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A Grammar of  
Chalcatongo Mixtec

Monica Macaulay

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A GRAMMAR OF CHALCATONGO MIXTEC

**This One**



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# A Grammar of Chalcatongo Mixtec

Monica Macaulay

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*For my parents,  
and for Joe*

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## Preface

I began the work that ultimately led to this grammar in 1981, when I was a graduate student in the Linguistics Department at the University of California, Berkeley. That year I took a field methods class taught by Leanne Hinton which used Chalcatongo Mixtec as the language of study. The language consultant for the class was Luciano Cortés Nicolás, and I continued to work with him until I left Berkeley in 1987.

I first went to visit Luciano's home in 1982. The trip involved a four-hour bus ride on paved roads from Oaxaca City to the town of Tlaxiaco, and then a three-and-a-half-hour ride over unpaved, winding mountain roads from Tlaxiaco to Chalcatongo. I arrived completely unannounced, without any real idea of what to expect. The residents of course had no idea what to expect from me either, but treated me with great kindness and generosity (and, of course, no small amount of curiosity). I have been to Chalcatongo twice since then, in 1985 and 1992. On my last trip, a number of things had changed: There is now a telephone in town, a few more streets have been paved, one store has a copier, and there is even a small arcade with video games. Despite these superficial changes, though, I think the remoteness of the village guarantees that many of the traditional ways of life—including, I hope, the language—will persist for some time.

The process of writing this grammar has been an extremely humbling experience. If I once thought I knew a lot about the language, I now have an inkling of how much I don't know. I have also learned how hard it is to organize a grammar—every topic seems to be connected in some way to every other topic, and any choice one makes means that some other way of looking at a problem is missed. Since one of my primary goals is to provide a reference grammar of use to as many readers as possible, I have tried to compensate for this by including much cross-referencing, as well as by providing a thorough index.

I would like to add here a note on the pronunciation of the name of the language. In Spanish it is called *Mixteco*, usually pronounced [misteko] or occasionally [mišteko], while in English most linguists say [mišteɸ] (or [mišteɸ]). The palatalization of the [s] is likely a hypercorrection, by analogy to Nahuatl and Mayan words which are spelled in Spanish with an "x"—e.g., *ixtle* [ište] 'fiber, rope', from Nahuatl *ixtli* (Santamaría 1978:622). Since the speakers of Chalcatongo Mixtec pronounce the Spanish name for their language as [misteko], I use a parallel pronunciation in English: [mistek]. (Perhaps the entire problem could be avoided by just using one of the versions of the native name for the language: **sáɪ saù** or **sánu saù**.)

Turning now to acknowledgments, I would like to express my extreme indebtedness to the speakers with whom I have worked: Luciano Cortés Nicolás in Berkeley, and Margarita Cuevas Cortés, Otelia Jiménez García, and Crescenciano Ruiz Ramírez in Chalcatongo. Their patience with my questions about their language is greatly appreciated, as is their willingness to educate this naive *gringa* about their culture, their village, and their lives.

Bulmaro Lazo and Adela López de Lazo provided me with a place to live in Chalcatongo, as well as with friendship and information on the village that I could not have done my work without.

My research and fieldwork have been funded in part by the UC-Berkeley Center for Latin American Studies, by the Survey of California and Other Indian Languages, and by a Faculty Development Grant from Purdue University. This support was much-needed and greatly appreciated.

I would like to thank Claudia Brugman, Amy Dahlstrom, Leanne Hinton, Barbara Hollenbach, and two anonymous reviewers for their comments on the manuscript. Alejandro de Avila supplied me with very helpful comments on the lexicon, drawing on his expertise in the ethnobotany of the region, and also checked the manuscript for Spanish mistakes. (Any that remain are of course entirely my doing.) I am very grateful to him for all his help.

Several graduate students helped in preparation of various parts of the volume: Marnie Jo Petray worked on the lexicon, Colleen Brice worked on the database, and Sara Shelton did the maps. I am indebted to all of them for taking on these tasks.

I also thank Rose Anne White, the editor of this series, for her boundless patience with my constant e-mail questions while I was preparing the manuscript for publication.

Finally, I want to thank Joe Salmons for his comments on the manuscript, for his support and encouragement while it was being written, and for his accompanying me to Mexico on my most recent field trip—certainly above and beyond the call of spousal duty.

To all, **kútaʔù šǎǎ=rí nuù=ro.**

## Abbreviations, Symbols, and Conventions

Example sentences in this grammar are given in the standard three-line format: the first line is a transcription of the Mixtec, the second line is a morpheme-by-morpheme gloss, and the third line is the free translation into English. Spanish words which are either completely or at least fairly well integrated into Mixtec are transcribed phonetically in the first line of an example, given in Spanish in the second line (in italics), and then translated into English in the third line. Boundary symbols are listed below, after the abbreviations.

1	First person	DEM	Demonstrative
2	Second person	DET	Determiner
3	Third person	F	Feminine
ADD	Additive	FOC	Focus
ADJ	Adjective	H	High tone
ADV	Adverb	HAB	Habitual
ADVP	Adverb Phrase	HORT	Hortative
AN	Animate	INCHO	Inchoative
AP	Adjective Phrase	INT	Interrogative
AYUT	Tepango/Ayutla de los Libres	IMP	Imperative
CAUS	Causative	JICAL	Santa María Jicaltepec
CFACT	Counterfactual	L	Low tone
CHAL	Chalcatongo	M	Mid tone
CLA	Classifier	MN	Masculine
COAT	San Juan Coatzospan	MOOD	Deontic mood marker
COMP	Complementizer	N, <i>n</i>	Noun
COND	Conditional	NEG	Negative
CONJ	Conjunction	NEG.FOC	Negative focus marker
COP	Copula	NEG.MOOD	Negative mood marker
CP	Completive	NOM	Nominalizer
CUAH	Santa Ana Cuauhtémoc	NP	Noun Phrase
		NUM	Number

P	Potential	STAT	Stative
PL	Plural	SUP	Supernatural
POL	Polite	T	Tone
POL.DEC	Polite, deceased	TEMP	Temporal
POL.OLD	Polite, older	TLAL	Santa Catarina Tlaltempan
POSS	Possessive	UNK	Unknown
PP	Prepositional Phrase	V	Verb
PRENAS	Prenasalized	<i>vb</i>	Verb plus body part term
PREP	Preposition	<i>vi</i>	Intransitive verb
PRO	Pronoun	VP	Verb Phrase
PROG	Progressive	<i>vt</i>	Transitive verb
QP	Quantifier Phrase	XP	Phrase of any category
QUANT	Quantifier	.	(Period) Separates parts of multi-word gloss
R	Realis	–	(Hyphen) Affix boundary
REP	Repetitive	=	(Equals sign) Clitic boundary
RES	Restrictive	*	(Asterisk) In Lexicon, probable diachronic source; in examples, ungrammaticality
S	Sentence		
SG	Singular		
SILA	Silacayoapan		
SM	San Miguel el Grande		
SP	Spanish		

## INTRODUCTION

Mixtec is an Otomanguean language spoken in south-central Mexico, primarily in the state of Oaxaca (although also in parts of Puebla and Guerrero). The number of speakers is not precisely known, but the most recent estimate (based on the 1980 census) sets the total at 323,137 (Garza Cuarón and Lastra 1991). The dialect described in this grammar is spoken in the town of Santa María Chalcatongo de Hidalgo (“Chalcatongo,” hereafter), located in the mountains which lie to the west of Oaxaca City. The state of Oaxaca is divided into districts, and these are further divided into smaller regions called *municipios* (similar to counties in the United States). Chalcatongo is the head of a municipio of the same name which is located in the district of Tlaxiaco. Maps 1, 2, and 3 illustrate the locations of Oaxaca, Tlaxiaco, and Chalcatongo, respectively.

According to Ayre (1977:69), the town of Chalcatongo has approximately 1,000 residents, while the municipio of which it is the head has approximately 8,000. Ayre’s work is based on the 1970 census, however, so the figures quoted are certainly lower than the actual current population. The inhabitants of the town are either bilingual in Spanish and Mixtec, or are monolingual in Spanish. Outside of the town, one finds all possibilities: Spanish-Mixtec bilinguals, Spanish monolinguals, and Mixtec monolinguals. Ayre lists 3,645 bilinguals in the municipio as a whole, and 504 Mixtec monolinguals (1977:9). Although most of those who speak Mixtec in the town itself no longer teach their children to speak the language, apparently Chalcatongo Mixtec is not yet endangered, since its use is still very much alive in the countryside.<sup>1</sup>

In the remainder of this chapter, I present introductory material: A brief classification of the Otomanguean language family is given in §1.1, and the nonstandard use of the term “dialect” by linguists who study Mixtec is explained in §1.2. A description of my consultants and some differences in their speech appears in §1.3, a typological overview of Chalcatongo Mixtec is provided in §1.4, previous work on Mixtec is described in §1.5, and a few comments on theoretical approach appear in §1.6. Finally, an overview of the structure of the grammar is the content of §1.7.

---

<sup>1</sup>For a sobering look at the constant and drastic reduction in the size of the native population of Mexico, however, see Garza Cuarón and Lastra (1991), especially pp. 103–107.



Map 1: Republic of Mexico

### 1.1. Genetic Classification of Mixtec

As mentioned above, Mixtec is a member of the Otomanguean language family, a large set of languages spoken throughout Mesoamerica. Attempts at classification of the languages involved have been ongoing for well over a century. Rensch (1976:1) cites Orozco y Berra (1864) as the first to link Mixtec, Chocho, Amuzgo, Zapotec, and Cuicatec as members of the “Mixteca-Zapoteca” family. There have been a number of different proposals and hypotheses over the years, arguing for different relationships among and within the branches, as well as for the inclusion and exclusion of various languages and groups of languages. Rensch (1976:1–8) provides a nice summary of the many proposals which had been made prior to publication of his book.

The classification of Otomanguean languages which appears in Figure 1 is primarily drawn from Campbell (1979:915–916), and augmented by Josserand (1983:95–101) and Kaufman (1988:5–12 and class notes, 1987). There are, however, a few areas of disagreement among those who have done these more recent comparisons and reconstructions.

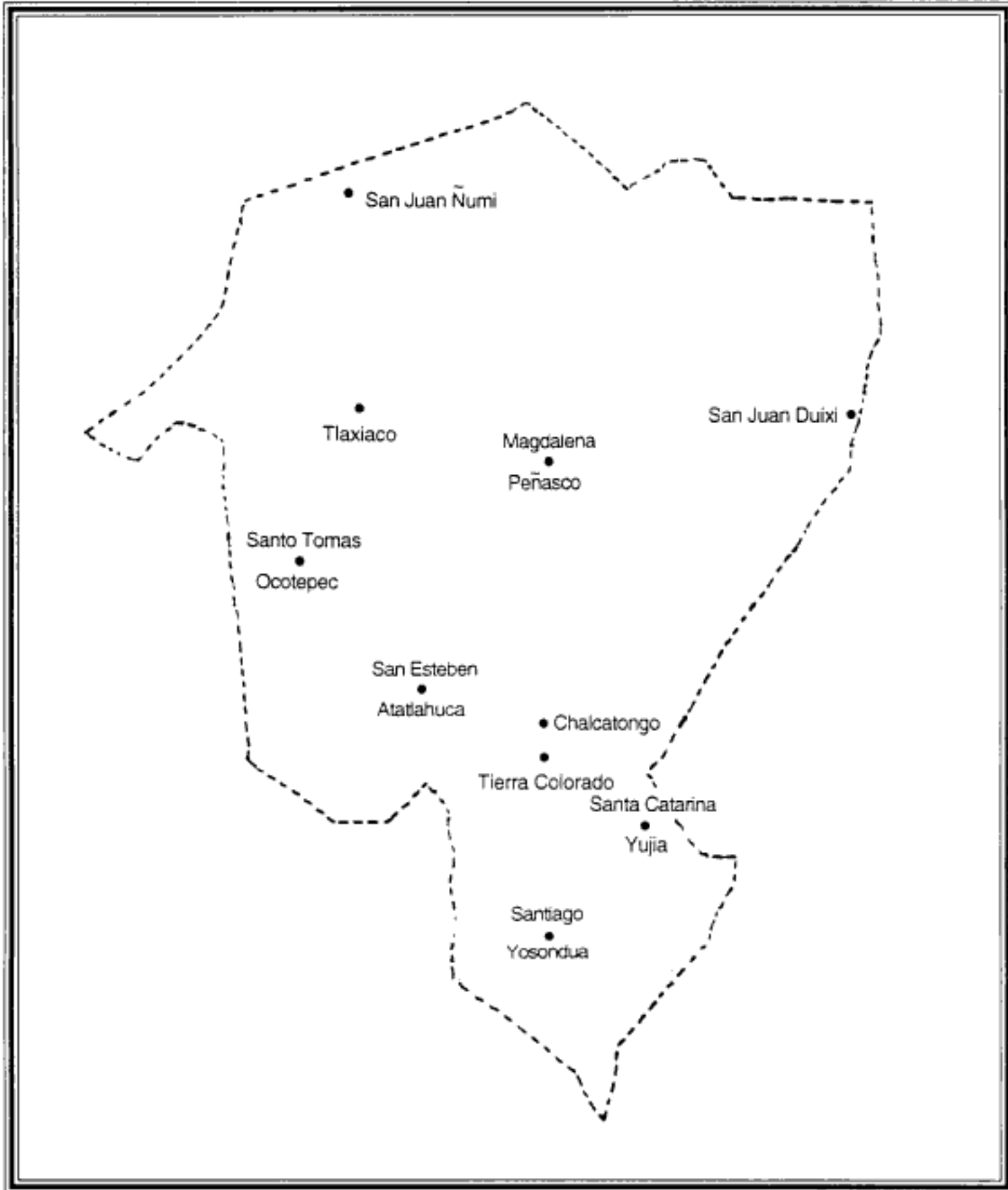




Map 2: State of Oaxaca

Huave, for example, has been proposed as a ninth branch (by Swadesh 1960, among others), and Kaufman (1988:5) suggests that Otomanguean itself can be further divided into Eastern Otomanguean (consisting of Mixtecan, Popolocan, Zapotecan, and Amuzgo) and Western Otomanguean (consisting of Chiapanec-Mangue, Otopamean, Chinantecan, and Tlapanec-Subtiaba). There are also disagreements about the appropriate subgroupings within the branches themselves—for example, Garza Cuarón and Lastra (1991:112–115) show the same eight branches, but with some differences of internal organization.

Within Mixtecan itself there are also differences of opinion about appropriate subgroupings. Some linguists (e.g., Swadesh 1960; Arana 1960) have made arguments for the inclusion of Amuzgo as a fourth branch, but this is not generally accepted at this point (see, e.g., Longacre 1966). Swadesh also differs from other classifications in excluding Trique from Mixtecan, but most current analyses have disagreed with this and have left it in.



Map 3: District of Tlaxiaco

(Adapted from Alexander 1980:113; used with permission)

Assuming, then, that Mixtecan consists of Mixtec, Cuicatec, and Trique, there are further differences in analyses of the relationships among the three. Under the classification adopted here, Mixtecan is subdivided such that Mixtec and Cuicatec are grouped together (and somewhat confusingly also called “Mixtecan”), and set off from Trique. Josserand (1983:99–101) summarizes the arguments which had been made up to the early 1980s for

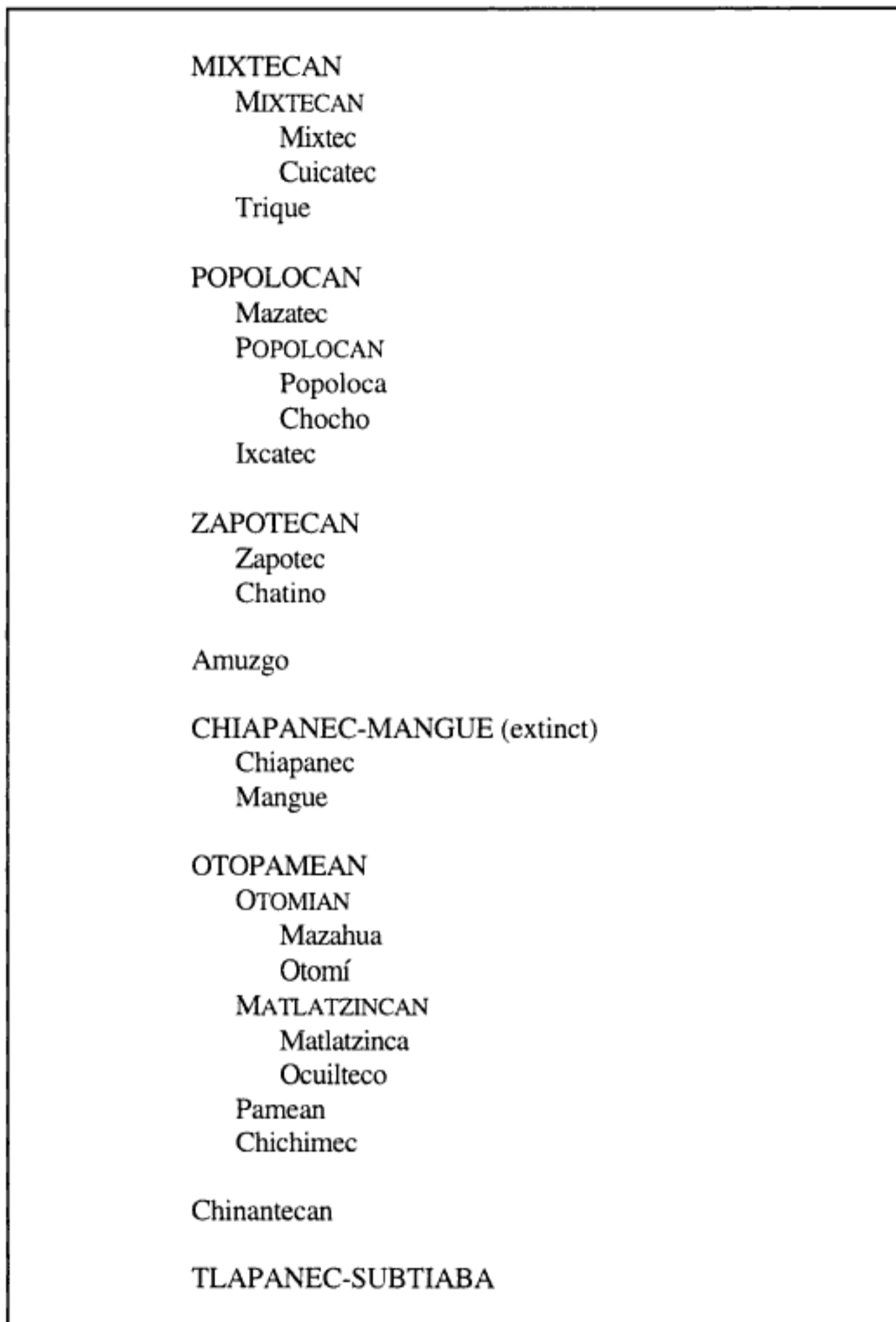


Figure 1: Otomanguan Languages and Language Families

and against various internal classifications in Mixtecan (including the one presented here) and points out that most of them have been based on glottochronological analysis, a technique which is of course largely discredited now. She argues that we simply do not know enough yet about the history of these languages to make any subgroupings with certainty: “To date, no one has presented an ordered set of innovations which would properly account for the sequential diversification of Mixtecan, and thus reveal the internal classification of these languages” (1983:101). She therefore concurs with Longacre (1957) and Rensch (1976) that the three languages should be listed at the same level. (1) presents a comparison of the latter approach with that given here:

(1) INTERNAL CLASSIFICATION OF MIXTECAN: TWO HYPOTHESES

<u>JOSSERAND, LONGACRE</u>	<u>CAMPBELL, KAUFMAN</u>
MIXTECAN	MIXTECAN
Mixtec	MIXTECAN
Cuicatec	Mixtec
Trique	Cuicatec
	Trique

Because Kaufman (1983) and (1988) are works which provide the kinds of analyses that Josserand calls for, I have adopted essentially his classification of Mixtecan here. Josserand’s cautionary note, however, should be kept in mind, and the internal subgrouping of Mixtecan should still be regarded as an open question.

We turn now to the Mixtecan language Mixtec and its “dialects.”

## 1.2. Mixtec Dialect Differentiation

The two earliest descriptions of Mixtec are de los Reyes’ ([1593] 1890/1976) grammar and de Alvarado’s ([1593] 1962) dictionary. De los Reyes—writing in the sixteenth century—commented on the great amount of variation found across Mixtec dialects and provided some description of the differences between the dialect which he used for his grammar (Teposcolula) and a number of others.

This variation still exists, to such an extreme that “Mixtec” really should be considered a group of related but distinct languages. Mixtecanists traditionally use the term “dialect” to describe its varieties, however, because of the dialect continuum which characterizes the region. In this area (known as the *Mixteca*), there are often no sharp boundaries over which intelligibility is lost, yet there is mutual unintelligibility between noncontiguous groups of speech communities. This results in great difficulty in determining where one dialect stops and the next begins. Ravicz (1965:40) proposes one interesting way to measure dialect boundaries in the area, *días de distancia* (‘days of distance’):

En términos generales, un perímetro de sesenta kilómetros puede abarcar un área dialectal. La persona que se halle a dos días de camino de su pueblo, puede comunicarse fácilmente; en cambio, una distancia de tres días de camino impedirá en cierta medida hacerse entender. Si se encuentra a cuatro

o cinco días de su propio pueblo, el individuo apenas contará con elementos suficientes para establecer comunicación y el español le servirá mejor. [In general terms, a perimeter of sixty kilometers can comprise a dialect area. A person who is two days' walk from their town can communicate easily; however, a distance of three days will hinder understanding to a certain extent. If this person is four or five days from their town, they can hardly depend on sufficient common elements to establish communication, and Spanish will serve them better.]

As an example of the kinds of phonological differences found between geographically close dialects, Table 1 provides a comparison of forms from Chalcatongo Mixtec with their cognates in San Miguel el Grande Mixtec, a village about eight kilometers away.<sup>2</sup>

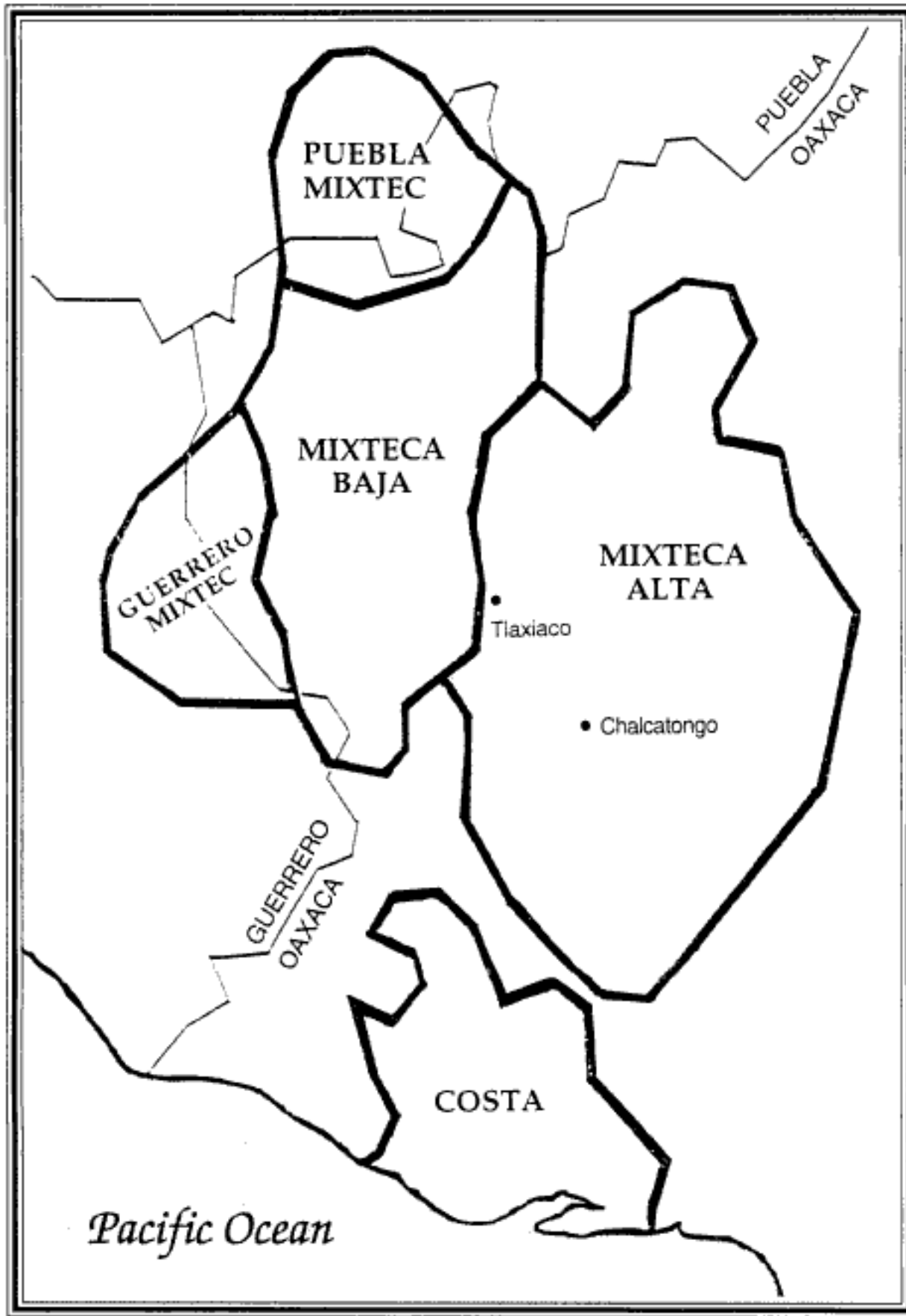
Table 1: Comparison of Forms in Two Closely-Related Dialects of Mixtec

	CHALCATONGO	SAN MIGUEL
'sky'	andíú	andíví
'blanket'	tíkài, tíkèi, tékei	tikàčí
'there'	wáã	yúã
'corncob'	níñí	niñi
'comal'	šìò, šòò	xiò
'slippery'	líʔu	líʔví
'work' ( <i>vi</i> )	sátĩũ	sátĩũ

The two dialects are mutually intelligible, but as these examples show there are numerous significant differences between them.

Paradoxically, however, great geographical distance between dialect locations is not a guarantee of mutual *un*intelligibility either. Geographically distant dialects may show surprising similarity due to the “leapfrogging” nature of Mixtec territorial expansion. These new settlements may even be founded outside of the Mixteca proper, as a community searches for better agricultural opportunities. Josserand (1983:103–105) describes a number of such cases; for example, there are two relatively new Mixtec towns on the Isthmus of Tehuantepec called ‘Nueva Raza’ and ‘Esperanza’, which were settled by groups from the Eastern part of the Mixteca Alta (specifically, from Santa Catarina Estetla and Santa María Peñoles). Josserand indicates that this kind of expansion is a long-standing process, which explains at least in part how linguistic diversification took place (and continues to take place) in Mixtec. At the same time, such expansion may also lead to a certain amount of dialect leveling as well, due to contact between the newly founded communities and other groups speaking different dialects of Mixtec.

<sup>2</sup>This set of examples is taken from Salmons (1992), which provides an analysis of some aspects of phonological differentiation between the two dialects. As the table shows, there is a great deal of variation in the form for ‘blanket’ in the Chalcatongo dialect, but there does not appear to be similar variation in the San Miguel Mixtec form.



Map 4: Five Mixtec Dialect Areas  
(Adapted from Josserand 1983:107; used with permission)

Thus, the Mixteca is the site of a classic case of dialect continuum (see, e.g., Chambers and Trudgill 1980:6–8), complicated by the form of territorial expansion described above. A complex relationship between language varieties like this points up the weaknesses in our definitions of the terms “dialect” and “language.” Since the present situation does not especially lend itself to either term, the traditional word “dialect” is used in this grammar, but the circumstances of its use should be borne in mind.

Given these caveats, then, the Mixteca is usually divided into five large dialect areas: Alta (Highlands), Baja (Lowlands), Costa (Coast), Puebla, and Guerrero Mixtec, as shown in Map 4. Josserand (1983), in her survey of Mixtec dialect history, makes further subdivisions of the Mixtec-speaking region, as shown in Map 5. The Chalcatongo dialect described here falls into the Mixteca Alta group, specifically, Josserand’s “Western Alta.”

In Table 1 we saw examples of phonological differences which are found between two geographically close dialects. So that the reader may get a better sense of the kinds of differences that are found across large dialect areas, Tables 2 and 3 present a number of phonological and morphosyntactic traits in five very divergent Mixtec dialects.<sup>3</sup>

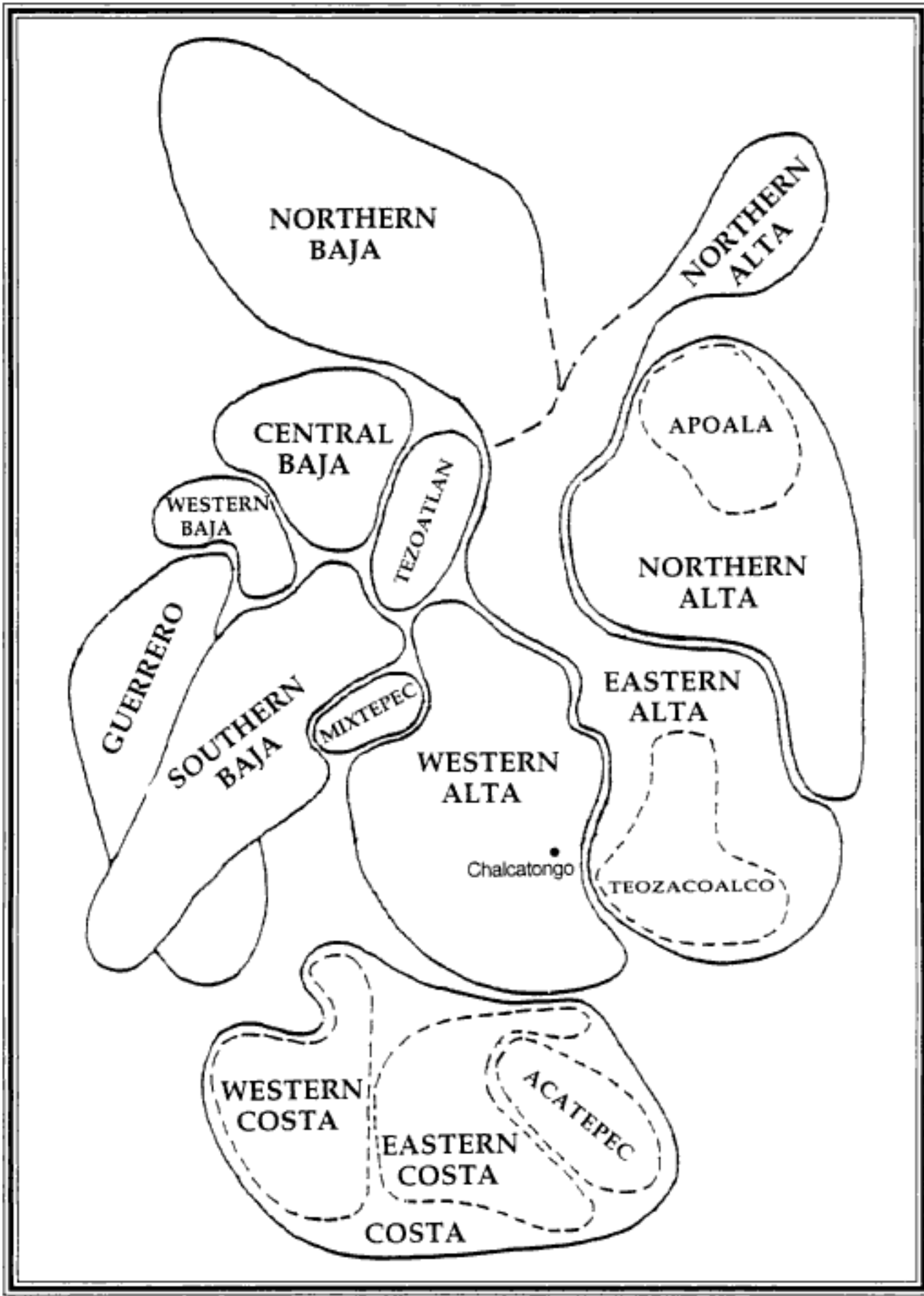
Table 2: Phonological Differences across Five Dialects of Mixtec

	CHAL	CUAH	TLAL	AYUT	JICAL
‘man’	čàà	tii	tee	tʲāa	rai
‘comal’	šiò, šoò	žižo	š <sup>r</sup> oo	šiyoʔ	čiyo
‘pus’	lak <sup>w</sup> a	<sup>n</sup> dak <sup>w</sup> a	<sup>n</sup> dak <sup>w</sup> a	<sup>n</sup> dak <sup>w</sup> āʔ	<sup>n</sup> dak <sup>w</sup> a
‘rain’	saù	dawi	dabi	sawiʔ	sabi
‘guts’	xítì	žiti	či lipa	ši <sup>h</sup> ti	čiti
‘comb’	kúkà	kuka	na k <sup>w</sup> ika	vī <sup>h</sup> ka	kuka
‘smoke’	nūʔmā	žūʔmē	nūʔmā	nūʔmā	yūʔmā

KEY: CHAL = Chalcatongo (Western Alta)  
 CUAH = Santa Ana Cuauhtémoc (Northeastern Alta)  
 TLAL = Santa Catarina Tlaltempan (Northern Baja)  
 AYUT = Tepango/Ayutla de los Libres (Southern Baja)  
 JICAL = Santa María Jicaltepec (Coast)

Table 3 illustrates two morphosyntactic features: the marking of negation and the formation of yes/no questions. Since these data were drawn from the available grammars and sketches, only three of the five dialects in Table 2 appear in Table 3: Chalcatongo Mixtec, Ayutla Mixtec (Hills 1990), and Jicaltepec Mixtec (Bradley 1970). San Juan Coatzacoapan Mixtec (Small 1990) replaces Cuauhtémoc for the Northeastern Alta dialect in Table 3, and Silacayoapan Mixtec (Shields 1988), a Western Baja dialect, replaces Tlaltempan, a Southern Baja dialect.

<sup>3</sup>The key below the table indicates which area each dialect is spoken in. The data are taken from Josserand’s (1983:489–678) cognate sets, except for the Chalcatongo data, which come from my fieldwork. I use Josserand’s original transcription of her data here, except that nasalization is marked with a tilde over a vowel instead of a cedilla under a vowel. Note also that tone is not marked in the majority of her forms.



Map 5: Josserand's Mixtec Dialect Areas  
 (Adapted from Josserand 1983:470; used with permission)



Table 3: Two Morphosyntactic Features in Five Dialects of Mixtec

	CHAL	COAT	SILA	AYUT	JICAL
negative marker	tu=	ñá	ko	tone change	ñà
yes/no questions	unmarked	ndu (second position)	á (initial)	ñāā, āān, or H tone (initial)	tá, na (final)

KEY: CHAL = Chalcatongo (Western Alta)  
 COAT = San Juan Coatzospan (Northeastern Alta)  
 SILA = Silacayoapan (Western Baja)  
 AYUT = Tepango/Ayutla de los Libres (Southern Baja)  
 JICAL = Santa María Jicaltepec (Coast)

The data in Tables 2 and 3 have been presented to give the reader an idea of the diversity found across the Mixtec dialects. As described above, despite the traditional terminology (which is maintained in this grammar for ease of exposition), it is quite clear that what we know as Mixtec is actually composed of a number of languages. One estimate of that number is made by Suarez (1983:13–20), who describes a method of testing mutual intelligibility which yields a total of twenty-nine distinct language groups within Mixtec, but he cautions that the method has its shortcomings. In fact, the question of the actual number of languages represented within Mixtec can probably never be decided with any precision, due to the kinds of dialect relationships found in the area, in conjunction with the problems inherent in our definitions of “language” and “dialect.”

### 1.3. The Chalcatongo Dialect

As mentioned in the Preface, I began working on Mixtec in a field methods class with a speaker from Chalcatongo named Luciano Cortés Nicolás. He is a relatively young speaker (born around 1960), who speaks Mixtec and Spanish natively, and English near-natively. He moved to the United States in 1979 and has lived in California since then. I continued to work with him until I left Berkeley in 1987.

I have worked with several speakers in Chalcatongo, but my primary consultants there have been Otelia Jiménez García (born around 1920), Crescenciano Ruiz Ramírez (born in 1929), and Margarita Cuevas Cortés (born in 1952). All are bilingual natives of Chalcatongo. The last two use more Spanish than Mixtec in their daily lives, but Señora Jiménez García clearly uses Mixtec more. She is also the only one of the three who has a “Mixtec accent” when she speaks Spanish, most noticeable in the replacement of [o] with [u], particularly in word-final position.

There are a few differences in the speech of these four consultants, as illustrated in Table 4. As the table shows, there is metathesis in the word for ‘bread’ in the speech of the two younger speakers. This is the only word I have ever found such metathesis in,

Table 4: Dialect Differences within Chalcatongo Mixtec

	OJG	CRR	MCC	LCN
'bread'	statilá	statilá	tastilá	tastilá
'cut'	káʔnʒa	káʔʒa	káʔʒa	káʔña
'hug'	kanunuʒaà	kunuʒà	kununʒaa	—
'have'	ñúbaʔa	ʒábaʔa	ñábaʔa	ʒúbaʔa
'taste'	kótónʒaà	kótóʒa	kótónʒa	—
'live'	nʒáá	ʒáá	nʒáá	ʒáá

KEY: OJG = Otelia Jiménez García  
 CRR = Crescenciano Ruiz Ramírez  
 MCC = Margarita Cuevas Cortés  
 LCN = Luciano Cortés Nicolás

however.<sup>4</sup> Also, note the variation between [ñ], [ʒ], and [nʒ] across the four speakers; this is characteristic of the area and is discussed in detail in Chapter 2. Aside from these two factors, however, the speech of these four consultants (and of Chalcatongo speakers in general) is quite homogeneous.

#### 1.4. Typological Overview of Chalcatongo Mixtec

This section provides a brief overview of some significant features of the phonology, morphology, syntax, and semantics of Chalcatongo Mixtec grammar. All of the topics mentioned here are dealt with more extensively in the appropriate chapters.

##### 1.4.1. Phonology

The consonant system of Chalcatongo Mixtec is extremely asymmetrical, containing one voiced stop /b/, one voiced prenasalized stop /nd/, and three voiceless stops /t/, /k/, /kʷ/; nasals /m/, /n/, /ñ/; lateral /l/; flap /r/; voiced fricative /ʒ/, voiceless fricatives /s/, /š/, /x/; affricate /č/; and glide /w/. Some speakers also have a voiced prenasalized fricative /nʒ/. There is a phonetic glottal stop (which may correlate with laryngealization of surrounding vowels), which is analyzed here as a feature of roots, not as a segment. There are also a number of marginal phonemes, described in Chapter 2.

<sup>4</sup>Barbara Hollenbach (personal communication) has suggested an alternative explanation for the differences in the form for 'bread'. The word is historically derived from the word for 'tortilla' (*staà* in Chalcatongo Mixtec) plus that for 'Spanish' (root *stílá* *Castellano* and other variants in Chalcatongo Mixtec); that is, 'Spanish tortilla'. Hollenbach's hypothesis is that the two [st] clusters in successive syllables were simplified differently by different speakers: some dropped the [s] from the first syllable, and some from the second.

There are six oral and six nasalized vowels: /i, ĩ, u, e, o, a, ī, ī̃, ū, ē, ō, ā/. The two mid nasalized vowels, however, are quite rare.

Syllable structure is (C)CV, but the only consonant clusters are those composed of /s/ plus another consonant. There are two sources for these clusters: either they are derived historically from a sequence of sVC, or they are derived synchronically by addition of the causative prefix s- (itself a reduced form of sa-) to a consonant-initial stem.

The language has three level tones: high (H, marked with acute accent), mid (M, unmarked), and low (L, marked with grave accent). An extraordinarily high number of words and affixes show a floating H tone like the one described for San Miguel el Grande Mixtec by Pike (1944, 1948). This tone is part of the lexical entry for the morphemes which have it, but it is realized on the following morpheme, not on the lexical item to which it belongs. In most cases it simply replaces the tone of the first syllable of the following word, but under certain circumstances, the floating H surfaces on the *second* syllable of that word. (See Chapter 2 for details.)

### 1.4.2. Morphology

The basic morphological unit is what Mixtecanists call the “couplet.” This is a root, consisting in all cases of two syllables. There are two categories of element which may be added to the couplet: ordinary affixes (inflectional and derivational) and phrasal affixes. Both types are always either nonsyllabic (composed of a single consonant) or monosyllabic. There are four inflectional affixes (all verbal prefixes), and no case marking or other nominal inflection. The productive derivational affixes are relatively few in number, although the lexicon shows evidence of many other fossilized derivational processes (including aspect marking on verbs and classifiers on nouns).

Some discussion is necessary here of the other type of element which may be added to the couplet, the phrasal affix.<sup>5</sup> A phrasal affix is an element which is bound, but which attaches to phrases, rather than to words. The term “phrasal affix” comes out of the body of work on clitics and cliticization which has appeared in the last fifteen years or so, initiated by Zwicky (1977).<sup>6</sup> In this paper, Zwicky called attention to the fact that there are several different kinds of elements which have been described by the term “clitic.” Zwicky (and others) have made the point that we can define continua of morphological types based on various criteria, the most relevant here being degree of dependence on neighboring

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<sup>5</sup>This research is especially important to any study of Mixtec because the language is rich in cliticization processes. However, in the early descriptions of Mixtec cliticization (the most notable being Pike 1944) little attention was paid to the different kinds of elements involved or to the distinction between diachronic and synchronic processes. I have presented arguments for my views on this matter elsewhere (Macaulay 1987a, 1987b); for the most part in the present work I simply note my analyses. In general, I avoid the term “clitic” in order to ensure a distinction between phrasal affixes and the contracted forms which are created by rules of fast speech, but when I do use it, I always intend it to refer to a phrasal affix (e.g., in discussion of the pronominal clitics).

<sup>6</sup>I have adopted the term from Klavans (1982); see also Nevis (1985). To distinguish phrasal affixes from ordinary affixes, an equals sign (=) is used to show dependence on a neighboring word or phrase, rather than a hyphen (which marks ordinary affixes).

elements. The endpoints of this continuum are, on the one hand, words (completely independent, i.e., free), and, on the other hand, affixes (completely dependent, i.e., bound). The categories between are a matter of varying opinion; the only one required for description of Mixtec is the category mentioned above: the phrasal affix. Phrasal affixes are morphological entities (affixlike) in terms of dependence, but syntactic entities (wordlike) in terms of placement. I have chosen to describe them in the chapters on syntax (Chapters 6 and 7), in order to incorporate them into a discussion of sentence structure in Chalcatongo Mixtec, but they could be described just as legitimately in the chapters on morphology.

### **1.4.3. Syntax**

Word order in Mixtec is VSO, but either one or two constituents may appear preverbally, in topic and/or focus position. When postverbal, the subject argument may be realized as a full NP or a pronominal enclitic (phrasal affix). The subject NP may also be fronted to focus position, in which case no pronominal clitic appears. Alternatively, a NP may appear in topic position, in which case it does not function as an argument of the clause. If this NP refers to the entity which is the subject of the sentence, a coreferential pronominal clitic (functioning as the subject argument) also appears.

Plural marking of all kinds is always optional in Chalcatongo Mixtec. The only explicitly plural pronominal enclitic is the first person inclusive, while all of the others may be used for singular or plural, letting context disambiguate the intended number. There are a few optional mechanisms for explicitly marking plurality, should the speaker so desire, including a verbal prefix marking plural subjects, and a plural word. The latter is a free morpheme which follows the head noun, or which may be discontinuous with the NP it modifies, in which case it appears in sentence-final position.

Nouns may serve as predicates with the addition of either the copula or the existential; adjectives may appear as predicates alone or with the copula or existential. There are very few prepositions; locative (and other) relationships are expressed instead through the use of a set of body part terms. Negation is marked by a proclitic phrasal affix. Subordination is most often marked by a phrasal affix complementizer, which also serves as a relative pronoun, and the word order in subordinate clauses is identical to that in main clauses.

### **1.4.4. Semantics**

Chapter 8 touches on a few of the most salient topics in Chalcatongo Mixtec lexical semantics. One such topic is the use (mentioned above) of body part terms to express locative relationships. The descriptive function of each body part term is derived from the canonical orientation of the human and the (quadruped) animal body, and then extended to more complex spatial relationships. In addition, some of the terms are also extended to other relationships, especially in temporal expressions.

Another complex domain in the lexical semantics of Chalcatongo Mixtec is motion. There is a large number of verbs of motion, which are marked for more aspectual

distinctions than nonmotion verbs have. The verbs of motion are also “round-trip,” coding the progress of the agent both to and from the goal; consequently, use of the completive aspect with these verbs is only appropriate when the agent has gone to the goal and returned. Furthermore, at least some of the verbs of motion distinguish two types of goal: “base” (a designated goal, usually the agent’s home) and “nonbase.”

### 1.5. Previous Work on Mixtec

A fair amount of research has been done on the Mixtec dialects, primarily by members of the Summer Institute of Linguistics. This work was begun by Pike, who did research on San Miguel el Grande Mixtec, spoken in a village which is (as mentioned above) only about eight kilometers from Chalcatongo (see Pike 1944, 1947, 1948).

There are a few grammars of various dialects of Mixtec in existence. Most of them were either written for the native speaker (e.g., Alexander 1980; North and Shields 1977), and thus are not very technical in nature, or were written in an older framework which has the potential for obscuring the description of the language for the modern-day reader (e.g., Daly 1973a, written in a highly formalized version of standard theory).

A great deal of work has gone into phonological analysis (especially of tone); see Mak (1950, 1953, 1958), Overholt (1961), Pankratz and Pike (1967), Hunter and Pike (1969), Daly (1973b, 1977, 1978), Pike and Wistrand (1974), North and Shields (1977), Pike and Ibach (1978), Zylstra (1980), and many others. These articles are primarily taxonomic descriptive studies, but a number of works have also appeared more recently which apply current theoretical phonological frameworks to Mixtec data, for example Yip (1981), Bickford (1986), Brown (1988), Hillman and Watters (1988), Gittlen and Marlett (1989), Goldsmith (1990), Marlett (1992), Piggott (1992), Aranovich (1994), and Macaulay and Salmons (1995).

Turning now specifically to Chalcatongo Mixtec, a number of projects have been undertaken, both by the present author and by others. Papers which came out of the field methods class mentioned in the preface and in §1.3 include Hinton (1982; on causatives), Macaulay (1982; on the verbs of motion and arrival); Brugman (1983; a study of body part terms used in the locative system), Faraclas (1983; a preliminary examination of tone and tone sandhi), Macri (1983; a study of noun classes), and Brugman and Macaulay (1986; on the interaction of the body part system and the verbs of location). My dissertation (Macaulay 1987b) was on the morphology of Chalcatongo Mixtec, with a focus on cliticization. More recently, in the academic year 1990–1991, Leanne Hinton taught a second field methods class on Chalcatongo Mixtec (working with the same speaker with whom we had worked before), in which the students concentrated on tone. Papers from this class include Buckley (1990; on tone in the verb), Buckley (1991; on a rule of low tone spreading), Hinton (1991; an accentual analysis of tone), Hinton et al. (1991; an overview of tone), and Meacham (1991; on the phonetics of tone). There also exists a brief sketch of Chalcatongo Mixtec, written by a native speaker, Pérez Jiménez (1988). I draw from all of these sources in the present grammar and gratefully acknowledge my debt to the authors.

Finally, a series on the syntax of the Mixtecan languages has recently appeared, edited by C. Henry Bradley and Barbara Hollenbach (1988, 1990, 1991, 1992). The

descriptions of Mixtec syntax in this series have proved invaluable to me, both in terms of helping me to identify constructions to investigate and in providing me with comparative evidence to aid in the analysis of my own data.

### **1.6. Theoretical Approach**

This volume is intended as a reference grammar of Chalcatongo Mixtec, for an audience of linguists. The focus is on description, rather than on use of the data to prove particular theoretical points. Obviously, however, no description is ever theory-neutral, and I have instead attempted to cast this as theoretically-informed description.

The theoretical approach here is generative: I draw from both linear and autosegmental phonology in the chapters on phonology and morphology, and in the chapters on syntax I make use of ideas about constituent structure taken from government-binding theory. Constituent structure is a topic which is often overlooked in descriptive grammars, presumably on the grounds that exploring it requires one to invoke concepts which are deemed too theoretical to mesh with the descriptive goals of the author. I have instead attempted to find a balance between the theoretical constructs which are necessary to illustrate significant facts about the language and my desire for clarity and simplicity of description.

These theories, then, are employed primarily as a means to enhance and clarify description and are not the focus of the book. My goal is for the resulting description to be clear enough that it will be of use both to linguists with other theoretical viewpoints and to future generations of linguists, once the above-mentioned theories have been—inevitably—replaced by others.

### **1.7. Outline of the Grammar**

This grammar follows the traditional organization: phonology—morphology—syntax—texts—lexicon, with a chapter on lexical semantics added after those on syntax. Specifically, the structure is as follows: Chapter 2 presents the phonological system of Chalcatongo Mixtec. Chapter 3 presents the derivational morphology, and Chapter 4, the inflectional morphology. Lexical categories are the topic of Chapter 5. Chapters 6 and 7 survey the syntax: Chapter 6 is on simple syntax, and Chapter 7 on complex sentences. Chapter 8 presents analyses of various topics in lexical semantics. Three texts are presented in Chapter 9, and then there is a Mixtec-English and English-Mixtec lexicon. Finally, there are references, an index of bound morphemes, and a subject index.

## PHONOLOGY

This chapter presents the phonology of Chalcatongo Mixtec. The phonemic inventory, including very general comments about distribution, is described in §2.1, and consonant clusters are the topic of §2.2. §2.3 describes syllable and root structure, and also presents arguments for a root-based analysis of glottalization. §2.4 discusses the tendency toward total harmony in the two vowels of the root, a very salient property of Mixtec. Tone and tone sandhi are covered in §2.5, and, finally, rapid speech contraction is the topic of §2.6.

## 2.1. Phonemic Inventory

This section includes discussion of the vowels of Chalcatongo Mixtec (§2.1.1), the consonants (§2.1.2), and certain aspects of the distribution of these segments (§2.1.3).

### 2.1.1. Vowels

Table 5 presents the vowel phonemes of Chalcatongo Mixtec. In this table and in Table 6, marginal phonemes are enclosed in parentheses; these are included in the discussion which follows each table.

Table 5: Vowels

	ORAL			NASAL		
HIGH	i	ĩ	u	ĩ	ĩ̃	ũ
MID	e		o	(ẽ)		(õ)
LOW		a				ã

As Table 5 shows, Chalcatongo Mixtec has six oral and six nasalized vowels. The mid vowels /e/, /ē/, /o/, and /ō/ occur much less frequently than the other vowels. The nasalized mid vowels, in fact, occur in only two or three words each: for example, **kéɪ** 'put', **ʒókó** 'brush' (*n*), and **sóá** 'thus, like that'. (For one speaker with whom I worked, the last of these three words was **súá**, with nasalized [ū], a much more regular form.) The mid vowels have lax counterparts which occur in free variation with the tense forms; that is, /e/ has the variant [ɛ], and /o/ has the variant [ɔ]. In addition, /i/ is occasionally realized as [ɪ].

(1), below, presents examples of the vowels of Chalcatongo Mixtec. In the remainder of this chapter, contrasting examples are in general as close to minimal pairs (or sets) as possible. In many cases, however, only near minimal pairs can be found. These are usually segmentally identical but differ in tone and/or glottalization.

(1) EXAMPLES OF VOWELS

/i/	kii	'come and return'
/ī/	kiki	'harden'
/u/	kuù	'die'
/e/	kee	'eat'
/o/	kòò	'snake'
/a/	kaa	'iron, bell'
/ī/	kíʔi	'go and return'
/ī/	kíʔī	'have recently given birth'
/ū/	kūù	'four'
/ā/	káá	'become accustomed to'

As mentioned above, all of the Mixtec dialects show a strong tendency toward identity of the two vowels in the root, as well as restrictions on possible combinations of vowels when they are not identical. This topic is discussed in §2.4.

### 2.1.2. Consonants

The consonant inventory of Chalcatongo Mixtec (shown in Table 6) contains a number of asymmetries. One has to do with frequency: there are a number of phonemes with extremely limited distribution. Another has to do with the pattern (or lack thereof) in voicing and prenasalization of segments. Two points are relevant to the latter issue: First, this kind of asymmetry is characteristic of the consonant inventories of Mixtec dialects in general.<sup>1</sup> Second, when allophonic variants of several of the segments in this dialect are considered (as described below), many of the gaps are filled in.

The consonants are presented individually below, organized by manner of articulation.

<sup>1</sup>For example, San Miguel Mixtec and Atatláhuca Mixtec each have voiceless /p, t, k, k<sup>w</sup>, ʔ/ and voiced prenasalized /nd, ŋg/, plus affricates /č/ and /nj/ (Dyk and Stoudt 1965; Alexander 1980). Peñoles Mixtec has /t, k, k<sup>w</sup>, ʔ/, /mb, nd, ŋg, ŋg<sup>w</sup>/, and /č, nj/ (Hinojosa 1977). San Juan Colorado Mixtec has /p, t, t<sup>y</sup>, k, k<sup>w</sup>, ʔ/, /mb, nd, nt<sup>y</sup>/, and affricate /c/ (Stark Campbell et al. 1986).



Table 6: Consonants

STOPS	[-VOICE]		t	k	k <sup>w</sup>
	[+PRENAS]		nd	(ŋg)	
	[+VOICE]	b			
FRICATIVES	[-VOICE]		s	š	x
	[+PRENAS]			(nž)	
	[+VOICE]	(ð)		ž	
AFFRICATES	[-VOICE]			č	
	[+PRENAS]			(nč)	
NASALS		m	n	ñ	
LATERAL			l		
FLAP			r		
GLIDE					w

### 2.1.2.1. Stops

Chalcatongo Mixtec has voiced prenasalized stops /nd/ and /ŋg/, voiced stop /b/, and voiceless stops /t/, /k/, and /k<sup>w</sup>/. In all of the other dialects of Mixtec with which I am familiar, voicing entails prenasalization. For distributional reasons, however, I have chosen to phonemicize the Chalcatongo Mixtec stop system with a plain bilabial stop, but with prenasalized alveolar and velar stops.<sup>2</sup> I prefer this analysis, despite the fact that it creates an asymmetry in the stop system, because the surface behavior of /b/, /nd/, and /ŋg/ (both initially and intervocalically) is not at all parallel: first, /b/ is only occasionally realized as [mb] word-initially and becomes [β] or sometimes [w] intervocalically.<sup>3</sup> /nd/, however, is *always* prenasalized and has no fricative allophone. Finally, /ŋg/ has a highly

<sup>2</sup>For a different analysis of the Chalcatongo system, see Iverson and Salmons (forthcoming). Under their analysis, prenasalization is a phonetic hypervoicing phenomenon, and all three segments are underlyingly plain voiced. I have not followed their analysis here (although I find it convincing) for two reasons: First, I prefer a slightly more surface description for the purposes of this grammar. Second, their analysis introduces complications into the description of the fricatives, because at least some speakers have both a voiced and a prenasalized palatal fricative.

<sup>3</sup>In one word, /b/ appears as [β<sup>w</sup>] intervocalically. This is in the word [žuβ<sup>w</sup>é?é] ‘door’, which is historically derived from the NP + NP construction žu?u be?e ‘mouth house’ and is the only example I have of /b/ following a morpheme boundary of this sort. The allophone [β] is found when /b/ occurs between vowels in a single morpheme, or when it follows a fast speech clitic or other word boundary. Thus, it is possible that these two allophones are conditioned by the type of boundary that precedes them, but unfortunately the evidence consists of only this one example. Also note that some authors use /β/ in place of /b/ (usually orthographic “v”), but that in the Chalcatongo dialect this would simply move the asymmetry to a different row. (In addition, two dialects, Peñoles Mixtec [Hinojosa 1977] and San Juan Colorado Mixtec [Stark Campbell et al. 1986], have both /β/ and /mb/.)

circumscribed distribution in this dialect: it occurs only medially, only between nasal vowels, and only in a very few words: **číngĩ** ‘curly’,<sup>4</sup> **k<sup>w</sup>āngō** ‘twist’, **ńngĩ** ‘cramp up’, and **tíńngĩ** ‘skinny’.<sup>5</sup> Elsewhere (Macaulay 1987b), I have treated [ŋg] as an allophone of /k/ which occurs between nasal vowels, but I have since found a small number of (near) minimal pairs, for example, **číngĩ** ‘curly’ and **číkĩ** ‘seed’.

/t/ is dental and unaspirated, and /k/ is optionally aspirated. /k<sup>w</sup>/ is a voiceless labialized velar stop. /k<sup>w</sup>/, /nd/, and /ŋg/ are considered unit phonemes, primarily on the distributional grounds that the only clusters which are allowed are /s/-initial (see §2.2). If /k<sup>w</sup>/, /nd/, and /ŋg/ were treated as clusters, this simple statement would have to be revised, and the resultant set would form a very unnatural class. Furthermore, the /s/-initial clusters only occur root-initially, never medially, yet /nd/ and /k<sup>w</sup>/ do appear medially.

## (2) EXAMPLES OF STOPS

	INITIAL	MEDIAL	AFTER [ʔ]
/t/	táʔa ‘suffer’	káta ‘sing’	—
/k/	káʔa ‘hip’	kaka ‘walk’	—
/k <sup>w</sup> /	k <sup>w</sup> aʔá ‘red’	tík <sup>w</sup> aʔa ‘orange (fruit)’	—
/b/	bàʔà ‘good’ [bàʔà, mbàʔà]	kaba ‘hard’ [kaβa]	ndaʔba ‘go out’ [ndaʔβa]
/nd/	ndaʔa ‘hand’	kenda ‘go out, exit’	saʔnda ‘calf (of the leg)’
/ŋg/	—	číngĩ ‘curly’	—

### 2.1.2.2. Fricatives

Chalcatongo Mixtec has the voiceless fricatives /s, š, x/ and the voiced fricatives /ð, ž/. In addition, some speakers have a voiced prenasalized fricative /nž/ in a small number of words. Of the fricatives, only /x/ has an uncomplicated distribution: for some speakers it becomes a palatal fricative [ç] before high front vowels, and otherwise it varies freely between [x] and [h].

The phoneme /ð/ appears only in the third person masculine clitic =**ðe**. In previous work I have treated it as an allophone of /r/. This was for the sake of simplicity: to avoid positing a phoneme which appeared in only one morpheme. There are arguments in favor of (and against) both treatments; here I have chosen to follow the diachronic evidence, which indicates that it is unlikely that [ð] is related to the [r] of the first and second person pronouns **rùʔù** ‘first person’ (clitic form =**rí**) and **roʔo** ‘second person (familiar)’ (clitic form =**ro**). Terrence Kaufman (personal communication) says that these pronouns are innovations and cannot be traced to Proto-Otomanguean, and so the source of the [r] is unknown. Furthermore, note that most third person pronominal clitics in Mixtec are transparently related to a corresponding noun (just as the first and second person clitics are

<sup>4</sup>Leanne Hinton has pointed out to me that this word bears at least superficial resemblance to *chino*, the Spanish word for ‘curly’, so it may be a loan.

<sup>5</sup>One other word which has phonetic [ŋg] is **ńnga** ‘other’. However, this is transparently derived from **ń=ka** ‘one=ADD’, and so is not treated as underlyingly containing the phoneme /ŋg/.

related to the corresponding full pronouns), for example, =**ñā** ‘she’ and **ñāʔā** ‘woman’. =**ðe**, however, is synchronically related only by suppletion to the noun **čāā** ‘man’. Kaufman reconstructs Proto-Otomanguean \***tææ** for ‘man’ and says that [ð] and [č] represent different developments from the first segment of this form.

A small piece of evidence for the opposite position—that is, for analyzing [ð] as an allophone of /r/—can be found in synchronic variation. Some speakers appear to be merging the [r] and the [ð] of the clitic pronouns: at least one of my consultants occasionally has [=ðí] for /=rí/. Nonetheless, the weight of the evidence seems to be with the diachronic argument, and so I treat [ð] as a phoneme for the purposes of this description. The reader should bear its extreme marginality in mind, however.

Turning next to /s/ and /š/, we find a somewhat complicated distribution. Josserand (1983:265–266) shows that Chalcatongo is located within the geographical area in which Proto-Mixtec \*s > š preceding \*i (and possibly preceding other front vowels). The existence of some instances of /s/ before /i/ and /š/ before other vowels in the present-day lexicon of Chalcatongo Mixtec reflects the fact that this rule is no longer productive. On the one hand, /s/ is found before /i/ in words borrowed from Spanish (e.g., **síža** ~ **sía** ‘chair’, from Spanish *silla*), and in derived words in which causative s- precedes a verb with first syllable **xi**: **xínu** ‘finish (vi)’, **sínu** ‘finish (vt)’.<sup>6</sup> On the other hand, /š/ is found preceding vowels other than /i/ in a small number of examples, such as **šaʔbà** ‘ravine’, **šaʔā** ‘grease’, and **šūʔū** ‘money’. Note that there are also a few minimal pairs, such as **šaʔba** ‘ravine’ and **sáʔba** ‘frog’. Examples of /s/ before /i/ and /š/ before other vowels are still relatively rare, however.<sup>7</sup>

/nž/, as mentioned above, only exists in the dialect of some Chalcatongo speakers, not all. It is also fairly rare for the speakers who have it, occurring in only a small number of roots (less than ten), and only before /a/. The words in which it is found tend to be low-frequency vocabulary, such as **nžaá**, a color term glossed variously by speakers as ‘white’, ‘light blue’, or ‘purple’, and **kununžà** ‘hug’. Hinton (1987) argues that /nž/ derives from Proto-Mixtec \*nd, following Josserand (1983:262), who shows that \*nd develops a number of palatalized and/or fricativized reflexes before \*i and \*e.<sup>8</sup> Hinton

<sup>6</sup>In addition, Hinton (1982:360) claims that causative s- plus a stem with initial [žu] in this dialect also results in [si]: **žúʔú** ‘afraid, frightened’, **síʔú** ‘scare or frighten’ (vt). However, as will be discussed in Chapter 3, causative s- plus a stative in ž- more plausibly results in a form in č. Since the **žúʔú/síʔú** case is unique, I prefer to think of it as suppletion.

<sup>7</sup>The sources of these somewhat exceptional cases are apparently quite diverse. (One which can be ruled out is \*x, which is a source for /š/ in other parts of the Mixtec-speaking area, but which was retained in the Western Alta dialects, of which Chalcatongo is one [Josserand 1983:267].) The palatalization of \*s to /š/ appears to have been quite uniform before \*i in this dialect, but less so before other front vowels. Only one of the words in Chalcatongo Mixtec in my corpus with /š/ before a vowel other than /i/ is listed in Josserand’s cognate sets, and it does indeed derive from \*s. This is the word for ‘grease’ or ‘lard’: \***seʔe** > **šaʔā**. Unfortunately, I do not have the data to determine the Proto-Mixtec form for the others. Finally, some words in this dialect with /s/ before /a/ (instead of the expected /š/) derive from \*l (e.g., **saà** from \***ti laa**), although others do have \*s as their source.

<sup>8</sup>Josserand (1983:263), however, does not include Chalcatongo in her map V–8, which shows the distribution of these developments across the Mixtec dialects. It may be that the results in the Chalcatongo dialect are so limited that her survey just missed them.

claims that the first step in the process for Chalcatongo Mixtec was \*nd > nǰ / \_\_\_ \*e.<sup>9</sup> In a later change, \*e > a. /nǰ/ then moved to /nž/ and, for the majority of speakers, eventually merged with /ž/ (and for some speakers in some cases, /ñ/, as discussed below). Thus, in Hinton's view, the speakers with /nž/ retain an older form which most Chalcatongo speakers have lost. Note also that /nž/ must be treated as phonemic for the speakers who have it, since it contrasts with /ž/, for example, in **nžáá** 'live, reside' and **žaa** 'tongue'.

Finally, the voiced fricative /ž/ is also problematic. In Chalcatongo Mixtec this segment varies synchronically in initial and medial positions between [ž] and [y], although the former predominates. There are two environments, however, in which [y] is more common; these are following [ʔ] and in the pronominal enclitics =**žo** ([=yo], 1PL), =**ži** ([=yi], 3POL.DEC), and =**ža** ([=ya], 3SUP).<sup>10</sup> I have chosen to phonemicize this segment as /ž/ on the grounds that [ž] is much more common phonetically than [y]. Josserand (1983: 252–253) posits a change from Proto-Mixtec \*y > ž in posttonic syllables before oral vowels in a broad area which includes Chalcatongo, but it appears that the Chalcatongo dialect has now generalized the change to include virtually all instances of the segment, with the exceptions noted above.

The distribution of /ž/ is complicated, however, by its interactions with /ñ/. In a few lexical items, speakers split on whether the word contains /ž/ or /ñ/: **žábaʔa/ñábaʔa** 'have', **káʔža/káʔña** 'cut'. Historically, [ñ] derives from \*y before nasalized vowels (Josserand 1983:453), and so the alternation should not surprise us. In fact, in some Mixtec dialects (e.g., Ñumí Mixtec, see Gittlen and Marlett 1989), such a rule is apparently still productive. We can see traces of it in present-day Chalcatongo Mixtec by observing that there are virtually no words containing /ž/ which have nasalized vowels. (There are only two exceptions to this statement of which I am aware; the first is the word meaning 'people'. There is a fair amount of variation in its pronunciation, and some speakers do have both [ž] and nasalized vowels: **ñážiñ**. The other is a word meaning 'baby': **žíkí**.) While, on the other hand, most words with [ñ] do have nasalized vowels, there are a number which do not, indicating that the rule is no longer productive in this dialect. In fact, minimal pairs with [ñ] and [ž] can be found (**ñáʔa** 'early' and **žáʔa** 'here'; **ñíʔi** 'steam bath' and **žíʔi** 'spread, smeared'), indicating that [ñ] is no longer an allophone of /ž/, and that it must be granted phonemic status in this dialect.

### (3) EXAMPLES OF FRICATIVES

	INITIAL	MEDIAL	AFTER [ʔ]
/ð/	=ðe 'he'	—	—
/s/	seʔe 'child'	bása 'later'	—
/š/	šéʔé 'ring'	nduši 'warm, heat'	—
/x/	xaʔà 'time'	bixi 'pineapple'	—
/ž/	žaa 'tongue'	kóžo 'empty, pour'	bíʔža 'nopal'
	[žaa, yaa]	[kóžo, kóyo]	[bíʔya, bíʔža]
/nž/	nžáá 'live, reside'	kénžaʔa 'move near'	bíʔnža 'nopal'

<sup>9</sup>The vowel that Josserand (1983) reconstructs as \*e is reconstructed by Kaufman as \*æ (Hinton [1987] cites class notes for this).

<sup>10</sup>Thanks to Joe Salmons for pointing out these distributional facts to me.

### 2.1.2.3. Affricates

There are two affricates, a prenasalized voiceless affricate /nč/ which occurs in a very small number of words (less than five), and a simple voiceless affricate /č/ which has a normal rate of occurrence.<sup>11</sup>

#### (4) EXAMPLES OF AFFRICATES

	INITIAL	MEDIAL	AFTER [ʔ]
/nč/	—	túnči ‘tunnel, hole’	—
/č/	čaʔa ‘gourd’	nduči ‘eye’	čúʔči ‘Jesus’

### 2.1.2.4. Nasals

There are three nasal consonants, /m/, /n/, and /ñ/. Of the three, /m/ is somewhat less frequent, appearing in perhaps twenty-five roots in all. The phonemic status of /ñ/ is a somewhat complicated issue, but as explained above it has to be treated as distinct from /ʃ/ in this dialect because of the existence of a small number of minimal pairs involving the two.

#### (5) EXAMPLES OF NASALS

	INITIAL	MEDIAL	AFTER [ʔ]
/m/	máa ‘self’	sámá ‘food’	saʔma ‘clothing’
/n/	náa ‘mother’	kána ‘call’	táʔnu ‘break’
/ñ/	ñáá ‘dark’	náñá ‘chayote’	māʔñú ‘between’

### 2.1.2.5. Lateral

/l/ appears word-initially in a small number of words (approximately ten), and intervocalically in many others.<sup>12</sup>

<sup>11</sup>Hinton (1987:5) argues that the words containing /nč/ are “highly disguised old Spanish loans.” In some cases such loan status is quite clear (e.g., *sančáo* < *Santiago*), while in others it is less so (e.g., *tʃlunčè papalome* [type of maguey], which Hinton claims derives from *golosina* ‘snack’ plus affixes).

<sup>12</sup>There is one word with /l/ which does not fit this description: *čflža* ‘lizard’, from Proto-Mixtecan \**wilu*, Longacre (1957), set 273. (The initial [č] is the regular result of fusion of the animal classifier *tʃ-* with a root in \**w*). If we were to analyze this word as containing the sequence *l-ʃ*, we could syllabify in two ways: *čfl.ʃa* or *čf.lʃa*. The former would be problematic in that the first syllable would violate the syllable canon of all Mixtec dialects, which does not allow closed syllables (see §2.3). The latter would be somewhat more plausible, although /lʃ/ would be a unique cluster (see §2.2). Since /ʃ/ is so often realized as [y], another possibility is that the word contains the cluster [ly]. This cluster does apparently occur in other dialects: Mak (1953:86, n. 2), for example, mentions rare instances of [y] as “second member of a consonant cluster” in San Miguel Mixtec. Finally, we could also analyze the medial as a palatalized /l/, although it would be the only instance of such a segment in this dialect. This last analysis is probably the most preferable, however, for two reasons. One is that palatalization in the environment of /i/ is quite

## (6) EXAMPLE OF LATERAL

	INITIAL	MEDIAL	AFTER [ʔ]
/l/	lúlí 'small'	lúlí 'small'	tíʔlu 'small'

## 2.1.2.6. Flap

/r/ is a highly limited phoneme in Chalcatongo Mixtec. It appears initially only in the first and second person pronouns, where it is realized as a flap: **rùʔù** [rùʔù] 'I' (clitic form =**rí**) and **roʔo** [roʔo] 'you' (clitic form =**ro**).

/r/ also appears in four or five nouns, but most of these nouns are loans, for example, **rih** 'sheep' (plausibly from Spanish *borrego*), and **tikoro žáʔnda** 'rainbow' (the first part presumably deriving from the 'round objects' classifying prefix **tí-** [see §3.3.3.2] plus Spanish *arco [iris]* 'rainbow'). Another noun containing /r/ is **riki** 'sound of a woodpecker', but this is clearly onomatopoeic. In these examples /r/ is pronounced as a flap intervocally, but as a trill initially, contrary to its pronunciation in the two pronouns. (Josserand [1983:219] says that the trilled [r̄] is a "certain loan.")

## (7) EXAMPLES OF FLAP

	INITIAL	MEDIAL	AFTER [ʔ]
/r/	rùʔù 'I' [rùʔù] rih 'sheep' [r̄ih]	tirírí '(type of) maguey' [tirírí]	—

## 2.1.2.7. Glide

/w/ is extremely rare, occurring only in two native words, which are identical except for tone. These are the demonstrative **wáá** 'that, that one' and the adverb **wáá** 'there'. The meaning of the latter has apparently been extended to time ('then') and also functions as a determiner ('the'). There is also one noun which contains [w]: **snawa** 'skirt', but this is probably a loan from a Spanish word for a long, full skirt, *enaguas*.

## (8) EXAMPLE OF GLIDE

	INITIAL	MEDIAL	AFTER [ʔ]
/w/	wáá 'there'	—	—

---

plausible, and the second is that other dialects of Mixtec do have palatalized consonants, including /l/. This is an interesting word, and more comparative data are needed.

### 2.1.2.8. Loan Phonemes

A few loan phonemes occur which are not listed in Table 6. /p/ is found in the words **páa** ‘godfather’ (which is derived from Spanish *compadre*), **pero** ‘but’ (Spanish *pero*), **primá/primú** ‘cousin’ (Spanish *prima/primo*), and **pāñú** ‘shawl’, which presumably has as its source Spanish *pañó* ‘cloth, drapery’, or perhaps *pañuelo* ‘shawl, handkerchief’. In addition to /p/, there is at least one borrowing with /ɸ<sup>w</sup>/: **ɸ<sup>w</sup>ersá** ‘strength, force’, from Spanish *fuera*. Finally, /ɣ/ occurs medially in a few loanwords, for example, **triyú** ‘wheat’, from Spanish *trigo* (although some speakers delete the medial consonant entirely, yielding **trfu**).

Note that final [o] in most Spanish borrowings is raised to [u] in Mixtec. There is some variation in this, but [u] definitely predominates. **Pero** ‘but’ (Spanish *pero*) is an exception to this rule. It is always realized with final [o].

### 2.1.3. Some Notes on Distribution

Josserand (1983) mentions several distributional restrictions which are characteristic of most Mixtec dialects, and some of these are found in Chalcatongo Mixtec. For example, she finds a widespread restriction on labial consonants preceding round (or labialized) vowels (1983:234), and this is true in Chalcatongo Mixtec, where /b, k<sup>w</sup>, m/ do not appear before /u, ũ, o, õ/. The strictly labial consonants /b/ and /m/ also do not occur before /i/ or /ĩ/, although the labialized /k<sup>w</sup>/ does. Silverman (1993) pursues this issue, concluding that the feature [labial] is restricted in the Mixtecan languages to one instance per couplet, and discusses the significance of this for feature geometry.

As mentioned in §2.1.1, the vowels /e/ and /o/ are much less frequent than the other oral vowels, and their nasalized counterparts are almost nonexistent. Among the commonly occurring nasalized vowels, /ũ/ and /ĩ/ are fairly rare (/ĩ/ more so than /ũ/), while /ã/ and /ī/ are more common.

In §2.1.2 it was mentioned that some Mixtec dialects have a restriction to the effect that roots containing [ñ] also contain only nasalized vowels; however, as we have seen, this is not true of Chalcatongo Mixtec. Some dialects have a more extreme version of this dependency: in Molinos Mixtec (Hunter and Pike 1969), for example, only nasalized vowels may occur in roots with medial nasal consonants, as well as in roots with initial nasal consonants and particular CV structures. However, Chalcatongo Mixtec roots do not impose requirements of this sort on the distribution of nasalized vowels; that is, there is no dependency (besides the limited dependency described above in the section on fricatives) between nasal consonants and nasal vowels.

Finally, there are stringent restrictions on combinations of vowels which may appear in a single root. These are covered in §2.4, after the canonical root structure of Mixtec is discussed.

## 2.2. Consonant Clusters

Consonant clusters are generally disallowed in all varieties of Mixtec. By far the most common clusters which do occur across the dialects are those which are root-initial and consist of /s/ plus another segment. Josserand (1983:231–232) points out that consonant clusters with initial /s/ in monomorphemic words are invariably analyzable as derived from an earlier form with a vowel following the /s/. Only /st/ and /snd/ are found in monomorphemic words in Chalcatongo Mixtec, with various other combinations being produced by prefixation of the causative *s-* to a consonant-initial verb. (For some speakers this /s/ is realized as [ʃ].) Typical examples are *staà* ‘tortilla’, *sndikì* ‘bull’, *s-kee* ‘make-eat’ (‘feed’), *s-ndáxi* ‘make-wet’ (‘wet’, *vt*), and *s-čóʔo* ‘make-cook’ (‘cook’, *vt*).

Consonant clusters in borrowings from Spanish are generally retained, even when the particular combination is not found in native words, for example, /tr/ in *triyú*, ‘wheat’ (Spanish *trigo*) and /ðr/ in *peðrú* *Pedro*.

## 2.3. Syllable Structure, the Couplet, and the Analysis of Glottal Stop

Syllable structure in Chalcatongo Mixtec is restricted to V, CV, and stem-initial CCV (in the few cases where clusters are allowed [see above]). A problem in the analysis of Mixtec syllable structure is the occurrence and distribution of [ʔ], which appears in Chalcatongo Mixtec intervocally, as well as word-medially preceding most voiced consonants: *bàʔà* ‘good’, *káʔndi* ‘explode’, *káʔbá* ‘dirty’, *saʔma* ‘clothes’, *táʔnu* ‘break’, *máʔnú* ‘between’, *kóʔlo* ‘turkey’, *bíʔža* ‘nopal’, and, for some speakers, *bíʔnža* ‘nopal’. (An echo vowel often intervenes between the glottal stop and the consonant, identical to the preceding vowel.) The voiced consonants which have not been found following [ʔ], /ŋg, r, w/, are all extremely rare, and so their nonoccurrence in this context is not surprising.<sup>13</sup>

Various analyses have been proposed for [ʔ] in Mixtec: it has been treated as a consonant in most descriptions, as a feature of vowels in others, and as a feature of roots in Macaulay and Salmons (1995). The latter approach best captures its distributional restrictions and can be extended to all but a very few of the other dialects. I briefly review some of the arguments for the root-based analysis here.

It is the stem type CVʔCV (exemplified above) which poses the most immediate problem for analysis, in that it appears to violate the syllable canon as stated above. Treatment of [ʔ] as a consonant (as in most descriptions of Mixtec dialects) would compel us to include closed syllables in the Mixtec syllable canon, but with [ʔ] as the only permissible final consonant. (Of course, it could be treated as part of the onset of the second syllable, but that is an even less desirable solution.) Furthermore, such closed syllables could only appear as the first syllable in a root, as there are no word-final glottal stops in Chalcatongo Mixtec. (According to Josserand [1983], there are at least two Mixtec dialects—Ayutla and Zacatepec—which do allow word-final glottal stop, and a syllable-based analysis rather

<sup>13</sup>In one example, the glottal stop precedes a voiceless consonant: *cúʔci* ‘God, Jesus’. This word is a loan from Spanish, however: *chucho* ‘diminutive of *Jesus*’ (see Santamaría 1959:423). The insertion of the glottal stop, especially before a voiceless consonant, is unexplained.



than a root-based analysis is preferable for them. See Macaulay and Salmons [1995] for details.)

An alternative to the consonantal analysis is suggested by Josserand (1983:176–179, following Bradley)<sup>14</sup> and adopted by Hills (1990) and Hinton et al. (1991), in which [ʔ] is treated as a prosodic feature of vowels, resulting in a distinction between open and “checked” syllables. This approach results in four parallel series of vowels when nasalization is taken into account: plain oral, plain nasal, checked oral, and checked nasal. Such a solution allows us to retain the simpler statement of the Mixtec syllable canon: (C)(C)V.

Another argument for the prosodic (vocalic) approach, one based on empirical evidence, is made by Hinton et al. (1991). They first show that in certain environments the rules of tone sandhi in Chalcatongo Mixtec treat CVV roots and CVCV roots differently (see §2.5 for details). Crucially, CVʔV roots behave like CVV roots in the relevant case. Hinton et al. point out that if glottal stop is analyzed as a feature of the vowel, such a result follows automatically, whereas if it is analyzed as a consonant, its behavior must be stipulated as an exception.

Furthermore, Meacham (1991:164) finds that the first vowel in a CVʔV couplet is considerably shorter than the first vowel in a CVCV couplet, while the second vowel of a CVʔV couplet is longer than that of a CVCV couplet. However, the timing of CVʔ and the timing of the initial CV of a CVCV root are comparable, as are the overall duration of the two types of root. Hinton et al. (1991) point out that this is also consistent with an analysis in which the glottal stop is analyzed as a feature of the vowel rather than as a consonant.

Before we can evaluate this approach, and review the refinement of it which is proposed in Macaulay and Salmons (1995), we must first consider the structure of Mixtec roots. In all Mixtec dialects there is a requirement that words be minimally disyllabic; this structure is known by Mixtecanists as the “couplet” (or “tonemic couplet,” Pike 1948:79–81). Couplets without glottalization in Chalcatongo Mixtec are restricted to the following types (ignoring consonant clusters here for ease of presentation):

- (9) VV:      uù ‘two’, uà ‘bitter’  
 CVV:     čàà ‘man’, saù ‘rain’  
 CVCV:    kitì ‘animal’, káta ‘sing’  
 VCV:     inì ‘inside’, úna ‘eight’

The couplet is subject to further affixation and/or cliticization, leading to words of more than two syllables. However, virtually all longer forms can be analyzed as polymorphemic—if not synchronically, then diachronically (see, for example, the discussion of animal names in Chapter 3).

The vowels in the examples in (9) are all plain (that is, nonchecked) and conform to the simple syllable canon described above. Inclusion of the glottal feature in the first syllable results in the addition of the couplet types shown in (10). (One logical possibility, VʔCV, does not occur in this dialect, but does in others.)

<sup>14</sup>The reference Josserand (1983) gives is Bradley (1977). She also mentions Bradley (1970) as a precursor.

- (10) V?V:      ú?u ‘hurt’, í?a ‘saint, god’  
 CV?V:     bà?à ‘good’, bá?ù ‘coyote’  
 CV?CV:    kó?lo ‘turkey’, bí?ža ‘nopal’

It is, as discussed above, the third type in (10) which causes problems for the consonantal analysis of [?]. However, if [?] is analyzed instead as a feature of the vowel, this type reduces to CVCV, allowing us to retain the simpler statement of the syllable canon.

We have seen, then, that there are good arguments for rejecting a consonantal analysis of [?] in Mixtec. However, the checked vowel analysis of Bradley, Josserand, and others also suffers from certain shortcomings, a number of which are discussed in Macaulay and Salmons (1995). I review just one here.

Recall that in virtually all of the Mixtec dialects, glottalization is restricted to initial syllables. This is an entirely arbitrary restriction under both the consonantal and the vocalic analyses. Some proponents of the latter approach have attempted to solve this by tying the occurrence of glottalization to stress.<sup>15</sup> In many of the dialects, stress is penultimate, and since this coincides with the first syllable of the couplet, the restriction can be accounted for by stipulating that glottalization only occurs on stressed syllables. However, as Macaulay and Salmons show, there are two situations in which this solution fails. First, some dialects (e.g., Alacatlazala, see Zylstra 1980) have final stress in certain contexts, but do not allow final glottalization. Second, the reverse also occurs: some dialects (e.g., Ayutla, see Pankratz and Pike 1967) have final glottalization of words with penultimate stress. Thus, the distribution of glottalization in these dialects remains unexplained under the vocalic approach.

This problem is solved, however, under the root-based analysis of Macaulay and Salmons (1995). There, we argue that glottalization in Chalcatongo Mixtec should be treated as a feature of roots (that is, of the couplet). Specifically, lexical entries containing glottalization are marked with a floating glottal feature, as illustrated in (11) for the word **bà?à** ‘good’. This feature attaches to the leftmost vowel by the rule stated in (12), producing an output which can be schematized as in (13).<sup>16</sup>

- (11) LEXICAL ENTRY FOR ‘GOOD’ (surface form: **bà?à**)  
       /baa/  
       [+constricted glottis]

- (12) GLOTTAL ASSOCIATION  
 Associate the feature [+constricted glottis] to the timing slot corresponding to the leftmost vowel of the couplet.

<sup>15</sup>Gittlen and Marlett (1989) make this proposal, for example, but in their analysis glottalization is a feature of syllables, not vowels.

<sup>16</sup>See Macaulay and Salmons (1995) for a more formal representation of the output of this rule, and for more precise explanation of how rule (12) works.

## (13) OUTPUT OF RULE (12)

/baa/  
|  
[+constricted glottis]

Rule (12) accounts for the unique placement of glottalization within the couplet, and since it is not dependent on stress, can apply in those dialects which do not have consistent penultimate stress as well as in those which do. Typological evidence indicates that it is not unusual for glottalization to be restricted to a specific position in a root, and, furthermore, that the initial syllable is a very common locus (see Macaulay and Salmons for a survey of typological evidence on this point). Motivation for this phenomenon is that word- or root-initial position is inherently prosodically prominent, and so prosodic features like glottalization are highly likely to appear in such a position.

In addition, our analysis correctly predicts that [ʔ] does not appear in affixes or clitics. This is because only roots may be marked for glottalization. Furthermore, the insight that surface (C)VʔV roots are underlyingly (C)VV—and thus behave the same as (C)VV roots under tone sandhi—is retained.

In what follows, I assume the analysis of [ʔ] in which glottalization is treated as a feature of the couplet. However, I continue to transcribe it as a segment, for ease of representation.

#### 2.4. Distribution of Vowels in the Couplet

The two vowels which occur in the Mixtec couplet are restricted to a subset of the possible combinations. Tables 7 and 8 present data on vowel co-occurrence in a sample of 693 Chalcatongo Mixtec roots. (Both tables omit the extremely limited vowels /ẽ/ and /õ/.) The number in each cell of Table 7 indicates the number of examples which were found of that particular combination in the entire sample.<sup>17</sup> Table 8 is a more detailed tabulation of the same data, showing vowel sequences sorted by root type: CVV, CVʔV, CVCV, and CVʔCV.

Note first that the two vowels must share features for nasalization; that is, either both are oral or both are nasal.<sup>18</sup> Such nasal harmony (and patterns of nasalization in general) is something which seems to differ fairly widely across the Mixtec dialects. In some dialects, for example, either one or both of the vowels of the couplet may be nasalized (e.g., Ayutla Mixtec, see Pankratz and Pike 1967). Other dialects go to the other extreme: in Ñumí Mixtec (Gittlen and Marlett 1989; see also Marlett 1992), nasality is a feature which

<sup>17</sup>Only monomorphemic disyllables were included in this tally. Realis and potential stems were only counted once per verb, unless they had different vowel combinations. When a form had more than one variant (involving different vowels), all were counted.

<sup>18</sup>It should be noted that I have found some tokens in which nasalization is only readily perceptible on the final vowel; however, there seems to be a great deal of variation (inter- and intraspeaker) in this feature. It may be that an analysis in which nasalization is a feature of roots (like glottalization) will be appropriate for this dialect, as it is for others. Nasalization is an aspect of Chalcatongo Mixtec phonology which deserves more detailed study than I have been able to accomplish to this point.

characterizes whole roots and affects consonants as well as vowels.<sup>19</sup> However, as we have seen above, although there is evidence that at one time in the history of Chalcatongo Mixtec the nasality of vowels correlated with the nasality of at least one consonant ([ñ]), such is no longer the case.

Table 7: Vowel Sequences in the Couplet

	a	e	i	ĩ	u	o	ã	ĩ	ĩ	ũ
a	118	0	31	4	45	2				
e	3	21	1	0	13	0				
i	34	2	47	2	35	23				
ĩ	0	0	1	16	10	0				
u	33	1	26	0	46	2				
o	1	1	1	0	0	55				
ã							26	3	0	7
ĩ							4	22	2	7
ĩ							0	1	14	0
ũ							3	0	0	30

Also note how many more couplets have oral vowels than nasal vowels: 574 (83%) have oral vowels, while only 119 (17%) have nasal vowels. In addition, there is a strong tendency toward vowel identity in the root: 395 (57%) of the sample show total harmony. This tendency is more pronounced with the nasal vowels than with the oral vowels: 303 (53%) of oral roots show harmony, while 92 (77%) of the nasal roots show harmony. Such tendencies toward harmony (both of vowel quality and nasality) are manifestations of what Salmons (1992) analyzes as a marked preference for having a single specification for any given feature in each Mixtec couplet.

Restrictions on vowel sequences in the closely related dialect of San Miguel el Grande Mixtec are discussed by Pike (1947:167–169). He divides the oral vowels into an inner and outer triangle: the inner triangle is /ə, e, o/, and the outer triangle consists of the cardinal vowels /i, a, u/. He finds that the outer triangle vowels may occur in any combination, while nonidentical sequences of inner vowels are quite rare. Substituting /i/ for /ə/, we find the same pattern in Chalcatongo Mixtec. The outer vowels may occur in any combination, while the only exception to the second statement is the sequence **o-e**, which occurs in one word, **onde** ‘until’. This is exactly the same exception which Pike cites for San Miguel Mixtec, and it may in fact be a loanword, from the archaic Spanish *de onde* ‘from where’.<sup>20</sup> Finally, the combination of inner and outer vowels is less patterned. The only ones which occur with any frequency, however, all consist of a front or central vowel

<sup>19</sup>See Piggott (1992) for a formal analysis of nasal spreading in two dialects of Mixtec.

<sup>20</sup>Thanks to an anonymous reader of the manuscript for pointing this out to me.

Table 8: Vowel Sequences in the Couplet by Stem Type

	a	e	i	ī	u	o	ā	ī	ī	ū
a	a. 30 b. 30 c. 42 d. 16			b. 2 c. 26 d. 3	c. 3 d. 1	a. 4 b. 11 c. 28 d. 2				
e		a. 7 b. 9 c. 3 d. 1	a. 1			c. 11 d. 2				
i	a. 6 b. 4 c. 20 d. 4	c. 2	a. 9 b. 12 c. 25 d. 1	c. 2	a. 2 b. 4 c. 28 d. 1	a. 3 c. 19 d. 1				
ī				a. 6 b. 8 c. 1 d. 1	a. 5 b. 5					
u	a. 4 b. 9 c. 18 d. 2	c. 1	c. 25 d. 1		a. 20 b. 8 c. 18	c. 2				
o						a. 20 b. 18 c. 16 d. 1				
ā							a. 12 b. 11 c. 3	c. 2 d. 1		c. 2 d. 5
ī							a. 1 b. 2 c. 1	a. 6 b. 5 c. 11	c. 2	a. 3 c. 4
ī									a. 4 b. 2 c. 1	c. 8
ū							a. 1			a. 9 b. 9 c. 11 d. 1

KEY:  
a = CVV  
b = CV?V  
c = CVCV  
d = CV?CV

followed by a back vowel: **i-o** (23 examples), **e-u** (13 examples), and **ĩ-u** (10 examples).<sup>21</sup> Otherwise, Pike's (1947: 169) statement that "no simple general rule for the occurrence of inner with outer vowels can be given" seems to hold true for Chalcatongo Mixtec as well as for San Miguel Mixtec.

## 2.5. Tone and Tone Sandhi

Chalcatongo Mixtec has three tones, high (´), mid (unmarked), and low (`), as illustrated in the minimal triplet in (14):<sup>22</sup>

- (14) kóó 'low wall, border'  
 koo 'there will be'  
 kòò 'snake'

Phonetically long vowels are transcribed as VV sequences, as in (9) and (14) above. Such forms are treated as disyllabic, following Pike (1948:79, n. 3). As Pike points out, it might be preferable to treat Mixtec as a mora-timed language, but the distinction is not important for our present purposes. Each vowel of a VV sequence carries a single level tone, and tonal contours over such phonetically long vowels are analyzed as sequences of distinct level tones.

Table 9 shows the frequency of tone co-occurrences in a sample of 773 monomorphemic couplets. Several points are worth noting about this table.<sup>23</sup> First, the two most extreme combinations, HL and LH, are quite rare, comprising (together) only 14, or 1.8 percent, of the total sample. In fact, all forms with an initial L tone are rare; there are only 43 (5.6%) which begin with L. The existence of a high number of ML forms, however, makes any claim about the overall rarity of L tone impossible; MLs make up 14.6 percent of the total.

<sup>21</sup>Pike (1947:169) makes essentially the same observation: "(Except for repeat sequences) no combinations of palatal with palatal vowel or of labial with labial vowel occur."

<sup>22</sup>As mentioned in §1.5, tone in Chalcatongo Mixtec has been extensively studied by a group working at the University of California at Berkeley: Eugene Buckley, Leanne Hinton, Marv Kramer, and Michael Meacham. Much of what follows (including the discussion of the morphological aspects of tone in Chapter 3) makes use of their work. I have tried to explicitly acknowledge each author's contribution in all cases.

<sup>23</sup>Some caveats about the contents of this table are also necessary: First, deciding when something is monomorphemic in this language can be somewhat difficult. In general, I have tried to be as conservative as possible. However, not only is there a constant and ongoing process of grammaticization and cliticization which obscures the source of bimorphemic forms, there are also legitimate questions about the status of alternations like those found in the verbal paradigms. (The latter issue is taken up in the next chapter.) In making up this table, I ruled out any form which was at all transparently bimorphemic in origin. In the case of verb stems, I counted all distinct tone combinations whenever there was more than one form. The second troublesome issue involves variant forms of a single lexical item. In this case, I decided to count all variants that had differing tone melodies. Finally, no cases were included which were clearly loanwords.

Table 9: Tone in Couplets

	CVV	CV?V	CVCV	CV?CV	TOTAL
HH	47	26	112	5	190
HM	37	58	81	27	203
HL	0	2	8	0	10
MH	10	14	49	5	78
MM	19	25	84	8	136
ML	34	18	57	4	113
LH	1	1	2	0	4
LM	0	5	10	0	15
LL	14	4	6	0	24
TOTAL	162	153	409	49	773

Hinton (1991) presents similar data, reproduced (in somewhat reorganized form) as Table 10. There are some rather striking differences between her results and those presented in Table 9, the most noticeable of which is the complete absence in Hinton's data of couplets with surface LM or MH tone.<sup>24</sup>

Table 10: Tone in Couplets (Hinton)

(Source: Adapted from Hinton 1991; used with permission.)

	CVV	CV?V	CVCV	CV?CV	TOTAL
HH	11	15	19	4	49
HM	2	2	4	1	9
HL	6	5	0	3	14
MH	0	0	0	0	0
MM	22	21	40	3	86
ML	31	25	49	7	112
LH	2	8	4	1	15
LM	0	0	0	0	0
LL	12	11	18	1	42
TOTAL	86	87	134	20	327

The lack of LM couplets is explained by Hinton (following Buckley 1991) as the result of a rule of Low-Tone Spreading which creates surface LL forms from underlying LM forms. (Buckley argues for such a rule based on the differing behavior of underlying and derived LL forms under tone sandhi; see §2.5.5.) However, note in Table 9 that the larger

<sup>24</sup>I have removed one MH CVCV form from her table. This is the word for 'mouse', which (as Hinton herself points out in the text) is transparently derived from the animal classifier plus an unidentified root.

sample shows 15 forms with (surface) LM tone. It is unclear why Hinton's and Buckley's data show no LM forms while mine show several. There are two factors possibly at work here: one is the difference in sample size, and the other is that the lack of surface LM tone (and the rule of Low-Tone Spreading accounting for it) may be idiolectal for the speaker with whom they worked. This is discussed further in §2.5.5.

The lack of MH forms Hinton takes as part of a larger pattern, involving an explanation for the source of H tones overall. This is discussed in §2.5.2.

### 2.5.1. Floating High Tone

A large number of morphemes in Chalcatongo Mixtec carry a final floating high tone. This tone is not associated to the morpheme that carries it; it is an extra tone which is not realized when the form is spoken in isolation or utterance-finally. However, when something does occur after such a morpheme, the floating high tone is associated to whatever immediately follows it—either to the first or the second syllable, depending on the underlying tone and CV structure of the host. Morphemes in Mixtec can thus be divided into two types: those which carry such a floating tone and those which do not.

Pike (1944, 1948) provides the classic description of floating tones in Mixtec. He uses the term “perturbation” to describe the tonal effect of one of these morphemes on a following morpheme and describes the perturbation patterns in San Miguel Mixtec as shown in the second column of (15). Essentially the same pattern of perturbation is found in Chalcatongo Mixtec, although there are some differences. The Chalcatongo patterns are listed in the third column of (15).

#### (15) TONAL PERTURBATION

	<u>San Miguel</u>	<u>Chalcatongo</u>
BASIC	PERTURBED	PERTURBED
HH	HH	HH
HM	HM	HM
HL	HL	HL
MH	MH	HH/MH
MM	HM/HH	HM
ML: (C)VV	HL	HM
(C)V?V	HL	HL
(C)V?CV	HL	HL
(C)VCV	MH	MH
LH	HH	HH
LM	HM	HM
LL	(n/a) <sup>25</sup>	HH/HM

<sup>25</sup>There are no LL couplets in San Miguel Mixtec. This is one of the areas in which the two dialects differ.



With few exceptions, a Chalcatongo Mixtec word with the underlying tones shown in the first column changes its tones to the sequence given in the third column when it follows a morpheme with a floating high tone. For example, a word with basic LM tone is perturbed to HM when it follows such a morpheme. As (15) shows, the most complex case is that of words with ML tone; here, the CV structure and glottalization status of the root determine the perturbed form when these words follow a morpheme with a floating high. This is discussed further below.

(16)–(24) give examples of perturbation in Chalcatongo Mixtec. In each case, the first word or affix is one which has a floating high tone as part of its underlying representation. (After the examples, a set of rules is given which accounts for the sandhi patterns.)

- (16) HH → HH  
 kũ̀ b́íkó → kũ̀ b́íkó ‘four parties’
- (17) HM → HM  
 kũ̀ bílu → kũ̀ bílu ‘four cats’
- (18) HL → HL  
 kũ̀ báʔù → kũ̀ báʔù ‘four coyotes’
- (19a) MH → HH  
 kũ̀ ʃoʔó → kũ̀ ʃóʔó ‘four fleas’
- (19b) MH → MH  
 staà luʔú → staà luʔú ‘toasted tortilla’
- (20) MM → HM  
 kũ̀ soʔo → kũ̀ sóʔo ‘four ears’
- (21a) ML → HL  
 ma-naʔmà → ma-náʔmà ‘don’t confess (IMP)’
- (21b) ML → HM  
 x́í staà → x́í stáa ‘with tortillas’
- (21c) ML → MH  
 kũ̀ inà → kũ̀ iná ‘four dogs’
- (22) LH → HH  
 kũ̀ tíó → kũ̀ tíó ‘four baskets’
- (23) LM → HM  
 kũ̀ bìçi → kũ̀ bíçi ‘four fans’



In the couplets with ML tone, this leveling from the expected HL to HM seems only to occur with (CV)V roots. All glottalized roots, whether (C)V?V or (C)V?CV, retain the final L tone. In the case of perturbed LL couplets, the leveling is virtually exceptionless. The LL couplets which perturb to HH instead of HM (24a) are restricted to three words in my data: **tùù** 'black', **tùù** 'feather', and **čùù** 'chicken'.<sup>27</sup> These are best handled as lexical exceptions with an idiosyncratic perturbation pattern. (The fact that all have [ùù] as their vowel is intriguing, but unexplained.)

Finally, we come to the cases exemplified by (19b) (MH → MH) and (21c) (ML → MH). Both of these (or their equivalents in San Miguel Mixtec) are analyzed by Goldsmith (1990) as the result of a rule of Tone Metathesis.<sup>28</sup> Following Goldsmith, we can preliminarily formulate the rule as in (27):

(27) TONE METATHESIS



The fact that glottal stop is not analyzed here as a consonant prevents (27) from applying to words of the form (C)V?V.<sup>29</sup> But what happens to roots of the (phonetic) form (C)V?CV? Under our analysis, their CV structure is (C)VCV, with a floating glottalization feature—(27) should therefore apply. However, as we have seen in (21a), such forms do *not* undergo Tone Metathesis but instead are perturbed to HL. This indicates that we should further restrict Tone Metathesis to apply only to unglottalized couplets, as in (28):<sup>30</sup>

(28) TONE METATHESIS (revised)



Condition: Couplet must not be glottalized.

<sup>27</sup>Phonetically, it sounds to me as if there is a rise in these three words when spoken in isolation, and in fact I have often transcribed them as LM. However, the consultants uniformly insist that there is no rise, that they are LL, and so I treat them as such.

<sup>28</sup>Another formal analysis of the San Miguel data is presented in Brown (1988).

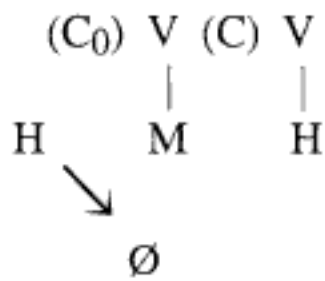
<sup>29</sup>Goldsmith (1990) formulates the Tone Metathesis rule slightly differently, and he also makes slightly different assumptions about the correct analysis of glottal stop in Mixtec; however, his formulation also prevents the rule from applying to CV?V roots.

<sup>30</sup>This could be used as an argument against the analysis of glottal stop as a feature of the root. However, a consonantal analysis of glottal stop would have to have its own condition on the rule: that it does not apply to couplets of the form CV?V.

Thus, the analysis of ML roots is dependent on CV structure and glottalization: (C)VV, (C)V?V, and (C)V?CV roots undergo Floating H Association (with CVV roots additionally undergoing Partial Assimilation), while CVCV roots undergo Tone Metathesis.

Returning now to the MH examples, we can first observe that MH roots may optionally undergo Floating H Association, yielding the forms in (19a). (19b), however, shows that an alternative is available for such roots: they may undergo no change whatsoever. Goldsmith (1990:26) handles the parallel San Miguel data by modifying the Tone Metathesis rule so that it applies to MH couplets as well as to ML couplets. However, since in the Chalcatongo data the rule applies to roots of all CV structures, not just to CVCV roots, it seems preferable to take the path which Goldsmith rejects; that is, to write a specific rule deleting the floating H before MH roots:

(29) FLOATING HIGH DELETION (optional)



Thus, rule (29) optionally deletes the floating H before any MH root. If (29) does not apply, rule (25), Floating H Association, applies as usual.

(30) summarizes the processes which form the standard perturbation patterns for Chalcatongo Mixtec:

(30a) UNDERGO ONLY RULE (25), FLOATING HIGH ASSOCIATION

- HH → HH
- HM → HM
- HL → HL
- MH → HH (optional)
- MM → HM
- ML → HL (glottalized couplets only)
- LH → HH
- LM → HM

(30b) UNDERGO RULE (25) AND RULE (26), PARTIAL ASSIMILATION

- ML → HM (CVV couplets only)
- LL → HM

(30c) LL LEXICAL EXCEPTIONS

- LL → HH

(30d) UNDERGO RULE (28), TONE METATHESIS

- ML → MH (CVCV couplets only)

- (30e) UNDERGO RULE (29), FLOATING HIGH DELETION  
 MH → MH (optional)

### 2.5.2. The Source of High Tone

Hinton (1991) argues that any H tone which appears to be part of a lexical item is either placed there by some morphological rule or must be represented as a floating tone which is not underlyingly associated to any particular tone-bearing unit in the lexical item in question.<sup>31</sup> In the latter case, such H tones are associated to the lexical item by the same rules which associate floating H tones originating as a part of a separate, preceding morpheme (as described in the section above). This claim, then, predicts that the only melodies involving H tone which will be found are those produced by the rules which associate floating H tones to the following morpheme (for my data, the rules in [25]–[29], above). That is, we should expect to find HH, HM, HL, and MH melodies (because these are possible outputs of those rules), and we should never find LH combinations (because there is no source for such a melody).

What, then, of the LH forms in Hinton's data? She argues that such forms should actually be reanalyzed as LM (a surface pattern which is missing in her corpus; recall Table 10). She bases her argument on Meacham's (1991) finding that the H of LH forms is phonetically lower than other H tones: "Meacham showed that [such high tones are] in fact about as high as mid tones in most environments" (Hinton 1991:176).<sup>32</sup>

My data (shown in Table 9) show a considerably smaller number of LH forms than do Hinton's data. This could be interpreted as providing additional support for the claim that high tones are always underlyingly floating to the left, whether they are morphologically added or underlyingly present. On the other hand, as previously mentioned, this is part of a larger pattern of reduction of extreme tone contrasts within the couplet (both LH and HL), which could mean that the coincidence of attested tone combinations involving H and the output of the rules which associate floating H tones to following morphemes is just that: a coincidence. This is a question which I here leave open.

Hinton also provides hypotheses about the origin of H tones in Mixtec. She lists the following as contexts for floating H tones: (a) continuative aspect (here called "realis"), (b) vocative case, (c) CVCV Spanish loans, (d) adjectivalization, and (e) following a "perturbing" morpheme (one of the set which carry a floating H tone). She implies that in some cases the addition of such H tones is productive (and thus that their addition is a synchronic morphological process), and that in other cases we can appeal to a diachronic explanation for the presence of a H tone (and thus must conclude that the H is synchronically underlyingly present). These hypotheses about the source of the H tone in modern-day Mixtec are

<sup>31</sup>The arguments and observations described in this section are spread throughout Hinton (1991) and Hinton et al. (1991). For simplicity, I refer in this section primarily to the former.

<sup>32</sup>These forms were originally treated as LH for two reasons: first, because they are realized that way in San Miguel Mixtec, and, second, because that was the auditory impression the transcribers had of such couplets (Leanne Hinton, personal communication).

consistent with Dürr's (1987) two-tone reconstruction for Proto-Mixtec and may provide a key to the development of the third (H) tone.

In the chapters which follow, various instances of morphologically induced H tones are discussed (e.g., the issue of the tone in realis stems of verbs is addressed in §3.1.1, adjectivalization is addressed in §3.3.1, etc.).<sup>33</sup>

### 2.5.3. "Gradient Smoothing"

Hinton et al. (1991) describe a rule which they call "Gradient Smoothing," whereby a LHH tone sequence becomes LMH. They give the following example:

(31)  $ndè?é + =rí \rightarrow ndè?e=rí$  'I will look'

My consultants, however, appear not to have this rule, instead producing the unmodified  $ndè?é=rí$  'I will look'. Whether rule (31) is idiolectal for the speaker with whom Hinton et al. worked, or whether it represents a subdialect of Chalcatongo Mixtec, it would have to be a very minor rule since there are so few couplets with LH tone in the first place. Also note, however, that a rule of this form (LHH  $\rightarrow$  LMH) would conform to the tendency to level out extreme sequences of tones.

### 2.5.4. High Dissimilation

Hinton et al. (1991) also posit a rule called "H Dissimilation," which lowers a word-final H after two or more preceding high tones. This rule applies across a phrasal affix boundary, when a pronominal clitic has high tone. Hinton et al. add that the rule is obligatory in words of four syllables or more, but optional in forms of only three syllables. Their examples are as follow:

(32)  $xičá?á + =rí \rightarrow xičá?á=ri$  'I am dancing'

(33)  $xítú?ú + =rí \rightarrow xítú?ú=ri$  'I am lying down'

(34)  $ndé?é + =rí \rightarrow ndé?é=rí$  OR  $ndé?é=ri$  'I am looking'

(35)  $sété + =rí \rightarrow sété=rí$  OR  $sété=ri$  'I am getting a haircut'

My data seem to show that the rule is even less constrained than they say: it appears to apply word-finally following even one H tone:

(36)  $xakú + =rí \rightarrow xakú=ri$  'I laugh'

<sup>33</sup>I have no data on vocatives, so I do not consider this case. CVCV Spanish loans are also not considered here.

(37)  $xiní + =rí \rightarrow xiní=ri$  'I know'

As mentioned, the final H must fall on a pronominal clitic for the rule to apply. We can state the rule as in (38):

(38) HIGH DISSIMILATION

$$\begin{array}{ccc} V & = & V \\ | & & | \\ H & & H \end{array} \rightarrow \begin{array}{ccc} V & = & V \\ | & & | \\ H & & M \end{array}$$

The tonal variations of the pronominal enclitics, however, are much more complicated than this simple rule would indicate, and deserve a much more extensive investigation than has been possible to this point.

### 2.5.5. Low-Tone Spreading

Buckley (1991) argues that underlying LM sequences in Chalcatongo Mixtec become LL by a rule which he calls "Low-Tone Spreading." This rule is predicated on the assumption that there are no surface LM forms in the language. However (as discussed above), speakers with whom I have worked have a fair number of LM couplets, for example, **ndĩkĩ** 'onion', **bĩxĩ** 'cold', and **bĩči** 'fan'. It appears that the speaker with whom Buckley worked has eliminated LM melodies. In addition, this speaker has L tone on the completive prefix **nĩ-**, which is almost always M tone for the other speakers with whom I have worked. The L of this speaker's prefix spreads (by the same rule) to verb roots under certain conditions. This topic is discussed further in §4.2. Once again, it is not clear whether Low-Tone Spreading is idiolectal for the speaker with whom Buckley worked (quite possible given the length of time he has been away from the community, and since he has used the language regularly), or whether it represents a subdialect of Chalcatongo Mixtec.

## 2.6. Contraction

As mentioned above, roots in Mixtec are formed of at least two syllables but are sometimes formed of three, and occasionally of four. (Roots of three or four syllables are always analyzable as deriving historically from more than one morpheme, however.) This strict requirement on root canon—that they must be of at least two syllables—is obscured, however, by a strong tendency to abbreviate forms with identical vowels in rapid speech, often resulting in monosyllabic surface forms. This process has often been called "cliticization," but I use the term "contraction" in order to maintain a distinction between the products of this process and the elements which I call "phrasal affixes" or "clitics" (e.g., the pronominal clitics). Contraction occurs, then, according to the rules in (39)–(41). When a syllable is deleted (by rule [40] or [41]), the one which remains retains its original tone. However, as some of the examples below illustrate, this is not always the case.

## (39) GLOTTAL FEATURE DELETION

$$\begin{array}{c} (C) V_i V_i \\ \neq \\ [+constricted\ glottis] \end{array}$$

## (40) VOWEL DELETION

$$(C) V_i V_i \rightarrow (C) V_i$$

## (41) INITIAL SYLLABLE DELETION

$$C_j V_i C_k V_i \rightarrow C_k V_i$$

Rule (41), while still productive, is far less often employed than rules (39) and (40), which are extremely common. Examples of the operation of rules (39) through (41) with single lexical items are shown in (42). Note in (42a) and (42c) that a word of the form (C)V?V has two possible rapid speech forms: (C)VV by (39), and (C)V by (39) and (40).

(42a) BY (39):  $bà?à \rightarrow bàà$  ('good')  
 $ú?u \rightarrow úu$  ('hurt')

(42b) BY (40):  $u\grave{u} \rightarrow \grave{u}$  ('two')  
 $čà\grave{a} \rightarrow čà$  ('man')

(42c) BY (39) AND (40):  $bà?à \rightarrow bàà \rightarrow bà$  ('good')  
 $ú?u \rightarrow úu \rightarrow u$  ('hurt')

(42d) BY (41):  $kitì \rightarrow tì$  ('animal')  
 $ndižì \rightarrow žì$  ('corpse')

Examples (43) and (44) illustrate the operation of some of these rules in connected speech. Note that the full forms underlying abbreviated roots can always be elicited from the speaker in slow speech, as is indicated by the second line in each example.<sup>34</sup>

(43)  $tú=ní-ta-ndà=rì \quad xà=ta-nda \quad ba=rì$   
 $tú=ni-ta-nda?à=rì \quad xà=ta-nda?à \quad bà?à=rì$   
 NEG=CP-?-hand=1 COMP=?-hand well=1  
 'I didn't marry (then) that I might marry well (later)'

<sup>34</sup>In example (43), the meaning of the element **ta-** in the verb meaning 'marry' is uncertain. Barbara Hollenbach (personal communication) has told me that the verb **ta-nda?à** derives from 'place hand', but in this dialect there is no synchronic source for the first syllable that has the meaning 'place'.



- (44) s-ndiʔi bikó=ʒo xa=kú ñũ=ʒò ʒa  
 s-ndíʔi bíkó=ʒo xa=kúu ñũũ=ʒo ʒaʔá  
 CAUS-finish fiesta=1PL COMP=COP town=1PL this  
 'We finish our fiesta, (the one) that is of this, our town'

There is also an idiosyncratic contraction which appears only with the copula **kúu**. **Kúu** often appears simply as **ú**, as in (45)–(47). Note in (47) that the nasalization of the preceding morpheme spreads onto the contracted copula.

- (45) ñasíʔi=ná ú  
 ñasíʔi=ná kúu  
 woman=1POL COP  
 'You are my wife'
- (46) má ú ʒii=rí  
 máá kúu ʒii=rí  
 EMPH COP husband=1  
 'That's my husband'
- (47) wā ú xa-ndáa  
 wāá kúu xa-ndáa  
 that COP NOM-true  
 'That's the truth'

Rapid speech contraction, while a pervasive characteristic of Mixtec phonology, is not synchronically responsible for all monosyllabic morphemes in Mixtec (as has been claimed by Pike 1944 and elsewhere). As I have argued in Macaulay 1987a and 1987b, we must carefully distinguish between the monosyllabic results of contraction and the two other types of monosyllabic element in Mixtec, affixes and clitics. It is clear that contraction is the historical mechanism by which many full words have been reduced to affixes and clitics, but a synchronic description must make note of the fact that affixes and clitics cannot be replaced in a given utterance by their corresponding full forms (in the cases in which such forms still exist in the language), whereas contracted forms may always be replaced by the corresponding full forms. Thus, the synchronic distribution of affixes and clitics cannot be accounted for by postulating a disyllabic underlying form and invoking the rules of rapid speech contraction.

## MORPHOLOGY: DERIVATION

This chapter presents the derivational morphology of Chalcatongo Mixtec, which primarily—although not entirely—involves derivation of verbs. §3.1 discusses morphological distinctions in the verb stem which are characteristic of all Mixtec dialects (with, of course, significant differences across dialects). The most common of these distinctions is between realis and potential aspect. A few verbs also have a stative stem, and the verbs of motion have additional aspectual forms (these are covered in Chapter 8, where the semantics of the verbs of motion and arrival is discussed). There are also sets of related verbs which include various aspectual forms, as well as contrasting intransitive and/or transitive stems. Virtually all of these stem forms can be analyzed as historically deriving from a prefix plus a root, but the prefixes are no longer productive. §3.2 next presents three prefixes, the causative, the inchoative, and the repetitive. These are all highly productive, and attach to verbs and in some cases to adjectives. Finally, §3.3 discusses derivation which is restricted to other lexical categories: adjectivalization, nominalization, and the archaic classifier system which is still discernible in a large number of nouns.

### 3.1. Distinctions in the Verb Stem

This section presents the numerous distinctions in the Chalcatongo Mixtec verb stem. Most of these are aspectual distinctions, but there are also others, having to do with, for example, transitivity. §3.1.1 looks at the most widespread distinction, that between potential and realis stems. §§3.1.2–3.1.3 consider two other minor categories: statives in **nd-** and alternations involving a prefix **čV-**. Finally, in §3.1.4, the synchronic status of the derivational morphology discussed in this section is considered.

### 3.1.1. Potential and Realis Aspect

As mentioned above, almost all Mixtec verbs have two aspectual stems, the realis and the potential.<sup>1</sup> These stems may be differentiated in various ways, as shown in (1a): they may differ segmentally, or by tone, or segmentally *and* by tone. Often, however, the two stems are phonologically identical, as in (1b), and in a very small number of verbs we find suppletion, as in (1c).

(1)	<u>Realis</u>	<u>Potential</u>	<u>Gloss</u>
(a)	SEGMENTAL AND TONAL DIFFERENCES		
	kaku	kákú	'be born'
	xasú	kásu	'close'
	xítú	kútú	'work in the fields'
	xíčaʔa	kačáʔa	'dance'
	xíkó	k <sup>w</sup> íkó	'spin'
	xátù	kuxátú	'be spicy'
	žesámá	kesámá	'eat'
(b)	NO DIFFERENCE		
	čaa	čaa	'write'
(c)	SUPPLETION		
	xíʔi	kuù	'die'

The derivation of these stems is discussed below; first, however, we consider the semantics and functions of each one.<sup>2</sup>

Potential aspect is used to present events as possible, probable, or potential. More specifically, the potential stem is used to express future time, imperative, counterfactual, conditional, and various modal senses. Examples (2) through (6) illustrate:

<sup>1</sup>As Comrie (1976:11) points out, "In discussions of aspect . . . there is no generally accepted terminology." Indeed, there is a fair amount of variation in the names which are used for these two verbal categories in the various descriptions of Mixtec dialects: "potential" and "continuative" (Bradley and Hollenbach 1988, 1990, 1991, 1992; Pike 1948; Hinton et al. 1991), "incompletive" and "continuative" (Bradley 1970), "irrealis" and "realis" (Bickford and Marlett 1989), and *futuro* ('future') and *presente* ('present') (Stark Campbell et al. 1986; Pensinger 1974; Dyk and Stoudt 1965; Alexander 1980). Sources which use tense terms for these aspects are all written for the native speaker and thus represent a simplification for that particular purpose. I have chosen to use the term "potential" in keeping with the majority of the works on Mixtec. However, I use "realis" for the other major aspectual category because it more accurately captures the essence of this category than do other terms such as "continuative."

<sup>2</sup>For a different approach to the semantic categorization of Mixtec verb stems, see Bickford and Marlett (1989). They argue for a primary distinction in terms of mood (realis/irrealis) and relegate aspect to a secondary distinction wholly within the realis category.

- (2) FUTURE  
 rù?ù kee=rí nduči  
 I eat.P=1 beans  
 'I will eat the beans'
- (3) IMPERATIVE  
 kútú  
 work.P  
 'Work!'
- (4) COUNTERFACTUAL  
 rù?ù kútú=rí=nu ba?à . . .  
 I work.P=1=CFACT but  
 'I was supposed to work, but . . . '
- (5) CONDITIONAL  
 rù?ù kanaxíí=ri nú=ǎǎ ñak<sup>wi</sup>?ná xíndee be?e=žó  
 I scream.P=1 COND=one robber be.in.R house=1PL  
 'I would scream if a robber was in our house'
- (6) MODAL  
 čú?či ni-xa?a vídá=žo xa=kúčakù=žo  
*chucho* CP-give *vida*=1PL COMP=live.P=1PL  
 'God gave us our life that we could/might live'

Realis aspect is used to describe actions which are underway at the time of the speech event, are habitual, or have already been finished at the time of speaking (in which case the completive prefix is added; see §4.2). The uses of an uninflected realis verb stem include progressive, habitual, and stative. (7) through (9) illustrate typical instances of realis aspect:

- (7) PROGRESSIVE/PRESENT  
 rù?ù žee=rí nduči=rí  
 I eat.R=1 bean=1  
 'I am eating/I eat my beans'
- (8) HABITUAL  
 rù?ù žee=rí nduči ndi-kíu  
 I eat.R=1 bean all-day  
 'I eat beans every day'
- (9) STATIVE  
 néné wáã kiší  
*nene* the sleep.R  
 'The baby is asleep/sleeping'

We turn now to the question of the derivation and relationship of the two stems. (1), above, provides a list of typical stem contrasts. (10) provides another, more complete list, identified this time by type of alternation:

(10)	<u>Realis</u>	<u>Potential</u>	<u>Gloss</u>
TONE ALTERNATION ONLY			
	kažu	kážu	'cough'
	ndukú	ndúkú	'look for'
X-/K- ALTERNATION			
	xatu	katu	'spill, boil over'
	xáʔni	káʔni	'kill'
X-/K- AND TONE ALTERNATION			
	xàča	kača	'spread'
	xoko	kokó	'light'
X-/K- AND VOWEL ALTERNATION			
	xíta	káta	'sing'
	xísndée	kúsndée	'be on (top of)'
X-/K-, TONE, AND VOWEL ALTERNATION			
	xándía	kundía	'believe'
	xító	koto	'take care of'
X-/K <sup>w</sup> - ALTERNATION			
	xanú	k <sup>w</sup> anú	'loan'
	xatáʔã	k <sup>w</sup> atáʔã	'fight'
X-/K <sup>w</sup> - AND TONE ALTERNATION			
	xáá	k <sup>w</sup> āā	'buy'
	xakú	k <sup>w</sup> áku	'laugh'
Ø-/KU- ALTERNATION			
	kúʔu	kukúʔu	'be sick'
	náʔá	kunáʔá	'remember'
Ø-/KU- AND TONE ALTERNATION			
	ndíso	kundiso	'carry'
	nžáá	kunžàà	'reside'
Ž-/K- ALTERNATION			
	žežíʔí	kežíʔí	'bite'
	žáši	káši	'nurse'

## Ž-/K- AND TONE ALTERNATION

žóó	koo	'exist'
žée	kee	'eat'

## Ñ-/K- ALTERNATION (only one example attested)

ñú?ũ	kú?ũ	'contain, wear'
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## SUPPLETIVE

xí?i	kó?ó	'drink'
kiší	kúsu	'sleep'
xí?i	kuù	'die'

## NO CHANGE

káá	káá	'climb, rise'
nakača	nakača	'wash'
taká	taká	'assemble, congregate'
tá?nu	tá?nu	'bend, break'
na?mà	na?mà	'confess'

The largest category by far is the “no change” category. Out of a sample of 188 verbs,<sup>3</sup> 104 (or 55.3%) show no difference between the realis and the potential stems. “Tone alternation only” is the next largest category, with 21 examples (11.2%). The rest of the categories (the other twelve listed above) include 10 or fewer examples each.

Initial consonant alternation, with or without vowel change, and with or without tone alternation, is limited to the following pairs: x-/k-, x-/k<sup>w</sup>-, ñ-/k-, ž-/k-, and Ø-/ku-. Vowel alternations include i/a, i/e, i/u, i/o, and a/u (with or without nasalization) and occur only with x-/k- initial consonants.

Kaufman (1988) shows for Proto-Mixtec (and for Proto-Otomanguean in general) that such consonantal and vocalic alternations can be analyzed as a set of tense-aspect-mood prefixes.<sup>4</sup> He reconstructs a number of these prefixes for Proto-Mixtec, including three which are relevant here: \***xi-** (which he calls “durative”), \***ka-** (“potential”), and \***ku-** (also “potential”) (1988:83). The reflexes of these prefixes, **xi-**, **ka-**, and **ku-**, are the ones which are involved in the x-/k- and x-/k<sup>w</sup>- alternations described above. These prefixes (and the others discussed below) are frozen in combination with the verb roots to which they attach and are completely nonproductive (that is, no new forms can be created with these prefixes). In §3.1.4, below, I further address the issue of the synchronic status of these prefixes, showing that they do have some synchronic legitimacy (primarily because of their transparency), but that they are clearly close to the fossilized end of the scale.

In addition to the prefixes mentioned above (**xi-**, **ka-**, and **ku-**), three others are introduced in the sections which follow: **ndi-** (stative), **žV-** (also stative), and **čV-** (causativizing and locative; see §3.1.3 for discussion of the semantics of this prefix). Because most of them (**čV-** excepted) mark aspect, and because aspect is most commonly an inflectional

<sup>3</sup>The sample includes only disyllables, in order to simplify the discussion of tone (see below in text).

<sup>4</sup>Kaufman cites Swadesh (1960) and Suarez (1986) as earlier research on the same topic.

category,<sup>5</sup> it is worth reviewing here the reasons for treating them as derivational. The first and most obvious reason is that they appear “inside” of other derivational morphology (e.g., causative *s-* and repetitive *na-*, discussed in the following section). Although exceptions have been found, relative ordering is still one of the most reliable of the various criteria normally invoked to distinguish between inflection and derivation. The second reason for treating these prefixes as derivational is that, while they do mark aspectual distinctions on a very large number of verb stems, they do not appear on *all* verb stems. This can be contrasted with the legitimately inflectional completive aspect-marking prefix *ni-* (discussed in the next chapter), which does, in fact, occur with all verb stems. The formation or non-formation of paradigms is another criterion for inflection versus derivation which points to the prefixes under discussion here as derivational.

Turning now to the derivation of Chalcatongo Mixtec verb stems, we find that when the prefixes combine with verb roots, they may undergo one of two morphophonemic rules, Labialization or Vowel Deletion (although it is also possible that neither rule applies). Both rules function to reduce the prefix + verb combination to structures which conform to the syllable and stem canon, and can be formulated as follows:

## (11) LABIALIZATION

$$\begin{array}{c} C \quad V + V \quad C \quad V \\ | \quad \backslash \quad \ddagger \\ k \quad u \end{array}$$

## (12) VOWEL DELETION

$$\begin{array}{c} C \quad V + V \quad C \quad V \\ | \quad \ddagger \quad | \quad | \quad | \\ c \quad v \quad v \quad c \quad v \end{array}$$

Derivations of four typical pairs of verb stems are illustrated in (13) through (16):<sup>6</sup>

## (13) RULE (11) (applies to potential stem only)

*xi-* + *anú* → *xanú* ‘loan (R)’

*ku-* + *anú* → *k<sup>w</sup>anú* ‘loan (P)’

<sup>5</sup>See Dressler (1989:6), for example, where verbal aspect is included in a list of nonprototypical derivational categories.

<sup>6</sup>I am assuming that the roots which combine with these prefixes can be of varying shape, for example, VCV, CVCV, or even CV (as in [16]). Note that the latter form is smaller than the minimally acceptable word, which has to have at least two syllables. The disyllabic requirement on stems, however, is something which can be seen as holding at a fairly shallow level and is fulfilled by affixation of the monosyllabic aspect-marking prefixes to these monosyllabic roots. Just as this affixation is required for the verb to meet the disyllabic requirement, the rules in (11) and (12) are required in the derivation of other verbs in order for them to meet the requirements of the syllable canon.

- (14) RULE (12)  
 xi- + atu → xatu ‘boil over, spill (R)’  
 ka- + atu → katu ‘boil over, spill (P)’
- (15) NEITHER RULE  
 xi- + čáʔa → xičáʔa ‘dance (R)’  
 ka- + čáʔa → kačáʔa ‘dance (P)’
- (16) NEITHER RULE  
 xi- + ta → xíta ‘sing (R)’  
 ka- + ta → káta ‘sing (P)’

This analysis works for a surprisingly large number of the verbs showing these alternations, although there are of course some irregular cases, as well as some completely suppletive cases. For example, the verb **xíto** (R) **koto** (P) ‘appear, seem’ shows vowel harmony in the potential stem (between the /u/ of the prefix **ku-** and the /o/ of the root), but, with the exception of a homophonous verb meaning ‘take care of’, this harmony is not attested elsewhere. Another verb, **xándía** (R) **kundíá** (P) ‘believe’, does not show the expected vowel correspondences (if the root is **ándíá**, the expected potential form would be **\*kandíá** or **\*kʷandíá**).<sup>7</sup> Finally, two of the three completely suppletive stems in my corpus also show x-/k- alternations (**xíʔi** [R] **kuù** [P] ‘die’ and **xíʔi** [R] **kóʔó** [P] ‘drink’), but again, these are best handled simply as lexical exceptions.

The minor alternations ñ-/k- and ž-/k- presumably represent a single prefix—or at least the reflex of a single prefix—in the realis aspect (recall the discussion of the relationship between [ñ] and [ž] in Chapter 2). Kaufman (1988) reconstructs a prefix **\*i-** ~ **\*y-** “durative,” which is plausibly the source of the initials in these verbs. This is not explored further here since there are so few examples (six total).<sup>8</sup> The other alternation, Ø-/ku-, is transparently the prefix **ku-** on the potential stem, and the lack of a prefix on the realis stem.

We turn next to a related issue: tonal variations in the verb stem. Like many of the other dialects which have been described, Chalcatongo Mixtec shows evidence of a floating high tone in a number of the realis stems of verbs (see §2.5.1 for discussion of the floating H). Hinton et al. (1991:150) claim that the “continuative” (here, “realis”) aspect “consists solely of this replacive high tone.” This holds for many of the verbs in which the two stems are distinguished purely by tone, but for verbs like those described above, which include an aspect-marking prefix, it must be amended to the effect that the floating high tone is only part of the marking of realis aspect, operating in conjunction with the prefix (usually **xi-**).<sup>9</sup>

<sup>7</sup>However, also note that other speakers have a form **kandíá** for both the potential and the realis of ‘believe’, which is one of the predicted potential forms for the realis **xándíá**.

<sup>8</sup>Four of the six involve eating or other oral activity: ‘eat’ (there are two verbs in this set with this meaning), ‘eat breakfast’, and ‘nurse’.

<sup>9</sup>The approach taken here is different from the one taken in Macaulay (1987b), in which I claim that the tone patterns are too unpredictable to be considered at all productive. I am convinced now that there is



Of the above-mentioned sample of 188 disyllabic verbs, 138 (73.4%) show the potential-realis tone correspondences which would be expected if the tone of the realis were derived from the tone of the potential by addition of a floating high. The remaining 50 (26.6%) do not conform to the expected changes: they either change in unexpected ways or do not change when the rules for association of the floating high should apply to change them.

However, one point should be made about these figures. Of the 138 examples which do show the expected potential-realis tone correspondences, 113 of these are of the categories which show no change when the floating H is associated (HH → HH, HM → HM, HL → HL, MH → MH). These 113 (60.1% of the total of 188) are actually neutral, then, as far as evidence for the presence of a floating high tone. The remaining 25 (13.3% of the total) show the expected correspondences and do show some change (e.g., MH → HH, MM → HM, LH → HH). It is this smaller set which actually provides positive evidence of the floating high tone.

With respect to forms which do show tone change, the example which would be most convincing for the presence of the floating high tone would be one which shows tone metathesis (ML → MH). Unfortunately, all of the (small number of) ML CVCV verbs I have found behave erratically and show idiosyncratic tone changes (or no tone changes at all).

(17) and (18) illustrate the range of data.

(17) SHOW EVIDENCE OF FLOATING HIGH TONE

(a) NO CHANGE IN TONE

- (i) HH → HH: *čísó* (P) → *čísó* (R) 'add'
- (ii) HM → HM: *ndónnda* (P) → *ndónnda* (R) 'come off, peel off'
- (iii) MH → MH: *taká* (P) → *taká* (R) 'assemble, congregate'

(b) CHANGE IN TONE

- (i) MH → HH: *suʔú* (P) → *súʔú* (R) 'steal'
- (ii) MM → HM: *kee* (P) → *žée* (R) 'eat'
- (iii) LH → HH: *ndèʔé* (P) → *ndéʔé* (R) 'look, see'
- (iv) LL → HM: *ndòò* (P) → *ndóo* (R) 'stay'

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regularity in the tonal variation manifested in these pairs of stems. See §3.1.4 for discussion of the synchronic status of these regularities, however.

## (18) NO EVIDENCE OF FLOATING HIGH TONE (UNPREDICTED TONE ALTERNATIONS)

- (a) HH → HM: tútú (P) → tútu (R) ‘whistle’
- (b) HM → MH: kásu (P) → xasú (R) ‘close, cover’
- (c) MM → HH: kuña (P) → xúñá (R) ‘open’
- (d) MM → LM: kača (P) → xàča (R) ‘spread, throw’
- (e) ML (CVCV) → HL: xatù (P) → xátù (R) ‘be spicy’

In evaluating these data, we could take one of two approaches. We could remain skeptical about the floating H analysis, pointing to the small amount of positive evidence for its presence (a mere 13.3% of the data in the sample). Alternatively, we could point to the fact that almost 75 percent of the verbs in the sample show the expected correspondences (including the change and no-change subcategories) and conclude that for the majority of Chalcatongo Mixtec verbs, there is a floating high tone involved in formation of the realis stem.

Historical and comparative considerations indicate that at least diachronically, the latter is the correct approach, since so many of the Mixtec dialects are described as making highly productive use of the floating H in verbal derivation. This, then, is the approach taken here: we assume that there is a floating H tone which plays a part in formation of realis stems. This floating H is associated to the stem (consisting of a single morpheme or of a prefix plus root) according to the rules laid out in Chapter 2: Floating High Association, Partial Assimilation, Tone Metathesis, and Floating High Deletion (see §2.5.1). (For ease of representation, however, realis stems in examples are treated as monomorphemic.) The verbs which do not conform to these rules are treated as suppletive, at least with respect to tone.

### 3.1.2. Statives in nd-

It has been mentioned in previous sections that a small number of verbs in Mixtec have a stative alternant in addition to the usual realis and potential stems. These stative forms generally show initial **nd-** or **ñ-**. Forms in **ñ-** are discussed in §3.1.3; forms with initial nasals are illustrated in (19) through (21):

- (19) xasú (R), kásu (P) ‘close, cover’ (*vt*)  
ndasú ‘closed’ (*stat*)
- (20) néñú (P,R) ‘swell, become fat’ (*vi*)  
ndéñú ‘swollen’ (*stat*)

- (21) *káá* (P,R) ‘rise, go up’ (*vi*)  
*ndáá* ‘risen, overflowed’ (*stat*)

Kaufman (1988:83) reconstructs a Proto-Mixtec prefix \**ndi-*, meaning “stative,” and this appears to be present in the stative forms in (19)–(21). In (19), for example, the root is *-asu*, and the three forms bear the prefixes *xi-*, *ka-*, and *ndi-*. Note that when a stative in *nd-* is related to a transitive verb (as in [19]), it also has a detransitivizing function. Of course, these statives may also correspond to verbs which are already intransitive (as in [20]–[21]).

There are other, presumably related cases in which a semantically stative form in *nd-* functions grammatically as a realis stem for some distinct potential. In some cases (e.g., [22]), such verbs are related to one (or more) other nonstative verbal paradigms:

- (22) *ndátu* (R), *kundátu* (P) ‘wait’ (*vi*)  
 (cf. *xítú* [R], *kátú* [P] ‘lie down’ [*vi*], *ndéndatu* [P,R] ‘rest’ [*vi*])

- (23) *ndító* (R), *kundito* (P) ‘be awake’ (*vi*)

Finally, there is one example in which a verb has a corresponding stative in *n-*, rather than the expected *nd-*, illustrated in (24):

- (24) *xúñá* (R), *kuñá* (P) ‘open’ (*vt*)  
*núña* ‘opened’ (*stat*)

### 3.1.3. Alternations Involving the Prefix *čV-*

Sets of verb stems which include a transitive member beginning with the syllable *čV-* (where “V” may be *u*, *i*, or *e*) contain a wide range of other types of stems, including stems beginning with *ž-*, *k-*, and *x-*. These stem sets are reviewed in this section with consideration of the semantics of the prefixes they appear to contain.

Virtually all of the verbs discussed here have a form with *ču-* or *či-* as first syllable, but there is no evident phonological conditioning (such as vowel harmony) which determines the vowel of the prefix. Nor does lexical category of the root determine prefix vowel (these prefixes attach to verbs, adjectives, and nouns, i.e., any major category). There is also no readily discernible semantic distinction between *ču-* and *či-*. Furthermore, a very small number of verbs in *č-* (just two in my corpus) have *če-* as first syllable. In some cases, there is even intra- and interspeaker variation in the prefix vowel in a single verb, for example, we find *čitáʔá*, *čutáʔá* ‘join, unite’ (*vt*) and *čusúku*, *čisúku*, *česúku* ‘wrap, roll up’ (*vt*). As far as semantic content can be determined (and this is discussed further below), the three prefixes seem to contribute a consistent meaning to the verbs in which they are found (approximately ‘put’ or ‘place’), and I accordingly treat them as variants of a

single prefix. Examples (25) through (28) illustrate some of the verbs of this set and in addition give the root for each case.<sup>10</sup>

- (25) čúsama 'turn upside down' (*vt*)  
sámá 'exchange, trade' (*vt*)
- (26) čútútu 'register' (*vt*)  
tutù 'paper' (*n*)
- (27) čindúčá 'wet' (*vt*)  
nduča 'water' (*n*)
- (28) čižúʔú 'carry in the mouth' (*vt*)  
žuʔu 'mouth' (*n*)

As can be seen from even this small set, it is quite difficult to assign a consistent meaning to ČV-. It has a verbalizing function (creating transitive verbs) when prefixed to nouns, but that certainly does not exhaust its contribution. Its function when forming verbs from other verbs is likewise unclear. As discussed below, it causativizes statives, but it often also adds lexical content which is hard to characterize precisely.

In §3.1.2, it was mentioned that statives generally show initial **nd-** or **ʒ-**. Here, we find that a number of verbs with transitive stems in Č- have corresponding stative stems in ʒ-. Again, roots for these forms may be of any category (and in some cases are unidentified). (29) through (32) illustrate:

- (29) čúndaxi 'soak, wet' (*vt*)  
žúndaxi 'soaked, wet' (*stat*)  
ndáxi 'wet' (*adj*)
- (30) čík<sup>w</sup>aʔa 'weigh, measure' (*vt*)  
žík<sup>w</sup>aʔa 'weighed, measured' (*stat*)  
(root unknown)<sup>11</sup>
- (31) čítaʔnu 'fold' (*vt*)  
žítaʔnu 'folded' (*stat*)  
táʔnu 'break, bend' (*vi*)
- (32) číʔi 'plant, sow' (*vt*)  
žíʔí 'planted, sown' (*stat*)  
(root unknown)

<sup>10</sup>There are some verbs in this set (not presented) for which the root is unidentifiable. In this section, for the most part, I have tried to present examples in which the root is clearly identifiable.

<sup>11</sup>Barbara Hollenbach tells me that other dialects have a noun **k<sup>w</sup>aʔa** or **kuʔva**, meaning 'a measure'.

In addition to verbs like those in (29)–(32), there is also a very small set of verbs which have three stems: a stative in *ž-*, a transitive in *č-*, and a stem in *k-* which may be intransitive or inherently reflexive (middle voice). (For the latter two stem types, there is no distinction between potential and realis forms.) (33) through (35) illustrate:

- (33) *kesaʔí, késáʔu* ‘disappear’ (*vi*)  
*čísaʔí, čísaʔu* ‘hide’ (*vt*)  
*žesaʔí, žésaʔu* ‘hidden’ (*stat*)  
*sáʔú* ‘cover’ (*vt*)
- (34) *kindíʔu* ‘lock oneself in’ (*vi*)  
*čindíʔu* ‘lock in’ (*vt*)  
*žindíʔu* ‘locked in’ (*stat*)  
*ndíʔu* ‘closed, locked’ (*adj*)
- (35) *ketáʔã* ‘meet’ (*vi*)  
*čutáʔã, čitáʔã* ‘join, unite’ (*vt*)  
*žútáʔã, žítáʔã* ‘joined, united’ (*stat*)  
*táʔã* ‘companion, friend, relative’ (*n*)

Finally, there is just one example in my data in which we find the familiar prefixes *xi-* and *ku-* in a set with *či-*:

- (36) *xíndáʔá* (R), *kundáʔá* (P) ‘carry’ (*vt*)  
*čindáʔá* ‘push’ (*vt*)  
*ndaʔa* ‘hand’ (*n*)

At this point, we turn to the meaning of the *čV-* prefix. While it is true, as stated above, that it is quite difficult to assign a single, unitary meaning to this prefix, there are a few tendencies worth noting. First, as already mentioned, *čV-* has a fairly clear causativizing relationship with statives in *žV-*. Second, when *čV-* attaches to nouns, it often creates a transitive verb with the general sense of ‘put’ or ‘place’, with the noun in a locative role. Consider, for example, (26) through (28), above, as well as (37):

- (37) *čižókó, čužókó* ‘steam’ (*vt*)  
*žokò* ‘steam’ (*n*)

(26) can be (roughly and in some cases incompletely) paraphrased as ‘put (something) on paper’, (27) as ‘place (something) in water’, (28) as ‘place (something) in the mouth’, and (37) as ‘place (something) in steam’. Of course, this only describes the semantics of such examples in the most general of terms—it is quite clear that they often develop some degree of semantic specialization with lexicalization (especially in the case of [26]).

In the next section, the issue of the synchronic status of the verbal prefixes discussed above is considered further.

### 3.1.4. Synchronic Status of the Aspectual Prefixes

Finally, we come to the question of the status of these prefixes in synchronic description. In the discussion which follows I omit the prefix  $\text{ǂV-}$  from consideration because (as pointed out above) it does not fit into the present set, which can otherwise be characterized as aspectual in nature. This prefix clearly has a different semantic (and perhaps morphological) status from that of the others.

The issue of the synchronic status of the aspectual prefixes arises because descriptions of other Mixtec dialects do not acknowledge their presence in the verb stem. Most grammars do mention segmental changes in the stem forms of verbs but do not present an explicit analysis of these segmental alternations as consisting of prefix + root. Furthermore, all of the descriptions with which I am familiar take one stem as basic (usually the potential) and treat the alternations as derived from that basic form.<sup>12</sup> The only sources which analyze verbal aspect in terms of prefix + root structure are historical in nature: Kaufman (1988) and the precursors he cites in that work (Swadesh 1960; Suarez 1986).<sup>13</sup>

It is my position that these prefixes do have a place in synchronic description, but that their participation in the derivational morphology is fundamentally different in nature from that of all other derivational affixes. The fact that we find the regularities noted in §3.1.1 (especially the operation of rules [11] and [12]) demonstrates their continuing role in the synchronic morphology of Chalcatongo Mixtec. However, their status with respect to productivity differs sharply from that of other derivational affixes (and from that of the inflectional affixes as well).<sup>14</sup>

Note first that there is a clear distinction in productivity even among the prefixes under discussion here: the stative prefixes **ndi-** and **ǂV-** occur much less often than do the prefixes which mark potential and realis stems (**xi-**, **ka-**, and **ku-**).<sup>15</sup> Furthermore, the semantics of the former two is less predictable: consider cases in which a stative is derived from a stative adjective, as in **ǂndíʔu** 'locked in', presumably from **ǂV-** plus **ndíʔu** 'closed, locked'. Here the prefix clearly adds more than just stative aspect to the root.

This set of prefixes as a whole, however, is notably less productive than other derivational affixation. These aspect markers are simply not available for the formation of new words. That is, as far as I can tell, no new verbs can be formed by prefixation of any of these aspect-marking elements either to existing roots or to novel roots. Speakers have a very clear sense of what counts as a word, and what does not. Attempts at creating neologisms by this method are uniformly rejected, without regard to the semantic, pragmatic, or

<sup>12</sup>The descriptions in Bradley and Hollenbach (1988, 1990, 1991, 1992) all take this approach but are distinguished from other descriptions by including discussion of such segmental changes in the section on verbal inflection.

<sup>13</sup>After this grammar was written a synchronic description very similar to that presented here came to my attention: Bickford and Marlett (1989). The rules they posit are somewhat different, but that is primarily due to the fact that their data come from three other Mixtec dialects.

<sup>14</sup>Aronoff (1980:81) addresses the relationship between productivity and synchronic description, concluding that "productivity must be represented in synchronic descriptions of linguistic competence, . . . the productivity of a rule is not a purely historical artifact."

<sup>15</sup>See Aronoff (1980), though, for discussion of whether this is a valid measure of productivity.

phonological plausibility of the construct. New forms in *s-* (causative) or *na-* (repetitive), however, are easily formed and almost always judged acceptable.

Another point of difference has to do with the fusion of these prefixes to the root, which occurs through application of rules (11) (Labialization) and (12) (Vowel Deletion). With only one exception, none of the other derivational or inflectional prefixes (those discussed in the sections and chapter which follow) fuses with the root, forming part of the disyllabic couplet. The sole exception is the causative *s-*, which fuses with both vowel- and consonant-initial roots to maintain the disyllabic structure of the couplet, as in (38). Of course, the fact that this is a prefix which (in present-day Chalcatongo Mixtec) consists only of a single consonant facilitates this fusion.

- (38) (a) *s-ičí*  
CAUS-dry  
'dry' (*vt*)
- (b) *s-čítú*  
CAUS-be.full  
'fill' (*vt*)

Other prefixes, however, do not fuse with the root, even when the root is vowel-initial, as in (39):

- (39) (a) *ndu-úʔu=ka=∅* ([*ndu-ʔúʔu=ka*])  
INCHO-hurt=ADD=3  
'It will begin to hurt more'
- (b) *ni-ičì=∅* ([*ni-ʔiçì*])  
CP-dry=3  
'It dried'

Rules (11) and (12), if applied to (39), would produce the nonoccurring forms \**ndúʔu* and \**ničì*, but, as we see, a glottal stop is inserted instead to preserve the morpheme boundary, creating a trisyllabic form. Thus, only the aspectual prefixes *xi-*, *ka-*, *ku-*, *ndi-*, and *ʒV-* undergo rules (11) and (12).

In addition to the fusion of the aspectual prefixes with roots, we can note that this prefixation is obligatory, whereas all other prefixation is optional. That is, roots which are marked by these aspectual prefixes do not surface without the prefixes. No root, however, is barred from occurring without any of the other derivational or inflectional affixes (e.g., *úʔu* 'hurt' does not require the inchoative prefix *ndu-*, and *ičì* 'be dry' likewise does not require the completive prefix *ni-*).

In conclusion, then, while these aspectual prefixes are both transparent and productive enough to merit attention in a synchronic description, they are not *as* transparent or productive as other derivational morphology. Perhaps the best way to conceive of this situation is to say that Chalcatongo Mixtec has two layers of verbal derivational morphology: a fairly fossilized inner layer and a more productive outer layer. This can be seen as a

manifestation of the continuous nature of morphological types (see, e.g., Bybee 1985) and is also very much in keeping with the continual cycle of grammaticization found in Mixtec, the results of which can be seen vividly throughout the grammar. In fact, an example of even more fused morphological material, the highly fossilized system of noun classifiers, is discussed in §3.3.3.

### 3.2. Verbal and Adjectival Derivation

Chalcatongo Mixtec has four productive derivational prefixes which apply to verbs and adjectives: a causative (with two forms, **s-** and **sa-**), two inchoatives (**ku-** and **ndu-**), and a repetitive (**na-**). These are described in the following three sections, and their relative ordering is presented in §3.2.4.

#### 3.2.1. Causative

Hinton (1982) observes that causatives can be formed in Chalcatongo Mixtec either syntactically (as in [40] and [41]) or morphologically (as in [42] and [43]).<sup>16</sup> The morphological causative is formed by prefixation of **s-** to the potential stem of verbs (as in [42]), and by prefixation of **sa-** to adjectives (as in [43]). The derived lexical category of an adjective prefixed by **sa-** is verb; the evidence lies in the fact that the full range of inflectional prefixes (see Chapter 4) may occur with such forms, as well as that certain derivational morphemes (such as the repetitive prefix; see [44], below) may also occur with such forms.<sup>17</sup>

- (40) *sáʔa xà=ná-káčaʔa=∅*  
 make COMP=MOOD-dance=3  
 'Make him dance! (Get him up and have him go out there and dance!)
- (41) *ni-sáʔa=ðe xà=ní-ndu-k<sup>w</sup>áʔá=ri*  
 CP-make=3MN COMP=CP-INCHO-red=1  
 'He made me blush'
- (42) *s-káčaʔa*  
 CAUS-dance.P  
 'Dance (him)!' (e.g., if riding a horse, making it dance by manipulating the reins)

<sup>16</sup>Examples (40)–(43) are taken from Hinton (1982:356–357).

<sup>17</sup>In §5.3, the issue of identification of adjectives is taken up—specifically, the problem of what grammatical behavior can be taken as criterial for adjective status in this language. A few cases are discussed there which are exceptions with respect to the form of the causative they take.



- (43) ni-sa-k<sup>w</sup>á?á=ðe  
 CP-CAUS-red=3MN  
 'He made (me) red' (e.g., he painted me red)

Hinton points out that it is clear that the two forms of the bound causative morpheme (**s-** and **sa-**) are historically related to the verb meaning 'make' or 'do' (**sá?a**), which appears in (40) and (41). However, the two morphological causatives are not precisely synonymous with the periphrastic causative. Instead, the construction found in (40) and (41) is interpreted as two-agent, or directive causation, while the constructions of (42) and (43) are each interpreted as a single event with only one agent, or as manipulative causation.<sup>18</sup> There is no inherent semantic difference between the two bound forms of the causative, however, as there is between use of the full form and the bound forms. Rather, as stated above, this distinction is dependent on the lexical category of the stem to which the prefix is attached.

(44)–(49) provide additional examples of the two forms of the morphological causative:

- (44) ná-sá-leku=Ø  
 REP-CAUS-scrawny(*adj*)=3  
 'He is getting scrawny again'
- (45) ká-na-sá-ba?a=Ø carrú  
 PL-REP-CAUS-good(*adj*)=3 *carro*  
 'They're fixing my truck'
- (46) a-ni-sá-k<sup>w</sup>áčí=rí ndīkī  
 TEMP-CP-CAUS-small(*adj*)=1 onion  
 'I've sliced the onions'
- (47) ni-s-kúčí=rí ro?o  
 CP-CAUS-bathe(*vi*)=1 you  
 'I bathed you'
- (48) s-ičí=rí  
 CAUS-be.dry(*vi*)=1  
 'I am drying it'
- (49) s-ndá?ba=ro  
 CAUS-go.out(*vi*)=2  
 'Put it out/Extinguish it!'

The near minimal pair in (50) and (51), below, shows that there is no phonological motivation for the alternation between **sa-** and **s-**. It should be noted, however, that there is some difference of opinion among speakers as to the correct causative form of the adjective

<sup>18</sup>Hinton (1988) discusses this in the context of iconicity. See especially pp. 358–359.

**ndoo** ‘clean’; at least one speaker used **s-** with this form. This is not so much a case of phonological conditioning of the morpheme, however, as it is one of nonprototypical adjectival behavior. See §5.3 for further discussion of this issue.

- (50) **s-ndóo**  
 CAUS-stay(*vi*)  
 ‘leave (something) behind’ (*vt*)

- (51) **sá-ndoo**  
 CAUS-clean(*adj*)  
 ‘Clean it!’

Finally, as stated above, it is quite clear that both **sá-** and **s-** derive historically from the verb **sáʔa** ‘do, make’. Note that the form that occurs with adjectives, **sá-**, still bears the high tone that the first syllable of the full verb bears. As Hinton et al. (1991) point out, the reduction to **s-** has not been accompanied by loss of the high tone. Instead, because there is no vowel for this tone to associate with, it becomes a floating high tone and, as such, is subject to the same rules of floating high-tone placement as were described in Chapter 2. We can see this in (47)–(49), above, in which the underlying form of the verbs to which causative **s-** attaches are, respectively, **kučf** ‘bathe’ (MH → HH), **ičl** ‘be dry’ (ML → MH), and **ndaʔba** ‘go out’ (MM → HM).

### 3.2.2. Inchoative

There are two inchoative prefixes in Chalcatongo Mixtec, **ku-** and **ndu-**. The former is historically a reduced form of the copula **kuú**, and the latter is a reduced form of a verb meaning ‘become’. The full form of **ndu-** apparently no longer exists in Chalcatongo Mixtec (although it does in other dialects, e.g., Yosondúa Mixtec, see Farris 1992:17). **Ku-** derives inchoative verbs from adjectives and potential verb stems, while **ndu-** derives inchoative verbs from adjectives only. In both cases the derived verb has the usual realis and potential stems, which may differ in tone. This is discussed further below.

**Ku-** plus verb is actually relatively rare; presumably, this reflects a semantic rather than morphological restriction in that inchoatives tend to co-occur with stative predicates, and more adjectives than verbs denote states in Mixtec. When they do co-occur, the resultant form is often translated as a future (as in [56] and [57]). (52) through (57) illustrate the two inchoative prefixes:

- (52) **ni-ku-k<sup>w</sup>aʔá nuù=na**  
 CP-INCHO-red face=1POL  
 ‘My face became red (I blushed)’

- (53) **ku-čǎʔã=ro**  
 INCHO-dirty=2  
 ‘You’re going to get dirty’

- (54) ndú-lokó=ri  
INCHO-*loco*=1  
'I'm going to go crazy'
- (55) maría ni-ndu-káʔnū=Ø  
*María* CP-INCHO-big=3  
'As for María, she has gotten very fat'
- (56) ku-kʷáʔnū=ðe  
INCHO-grow=3MN  
'He will grow'
- (57) kú-kíʔi ndendú=ro  
INCHO-go.and.return both=2  
'Both of you are going to go'

The semantic distinction between **ku-** and **ndu-** is unclear; most adjectives can occur with both. Forms with **ndu-** are more likely than forms with **ku-** to be lexicalized (e.g., **ndu-kʷftf** 'shrink' < **kʷftf** 'short', **ndu-káni** 'stand' < **káni** 'long'). Consequently, there are a few forms in **ndu-** in which the root is unidentifiable, that is, there is no extant free form corresponding to the apparent root. In many of these cases, though, the root can be identified by inspection of data from related dialects of Mixtec. Consider the following:

- (58) ndú-kòð  
INCHO-(?)  
'Sit down' (*vi*)
- (59) ndu-kʷi  
INCHO-(?)  
'Stand up' (*vi*)
- (60) ndú-bà  
INCHO-(?)  
'Get excited, noisy, riotous'

Dyk and Stoudt (1965) report the following forms for the closely related San Miguel dialect: **koo** 'sit down', **kʷiʔi** 'stand up, be standing', and **baà** 'tumultuous, noisy'. These forms, which no doubt represent the roots for the forms in (58) through (60), have apparently fallen into disuse as free forms in the Chalcatongo dialect.<sup>19</sup>

One other problem case with **ndu-** involves a form in which the inchoative is attached to what appears to be the noun **ndaʔa** 'hand'. This is problematic because **ndu-** normally only attaches to adjectives.

<sup>19</sup>Of course, Dyk and Stoudt compiled their San Miguel dictionary over thirty years ago. I do not know whether these forms are still current in that dialect, or whether it too has lost them at this point.

- (61) s-ndu-ndá?á  
 CAUS-INCHO-hand(?)  
 'Let it drop!/Drop it!'

(61) actually belongs to a fairly large set of verbs containing the root **nda?a**. There is, for example, a verb **kundá?á** (P), **xíndá?á** (R) 'carry'; a verb **nánda?a** 'wash one's hands'; and another verb **tánda?a** 'marry'. It may be the case that these words are reduced forms of archaic compound verbs (consisting of verb + noun). Alternatively, in these examples **nda?a** could have been zero-derived into a verb (or adjective) and then have undergone further derivation to form the present-day set of verbs.

One final fact to note about these two prefixes is that although the tone of **ku-** is generally mid, the tone of **ndu-** may vary according to aspect. In those cases in which there is variation, in potential aspect it is usually mid, whereas in realis aspect it is usually high, due to the presence of the floating H tone in realis stems. (The variation is probably simply due to lexicalization.) (62)–(64) illustrate:

- (62) ndu-kũ?ũ inì 'remember (the past)' (P)  
 ndú-kũ?ũ inì (R)
- (63) ndu-k<sup>w</sup>á?á 'blush' (lit. 'get red') (P)  
 ndú-k<sup>w</sup>a?a (R)
- (64) ndu-k<sup>w</sup>ĩ 'stand up' (*vi*) (P)  
 ndú-k<sup>w</sup>ĩ (R)

However, (65) is a counterexample:

- (65) ndú-kani 'stand up' (P)  
 ndu-káni (R)

### 3.2.3. Repetitive

Repetitive **na-** attaches to potential verb stems, signaling repetition or iteration of action. (66)–(69) illustrate:

- (66) káta 'sing' (P)  
 na-kata 'sing again' (P)
- (67) kaka 'walk' (P)  
 na-kaka 'walk again' (P)
- (68) k<sup>w</sup>íkó 'turn' (*vi*) (P)  
 na-k<sup>w</sup>íkó 'revolve' (P)

- (69) *kīʔī* ‘take’ (P)  
*na-kīʔī* ‘gather’ (P)

There are also many verbs in **na-** for which the meaning is not completely transparent or predictable. (70) through (73) are typical examples:

- (70) *kání inì* ‘think’ (P)  
*ná-kani iní* ‘worry’ (P)
- (71) *tíí* ‘catch something which is thrown’ (P)  
*na-tíí* ‘catch something which is falling’ (P)
- (72) *čaʔu* ‘pay’ (P)  
*na-čaʔu* ‘repay’ (e.g., a loan) (P)
- (73) *xaà* ‘arrive’ (away from speaker) (P)  
*na-xaà* ‘arrive at home’ (away from speaker) (P)

While it is clear that repetitive **na-** does not produce the standard tone sandhi effects that ordinary perturbing morphemes in this dialect do, it does in some cases appear to have an effect on the tone of the root it precedes. However, these effects are not regular (as can be observed in the small sample above). This prefix is like **ndu-** (inchoative) in showing a pattern of mid tone on the prefix itself in potential aspect and high tone on the prefix for realis, although in fact it is more widespread in this case than it is for **ndu-**. As noted, the forms in (66) through (73), above, are all in potential aspect. (74) through (80), below, give the corresponding realis stems (in the cases for which data are available):

- (74) *ná-kata* ‘sing again’ (R)
- (75) *ná-kaka* ‘walk again’ (R)
- (76) *ná-kīʔī* ‘gather’ (R)
- (77) *ná-kani iní* ‘worry’ (R)
- (78) *ná-tíí* ‘catch something which is falling’ (R)
- (79) *ná-čaʔù* ‘repay’ (R)
- (80) *ní-na-xáa* ‘arrive at home’ (away from speaker) (R; completive)<sup>20</sup>

<sup>20</sup>The completive form is given here because verbs of arrival lack a realis stem (see §8.1).

Note that the pair (70) and (77) form an exception to this rule. (80) appears to do so too, but it is not clear what effect the completive prefix has on the tone of the repetitive prefix (see also the discussion in §2.5.5).

### 3.2.4. Relative Ordering of Derivational Prefixes

These prefixes do not all co-occur, but we can deduce their relative ordering from pairs of examples such as (81) and (82):

- (81) ni-ká-na-s-káa=Ø  
 CP-PL-REP-CAUS-rise=3  
 ‘They untangled (it)’  
 (cf. káá ‘rise’, s-káa ‘unfold’)

- (82) s-ndu-k<sup>w</sup>íʔa ñãʔã  
 CAUS-INCHO-sad woman  
 ‘Make the woman become sad’

From examples such as these, we can tell that the relative order of the verbal derivational prefixes is repetitive > causative > inchoative.<sup>21</sup>

## 3.3. Other Derivation

This section covers three other derivational processes: adjectivalization (§3.3.1), nominalization (§3.3.2), and the archaic system of noun classification (§3.3.3).

### 3.3.1. Adjectivalization

Hinton et al. (1991) posit a rule called “Adjectival High,” which derives adjectives from nouns by replacing the tones of the root with H. (83)–(86) illustrate:

- (83) káʔba ‘filth’ → káʔbá ‘dirty’  
 (84) čãʔã ‘filth’ → čáʔá ‘dirty’  
 (85) žuù ‘rock’ → žúú ‘solid, hard’  
 (86) xaʔà ‘foot’ → xáʔá ‘standing, on foot’

<sup>21</sup>The causative does not co-occur with the inchoative **ku-**, but does with **ndu-**.

That these are in fact adjectives, and not stative verbs, is attested by the fact that they can be used attributively, as in (87):

- (87)  $\bar{n}\acute{u}?\bar{u}=\emptyset$  sa?ma čá?á  
 wear=3 clothes dirty  
 'He is wearing dirty clothes'

This process appears to be somewhat productive, relating a number of nouns and adjectives in the lexicon. However, there are also a number of adjectives which do *not* have HH tone, so this rule cannot be invoked to account for the derivation of all adjectives.<sup>22</sup> The rule, which I call "Adjectivalization," is formalized in (88). Note that although it involves addition of a single H tone to a noun (which then spreads across both vowels of the couplet), it does not have the same results as the rules which associate a floating H to a following root (described in Chapter 2).

(88) ADJECTIVALIZATION



### 3.3.2. Nominalization

The prefix **xa-** derives nouns from adjectives, specifying an individual with the relevant characteristic—that is, of the form 'the X one' (e.g., 'the tall one'). It is clear that the prefix **xa-** is related to the phrasal affix **xa=** which marks subordinate clauses of various types; as discussed in Chapter 7, nominalized adjectives could conceivably be analyzed as headless relative clauses. However, nominalized adjectives exhibit the syntactic behavior of single words, rather than that of clauses, and it thus appears that the two uses of **xa-/xa=** are synchronically distinct.<sup>23</sup>

Nominalizing **xa-** generally does not affect the tone of the adjective to which it is attached. (There are, however, exceptions, which are noted below.) (89) and (90) are typical examples:

<sup>22</sup>Bradley (1970:55–56) notes a tone-changing rule in Jicaltepec Mixtec, by which what he calls stative verbs are derived from nouns. However, he does not make any general statement about the rule, merely saying that the "marker" of the process is a "tone pattern." His examples show one case of HH → LM, one case of HH → LL, and one case of MM → HH. It is unclear whether this represents one rule or several, one rule and two idiosyncratic cases, or simply does not represent a productive pattern in Jicaltepec Mixtec at all.

<sup>23</sup>Hollenbach (1990) discusses the related forms in a large number of Mixtec dialects. Her treatment differs from the one given here in that she treats nominalization and subordination as different functions of the same morpheme. See §7.2.1 for further discussion.

- (89) keè xá-ndáa  
 speak NOM-true  
 'Speak the truth' (cf. ndáa 'true')
- (90) saʔma=rí kú xa-k<sup>w</sup>aʔá  
 clothes=1 COP NOM-red  
 'My clothes are the red ones' (cf. k<sup>w</sup>aʔá 'red')<sup>24</sup>

In addition to such productive uses, there are several words in **xa-** which have conventionalized (although fairly transparent) meanings, as (91) through (95) illustrate. (Many others may be found in the lexicon at the end of this grammar.)

- (91) xa-bīšī 'fruit'  
 NOM-sweet (cf. bīšī 'sweet')
- (92) xa-k<sup>w</sup>áá 'night/blind person'  
 NOM-dark
- (93) xa-lúlí 'child, boy'  
 NOM-small
- (94) xa-síʔí 'girl, woman'  
 NOM-feminine (cf. síʔí 'feminine')
- (95) xa-žíí 'man, husband'  
 NOM-masculine (cf. žii 'masculine')

As mentioned above, **xa-** generally does not perturb, as we see clearly in (96), below. However, there are a small number of cases in which it does appear to have a perturbing effect on the tones of the root, for example, (91) and (95), above. Note that (91) shows the most marked kind of perturbation, Tone Metathesis. (95) is also an interesting form because it shows some cross-speaker variation. At least one of my consultants has **xa-žíí** for the nominalized form, and **žíí** for the adjective (of course, it is impossible to tell if perturbation has taken place when the root bears HH tone). (97), below, presents another case which appears to manifest the floating H, but in this example it should be noted that most Chalcatongo Mixtec speakers do not have the adjectival form. Only one, older speaker was able to give me the adjective.

- (96) xa-tū̀̀ 'black thing'  
 NOM-black (cf. tū̀̀ 'black')

<sup>24</sup>The Chalcatongo Mixtec copula takes two forms, as discussed in §6.6.2. The relevant point here is to note that in (90) the copula takes the prenominal form **ku**, rather than the preadjectival form **ka**—evidence that the form has been nominalized.



- (97) xa-sučí 'young man'  
 NOM-young (cf. sučí 'young')

### 3.3.3. Classifiers

De León (1988) presents an overview of the grammar and uses of noun classifiers in Coatzacoquitengo Mixtec (a dialect which is spoken in the state of Guerrero). Chalcatongo Mixtec shows remnants of a similar classifier system, but in this dialect the classifiers are completely fossilized, and no longer productive in any sense.

It is fairly common in Mixtec to find lexicalized NP + NP constructions with specialized meanings: **nduʔà ndeʔʒu** 'Abasolo', town name (lit. 'plain mud'), **íʔa siʔʔ** 'Virgin Mary' (lit. 'god female'), and so on.<sup>25</sup> Frequently, however, the first noun is reduced to a single syllable, at first by the rapid-speech contraction rules which are discussed in Chapter 2. In later stages, the form may become fossilized and undergo unpredictable phonological and semantic shifts, as is typical in the grammaticization cycle. According to De León, Mixtec noun classifiers developed in this way from full nouns, which underwent semantic specialization as they reduced to one syllable.<sup>26</sup> In Coatzacoquitengo Mixtec such noun classifiers may be used with proper nouns and loanwords, evidence of their continued productivity. However, in Chalcatongo Mixtec this is not the case. The process of erosion of one of the syllables of the classifying noun has been carried to a state of complete fossilization or even loss in this dialect, and the result is a set of trisyllabic (or in some cases, disyllabic), synchronically monomorphemic lexical items.

As shown in Chapter 5, many of the pronominal clitics developed from the same nouns as the classifiers did. However, the pronominal forms differ in that they are enclitics (phrase-final phrasal affixes), while what remains of the classifiers in Chalcatongo Mixtec can no longer even be called prefixes.

This section briefly reviews some of the semantic domains in which the remnants of the classifier system are found.

#### 3.3.3.1. Animal Names

In the domain of animal names, we find a large number of trisyllabic words beginning with the syllable **tí**, which is the reduced form of **kítí** 'animal'. (98) illustrates:

- (98) tìndákú '(type of) worm'  
 tikàkà 'raven'  
 tìndóo 'spider'  
 tìñúú 'owl'  
 tìkiči 'bat'  
 tikàà 'grasshopper'

<sup>25</sup>The topic of the syntax and semantics of NP + NP constructions is taken up in §6.2.

<sup>26</sup>For another hypothesis on the genesis of the classifiers, see Macaulay (1987b).

In most cases, the two final syllables of an animal name beginning with **tĩ** are not recognizable as an independent morpheme. Occasionally they are, however, as in (99), in which the morpheme describes a characteristic feature of the animal in question. Note here also that there appears to be spreading of the H tone in the root (HM → HH). This is not, however, the regular result of a floating H tone on HM roots, which normally do not change contour (see Chapter 2). This effect is seen with a number of the classifiers (as illustrated in various examples below).

(99) *tisúʔmá* 'scorpion' (cf. *súʔma* 'tail')

There are also a number of animal names in **č**, which can be shown to have derived from **tĩ** plus a root with initial **\*y** or **\*w**.<sup>27</sup> Four examples from the Chalcatongo dialect are presented in (100), and parallel data from two other dialects are listed in (101) and (102).

(100) *čókó* 'ant'  
*čúkú* 'fly'  
*čuku* 'louse'  
*čáká* 'fish'

(101) San Miguel el Grande Mixtec (Dyk and Stoudt 1965):  
*čókó, tiyókó* 'ant'  
*čúkú, tiyúkú* 'fly'  
*čuku, tiyuku* 'louse'  
*čáká, tiyáká* 'fish'

(102) Chayuco Mixtec (Pensinger 1974):  
*tyìyòkò* 'ant'  
*tyiyuku* 'fly'  
*tyìyúkú* 'louse'  
*tyiyaka* 'fish'

Chayuco Mixtec is an example of a dialect in which there has been no fusion of **tĩ** (or its cognate) with /y/, while San Miguel Mixtec provides a nice example of a transitional dialect, in which fusion is optional.

The apparent prefix **tĩ** is obviously a reduced form of the noun **kĩtĩ** 'animal', and in fact for several other dialects, the prefix has been treated as synchronically deriving from the full form (e.g., in Pike 1944, 1949; Alexander 1980; Stark Campbell et al. 1986). In Chalcatongo Mixtec, however, **tĩ** must be treated as a fossilized prefix which bears only a diachronic relationship to the full noun **kĩtĩ**. There are several sources of evidence for this claim. First, note that the prefix may never be replaced by the full noun in animal names such as those in (98). NP + NP constructions with **kĩtĩ** as the first member do exist (as

<sup>27</sup>Virtually all of the examples of animal names in **č** derive from root-initial **\*y**. One of the few which had root-initial **\*w** (*čilža* 'lizard') has already been discussed in Chapter 2, n. 12.

illustrated in [103] and [104]), but the meanings of these are much more general in nature than those of the true animal names.

(103) *kiti táta* 'breeding animal'  
(*táta* 'father')

(104) *kiti žúkú* 'wild animal'  
(*žúkú* 'mountain')

Further evidence for the claim that the forms in (98) are lexicalized trisyllables can be drawn from examination of animal names for which there is change and/or variation in the vowel of the initial syllable (as in [105]). In some cases, *t̥i* varies with *te*, in others it varies with *ti*, in some cases *t̥i* is replaced by *ti*, and in one case it is *ti* which varies with *te*:

(105) *t̥indákú, tendákú* '(type of) worm'  
*tiñúú, teñu* 'owl'  
*t̥iñíí, tiñí* 'rat'  
*tixi* 'buzzard'  
*timí* 'bee'  
*tikokó, tekokó* '(type of) worm'

It would be difficult, if not impossible, to state a synchronic rule which could predict the vowel (or vowel variants) resulting from reduction of *kiti* in each of these cases.<sup>28</sup> In addition, such an analysis would be unable to explain the loss of the third syllable in forms like *tixi* 'buzzard' and *timí* 'bee'. Under the analysis of these words as fossilized trisyllables or disyllables, however, such variation is not at all unexpected. It is precisely the fact that the forms have been lexicalized, and that they are no longer transparent to the speakers of the language, which permits phonological change such as the variation in the initial vowel and the loss of the final syllable in some of the words in this domain. (For more extensive arguments against synchronic derivation in the Chalcatongo dialect, see Macaulay 1987a.)

It should be noted, finally, that there are also many animal names in Chalcatongo Mixtec which do not include an initial *t̥i* (or any other recognizable first syllable), as in (106). A few of these words do have an optional *t̥i* in the closely related San Miguel el Grande dialect; two of these are noted in brackets in (106):

<sup>28</sup>Pike (1944:128) notes similar data in San Miguel Mixtec and claims that it is (essentially) rule-governed: "Before front high vowels or palatal consonants, the [ə] usually changes to [i]." This rule (modified for the Chalcatongo dialect by replacing [ə] with [i]) works for *tixi* 'buzzard' and *timí* 'bee', but not for any of the other examples given in (105). It does appear to predict the variation in *t̥iñíí/tiñí*, but note the apparent vowel harmony. Furthermore, the rule does not work (in this dialect, at least) for the many other trisyllabic nouns which also begin with *t̥i* but which are from the semantic domain of round objects. It would be interesting to discover whether the rule still holds in San Miguel Mixtec, or whether the grammars of those speakers, like the ones in Chalcatongo, have proceeded to a further state of fossilization since Pike did his work there.

- (106) saà 'bird' [SM: tisaà]  
 bílu 'cat'  
 inà 'dog' [SM: ti?inà]  
 bá?ù 'coyote'  
 sá?ba 'frog'  
 sndikì 'bull'  
 kòò 'snake'  
 kó?lo 'turkey'

### 3.3.3.2. Terms for Round Objects

In addition to the various words for animals beginning with **tí**, there are a number of words denoting round or cylindrical objects which also begin with **tí**.<sup>29</sup> There is no clear corresponding full word in this case, however.

- (107) tičí 'avocado'  
 tikačá 'dust, whirlwind'  
 tikánu 'knot'  
 tikò?ží 'dimple'  
 tik<sup>w</sup>a?a 'orange (fruit)'  
 tik<sup>w</sup>ití 'potato'  
 tìnana 'tomato'  
 tìndúú 'tree trunk'

There are also a few nouns denoting round objects which begin with **č** (e.g., **ča?a** 'gourd'), that could conceivably have undergone the same process of fusion by which the animal names in **č** were derived. I lack the comparative data, however, which would be necessary to determine whether this was in fact the origin of these instances of initial **č**.

### 3.3.3.3. Tree Names

Words for trees are often trisyllabic and begin with the syllable **nù**, as in (108). These data show sporadic tone changes in the root, again not conforming to the expected behavior of a floating H tone. For example, the root for 'fruit' is ML in isolation, but MH in the word for 'fruit tree'. This is the result expected for a CVCV root, but not for a CV?V root.

- (108) nùnde?é 'fruit tree' (cf. nde?è 'fruit')      nu`nì 'juniper'  
 nùžúšá 'torchpine' (cf. žúša 'pine needles')      nužòò 'bamboo'  
 nùkaxí, nukàxí 'evergreen oak'

<sup>29</sup>Longacre (1957) says that this prefix is distinct from the one found on animal names, and that it derives from a root meaning 'thing' or 'oval-shaped thing'. De León (1986:350), however, claims that the use of **tí** to refer to spherical objects results from semantic extension of the classifier for animals.

The initial syllable **nù** is a reduction of **žũnũ** ‘tree’ (following the rule of Initial Syllable Deletion described in Chapter 2), but, again, the full word may not be substituted for the initial syllable in these tree names. Also note the loss of nasalization in the first syllable of the trisyllabic forms.

### 3.3.3.4. Building Names

There are two words in my corpus which denote types of buildings, and which begin with the syllable **be**, as follows:

(109) bekàà ‘jail’ (cf. kaa ‘iron’)

(110) beñũ?ũ ‘church’ (cf. ñũ?ũ ‘earth, land’, ñũ?ũ ‘fire, light’)<sup>30</sup>

Note that it is possible to form similar constructions with the full word **be?e** ‘building’ as the first element, as shown in (111) through (115). However, the last two, containing **kaa** ‘iron’ and **ñũ?ũ** ‘earth’ (or the other possible source, **ñũ?ũ** ‘light’), do not mean (respectively) ‘jail’ and ‘church’, as illustrated in (114) and (115).

(111) be?e ání ‘city hall’ (Spanish *palacio municipal*)<sup>31</sup>  
house *presidencia*

(112) be?e čũũ ‘chicken coop’  
house chicken

(113) be?e kítí ‘corral’  
house horse

(114) be?e kaa ‘building made of iron’<sup>32</sup>  
house iron

(115) be?e ñũ?ũ ‘building made of earth/light’  
house earth

The fact that (114) and (115) are interpreted compositionally, and do not have the specialized readings of (109) and (110), indicates that the latter are lexicalized in trisyllabic form and therefore cannot be synchronically derived from syntactic constructions with the full noun **be?e** as first member.

<sup>30</sup>It is not clear which of these is the source of the original root.

<sup>31</sup>The word **ání** in (111) is a noun approximately meaning ‘office of the mayor’ (Spanish *presidencia*), that is, the office held by the elected official who is in charge of the town and surrounding area (Spanish *Presidente*).

<sup>32</sup>My oldest consultant, Otelia Jimenez García, did once translate (114) as ‘jail’, but all other consultants rejected that meaning for it, indicating that its fossilization may be relatively recent.

### 3.3.3.5. Terms for Younger Kin

Finally, there are several kin terms with a first syllable *se*, all of which denote a younger relative (the related noun *seʔe* means 'child'). Note again the irregular tone changes between root and derived form.

(116) *sendúča* 'godchild' (cf. *nduča* 'water')

(117) *sesíʔí* 'daughter' (cf. *síʔí* 'feminine')

(118) *sežíí* 'son' (cf. *žíi* 'masculine')

(119) *sexanú* 'daughter-in-law' (cf. *xánu* 'sister-in-law')

(120) *sekásá* 'son-in-law' (cf. *kása* 'brother-in-law')

### 3.3.3.6. Conclusion

To conclude this section, then, we have seen that there are a number of semantic domains in Chalcatongo Mixtec in which many of the words have a common first syllable which is suggestive of a classifier. However, while productive classifier systems have been documented for other Mixtec dialects, in Chalcatongo Mixtec we must conclude that the system is no longer productive. Arguments against synchronic derivation of the initial syllable from the full noun to which it is related include the following: (a) in most cases the corresponding full noun (when there is one) may not be substituted for the initial syllable; (b) in cases in which a NP + NP construction with the corresponding full noun *can* be created, this construction has a different meaning than the trisyllabic form does; and (c) the trisyllabic forms are susceptible to phonological and semantic change which would not be expected if the prefix represented a productive classifying element. Finally, we must also note that the prefixes in Chalcatongo Mixtec do not fulfill any of the typical functions of classifiers. That is, it is misleading to speak of the prefix co-occurring with some noun for which it has a quantifying or classifying (or other) function, since in the majority of cases the two final syllables do not constitute an independent morpheme.<sup>33</sup> I conclude that Chalcatongo Mixtec in its current state does not have an extant system of noun classification. The suggestive initial syllables which we observe in certain semantic domains are instead the fossilized remnants of an archaic classifier system.

<sup>33</sup>Direct evidence that speakers are not conscious of the classifying function of these prefixes was provided by one of my consultants, who produced *zúnú núžúša* for 'torchpine' on one occasion (cf. example [108]).

## MORPHOLOGY: INFLECTION

Inflection in Mixtec, like derivation, is exclusively prefixing. It is also quite limited in that only verbs (and some adjectives) can be inflected. Furthermore, there are only five inflectional prefixes: plural, completive, mood (positive and negative), and temporal. Each of these is described in turn below.

### 4.1. Plural

Plural marking of all kinds is optional in Mixtec. The use of quantifiers, the “plural word,” and a postverbal plural marker are discussed in Chapters 5 and 6. This section describes the use of the inflectional prefix **ká-**, which marks plural subject agreement on the realis stem of verbs, and on some adjectives. There is no apparent semantic basis for the restriction to realis stems. In fact, I do have two or three spontaneous examples of **ká-** attached to potential stems in my data. However, all examples of **ká-** plus potential which I constructed to test this were rejected by my consultants as ungrammatical. (1)–(4) illustrate the use of this prefix:

- (1) **ká-žaà=to**  
 PL-reside=3POL.OLD  
 ‘They live (there)’
- (2) **ká-káʔã=žo**  
 PL-talk=1PL  
 ‘We are talking’
- (3) **ká-bèè šãã=∅**  
 PL-weigh much=3  
 ‘They weigh a lot’

- (4) ndik<sup>w</sup>ítí ñažīū ká-ku ndá?u xiná?a<sup>1</sup>  
 all people PL-COP poor plural  
 'All the people are poor'

As can be seen from the above examples, **ká-** has high tone and is not a perturber. However, there are some cases in my data in which **ká-** appears with mid tone instead of high, as in (5) and (6):

- (5) táa=rí xína?a ni-ka-xaà íkú  
 parent=1 plural CP-PL-arrive yesterday  
 'My parents arrived yesterday'
- (6) a-ni-ka-xá?ña=Ø  
 TEMP-CP-PL-cut=3  
 'They already cut (it)'

The majority of the examples in which **ká-** occurs with mid tone have the completive prefix **ni-** preceding it. As is discussed in the next section, the completive prefix often seems to have a lowering effect on the tone of the following syllable. The other cases of mid tone **ká-** are unexplained.

#### 4.2. Completive

The completive prefix **ni-** attaches to the realis stem of verbs and marks an event as having been completed.<sup>2</sup> **ni-** can describe either a completed past event or a completed future event. The former use is shown in (7)–(9), while the latter is shown in (10)–(12):

- (7) ni-čaà=rí be?e=ró  
 CP-arrive=1 house=2  
 'I arrived at your house'
- (8) ni-ku-líí=ná  
 CP-INCHO-naked=1POL  
 'I took off my clothes' (lit. 'became naked')

<sup>1</sup>ndik<sup>w</sup>ítí is a complex form composed of the initial syllable of ndí?í 'all' and the word k<sup>w</sup>ítí 'just'.

<sup>2</sup>Pike (1944:125–126) makes the same point for San Miguel Mixtec, showing there that the prefix **ni-** does not indicate past tense, as one might think upon first inspection of the data. He gives examples like those in the present text to show that its function is instead to mark completion of the event described, regardless of the time reference of the utterance. Bickford and Marlett (1989) also make this point for the three Mixtec dialects that they describe, Santiago Nuyóo, Santo Domingo Nuxáa, and Tezoatlán.



- (9) ni-číʔi=ró itù=ro  
 CP-plant=2 cornfield=2  
 'You planted your cornfields'
- (10) ni-s-ndìʔ=rí orá wāá sáʔa=rí tīū=rí  
 CP-CAUS-finish=1 hora that do=1 work=1  
 'I will have finished doing my work by then'
- (11) kana=ró ruʔù nu=ní-na-ketáʔá=ro xí peðrú  
 call=2 me COND=CP-REP-find=2 with *Pedro*  
 'Call me when you find/if you have found Pedro'
- (12) bina xa=kínoʔo=rí nú=a-ni-kutúʔa=rí káʔā=rí misteku  
 now COMP=leave=1 COND=TEMP-CP-learn=1 speak=1 *Mixteco*  
 'When (lit. 'Now that') I leave (Chalcatongo), I want to have learned to speak Mixtec'

As examples like (7) and (8) show, **ni-** is not a perturbing morpheme. However, it does seem to have other tonal effects. Recall the discussion in §2.5.5 of Buckley's (1991) rule of Low-Tone Spreading. In Buckley's data, **ni-** had low tone, which spread rightward in certain cases to an adjacent syllable (or syllables).<sup>3</sup> However, in a sample of 302 forms in **ni-**, I found that 214 (71%) had mid tone on the prefix, 45 (15%) had low tone, and 43 (14%) had high tone (the result of following a morpheme with a floating H). In the cases in which **ni-** has mid tone, of course the low spreading rule cannot apply. In my data, **ni-** appears instead to have another effect on the tone of the following syllable, which is analogous to but not exactly the same as Buckley's rule: in slightly less than half the cases I examined, the tone of the following syllable or syllables is lowered by one step, that is, from H to M and from M to L. (13)–(15) are representative examples:

- (13) ni-xēī=rí bílu nù xíto (stem: xēī)  
 CP-put=1 cat face bed  
 'I put the cat on the bed'
- (14) rùʔù ni-žoo seʔe=rí (stem: žóó)  
 I CP-exist child=1  
 'I had my children'
- (15) ni-čàà=na (stem: čaà)  
 CP-come=1POL  
 'I came'

There is no phonological (or other) conditioning that I can find that accounts for this lowering in only some examples. I assume, then, that it is an optional rule. Furthermore,

<sup>3</sup>I am simplifying somewhat. See Buckley (1991:169) for details.

it happens following both mid tone **ni**- and low tone **nɪ**-. Thus, Buckley's rule of Low-Tone Spreading (which does not exist in monomorphemic LM couplets for the speakers with whom I worked in Chalcatongo, as it does for Buckley's speaker) has to be changed in this case to a more specific rule which states that the syllable(s) following the completive prefix may optionally be lowered one step. I leave formalization of this rule aside here, since the topic of the tonal effects of the completive marker is still incompletely understood.

### 4.3. Mood

There are two mood-marking prefixes in Chalcatongo Mixtec: one which occurs in positive contexts, **na**-, and one which occurs in negative contexts, **ma**-. The grammars of other dialects which have this distinction (e.g., Alexander 1980; Pensinger 1974; Dyk and Stoudt 1973) describe **ma**- simply as a negative marker used with potential aspect and pair it with the clitic **tu**= (which is used primarily with realis aspect). However, I have shown elsewhere (Macaulay 1990) that in the Chalcatongo dialect this pairing fails, and that, in fact, **ma**- is in alternation with **na**-. This section begins with description of the positive form, **na**-, and then turns to the negative, **ma**-.

Examples (16)–(18) illustrate main clause uses of **na**- in Chalcatongo Mixtec. It is always prefixed to the potential verb stem and has a perturbing effect on the tone of the word which follows it.

- (16) *na-čindúčá=rí saʔma=rí* (stem: *čindúčá*)  
 MOOD-rinse=1 clothes=1  
 'I must rinse my clothes'
- (17) *na-čáa* (stem: *čaà*)  
 MOOD-come  
 'You must/should come' or 'Come!'
- (18) *na-kíí=Ø bina nūʔni* (stem: *kii*)  
 MOOD-come=3 right.now  
 'He must/should come right now'

These examples illustrate the deontic mood function of **na**- in main clauses. Following Chung and Timberlake (1985:246), I take deontic mood to "characterize an event as non-actual by virtue of the fact that it is imposed on a given situation." (16), (17), and (18) illustrate three of the related senses that deontic mood may convey, depending on person of subject: (a) volunative or desiderative ("the speaker expresses intention or deliberation to realize the event" [1985:247]), (b) imperative,<sup>4</sup> and (c) optative ("the speaker desires some event of some participant" [1985:247]). What these three senses have in common is that they are all expressions of the will of the speaker.

<sup>4</sup>Consultants indicate that imperatives with **na**- are more "polite" than imperatives formed with the potential stem alone. (See §6.6.4.)

When **na-** occurs in subordinate clauses in Chalcatongo Mixtec, it has similar functions. It may appear in complements to verbs of causation (as in [19]), to verbs expressing the desire or directions of the subject (as in [20]), to verbs of permission (as in [21]), and in complements to imperatives, both when the two clauses have the same subject (as in [22]) and when they have different subjects (as in [23]).

- (19) *sáʔa xa=na-kíi=Ø* (stem: *kii*)  
 make COMP=MOOD-come=3  
 'Make him come'
- (20) *keè=Ø xà=na-číndé=ri róʔo* (stem: *čindé*)  
 say=3 COMP=MOOD-help=1 you  
 'She says that I should help you'
- (21) *s-ndóo na-kíʔi=Ø xí=ri* (stem: *kíʔi*)  
 allow MOOD-go=3 with=1  
 'Let him go with me'<sup>5</sup>
- (22) *k<sup>w</sup>áʔá na-číʔu žuʔu=ró* (stem: *číʔù*)  
 go MOOD-rinse.out mouth=2  
 'Go rinse out your mouth'
- (23) *kéĩ seʔe=ró na-kúsu=Ø* (stem: *kúsu*)  
 put child=2 MOOD-sleep=3  
 'Put your child down to sleep'

**na-** also appears in conditional clauses, as in the following:

- (24) *nú=wáá na-sáʔa=Ø ku-síi šáá iní=ri* (stem: *sáʔa*)  
 COND=that MOOD-do=3 COP-happy much insides=1  
 'If he did that, I would be very happy'
- (25) *bàʔà=kà=Ø nu=na-kíʔi=ro šíá* (stem: *kíʔi*)  
 good=ADD=3 COND=MOOD-go=2 tomorrow  
 'It would be better if you went tomorrow'

These uses of **na-** in subordinate clauses all have in common that the occurrence of some event, while not certain, is desired. They differ from the main clause uses of **na-** in that the will which is expressed is not necessarily that of the speaker but is instead usually that of the subject of the main clause. It is true that this subject is, in fact, almost always the speaker—but it does not have to be, as shown in example (20). Chung and Timberlake (1985:249) call this the use of deontic mood in "secondary events." Note that (25) might be interpretable as an exception to the claim that the subject of the main clause is the one

<sup>5</sup>*s-ndóo* has the form of a causative, but it is unclear what the root is.

whose will is expressed; in this case, however, the sentence presumably reflects the will or desire of the speaker, whose identity is not expressed overtly in the sentence.<sup>6</sup>

We turn now to the negative mood marker, **ma-**, which is illustrated in (26)–(29). Note that **ma-**, like **na-**, carries a floating H tone.<sup>7</sup>

(26) *ma-kíʔĩ=rí* (stem: *kíʔĩ*)  
NEG.MOOD-go=1  
'I will not go'

(27) *ma-kúú=ro* (stem: *kuù*)  
NEG.MOOD-die=2  
'Don't die!'

(28) *sáʔa xa=ma-kíi=Ø* (stem: *kii*)  
make COMP=NEG.MOOD-come=3  
'Make him not come/Don't let him come'

(29) *kaka kʷéé=ní xa=má-kʷítá=ní* (stem: *kʷítá*)  
walk slow=2POL COMP=NEG.MOOD-tire=2POL  
'Walk slowly so that you don't get tired'

The meaning of **ma-** is precisely the opposite of that of **na-**, that is, by using **ma-** the speaker indicates his or her expectation or desire that some event should not occur. An example like (26), then, is a negative volutative, that is, it expresses the speaker's intention *not* to realize the event in question. It is still deontic mood because it still characterizes the event as nonactual. In fact, it could be argued that such an utterance is more strongly nonactual than a positive volutative: not only is it nonactual in the present, but the speaker indicates a desire that it remain nonactual in the future.

#### 4.4. Temporal

The fifth inflectional prefix is temporal **a-**, which attaches to realis verb stems. The meaning of this prefix appears to be quite similar to that of the Spanish *ya*, which can be translated as 'already', or 'now'.<sup>8</sup> (30) through (33) illustrate:

<sup>6</sup>Hills (1990:73–74) says that the "hortatory" **na-** in Ayutla Mixtec "always implies personal interest on the part of the speaker, and frequently a strong wish." However, Ayutla Mixtec differs from Chalcatongo Mixtec in that it has two prefixes, the hortatory **na-** and the "obligation marker" **na-**, which is used in stating requirements. Thus, the uses may not be parallel. Furthermore, Hills does not discuss the use of either prefix in subordinate clauses.

<sup>7</sup>This is, in fact, another parallelism between **ma-** and **na-** which is not shared by the negative clitic **tu=**.

<sup>8</sup>Terrence Kaufman (personal communication) tells me that despite the phonological similarity, Mixtec **a-** is not borrowed from Spanish. This is supported by the fact that the Yosondúa dialect has two forms, **xa-** and **sa-**, fulfilling this function (Farris 1992:55–56).

- (30) a-xíʔi toʔò ñǎʔnū wǎǎ  
 TEMP-die man old the  
 'The old man is dying now'
- (31) a-ni-kušíní=žó  
 TEMP-CP-eat=1PL  
 'We already ate'
- (32) tú=a-ni-kuní=ǎe  
 NEG=TEMP-CP-want=3MN  
 'He now didn't want to/He didn't want to anymore'
- (33) saʔma wǎǎ a-ni-ičǐ  
 clothes the TEMP-CP-be.dry  
 'The clothes are dry now/have already dried'

#### 4.5. Relative Ordering of Inflectional Prefixes

The mood prefixes do not co-occur with the plural, completive, or temporal prefixes because the former attach to potential verb stems, while the latter attach to realis verb stems. The plural, completive, and temporal do co-occur, however, as the following examples show:

- (34) a-ni-ka-žesámá=rí  
 TEMP-CP-PL-eat=1  
 'We already ate'
- (35) a-ni-ka-kǎʔǎ=ró xǐ maestro  
 TEMP-CP-PL-talk=2 with *maestro*  
 'You (PL) already talked with the teacher'

The relative ordering of these three prefixes, as these examples illustrate, is temporal > completive > plural.

## LEXICAL CATEGORIES

This chapter defines and exemplifies the lexical categories of Chalcatongo Mixtec. Most of these are easily distinguished; substantive problems arise only with the identification of adjectives and prepositions.

### 5.1. Nouns and Pronouns

Nouns in Chalcatongo Mixtec bear no inflectional morphology whatsoever—there is no case or direct plural marking, for example. Nouns are identifiable by their distribution in phrases and clauses: they may be quantified or modified by adjectives or relative clauses, or they may take a demonstrative ('this', 'that'). (The syntax of the noun phrase is the topic of §6.2.)

Chalcatongo Mixtec nouns can be classified into the usual categories: mass versus count, proper versus common, full noun versus pronoun, etc. The latter class, pronoun, is the most interesting of these subcategories. The language has a fairly extensive system of clitic pronouns, but full pronouns only for first and second persons. The syntax of the pronominal forms is addressed in Chapter 6; here we confine ourselves to examination of the relationship between the clitics and the full forms. Table 11 displays the full set of pronominal clitics for the Chalcatongo dialect, as well as the corresponding pronouns and nouns.

The first thing to note about this system is that there are no free third person pronouns in Mixtec; rather, full nouns with generic reference correspond to the clitic forms. Thus, **čàà** means 'man', **ñá?á** means 'woman', and so on. True pronouns exist only for first and second persons, in singular and plural, polite and familiar forms.

Second, while many of the pronominal clitics are identical with what would be the output of the rules of rapid speech contraction applied to the full forms (recall §2.6), a few are not (**rù?ù**/**rí**, **čàà**/**ǎe**). The syntax of the full forms and that of the clitic forms is quite different as well (see §6.7.1) and so the clitic forms cannot be the result of synchronic contraction of the full forms, but must instead be regarded as invariant phrasal affixes.

Table 11: Pronouns

PERS	GENDER	FREE	CLITIC
1	FAMILIAR	rùʔù	=rí
	POLITE	naʔa	=na
	INCLUSIVE (PL)	žóʔó	=žó
2	FAMILIAR	roʔo	=ro
	POLITE	níʔí	=ní
3	MASCULINE	čàà 'man'	=ðe
	FEMININE	ñãʔã 'woman'	=ñã
	POLITE: OLDER	toʔò 'older person'	=to
	YOUNGER, DECEASED, etc.	(žii 'masculine')	=žii
	SUPERNATURAL	íʔa, íža 'god'	=ža
	ANIMAL	kiti 'animal'	=ti
	UNMARKED		=∅

Third, note that there is only one inherently plural pronoun: **žóʔó**, first person plural inclusive. Plurals of other persons and genders may be marked by addition of the prefix **ká-** to the verb stem when the subject is plural (see §4.1), and/or by various syntactic means, such as use of the plural word **xináʔa** in the NP (see §6.2.4, also §5.8). These options are illustrated in (1)–(5). Note in (1) that a first-person plural made with one of the number-neutral clitics and another pluralizing element (here, **ká-**) is exclusive of the hearer, and in (5) that more than one pluralizing element may be employed to mark the number of a single argument.

- (1) **ká-satíũ=rí**  
 PL-work=1  
 'We're working' (exclusive of hearer)
- (2) **ká-xīnũ=ro**  
 PL-run=2  
 'You (PL) run'
- (3) Mexico **ká-žaà=to**  
 Mexico PL-live=3POL.OLD  
 'They live in Mexico City'
- (4) **ndíto=to xináʔa**  
 be.awake=3POL.OLD plural  
 'They are awake'
- (5) **ka-xãʔã=∅ xináʔa beʔe**  
 PL-go=3 plural house  
 'They went to their house'

Finally, the item glossed 'younger, deceased, etc.' in Table 11, =**ži**, requires some explanation. Speakers give varying accounts of its semantics. One speaker said that it was used for young males and deceased persons. Another said that it was used for younger people of either gender, as well as for the deceased. Pérez Jiménez (1988:13) describes its use this way: "Hablando con ternura o compasión, como cuando se trata de niños, difuntos o seres queridos [speaking with tenderness or compassion, as when one refers to children, the deceased, or loved ones]."

This clitic form is also unique among the third person pronominal clitics in that it lacks a corresponding full noun with precisely the same semantics. The adjective **ži** 'masculine', the most obvious correspondent, is used only for living males and, furthermore, may be used for older as well as for younger males. There are several lines of speculation we might take on the source of this pronoun: First, sixteenth-century records indicate that there was at that time a clitic =**si**, which was used for "niño, cosa, el difunto [child, thing, or dead person]" (Arana and Swadesh 1965:25), and this could be the predecessor of the Chalcatongo =**ži** (although the correspondence between s and ž is not an expected one). Alternatively, we can note that the San Miguel dialect has a pronoun =**i**, which Dyk and Stoudt (1965) say is used for children, and which, according to them, derives from **sũčf** 'child'. This too could be related, although, again, the clitic form is not what would be expected from the full form. Finally, Barbara Hollenbach (personal communication) suggests another possibility: According to Farris (1992:135), Yosondúa Mixtec has a pronominal clitic =**yí** or =**i** 'general third person', which derives from **yíví** 'person', and this (or its cognate in this dialect, **ñážiũ**) could be the source for the Chalcatongo form as well. It is clear that determination of the source of =**ži** is a question which requires greater comparative data for resolution than are currently available.

Having examined the pronominal clitics, we can now classify Chalcatongo Mixtec nouns in a sort of gender or noun class system, according to which clitic is used to replace them. It is a fairly limited gender system, however, in that the only reflection of it is in the clitic pronouns. That is, there are no agreement rules or other such phenomena which depend on nominal gender. In general, this gender classification is quite straightforward: males are referred to by the masculine clitic, animals are referred to by the animal clitic, and so on. The genders which we can determine, then, are listed below with typical exemplars. It should be pointed out, however, that these third person pronominal clitics are never obligatory: any noun can take the zero clitic as long as the full noun is mentioned or is clear from context.

(6) MASCULINE

čàà	'man'
xa-žíí	'husband'
k <sup>w</sup> àʔa	'brother (of female)'
ñáni	'brother (of male)'



- (7) FEMININE  
 ñãʔã 'woman'  
 xa-siʔí 'girl, woman'  
 náa 'mother'  
 na-číso 'mother-in-law'
- (8) POLITE, OLDER  
 toʔò 'person, stranger'  
 táa 'father'  
 awelita 'grandmother' (SP *abuelita*)  
 ñãʔã ñãʔnũ 'old woman'
- (9) ANIMAL  
 kití 'animal, horse'  
 kiní 'hog'  
 saà 'bird'  
 tikáxī 'worm'
- (10) SUPERNATURAL  
 íʔa 'god, saint'  
 čúʔči 'Jesus, God' (SP *chucho*)  
 sutù 'priest'  
 mōxa 'nun' (SP *monja*)  
 xa-úʔu 'the Devil'
- (11) POLITE, YOUNGER/DECEASED  
 xa-žíí '(late) husband'  
 xa-lúlí 'boy'  
 xa-siʔí 'girl'  
 ndíži 'dead person'
- (12) ZERO  
 ndežu 'food, dinner'  
 tičí 'avocado'  
 nundóʔo 'accident, problem'

## 5.2. Verbs

The grammar of Chalcatongo Mixtec does not make a clear distinction between the classes of verbs and adjectives. The problems in distinguishing the two are discussed in the next section; here, we look first at the clearest cases of verbs.

Recall from §3.1 that verbs in Chalcatongo Mixtec have at least two different stem forms. Approximately half have distinct stems for realis and potential aspect, and a few have a stative stem, and/or a stem beginning with the syllable *čV*, which often has a

transitivizing effect (among other functions). The existence of distinct realis and potential stems is one of the defining characteristics of verbs in Mixtec.

In addition, verbs allow affixation of all of the inflectional prefixes described in the preceding chapter: **ká-** ‘plural’, **ni-** ‘completive’, **na-/ma-** ‘mood’, and **a-** ‘temporal’. These prefixes are illustrated again in (13)–(16):

- (13) *maría te x<sup>wā</sup> ká-xita*  
*María and Juan* PL-sing.R  
 ‘María and Juan are singing’
- (14) *ni-čisaʔí=ri máá=ri nuù=ðe*  
 CP-hide.R=1 self=1 face=3MN  
 ‘I hid myself from him’
- (15) *na-kúči=ðe*  
 MOOD-bathe.P=3MN  
 ‘He should/must bathe’
- (16) *a-ni-ndatu=rí uù órá*  
 TEMP-CP-wait.R=1 two *hora*  
 ‘I’ve already been waiting two hours’

A second defining characteristic of verbs is the form of the causative morpheme which they take. Recall from §3.2.1 that the causative for verbs is **s-**, as in (17)–(18):

- (17) *ma-s-kána=ro*  
 NEG.MOOD-CAUS-throw=2  
 ‘Don’t throw it!’
- (18) *s-k<sup>w</sup>isó=ri tik<sup>w</sup>ití*  
 CAUS-boil(*vi*)=1 potato  
 ‘I’m boiling the potatoes’

Third, verbs allow the inchoative prefix **ku-**, but not the inchoative prefix **ndu-** (these examples are repeated from §3.2.2; see the discussion there for more details):

- (19) *ku-k<sup>w</sup>áʔnū=ðe*  
 INCHO-grow=3MN  
 ‘He will grow’
- (20) *kú-kíʔī ndendú=ro*  
 INCHO-go.and.return both=2  
 ‘Both of you are going to go’

Most verbs, of course, are not distinguished according to number of subject, but there are two pairs of verbs for which this is criterial.<sup>1</sup> As shown in §5.3 (examples [43]–[46]), there are also some adjectives that have distinct forms depending on the number of the noun that they modify, so this cannot be used as a criterion for distinguishing between verbs and adjectives.

- (21) kúžaa (P), xížaa (R) ‘be located, singular subject’  
 kúsikú (P), káisikú/káišikú (R) ‘be located, plural subject’
- (22) kundee (P), xíndee (R) ‘be located in, singular subject’  
 k<sup>w</sup>íñí (P), íí, káʔíí (R) ‘be located in, plural subject’

Finally, there is a fairly large set of phrasal verbs which consist of verb plus body part term, as illustrated in (23). (Many more can be found in the lexicon which follows Chapter 9.) As noted, in some cases the first element (the verb) has an independent meaning, but in others speakers are not able to supply a literal translation.

- (23) kítí inì (P,R) ‘be angry’ (lit. ‘boil insides’)  
 káʔā žaá (P,R) ‘whisper’ (lit. ‘speak tongue’)  
 káʔā sūkú (P,R) ‘speak loudly, yell’ (lit. ‘speak neck’)  
 xātaʔni iní (P,R) ‘love’  
 kání inì (P), xání inì (R) ‘think’ (lit. ‘stand up insides’)

### 5.3. Adjectives

As mentioned above, it can be quite difficult to distinguish adjectives from verbs in Chalcatongo Mixtec.<sup>2</sup> There are only a few clear grammatical correlates of adjectival status. Instead, there seems to be a cluster of behaviors which, taken together, typify adjectives. Further complicating the matter is the fact that speakers occasionally differ in their grammaticality judgments for adjectival constructions. In what follows, I enumerate the grammatical behaviors which adjectives demonstrate and comment on the variability in behavior in each category.

**ZERO COPULA:** All adjectives can appear with a zero copula, as illustrated in (24)–(25). Of course, this fact contributes nothing to the search for features which distinguish adjectives from verbs.

<sup>1</sup>Hills (1990:192) provides a list of twenty-three verbs in Ayutla Mixtec which make this distinction (almost all are verbs of position and location). I have only found the two pairs cited in the text in Chalcatongo Mixtec.

<sup>2</sup>This, of course, is not unusual in the languages of the world: “It must not be forgotten that a typological universal pattern is almost always a pattern of variation: some languages more clearly distinguish the category ‘adjective’ than others, . . . and it may be that some languages barely distinguish the category ‘adjective’ at all” (Croft 1991:94).

- (24) x<sup>w</sup>ã súčí=ká nuù=ri  
*Juan* young=ADD face=1  
 ‘Juan is younger than I am’
- (25) ñíʔní nduča  
 hot water  
 ‘The water is hot’

COPULA: Virtually all adjectives can appear with the copula, which takes the form **kaa** in realis aspect and **kuú** in potential aspect.<sup>3</sup> (In rapid speech, these forms are almost always contracted to **ka** and **ku**, respectively.) Verbs, of course, never co-occur with these copular forms, and so this can be used as a test for distinguishing the two. (26)–(28) provide examples of adjectives in construction with the copula, the syntax of which is discussed further in §6.6.2.

- (26) ka ñíʔní=Ø  
 COP hot=3  
 ‘It’s hot’
- (27) ni-ka lúú=Ø  
 CP-COP pretty=3  
 ‘She was pretty’
- (28) kuú bàʔà  
 COP.P good  
 ‘Be good!’

There is some indeterminacy with adjectives in construction with **ku** due to the fact that the potential copula and one of the two inchoative markers (see §3.2.2, and below) are homophonous (and possibly historically related). As a consequence, it is often unclear which form is present, as illustrated in (29):

- (29) kú ñáʔnū=Ø  
 ? old=3  
 ‘They will be/are getting old’

Although virtually all adjectives can co-occur with the copula, very occasionally a consultant rejects a form with **kaa** (e.g., \***kaa ndàki** ‘It is stale, hard’ was judged unacceptable). In addition, there appear to be sporadic dialect differences concerning the grammaticality of a form with **kaa** (e.g., one speaker said that **ka šáà** ‘It is fierce’ was ungrammatical, while another found it perfectly acceptable).

<sup>3</sup>Apparently, in other dialects of Mixtec **kaa** is a main verb meaning ‘appear’ and **kuu** is the copula (Barbara Hollenbach, personal communication). This is not the case in Chalcatongo Mixtec, however.

EXISTENTIAL: Mixtec also allows a construction in which the existential is used with an adjective.<sup>4</sup> This construction, which is illustrated in (30)–(31), apparently has the same meaning as the normal copula + adjective construction and can take a non-null subject. (See §6.6.1 for further discussion.)

(30) žó ñiʔni=Ø  
exist hot=3  
'It's hot'

(31) žíí=rí žóó niʔi inì=ðe  
husband=1 exist strong insides=3MN  
'My husband is strong'

Again, there are some cases in which consultants reject the existential + adjective construction, for example \*žó kúká 'S/he is rich', \*žó žáči 'S/he is fast', \*žó túʔú 'S/he is gossipy'.

INCHOATIVE: All of the adjectives tested were found to co-occur with both the inchoatives **ku-** and **ndu-**, as illustrated below in (32)–(33). The former, as mentioned before, also occurs with verbs, but the latter only occurs with adjectives (see §3.2.2).

(32) ñāʔā wāā ni-ku-šíí  
woman the CP-INCHO-thin  
'The woman became thin'

(33) žíí=rí ndu-kʷíñí  
husband=1 INCHO-jealous  
'My husband is going to get jealous'

CAUSATIVE: Causative verb formation is discussed in §3.2.1. As pointed out in that section, verbs are always causativized with the prefix **s-**. Adjectives are usually causativized (and verbalized) by the prefix **sa-**, but some items allow either form. Examples are given in (34)–(37); note in (36) that **tíʔlu** 'small' is an adjective which allows **sa-** or **s-**.

(34) čàà wāā ni-sa-ndáʔu rúʔu (\*s-ndáʔu)  
man the CP-CAUS-poor I  
'The man made me poor'

(35) rùʔù sá-bàʔà=ri (\*s-bàʔà)  
I CAUS-good=1  
'I'll fix it'

<sup>4</sup>Croft (1991:69) cites another language which also does this: Yagaria, as described by Renck (1975). Renck, however, does not give any explicit discussion of the construction, and I could find only one example in the grammar (p. 58).

- (36) sá-tíʔlu / s-tíʔlu  
CAUS-small  
'Shrink, make small'
- (37) na-sá-ñíʔní=rí (\*s-ñíʔní)  
REP-CAUS-hot=1  
'I'll heat it'

INFLECTIONAL AFFIXATION: Of the five inflectional affixes (**ká-** 'plural', **ni-** 'completive', **na-/ma-** 'mood', and **a-** 'temporal'; see Chapter 4), only **ni-** occurs with a large number of adjectives. The plural marker **ká-** occurs with a few, while co-occurrence of adjectives with the mood markers or the temporal marker is unattested. (38)–(41) provide examples of the first two cases:

- (38) ni-ñíʔní=Ø  
CP-hot=3  
'It was hot'
- (39) ni-tíʔlu=Ø  
CP-small=3  
'It was small'
- (40) ká-ià šāā ték<sup>w</sup>aʔa žáʔa  
PL-sour very orange this  
'These oranges are very sour'
- (41) ká-kúká=Ø  
PL-rich=3  
'They are rich'

Consultants rejected completives with a few adjectives, including **ndoo** 'clean', **lúfí** 'small', and **žáʔu** 'expensive'. They also rejected a number of plurals with adjectives, including **ndoo** 'clean' and, for one speaker, **kúká** 'rich' (although another speaker found it acceptable, as shown above in (41)).

NOMINALIZATION: Finally, as described in §3.3.2, adjectives can be nominalized with the prefix **xa-**, as in (42):

- (42) xa-k<sup>w</sup>íí 'the green one' (k<sup>w</sup>íí 'green')  
xa-lúfí 'child, boy' (lúfí 'small')  
xa-ñáʔa 'morning' (ñáʔa 'early')

To sum up, then, the best predictors of adjectival status are co-occurrence with the copula, co-occurrence with the inchoative **ndu-**, and nominalization with **xa-**. The other grammatical correlates (e.g., lack of co-occurrence with the inflectional affixes **na-/ma-**

and **a-**, or co-occurrence with the causative **sa-**) can be fairly good indicators of adjectival status, but a number of particular forms vary by dialect or perhaps even idiolect. As stated above, the categories “verb” and “adjective” are not clear-cut categories in Chalcatongo Mixtec but seem instead to form a continuum with clear cases at either end, but many less clear cases toward the middle.

As a final observation about adjectives, there are two in Chalcatongo Mixtec which have distinct singular and plural stems.<sup>5</sup> These are shown in (43)–(46):

(43) *beʔe káʔnũ=Ø*  
house big.SG=3  
‘The house is big’

(44) *beʔe náʔnũ=Ø*  
house big.PL=3  
‘The houses are big’

(45) *žoʔo káni*  
rope long.SG  
‘a long rope’

(46) *žoʔo náni*  
rope long.PL  
‘long ropes’

#### 5.4. Prepositions

Most of the relationships which are coded with prepositions in a language like English are coded with body part nouns in Mixtec. This topic is discussed in depth in §8.2. Chalcatongo Mixtec does, however, have a small number of items which do function as prepositions: **kʷàčl** ‘due to’, **kʷentá** ‘about, like’, **onde** ‘up to, until’, **xakúu** ‘for’, **máʔnú** ‘between’, **xíí** ‘with’, and **iči** ‘toward’. The degree of certainty with which we can say that these forms are prepositions varies from cases in which there is no corresponding noun in the modern-day language (e.g., **xíí** ‘with’) to cases in which the corresponding noun is so similar in meaning and usage that perhaps it would be better not to consider the form a preposition at all (e.g., **iči** ‘toward’). This wide variation across the set simply indicates that each one is in a different stage of grammaticization. Just as we saw with verbs and adjectives, Mixtec appears not to draw a sharp line between prepositions and nouns. (The syntax of these prepositions is covered in §6.3.)

<sup>5</sup>This has been noted for many other Mixtec dialects. The adjectives which show a number distinction always belong to the following small set: ‘big’, ‘long’, and ‘small’. Yosondúa Mixtec (Farris 1992:125), Jicaltepec Mixtec (Bradley 1970:55), Ayutla Mixtec (Hills 1990:200), and Coatzospan Mixtec (Small 1990:405), for example, make the distinction with all three. Chalcatongo Mixtec, however, does not do it with any of the words for ‘small’.

Starting with **k<sup>w</sup>àčì** ‘due to’ or ‘on account of’, this form is related to a noun meaning ‘fault’ or ‘cause’. It is used (in all of the examples found containing it) when the cause of some event is a negatively evaluated occurrence (as in [47] and [48]). The relative rarity of **k<sup>w</sup>àčì** as a preposition may indicate that it is only just beginning down the path toward grammaticization.

- (47) ni-xíʔi=ðe k<sup>w</sup>àčì ħ̃ rayú  
 CP-die=3MN due.to one *rayo*  
 ‘He died due to lightning/He was killed by lightning’
- (48) ni-xīnū=Ø k<sup>w</sup>āʔā=Ø k<sup>w</sup>àčì nundóʔo  
 CP-run=3 go=3 due.to accident  
 ‘She ran because of the accident’

**k<sup>w</sup>entá** ‘about, like’ is borrowed from the Spanish word *cuenta*, meaning ‘account’. The semantic development of this borrowing is somewhat obscure; *cuenta* can also mean ‘reason’ or ‘consideration’, and there are idioms *tener en cuenta* (‘keep in mind, consider’) and *tomar en cuenta* (‘to be taken into account’) which might provide the basis for the meaning ‘about’ in Mixtec. Additionally, there are idioms *por cuenta de* (‘on account of’) and *hacer de cuenta* (‘to imagine, pretend as if’) which plausibly could underlie the Mixtec use meaning ‘like’. The important thing to note is that *cuenta* is a noun in Spanish, whereas **k<sup>w</sup>entá** is a preposition in Mixtec (although it also has nominal uses as a noun meaning ‘account’). It is extremely common in its prepositional use in this dialect of Mixtec, and is illustrated in the following examples:

- (49) ni-ndàtūʔū=rí xī maría k<sup>w</sup>entá ndatīū=rí  
 CP-talk=1 with *María cuenta* thing=1  
 ‘I talked to María about myself’ (lit. ‘my things’)
- (50) bina xížaa=ro žáʔa k<sup>w</sup>entá ndiži  
 now be.located=2 here like dead.person  
 ‘Now you are here like a dead person’

**onde** ‘up to, until’ is not related to any extant noun in Chalcatongo Mixtec, to my knowledge, and (as mentioned in Chapter 2) may well be an early loan from Spanish (from *de onde* ‘from where’, or perhaps just *donde* ‘where’). Its spatial and temporal uses are shown in (51) and (52), respectively:

- (51) kù kaka=žó ondé San Miguel  
 be.able walk=1PL up.to *San Miguel*  
 ‘We can walk to San Miguel’
- (52) sātīū=žó te onde ičāā s-ndíʔi=žó tīū=žó  
 work=1PL and until tomorrow CAUS-end=1PL work=1PL  
 ‘We are working and, when it is tomorrow, we will finish our job’



**xakúu** ‘for’ marks benefactives. Although it is treated here as an unanalyzable form, it undoubtedly originated as bimorphemic, as we can tell from its trisyllabic shape. A brief survey of the marking of benefactive in other Mixtec dialects yields a hypothesis about its origin. Of the six grammars that I consulted, five indicate that ‘for’ may be marked by the term for ‘foot’. So, for example, Jamiltepec (Johnson 1988:24) uses **čaʔa** ‘foot’, Ocotepec (Alexander 1988:165) uses **xeʔe** ‘foot’, and Silacayoapan (Shields 1988:318–319) uses **saʔa** ‘foot’. The Chalcatongo word for ‘foot’ is **xaʔà**, which would contract to **xa**, the first syllable of this form, by the usual rules. It is not clear what **kúu** is, although it may be the copula. There is actually one instance in data from spontaneous speech in which the benefactive is simply marked with **xa**, but I could never get a consultant to repeat it. This is shown in (53):

- (53) **xa séʔe**  
 (foot?) child  
 ‘for his/her child’

All other instances of benefactive ‘for’ make use of the full form **xakúu**. With the comparative evidence cited above in mind, we can assume, then, that **xakúu** was historically a use of a body part term plus some other element, which has now evolved into an unanalyzable preposition. I treat the form as synchronically monomorphemic and simply translate it as ‘for’. (54)–(55) illustrate typical uses:

- (54) **ni-sáʔa=rí ĩ šìò xakúu sesíʔí=rí**  
 CP-make=1 one skirt for daughter=1  
 ‘I made a skirt for my daughter’
- (55) **žúbaʔa=rí ndatíũ xakúu=ro**  
 have=1 thing for=2  
 ‘I have something for you’

**māʔñú** ‘between’ is related to the noun **māʔñú**, meaning ‘middle’.<sup>6</sup> Its use as a preposition is illustrated in (56)–(57):

- (56) **na-xáʔa=rí māʔñú maría te x<sup>wā</sup>**  
 MOOD-pass=1 between *María* and *Juan*  
 ‘I will pass between *María* and *Juan*’
- (57) **béʔe=rí xínža māʔñú béʔe maría te béʔe x<sup>wā</sup>**  
 house=1 be.located between house *María* and house *Juan*  
 ‘My house is located between *María*’s house and *Juan*’s house’

**xíí** ‘with’ marks both instrumental and comitative arguments. Although this form apparently derives from a body part term meaning ‘side’ (Hills and Merrifield 1974),

<sup>6</sup>An anonymous reader points out that **māʔñú** may be a loan, from Spanish *medio* ‘middle’.

present-day Chalcatongo Mixtec speakers do not use it to refer to that part of the body, using either the native term **šɪɪ** ‘side’ or the Spanish loanword **ladú** (from *lado* ‘side’) instead. Thus, this form is completely grammaticized in its prepositional use. (58)–(59) illustrate:

(58) máá=rí ni-xáʔža=rí ndáʔa=rí xí žučí  
EMPH=1 CP-cut=1 hand=1 with knife  
‘I cut my hand with the knife’

(59) ñáʔā xí=rí  
come with=1  
‘Come with me’

The last member of this set of items is **iči** ‘toward’, which is related to a noun of the same form, **iči**, meaning ‘path’ or ‘road’. The extension from ‘path’ to ‘toward’ is quite transparent; in fact, Brugman (1983:266–267) treats it as a kind of “honorary” body part noun, since it is so similar to the true body part nouns in the semantic extensions it manifests in its locative and temporal uses. Prepositional uses of **iči** in which it takes a simple NP complement are illustrated in (60)–(61):

(60) inà wáā kíʔi iči beʔe=ro  
dog the go toward house=2  
‘The dog is going toward your house’

(61) kiti=ró káʔi iči wáā  
animal=2 be.located.PL toward there  
‘Your animals are over there’

In the majority of examples containing **iči**, however, it takes a complement which consists of a locative phrase involving a body part term, as in (62)–(63). Since the body part terms are here treated as nouns, this is just another, slightly more complex, type of NP complement.

(62) ni-kenda=rí ñúū=rí iči núu žuku  
CP-exit=1 town=1 toward face mountain  
‘I walked from my town toward the mountain’

(63) kenda iči žata béʔe  
exit toward human.back house  
‘Come outside!’

In conclusion, as discussed above, many of these apparent prepositions also have nominal uses: for example, **kʷàčɪ** ‘due to’ also means ‘fault’, and **kʷentá** ‘about, like’ is a Spanish borrowing which is also used to mean ‘account’. It seems quite likely that all Mixtec prepositions ultimately derive from nouns, and that the set which includes both

prepositions and body part terms used as locatives really forms a continuum of grammaticization from noun to preposition.<sup>7</sup> I have chosen to treat the forms exemplified in (47)–(63) as prepositions because these words do not show typical nounlike behavior in their locative use: they cannot be modified, nor can they head noun phrases, for example. It is for this reason that they are here treated as a separate lexical category. I follow Brugman (1983) in treating the body part terms as nouns (discussion of these forms appears in §8.2). It must be admitted, however, that the line thus drawn is somewhat artificial; as discussed in Chapter 8, some of the body part terms seem to be more prepositional than others, just as some of the prepositions in the present section seem to be more nounlike than others.

### 5.5. Adverbs

Chalcatongo Mixtec adverbs are illustrated below, in (64)–(67). All of these forms are monomorphemic; there is no adverbializing derivation. The placement of adverbs is discussed in §6.1.

(64) žani xínža béʔe žáʔa  
close be.located house this  
'This house is close'

(65) rùʔù káʔã=rí súní  
I speak=1 also  
'I am speaking too'

(66) k<sup>w</sup>éé kii=ró  
slowly come=2  
'You are coming slowly'

(67) x<sup>w</sup>ã ni-xĩnũ žáči  
Juan CP-run fast  
'Juan ran fast'

### 5.6. Quantifiers

Quantifiers form a small closed class in Chalcatongo Mixtec and provide one of the ways of marking the plural within a noun phrase, as in (68) through (70):

<sup>7</sup>Brugman (1983:286, n. 6) also speculates that the prepositions derive from some other lexical category. For a different point of view, see Hollenbach (1995), who argues that Mixtecan body part terms have undergone a category shift to prepositions in their locative and temporal uses.

- (68) k<sup>w</sup>aʔà šáã ñáʒíũ kuní saʔa kúká  
 many much people want make rich  
 'Many people want to be/become rich'<sup>8</sup>
- (69) žóó k<sup>w</sup>aʔà béʔe ñũndéžá  
 exist many house Chalcatongo  
 'There are many houses in Chalcatongo'
- (70) tíni kóʔlo 'various turkeys'  
 various turkey

The placement and use of quantifiers is addressed in §6.2.3.

### 5.7. Numbers

The numeral system of Mixtec is a mixed decimal and vigesimal system, with both additive and multiplicative components. This complex system is summarized in Table 12.

Table 12: Chalcatongo Mixtec Numerals

1	íí	11	uši íí	21	okò íí	31	okò uši íí	41	uè šíkó íí
2	uù	12	uši uù						
3	unì	13	uši unì						
4	kũũ	14	uši kũũ						
5	úʔũ	15	šíáʔũ	25	okò úʔũ	35	okò šíáʔũ	45	uè šíkó úʔũ
6	íñũ	16	šíáʔũ íí	26	okò íñũ	36	okò šíáʔũ íí	46	uè šíkó íñũ
7	úšia, úša	17	šíáʔũ uù						
8	unà	18	šíáʔũ unì						
9	íí	19	šíáʔũ kũũ						
10	uši	20	okò	30	okò uši	40	uè šíkó	50	uè šíkó uši
51	uè šíkó uši íí	61	uè šíkó okò íí	71	unì šíkó uši íí	81	kũũ šíkó íí	91	kũũ šíkó uši íí
55	uè šíkó šíáʔũ	65	uè šíkó okò úʔũ	75	unì šíkó šíáʔũ	85	kũũ šíkó úʔũ	95	kũũ šíkó šíáʔũ
60	uè šíkó okò	70	unì šíkó uši	80	kũũ šíkó	90	kũũ šíkó uši	100	íí sientó
								1000	mil

<sup>8</sup>The extremely common quantifier šáã 'much' is homophonous with an adjective meaning 'fierce'. Barbara Hollenbach (personal communication) hypothesizes that the two are different senses of the same word.

As the table shows, the numbers ‘one’ through ‘ten’ are: **íí**, **uù**, **unl**, **kũù**, **úʔũ**, **íñũ**, **úšia** (or for some speakers, **úša**), **unà**, **íí**, **ušl**.

‘Eleven’ through ‘fourteen’ are formed with the word for ‘ten’ plus the required digit, while ‘fifteen’ is monomorphemic: **šlǎʔũ**.<sup>9</sup> ‘Sixteen’ through ‘nineteen’ are formed with ‘fifteen’ plus the required digit, for example, **šlǎʔũ uù** ‘seventeen’.

‘Twenty’ is also monomorphemic: **okò**. ‘Twenty-one’ through ‘thirty’ are formed by adding digits to ‘twenty’; ‘thirty’ being **okò ušl** (‘twenty + ten’).

‘Thirty-one’ through ‘thirty-four’ are formed with ‘twenty + ten’ plus the appropriate digit, for example, **okò ušl unl** ‘thirty-three’. ‘Thirty-five’ is **okò šlǎʔũ** (‘twenty + fifteen’). ‘Thirty-six’ through ‘thirty-nine’ are formed by adding digits to this base, so **okò šlǎʔũ kũù**, for example, is ‘thirty-nine’.

Starting at forty, the system becomes simultaneously multiplicative and additive. From ‘forty’ to ‘sixty-nine’, the base is **uù šíkó** (‘two × twenty’; the change in the form for ‘twenty’ in this context is discussed below). The same pattern as just described for the numbers under ‘forty’ is followed here: the numbers for ‘forty-one’ through ‘sixty-nine’ are formed by adding the appropriate number to the base **uù šíkó**. So, for example, ‘fifty-six’ is **uù šíkó šlǎʔũ íí** (‘[two × twenty] + fifteen + one’), and ‘sixty’ is **uù šíkó okò** (‘[two × twenty] + twenty’).

Comparative evidence explains the two forms for ‘twenty’. In isolation and in combinations forming ‘twenty-one’ through ‘thirty-nine’ it is **okò**. In most forms above ‘thirty-nine’, however, it is **šíkó**, as in **uù šíkó** ‘forty’ (‘two × twenty’). My consultants could supply no independent gloss for **šíkó**, but dictionaries indicate that some dialects (e.g., San Miguel el Grande, see Dyk and Stoudt 1965) preserve a distinction between **okò** ‘twenty’ and **šíkó** ‘score’ (Spanish *veintena*). Thus, **uù šíkó** is, at least historically, parallel to ‘two score’ in English.

Numbers from ‘sixty’ to ‘sixty-nine’ are formed as described above: by multiplication plus addition (‘[two × twenty] + twenty + *n*’),<sup>10</sup> but the term for ‘seventy’ analyzes its component ‘sixty’ differently. The numbers from ‘seventy’ to ‘seventy-nine’ are based on **unl šíkó ušl** (‘[three × twenty] + ten’). ‘Eighty’ is **kũù šíkó** (‘four × twenty’), and ‘ninety’ is **kũù šíkó ušl** (‘[four × twenty] + ten’). ‘One hundred’ is a mixed Mixtec-Spanish form: **íí sientó** (Spanish *siento* ‘one hundred’), and numbers over ‘one hundred’ simply incorporate it: **uù sientó okò** ‘two hundred and twenty’. ‘One thousand’ is the Spanish borrowing **mil**, and numbers over ‘one thousand’ likewise incorporate it: **mil uù sientó** ‘one thousand two hundred’.

<sup>9</sup>Barbara Hollenbach (personal communication) suggests that this word may historically be formed from the words for ‘ten’ and ‘five’. However, such a source is not transparent at all to current-day speakers.

<sup>10</sup>Other dialects of Mixtec do not have this composition for ‘sixty’ to ‘sixty-nine’. For example, Ayutla Mixtec has **unl šíkò** ‘sixty’, literally ‘three twenty’ (Hills 1990:151).

### 5.8. Plural Word

As we saw in Chapter 3, plural agreement on the verb in Chalcatongo Mixtec is optional.<sup>11</sup> Marking of plurality in the noun phrase is also optional, and furthermore is it not direct, that is, there is no nominal affixation which marks argument plurality. However, there is a strategy for explicitly marking plurality of NPs: use of a free morpheme, **xináʔa**, which simply means ‘plural’. The syntax of this word is discussed in the next chapter; here, we concentrate on its lexical category. The plural word is illustrated in (71)–(74):<sup>12</sup>

- (71) *táa=rí xínaʔa na-šuk<sup>wíi</sup> šíã*  
 parents=1 plural REP-turn tomorrow  
 ‘My parents will return tomorrow’
- (72) *káisiokú táa=rí xínaʔa*  
 be.here.PL parents=1 plural  
 ‘My parents are here’
- (73) *s-kitáʔã žūnū žáʔa xínaʔa*  
 CAUS-meet wood this plural  
 ‘Put these (pieces of) wood together’
- (74) *x<sup>wā</sup> xíndee xí ĩ=ka ñažīù wáã xínaʔa*  
*Juan* be.in with one=ADD people the plural  
 ‘Juan is with/among those people’

Dryer (1989:865) discusses plural words like the one just exemplified and gives the following definition: “[The plural word is] a morpheme whose meaning and function is similar to that of plural affixes in other languages, but which is a separate word that functions as a modifier of the noun.” The Chalcatongo Mixtec plural word fits Dryer’s definition quite well. (However, as shown in Chapter 6, the plural word is not, strictly speaking, a *modifier* of the noun in Chalcatongo Mixtec but rather is placed in apposition to the entire NP.)

Dryer shows that languages with plural words tend to have a number of typological characteristics in common, and, indeed, Chalcatongo Mixtec fits the description quite well. These characteristics include the following: (a) they often have classifiers (see §3.3.3), (b)

<sup>11</sup>Portions of this section (and of §6.2.4, in which the issue of the syntax of the plural word is discussed) have appeared previously as Macaulay (1989). The reader is directed to that source for more detailed information.

<sup>12</sup>The only other two Mixtec dialects for which a plural word is described are Peñoles (Daly 1973a: 20, 46) and Atatláhuca (Alexander 1980:54). The plural word in Peñoles Mixtec is quite unlike the one in Chalcatongo Mixtec, both in form (in Peñoles Mixtec it is **kwee**) and distribution. The one in Atatláhuca Mixtec, however, is quite similar to that in Chalcatongo Mixtec in both respects. See Macaulay (1989) for more details.

they tend towards isolating or analytic structure (although see the next point), (c) they often show some verbal inflection, and (d) they usually lack case marking.

Plural words, according to Dryer, can belong to a variety of lexical categories, but the most common case is for such forms to belong to a minor word class of their own. This is the case in Chalcatongo Mixtec, where it does not quite exhibit the behavior of members of the two most plausible other candidates for categories, pronoun and quantifier. I examine each possibility in turn, showing that **xináʔa** differs in significant ways from prototypical members of each category.

Examples like (75) and (76) illustrate the pronounlike behavior of **xináʔa**:

- (75) *káisikú=∅ xináʔa nù mesa*  
 be.located.PL=3 plural face *mesa*  
 ‘They’ll be on the table’
- (76) *ká-xāʔã=∅ xináʔa beʔe*  
 PL-go=3 plural house  
 ‘They went to their house’

In both examples, **xináʔa** could be interpreted as a subject pronoun in postverbal position. There are several reasons, however, why this cannot be correct. First, free pronouns are normally barred from postverbal subject position in Chalcatongo Mixtec (see §6.7.1). Free pronouns in subject function may only appear in topic position (a clause-initial position used for topicalized items; see §6.1).

Second, if **xináʔa** were a pronoun, it would be a rather deviant one, since it is neutral with respect to person. In fact, **xináʔa** itself can be overtly marked for any person through attachment of a pronominal clitic, as in (77)–(78):

- (77) *ndiʔi=rí xináʔá=rí ni-čà-kožo=rí*  
 all=1 plural=1 CP-come-plural=1  
 ‘We all came’
- (78) *roʔo xináʔá=ro kíʔi kóžo=ro*<sup>13</sup>  
 you plural=2 go plural=2  
 ‘(You plural) go!’

In addition to the fact that this lack of an inherent person category makes **xináʔa** quite unlike any true pronoun in Mixtec, we can observe that the true pronouns never allow attachment of a pronominal clitic at all, of the same or of a different person. Yet any pronominal clitic may attach to **xináʔa**. Such evidence clearly indicates that **xináʔa** is not a pronoun. In examples like (75) and (76), the zero third-person marker is what functions as the pronominal subject. **Xináʔa** marks that subject as plural, just as it may for any overt clitic pronoun (as it does in, e.g., [78]).

<sup>13</sup>**kóžo** is another plural marker (not a plural word, though), used exclusively with verbs of motion.

The evidence against the membership of **xináʔa** in the category “quantifier” is not as clear-cut as the evidence is against its pronominal status. One fairly convincing factor, though, is word order. As shown in §5.6, above, quantifiers precede the head in the Chalcatongo Mixtec noun phrase. However, as seen in (71)–(74), and again in (77), **xináʔa** follows a nominal head.

In addition, Dryer (1989:866–867) points out that plural words are not precisely parallel in their semantics to quantifiers like ‘some’ and ‘many’. Plural words are semantically less complex than quantifiers. That is, quantifiers tend to code more than just plurality—as Dryer points out, they can be restricted to sets larger than two, they can signal indefiniteness, and so on. Plural words do not do any of this; they simply code argument plurality.

Thus, syntactic and semantic evidence indicates that **xináʔa** is not a quantifier. The best solution to the problem of its lexical category seems to be to assign it to a class of its own, which is, as mentioned above, one of the more common options Dryer finds in his sample. Again, the syntax of this unique word is the topic of §6.2.4.

### 5.9. Conjunctions and Disjunctions

Chalcatongo Mixtec makes use of several coordinating and subordinating conjunctions, as illustrated in (79)–(84):

(79) **te** ‘and’

maría ni-xíta te x<sup>wā</sup> ni-xičáʔá  
*María* CP-sing and *Juan* CP-dance  
 ‘María sang and Juan danced’

(80) **ši** ‘or’

xáni ini=rí xa=kúžaa=Ø ší ŋí uè kiù  
 think insides=1 COMP=be.located=3 one or two day  
 ‘I think that she’ll be here one or two days’

(81) **o** ‘or’ (Spanish *o*)

žaʔá kúú xa=kúú čàà o xa=kúú xa-siʔí  
 this COP COMP=COP man *o* COMP=COP NOM-feminine  
 ‘Is this (animal) a male or a female?’

(82) **čìì** ‘because’

čoʔo čìì bína xížaa=Ø  
 go.HORT because now be.located=Ø  
 ‘Let’s go, because she’s there now’

(83) **bàʔà** ‘but’

maría xátãʔã káta bàʔà tu=xátãʔã kačáʔa  
*María* like sing but NEG=like dance  
 ‘María likes to sing but she doesn’t like to dance’



- (84) **pero** 'but' (Spanish *pero*)  
ni-kandía=Ø **pero** bína tu=kandía=Ø  
CP-believe=Ø *pero* now NEG=believe=Ø  
'He used to believe (it), but now he doesn't'

As noted, two of these are Spanish loanwords, **o** 'or' and **pero** 'but'. The former does not occur very often in Chalcatongo Mixtec, while the latter is almost as common as the native form.

## PHRASAL AND CLAUSAL SYNTAX

This chapter describes the basic syntactic constructions of Chalcatongo Mixtec: word order and constituency (§6.1), noun phrases (§6.2), prepositional phrases (§6.3), negation (§6.4), question formation (§6.5), a number of minor construction types (§6.6; including existentials, copular constructions, the additive and restrictive clitics, imperatives, and hortatives), and the placement of pronouns (§6.7). Several of these constructions require the presence of phrasal affixes (recall the discussion of this term in §1.4.2), each of which is discussed individually in its own section according to function.

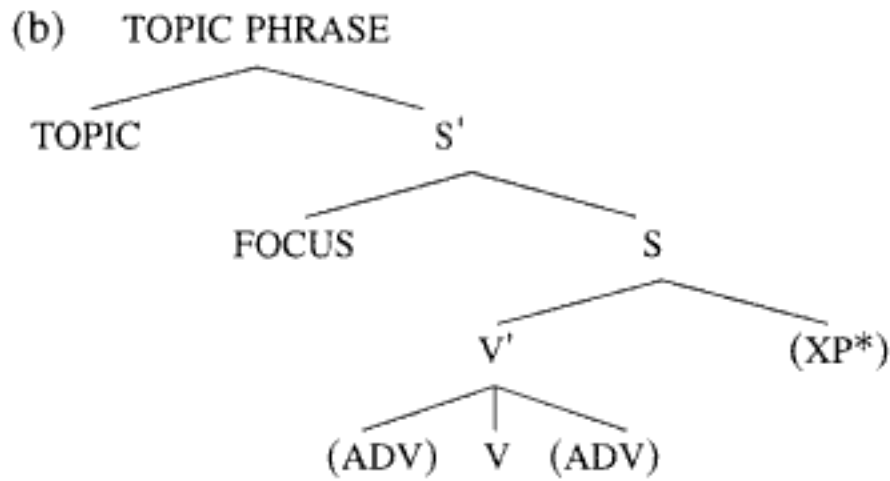
As noted in §1.6, constituent structure is a major concern of this chapter. Throughout it, I develop and refine a schematization of Chalcatongo Mixtec clause structure which encompasses the basic constructions. I start with a simple schema in §6.1 and add to it as further elements are described.<sup>1</sup> Ultimately I arrive at a fairly complex schematization showing the position of arguments, the possibilities for topic and focus constituents, and the placement of phrasal affixes. A somewhat simplified preview of this is given in (1)—simplified because it omits the phrasal affixes—in both labeled bracketing and tree format:

## (1) CONSTITUENT STRUCTURE OF THE MIXTEC CLAUSE

- (a) TP[[TOPIC] S'[[FOC] S[V'[(ADV) V (ADV)] (XP\*)]]]

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<sup>1</sup>In determining the constituent structure of the Chalcatongo Mixtec clause, I have made use of work by Aissen (1992), done in the government-binding framework. At the same time, in keeping with the descriptive goals of this grammar, the characterization of clause structure is entirely surface-oriented, and no appeals are made to such notions as movement of constituents or morphemes. While this results in a somewhat idiosyncratic structure, making use of ideas drawn from government and binding but omitting such critical GB notions as INFL, IP, CP, and so on, the goal here is to get across as simply as possible my ideas about the constituency of the Chalcatongo Mixtec clause without clouding the picture with the paraphernalia necessary for more theoretical claims.



The structure in (1) is explained in detail as the chapter progresses. Briefly, (1) shows that the Chalcatongo Mixtec clause has an external position for topic and an internal position for focus. As shown in §6.4.2, below, the focus constituent contains a slot for a special negator reserved for focused elements and a slot for the focused item itself. Following that, we find the clause proper. Inside the S, the verb may be preceded and/or followed by an adverbial, and following that there are slots for NP and PP arguments (abbreviated here as XP\*<sup>2</sup>).<sup>2</sup> The syntax of complex sentences—coordination and subordination—is the topic of the next chapter.

## 6.1. Word Order and Constituency

Basic word order in Mixtec is VSO, as illustrated in examples (2)–(5). The Chalcatongo dialect manifests all of the expected word order correlations noted by Greenberg (1963) for a type I (VSO) language: it has (some) prepositions, nouns precede modifying adjectives, and the genitive follows the head noun in possessive constructions.

### (2) VSO

nì-naa inì čáá ndoʔò  
 CP-lose insides man basket  
 ‘The man forgot his basket’

### (3) ADV-VSO

íkú ni-xáá maría ndoʔò  
 yesterday CP-buy *María* basket  
 ‘Yesterday *María* bought a basket’

<sup>2</sup>By “XP,” I mean a phrase of any category. An XP in an argument position will virtually always be a NP or PP; when I use it in the discussion of topic, XP can be NP, PP, ADVP, or anything else. The asterisk indicates that there can be more than one XP and the parentheses indicate that there can be zero.

## (4) V-SUBJECT CLITIC-O

ká-ndiso=Ø íža síʔí natividad

PL-carry=3 God female *natividad*

'They carried the (statue of the) Virgin of the Nativity'

## (5) VS

ni-na-ičì saʔma=ró

CP-REP-be.dry clothes=2

'Your clothes have dried'

While the basic word order in Mixtec is VSO, sentences with one or more constituents located in preverbal position are also found. (The presence of the alternative order SVO is another of the characteristics of a type I language, according to Greenberg 1963:63.) The evidence indicates that there are two preverbal positions, one for topic and one for focus. Topic is initial, and focus is the more internal of the two. (In addition, an adverbial may also precede the verb.) The syntax and semantics of topic and focus are discussed at length below. At this point, we start by considering examples (6) through (8), which illustrate sentences with one preverbal constituent each (set in boldface in the examples). Initial subjects and initial obliques are fairly common; initial objects are relatively rare. There is no passive in Chalcatongo Mixtec, probably at least in part because the language provides such flexible fronting options.

## (6) INITIAL SUBJECT

(a) **ñáʔíú wáá** ni-ka-xáʔa ñũũ

people that CP-PL-pass town

'Those people went to the town'

(b) **spexó** táʔu*espejo* break(*vi*)

'The mirror breaks/is broken'

## (7) INITIAL OBLIQUE

(a) **čìl žuù wáá** žáá íí kòò

stomach rock that live one snake

'Under that rock lives a snake'

(b) **nù žúkú wáá** žáá íí báʔù

face mountain that live one coyote

'In those mountains lives a coyote'

## (8) INITIAL OBJECT

(a) **tutù wáá** nì-xàʔža peðrúpaper that CP-cut *Pedro*

'Pedro cut that (piece of) paper'

- (b) **statilá** nì-saʔa miguel  
bread CP-make *Miguel*  
'Miguel made the bread'

All of the examples above are cases where the initial constituent is an argument of the verb. The initial constituent does not necessarily have to be an argument, however, as illustrated in the examples in (9):

(9) INITIAL NONARGUMENT

- (a) **čàà** tú=žóó seʔe  
man NEG=exist child  
'That man has no children' (lit. 'As for that man, children do not exist')
- (b) **maría** ni-teʔnde saʔma  
*María* CP-rip(*vi*) dress  
María ripped her dress (lit. 'As for María, her dress ripped')

Adverbials may also appear in preverbal position. We have already seen one example in (3); two more appear in (10):<sup>3</sup>

(10) INITIAL ADVERBIAL

- (a) **nù žoð** **nù žo** kīʔī=rí nužáʔu  
face month face month go=1 market  
'Every month I will go to the market'
- (b) **wáã** ni-ka-žée=Ø staà  
there CP-PL-eat=3 tortilla  
'There, they ate'

Furthermore, initial NP constituents and pre-predicate adverbials may co-occur, in that order, as in (11):

(11) INITIAL NP AND ADVERBIAL

- ñáni=rí šãã** káʔã=Ø  
brother=1 much talk=3  
'My brother talks a lot/too much'

The opposite order—adverbial, NP—is generally rejected in explicit elicitation, but does occur (albeit rarely) in spontaneous speech. Compare (12a-c), and (13):

<sup>3</sup>Example (10b) has a direct object in the Mixtec version but is translated into English without one to reflect the fact that the phrase *žée staà* is interpreted as the generic 'eat'.

- (12) (a) **x<sup>w</sup>ā** ni-xīnū žáči  
*Juan CP-run fast*  
 'Juan ran fast'
- (b) **x<sup>w</sup>ā žáči** ni-xīnū
- (c) \***žáči x<sup>w</sup>ā** ni-xīnū  
 (judged ungrammatical in elicitation)
- (13) **iku maría** ni-xi?i  
*yesterday María CP-die*  
 'Yesterday María died'  
 (spontaneously produced)

Setting example (13) aside for now, the data in (2) through (12) suggest that we can preliminarily illustrate the structure of the main clause in Chalcatongo Mixtec as in (14). As explained in footnote 2 of this chapter, I use "XP\*" to represent slots for any number of arguments following the verb (in practice, this of course is usually zero, one, or two). These arguments can be of any phrasal category, but are usually NPs.

- (14) [[TOPIC] S[(ADV) V (XP\*)]]

In (14) we see that the clause has an initial position for a topicalized constituent, and following that, a preverbal adverb position, and then slots for the verb and its arguments.

While the structure above can account for most simple sentences, I have found a few examples with word order which does not follow the pattern described. First, I have found a single instance of apparent VOS word order:

- (15) čó?o či a-sá?a mísá sutù  
 go.HORT because TEMP-make *misa* priest  
 'Let's go, because the priest is already starting the mass'

A plausible explanation of this, however, is that **sá?a mísá** is enough of a fixed phrase that it has become a compound verb (analogous to the causatives described in Chapter 3), and that (15) is actually an example of an intransitive with VS word order. This is precisely the kind of form which is likely to be shortened in rapid speech, and eventually fuse into a trisyllabic word.

There are also occasional instances of sentences which have *two* preverbal arguments, as in (16):

- (16) (a) **kaxá wáá tènana** nū?ū=Ø  
*caja the tomato contain=3*  
 'The box contains tomatoes'

- (b) **burrú=ró wǎǎ nužá?u xíndee=∅**  
*burro=2 that plaza be.in=3*  
 ‘Your burro is in the plaza’

Compare (16a) and (16b) with (11), in which there are also two constituents before the verb. (11) contains a topicalized initial constituent, followed by an adverbial which modifies the verb. Both of the examples in (16), however, contain two NP arguments preceding the verb. Following Aissen’s (1992) proposals for Mayan, I argue in Macaulay (1993) that Mixtec sentences have both a clause-internal focus position and a clause-external topic position. (The function and meaning of each of these is discussed below.) It is unusual for both of these positions to be filled, but as (16) shows, it occasionally happens. We can thus revise (14) to the following (still preliminary) rough schema for clause structure in Mixtec (the details of which are explained below):

- (17) TP[[TOPIC] S’[[FOCUS] S[(ADV) V (XP\*)]]]

In (17), TP (the topic phrase) is the root node and dominates the topic and the clause proper (S’).<sup>4</sup> The S’ contains a position for a focused element and the S, and the S consists of an optional adverb, a verb, and optional arguments. As mentioned above, the general structure in (17) is adopted from Aissen (1992). As Aissen points out, external topics have been widely discussed in the syntactic literature, usually under the name “left-dislocation,” and it is commonly assumed that they occur outside of S’. Crucially, they are treated as base-generated in situ, never moved from another position. This is precisely the status required of an element which does not fulfill any argument function in the clause, as is the case with topics. (In most instances the topic does in fact duplicate some argument, but there are examples where it does not, such as [9].)

Turning now to the function of elements in these positions, focus can be informally characterized as an argument which stands in the X position of an utterance of the form “It was X who/that . . . ,” while topic is more loosely what the sentence is about. A focused constituent must always fill an argument role in the clause, whereas a topic does not (indeed, may not). Furthermore, because (in most analyses) focused elements are moved to their position from other locations within S, coreferential pronominals never co-occur with them in the same clause. However, overt coreferential pronominals may co-occur with topics; this follows from the fact that topics are directly generated in position. This fact is important in determining the function of a sentence-initial NP in Mixtec. (18) and (19) provide examples of the semantic and syntactic contrast between topic and focus, respectively. Note that in (18) the topic is doubled by a second person pronominal clitic, whereas there is no pronominal clitic in (19).

<sup>4</sup>Aissen calls the root node “E,” for “Expression,” taking the term from Banfield (1973) and Emonds (1985). I use “Topic Phrase” here simply for clarity; “E” or any other name would serve just as well. Also, what I call “S” is CP in Aissen’s formulation.

- (18) TOPIC  
 roʔo tú=kúʔu=ro  
 you NEG=be.sick=2  
 'As for you, you aren't sick'
- (19) FOCUS  
 rùʔù kúʔu  
 I be.sick  
 'I'm the one who is sick'

Focus is often used to express a contrast, as is more explicitly illustrated in (20). Here again, it is clear that focus is involved (rather than topic) not just by the translation, but also by virtue of the fact that no pronominal clitic appears on either verb.

- (20) rùʔù číʔi itù te máá=ðe číʔi nduči tũũ  
 I plant corn and EMPH=3MN plant bean black  
 'I'm planting corn and/but *he's* planting black beans'

Out of context, a sentence containing a single preverbal NP and no overt pronominal clitic would be ambiguous between a focus reading and a topic reading. This is because Chalcatongo Mixtec has a zero third person subject clitic. Such a sentence might contain a focused constituent with no pronominal clitic, or a topic with a zero clitic. Because this third person subject marker has no phonetic content, the topic may appear to be the unique bearer of the role in question, but it is really the zero clitic which functions as the argument in such a construction. Occasionally the two possibilities can be distinguished by intonation: in some cases there is a pause after a topic, but normally there is no pause after a focused element. (21) provides an example of a sentence which not only has a pause after the topic but also shows that the topic can be coreferential with something in a subordinate clause, separated from it by the main clause.

- (21) x<sup>w</sup>ā, keè=Ø xa=číʔi=Ø nunì  
 Juan say=3 COMP=plant=3 corn  
 'As for Juan, they say he's planting corn'

However, most sentences with topics do not include a pause following the topic. Instead, such utterances are generally disambiguated by context. There is one other way in which we can distinguish topic from focus in Chalcatongo Mixtec; this is discussed in the section on negation (§6.4), where we see that there is a special negator for focus constituents.

We turn now to obliques, which generally follow the subject and object (if there is one) and express location, time, benefactive, instrumental, and comitative roles. Many of these roles are marked with body part terms (see §8.2), although some are marked with elements which are better considered prepositions (see §6.3), and some are not marked overtly at all. At this point, a few examples of each type are presented; each is discussed more thoroughly in the appropriate section.



Locative noun phrases, of course, express various types of stative location (as in [22]), but they are also used in Mixtec to express the roles source and goal. The distinctions that are coded in English by prepositions such as 'to' and 'from' can in most cases be deduced from context in Mixtec, while in other cases they are part of the verbal semantics.<sup>5</sup> (23) and (24) provide two such examples; this is discussed further in Chapter 8.

(22) *saà wáã xindeè=Ø inì kaxa*  
bird the be.in=3 insides *caja*  
'The bird is in the cage'

(23) *ni-ka-čaa=žó nuù bé?e*  
CP-PL-arrive=1PL face house  
'We came to the house'

(24) *tóo nduča šinì bé?e*  
drip water head house  
'Water is dripping from the roof'

Temporal notions are often expressed in subordinate clause form (see §7.2.5.1). However, they may also be expressed through simple adverbial adjuncts, which follow whatever arguments are present. Example (25a) contains an adverb of time, *šíã* 'tomorrow', and (25b) shows an expression of temporal duration, *uù órá* 'two hours'.

(25) (a) *rù?ù šíko=rí nduči šíã*  
I sell=1 bean tomorrow  
'I will sell beans tomorrow'

(b) *xalúlí wáã ni-kiší uù órá*  
child the CP-sleep two *hora*  
'The child slept for two hours'

Benefactive is marked with the preposition *xakúu* (the probable etymology of which is discussed in §5.4). (26) illustrates:

(26) (a) *žúba?a=rí ĩ tí?i xakúu=ro*  
have=1 one little.bit for=2  
'I have something for you'

<sup>5</sup>For a discussion of the interaction of body part terms and verbs of location in Chalcatongo Mixtec, see Brugman and Macaulay (1986). For discussion of the semantics of the verbs of motion and their relation to notions like goal and source, see Macaulay (1982, 1985). Both of these topics are also addressed in Chapter 8.

- (b) ni-sáʔa=rí ĩ šìò xakúu sesíʔí=rí  
 CP-make=1 one skirt for daughter=1  
 'I made a skirt for my daughter'

Instrument and comitative are both marked with **xíí** 'with'. The source of this form is discussed in Chapter 5; there it is shown that it originated as a body part term meaning 'side', but that it is no longer found in that function in Chalcatongo Mixtec. (27)–(28) illustrate the instrumental and comitative uses of **xíí**, respectively:

- (27) ni-xaʔña=rí kũñũ xí žučí  
 CP-cut=1 meat with knife  
 'I cut the meat with a knife'

- (28) ñáʔã xí=rí  
 come with=1  
 'Come with me'

§6.3 presents several other types of obliques such as expressions of cause, extent, path, and various locatives. In addition, Chapter 8 describes the use of body part terms in their functions as locatives and expressions of temporal relations.

## 6.2. Noun Phrases

The most common nominal construction in Chalcatongo Mixtec is one in which a noun phrase contains two other noun phrases in apposition. I refer to this construction informally as the NP + NP construction. It is used to express a wide range of semantic relationships, and because it most often consists only of two nouns it is easily confused with compounding. However, it contrasts with true compounds in that it can contain internal modification. Both the NP + NP construction and compounding are described below.

### 6.2.1. NP + NP Genitive

The nominal possessive consists of two NPs which appear in the order possessed-possessor, as is illustrated in (29), below. (Pronominal possessives are created by the attachment of a pronominal enclitic to a noun phrase. These are discussed in §6.7.1.)

- (29) (a) kačíní peðrú 'Pedro's hat'  
 hat *Pedro*
- (b) ndùu ndíkandí 'the sun's rays'  
 ray sun

- (c) soʔo sndikì 'the bull's ear'  
ear bull

A classifying relationship between two nouns is also expressed by the NP + NP genitive construction in Chalcatongo Mixtec, as the following examples illustrate:

- (30) (a) pílón ñúʔú 'pile of dirt'  
*pilón* earth  
(b) cuadríllá isù 'herd of deer'  
*cuadrilla* deer

In another use of the genitive, the nonhead noun describes the contents of the object to which the head noun refers, as in the following:

- (31) (a) ndoʔò staà 'basket of tortillas'  
basket tortilla  
(b) xìka žáʔa 'basket of chiles'  
basket chile

All of the examples up to this point have simply contained two nouns. However, as mentioned above, such genitives are not noun-noun compounds. They are instead two full NPs, as we can tell by the fact that either may be modified, as in (32)–(34). (In examples [32] and [33], the relevant NP is shown bracketed to the right of the sentence.)

- (32) rùʔù kuní=rí kuú ħ́ táa xasíʔí lúlí [NP [NP táa] [NP xasíʔí lúlí]]  
I want=1 COP one father girl little  
'I want to be the father of a little girl'
- (33) k<sup>w</sup>ãʔã=Ø ladó ndaʔa bàʔà [NP [NP ladó] [NP ndaʔa bàʔà]]  
go=3 *lado* hand good  
'He's going to the right' (lit. 'the side of the good hand')
- (34) [NP [NP kačíní víéjój] [NP x<sup>w</sup>ã]]  
hat *viejo* *Juan*  
'Juan's old hat'

### 6.2.2. Compounds

It is notoriously difficult to provide defining evidence of compound status. Lieber (1992:12–13) cites three criteria which may be useful for this task: (a) a characteristic stress pattern (as in the initial compound stress of English), (b) the juxtaposition of elements which could not normally be juxtaposed by the rules of the syntax (e.g., a noun

appearing before an adjective in an AP in English), and (c) the fact that in a compound, neither element may be individually modified, so that the elements are inseparable. The first two of these criteria are not helpful in identifying compounds in Mixtec, the first because there is no characteristic stress (or, for that matter, tonal pattern) associated with compounds in Chalcatongo Mixtec, and the second because the candidates for compound status are mostly N + N. Since NP + NP, as we have seen, is a highly productive syntactic pattern, and since each NP may consist of a single noun, apparent N + N compounds could well be NP + NP constructions instead. The third criterion is the only one which seems to work in judging compound status in this dialect of Mixtec. Some N + N sequences do indeed appear to be compounds, in that they cannot be internally modified. (35) and (36) illustrate:

- (35) (a) íʔa ndíkandí 'sun god'  
           god sun
- (b) íʔa ndíkandí=žó 'our sun god'  
           god sun=1PL
- (c) \*íʔa=žó ndíkandí 'our sun god'
- (36) (a) kiù Miercúles 'Wednesday'  
           day *Miercules*
- (b) kiù Miercúles žáʔa 'this Wednesday'  
           day *Miercules* this
- (c) \*kiù žáʔa Miercúles 'this Wednesday'

In addition, there are a number of compound place names, such as those in (37). The first noun in these is always **ñũũ** 'town', while the second noun either describes a characteristic associated with the town (as in [37a]) or is a word for which the meaning is no longer known to native speakers (as in [37b]–[37d]).<sup>6</sup> Needless to say, these compounds cannot be internally modified.

- (37) (a) ñũũ tik<sup>w</sup>áʔá 'Ticua'  
           town orange
- (b) ñũũ ñélé 'San Miguel el Grande'  
           town (?)

<sup>6</sup>One reader suggests that **ñélé** in (37b) may actually be from the Spanish name of the town, as follows: (Sa)ñ (Migu)el e(l Grande). (37d), 'Chalcatongo', is commonly defined by speakers as something like 'town (where people) thrive', based on the verb **ndežá** 'increase' or 'thrive'. López Ramos (1987:61), however, suggests that this may be a folk etymology and says that in the sixteenth century Chalcatongo was called **Ñuundaya**, *Lugar de Muerte*, 'Place of Death'.

- (c)  $\tilde{n}\tilde{u}\tilde{u}$  koʔʒó 'Mexico City'  
town (?)
- (d)  $\tilde{n}\tilde{u}\tilde{u}$  ndéžá 'Chalcatongo'  
town (?)

It is important to keep in mind that one cannot assume that any combination of two nouns found in Mixtec is a compound; as mentioned above, the highly productive NP + NP construction is a much more common source for juxtaposition of nouns.

### 6.2.3. Nonhead Elements of the NP

In addition to the head, NPs can contain quantifiers, adjectives, and determiners. The linear ordering of these elements is shown in (38):

- (38) (QP) – N – (AP) – (DET)

To start our discussion with the first element in the NP, a number of different quantifiers (including a numeral) are illustrated in examples (39)–(44). (The relevant NPs are all bracketed.)

- (39) xa=ká-šikó=Ø nuní ndučí, NP[k<sup>w</sup>aʔà ndátíũ]  
COMP=PL-sell=3 corn beans many thing  
'(People) who sell corn, beans, many things'
- (40) k<sup>w</sup>āā=rí NP[xoò lana]  
buy=1 a.little lana  
'I'm going to buy a little wool'
- (41) ni-s-kéé=rí NP[ndiʔi seʔe=rí]  
CP-CAUS-eat=1 all child=1  
'I fed all my children'
- (42) k<sup>w</sup>aʔa nuè seʔe=rí NP[tíʔi staà]  
give face child=1 a.little tortilla  
'Give my child a bit of tortilla'
- (43) pero a-ni-kuu=Ø NP[šāā k<sup>w</sup>íža]  
pero TEMP-CP-COP=3 many year  
'But it has already been many years'
- (44) ni-xìni=rí NP[uè xa-lúlí]  
CP-see=1 two NOM-small  
'I saw two children'

There is one quantifier phrase which occurs quite frequently: **k<sup>w</sup>aʔà šáá**, literally ‘much many’, as shown in (45). Example (46) illustrates another, less common combination of quantifier plus **šáá**.

- (45) čì, žóo NP[ [k<sup>w</sup>aʔà šáá] ñažíú mezcladó]  
 because exist much many people *mezclado*  
 ‘Because there are so many mixed race people’
- (46) NP[ [tini šáá] ñažíú] ni-ka-kíi xináʔa  
 various many people CP-PL-come.and.return plural  
 ‘Many people came (and left)’

Attributive adjectives follow the head in Mixtec. (47)–(48) are typical examples:

- (47) te ni-ka-xáá=Ø NP[íža siʔi]  
 and CP-PL-buy=3 God female  
 ‘And they bought (the statue of) the Virgin’
- (48) NP[lagúna káʔnū] ni-žoo žáʔa  
*laguna* big CP-exist here  
 ‘There was a big lake here’
- (49) kúʔū=rí NP[íí vestido xáá] šíà  
 wear=1 one *vestido* new tomorrow  
 ‘I’m going to wear a new dress tomorrow’

Example (50) shows an adjective which is itself modified:<sup>7</sup>

- (50) x<sup>w</sup>ā NP[čàà [kúká šáá]]  
*Juan* man rich very  
 ‘Juan is a very rich man’

Finally, the only determiners in Chalcatongo Mixtec are the deictic demonstratives **žaʔá** ‘this’ and **wáá** ‘that’, which are both used as definite determiners.<sup>8</sup> These also follow the noun, as illustrated in (51)–(54):

<sup>7</sup>Note that (50) is a counterexample to the claim made below in §6.6.2 that predicate nominals require the presence of a copula of some sort. Either this is one of the occasional exceptions, or another analysis of the sentence is needed. One which might be plausible is that (50) is an instance of a sentence with two prepredicate nominals, that is, the adjective is actually the predicator. In that case it could be translated as ‘As for Juan<sub>i</sub>, it is *that man<sub>i</sub>* who is very rich’.

<sup>8</sup>The tones of both vary quite a bit, and it is possible that the corresponding adverbs **žáʔa** ‘here’ and **wáá** ‘there’ have also developed uses as definite articles. Also note that the numeral **íí** ‘one’ appears preminally as an indefinite article.

- (51) na-k<sup>w</sup>áá=Ø NP[iža síʔí wáá]  
MOOD-buy=3 god female the  
'That they might buy (the statue of) the Virgin'
- (52) NP[ñáʒīū wáá] ni-ka-xáʔa=Ø ñūū  
people that CP-PL-pass.by=3 town  
'Those people went to the town'
- (53) te xa-k<sup>w</sup>áa be-ndíí=ní=Ø NP[lugar ʒáʔa]  
and NOM-dark come-come=RES=3 lugar this  
'And at night she would come right here'
- (54) te despues ni-kà-kii NP[ñáʒīū ʒáʔa]  
and *después* CP-PL-come people this  
'And later these people returned'

#### 6.2.4. Plural Word

The lexical category of the plural word is discussed in §5.8. In this section, its syntactic behavior is considered.<sup>9</sup> A number of examples of **xináʔa**, the Chalcatongo Mixtec plural word, were given in the previous discussion; (55)–(58) provide four more. (55) contains a postverbal plural subject, (56) a preverbal plural subject, (57) a plural object, and (58) a plural oblique argument. (In each case, the noun which is modified by the plural word is in boldface type.)

- (55) wáá káʔīī **carro** wáá xinaʔa  
there be.located.at.PL *carro* the plural  
'The trucks are over there'
- (56) **táa**=rí xinaʔa ni-ka-xaà íkú  
parents=1 plural CP-PL-arrive.there yesterday  
'My parents arrived yesterday'
- (57) ni-xáá=rí k<sup>w</sup>aʔà **ʒúʔa** káni xinaʔa  
CP-buy=1 many rope long plural  
'I bought many long ropes'
- (58) čìì kuní=ná k<sup>w</sup>áá=ná ĩĩ bultú xakúu **rĩ**=na xinaʔa  
because want=1POL buy=1POL one *bulto* for sheep=1POL plural  
'Because I want to buy a sack for my sheep'

<sup>9</sup>For a more detailed treatment of the syntactic aspects of use of the plural word in Chalcatongo Mixtec, see Macaulay (1989).

As discussed in the previous chapter, these examples show that **xiná?a** always follows the head which it modifies, contrary to the word order of true quantifiers (which precede the noun). Furthermore, the element marked as plural by **xiná?a** can be a full noun, as it is in (55)–(58), or it can be a pronominal clitic, as in (59)–(61), below. In (61), note that the argument which is pluralized is actually zero-marked:<sup>10</sup>

- (59) kǐ?ǐ=**ni** xíná?a=ni  
 go=2POL plural=2POL  
 ‘(You plural) go!’
- (60) ndító=**to** xíná?a=to  
 be.awake=3POL.OLD plural=3POL.OLD  
 ‘They are awake’
- (61) nì-kà-xǐnū=**∅** xíná?a=**∅**  
 CP-PL-run=3 plural=3  
 ‘They ran’

Finally, **xiná?a** has one very interesting and unusual syntactic property (unusual for Mixtec, that is): it can also be discontinuous with the head, as shown in (62)–(65).

- (62) tó?o wǎǎ kúžaa nundua xíná?a  
 person the live Oaxaca plural  
 ‘Those people will live in Oaxaca’
- (63) kúžaa=**ri** núndua xíná?a=ri  
 live=1 Oaxaca plural=1  
 ‘We will live in Oaxaca’
- (64) ñǎ?ǎ=**ni** xǐǐ=**ná** xíná?á=**ni**  
 come=2POL with=1POL plural=2POL  
 ‘(You plural) come with me’
- (65) táa=**ri** čakú xíná?a Mexico  
 parents=1 live plural Mexico  
 ‘My parents live in Mexico City’

In (62) a preverbal subject is marked as plural by a sentence-final instance of **xiná?a**, and in (63) and (64) the clitic subject is marked as plural in the same way. In both of the latter cases, the plural word is separated from the clitic subject by some other constituent. In (65), the plural word appears in postverbal subject position, marking a preverbal subject NP as plural. The only discontinuous configuration which is ruled out, to my knowledge,

<sup>10</sup>I am marking the zero on **xiná?a** in this example to make it explicit; in other examples, I omit it.



is one in which there is a full NP subject in postverbal position, with **xináʔa** appearing in sentence-final position and separated from the subject by some other constituent, as in (66):

- (66) \*nì-xitāʔā=Ø ʔàà wāā ʔí xasiʔi xináʔa  
 CP-fight=3 man that one woman plural  
 ‘The men fought over a woman’

### 6.3. Prepositional Phrases

As described in Chapter 8, most locative (and temporal) relationships are expressed in Chalcatongo Mixtec through the use of body part terms. This section describes the seven prepositions which complement that system: **kʷàčì** ‘due to’, **kʷentá** ‘about, like’, **onde** ‘up to, until’, **xakúu** ‘for’, **máʔnũ** ‘between’, **xíí** ‘with’, and **iči** ‘toward’. In all cases, the prepositions take a following NP, and many may also take a following subordinate clause.

**kʷàčì** ‘DUE TO’: This form, as mentioned in Chapter 5, is related to a noun of the same form meaning ‘cause’ or ‘fault’. Its use as a preposition is fairly limited; I have only found it in a small number of examples. (67) and (68) illustrate:

- (67) ni-xíʔi=ðe kʷàčì ʔí rayú  
 CP-die=3MN due.to one *rayo*  
 ‘He died due to lightning/He was killed by lightning’
- (68) ni-xĩnũ=Ø kʷāʔā=Ø kʷàčì nundóʔo  
 CP-run=3 go=3 due.to accident  
 ‘He ran because of the accident’

In these examples, it seems as plausible to claim that the phrase containing **kʷàčì** is a NP + NP construction as it is to claim that it is a prepositional phrase. However, I have found one instance of **kʷàčì** with a clausal complement, which indicates that it is at least in the process of acquiring prepositional status:

- (69) ni-xĩnũ=Ø kʷāʔā kʷàčì ni-sáʔa=Ø nundóʔo  
 CP-run=3 go due.to CP-make=3 accident  
 ‘He ran because he caused an accident’

**kʷentá** ‘ABOUT, LIKE’: This form is a Spanish borrowing (*cuenta* ‘account’). It has two primary senses in Chalcatongo Mixtec: ‘about’ (as in [70]–[71]), and ‘like’ or ‘as if’ (as in [72]–[73]):

- (70) ni-ndatũʔũ=rí xí maría kʷentá ndatĩũ=rí  
 CP-talk=1 with *María cuenta* thing=1  
 ‘I talked to María about myself’ (lit. ‘my things’)

(71) beì=ná k<sup>w</sup>entá ħ́ ndatíũ xà=kuní=ná ndatùʔù=na xíí=ní  
 come=1POL *cuenta* one thing COMP=want=1POL talk=1POL with=2POL  
 ‘I am coming (to you) about a thing that I want to discuss with you’

(72) ni-ndéʔe=Ø k<sup>w</sup>entá sáù  
 CP-cry=3 *cuenta* rain  
 ‘He cried like it was raining’

(73) sũʔnũ=rí ni-kuu=Ø xa-k<sup>w</sup>ãã  
 shirt=1 CP-COP=3 NOM-yellow  
 ‘My shirt was yellow’

te žée=ro ni-kúú=Ø xa-k<sup>w</sup>ií k<sup>w</sup>entá žee maría  
 and POSS=2 CP-COP=3 NOM-green *cuenta* POSS *María*  
 and yours was green like *María*’s’

In addition to a nominal argument, **k<sup>w</sup>entá** may also take a subordinate clause containing the complementizer **xa=** (see §7.2.1). The only examples of this that I have found all occur in a construction which means ‘act like X’ or ‘act as if X’, as in (74)–(75):

(74) sáʔa k<sup>w</sup>entá xa=xíči=ró  
 do *cuenta* COMP=bathe=2  
 ‘Act like you’re bathing’

(75) sáʔa k<sup>w</sup>entá xa=káʔã=ro  
 do *cuenta* COMP=talk=2  
 ‘Act like you’re talking’

**onde** ‘UP TO, UNTIL’: The spatial use of the preposition **onde** is illustrated in (76)–(79):

(76) kù kaka=žó ondé San Miguel  
 be.able walk=1PL up.to *San Miguel*  
 ‘We can walk to San Miguel’

(77) k<sup>w</sup>áʔá ondé inì beʔe  
 go up.to insides house  
 ‘Go farther inside the house’

(78) x<sup>w</sup>ã ni-ndòò=Ø onde žata  
*Juan* CP-stay=3 up.to human.back  
 ‘Juan stayed back, behind’

- (79) xa=béi=Ø onde žata wáã kú k<sup>w</sup>aʔa=rí  
 COMP=come=3 up.to human.back the COP brother=1  
 ‘The one who comes next will be my brother’

Note in (77) that **onde** co-occurs with a body part term locative. Because expressions with body part terms are treated here as noun phrases, we do not need to say that **onde** is a preposition that can take another prepositional phrase as complement; rather, the complement in (77) is simply a NP complement, as in, for example, (76). (78) and (79) also illustrate **onde** with a body part term (**žata** ‘human back’) as complement; in this case the body part term occurs alone, not in construction with another noun. In both cases, the subject is understood as being in the space that extends up to the relevant human’s back.

**onde** also has a temporal use, usually best translated as ‘until’. In this use it may have a NP or a clausal complement. (80)–(81) illustrate:

- (80) onde ĩ̃=ka ísá  
 until one=ADD next  
 ‘the next time’
- (81) sátiũ=žó te onde ičãã s-ndíʔi=žó tíũ=žó  
 work=1PL and until tomorrow CAUS-end=1Pl work=1PL  
 ‘We are working, and, when it is tomorrow, we will finish our job’

**xakúu** ‘FOR’: This is the term that marks a benefactive and (as discussed in §5.4) may be derived from the word for ‘foot’ (**xaʔà**) plus some unidentified element **kúu**. As (82)–(84) illustrate, **xakúu** allows a NP complement (or, equivalently, a clitic pronoun):

- (82) tóʔo wáã ndíso=Ø ndatíũ xakúu beʔe  
 man the carry=3 thing for house  
 ‘The man is carrying things for his house’
- (83) ni-sáʔa=rí ĩ̃ šìò xakúu sesíʔi=rí  
 CP-make=1 one skirt for daughter=1  
 ‘I made a skirt for my daughter’
- (84) rùʔù saʔa=rí xakúú=ña  
 I do=1 for=3F  
 ‘I am doing it for her’

**mãʔnũ** ‘BETWEEN’: As we saw in Chapter 5, this preposition is related to a noun meaning ‘middle’ and is possibly a borrowing of Spanish *medio* ‘middle’. (85)–(86) illustrate:

- (85) x<sup>w</sup>ã xíndee=Ø mãʔnũ ñãʒiũ  
 Juan be.located=3 between people  
 ‘Juan is over there, between those people’

- (86) béʔe=rí xínʒa=Ø māʔñú béʔe maría te béʔe x<sup>wā</sup>  
 house=1 be.located=3 between house *María* and house *Juan*  
 'My house is located between María's house and Juan's house'

**māʔñú** can also be used with a temporal sense, and it can also take a clausal complement. The following example, in which the clausal complement is bracketed, illustrates:

- (87) ku ndéʔe=rí roʔo māʔñú [ʒ ka uè ší ká kũù xa-níní]  
 can see=1 you between [COP two or COP four NOM-late]  
 'I can see you between two and four in the afternoon'

**xíí** 'WITH': As mentioned previously, **xíí** apparently originated as a body part term meaning 'side', but it is not recognized as such by present-day speakers of Chalcatongo Mixtec. Its instrumental use is illustrated in (88)–(90), and its comitative use is exemplified in (91)–(93):

- (88) máá=rí ni-xáʔʒa=rí ndáʔa=rí xí žučí  
 EMPH=1 CP-cut=1 hand=1 with knife  
 'I cut my hand with the knife'
- (89) taba=ró xí palá  
 take.out=2 with *pala*  
 'Take it out with a shovel'
- (90) saʔma ndéčé=Ø xí tačí  
 clothes fly=3 with wind  
 'The clothes are moving in the wind'
- (91) peðrú kii=Ø xí=ʒo=nú baʔa tú=a-ni-kíí=Ø  
*Pedro* come=3 with=1PL=CFACT but NEG=TEMP-CP-come=3  
 'Pedro was going to come with us but he didn't'
- (92) maría xíta=Ø xíí x<sup>wā</sup>  
*María* sing=Ø with *Juan*  
 'María sang with Juan'
- (93) k<sup>w</sup>ítí kuní=ri ndučí xí ndiù  
 just want=1 bean with egg  
 'I just want beans with egg'

**iči** 'TOWARD': In its nominal use, **iči** means 'road' or 'path'. It is usually used prepositionally with the meaning 'toward'. In some cases (as in [94]–[95]) it has a simple NP complement, but in most cases (as in [96]–[97]) it takes a complement composed of a locative body part term plus NP:

- (94) ndèʔé iči wáã žóó šãã itá  
 look toward there exist many flower  
 'Look, there are many flowers over there!'
- (95) a-ni-kíʔi=Ø iči béʔe=žó  
 TEMP-CP-go=3 toward house=1PL  
 'She's on her way to our house'
- (96) bèì=Ø iči núu=žó  
 come=3 toward face=1PL  
 'She's coming toward us'
- (97) inà žáʔa ndéʔé=Ø iči íni beʔe  
 dog that look=3 toward insides house  
 'That dog is looking into the house'

A case in which *iči* takes a clausal complement is shown in (98):

- (98) šuk<sup>wíi</sup> iči ní-čaà=ro  
 return toward CP-arrive.here=2  
 'Go back to where you came from'

As mentioned before, the semantics of the body part terms which are used in a fashion parallel to that of the prepositions is the topic of §8.2.

## 6.4. Negation

This section describes three different forms of negation in Chalcatongo Mixtec: negation with **tu=** (the phrasal affix which negates most verbal predicates), **túu** (the negative copula), and focus negation (marked with the form **niàsù**). The sentential negator **tu=** attaches to the initial constituent in S, that is, after any focused constituent. The focus negator **niàsù** precedes a focused constituent and has scope over that constituent alone. **túu** is used to negate nominal predicates only. Finally, negation of NPs is also discussed; the phrasal affix **tu=** performs this function as well.

### 6.4.1. Sentential Negation

Chalcatongo Mixtec has a bound negative marker **tu=** which corresponds to the full word **túu**, translated as 'no'. The bound form appears to the left of the verb (or copula plus adjective), and also to the left of any preverbal adverb. Examples (99) through (101) illustrate its use with verbal and adjectival predicates:

- (99) *tu=ni-xížaa=ró*  
 NEG=CP-be.located=2  
 'You weren't there'
- (100) *tu=ká-ku siḥ iní=ro*  
 NEG=PL-COP happy insides=2  
 'You (PL) don't feel happy'
- (101) *tu=šãã sáʔa=∅ bīxī*  
 NEG=much make=3 cold  
 'It's less cold/It's not so cold'

In (99) and (100), we see **tu=** attaching directly to the inflected verb, before the completive prefix in the former, and before the plural prefix in the latter. (101) shows that the negative marker is a clitic, rather than a prefix, since in this case it attaches to the quantifier which precedes the verb.

Because adjectives can be used predicatively without a copula (see §6.6.2), we also find **tu=** attached directly to adjectives, as well as to modifiers of adjectives, a further indication of its clitic status. This is shown in (102)–(104):

- (102) *tu=ñíʔní=∅*  
 NEG=hot=3  
 'It's not hot'
- (103) *ndežu tú=žaʔu=∅*  
 food NEG=expensive=3  
 'The food is not expensive'
- (104) *sókó tú=šãã kúnú=∅*  
 well NEG=much deep=3  
 'The well is not very deep'

Sentences like (103) and (104) show that **tu=** is placed after a pre-predicate NP and before the predicate phrase itself, whether that predicate is verbal or adjectival.

There is only one NP in pre-predicate position in examples (103) and (104), and again we cannot tell a priori whether that phrase is in topic or focus position when the sentence appears out of context. The two possibilities for the placement of the negative marker **tu=** relative to a predicate-initial NP are shown in (105), below.

- (105) (a)  $TP[[TOPIC] NEG=S[[FOCUS] S[(ADV) V (XP*)]]]$   
 (b)  $TP[[TOPIC] S[[FOCUS] NEG=S[(ADV) V (XP*)]]]$

In (105a) the negative clitic precedes the focus, whereas in (105b) it follows the focus. I show below that the latter has to be the correct analysis. The primary evidence for this is

that Chalcatongo Mixtec has a distinct negator for focus (in sentences of the form ‘It wasn’t X who/that . . .’), ruling out a pre-focus position for **tu=**. The focus negator is the subject of §6.4.2; at this point I simply assume that (105b) is the correct structure.

We turn now to negation of nominal predicates, which differs from negation of verbal and adjectival predicates. The phonetic form of the negator for nominals in ordinary conversational speech is [tu], which sounds exactly like the phrasal affix **tu=** discussed above. ([106] provides an example.) However, in this case [tu] is the contracted form of the full form **túu** ‘no’, rather than the corresponding phrasal affix **tu=**. We can tell that this is the case because with nominal predicates the full form may be substituted for the monosyllabic form (as shown in [106]), whereas this is not possible with verbal or adjectival predicates.

- (106) tu-nũʔũ (or: túu nũʔũ)  
 NEG-tooth  
 ‘He doesn’t have any teeth’

This use of the negator **túu** has some interesting characteristics. As shown in §6.6.2, in affirmative sentences, nouns (unlike adjectives) usually cannot be used predicatively without a copula. ([107], below, provides an example of an affirmative predicate nominal, for comparison.) However, as (106) and (108) show, a negative predicate nominal does not require the copula **kúu**, while (109) shows that it also does not *allow* one.<sup>11</sup>

- (107) máá=Ø kú žii=rí (\*máá=Ø žii=rí)  
 EMPH=3 COP husband=1  
 ‘That’s my husband’

- (108) túu banco ñũũndéža  
 NEG *banco* Chalcatongo  
 ‘There isn’t a bank in Chalcatongo’

- (109) \*tú=ku tutù  
 NEG=COP paper  
 ‘It’s not paper/He doesn’t have any paper/There isn’t any paper’

Data like these lead to the conclusion that **túu** in these contexts is actually a negative copula. This is another topic that deserves comparative study—the only other mention of the issue of which I am aware is in Farris (1992:57), in which he says that Yosondúa Mixtec has a negative verb **tuu**, meaning ‘not exist’.<sup>12</sup> Presumably, Yosondúa Mixtec speakers provided him with this translation; Chalcatongo Mixtec speakers translate the cognate **túu** only as ‘no’, so their form may be in the process (or further along in the process) of losing its verbal status.

<sup>11</sup>Note that (108) contains the full form **túu**, rather than the contracted form. This happened spontaneously, under conditions of emphasis.

<sup>12</sup>Thanks to Barbara Hollenbach for pointing this out to me.

We must be careful, however, to distinguish between the negative copula (or existential) **túu** and the negative proclitic which appears in (99)–(104). Consider examples like (99) and (101). It would be nonsensical to claim that **tu=** is copular in such examples, since they contain verbal predicates. Such a claim is more plausible for examples like (100) and (102)–(104), which have adjectival predicates, except that, as (100) shows, here the negative marker **tu=** can *co-occur* with the affirmative copula. Further evidence against a copular analysis of the negative in these sentences comes from examples like (9a), repeated here as (110), in which the phrasal affix **tu=** co-occurs with the existential (which itself functions somewhat like a copula in this construction):

- (110) čàà tú=žóó seʔe  
 man NEG=exist child  
 ‘That man has no children’ (lit. ‘As for that man, children do not exist’)

Thus, nominal predicates are negated by the full form **túu**, which in rapid speech may be shortened to **tu**, and which functions as a negative copula in such cases. However, verbal and adjectival predicates are negated by the phrasal affix **tu=**, which never appears in disyllabic form and which does not have any copular function. The phrasal affix is obviously related to the negative copula historically, but because of its different form and distribution, it must be treated as synchronically distinct from the full form in present-day Chalcatongo Mixtec.

In the next section I present another Chalcatongo Mixtec negator, and then in the section which follows that, we return to one final use of the clitic **tu=**.

#### 6.4.2. Focus Negation

As mentioned earlier, focused arguments are not negated with **tu=** but rather have a special negator, **niàsù**. (111)–(113) illustrate:

- (111) (a) niàsù roʔo kúʔu  
 NEG.FOC you sick  
 ‘It’s not *you* who is sick’  
 (b) \*tu=roʔo kúʔu  
 NEG=you sick  
 ‘It’s not *you* who is sick’
- (112) niàsù čũũ lii ká-ku či ká-ku kóní lúlí  
 NEG.FOC chicken chick PL-COP but PL-COP turkey.hen small  
 ‘They’re not *chicken* chicks, they’re *turkey* chicks’
- (113) maría, kée=Ø xa=tándaʔa=Ø xí x<sup>wá</sup>  
 María say=3 COMP=marry=3 with Juan  
 ‘As for María, they say that she’s marrying Juan’



(113), continued:

pero niasu xí x<sup>wá</sup> tandaʔá=Ø či tándaʔá=Ø xí péðrú  
 pero NEG.FOC with *Juan* marry=3 because marry=3 with *Pedro*  
 but it isn't *Juan* who she's marrying, she's marrying *Pedro*'

The trisyllabic form of **niàsù** indicates a bimorphemic origin, but it is not clear what the source elements are. There is a form **nii** 'nor' (probably borrowed from the Spanish word of essentially the same form and meaning) and a form **asù** 'than', the two of which provide plausible components, but since there is no conclusive evidence for this analysis I treat it here as a monomorphemic word.<sup>13</sup> It should also be noted that some speakers have **fiàsù**, with a palatal nasal in initial position, while one consultant with whom I spoke had **nísú**:<sup>14</sup>

(114) ñiàsù xá-k<sup>wa</sup>ʔa kú xa-k<sup>wáá</sup> kú  
 NEG.FOC NOM-red COP NOM-yellow COP  
 'It isn't *red*; it's *yellow*'

(115) nísú tutú kú wáá  
 NEG.FOC paper COP that  
 'That's not *paper*'

**niàsù** has scope only over the focused NP, so it can be added to our schema of the Chalcatongo Mixtec sentence as shown in (116). Here, the slot for NEGATIVE FOCUS is included as a sister to FOCUS, within the preverbal focus phrase.

(116) TP[[TOPIC] S'[[[NEG.FOC] [FOC]] NEG=S[(ADV) V (XP\*)]]]

Thus, **niàsù** can provide us with a test for topic versus focus status in a preverbal NP: if the NP takes narrow scope negation with **niàsù**, we know that it is in focus position; if it only allows sentence-level negation with **tu=**, it must be a topic.

We return now to the simple negator **tu=**, considering one last possibility for its positioning: attached to the left margin of a NP, with the sense of 'no X' or 'no Xs'. Consideration of these data provides some evidence in favor of the clausal positioning of **tu=** given above in (105b). This is discussed further below.

### 6.4.3. Negation of NPs

As we have seen, the phrasal affix **tu=** attaches to the left of the predicate phrase, optionally following a single preverbal NP. There is one other position of occurrence for **tu=**, however, which is attachment to single NPs. Many of these constructions are fixed

<sup>13</sup>As we see in §7.2.3, **niàsù** occasionally appears in comparatives, strengthening the case for **asù** 'than' as its second element.

<sup>14</sup>For these two consultants, the focus negator appears to be a tonal perturber, while it is not one for the other consultants (note especially example [112]).

phrases, such as **tú=k<sup>w</sup>iti** ‘nothing’ (as in [117]) and the negative indefinites (as in [118]–[120]), although nonce formations are also possible (as in [121]):

- (117) **tú=k<sup>w</sup>iti** xísiki=Ø  
 NEG=just(?) play=3  
 ‘He doesn’t play (at) anything’<sup>15</sup>
- (118) **tu=ndéu** kíʔí=rí  
 NEG=where go=1  
 ‘I have nowhere to go’
- (119) **tú=ndéu** ní-kii=Ø  
 NEG=who CP-come=3  
 ‘Nobody came’
- (120) **túu**, **tú=ndiči** kíʔí=žo  
 No NEG=in.what.direction go=1PL  
 ‘No, there’s nowhere for us to go’
- (121) **ni-kexaʔá=rí** xãã=rí nužáʔu te **tú=šũʔũ** ñábaʔa=rí  
 CP-start=1 buy=1 market and NEG=money have=1  
 ‘I started to buy (things) in the market, but I didn’t have any money’

In all of these examples (with the possible exception of [117], in which it is not entirely clear what lexical category the root belongs to), the phrasal affix **tu=** attaches to a preverbal NP. In (105) (repeated below as [122], with the focus negator added), it was pointed out that there were two possibilities for the positioning of **tu=**: attached to the S’ (as in [122a]) or attached to the S (as in [122b]).

- (122) (a) TP[[TOPIC] NEG=S’[[[NEG.FOC] [FOC]] S[(ADV) V (XP\*)]]]  
 (b) TP[[TOPIC] S’[[[NEG.FOC] [FOC]] NEG=S[(ADV) V (XP\*)]]]

Examples such as (117)–(121) might seem to be evidence for the former claim; that is, we could argue that **tu=** appears before a focused NP in these examples because it attaches at the S’ level (as in [122a]). However, consideration of the semantics of such sentences indicates that in fact **tu=** is more tightly bound to the NP than that. In each case, the

<sup>15</sup>It is not clear what the root is in **tú=k<sup>w</sup>iti** ‘nothing’. There are two words of the form **k<sup>w</sup>ití**, one an adjective meaning ‘short’ and the other an adverb meaning ‘just’. As mentioned in the text, **tú=k<sup>w</sup>iti** does seem to function as a fixed phrase, and speakers do not (consciously) think of it as bimorphemic. However, I do have one example in which the two morphemes are separated:

- (i) **či** antes **tu=ká-xini=Ø** **k<sup>w</sup>iti**  
 because antes NEG=PL-know=3 ?  
 Because before they didn’t know anything  
 The speaker could not give me a translation for the word **k<sup>w</sup>iti** here, though.

negative has scope over only the NP it attaches to, rather than over the entire sentence. An example which supports this point is given in (123):

- (123) tú=k<sup>w</sup>aʔà ñáʒīũ ní-xaʔa=∅  
 NEG=many people CP-pass=3  
 ‘Not many people went’

Sentence (123) crucially means ‘Not many people went’ rather than ‘Many people did not go’, which would be the expected reading if the negative was attached to the S’ and thus had scope over the entire sentence. Because the sentence has the reading it does, we know that **tú=** is attached only to the NP in this case, rather than to the S’.

Such negated NPs can occur in topic position (as in [123]), or they can occur in focus position (as in [124]). We can tell that the negated NP in (124) is focused because it is preceded by another preverbal NP, the topic.

- (124) rùʔù tú=k<sup>w</sup>iti no ní-ʒee=rí bina  
 I NEG=little what CP-eat=1 now  
 ‘As for me, *nothing* is what I ate today’

Thus, there are two kinds of negation that can occur in conjunction with focused constituents: first, the special focus negator **niàsù**, which produces readings like ‘It is not X who/that . . .’, and, second, simple negated NPs meaning ‘no X’. To see this more clearly, consider (125), our current clause schema:

- (125) TP[[TOPIC] S’[[[NEG.FOC] [FOC]] NEG=S[(ADV) V (XP\*)]]]

If a focused phrase is negated with **niàsù**, the negator appears in the position marked NEG.FOC (for “negative focus”). However, if a negated NP is the form that is focused (as in [124]), this appears as a single constituent in the position marked FOC (“focus”), as a NP of the form shown in (126):

- (126) [ . . . S’[FOC [tu=NP] S[(ADV) V (XP\*)]]]

In the sections which follow, we find that there are other phrasal affixes whose positioning requires further modification of the structure shown in (125).

## 6.5. Questions

This section describes yes/no and WH-questions. Embedded questions are covered in §7.2.4.

### 6.5.1. Yes/No Questions

Yes/No questions are identical in form to statements. That is, there is no marking of the interrogative status of such forms—by question particle, intonation, tone, or other method. (127)–(128) illustrate:

- (127) *ñábaʔa=ró librú=ro*  
 have=2 libro=2  
 ‘You have your book/Do you have your book?’

- (128) *xakú=ro*  
 laugh=2  
 ‘You’re laughing/Are you laughing?’

The formation of yes/no questions across the Mixtec dialects is quite diverse. Most other dialects mark such questions with a question particle. In most cases these are sentence-initial, but some are sentence-final, and at least one dialect places the question particle in second position. The sentence-initial forms include **án** (Alacatlazala Mixtec, see Zylstra 1991), **ñáá/áán** or a tone change (Ayutla Mixtec, see Hills 1990), **atu** (Jamiltepec Mixtec, see Johnson 1988), and **á** (Ocotepéc Mixtec, see Alexander 1988; Silacayoapan Mixtec, see Shields 1988). Two dialects have sentence-final question markers: Diuxi-Tilantongo Mixtec uses **á** (Kuiper and Oram 1991), and Yosondúa Mixtec uses sentence-final **nú** (Farris 1992).<sup>16</sup> Finally, Coatzospan Mixtec has a question particle **ndu**, which is placed in second position (Small 1990).

Like Chalcatongo Mixtec, the closely-related San Miguel dialect also lacks overt marking of yes/no questions (Pike 1944:136), so this may well be a small-scale areal phenomenon.

### 6.5.2. WH-Questions

WH-questions contain an interrogative word or phrase in focus position. The set of fixed interrogative words and phrases is listed in (129), below. In addition, interrogative phrases may be constructed with the prefix **na-** ‘what’ plus a relevant noun, as exemplified in (130).

<sup>16</sup>Note that this interrogative marker is identical in form to the Chalcatongo Mixtec counterfactual clitic =**nú** (see §7.2.2). The town of Yosondúa is about fifteen kilometers south of Chalcatongo, and the dialects are mutually intelligible, so there could be a connection.

- (129) *ndàsà* ‘how’  
*ndéu* ‘where, which, who’  
*noò* ‘what, which’  
*čí-na-xaʔa, ší-na-xaʔa, ná-xáʔa* ‘why’  
*ndekíu, ndikíu* ‘when, what day’ (*kiù* ‘day’)  
*ndíči, ndéči* ‘where, in what direction’ (*iči* ‘road, path’)  
*xáu náʔá* ‘how long’ (< *xa=ku náʔá*) (*náʔá* ‘a long time’)
- (130) *na-kiù* ‘what day’ (*kiù* ‘day’)  
*na-ma* ‘when’ (*ma* unidentified)  
*na-orá* ‘what hour, what time’ (Spanish *hora* ‘hour’)  
*na-sáa* ‘how many’ (*sáa* unidentified)  
*na-sik̀̀* ‘against whom’ (*sik̀̀* ‘animal back’)  
*na-xíí* ‘with whom’ (*xíí* ‘with’, although see below)  
*na-žòò* ‘what month’ (*žòò* ‘month’)

A few of the forms in (129) require some explanation. Starting with the phrase meaning ‘why’, we find variation between *čí-na-xaʔa*, *ší-na-xaʔa*, and *ná-xáʔa*. The most likely gloss is ‘(because)-what-foot’. Many other dialects of Mixtec have the word for ‘foot’ in their expression for ‘why’—for example Ocotepéc Mixtec has *nà xèʔè* (Alexander 1988:185), Ayutla Mixtec has *ndee šaʔàʔ* (Hills 1990:44), Alacatlazala Mixtec has *ndá šàʔà* (Zylstra 1991:37), and Silacayoapan has *ndá sàʔà* (Shields 1988:336). All are glossed as ‘what foot’ or ‘which foot’. However, it is not clear what the first element (*čí* or *ší*) in the Chalcatongo form is. My hypothesis is that it is ‘because’, but this remains to be verified.

A second thing to note about the forms in (129) is that many of them have an initial **nd** or **nde**, which leads to the conclusion that at least historically there was a form **nd(e)**- which was a general interrogative marker.<sup>17</sup> Under this hypothesis, *ndekíu* is transparently ‘WH-day’ (with optional vowel harmony producing *ndikíu*). *Ndíči* and its alternant *ndéči* are presumably **nd(e)**- plus *iči* ‘road, path’. Finally, *ndéu* ‘where, which, who’ could be **nde**- plus **u** (the contracted form of the copula *kuú*), although the semantics is not as transparent. *Xáu náʔá* ‘how long’ appears also to be the result of contraction of *kuú*.

The forms in (130) are for the most part fairly transparent. One, *na-xíí* ‘with whom’, seems somewhat strange, however, if we interpret *xíí* in its present-day sense, ‘with’. The resultant literal gloss would be ‘what with’, considerably different from the actual meaning ‘with whom’. However, note the form meaning ‘against whom’, *na-sik̀̀*. This is literally ‘what animal.back’. Recall from §5.4 that *xíí* derives historically from a body part term meaning ‘side’. Given the literal gloss ‘what side’, the interpretation ‘with whom’ of *na-xíí* becomes clear. Although speakers of present-day Chalcatongo Mixtec do not recognize *xíí* as a body part term, they apparently do retain it in this use in the frozen interrogative *na-xíí*.

<sup>17</sup>An anonymous reader points out the Yosondúa interrogative marker **ndu-** and asks if there could be a historical relationship. Very little is known about the source of these WH-elements, but this suggestion seems quite plausible.

**Na-ma** 'when' contains an unidentified morpheme **ma**. However, Josserand (1983) reconstructs \***awā** for Proto-Mixtec 'when', and several dialects fairly closely related to Chalcatongo Mixtec have the reflex **ama** for this form (e.g., San Miguel el Grande, see Dyk and Stoudt 1965:77). It seems plausible, then, that **na-ma** was formed by analogy to other interrogatives, that is, that it was derived from **na-** plus **ama**.

**Na-** is quite productive, and can be used with virtually any noun to form an interrogative, as the attested examples in (131) show:

- (131) na-čàà 'what man'  
 na-k<sup>w</sup>íža 'what year'  
 na-nundóʔo 'what problem, misfortune'  
 na-tiempú 'what time' (Spanish *tiempo* 'time')  
 na-tūʔú 'what word'

(132)–(139) provide typical examples illustrating the syntax of WH-questions:

- (132) noò kúú xa=sáʔá martá  
 what COP COMP=do *Marta*  
 'What is Martha doing?'
- (133) ndéu ní-ka-žaà táa=ní  
 where CP-PL-live parent=2POL  
 'Where did your parents live?'
- (134) ndéu xító beʔe žáʔa  
 who care.for house this  
 'Who takes care of this house?'
- (135) ší-na-xaʔa xakú=ro  
 (because)-what-foot laugh=2  
 'Why are you laughing?'
- (136) na-sáa čũũ žúbaʔa=ró  
 what-? hen have=2  
 'How many hens do you have?'
- (137) na-orá kíʔi=ro  
 what-*hora* go=2  
 'When (what time) will you leave?'
- (138) ndikíu kíʔi=ro  
 when go=2  
 'When (what day) will you leave?'

- (139) ndéçi kéndòò beʔe maría  
 where place.be.located house *María*  
 ‘Where (on what road) is María’s house?’

As we see from (132)–(139), the interrogative word or phrase is in focus position, and is followed immediately by the verb. The following clause has a gap which corresponds to the argument (or adjunct) which is represented by the interrogative word or phrase. Otherwise, the syntax of the clause is unchanged from that of an assertion.

## 6.6. Minor Construction Types

This section presents five additional constructions: the existential (§6.6.1), the copular construction (§6.6.2), the additive and restrictive phrasal affixes (§6.6.3), imperatives (§6.6.4), and hortatives (§6.6.5).

### 6.6.1. Existential

The existential verb is **koo** in potential aspect and **žóó** in realis, although both stems most often appear in monosyllabic form: **ko** and **žó**. I refer to this verb by its realis form throughout this discussion because most of my examples of existentials are in that aspect.

The main construction in which the existential appears contains a NP subject and an optional locative, as in (140) through (142):

- (140) lagúna káʔnū ni-žoo=Ø žáʔa  
*laguna* big CP-exist=3 here  
 ‘There was a big lake here’
- (141) inì kaxá wáã žoo tenàna  
 insides *caja* the exist tomato  
 ‘In the box there are tomatoes’
- (142) ko šāã nãžĩũ  
 exist.P many people  
 ‘There will be a lot of people (here)’

In another common construction, **žóó** takes an adjectival complement and a subject NP (or pronominal clitic), as in (143) through (145):

- (143) žó luu=Ø  
 exist pretty=3  
 ‘It is pretty’

- (144) ko ičí=Ø  
 exist.P dry=3  
 'It will be dry'
- (145) kisi žó=Ø xáá  
 pot exist=3 new  
 'The pot is new/There is a new pot' (lit. 'As for the pot, it exists new')

žóó may also take subjects other than third person, as in (146) and (147):

- (146) žáʔa žo=žó íñũ  
 here exist=1PL six  
 'There are six of us here' (lit. 'Here we exist six')
- (147) ndeʔe žaʔa žoo=rí īñũ=rì nuu ndatì=rí  
 see here exist=1 six=1 face shadow=1  
 'Look, there are six of me (as in mirrored images)'

In these constructions, the existential appears to function as a copula. Coexisting with the existential is a more standard copula, which is the topic of the next section. The distinction between use of the existential and use of the copula with an adjectival complement, however, is not clear.

### 6.6.2. Copular Constructions

The copula in Mixtec has two forms, depending on whether the predicate is nominal or adjectival. Before adjectival predicates, it is **kaa** in realis aspect and **kuú** in potential. Before nominal predicates, it is **kuú** in realis aspect and, as with adjectives, **kuú** in potential. (All of these forms are virtually always shortened to a monosyllable in spontaneous speech.) (148) through (151) illustrate:<sup>18</sup>

- (148) x<sup>w</sup>ā ka=Ø lúlí  
 Juan COP.R=3 small  
 'Juan is small/short'
- (149) kuú=Ø sūkú  
 COP.P=3 tall  
 'He will be tall (when he grows up)'

<sup>18</sup>Recall that there are two other morphemes with the form **ku(u)**: the inchoative (see §3.2.2) and the auxiliary verb 'can'.



- (150) wāá kú ĩ čàà sātīū  
 that COP.R one man work  
 'That is a man who is working'
- (151) ku=Ø ĩ čàà ká?nū  
 COP.P=3 one man big  
 'He will be a big man'

In §6.6.1, it was pointed out that the existential **ž66** also appears to function as a copula in some cases. We can further note that while nominal predicates require either an existential or the copula, adjectival predicates may occur alone.<sup>19</sup> (152) and (153) are examples of adjectival predicates with no copula. Note also that the predicate may precede or follow the subject.

- (152) xa-lúlí čá?ā  
 NOM-small dirty  
 'The boy is dirty'
- (153) čá?ā xa-lúlí  
 dirty NOM-small  
 'The boy is dirty'

It is unclear to me what the semantic differences are among the copular use of the existential, use of the copula **kaa** or **kúu**, and use of a zero copula.<sup>20</sup>

### 6.6.3. Additive/Restrictive

The additive and restrictive morphemes (=ka and =ni, respectively) are a complementary pair of phrasal affixes which attach to a wide variety of categories in almost any position. The additive indicates the notions 'more', 'most', 'to excess', etc., and the restrictive, 'just', 'still', 'alone', 'only', etc. The most common position for one of these elements is immediately following the verb (either stem) or predicate adjective, as in (154) through (157), below. However, because these two elements may also attach after any postverbal modifier, as shown in (158) through (160), we know that they are clitics, not affixes. (154), (156), and (157) additionally show that the additive/restrictive clitic immediately precedes the pronominal clitic when both are present.

<sup>19</sup>As mentioned above, there are occasional exceptions (e.g., [50]).

<sup>20</sup>I have come across a few references to the existence of a relationship between an existential verb and a copula: see Munro (1977) for discussion of just this development in Yuman languages. Strom (1992: 124–126) also notes an existential used as a copula in the Tucanoan language Retuarã, and Clark (1978) discusses the relationship between locatives formed with the existential and the copula (among others).

- (154) ni-žéé=ka=rí takú ásu róʔó  
 CP-eat=ADD=1 *taco* than you  
 'I ate more tacos than you'
- (155) sókó žáʔa k<sup>w</sup>a-kù-kúnú=ka=Ø  
 well this go-INCHO-deep=ADD=3  
 'The well is getting deeper'
- (156) roʔo žéé=ní=ró  
 you eat=RES=2  
 'You just eat/you're just eating'
- (157) k<sup>w</sup>ítí kíʔi kee=ni=rí uù  
 just go eat=RES=1 two  
 'I'm just going to eat two'
- (158) na-kíʔi x<sup>w</sup>ā či xínū žáči=ka=Ø  
 MOOD-go *Juan* because run fast=ADD=3  
 'Juan should go because he runs faster'
- (159) x<sup>w</sup>ā káʔnū šāā=ka=Ø asù peðrú  
*Juan* fat much=ADD=3 than *Pedro*  
 'Juan is much fatter than Pedro'
- (160) kaka k<sup>w</sup>éé=ní  
 walk slow=RES  
 'Just walk slowly'

(161) presents the structure of the Mixtec clause with the additive and restrictive enclitics added. The positioning of these clitics after an optional postverbal adverb indicates that the verb and modifying adverbs (preceding or following the V) form a constituent, called here V'.

- (161) TP[[TOPIC] S'[[[NEG.FOC] [FOC]] NEG=S[V'[(ADV) V (ADV)]=ADD/RES (XP\*)]]]

=**ka** and =**ni** also appear on noun phrases in any position (including topic and focus), as illustrated in (162)–(164). They also appear inside noun phrases, when there is a quantifier of some sort modifying the noun, as in (165) through (167). In these cases the additive or restrictive element attaches to the modifying phrase contained within the noun phrase.

- (162) k<sup>w</sup>aʔa uù ndíká=ka nuù=rí  
 give two banana=ADD face=1  
 'Give me two more bananas'

- (163) xa-súčí=ka ni-táʔu=Ø vídriu  
 NOM-young=ADD=3 CP-break *vidrio*  
 ‘The youngest one broke the window’
- (164) ñáni=ni=rí kii  
 brother=RES=1 come  
 ‘It’s just my brother who is coming’
- (165) táʔu=ni xa-lúli žóó  
 few=RES NOM-small exist  
 ‘There are just a few children (here)’
- (166) žée=Ø uù=ka staà  
 eat=3 two=ADD tortilla  
 ‘He’s eating two more tortillas’
- (167) rùʔù ñábaʔa=rí xoð=ka šūʔū te máá ñábaʔa kʷaʔà=ka=Ø  
 I have=1 little=ADD money and EMPH have much=ADD=3  
 ‘As for me, I have less money than *he* does’  
 (lit. ‘I have little money and *he* has more’)

Note in (167) that the additive can be added to a word like **xoð** ‘little’, with the result meaning ‘less’. From this we see that **=ka**, when added to a scalar adjective, draws the reference point further toward the relevant end of the scale, whether it is toward the positive or the negative end.

Finally, the additive and restrictive also appear in sentences (or sentence fragments) with no verbal or adjectival predicate, as in (168) through (170). In these cases, **=ka** and **=ni** simply attach to the noun, adverb, or quantifier phrase that makes up the utterance.

- (168) té ndéu=ka  
 and who=ADD  
 ‘And who else?’
- (169) kʷaʔà šáá=ká ñážiū  
 much many=ADD people  
 ‘(There are) many more people’
- (170) žáʔa=ni  
 here=RES  
 ‘right here’

#### 6.6.4. Imperatives

The regular method of forming the imperative is use of the potential verb stem. Such imperatives generally do not carry a pronominal clitic overtly marking second person subject, although one may appear. This is most common when the speaker wants to soften the force of the imperative and does so by using the polite second person clitic, =*ni*. (171)–(174) illustrate:

(171) *kee staà*  
eat.P tortilla  
'Eat!'

(172) *kaka xoò nńĩ*  
ask.P little.bit salt  
'Ask for some salt'

(173) *k<sup>w</sup>ãã=ró*  
buy.P=2  
'Buy it!'

(174) *ká?ã=ní*  
speak.P=2POL  
'Please speak!'

Another way to soften an imperative is to use the deontic mood prefix, *na-* (see §4.3), which attaches to the potential verb stem, as in the following:

(175) *na-kíi*  
MOOD-come.P  
'Come!'

(176) *na-čísó nuù=Ø*  
MOOD-answer face=3  
'Answer him!'

As described in §8.1, the verbs of motion display more aspectual stem distinctions than do other verbs. Most of these verbs also show idiosyncrasies in formation of the imperative. Both of the verbs for 'go' ('go to base' and 'go to neutral goal'; see §8.1 for explanation of these definitions) use the progressive as the base of the imperative, as in (177) and (178):

(177) (a) *k<sup>w</sup>á-no?o*  
go.PROG-go.and.return  
'Go home!'

- (b)  $k^w a\text{-no}^{\circ}o=\emptyset$   
 go.PROG-go.and.return=3  
 'S/he is going home'
- (178) (a)  $k^w \acute{a}^{\circ} \acute{a} \text{ in}^{\circ} \text{ be}^{\circ} e$   
 go.PROG insides house  
 'Go inside the house!'
- (b)  $k^w \bar{a}^{\circ} \bar{a}=\emptyset$   
 go.PROG=3  
 'S/he is going'

As the examples show, there is a tonal component in the formation of these two imperatives—specifically, addition of a high tone to  $k^w \acute{a}^{\circ} \acute{a}$  (and its reduced form  $k^w a\text{-}$ ). This alternation, however, is not manifested elsewhere in the grammar.

The potential stem is used to form the imperative of the verbs meaning 'come' and 'arrive here' (as in [179] and [180]), while the habitual stem is used for the imperative of the verb meaning 'enter' (not included in the set of verbs of motion but clearly semantically related), as in (181).

- (179)  $\acute{z} \acute{a}^{\circ} a \text{ kii}=\acute{n} \acute{i}$   
 here come.P=2POL  
 'Please come here!'
- (180)  $\acute{c} \acute{a} \acute{a}=\acute{n} \acute{i}$   
 arrive.here.P=2POL  
 'Please come!'
- (181)  $\acute{n} \acute{d} \acute{f} u=\acute{n} \acute{i}$   
 enter.HAB=2POL  
 'Please enter!'

One of the verbs of motion, **kii** 'come', has a suppletive imperative form:  $\acute{n} \acute{a}^{\circ} \acute{a}$  'come.IMP'. As (179) shows, however, either the potential stem **kii** or the imperative  $\acute{n} \acute{a}^{\circ} \acute{a}$  may be used with imperative force; there appears to be no difference in meaning between the two.

Negative imperatives are made by prefixing the negative deontic mood marker **ma-** to the potential stem, as illustrated in (182)–(184). The person-marking clitic is obligatory in a negative imperative, whereas it is optional in an affirmative imperative.

- (182)  $\acute{m} a\text{-k} \acute{o}^{\circ} o=\acute{r} \acute{o}$   
 NEG.MOOD-drink.P=2  
 'Don't drink it!'

- (183) ma-káʔǎ=ro nuù=Ø  
 NEG.MOOD-speak.P=2 face=3  
 'Don't scold him!'
- (184) ma-xáʔa=ní  
 NEG.MOOD-pass.by=2POL  
 'Please don't pass by!'

The negative imperative of the verbs of motion is also formed by attaching **ma-** to the potential stem, as in (185)–(187). Note in (185) that this is the case even when the verb uses something other than its potential stem for the affirmative imperative. In other words, the suppletive forms cannot be negated; when speakers want to form a negative imperative, they must use the potential stem.

- (185) ma-kíʔī=ro  
 NEG.MOOD-go.P=2  
 'Don't go!' (cf. [178a])
- (186) ma-kíí=ní  
 NEG.MOOD-come.P=2POL  
 'Please don't come!' (cf. [179])
- (187) ma-čáa=ro šíǎ  
 NEG.MOOD-arrive.here.P=2 tomorrow  
 'Don't come tomorrow!' (cf. [180])

Finally, there are two verbs which have distinct imperatives but are not, strictly speaking, verbs of motion. These are the verbs 'bring' and 'take', as illustrated in (188) and (189):

- (188) čǎǎ  
 bring.IMP  
 'Bring it!' (cf. kundáʔá [P], xíndáʔá [R])
- (189) žáʔá  
 take.IMP  
 'Take it!' (cf. kīʔī [P], kǐʔī [R])

#### 6.6.5. Hortatives

Another specialized form which one verb of motion has is the hortative 'go', as shown in (190), below. This verb, which never carries a person marker, may be used alone or with a variety of complements. When it has a verbal complement, as in (191)–(192), it often loses the motion component of its semantic content, functioning simply as a generic

hortative. Note also in these examples that the verbal complement must be in potential aspect, and, further, that the hortative is often contracted to a monosyllable. (193)–(194) illustrate nominal goal complements to the hortative, and (195)–(196) illustrate body part term locative complements (which are also nominal).

- (190) čóʔo  
go.HORT  
'Let's go'
- (191) čóʔo kee staà  
go.HORT eat.P tortilla  
'Let's eat'
- (192) čó kaka  
go.HORT walk.P  
'Let's walk/Let's go walking'
- (193) čóʔo ñũ̀  
go.HORT town  
'Let's go to town'
- (194) čóʔo bíkó  
go.HORT party  
'Let's go to the party'
- (195) čóʔo žata sk<sup>w</sup>elá  
go.HORT animal.back *escuela*  
'Let's go behind the school'
- (196) čóʔo nù žúnũ wáã  
go.HORT face tree there  
'Let's go over to those trees there'

In (197a) and (197b) we see another possibility, in which čóʔo is followed by an independent pronoun. Note that these are the full forms of the pronouns, not the clitic forms, and that they function in the sentences as vocatives:

- (197) (a) čóʔo roʔó  
go.HORT you  
'Let's go, you!'
- (b) čóʔo níʔí xínaʔa=ní  
go.HORT you.POL plural=2POL  
'Let's go, all of you!'

Finally, a verb in potential aspect with a first person plural pronominal clitic may also be used as a hortative, as in (198):<sup>21</sup>

- (198) *késama=žó*  
 eat.P=1PL  
 'Let's eat'

## 6.7. Pronouns

This section presents, first, the pronominal clitics of Chalcatongo Mixtec (§6.7.1) and then turns to reciprocals and reflexives (§6.7.2).

### 6.7.1. Pronominal Clitics

The Chalcatongo Mixtec pronominal clitics are a set of phrasal affixes which mark subjects on verbs, possessors on nouns, and objects on prepositions. They appear after any modifier or modifiers which follow the verb, or after the verb if there are no modifiers. Recall from Chapter 1 that a phrasal affix is a type of clitic which is defined by its positioning with respect to the phrase, rather than to the word. These pronominal clitics can be further classified as "special clitics" (Zwicky 1977; Zwicky and Pullum 1983), which are clitics that are related to full forms with different positional requirements. (Among the phrasal affixes of this dialect, only the pronominal enclitics and the negative proclitic fit into this category. The other clitics—e.g., the additive and restrictive—exist only in bound form.) As we saw in Table 11 of Chapter 5 (repeated below), the first and second person pronominal clitics correspond to full pronouns, while the third person pronominal clitics correspond to nouns with generic reference, rather than to pronouns. The difference in positioning between the clitics and the full forms is the primary topic of this section.<sup>22</sup>

The table presents the pronominal clitics and the set of independent pronouns and nouns to which they are phonologically and semantically related. These clitics (when functioning as subjects) appear in different syntactic environments from those of the full forms, however, and, in addition, the distributional restrictions on the full first and second person pronouns are different from those on the full nonpronominal nouns. There are four possibilities for instantiation of subject in Chalcatongo Mixtec: (a) the subject may be represented by a postverbal clitic, (b) the subject may be a full NP (pronominal or not) in focus position, with no pronominal enclitic on the verb, (c) the subject may be a full NP (again, pronominal or nonpronominal) in topic position, in which case a postverbal clitic does

<sup>21</sup>The citation form for this verb is *kesámá*. Since it is the only example I have found of a potential verb stem used as a hortative, it is unclear whether or not the change in tone represents a productive process.

<sup>22</sup>See Marlett (1993) for a description of types of pronouns in the closely-related Zapotec languages. Although Marlett uses quite different terminology to present the Zapotec data than is used here, it appears that the distribution of the different types of pronouns in Zapotec is very similar to that found in the Mixtec languages.



Pronouns			
PERS	GENDER	FREE	CLITIC
1	FAMILIAR	rùʔù	=rí
	POLITE	naʔa	=na
	INCLUSIVE (PL)	žóʔó	=žó
2	FAMILIAR	roʔo	=ro
	POLITE	níʔí	=ní
3	MASCULINE	čàà 'man'	=ðe
	FEMININE	nāʔā 'woman'	=nā
	POLITE: OLDER	toʔò 'older person'	=to
	YOUNGER, DECEASED, etc.	(žii 'masculine')	=ži
	SUPERNATURAL	íʔa, íža 'god'	=ža
	ANIMAL	kiti 'animal'	=ti
	UNMARKED		=Ø

occur, and (d) the subject may be a full NP in postverbal position, with no clitic. In the last case, however, the subject may only be a nonpronominal NP but may not be a pronoun.<sup>23</sup> That is, if the subject is represented by a pronoun in postverbal position, it must be a clitic pronoun, not an independent pronoun. Independent pronouns may only occur in topic or focus position.

Consider, first, the examples in (199):

- (199) (a) ni-žee=rí  
 CP-eat=1  
 'I ate (it)'
- (b) rùʔù ni-žee  
 I CP-eat  
 'I'm the one who ate (it)'
- (c) rùʔù ni-žee=rí  
 I CP-eat=1  
 'As for me, I ate (it)'
- (d) \*ni-žee rùʔù
- (e) \*ni-žee=rí rùʔù

<sup>23</sup>These distribution and co-occurrence facts raise interesting questions about argument structure in Mixtec—specifically, whether it is the full pronouns or the pronominal clitics which function as the arguments of the predicate (cf. Jelinek's [1984] arguments about pronominal argument versus lexical argument languages). For a more theoretical discussion of the issue than is found in this grammar, see Macaulay (1993).

(f) \*rí=ni-žee

As (199a)–(199c) show, subject can be marked with a pronominal enclitic, a full pronoun in focus position, or a full pronoun in topic position co-occurring with a pronominal enclitic. Examples (199d) and (199e) show that a full subject pronoun may not appear postverbally (either with or without a clitic pronoun), and (199f) shows that the pronominal clitics may attach only to the right side of the V (this formulation is slightly modified below).

These positional restrictions hold only for pronominal subjects. Nominal subjects may occur in topic position, focus position, or following the verb, as shown in (200)–(202), respectively (the subjects are in boldface in each example):

(200) **čàà wǎǎ** xítuu=Ø  
man that lie.down=3  
'That man is lying down'

(201) tú čì **xwǎná** ni-sáʔa  
no because *Juana* CP-do  
'No, because *Juana* was the one who did (it)'

(202) nì-naa inì **čǎǎ** ndoʔo  
CP-lose insides man basket  
'The man forgot his basket' (cf. [199d])

Finally, the interaction of the clitic pronouns with full NP subjects is illustrated in (203), below. (203a) shows that a full NP subject in preverbal position may occur with no clitic subject. In this case the full NP is in focus position. (203b) shows that clitic and full NP subjects may co-occur when the NP is a topic. However, (203c) shows that they cannot co-occur when the full NP follows the verb.

(203) (a) **nǎʔǎ wǎǎ** xínū  
woman the run  
'The woman is the one who is running'

(b) nǎʔǎ wǎǎ xínū=**nǎ**  
woman the run=3F  
'The woman is running'

(c) \*xínū=**nǎ** nǎʔǎ wǎǎ  
run=3F woman the  
'The woman is running'

Independent pronouns and nouns also appear as direct objects (as in [204] and [205]), and as the standard of comparison in a comparative construction with the subordinator **asù** 'than' (as in [206]). The pronominal clitics may not appear in these positions.

- (204) kǐʔi číndé=ri róʔó (\*číndé=ri=ro)  
 go help=1 you  
 'I'm going to help you'
- (205) na-číndé=Ø žóʔó (\*na-číndé=Ø=žó)  
 MOOD-help=3 us  
 'He should/must help us'
- (206) ni-žéé=ka=rí takú ásu róʔó (\*ásu=ro)  
 CP-eat=ADD=1 *taco* than you  
 'I ate more tacos than you did'

The independent forms, of course, may undergo rapid-speech contraction, making the surface form appear to be a pronominal clitic in object position. For example, (204) could be pronounced **kǐʔi číndé=ri ró** in rapid speech. However, **ró** in this case is a contraction of the full form **róʔó**, not an instance of the clitic **=ro**. (The asterisk in [204] indicates that the form would be ungrammatical with a *clitic* as direct object.) The way we can tell that the monosyllabic form is a contraction of the full form is by testing with one of the suppletive clitics, such as third person masculine. And, in these cases the clitic form never appears. Furthermore, one can always elicit the full form in object position, whereas it is explicitly rejected by speakers in positions which require clitics (such as for postverbal pronominal subjects).

Evidence that the bound pronouns are clitics and not inflectional affixes can be seen by comparing examples (207) and (208):

- (207) ni-žéé=rí staà  
 CP-eat=1 tortilla  
 'I ate'
- (208) ni-žéé šāā=rí staà  
 CP-eat much=1 tortilla  
 'I ate a lot/I ate excessively'

In (207), the first person subject marker attaches directly to the verb, and we have no way of knowing just from this whether it is an inflectional affix, or whether there is a phrasal boundary at that point which just happens to coincide with the "edge" of the verb. In (208), however, the subject marker attaches not to the verb but to the adverbial **šāā** 'much'.<sup>24</sup> This indicates that the pronominal is positioned at the right margin of the constituent which contains the verb (which I call V'), evidence that the pronominal clitics are in fact phrasal affixes. (209) illustrates this structure:

- (209) [ . . . NEG=ſ[V'[(ADV) V (ADV)]=ADD/RES=PRO (XP\*)]]

<sup>24</sup>It is also possible to say **ni-žéé=rí šāā stáa**, in which case **šāā stáa** is a constituent, and the sentence means 'I ate many tortillas'.

In (209), we see that the pronominal clitic attaches to V', after the additive or restrictive clitic, if one is present. (V' is a constituent containing the verb and two positions for adverbs.) (210) and (211) provide additional examples of sentences containing postverbal adverbs to which a pronominal clitic is attached (the adverb is in boldface in each):

(210) ma-kúʔni **niʔi=ró**  
 NEG.MOOD-tie tight=2  
 'Don't tie it tightly'

(211) a-ní-žo šāã kʷíʒa ni-xīnū **bàʔà=ka=rí** te bína tú=a  
 already-CP-exist many year CP-run well=ADD=1 and now NEG=TEMP  
 'Years ago I could run better but not any more'

Finally, the same set of pronominal clitics is also used to mark person (and other features) on body part terms in their functions as locatives and directionals (as in [212]), on prepositions (as in [213]), and on nouns as pronominal possessors (as in [214]).<sup>25</sup> The relevant phrases are set in boldface in (212)–(213).

(212) ndéʔé=rí **iči=ðe** nú=bè=ðe iči žáʔa  
 watch=1 path=3MN COND=come=3MN path here  
 'I am watching (to see) if he is coming toward here'

(213) s-ndóo na-kíʔi=Ø **xí=ri**  
 allow MOOD-go=3 with=1  
 'Let him go with me'

(214) (a) seʔe=rí 'my son'  
 son=1

(b) beʔe=ró 'your house'  
 house=2

It is clear from the following examples that in the possessive the pronominal elements are still clitics, rather than affixes, since in these cases the pronoun follows something other than the head of the NP:

(215) kačíní kʷíi=rí xísndée=Ø sik̀i mesá  
 hat green=1 be.on=3 animal.back mesa  
 'My green hat is on the table'

<sup>25</sup>It could be argued that the use of the pronouns in (212) and (213) is in fact the same as it is in (214). That is, the former may well be possessive constructions too.

- (216) xísndée ʔĩ kaxá kãʔnũ=rí sikè mesá  
 be.on one *caja* big=1 animal.back *mesa*  
 'My big box is on the table'

In (215) and (216), the pronominal clitic attaches to a NP-final adjective. However, we also find constructions like (217) and (218), in which the clitic attaches to the head of the NP, and the adjective follows:

- (217) kačíní=rí kʷíi  
 hat=1 green  
 'my green hat/My hat is green'
- (218) ni-ka-suʔú=Ø súʔnũ=ña lúú  
 CP-PL-steal=3 shirt=3F pretty  
 'Someone stole her pretty shirt'

The status of such constructions is not entirely clear: they may simply be NPs with internal clitic pronouns. On the other hand, they may include some sort of secondary predicate, in which case we would be able to say that the pronominal clitics only attach to the right margin of the NP. This is a topic which I leave for future research.

### 6.7.2. Reciprocals and Reflexives

There is no explicit marker of reciprocity in common use in Chalcatongo Mixtec. Examples (219)–(221) show the kinds of strategies that are most often employed to express the reciprocal:

- (219) ni-ka-ketáʔã=Ø  
 CP-PL-meet=3  
 'They found each other'
- (220) peðrú te xʷã ni-ka-xitáʔã=Ø  
*Pedro* and *Juan* CP-PL-fight=3  
 'Pedro and Juan fought each other'
- (221) peðrú ni-xitáʔã=Ø xí xʷã  
*Pedro* CP-fight=3 with *Juan*  
 'Pedro and Juan fought each other' (lit. 'Pedro fought with Juan')

In (219) and (220), the marking for plural subject in conjunction with the semantics of the verb suffices to express reciprocity. That is, a verb like 'meet' or 'fight' with a plural subject and no object specified may be interpreted as describing reciprocal action. Presumably, context disambiguates the reciprocal use of such constructions from the use in which there is a simple plural subject and an unexpressed object (e.g., for [220], 'they fought

[someone]’). In (221), the consultant opted for circumlocution in response to my persistent prompting for a reciprocal, splitting the plural subject into two separate arguments.

Note that both verbs used in the examples above contain the root **táʔã**. Chalcatongo Mixtec has a noun of this form meaning ‘companion’, ‘friend’ or ‘relative’, and apparently other dialects use the cognate forms semi-productively to form reciprocals (Barbara Hollenbach, personal communication). In fact, I did find a few examples of it in Chalcatongo Mixtec as well:

(222) *ká-kani táʔã xináʔa*  
 PL-hit companion plural  
 ‘They are hitting each other’<sup>26</sup>

(223) *ni-ká-ku-manì nuù táʔã*  
 CP-PL-INCHO-love face companion  
 ‘They love each other’

In (222)–(223), the noun **táʔã** makes reciprocity explicit. I have glossed it as ‘companion’, its most usual translation, but when I asked what it meant in these examples the consultant said, “entre los dos [between the two].” This, then, is probably the most explicit way of marking a reciprocal in Chalcatongo Mixtec, but nonetheless it does not seem to be all that commonly used. The speaker who provided (221), for example, did not produce any sentences with **táʔã** despite my elaborate descriptions of situations which involve reciprocal actions or emotions.

Although use of the nominal form as a reciprocal is not that common in this dialect, it is significant that it does appear as a fused part of two verbs denoting actions which are often reciprocal. Since other dialects apparently use the noun more regularly, the Chalcatongo dialect may have only recently started to eliminate it.

Reflexives are formed in Chalcatongo Mixtec using the word **máá** ‘self’, which is marked with the appropriate pronominal clitic. This is illustrated in (224)–(226):

(224) *ni-čisaʔí=rì máá=rì nuù=ðe*  
 CP-hide=1 self=1 face=3MN  
 ‘I hid myself from him’

(225) *číkú xátãʔã máá=Ø*  
*Francisco* like self=3  
 ‘Francisco likes himself’

(226) *na-taba=rì máá=rì*  
 REP-draw=1 self=1  
 ‘I’m going to draw (a picture of) myself’

<sup>26</sup>Despite the potential stem form of the verb, the sentence was translated into Spanish in the progressive: *Se están peleando los dos*. This may just have been a performance error, however.

The fact that **máá** may be the host for a clitic pronoun indicates that it is not a pronoun itself but is instead a noun. This is a case of what Faltz (1977/1985:29–34) calls a “head reflexive,” that is, one which is the head of a reflexive NP.

There is some lexical idiosyncrasy in the occurrence of **máá** with prepositions: it appears not to occur as the object of the preposition **k<sup>w</sup>entá** ‘about’ (as in [227] and [228]), but it does occur as object of **xakúu** ‘for’ (as in [229]):<sup>27</sup>

(227) ni-ndàtũ?ũ=rí xí maría k<sup>w</sup>entá ndatĩũ=rí (\*k<sup>w</sup>entá máá=rí)  
 CP-talk=1 with *María cuenta* thing=1  
 ‘I talked to María about myself’ (lit. ‘my things’)

(228) ni-ndàtũ?ũ=rí xí maría k<sup>w</sup>entá ndatĩũ=ñá (\*k<sup>w</sup>entá máá=ñá)  
 CP-talk=1 with *María cuenta* thing=3F  
 ‘I talked to María about herself’ (lit. ‘her things’)

(229) ro?o sá?a=ro xakúu máá=ro  
 you do=2 for self=2  
 ‘You do it for yourself’

There are a few verbs which are lexically middle voice and so require no overt marking of the reflexive. (230)–(231) illustrate (see also the discussion in §3.1.3):

(230) ni-kùnduxi=Ø  
 CP-bury.self=3  
 ‘S/he buried him/herself’

(231) ni-kindí?u=rí inì be?e  
 CP-lock.in.self=1 insides house  
 ‘I locked myself in the house’

There are also verbs like **sete** ‘shave’, which allow for middle voice as the unmarked or default reading when no overt object is present, but this may be as much a function of pragmatics as semantics:

(232) sete=ro  
 shave=2  
 ‘You are shaving yourself’

(233) sete=rí šíni=rí xa-ñíni  
 shave=1 head=1 NOM-late  
 ‘I’ll shave myself in a little while (in the afternoon)’

<sup>27</sup>Amy Dahlstrom (personal communication) suggests that this may not be due to choice of preposition but rather to the semantics of the verb. I leave this an open question.

**máá** also has an emphatic use, as illustrated in (234)–(236):

- (234) *máá xíʔi=ðe*  
 EMPH drink=3MN  
 ‘That one, he’s drinking’
- (235) *máá=rí kačáʔa*  
 EMPH=1 dance  
 ‘It’s me who will dance’
- (236) *máá=ðe ni-xaʔa=ðé taʔu=rí*  
 EMPH=3MN CP-give=3MN hit=1  
 ‘As for him, he hit me’

Note that a sentence containing the emphatic **máá** may include a verb with a clitic pronoun functioning as subject, as in (234). The emphatic phrase (**máá** plus clitic) may also function as a focused subject, as in (235), in which case the verb does not carry a pronominal clitic. Finally, as a third option, the sentence may contain both a verb with a clitic pronoun attached (the subject argument) and a topicalized emphatic as well (as in [236]).

## 6.8. Sentence Structure and Clitic Placement

The structure of the basic Chalcatongo Mixtec main clause and placement of the phrasal affixes as it has been developed in this chapter is summarized in (237):

- (237) TP[[TOPIC] S[[[NEG.FOC] [FOC]] NEG=S[V'[(ADV) V (ADV)]=ADD/RES=PRO (XP\*)]]]

(237) shows that the clause may consist of an initial topic, which is not an argument of the predicate (although it may have the same reference as one of the arguments), and a S'. This S' may contain first a focused constituent (which may be negated by a special focus negator, **niàsù**), and the S. The S has an initial V', which contains the verb, and slots for phrase-initial and final adverbs. The additive and restrictive clitics and the pronominal subject-marking clitics attach as phrasal affixes to this V', in that order. Following the V', there may be one or more arguments of any category.

The schema in (237) assumes a verbal predicate, although, as we have seen, it is possible to use other lexical categories predicatively. The structure of such sentences is in most respects the same as it is with a verbal predicate, and so the structure above can be generalized to cover them as well. Also note that (237) includes a position for a clitic pronoun as subject, but recall that a full, nonpronominal NP can appear in postverbal subject position instead.



## COMPLEX SENTENCES

This chapter presents the syntax of complex sentences in Chalcatongo Mixtec. §7.1 covers coordination (including conjunction and disjunction), while §7.2 presents a wide variety of different types of subordination (including sentential complements to verbs, purpose and result clauses, relative clauses, conditionals and counterfactuals, and embedded questions).

### 7.1. Coordination

This section describes the primary means in Chalcatongo Mixtec of creating conjunction and disjunction (which make use of the forms **te** ‘and’ and **ši** ‘or’, respectively). It also covers the expression of contrast and antithesis, which employs both the native word **bàʔà** ‘but’ and the Spanish borrowing **pero**, also meaning ‘but’. Finally, an idiomatic construction is presented in which the form **čáʔā=ka** is conjoined to a positive sentence, with the result meaning ‘not yet’.

#### 7.1.1. Conjunction

The primary coordinator in Chalcatongo Mixtec is **te** ‘and’. Examples (1)–(5) illustrate coordination of clauses, NPs, VPs, APs, and locative expressions, respectively.<sup>1</sup>

- (1) xíta=ðe te xicáʔá=ña  
 sing=3MN and dance=3F  
 ‘He sings and she dances’

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<sup>1</sup>Actually, there are multiple analyses possible for most of these sentences. For example, (3) could be interpreted as a conjoined S’ instead of as two VPs, and (4) as conjoined clauses (as in [1]), instead of APs. No important points rest on which analysis is chosen for each example here.

- (2) *maría te x<sup>wā</sup> ká-xita=Ø*  
*María and Juan PL-sing=3*  
 ‘María and Juan are singing’
- (3) *maría xíta=Ø te xičá?á=Ø*  
*María sing=3 and dance=3*  
 ‘María is singing and dancing’
- (4) *kã?nũ=ñã te sũkũ=ñã*  
*fat=3F and tall=3F*  
 ‘She is fat and she is tall’
- (5) *íí šãã čókó inì kaxá te sikì kaxá*  
*be.located many ant insides caja and animal.back caja*  
 ‘There are many ants in the box and on the box’

Coordinated clauses may have different subjects expressed by pronominal clitics (as in [1], above), may each have a distinct topic NP (as in [6]), or may each have a distinct post-verbal subject (as in [7]):

- (6) *xasi?í wãá žéé=Ø tástila te žó?ó ká-nde?e=žo*  
*woman that eat=3 bread and we PL-see=1PL*  
 ‘That woman is eating the bread and we are watching her’
- (7) *na-xá?a ušì k<sup>wí</sup>a te čaà stoð=rí*  
*MOOD-pass ten year and come uncle=1*  
 ‘Ten years will pass and then my uncle will come’

Alternatively, the two clauses may share a subject, as in the examples below. In some cases, the shared subject is repeated in each clause, as in (8), while in other cases there is a single shared topic, as in (9). (The conjoined clauses are bracketed in each example.)

- (8) *[ni-čundee=rí inì bolsá=rí] te [k<sup>wā</sup>?ã=rí]*  
*CP-put.in=1 insides bolsa=1 and go=1*  
 ‘I put (it) in my bag and I left’
- (9) *peðrú [[ni-kíí=Ø be?e=rí] te [k<sup>wā</sup>?ã=Ø]]*  
*Pedro CP-come=3 house=1 and go=3*  
 ‘Pedro came to our house and then he left’

Some examples of conjoined clauses show combinations of subject-marking strategies. A very common form is for the first clause to have a postverbal subject while the second clause has a topic. (10) and (11) illustrate:

- (10) a-ni-kéndá žòè te ndí?i žúnú ká-xíto=Ø lúú  
 TEMP-CP-exit moon and all tree PL-seem=3 pretty  
 'The moon has come out and all the trees look pretty'
- (11) ni-kexá?á tačí te ndí?i ítu tá?nu=Ø  
 CP-begin wind and all corn break=3  
 'The wind is starting and all the corn will break'

Another possibility is to have an overt postverbal subject in one conjunct but not in the other, as in (12) and (13):

- (12) k<sup>w</sup>á?á te kii=ro bina núnúni  
 go and come=2 right.away  
 'Go and come right back'
- (13) íža sí?i ndúkoo=ži te ná-k<sup>w</sup>atu=Ø  
 god feminine sit=3POL.DEC and REP-pray=3  
 'The Virgin is sitting and praying'

The construction in (12), which contains a verb with an overt person-marker in the second clause, is most often found in imperatives. The first verb in such a sentence is in imperative form, and so occurs without a person-marker. It is conjoined with a statement about what the hearer will do after complying with the imperative, and the second verb therefore does bear a person-marking clitic. This construction of course is restricted to second person.

In (13), however, we see a somewhat less common pattern. In this example, the first conjunct has both a topic and an overt clitic, while the second conjunct has a zero clitic. In sentences like this one, the speaker is explicit about the noun classification of the third person subject in the first conjunct but then reverts to the general third-person marker in the second conjunct. (Alternatively, of course, we could say that there is no marking on the second conjunct, and that the person-marking clitic has been elided. There is no way to tell which of these alternatives is correct, since both involve the absence of phonetic content.)

Another common use of **te** is conjunction of a hypothetical statement and its contradiction (a case in which we would probably use 'but' in English). Often in such examples, the first clause has the counterfactual clitic =**nú** attached. (14)–(15) illustrate this use of **te**:

- (14) a-bèl=Ø xí=ná=nú te ni-ndòò=Ø iči žáta  
 TEMP-come=3 with=1POL=CFACT and CP-stay=3 path human.back  
 'He was going to come with me, but he stayed behind'
- (15) nì-ki-kéé=Ø stáa te tú=ní-žéé=Ø  
 CP-come-eat=3 tortilla and NEG=CP-eat=3  
 'He came to eat, but he didn't eat anything'

There is, of course, often a relationship of temporal sequence between the two conjuncts. For example, in (16), below, the second conjunct is a clause expressing a desired outcome of the first, and in (17) the first clause expresses a condition for occurrence of the second:

(16) *sáʔa bàʔà=žó te na-k<sup>w</sup>áá=Ø xináʔa*  
 make good=1PL and MOOD-buy=3 plural  
 ‘We’ll repair it so that they will buy it’

(17) *na-čáa táa=ri te kási inì=žó*  
 MOOD-come father=1 and eat insides=1PL  
 ‘As soon as my father comes, we’ll eat’

Finally, coordinate structures often exhibit ellipsis of various constituents in the second conjunct, as shown in (18)–(19):

(18) *maría xíta=Ø te x<sup>w</sup>ā súní*  
*María* sing=3 and *Juan* too  
 ‘María sings and Juan does too’

(19) *x<sup>w</sup>ā ni-xáʔā=Ø sk<sup>w</sup>elá ndékiù te róʔo tuù*  
*Juan* CP-go=3 *escuela* every.day and you no  
 ‘Juan went to school every day but you didn’t’

### 7.1.2. Disjunction

The native word meaning ‘or’ in Chalcatongo Mixtec is *ši*, as illustrated in the following examples:

(20) *kúžaa=Ø ĩ ĩ ši uù kiù*  
 be.located=3 one or two day  
 ‘She’ll be here for one or two days’

(21) *na-tùʔū k<sup>w</sup>aʔa=ró maría, žáá=ñā čakú=ñā ši noð ní-kuu xí=ñā*  
 what-word give=2 *María*, live=3F alive=3F or what CP-be with=3F  
 ‘What can you tell me about María—is she alive, or what has happened to her?’

(22) *kusámá=rí žáʔa ši kíʔī=rí restauran*  
 eat=1 here or eat=1 *restaurán*  
 ‘I’ll eat here or go to a restaurant’

A sentence containing disjunction of the form “neither X nor Y” can be constructed using *te* ‘and’ to conjoin two negative clauses, as in (23):

- (23) tú=kú=Ø kã?ã=Ø te tú=xíni so?o=Ø  
 NEG=can=3 speak=3 and NEG=know ear=3  
 ‘He can’t speak or hear’ (lit. ‘He can’t speak and he can’t hear’)

Finally, the Spanish borrowing *o* (‘or’) is also used in some cases:

- (24) ža?á kúú xa=kúú čàà o xa=kúú xa-si?í  
 this COP COMP=COP man o COMP=COP NOM-feminine  
 ‘Is this (animal) a male or a female?’

### 7.1.3. Contrast and Antithesis

The native word for ‘but’ in Chalcatongo Mixtec is **bà?à**, as illustrated in (25)–(26), below. Speakers use the Spanish word *pero* with almost equal frequency, though, as in (27)–(28):

- (25) peðrú kii=Ø xí=žo=nú bà?à tú=a-ni-kíí=Ø  
*Pedro* come=3 with=1PL=CFACT but NEG=TEMP-CP-come=3  
 ‘Pedro was supposed to come with us, but he didn’t come’
- (26) maría xátã?ã=Ø kátá=Ø bà?à tu=xátã?ã=Ø kačá?á=Ø  
*María* like=3 sing=3 but NEG=like=3 dance=3  
 ‘María likes to sing, but she doesn’t like to dance’
- (27) maría xátã?ã=Ø kučá?á=Ø pero rù?ù tu=xátã?ã inì=ri  
*María* like=3 dance=3 *pero* I NEG=like insides=1  
 ‘María likes to dance, but I don’t like to’
- (28) ndúkoo=Ø wãã pero luego k<sup>w</sup>ã?ã=Ø  
 sit=3 there *pero luego* go=3  
 ‘He was sitting there, but then he left’

As noted in §7.1.1, the relationship between clauses expressed in English by ‘but’ may also be expressed in Mixtec through conjunction with **te** ‘and’ (as in examples [14] and [15], above).

### 7.1.4. ‘Not Yet’

A special construction is used in Chalcatongo Mixtec to express the notion ‘not yet’: **čá?ã=ka te [S]**, where “[S]” indicates sentence. The first word appears to have the additive enclitic =**ka** attached (see §6.6.3), but the meaning of the root itself is unclear, since it appears only in this construction. This form (**čá?ã=ka**) is always conjoined to a positive

sentence in potential aspect, with the resultant meaning ‘it is not the case that X yet’, as illustrated in (29)–(31):

- (29) čǎʔǎ=ka te kíʔī=ri  
not.yet=ADD and go=1  
‘I haven’t gone yet’
- (30) čǎʔǎ=ka te xaà miguel  
not.yet=ADD and arrive *Miguel*  
‘Miguel hasn’t arrived yet’
- (31) čǎʔǎ=ka te ku=∅ kée=∅ xináʔa  
not.yet=ADD and can=3 eat=3 plural  
‘They can’t eat yet’

The construction **čǎʔǎ=ka te [S]** appears in subordinate clauses as well as in main clauses, in which case it is preceded by the subordinator **xa=** (see §7.2.1, below). (32)–(33) illustrate:

- (32) žóʔó ka-xani inì=žo xa=čǎʔǎ=ka te kíʔī=ña  
we PL-think insides=1PL COMP=not.yet=ADD and go=3F  
‘We think that she didn’t go yet’
- (33) xáni inì=rí xa=čǎʔǎ=ka te kenda=∅  
think insides=1 COMP=not.yet=ADD and exit=3  
‘I think he hasn’t left yet’

Finally, on rare occasions, **=ka** is omitted, and **čǎʔǎ** appears alone (but, as always, conjoined to a sentence which is not itself marked with a negative):

- (34) čǎʔǎ te kexáʔa=∅ kačáʔa=∅ xináʔa  
not.yet and begin=3 dance=3 plural  
‘They haven’t started to dance yet’

## 7.2. Subordination

Before considering the types of subordinate clauses found in Chalcatongo Mixtec, one difference in word order from that illustrated in Chapter 6 should be noted. Basic word order in subordinate clauses is identical to basic word order in main clauses (VSO), but in subordinate clauses only one initial constituent may occur. Recall from Chapter 6 that the topic in Chalcatongo Mixtec is a clause-external topic. Because of this, it cannot occur in an embedded sentence, and this accounts for the fact that one never finds subordinate clauses with two preverbal constituents. Further evidence that the one preverbal position in

a subordinate clause is a focus position is provided by the fact that the focus negator, **niàsù**, can occur in this position, as shown in (35):

- (35) x<sup>wā</sup> kéé=Ø xa=nia<sup>s</sup>u maría tandaʔá xí péðrú  
 Juan say=Ø COMP=NEG.FOC María marry with Pedro  
 Juan says that it's not María who is marrying Pedro

This section, then, presents five categories of subordinate clause: subordination with the complementizer **xa=** (§7.2.1), conditionals and counterfactuals (§7.2.2), comparatives and superlatives (§7.2.3), embedded questions (§7.2.4), and, finally, a section on other subordinators (§7.2.5).

### 7.2.1. Subordination with **xa=**

Chalcatongo Mixtec makes use of a multipurpose complementizer **xa=**, which is described in §7.2.1.1. In the sections after that, particular types of subordination which make use of this complementizer are described.

#### 7.2.1.1. Complementizer **xa=**

The complementizer **xa=** is a monosyllabic phrasal affix which introduces subordinate clauses and has no corresponding full form.<sup>2</sup> It precedes the subordinate clause, attaching to the first constituent in the clause, whether that constituent is the predicate or a preverbal element. In (36) and (37), below, **xa=** introduces a verb-initial subordinate clause, and in (38) and (39) it introduces a NP-initial subordinate clause. Note also that **xa=** appears to be a tonal perturber (recall §2.5) for some speakers (e.g., in [38] and other examples below), but not for others (e.g., in [36], [37], and [39]).

- (36) x<sup>wā</sup> nì-kunì=Ø xa=nà-šuk<sup>wí</sup>í=rí  
 Juan CP-want=3 COMP=REP-turn=1  
 'Juan wanted me to go back home'
- (37) sáʔa xa-siʔí wáã xa=na-sá-k<sup>wí</sup>ti=Ø  
 make NOM-feminine the COMP=MOOD-CAUS-short=3  
 'Make the woman shorten (it)'
- (38) ni-xìni=rí xa=úu xa-siʔí lúlí ká-ndeʔe núu=rí  
 CP-know=1 COMP=two NOM-feminine little PL-look face=1  
 'I knew that two girls were looking at me'

<sup>2</sup>See Hollenbach (1990) for a comparative study of **xa=** and its cognates and equivalents across the Mixtecan languages. Hollenbach argues that it is the use in headless relatives (see §7.2.1.4) which represents the original function of the element.

- (39) kuní=ri xa=x<sup>wā</sup> na-kí-no?o bé?e  
 want=1 COMP=*Juan* MOOD-come-go.and.return house  
 'I want Juan to go home (and come back)'

Occasionally, **xa=** may occur in an apparent main clause in deontic mood (see §4.3), which usually also contains the mood-marking prefix **na-**. This is illustrated in example (40) and is interpreted as having an implicit main clause expressing the will of the speaker (something like 'I want'). This unstated or implied main clause accounts for the occurrence of the complementizer.

- (40) xa=na-kándía=Ø  
 COMP=MOOD-believe=3  
 'She must/has to believe (it)'

The complementizer **xa=**, as mentioned in §3.3.2, is homophonous with the nominalizer **xa-** (which we see in words like **xa-si?ɬ** 'woman'; literally 'NOM-feminine'). As Hollenbach (1990) argues, it is extremely likely that the two morphemes have a common origin. She treats the nominalizing use as a relativizer, glossing examples like **xa-si?ɬ** as 'the one who is feminine'. She considers this the basic function of **xa=** (or, more properly, its cognates across the thirteen dialects she examines), and argues that all other uses are synchronically related to this one: "son usos diversos del mismo morfema [they are diverse uses of the same morpheme]" (1990:1). While I agree that the complementizer and the nominalizer are clearly diachronically related, in Chalcatongo Mixtec the two forms do not have the same synchronic morphological status. They have different distributions: one is a phrasal affix, and the other is a derivational affix. Furthermore, Mixtec subordinate clauses show no morphological indication of being nominalized (e.g., person marking appears on the verb within the clause, rather than at the end, as we would expect if the whole clause were a nominal). Thus, they must be differentiated in a synchronic account of Chalcatongo Mixtec.

#### 7.2.1.2. Sentential Complements to Verbs

Sentential complements to verbs in Mixtec may be introduced by the complementizer **xa=** or may have no complementizer at all. Complementizer type (**xa=** or zero) is in general determined by whether the subjects of the two clauses are the same or different, although no strict rule governing the appearance or nonappearance of **xa=** can be established.

When the subjects are the same, it is most common to have a zero complementizer, as in (41)–(46). The verb in such a subordinate clause can be in potential or in realis aspect and almost always carries person marking.

- (41) kuní=rí kée=rí  
 want=1 eat.P=1  
 'I want to eat something'



- (42) xǎtǎ?ǎ inì=rí kũnú=rí  
like insides=1 run.P=1  
'I like to run'
- (43) náá iní=ri kundá?a=rí šũ?ũ  
lose insides=1 carry.P=1 money  
'I always forget to bring money'
- (44) ni-kexá?á=Ø xíči=Ø  
CP-start=3 bathe.R=3  
'He started to bathe'
- (45) ni-s-ndí?i=rí ni-žéé=rí staà  
CP-CAUS-finish=1 CP-eat.R=1 tortilla  
'I finished eating'
- (46) čǎ?ǎ=ka te kexá?á=Ø kačá?a=Ø xiná?a  
not.yet=ADD and start=3 dance.P=3 plural  
'They haven't started to dance yet'

Occasionally, however, the complementizer **xa=** does appear in a same-subject construction, as shown in (47)–(48):

- (47) kuní=ri xa=ketá?ǎ=rí xī kú?u=rí  
want=1 COMP=meet=1 with sister=1  
'I want to find/meet up with my sister'
- (48) xiní=ri xa=tú=kú sá?a=rí  
know=1 COMP=NEG=can do=1  
'I know that I can't do (it)'

When the subjects of the two clauses are different, the complements of such verbs are almost always introduced by **xa=**, with one exception, as noted below. Again, the verb in the subordinate clause may be in either realis or potential aspect. We have seen some examples of this construction in (36)–(39); (49)–(52) provide a few more:

- (49) kuní=ri xa=ná-kí?i=ro  
want=1 COMP=MOOD-go.P=2  
'I want you to go'
- (50) žú?ú=Ø xa=kúu táa  
be.afraid=3 COMP=die.P father  
'He is afraid that his father will die'

- (51) tú=kandía=rí xa=ní-xi?i=Ø  
 NEG=believe=1 COMP=CP-die.R=3  
 'I don't believe that he died'
- (52) ni-kèe=ri xà=kíí=Ø žá?a šíã  
 CP-tell=1 COMP=come=3 here tomorrow  
 'I told you that he was coming here tomorrow'

The exception to the tendency toward presence of **xa=** when the subjects of the two clauses are different involves imperatives. When an imperative has a following subordinate clause—whether the two clauses have the same or different subjects—the complementizer **xa=** is far more likely to be omitted than in nonimperatives with different subjects. (53) and (54) show imperatives with no complementizer; (55) and (56) show imperatives with **xa=**:<sup>3</sup>

- (53) s-ndoo na-kí?i=Ø xí=ri  
 allow MOOD-go=3 with=1  
 'Let him go with me'
- (54) kěĩ se?e=ró na-kúsú=Ø  
 put child=2 MOOD-sleep=3  
 'Put your child down to sleep'
- (55) sá?a xa=na-čá?u=Ø  
 make COMP=MOOD-pay=3  
 'Make him pay'
- (56) k<sup>w</sup>á-keè xiní ñanì=ro xa=tú=kí?i=ri  
 go-say know brother=2 COMP=NEG=go=1  
 'Go tell your brother that I am not going'

Thus, the presence or absence of the complementizer **xa=** in verbal complements is to a large extent governed by whether the subjects of the two clauses are the same or different. However, as we have seen, this is a tendency rather than a rule, and exceptions do exist.

### 7.2.1.3. Purpose and Result Clauses

Clauses of purpose or result are almost always introduced by **xa=** ([54], above, is an exception to this). (57) and (58) show cases in which the subjects are the same, and (59) and (60) provide cases in which the subjects are different:

<sup>3</sup>In (55) we see that it is not the presence of **na-** (the deontic mood prefix) which causes the absence of **xa=**, since this example shows the two co-occurring.

- (57) wáã ni-kuu ħ̃ parájé nuù ní-ka-ndùkoo=Ø xa=ní-ka-ndendàtu=Ø xínáʔa  
 there CP-COP one *paraje* face CP-PL-be.seated=3 COMP=CP-PL-rest=3 plural  
 ‘There, there was a spot in which they sat to rest’
- (58) ni-kíí=Ø xa=kéé=Ø staà  
 CP-come=3 COMP=eat.P=3 tortilla  
 ‘She came to eat’
- (59) ni-xàʔà=ri xa=ní-žee seʔé=rí  
 CP-give=1 COMP=CP-eat.R child=1  
 ‘I gave (food) so that my child could eat’ (elicited: ‘I gave food to my baby’)
- (60) ni-xáá=rí žaʔa xa=sáʔa náa=ri molí  
 CP-buy=1 chile COMP=make mother=1 *mole*  
 ‘I bought chiles so that my mother could make mole’

As the contrast between (58) and (59) shows, the purpose or result clause may be in either potential or realis aspect, depending on the situation portrayed.

#### 7.2.1.4. Relative Clauses

The complementizer **xa=** also functions as a relative pronoun in Chalcatongo Mixtec, as illustrated in (61)–(64). It is occasionally omitted in relative clauses, however, as in (65)–(66). The relative clause itself (bracketed in the examples below) follows the head noun and has the usual word order, except that the constituent which is coreferential with the head is not overtly present.

- (61) ndeʔe čàà [xa=xíndii žata xa-síʔi]  
 look man COMP=stand human.back NOM-feminine  
 ‘Look at the man who is standing behind the woman’
- (62) ni-ndukoo=rí nu mesá [xá=ni-ndaxi]  
 CP-sit=1 face *mesa* COMP=CP-wet  
 ‘I sat on a table which was wet’
- (63) kũñũ [xa=ní-žee=rí] kaa žíʔi  
 meat COMP=CP-eat=1 COP raw  
 ‘The meat that I ate was raw’
- (64) ni-ku báʔa šáã ñúũ [xa=ní-ku bína]  
 CP-COP good very town COMP=CP-INCHO now  
 ‘The town that it has become now is very good’

(65) wāá kú ĩ čàà [sáʔa tastilá]  
 that COP one man make bread  
 'He's a man who bakes bread'

(66) wāá kú čàà [kana=rí]  
 there COP man call=1  
 'There's the man who I will call'

(67) provides an example of relativization across two clause boundaries.

(67) beì=ná k<sup>w</sup>entá ĩ ndatíũ [xà=kuní=ná [ndatũʔũ=na xíí=ní]]  
 come=1POL *cuenta* one thing COMP=want=1POL discuss=1POL with=2POL  
 'I am coming (to you) about a thing that I want to discuss with you'

Obliques may also be relativized, although in general this is avoided. The strategy which strikes consultants as most natural is to place the body part term marking the grammatical relation before the head noun, as in (68)–(69). The only examples I have found of this strategy, however, contain **nuũ** 'face'.

(68) nuũ xá-siʔí [xa=peðrú šíkú kũñũ] ká kúʔu  
 face NOM-feminine COMP=*Pedro* sell meat COP sick  
 'The woman who Pedro sells meat to is sick'

(69) nuũ xá-siʔí [xa=peðrú ni-xaʔa kũñũ] ká káʔnũ  
 face NOM-feminine COMP=*Pedro* CP-give meat COP fat  
 'The woman who Pedro gave the meat to was fat'

In these examples, we see that the body part term which marks the indirect object relationship appears in the main clause, rather than in the subordinate clause (either stranded by itself or adjacent to the relative pronoun). Such a construction seems to argue for a more literal reading of the body part term as a location, rather than as a purely grammatical or function morpheme. That is, it is the location described as 'face woman' (her front, the part facing the speaker or the agent of the action) which is being described as 'sick' or 'fat', and this is why the locative body part term appears in the main clause. As we see below, no marking of the grammatical relation of the head to the predicate is required in the relative clause itself, and this is why **nuũ** 'face' does not appear in the subordinate clause. (Further discussion of body part terms used as locatives is presented in §8.2.)

Examples of relativized obliques without this kind of marking in the main clause are hard to find. The only examples I have been able to elicit are relativized instruments, and in one case an indirect object. It should be stressed that I have not found such examples spontaneously occurring in narratives or conversations, indicating that they are probably somewhat forced. Nonetheless, some interesting patterns of grammaticality emerge from these elicited examples. First, there is no overt marking of oblique status within the relative clause, as illustrated in (70)–(71):

- (70) žučì [xa=ní-xaʔña=rí kùñù] tú=xáʔña  
 knife COMP=CP-cut=1 meat NEG=cut  
 'The knife that I cut the meat with was dull'
- (71) wáã kú xa-siʔí [xa=peðrú ku kʷaʔa žuù]  
 there COP NOM-feminine COMP=*Pedro* can give rocks  
 'There is a woman that Pedro can give rocks to'<sup>4</sup>

No preposition or body part term occurs in these examples to mark the particular grammatical relation borne by the element which is relativized. That is, there is nothing stranded in the subordinate clause, nor is there anything fronted to a position adjacent to the relative pronoun **xa=**. Consultants differ in their judgments about whether or not a sentence is grammatical if a body part term is stranded within the relative clause, as illustrated by (72) and (73) (produced by two different speakers). As shown, both contain **nuù** 'face', yet one speaker judged (72) to be grammatical, while another judged (73) to be ungrammatical.

- (72) máá=ña ná-kuni čàà [xa=ní-xini=ro nuù]  
 EMPH=3F REP-know man COMP=CP-know=2 face  
 'It's *she* who recognizes the man that you knew'<sup>5</sup>
- (73) \*xa-siʔí [xa=peðrú ni-xaʔa kùñù nuù] ká káʔnū  
 NOM-feminine COMP=*Pedro* CP-give meat face COP fat  
 'The woman who Pedro gave the meat to was fat'

In one example, however, the body part term itself seems to function as the relativizer, replacing **xa=**:<sup>6</sup>

- (74) wáá kú ñúʔú [nuù ní-čiʔi=rí itù=rí]  
 that COP land face CP-plant=1 crop=1  
 'That is the land where I planted my crops'

A common alternative to the construction of relativized obliques is conjunction, as in the following:

<sup>4</sup>As stated in the text, these sentences are somewhat forced, which accounts for the silliness in the content of this particular sentence. It came up during a session in which I was trying to elicit relative clauses, although I do not remember exactly how this particular scene arose. However, it *is* grammatical and so is included to illustrate the point.

<sup>5</sup>The verb 'know' often takes a complement marked by **nuù** 'face'.

<sup>6</sup>Barbara Hollenbach (personal communication) suggests another analysis for sentence (74): she believes that the clause beginning with **nuù** is actually a headless relative, in which **nuù** means something like 'the place where'. Under this analysis, the headless relative clause is in apposition to the noun **ñúʔú** 'land'.

- (75) *rùʔù xíní=ri seʒíí peðrú te wǎǎ k<sup>w</sup>ǎǎ beʔe xakúu=Ø*  
 I know=1 son *Pedro* and that buy house for=3  
 ‘I know Pedro’s son, and he (that one) will buy a house for him’  
 (elicited: ‘I know the child who Pedro will buy a house for’)

Finally, headless relative clauses are constructed in the same manner as are headed ones and are always introduced by **xa=**. (76)–(78) illustrate:

- (76) *xǎtǎʔǎ=ka=rí asù [xa=ní-ʒúbaʔa=rí]*  
 like=ADD=1 than COMP=CP-have=1  
 ‘I like it better than the one that I used to have’
- (77) *rùʔù kuní=rí [xa=xíʒaa núu]*  
 I want=1 COMP=be.located face  
 ‘I want the first one’
- (78) *noò kú [xa=ní-xaʔa peðrú nuù maría]*  
 what COP COMP=CP-give *Pedro* face *María*  
 ‘What did Pedro give María?’ (lit. ‘What is it that Pedro gave to María?’)

Example (78) illustrates a very common method of forming WH-questions (see §6.5.2), in which the question is phrased as a kind of WH-cleft and contains a headless relative.

### 7.2.2. Conditionals and Counterfactuals

Conditionals and counterfactuals form overlapping categories in Chalcatongo Mixtec. Conditionals are marked by a proclitic phrasal affix **nú=**, which appears sentence-initially (in a position before the focus, if there is one, or before the verb if there is no focused NP). The antecedent can precede or follow the consequent and is often in deontic mood (marked with the prefix **na-**, as described in §4.3). (79)–(82) illustrate:

- (79) *nú=wǎǎ na-sáʔa=Ø ku síi šǎǎ iní=ri*  
 COND=that MOOD-do=3 COP happy much insides=1  
 ‘If he would do that, I’d be very happy’
- (80) *nú=na-xaà=Ø ku síi šǎǎ iní=ri*  
 COND=REP-arrive=3 COP happy much insides=1  
 ‘If he would return, I’d be very happy’
- (81) *ku síi iní=ri nú=toʔò wǎǎ ki-nóʔo nákunúū*  
 COP happy insides=1 COND=man that come-go.and.return soon  
 ‘I’d be happy if that man would go home soon’

- (82) *bàʔà=kà nu=na-kíʔĩ=ro šíã*  
 good=ADD COND=MOOD-go=2 tomorrow  
 'It would be better if you went tomorrow'

Counterfactual conditionals are also constructed with the proclitic **nú=** but, in addition, contain a phonologically identical *enclitic* =**nú**, which appears to the extreme right of the antecedent, as shown in (83)–(84). Also note that in these examples **nú=** appears to be a perturber, which it was not in the examples above. I do not have enough examples of counterfactual conditionals to determine if this is significant or not, however.

- (83) *nú=rúʔù žúbaʔa šũʔú=nú . . .*  
 COND=I have money=CFACT  
 'If I had a lot of money . . .'
- (84) *nú=ní-xítu=kà=ri tíʔa=nu bina ñúʔni kúñábaʔa=kà=žó xoð šũʔũ*  
 COND=CP-work=ADD=1 a.little=CFACT right.now keep=ADD=1PL few money  
 'If I would have worked a little more, now we would have saved some money'

Counterfactuals which are not conditional are usually formed with the enclitic =**nú** only. This construction often translates as 'supposed to' or 'used to'.<sup>7</sup>

- (85) *peðrú kii=Ø xí=žo=nú baʔa tú=ni-kíí=Ø*  
*Pedro* come=3 with=1PL=CFACT but NEG=CP-come=3  
 'Pedro was going to come with us, but he didn't'
- (86) *íkú ta-ní-k<sup>w</sup>a rúʔù sátíũ=rí=nú*  
 yesterday ?-CP-dark I work=1=CFACT  
 'Last night I was supposed to work (but I didn't)'
- (87) *x<sup>w</sup>ã ni-sátíũ=nu*  
*Juan* CP-work=CFACT  
 'Juan used to work (but now he doesn't)'

Occasionally, however, a plain counterfactual will be marked with the proclitic **nú=**, instead of the enclitic =**nú**, as in the following:

- (88) *nú=ní-ká-xãʔã=žo ndíxinu*  
 COND=CP-PL-go=1PL Tlaxiaco  
 'We would have gone to Tlaxiaco'

<sup>7</sup>The second word in (86), *ta-ní-k<sup>w</sup>a* is usually used to mean 'good evening'. The element *ta-* appears in fixed greeting expressions and may be a frozen vocative. (Other dialects have productive quotatives and vocatives; e.g., Jicaltepec has four: *-tá*, *-na*, *-tí*, and *-to* [Bradley 1970:39].) The use of what is normally a greeting in example (86) is unexplained, however.

(88), continued:

pero tú=ni-kúu čì a-ní-kuʔu náa=rí  
 pero NEG=CP-can because TEMP-CP-sick mother=1  
 but we couldn't because my mother was sick'

Note that this instance of **nú=**, as in the counterfactual conditionals of (83)–(84), also perturbs the tone of the following syllable. It may be that the counterfactual construction involves not only addition of the enclitic =**nú** but also the addition of a floating H tone to the proclitic **nú=** (should it appear), and, furthermore, that occasionally only the latter operation is carried out in forming a counterfactual.

### 7.2.3. Comparatives and Superlatives

This section addresses comparatives of degree, comparatives of likeness, and superlatives. First, comparatives of degree in Chalcatongo Mixtec consist of two parts, the first of which almost always contains the additive or restrictive marker, and the second of which is introduced by a term meaning 'than'. The most common connective is the subordinator **asù** 'than', but the body part term **nuù** 'face' is also used in this function.

With **asù** 'than', the two halves are interpreted as clauses. The second clause generally consists on the surface of only a single NP (representing the standard of comparison) but is understood as containing the same predicate as the first clause. We have already seen a few examples of comparatives which use **asù** in §6.6.3; (89) and (90) provide two more examples:

(89) rùʔù sùkú=ka=rí asù roʔo  
 I tall=ADD=1 than you  
 'I am taller than you'

(90) xìka žáʔa kíʔi=ka=Ø tek<sup>w</sup>ite asù ħí=ka wáã  
 basket this take=ADD=3 potato than one=ADD there  
 'This basket holds more potatoes than the other one there'

In some cases, **niàsù**, the focus negator (see §6.4.2), appears instead of **asù**. This lends credence to the hypothesis that the latter is the root of the former. The semantics seems to be of this form: A statement is true about one item; it is not the case that it is true about the other.<sup>8</sup> (91)–(92) illustrate:

(91) žíki žáʔa bèè=kà niàsù ħí=ka žaʔá  
 pumpkin this heavy=ADD NEG.FOC one=ADD this  
 'This pumpkin is heavier than this other one'

<sup>8</sup>An anonymous reader points out that this is similar to the expletive *ne* of literary French, as in *plus grand que je ne le croyais* 'bigger than I thought it was'.



- (92) xa-lúlí žá?a sūkú=ka niàsù ħ=ka  
 NOM-small this tall=ADD NEG.FOC one=ADD  
 ‘This boy is taller than the other one’

The body part term **nuù** ‘face’ is also used in comparatives, as in (93)–(95):

- (93) rù?ù sūkú=ri tí?a nuù=ro  
 I tall=1 a.little face=2  
 ‘I am a little taller than you’
- (94) xa-lúlí ká-kana xí=ka nù xa-si?i lúlí  
 NOM-small PL-call with=ADD face NOM-feminine little  
 ‘The boys yelled more than the girls’
- (95) maría lúú=ka nù rosa  
 María pretty=ADD face Rosa  
 ‘María is prettier than Rosa’

With **nuù**, like **asù**, the standard of comparison always consists of a single NP. However, in this case the standard of comparison does not appear to constitute a reduced clause. Rather, the comparison is simply made with the addition of the NP consisting of the body part term and its object. Evidence for the difference in status between the *than*-phrase in an **asù** comparative and a **nuù** comparative comes from the form that a pronominal standard of comparison takes: notice that in (89), with **asù**, the pronoun is in full form, while in (93), with **nuù**, it is in clitic form. My hypothesis is that in comparatives with **asù**, the NP represents the focus of the reduced second clause. Recall from §6.7.1 that pronouns in topic or focus position always appear in full form. However, when the standard of comparison in a comparative with **nuù** is pronominal, it appears in clitic form and thus cannot be the focus of a clause that has undergone ellipsis. This leads to the conclusion that the NP (or pronoun) following **nuù** is the second half of a NP + NP construction (as discussed in §6.2), rather than what is left of a second clause after ellipsis.<sup>9</sup>

Comparison can also be expressed through conjunction of contrasting clauses, as in (96):

- (96) rù?ù ñába?a=rí xoð=ka šũ?ũ te máá=Ø ñába?a=Ø k<sup>w</sup>a?à=ka  
 I have=1 little=ADD money and EMPH=3 have=3 much=ADD  
 ‘I have less money than *he* does’ (lit. ‘I have little money and *he* has more’)

Comparatives of likeness make use of the subordinator **sa**= ‘how’. These are illustrated in (97)–(98):

<sup>9</sup>I am somewhat tentative about this because it could be argued that the entire **nuù** + NP phrase is the focus of a reduced clause. I do not know what kind of tests one would have to devise to determine which analysis is correct, so I leave my claims in hypothesis form for now.

- (97) žée=rí takú sa=ní-žee=ró  
eat=1 taco how=CP-eat=2  
'I can eat as many tacos as you can'
- (98) žée šãã=rí sa=ní-žee=ró  
eat much=1 how=CP-eat=2  
'I eat a lot, like you do'

The superlative construction adds the nominalizer **xa-** (see §3.3.2) to the word expressing the quality being compared, yielding, in effect, 'the one that is more X', hence 'the X-est'. Most of my examples only contain one clause (i.e., there is no stated standard of comparison). This is illustrated in (99)–(100):

- (99) x<sup>w</sup>ã kú xa-lúlí=ka  
Juan COP NOM-small=ADD  
'Juan is the smallest'
- (100) roʔo kúu xa-náxini=ka  
you COP NOM-drunken=ADD  
'You are the drunkest'

When the standard of comparison is explicitly stated, the construction makes use of **nuù** 'face', as in the comparative examples given above in (93)–(95):

- (101) sk<sup>w</sup>elá žáʔa kúu xa-káʔnũ=ka nu ndíʔí nu ndíʔí sk<sup>w</sup>elá nũù žaʔá  
*escuela* here COP NOM-big=ADD face all face all *escuela* town this  
'This school is the biggest of all the schools in town'
- (102) x<sup>w</sup>ã kú xa-lúlí=ka nuù ndíʔí=žo  
Juan COP NOM-small=ADD face all=1PL  
'Juan is the smallest of all of us'

#### 7.2.4. Embedded Questions

Embedded interrogatives are virtually identical to main clause WH-questions (discussed in §6.5.2). All of the forms listed in the previous chapter (examples [129]–[130]), with the single exception of **ší-na-xaʔa** 'why', may appear in an embedded interrogative clause. Embedded interrogatives calling for 'why' use the shorter form **ná-xáʔa**, as in (103), below. The syntax of embedded interrogatives is the same as that of a main clause interrogative; that is, they consist of an interrogative word or phrase in focus position, followed by a clause with a corresponding gap in it. (103)–(107) illustrate:

- (103) tú=xini=rí na-xaʔa nì-xāã=Ø  
 NEG=know=1 what-foot CP-buy=3  
 'I don't know why he bought it'
- (104) tú=xini=rí nama kīʔī=Ø nužáʔu  
 NEG=know=1 when go=3 market  
 'I don't know when he's going to the market'
- (105) s-náʔa ndàsà čaa=rí  
 CAUS-remember how write=1  
 'Teach me how to write'
- (106) tú=xini=rí ndéu kuní=rí  
 NEG=know=1 which want=1  
 'I don't know which one I want'
- (107) tú=xini=rí ndéu nì-žee statilá  
 NEG=know=1 who CP-eat bread  
 'I don't know who ate the bread'

In addition to the fixed-phrase interrogatives, interrogative forms may be created with **na-** plus any appropriate noun or noun phrase and used in embedded questions, as in the following:

- (108) máʔíí máá=ži xiní=ži na-kastíu kʷaʔa=Ø žóʔó  
 alone EMPH=3POL.DEC know=3POL.DEC what-castigo give=3 us  
 'Only God knows what punishment he will give us'
- (109) tú=xini=rí na-tūʔū káʔã=Ø  
 NEG=know=1 what-word speak=3  
 'I don't know what he was talking about'

Finally, embedded questions corresponding to main clause yes/no questions are formed with the conditional proclitic **nú=**. This element has already been discussed in §7.2.2; examples (110)–(111) illustrate its use in embedded questions:

- (110) tú=xini=rí nú=kīʔī=rí  
 NEG=know=1 COND=go=1  
 'I don't know whether I'm going'
- (111) tú=xini=rí nú=kāʔã=Ø xa-ndáa  
 NEG=know=1 COND=speak=3 NOM-true  
 'I don't know if he's telling the truth'

### 7.2.5. Other Subordinators

This section presents two further categories of subordinate clause: subordinate time clauses (§7.2.5.1) and expressions of cause (§7.2.5.2).

#### 7.2.5.1. Subordinate Time Clauses

There are a number of subordinating conjunctions which express a temporal relationship between the subordinate and main clause. The complementizer **xa=** may be used in this way and is usually translated as ‘while’, ‘during the time that’, or ‘when’. (112)–(114) illustrate:

- (112) čá?ā=ka keé=žó staà te wāā xa=s-ndí?í=žo ndatù?ũ=žo  
not.yet=ADD eat=1PL tortilla and then COMP=CAUS-finish=1PL talk=1PL  
‘First we’ll eat and then, when we finish, we’ll talk’
- (113) sa?ma wāā na-ičì=Ø xa=kú ħĥ ora  
clothes the REP-be.dry=Ø COMP=COP one *hora*  
‘The clothes will be dry in an hour’
- (114) xíni nū?ũ=ka=rí ndĥkĥ xa=kú šĥā  
need=ADD=1 onion COMP=COP tomorrow  
‘I’ll need more onions (when it is) tomorrow’

Another element which is used to show a temporal relationship between clauses is the preposition **onde** ‘until’, illustrated in (115)–(117), below. (Recall from §6.3 that the spatial use of this preposition means ‘up to’ or ‘as far as’.) In (116), we see that **onde** may co-occur with the complementizer **xa=**. Contrast this with (115) (a sentence with essentially the same meaning), in which **onde** occurs alone. Also note in (117) the punctual, rather than continuous, sense that **onde** can convey.

- (115) ni-ndìto=rí se?é=Ø onde ni-xižaà=Ø  
CP-care.for=1 child=3 until CP-be.located=3  
‘I took care of her children until she returned’
- (116) ni-ndìto=rí se?e=ðé xína?a onde xa=ní-na-šúk<sup>w</sup>ī=Ø  
CP-care.for=1 child=3MN plural until COMP=CP-REP-return=3  
‘I took care of his children until he returned’
- (117) bíkó žá?a ndí?í onde kaa ħĥ xa-k<sup>w</sup>áá  
party this end until COP nine NOM-dark  
‘The party will end at nine at night’

There are two forms which are used as subordinating conjunctions meaning ‘when’: a native form *sá=* and a Spanish borrowing, *orá* (from *hora* ‘hour’). The subordinate clause may precede or follow the main clause. Within the subordinate clause, both *sá=* and *orá* occur before the verb or any preverbal constituent. (118)–(122) illustrate:

- (118) ni-kéndá=rí sa=nì-s-ndiʔi=rí ni-žéé=rí staà  
 CP-exit=1 when=CP-CAUS-end=1 CP-eat=1 tortilla  
 ‘I left when I finished eating/I left after I ate’
- (119) ni-ka-káʔã=rí xí x<sup>wã</sup> sá=maría ni-s-náa ndáka  
 CP-PL-talk=1 with *Juan* when=*María* CP-CAUS-be.lost key  
 ‘We talked with Juan when María lost the keys’
- (120) sá=súčí=∅ maría ní-nžaa=∅ Chalcatongo  
 when=young=3 *María* CP-reside=3 *Chalcatongo*  
 ‘When María was young, she lived in Chalcatongo’
- (121) orá ni-s-ndiʔi=rí nì-žee=rí staà ni-kéndá=rí  
*hora* CP-CAUS-end=1 CP-eat=1 tortilla CP-exit=1  
 ‘When I finished eating, I left’
- (122) ndító=ðe orá maría ni-xaà  
 be.awake=3MN *hora* *María* CP-arrive.there  
 ‘He was awake when María arrived’

In the following example, the subordinate clause is embedded after the topic of the main clause:

- (123) x<sup>wã</sup> orá xínū=∅ ni-xaʔnu=∅ xaʔà  
*Juan* *hora* run=3 CP-break=3 foot  
 ‘Juan, while he was running, broke his foot’

#### 7.2.5.2. Expressions of Cause

Subordinate clauses expressing cause contain the subordinator *čìì* ‘because’. For some speakers the [č] varies with [š], although the former is more common. The clause marked by *čìì* almost always follows the main clause, as (124)–(126) illustrate:

- (124) ku sîh iní=rí čìì na-xaà=∅ šíã  
 COP happy insides=1 because REP-arrive.there=3 tomorrow  
 ‘I am happy because she is returning home tomorrow’

- (125) čóʔo čìì bína xížaa=Ø  
 go.HORT because now be.located=Ø  
 'Let's go, because she's there now'
- (126) ndéʔe čìì síža wáã ndata  
 look because chair the break  
 'Be careful because the chair is going to break'

The word meaning 'because' is homophonous with the word for 'stomach' (both are čìì). Whether there is in fact a relationship between the two is unclear to me. However, we can note that other dialects of Mixtec use a variety of other body part terms for 'because' (or as part of a phrase meaning 'because'). For example, Ayutla Mixtec uses the phrase šaʔàʔ à nà, literally 'foot its it' (Hills 1990:235), Jamiltepec Mixtec uses the phrase čàʔà čà vátyí, literally 'foot COMP because' (Johnson 1988:130), and Ocotepec Mixtec uses two phrases which include body part terms: s̀k̀l̀ x̀à, literally 'nape COMP', and xèʔè x̀à, literally 'foot COMP' (Alexander 1988:284). I will continue to gloss Chalcatongo Mixtec čìì as 'because', but it should be borne in mind that it may in fact be another extended use of a body part term.

## TOPICS IN LEXICAL SEMANTICS

A number of topics in Mixtec lexical semantics have been explored in various works (see, e.g., Kuiper and Merrifield 1975; Brugman 1983; Macaulay 1985; Brugman and Macaulay 1986; De León 1986). This chapter addresses three of these topics with respect to the Chalcatongo dialect: §8.1 presents the verbs of motion and arrival, §8.2 presents the body part terminology (used in the marking of locative and other relationships), and §8.3 discusses verbs of position and location, and the ways in which they interact with the system of body part terms.

### 8.1. Verbs of Motion and Arrival

Recall from Chapters 3 and 4 that Mixtec verbs have two stems—one for realis and one for potential aspect—and that the realis stem can be further inflected for completive aspect. The verbs of motion are exceptional in that they make several more aspectual distinctions than do other verbs, while the verbs of arrival actually make less. The former have distinct potential, imperative, progressive, and habitual stems and allow affixation of the completive prefix for a fifth possibility. The latter (the verbs of arrival) have only potential and completive forms, with no unprefixated realis stem in use, for reasons which are described below.

Mixtec verbs of motion were first discussed in depth by Kuiper and Merrifield (1975), and further work has been done on the topic by Pickett (1976), Speck and Pickett (1976), Macaulay (1982, 1985), and Merrifield (1992). In the present section I briefly sketch out the semantics of these verbs in Chalcatongo Mixtec as well as consider the morphological characteristics of the most complex of this set of verbs.<sup>1</sup>

Table 13 lists the forms of the verbs of motion and arrival in Chalcatongo Mixtec. The first point to note is that in this language, verbs of motion are “round trip,” that is, they code the progress of an agent to and from some goal. As a consequence, use of the

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<sup>1</sup>See Macaulay (1982, 1985) for further detail.

Table 13: Verbs of Motion and Arrival

	CP	HAB	PROG	POT	IMP
Go <sub>1</sub> (home)	ni-nóʔo	—	k <sup>w</sup> a-noʔo	noʔò	k <sup>w</sup> á-noʔo
Go <sub>2</sub>	ni-xáʔā	xáʔā	k <sup>w</sup> āʔā	kíʔī	k <sup>w</sup> áʔā
Come	ni-kii	ndíí	bèì	kii	ñáʔā
Arrive There <sub>1</sub> (home)	ni-na-xáa	—	—	na-xaà	—
Arrive There <sub>2</sub>	ni-xaà	—	—	xaà	—
Arrive Here	ni-čaà	—	—	čaà	—

KEY: 1 = GOAL IS BASE  
2 = NEUTRAL GOAL

completive with these verbs is only appropriate when the agent has gone to the goal *and returned*. Compare (1) and (2):

- (1) ni-xáʔā=∅ nundùa íkú  
CP-go<sub>2</sub>=3 Oaxaca yesterday  
'She went to Oaxaca yesterday (and has returned)'
- (2) k<sup>w</sup>āʔā=∅ nundùa íkú  
go<sub>2</sub>.PROG=3 Oaxaca yesterday  
'She went to Oaxaca yesterday (and has not returned)'

Example (1) is only appropriate for use when the agent has gone to Oaxaca and returned. When the trip is underway (i.e., when the agent has left but has not yet come back), the progressive form is used, as in (2). The progressive form, however, does not tell us whether the agent has arrived at the goal, that is, in (2) the agent might still be on the way to Oaxaca or might be on the way back. (2) would be appropriate until the subject returned to the starting point.

Mixtec verbs of motion and arrival also specify the status of the goal with respect to the notion "base." Base can be thought of in general as a designated and nonarbitrary goal, which in practice is usually the agent's home (although temporary bases can also be designated). There are two verbs roughly meaning 'go': one means 'Go to base and return' ('go<sub>1</sub>' in the table above), and the other means 'Go to nonbase and return' ('go<sub>2</sub>'). Likewise, there are two verbs meaning 'arrive there': 'Arrive there at base' ('arrive there<sub>1</sub>'), and 'Arrive there at nonbase' ('arrive there<sub>2</sub>'). ('Come' and 'arrive here', however, are not made up of pairs differentiated according to the status of the goal.) Thus, we find contrasts like those in (3) and (4):

- (3) šíã ná-xaa=ná  
tomorrow arrive.there<sub>1</sub>=1POL  
'Tomorrow I'll arrive (home)'



- (4) *šíā xaà táa=rí beʔe=ró*  
 tomorrow arrive.there<sub>2</sub> father=1 house=2  
 'Tomorrow my father will arrive at your house'

As mentioned above, while the verbs of motion show more aspectual distinctions than is usual in Mixtec, the verbs of arrival show less. These verbs are "momentary" (the term is borrowed from Kuiper and Merrifield 1975), that is, they occur only in completive and potential aspects. The focus with these verbs is on the moment of initiation of action, with the verb in potential aspect if the action has not yet been initiated, and in completive once it has been. The bare realis stem is simply nonoccurring. (5) and (6) illustrate:

- (5) *peðrú čaà žáʔa bina nūʔni*  
*Pedro* arrive.here here right.away  
 'Pedro will arrive here right away'
- (6) *peðrú ni-čàà žáʔa íkú*  
*Pedro* CP-arrive.here here yesterday  
 'Pedro got here yesterday'

The morphology of the verbs in this semantic domain is extremely unusual. For example, the progressive of 'go<sub>1</sub>' (*k<sup>w</sup>a-noʔo*) is formed with a reduced form of the progressive of 'go<sub>2</sub>'. Use of contracted forms of the verbs of motion as auxiliaries is extremely common in Mixtec (and in fact some nonmotion verbs are used this way as well). The auxiliary form of one of these verbs is always monosyllabic, losing a syllable according to the rules of fast speech detailed in Chapter 2. (Verbs with nasalized vowels usually also lose their nasalization.) In this case, however, the reduced form of *k<sup>w</sup>aʔa* is not an auxiliary, but is simply part of the progressive form of 'go<sub>1</sub>'.

'Go<sub>2</sub>' appears at first glance to be more regular, in that it has the prefixes *xi-* and *ku-* present in two of its stems (recall the discussion in §3.1.1). However, these prefixes appear in the habitual and progressive stems, while the potential form of this verb is suppletive.

The verb 'come' (*kii* in potential aspect) has a habitual stem which begins with *nd-*.<sup>2</sup> As we saw in §3.1.2, the language has a set of statives which also have initial *nd-*. Habitual and stative are similar enough categories that we can posit a single prefix *ndi-* for these forms. The habitual stem of 'come', then, is formed with the prefix *ndi-* plus the same root as found in the potential stem, rather than the progressive stem. However, the habitual of 'go<sub>2</sub>' (*xáʔa*) does not contain this prefix, but is instead clearly related to the progressive and imperative forms.

The form of 'arrive there<sub>1</sub>' (which has base as goal) is formed with repetitive *na-* prefixed to the form which has a neutral goal ('arrive there<sub>2</sub>'). This suggests a parallel analysis of the stem of 'go<sub>1</sub>' (*noʔo*) as composed of repetitive *na-* plus *oʔo*, a vowel-initial

<sup>2</sup>The verbs for 'enter' and 'exit' also have habitual forms in *ndi-*, but lack the other aspectual forms found with the verbs of motion.

stem. If this is correct, the form would then be subject to Rule (12) from Chapter 3, Vowel Deletion, which would produce its surface form.

Finally, the three verbs of motion are not consistent with respect to which stem is chosen for affixation with the completive *ni-*. Both 'go<sub>1</sub>' and 'come' use the potential stem for this function (which is quite unusual in light of the normal pattern in which the realis is used), while 'go<sub>2</sub>' makes use of the habitual stem.

## 8.2. Use of Body Part Terms as Locatives

Chalcatongo Mixtec has a few lexical items which function as prepositions (recall the discussions in §5.4 and §6.3), but for the most part locative relationships are coded with nouns which (in their primary use) refer to body parts. These locative expressions make use of the highly productive NP + NP construction described in §6.2. The system of body part terms in Chalcatongo Mixtec has been examined by Brugman (1983), who describes their uses as follows:

Body-part terms are used in at least four distinguishable ways: 1) to refer to parts of the body; 2) to refer to subparts of other objects, based on perceived similarities to the corresponding subparts of the body . . . ; 3) again to refer to subparts of other objects, but taking the named subpart as a location rather than as an entity . . . ; 4) to refer to areas outside the boundaries of the object, areas associated with the subpart named by the body-part term (1983:235).

For our purposes, Brugman's four categories can be reduced to the following two basic classes: those which describe objects (these can be parts of the body or parts of other objects) and those which describe locative relationships. This section presents primarily the latter uses, although some purely referential uses are noted as well.<sup>3</sup>

(7) presents the subset of body part terms which can be used in both ways:

(7) čìì	'stomach'	šinì	'head'
inì	'insides'	sikè	'back (animal)'
nuù	'face'	xaʔà	'foot/leg'
ndaʔa	'hand/arm'	žata	'back (human)'

In the use in which the construction describes an object, the body part term is generally the head of a genitive construction. (8) and (9) illustrate:

(8) čìì	kiti
	stomach animal
	'the stomach of an animal'

<sup>3</sup>It is impossible to do the subject of body part term locatives justice in such a short space. The reader is referred to Brugman (1983) for a detailed examination of this complex area. Examples which are taken from Brugman are noted as follows: B:date:(page number), so for example B:1983:(12) cites her example (12). Many of these have been reelicited, so the transcriptions may vary slightly.

- (9) *ndaʔa žúnū táʔnu*  
 arm tree break  
 ‘The tree’s branch is breaking’ (B:1983:[16])

In order to explain the other use of body part terms (the locative use), I must first introduce some terminology. I use “figure” to refer to the object being located, and “ground” to refer to the entity relative to which a figure is located.<sup>4</sup> A locative construction involving a body part term may refer either to an area on the ground or to an area near to but separate from the ground. Brugman has termed the former the “subregion locative” and the latter the “adjacent space locative.” (10) and (11) illustrate the subregion use, while (12) and (13) show the adjacent space use:

- (10) *kafée wāā xíndee inì kaxa*  
*café the be.in insides caja*  
 ‘The coffee is in the box’
- (11) *xížaa=ðe šinì žuku*  
 be.located=3MN head mountain  
 ‘He is at the top of the mountain’ (B:1983:[46])
- (12) *ni-ndečé Ĥ saà šinì žúnū*  
 CP-fly one bird head tree  
 ‘A bird flew over the tree’ (B:1983:[50])
- (13) *xa-lúlí=ro xindee čìì mesa žáʔa*  
 NOM-small=2 be.in stomach mesa that  
 ‘Your child is under that table’

In (10) and (11), the ground is the box and the mountain, respectively. The object that is being described (the coffee in the former and ‘he’ in the latter) is being located in (or on) some subregion of the ground, which is the area described by the body part term. That is, if the inside of a box is conceived of as its stomach, (10) places the coffee *in* the stomach. If the top of the mountain is conceived of as its head, (11) places the subject ‘he’ somewhere *on* that head. In these cases the physical object is in contact with the relevant subpart of the ground—hence the term “subregion locative.” In (12) and (13), however, this is not the case. The ground is the tree in (12) and the table in (13). The top of the tree is again the ‘head’, but in this case the bird is not located on the head of the tree; rather, it is located in the space adjacent to the head. Likewise in (13), the underside of the table is its ‘stomach’, and the child is located in the space adjacent to the stomach, but not actually touching the underside. This is what is meant by the term “adjacent space locative.”

<sup>4</sup>See Talmy (1985a, 1985b) for further discussion of figure and ground. In addition, Brugman and Macaulay (1986) discuss the use of these terms specifically with respect to Chalcatongo Mixtec data.

The remainder of this section is devoted to description and exemplification of each of the body part terms which are used as locatives in Chalcatongo Mixtec. Subregion uses and adjacent space uses are both described.

### 8.2.1. ‘Stomach’: ‘Under, Beneath’

The body part term **č̣i** ‘stomach’ is used to describe the underside of objects, and is translated into English as ‘under’ or ‘beneath’ in virtually all examples. We have already seen one use of it in (13); (14) provides another example, this time a subregion use:

- (14) ndīxã=rí káisikú č̣i tekeé wãã  
 shoe=1 be.located.PL stomach blanket that  
 ‘My shoes are under that blanket’

### 8.2.2. ‘Insides’: ‘In, Into’

The form **in̩** ‘insides’ refers to interior locations. With stative verbs it simply describes an interior location and translates as ‘in’, as in (10). With verbs of motion, it locates the endpoint of the motion (‘into’) as in (15):

- (15) kwáʔá in̩ beʔe  
 go insides house  
 ‘Go into the house’

It has been difficult to decide on appropriate English glosses for **in̩** and for **č̣i**; consultants tend to translate both as *estómago* ‘stomach’. The distinction seems to be that **in̩** is used for ‘stomach’ in the internal sense while **č̣i** is used for the external area.<sup>5</sup> Brugman settled on ‘stomach’ for **in̩** and ‘belly’ for **č̣i**, but I use ‘insides’ and ‘stomach’ (respectively) here in order to communicate the internal/external distinction between the two.

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<sup>5</sup>Pérez Jiménez (1988:14) translates **in̩** as ‘heart’, but my consultants have indicated that while they are aware of this as an archaic use of the word, they do not use it in that sense themselves (instead they use the Spanish borrowing **anú** [from *ánima* ‘soul’]). There is documentation that in the sixteenth century **in̩** meant both ‘stomach’ and ‘heart’: Arana and Swadesh list the sixteenth-century Mixtec form **in̩** as meaning ‘dentro, entre, interior, semilla, estómago, corazón, mente’ (‘inside, among, interior, seed, stomach, heart, mind’) (1965:91). However, all of my consultants said that the term is never used to mean ‘heart’ by modern speakers.

### 8.2.3. 'Face': 'To, Into, From, In, On, Of', etc.

'Face' (**nuù**) is the body part term used most often as a locative, with the widest range of senses.<sup>6</sup> While the actual body part referred to by the term is the face—that is, the front part of the head—most locative uses of **nuù** generalize this to any surface facing the speaker. (It also has uses not captured by this characterization, such as for planar surfaces which are not vertically oriented, as described below.) Starting first with one of the simplest uses of **nuù**, in (16)–(17) we see it marking indirect objects. Here, the transfer of possession described is conceived of as going toward the front, or facing surface, of the goal (or recipient) argument:

- (16) k<sup>w</sup>aʔa=ní ĩ̃=kà ità nuù=na  
 give=2POL one=ADD flower face=1POL  
 'Give me another flower, please'
- (17) ni-xanú=rí ndoʔo=rí nuù=Ø  
 CP-loan=1 basket=1 face=3  
 'I loaned him my basket'

Other types of goals (both abstract and concrete) are also coded with **nuù**, as in (18)–(21):

- (18) keè síʔu=ró nuù=rí  
 say name=2 face=1  
 'Tell me your name'
- (19) nì-čaa=rí ĩ̃ carta nuù táa=rí  
 CP-write=1 one carta face father=1  
 'I wrote a letter to my father'
- (20) ni-xika=Ø nuù=rí ĩ̃ favor  
 CP-ask=3 face=1 one favor  
 'She asked me a favor'
- (21) ndeʔé nuù maría  
 look face *María*  
 'Look at María'

In general, verbs of transfer, speaking, and sight take arguments marked with **nuù**. However, it would not be accurate to conclude that the function of **nuù** is to mark only goal arguments. We can see this in examples like (22)–(23), in which it codes source:

<sup>6</sup>See Hollenbach (1995) for discussion of the semantic extensions of this term in eight other Mixtec dialects, as well as in Trique and Cuicatec.

- (22) *saà wǎǎ ni-kéndá=∅ nuù žúnú wǎǎ*  
 bird that CP-exit=3 face tree that  
 ‘That bird flew out of that tree’ (B:1983:[59])
- (23) *ni-kexá?á=rí núú=rí nuù žúnú žá?a*  
 CP-begin=1 descend=1 face tree this  
 ‘I began to climb down from/out of the tree’

In examples like these, instead of having an action directed (either literally or metaphorically) toward some goal, we find that the action is directed away from a source argument. All that is coded by **nuù**, then, is that one of the arguments involved presents a planar surface. In the cases immediately above, the tree is presented as a surface out of which a bird emerges (as in [22]), or down which the subject climbs (as in [23]). The direction of the action is made clear by the semantics of the verb: ‘exit’ in (22) and ‘descend’ or ‘climb down’ in (23).

The relevant planar surface, however, does not even have to be vertically oriented, as one might expect from the canonical position of a face on a body. Consider the uses of **nuù** in (24)–(26):

- (24) *kanda nuù ndúča*  
 dive face water  
 ‘Dive into the water’
- (25) *žučì xížaa=∅ nuù mesa*  
 knife be.located=3 face *mesa*  
 ‘The knife is on the table’
- (26) *čúkū wǎǎ xíka=∅ nuù tečú*  
 fly the walk=3 face *techo*  
 ‘The fly is walking on the ceiling’

In (24) and (25), the planar surface faces up, while in (26) it faces down. Other purely locational uses of **nuù**, with varying orientations of the surface in question, are illustrated in (27)–(29):

- (27) *rù?ù xíndii=rí nuù maría*  
 I stand=1 face *María*  
 ‘I’m standing in front of *María* (facing her)’
- (28) *kiti=ró kǎ?īī=∅ nuù ñū?ū=rí wǎǎ*  
 animal=2 be.located.PL=3 face land=1 that  
 ‘Your animals are in my fields’

- (29) nuù žúku wáã žaa ħ ħ bá?ù  
 face mountain the reside one coyote  
 'In the mountains lives a coyote'

**nuù** also has a partitive use. These constructions usually consist of a quantifier followed by a NP + NP construction containing **nuù** and another NP, as in (30)–(32):

- (30) tá?a=Ø k<sup>w</sup>a?à šáã nuù k<sup>w</sup>é?e  
 suffer=3 many much face illness  
 'He suffers from many illnesses'
- (31) te noò kú xātá?ã=ka=ro nuù ndéndú  
 and which COP like=ADD=2 face both  
 'And which is the one that you like the best of both?'
- (32) ndé?é=rí kũũ núu kiti  
 see=1 four face animal  
 'I see four animals'

Example (33) shows that the second NP may be omitted when it is clear from context:

- (33) tú=k<sup>w</sup>iti nuù (Ø) žéé=rí ħ ħ kiù bína  
 NEG=little face (Ø) eat=1 one day today  
 'I haven't eaten anything today'

Another, probably related construction expresses the notion 'per', as in (34)–(35). This construction is similar to the partitive but, instead of a quantifier, contains a quantified expression of time preceding **nuù**.

- (34) ná-kúčí=ðé nũ?ũ žá?a unì xá?a nuù kiù  
 MOOD-bathe=3MN earth this three time face day  
 'He should bathe with this earth three times a day'
- (35) peðrú xá?ã nundúa ħ ħ xa?a nuù k<sup>w</sup>íža  
 Pedro go.and.return Oaxaca one time face year  
 'Pedro goes to Oaxaca once a year'

A number of other uses of **nuù** are illustrated below. (36) shows its use as 'about' (possibly a partitive use), (37) as 'in place of' or 'instead of', (38) meaning 'first', (39) as part of an iterative adverbial, and (40) in a comparative:

- (36) kašũ?ũ ndí?í xa=xiní=ro nuù ndatíũ ža?á  
 tell all COMP=know=2 face thing this  
 'Tell (me) everything that you know about this thing'

- (37) ni-xačaʔá=rí nuù moníka  
 CP-dance=1 face *Mónica*  
 'I danced in place of/instead of Monica'
- (38) rùʔù kuní=rí xa=xíʒaa núu  
 I want=1 COMP=be.located face  
 'I want the first one'
- (39) táa=rí ká-kii ndèʔe rúʔu k<sup>w</sup>íʒa nuù k<sup>w</sup>íʒa  
 parent=1 PL-come see me year face year  
 'My parents come to see me every year'
- (40) rùʔù sùkú=ri tíʔa nuù=ro  
 I tall=1 a.little face=2  
 'I am a little taller than you'

Finally, the contrast between (41) and (42), and (43) and (44), illustrates one last use of this body part term:

- (41) saà ndéčé=Ø sik̀ itú  
 bird fly=3 animal.back cornfield  
 'The bird is flying over the cornfield'
- (42) saà ndéčé=Ø nuù itú  
 bird fly=3 face cornfield  
 'The bird is flying among the corn in the cornfield'
- (43) ni-kanžáa=Ø iǹ ndúča  
 CP-drown=3 insides water  
 'Someone drowned in the water'
- (44) sučá=ró nuù nduča  
 swim=2 face water  
 'You will swim in the water'

Examples (42) and (44) illustrate an unusual case of the subregion use of a body part term. In each case, the action in question is performed through or under the surface of the ground, rather than *on* the surface. Brugman and Macaulay (1986) call this the "shallow subregion" use of a body part term, pointing out that some two-dimensional surfaces are allowed to have a small amount of depth. This only occurs when the ground has a relatively large amount of total depth, and the depth at the surface is only a small fraction of that total (as it is in a cornfield or a body of water). This use of **nuù** comes up again in §8.3, where the interaction of verbs of position and location with body part terms is discussed.



#### 8.2.4. 'Hand, Arm': 'On (Long Object)'

The term **ndaʔa** 'hand, arm' is used as a locative with a very restricted range of meanings. Its uses include, first, reference to subparts of objects which branch off or stick out from the main body of the object. (45)–(46) illustrate:

- (45) ndaʔa žúnú  
hand tree  
'tree branch' (B:1983:[15])
- (46) ndaʔa žuča  
hand river  
'fork of a river' (B:1983:[13])<sup>7</sup>

Second, as Brugman (1983:243) shows, **ndaʔa** also has locative uses, but they are always of the subregion type:

- (47) ndukoo=rí ndaʔa žúnú  
sit=1 hand tree  
'I'm sitting on the branch of the tree' (B:1983:[17])

#### 8.2.5. 'Head': 'On Top of, Above'

The word for 'head', **šiǹ**, is used to refer to the tops of things. We have already seen it in examples (11) and (12); (48) and (49) provide two more examples:

- (48) ni-kaa=rí šiǹ žúnú iku  
CP-climb=1 head tree yesterday  
'I climbed to the top of the tree yesterday' (B:1983:[49])
- (49) ndeʔe žoð sa=xížaa=Ø šiǹ žúnú wáã  
look moon how=be.located=3 head tree the  
'Look at the moon, how it is above the tree!'

As with **nù**, uses of **šiǹ** may abstract away from the canonical orientation of the human body; this is shown in (50) and (51), in which we see that fingers and toes are referred to with 'head'. Here, it is apparently the 'tip' aspect of **šiǹ** which is salient:

- (50) šiǹ ndáʔá  
head hand  
'finger' (B:1983:[45])

<sup>7</sup>The glosses for this example and another were reversed in Brugman's text (1983:243); they have been put in the proper order here.

- (51) *šinì xáʔá*  
 head foot  
 'toe' (B:1983:[44])

This abstraction can even extend to time, as in (52):

- (52) *šinì žóo*  
 head month  
 'the end of the month'

### 8.2.6. 'Back (of Animal)': 'On Top of'

**sik̄** 'back (of an animal)' describes a location which is long, planar, top, and horizontal. The difference between **sik̄** 'back (animal)' and **žata** 'back (human)' is one of orientation. **sik̄** refers to the horizontal plane, while **žata** refers to the vertical.<sup>8</sup>

The uses of **sik̄** are distinguished from those of **šinì** 'head' also by virtue of the shape of the object functioning as ground: speakers use **sik̄** to describe the top of something which has a significant dimension of length (such as a wall or a long table), while they use **šinì** for something with no such dimension, but instead with a top area which is smaller than (or roughly the same as) the rest of the object (such as a hilltop or a treetop). (53)–(54) illustrate uses of **sik̄**:

- (53) *čusndée sik̄ carró*  
 put.on animal.back *carro*  
 'Put it on top of the bus'
- (54) *saà ndéčé=Ø sik̄ itú*  
 bird fly=3 animal.back field  
 'The bird is flying over the fields'

Brugman (1983:254) points out that the object named as ground must be perceived as three-dimensional for grammatical use of **sik̄**. In (55), below, we see an ungrammatical example of **sik̄** used with a (notionally) two-dimensional object. In order to code this location, **nuù** 'face' must be used, as shown in (56):

- (55) *\*seʔe=rí xítú sik̄ žúu*  
 son=1 lie animal.back mat  
 'My son is lying on the mat' (B:1983:[40])

<sup>8</sup>Barbara Hollenbach tells me that **sik̄** (or its cognate) means 'nape (of the neck)' (for humans) in some other Mixtec dialects. As shown in §8.3, **sik̄** actually can be used for humans in Chalcatongo Mixtec, when the human is carrying something on his or her back, bent over in a posture like that of a quadruped animal.

- (56) seʔe=rí xítú núu žúu  
 son=1 lie face mat  
 'My son is lying on the mat' (B:1983:[40])

**sikà** can also be used in the sense of 'against', as in (57):

- (57) kǎʔǎ=Ø sikà gobiernú  
 say=3 animal.back *gobierno*  
 'He spoke against the government'

Finally, note in (58) and (59) how it is the semantics of the verb which determine the role of the relevant subpart of the ground. In (58), the activity described by the verb forces an interpretation in which the motion proceeds in a path across the area specified by **sikà**. In (59), however, the use of a stative verb produces a simple locative interpretation:

- (58) ni-xaʔa=rí sikà xikà béʔe  
 CP-pass=1 animal.back wall house  
 'I climbed over the wall of the house (a wall surrounding property)'
- (59) ni-ndùkoo=rí sikà xikà béʔe  
 CP-sit=1 animal.back wall house  
 'I sat on the wall of the house' (B:1983:[39])

### 8.2.7. 'Foot, Leg': 'At the Bottom of, At the Foot of'

The term **xaʔà** 'foot/leg', like **ndaʔa** 'hand/arm', has only a narrow range of locative uses. It names the lower parts of objects, which may or may not have leglike physical characteristics:

- (60) xaʔà žúkú  
 foot hill  
 'bottom of the hill'
- (61) xaʔà mesá  
 leg *mesa*  
 'leg of the table'

Like **ndaʔa**, **xaʔà** has only the subregion use as a locative:

- (62) ndúkòò=Ø xaʔà žúnú  
 sit=3 foot tree  
 'She is sitting at the foot of the tree'

- (63) isù wáã sáʔa=Ø ń ʒaù xaʔà ʒúnũ wáã  
 rabbit the make=3 one hole foot tree the  
 ‘The rabbit is digging a hole under/at the base of the tree’ (B:1983:[29])

### 8.2.8. ‘Back (of Human)’: ‘On the Back of, Behind’

**ʒata** ‘back (of a human)’ is, as mentioned before, distinguished from **sikɿ** ‘back (of an animal)’ in terms of orientation. The form **ʒata** has both subregion and adjacent space uses as a locative, although the latter is far more common and is often used with the sense of ‘behind’. For the contrast between **ʒata** and **sikɿ**, compare (64)–(65) with (53)–(59), above.

- (64) ni-xéĩ=Ø síʔú ʒata ʒubéʔé  
 CP-put=3 gum human.back door  
 ‘She put her gum on the back of the door (i.e., she stuck it on the back of the door)’
- (65) ndakú xíʒaa=Ø ʒata ʒubéʔé  
 broom be.located=3 human.back door  
 ‘The broom is behind the door’

Finally, although the phrase **ʒata béʔe** can be used to mean ‘behind the house’ (as in [66], below), it also has the conventionalized meaning ‘outside’ (as in [67]). The phrase **ʒata béʔe** in rapid speech becomes **ta-béʔe** (recall the rules of rapid speech contraction given in §2.6), and the shortened version verges on lexicalization with the invariant meaning ‘outside’.

- (66) xáʔa ʒata béʔe unì  
 pass human.back house three  
 ‘Pass/walk behind the third house’ (B:1983:[36])
- (67) kenda ʒata béʔe/kenda ta-béʔe  
 exit human.back house/exit human.back-house  
 ‘Go outside’

### 8.3. Verbs of Position and Location

Brugman and Macaulay (1986) present a number of verbs which describe position and location, as shown in (68).<sup>9</sup> (The glosses for some of these are amended slightly below.)

<sup>9</sup>This section is adapted from Brugman and Macaulay (1986). See that source for a fuller discussion of the data.

## (68) (a) GENERIC

xížaa (R-SG), kúžaa (P-SG); 'be located'  
 káisikú (R-PL), kúsikú (P-PL)

## (b) POSTURE

xíndii (R), kúndíi (P) 'be standing'<sup>10</sup>  
 ndúkòò (P, R) 'be sitting'  
 xítuu (R), kutuu (P) 'be lying'

## (c) POSITION

xíndee (R), kundee (P) 'be in, be within the boundaries of'  
 kándee (R), kundee (P) 'be in, hidden from view'  
 xísndée (R), kúsndée (P) 'be on (top of a raised two-dimensional surface)'

These verbs encode various aspects of spatial relationships, for example, the posture of the figure, the position of the figure relative to the ground, and whether the figure is visible or not. Note also that the generic verb of location has distinct forms for singular and plural subjects, as well as for realis and potential aspects.

(69)–(73) illustrate this verb and the posture verbs, in construction with a variety of body part terms:

(69) xížaa=Ø nuù ndaʔa=rí  
 be.located.R.SG=3 face hand=1  
 'It is in my hand' (long object on open hand, lying or balanced upright)

(70) xítuu=Ø nuù ndaʔa=rí  
 be.lying=3 face hand=1  
 'It is lying on my hand' (long object lying on open hand)

(71) xítuu=Ø inì ndaʔa=rí  
 be.lying=3 insides hand=1  
 'It is lying in my hand' (long object in closed fist)

(72) rùʔù xíndii=rí nuù maría  
 I stand=1 face *María*  
 'I am standing in front of *María* (facing her)'

(73) ndúkòò=Ø xaʔà žúnú  
 sit=3 foot tree  
 'She is sitting at the foot of the tree'

The interaction of the verbs of position with various body part terms is more complicated than that involving the plain location verbs, or the verbs of posture, and these are next

<sup>10</sup>Some speakers have **kándii** for the realis stem of this verb.

discussed individually. Starting with **xíndee** (R), **kundee** (P) ‘be in’, we find examples such as the following:

- (74) *kafée wǎǎ xíndee=Ø inì kaxa*  
*café the be.in=3 insides caja*  
 ‘The coffee is in the box’
- (75) *xa-lúlí=ro xíndee=Ø čìì mesa žáʔa*  
 NOM-small=2 be.in=3 stomach *mesa* this  
 ‘Your child is under this table’
- (76) *kiti=ǎé kundee=Ø nuù corral=rí šíǎ*  
 animal=3MN be.in=3 face *corral*=1 tomorrow  
 ‘His animals will be in my corral tomorrow’

(74) is unremarkable: the inside of the box is its ‘insides’, and something in this space is described with the verb meaning ‘be in’. In (75), however, we see the same verb used with a different body part term, this time **čìì** ‘stomach’. Here the underside of the table top is considered its ‘stomach’, and the child is located in the space adjacent to (i.e., below) that area with this verb. Crucially, the adjacent space is bounded on four sides by the edges of the table top and its legs, which is what makes the verb ‘be in’ appropriate here.

(76) is somewhat more complicated. Recall from §8.2.3 that **nuù** can be used with any planar surface, regardless of its orientation. In this case, it codes an inside bottom surface—the ‘face’ of the corral. If **kundee** just meant ‘be in’, this would seem strange: we know that this is a subregion use of the body part term (because there is contact between the figure and the ground), and that therefore this is a (notionally) two-dimensional, planar ground. However, **kundee** actually has a more general sense, ‘be within the boundaries of’, and it is this use that is shown in (76).

Note that the sentence in (76) is also grammatical if we replace **nuù** with **inì**:

- (77) *kiti=ǎé kundee inì corral=rí šíǎ*  
 animal=3MN be.in insides *corral*=1 tomorrow  
 ‘His animals will be in my corral tomorrow’

From (76) and (77) we see that a corral can be conceived of as a three-dimensional container (bounded on the sides by the fence around it), in which case the ground is coded with **inì** ‘insides’. It can also be conceived of as a flat surface, in which case the ground is marked with **nuù** ‘face’. The verb **xíndee/kundee** simply expresses containment but does not give any information about the shape or dimensionality of the ground. Thus, it can collocate with either body part term, as long as the shape of the ground is compatible with each construal.

Turning next to **kándee** (R), **kundee** (P) ‘be in, hidden from view’, we find that it collocates most frequently with **inì** ‘insides’, as shown in (78), below. This reflects the most common real-world situation, in which a figure is hidden because it is located in some

three-dimensional “container.” However, (79)–(80) show that other body part terms may also be used with this verb:

- (78) kándeé ńń ñažĩũ inì beʔe wáã  
 be.hidden one person insides house the  
 ‘There is a stranger in the house’
- (79) ndĩxã=rí kándeé=Ø čìì tikaí  
 shoe=1 be.hidden=3 stomach blanket  
 ‘My shoes are under this blanket’
- (80) kándeé=Ø bina ñúʔni nuù nduʔà wáã  
 be.hidden=3 right.now face plain the  
 ‘She is on the plains right now’

In (79), we find **kándeé** describing shoes hidden under a blanket, which is something that is normally considered two-dimensional. However, the shoes are bulky enough to shape the ground into something three-dimensional, and so the use of ČÌÌ ‘stomach’ is called for.

There are two explanations for the use of **kándeé** in (80): either the subject is hidden because she is far away and thus out of sight, or she is hidden in the corn (or other vegetation) growing on the plain in question. The latter interpretation would involve the shallow subregion use of a body part term discussed in §8.2. In either case, however, **nuù** codes a two-dimensional surface, indicating that **kándeé**, like **xíndeé**, is neutral with respect to dimensionality.

Finally, consider (81)–(82), which illustrate the simplest uses of **xíndeé** (R), **kúsndée** (P) ‘be on (top of a raised two-dimensional surface)’:

- (81) xíndeé=Ø sik̀ beʔe wáã  
 be.on=3 animal.back house the  
 ‘It is on the roof of the house’
- (82) kúsndée sik̀=rí  
 be.on animal.back=1  
 ‘Get on my back’

**Xíndeé** almost exclusively collocates with **sik̀** ‘animal back’ (as it does in these examples). (Note that in [82], the body part term is used referentially, rather than as a locative. Also note that the term for ‘animal back’ is used here to refer to a human’s back, due to the orientation of the person involved.) Given the English translation of **xíndeé**, one might assume that it would also subcategorize for **nuù** ‘face’, but this is in general not the case, as shown in (83)–(84):

- (83) (a) bílu wáã xížaa=Ø nuù žuu  
 cat the be.located=3 face mat  
 'The cat is on the mat'
- (b) \*bílu wáã xísndée=Ø nuù žuu  
 cat the be.on=3 face mat  
 'The cat is on the mat'
- (84) \*kítì=ǎé kusndee nuù corral=rí šíã  
 animal=3MN be.on face corral=1 tomorrow  
 'His animals will be in my corral tomorrow' (cf. [76])

**Xísndée** appears to require more than just the spatial relation of English 'on'; it appears to require that the figure be located on a ground *with a raised surface*. This explains its collocation with **sikà**, since this term always refers to a top area (see §8.2.6).

However, **xísndée** is not completely barred from co-occurrence with other body part terms, as (85) illustrates:

- (85) sùžnū=ro xísndée=Ø nuù žúnū wáã  
 shirt=2 be.on=3 face tree the  
 'Your clothes are on the tree'

(85) describes a situation in which clothes are spread over the branches of a tree, for drying. **Nuù** is used here because the ground in this case does not fit the requirements for **sikà** (that the ground be long, planar, top, and horizontal). The ground in this example does, however, fit the requirements for **nuù**, since its relevant subpart can be conceived of as a two-dimensional surface. Because it is also raised, it fits the conditions for use of **xísndée**.

Thus, the Mixtec verbs of position and location, along with the locative body part terms, lexicalize a great deal of information about the shape of the ground, but relatively little about the precise relationship borne by the figure to the ground. (With the exception of the small set of posture verbs, Mixtec also lexicalizes relatively little about the shape of the figure.) The relationship between the figure and the ground is made clear by the body part terms chosen instead of the verb. Contrasts such as those illustrated in (74)–(76) highlight the importance of the body part term used, while comparison of examples such as (74), (77), and (84) point up the interaction between the body part terms and the verbs of location. The various elements of a spatial relationship are distributed very differently in Mixtec than they are in a language like English.

One final example illustrates how a Chalcatongo Mixtec verb of position (**ndúkoo** 'sit') in conjunction with the most versatile of the body part terms (**nuù** 'face') can express a complex spatial relationship, in this case 'around':

- (86) ñažìù wáã ká-ndúkoo=Ø nuù mesa  
 people the PL-sit=3 face mesa  
 'The people are sitting around the table'



In this example, **nuù** is a relation distributed over each of the individuals making up the plural figure. That is, each side of the table (bounded by the top edge, two legs, and the floor) is coded with **nuù**, and each person is sitting adjacent to a distinct instance of this location. The fact that the subject is plural, in conjunction with the verb and body part term chosen, and in conjunction with the particular geometry of tables, forces the distributed reading of the locative expression.

## TEXTS

This chapter contains one long text on the history of Chalcatongo and two shorter texts, one about market day and the other a personal history. The long text was dictated to Leanne Hinton and me by Crescenciano Ruiz Ramírez in 1985. The text about market day was dictated to me by Luciano Cortés Nicolás in 1981, and the personal history by Sabina Cortés Cruz in 1982.<sup>1</sup> In each case the story was first told in Mixtec in its entirety with a tape recorder running. Each narrator then gave a free translation into Spanish, and once I had the stories transcribed, worked with me on fine-tuning the transcription and the translation.<sup>2</sup> Later, I translated the Spanish into English.

The Mixtec transcription is phonemicized to a certain extent, the main exception being that tones are transcribed as I heard them. I do not pretend to have solved all the mysteries of tone sandhi in Chalcatongo Mixtec, and so did not want to attempt to “unperturb” the tones. Some idiosyncrasies have also been left in to give the reader an idea of the kind of variation that is found even in the speech of a single speaker.

Each line of text actually consists of three lines: first the Mixtec, then a morpheme-by-morpheme gloss, and finally an English translation. Division into lines is generally based on pauses, which tends to produce lines which consist of a single clause (although this is not the case for every line).

Spanish borrowings which are assimilated into Mixtec are transcribed phonetically in the first line, but those that constitute code-switching are simply written in Spanish orthography (although with tone marking in some cases). Spanish forms are written in italics in the middle (morpheme-by-morpheme gloss) line, and translated into English in the last line.

The abbreviations used in the texts are the same as those used in the grammar.

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<sup>1</sup>The late Sabina Cortés Cruz was Margarita Cuevas Cortés’ mother. I was able to work with her only once, in 1982, at which time she told me the story that appears (in part) below.

<sup>2</sup>In addition, I am grateful to Margarita Cuevas Cortés, who helped me with all three of the texts.

### 9.1. History of Chalcatongo

Told by Crescenciano Ruiz Ramírez, 1985.

- (1) Dices Chalcatongo **ñũũ ndéžá**.  
*dices Chalcatongo ñũũ ndéžá*  
 You say 'Chalcatongo' **ñũũ ndéžá** [in Mixtec].
- (2) ni-ndùkoo=Ø xí ñažĩũ xíká.  
 CP-be.seated=3 with people walk  
 It was founded by people who walked (here).
- (3) ni-sáʔa=Ø formár ñũũ.  
 CP-make=3 *formar* town  
 They founded the town.
- (4) nì-ka-kii=Ø ñũũ xíká=ðe.  
 CP-PL-come.and.return=3 town walk=3MN  
 They came to the town walking.
- (5) ka-xíká=Ø íčí,  
 PL-walk=3 road  
 They walked along the road,
- (6) ká-xãʔã=Ø viaje.  
 PL-go.and.return=3 *viaje*  
 they were on a journey.
- (7) te ni-ka-xáʔa=Ø nuù xížaa beñúʔũ.  
 and CP-PL-pass.by=3 face be.located church  
 And they passed by where the church is (presently) located.
- (8) wáã ni-kuu í parájé nuù ní-ka-ndùkoo=Ø xa=ní-ka-ndendàtu=Ø xínáʔa.  
 there CP-COP one *paraje* face CP-PL-be.seated=3 COMP=CP-PL-rest=3 plural  
 There was a spot in which they sat to rest.
- (9) wáã ni-ka-žée=Ø stáa,  
 there CP-PL-eat=3 tortilla  
 There they ate,

- (10) te ká-ndiso=Ø iža síʔí natividad,  
and PL-carry=3 God female *natividad*  
and they carried (a statue of) the Virgin of the Nativity,<sup>3</sup>
- (11) bè̀ì=Ø kožo xí=Ø.  
come=3 plural with=3  
coming with her.
- (12) te, wáã ni-ka-žée=ðé staà,  
and there CP-PL-eat=3MN tortilla  
And there they ate,
- (13) ni-ka-ndendatu=ðé.  
CP-PL-rest=3MN  
they rested.
- (14) te, xa=ní-ka-nduk<sup>w</sup>íí=ðé xa=žaʔa kí-kožo=ðe íí=ka nū̀ù  
and COMP=CP-PL-stand.up=3MN COMP=this go-plural=3MN one=ADD town  
And they stood up to go to the other town
- xa=šíkó=ðé iža síʔí.  
COMP=sell=3MN God female  
to sell the Virgin.
- (15) te, tú=a-ni-kúu=Ø xa=kíʔí=Ø iža síʔí,  
and NEG=TEMP-CP-be.able=3 COMP=take=3 God female  
But they couldn't take the Virgin,
- (16) či, ká-tíí=Ø iža,  
because PL-grab=3 God,  
because they grabbed her,
- (17) te xáʔã, ī ladó te íí=ka ladó,  
and go.and.return, one *lado* and one=ADD *lado*  
and went back and forth, to one side and the other,
- (18) te tu=a-ni-kúu=Ø xa=kíʔí=Ø.  
and NEG=TEMP-CP-be.able=3 COMP=take=3  
but they couldn't take her.<sup>4</sup>

<sup>3</sup>This speaker consistently says *iža* 'God' for what other speakers pronounce *iʔa*.

<sup>4</sup>Here the travelers are trying to pick the statue up, but find that it can no longer be moved.

- (19) te wáã ni-ka-kéé=Ø . . .  
and then CP-PL-say=3  
And then they said . . .<sup>5</sup>
- (20) ñážiũ wáã ni-ka-xá?a=Ø ñũù.  
people that CP-PL-pass.by=3 town  
Those people went to the town.
- (21) ni-nání=Ø Chalcatongo viejo.  
CP-be.named=3 *Chalcatongo viejo*  
It was called “Old Chalcatongo.”
- (22) wáã ni-ka-žaà ñážiũ, xa=ná?a,  
there CP-PL-live people, COMP=early  
There lived the people from before,<sup>6</sup>
- (23) te ni-ka-xá?a=Ø, ni-ka-xã?ã=Ø kã?ã=Ø xí ñážiũ wáã,  
and CP-PL-pass.by=3, CP-PL-go=3 talk=3 with people the  
and they went, they went to talk with the people,
- (24) na-k<sup>w</sup>áã=Ø iža sí?í wáã,  
MOOD-buy=3 God female the  
that they might buy (the statue of) the Virgin,
- (25) či tú=a-kúu=Ø xa=kundá?a=Ø xiná?a,  
because NEG=TEMP-be.able=3 COMP=carry=3 plural  
because they couldn’t carry her,
- (26) či ni-ndukòò=Ø lugar wáã.  
because CP-be.seated=3 *lugar* there  
because she was sitting at that place.
- (27) te na-sa-ndáá=Ø maa wáã kúu lugar nuè kã?íĩ xína?a beñú?ú.  
and MOOD-make-true=3 EMPH there COP *lugar* face be.located.PL plural church  
And it would turn out that the very place where they were would be where the church  
would be.
- (28) te ni-ka-kií ñážiũ ñũù Chalcatongo viejo,  
and CP-PL-come people town *Chalcatongo viejo*  
And those people came to Old Chalcatongo,

<sup>5</sup>The ellipsis here indicates a false start by the narrator.

<sup>6</sup>The town of Chalcatongo used to be located several kilometers away from its present location. This story provides an explanation for why it was moved.

- (29) te ni-ka-xáã=Ø íža siʔi,  
and CP-PL-buy=3 God female  
and they bought the Virgin,<sup>7</sup>
- (30) te ni-ka-kíʔi=Ø,  
and CP-PL-take=3  
and they took her,
- (31) te kwāʔã=Ø xí=Ø onde nūū wáã.  
and go.and.return=3 with=3 until town the  
and went back with her to the town.
- (32) te, ndúú ni-žaa íža siʔi wáã,  
and day CP-live god female the  
And during the day the Virgin lived (there),
- (33) te xa-kwáa be-ndíí=ní=Ø lugar žáʔa.  
and NOM-dark come-come=RES=3 lugar this  
but at night she would come right here.<sup>8</sup>
- (34) te, sóã ni-saʔa=Ø uù uni xáʔa,  
and like.that CP-do=3 two three time  
And she did this two or three times,
- (35) te despues ni-kà-kii ñažīū žáʔa te ni-ka-sáʔa=Ø beñūʔū žáʔa.  
and *despues* CP-PL-come.and.return people that and CP-PL-make=3 church this  
and later these people returned and built this church.
- (36) te xa=žóo šãã kwíža xa=ní-kuu=Ø wáã.  
and COMP=exist many year COMP=CP-COP=3 there  
And it is many years since they were there.
- (37) te ni-ka-kii ñažíú wáã,  
and CP-PL-come.and.return people the  
And the people came and went,
- (38) te, ni-ka-sáʔa=Ø beñūʔū.  
and, CP-PL-make=3 church  
and they built the church.

<sup>7</sup>In line (28) it is the travelers who come to Old Chalcatongo. In line (29), however, the pronoun 'they' refers to the inhabitants of the town.

<sup>8</sup>That is, during the day the statue stayed in Old Chalcatongo, but at night it would mysteriously move to the present site of the town of Chalcatongo (where the narrator is located).

- (39) žáʔa či laguna žóo.  
this because *laguna* exist  
This was because there was a lake,
- (40) te, na-káʔã=žó desierto kúu=Ø žúku kúu=Ø,  
and MOOD-say=1PL *desierto* COP=3 forest COP=3  
and we might say it was a desert, it was a forest,
- (41) tu=noò ñažĩũ žáá žáʔa tú=kʷiti.  
NEG=what people live here NEG=little  
there weren't any people living here, nothing.
- (42) te wáã te ni-ka-kexáʔa čaà kožo ñažĩũ,  
and then and CP-PL-begin come plural people  
And then people began to come,
- (43) kúu=Ø ĩĩ=ka ñũũ.  
COP=3 one=ADD town  
it's another town.
- (44) ni-ka-čaà kožo kasiké.  
CP-PL-come plural *cacique*  
The caciques came.<sup>9</sup>
- (45) kāʔĩĩ uù uni kasíké ñũũ žáʔa.  
be.located.PL two three *cacique* town this  
Two or three caciques are still in this town.
- (46) te wáã te ni-kexáʔa ká-kíí ñažĩũ xíká,  
and then and CP-begin PL-come people walk  
And then people began to come walking,
- (47) ni-ka-ndukoo=Ø ñũũ.  
CP-PL-be.seated=3 town  
they founded the town.
- (48) ni-kexáʔa=Ø ka-ndeža=Ø xináʔa.  
CP-begin=3 PL-abound=3 plural  
They began to thrive.
- (49) te žáʔa či lagúná kúu,  
and here because *laguna* COP  
And here because there was a lake,

<sup>9</sup>*Cacique* is the Spanish word for a political leader or boss.

- (50) lagúna káʔnũ ni-žoó žáʔa,  
*laguna* big CP-exist here  
 there was a big lake here,
- (51) čí tú=ñažĩũ ni-káisioku žáʔa,  
 because NEG=people CP-be.located.PL here  
 because no people were here,
- (52) te wáã te kʷee=ni kʷee=ni ni-kexáʔa ni-ka-čaà kožo ñažĩú.  
 and then and slow=RES slow=RES CP-begin CP-PL-arrive.here plural people  
 and then little by little people began to arrive here.
- (53) te ni-ku-káʔnũ ñũũ.  
 and CP-INCH-big town  
 And the town became big.
- (54) pero a-ni-kuu=Ø šãã kʷíža.  
*pero* TEMP-CP-COP=3 many year  
 But it has already been many years.
- (55) te, wáã te ni-ndoo ñũũ Chalcatongo viejo,  
 and then and CP-stay town *Chalcatongo viejo*  
 And then old Chalcatongo stayed (there),
- (56) a-ni-xížaa=Ø wáã,  
 still-CP-be.located=3 there  
 it was still located there,
- (57) ni-ndoò=Ø onde wáã.  
 CP-stay=3 until there  
 it stayed there.
- (58) te, kožo ñažĩũ žáʔa xa=ni-kaisioku xináʔa žáʔa,  
 and plural people this COMP=CP-be.located.PL plural here  
 And there were many people who were here,
- (59) te ni-ndéža ñažĩú ni-ndéža ñažĩú,  
 and CP-thrive people CP-thrive people  
 and the people thrived, the people thrived,
- (60) niàsù ñažĩú máʔǎ ñũũ=žó,  
 NEG.FOC people alone town=1PL  
 it's not just people from our town alone,



- (61) *či, k<sup>w</sup>aʔà šáã ñažīū ñūū, taká ñūū estadó, té Puebla, te Guerrero.*  
 but many many people town various town *estado* and *Puebla* and *Guerrero*  
 but very many people from various towns and states: *Puebla* and *Guerrero*.
- (62) *tini šáã ñažīū ni-ka-kíi xináʔa,*  
 various many people CP-PL-come.and.return plural  
 Many people came (and left),
- (63) *ka-ndukòò=Ø kožo.*  
 PL-sit=3 plural  
 they settled here.
- (64) *žáʔa žoo ñūʔū libré.*  
 here exist land *libre*  
 There was free (unused) land here.
- (65) *túu, tú=ndéú, dueño kúu,*  
 No NEG=who *dueño* COP  
 No, nobody was the owner,
- (66) *ñūū wáã ni-ku-káʔnū.*  
 town the CP-INCHO-big  
 the town became big.
- (67) *te, žoo historía,*  
 and exist *historia*  
 And there is a history (book),
- (68) *pero, žoo te žáʔnū xa=ká-xini báʔa=ðé historía wáã,*  
*pero* exist ? old COMP=PL-know well=3MN *historia* the  
 but there were old people who knew the history better,<sup>10</sup>
- (69) *te, pero tu=a-káisikú=Ø icáʔa,*  
 and *pero* NEG=TEMP-be.located=3 toward.here  
 but they aren't here any more,
- (70) *te ni-ka-xíʔi=ðe.*  
 and CP-PL-die=3MN  
 they died.

<sup>10</sup>The adjective *žáʔnū* means 'old', but it is clear that it is functioning as a noun here. *te* is probably an archaic classifier for males; the cognate to *čàà* 'man' in many dialects is a form like *tée* (e.g., Peñoles, see Daly 1978:63). The only other form I know of in Chalcatongo Mixtec with a similar first syllable is the noun *tezíí* 'macho (person)'.

- (71) te žóó nú=kuní=ni, te, taba=na ńń librú.  
and exist COND=want=2POL and take.out=1POL one *libro*  
And there is—if you want—I will take out a book.
- (72) beʔàní kándeé ńń librú, ńń historia,  
*palacio.municipal* be.hidden.in one *libro* one *historia*  
In the *palacio municipal* there's a book, a history,<sup>11</sup>
- máá legitimú nuù xà=ni-ndukoo=Ø ñũũ.  
EMPH *legítimo* face COMP=CP-be.seated=3 town  
an official one about how they settled the town.
- (73) sóã xa=kúu=Ø,  
like.that COMP=COP=3  
It was like that,
- (74) ni-kúu=Ø ńń lugar,  
CP-COP=3 one *lugar*  
it was the place,
- (75) te bèl=Ø bina ñúʔni, ni-kexáʔa=ðe kú-kãʔnũ=Ø, verdad.  
and come=3 right.now, CP-begin=3MN INCHO-big=3 *verdad*  
and right now (the time) is coming that it's beginning to get big, (it's) true.
- (76) bina ñúʔni či, xa-ndíʔi ñãʒĩũ, a-ni-ka-kuú ñãʒĩũ razón,  
right.now because NOM-all people TEMP-CP-PL-COP people *razón*  
Right now because all the people are now educated (*gente de razón*),
- (77) čl antes tu=ká-xini=Ø kʷití.  
because *antes* NEG=PL-know=3 little  
because before they didn't know anything.
- (78) ka-kãʔã=Ø statilá,  
PL-speak=3 Spanish,  
They speak Spanish,
- (79) te biná žáʔa ni-kú=Ø, ni-ka-xíni=Ø xináʔa ńń=ka kutúʔa xináʔa.  
and now this CP-COP=3 CP-PL-know=3 plural one=ADD learn plural  
and now it was (because of) this, they knew that others were learning.
- (80) žóó=ka pero, tú=xa=šãã ñãʒĩú xa=kãʔã sánu sáu,  
exist=ADD *pero* NEG=COMP=many people COMP=speak Mixtec  
There are some but not many people who speak Mixtec,

<sup>11</sup>The *palacio municipal* is similar to a city hall or county courthouse in the United States.

- ši máá=ni sastilá xiná?a.  
because EMPH=RES Spanish plural  
because (they only speak) Spanish.
- (81) sǒã ni-sá?a=Ø formar ñũũ Chalcatongo.  
thus CP-make=3 *formar* town *Chalcatongo*  
Thus they founded the town of Chalcatongo.
- (82) pero, úu ni-kuu=Ø šãã kʷíža, ku=Ø šãã kʷíža,  
*pero* oh CP-COP=3 many year COP=3 many year  
But oh, it was many years ago, it was many years ago,
- (83) ku=Ø šãã kʷíža,  
COP=3 many year  
it was many years ago,
- (84) tú=ná?a=ná,  
NEG=remember=1POL  
I don't remember,
- (85) pero, kuní=Ø xa=tabá=ná história,  
*pero* want=3 COMP=take.out=1POL *historia*  
but (if) (someone) wants me to take out the history (book),<sup>12</sup>
- (86) te, kenda história,  
and exit *historia*  
the history can be taken out,
- (87) žoo librú,  
exist *libro*  
there's a book,
- (88) žoo ǎ librú, ǎ geografía xa=xížaa=Ø,  
exist one *libro*, one *geografía* that be.located=3  
there's a book, a geography (book) that is there,
- (89) sa=xa=ní-ndukʷíĩ ñũũ,  
how=COMP=CP-stand.up town  
(about) how the town was founded,

<sup>12</sup>It is not clear to me why the main verb is marked for third person. I have translated it into English that way, but the free translation given by the narrator (in Spanish) was in second person: "If YOU want me to take out the history." Note that in line (110) the offer is repeated, and there the speaker does use a second person clitic pronoun.

- (90) sa=ni-nduk<sup>wĩĩ</sup> ñũũ Chalcatongo.  
 how=CP-stand.up town *Chalcatongo*  
 how the town of Chalcatongo was founded.
- (91) te, xa=ní-ka-kexá?a ñažíũ wáã ka-satĩũ=Ø,  
 and COMP=CP-PL-begin people the PL-work=3  
 And the people began to work,
- (92) te ni-ka-sá-bà?à=Ø kaží,  
 and CP-PL-CAUS-good=3 *calle*  
 and they fixed the streets,
- (93) ni-ka-sá?a=Ø bà?à beñú?ũ,  
 CP-PL-make=3 good church  
 they fixed the church,
- (94) te ndi-k<sup>wítí</sup> ni-ka-sa?a=Ø xiná?a,  
 and all-little CP-PL-make=3 plural  
 and they did everything,
- (95) te, ni-ku bá?a šãã ñũũ xa=ní-ku=Ø bína.  
 and CP-COP good very town COMP=CP-become=3 now  
 and the town that it has become now is very good.
- (96) bína ñú?ni žoo carró,  
 right.now exist *carro*  
 Now there are cars,
- (97) žoo carreterá,  
 exist *carretera*  
 there is a highway,
- (98) žoo ndi-k<sup>wítí</sup>=žó,  
 exist all-little=1PL  
 we have everything,
- (99) pero anté žoo tu=xá=noò žoo,  
*pero antes* exist NEG=COMP=what exist  
 but before there wasn't anything,
- (100) tu=k<sup>wítí</sup> noò núú žóo, antes.  
 NEG=little what face exist *antes*  
 nothing (is) what there was, before.

- (101) sǎã noð xa=ní-saʔa=Ø formar ñũũ=žó.  
 thus what COMP=CP-make=3 *formar* town=1PL  
 This is the way in which they founded our town.
- (102) či, žóo kʷaʔà šǎã ñažǐú mezclado,  
 because exist many many people *mezclado*  
 Because there are so many mixed race people,
- (103) tú=xa=ñazǐũ legitímó,  
 NEG=COMP=people *legítimo*  
 there aren't legitimate (native) people,
- (104) či legitímó wǎã ká-žaa San Pablo, San Esteban, Sančǎõ,  
 because *legítimo* the PL-reside *San Pablo San Esteban Yosondúa*  
 because the legitimate (ones) live in San Pablo, San Esteban, Yosondúa,
- (105) wǎã puro ñažǐú legitímó,  
 that *puro* people *legítimo*  
 those are pure legitimate (native) people,
- (106) pero žáʔa xa=ndi-kʷítí ní-ka-ku=Ø ñažǐũ mezclado.  
*pero* here COMP=all-little CP-PL-become=3 people *mezclado*  
 but here all the people have become mixed race.
- (107) sǎã noð xa=ní-kuu=Ø ñũũ žáʔa,  
 thus what COMP=CP-become=3 town this  
 Thus it became this town,
- (108) te žoo=ka história,  
 and exist=ADD *historia*  
 and there is still a history (book),
- (109) kenda librú xa=xíndee=Ø beʔàni.  
 exit *libro* COMP=be.located=3 *palacio.municipal*  
 the book can be taken out that is located in the *palacio municipal*.
- (110) te wǎã te nú=kúni=ni,  
 and there and COND=want=2POL  
 And there if you want,
- (111) xa=žóo=Ø.  
 COMP=exist=3  
 there it is.<sup>13</sup>

<sup>13</sup>Unfortunately, I was never able to see this book.

## 9.2. Market Day

Told by Luciano Cortés Nicolás, 1981.

- (1) Jueves kúu ĩ kiù žáʔu.  
*Jueves* COP one day plaza  
 Thursday is market day.
- (2) Jueves ča-kóžo ñažĩù ndiʔi ñúũ,  
*Jueves* come-plural people all town  
 Thursday people come from all the towns,
- (3) ká-šikú=Ø ndátĩũ k<sup>w</sup>entá ñĩĩ,  
 PL-sell=3 thing *cuenta* salt  
 they sell things like salt,
- (4) ká-šikú=Ø ñĩĩ,  
 PL-sell=3 salt  
 they sell salt,
- (5) ká-šikó=Ø riĩ,  
 PL-sell=3 sheep  
 they sell sheep,<sup>14</sup>
- (6) ká-šikó=Ø čúú,  
 PL-sell=3 hen  
 they sell hens,
- (7) ká-šikó=Ø, wā kú ñažĩu xa=ká-kuni=Ø.  
 PL-sell=3 that COP people COMP=PL-want=3  
 they sell (those things) to people who want them.
- (8) kúñábaʔa=Ø kítí bàʔà súní,  
 have=3 animal but also  
 They have animals, but also,
- (9) kiù wāá čá-kožo ñažĩù ĩ=ká ñúũ xa=ká-šiku=Ø sáʔma,  
 day that come-plural people one=ADD town COMP=PL-sell=3 clothes  
 that day people come from other towns to sell clothes,

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<sup>14</sup>Note the variation between **ká-šikú** and **ká-šikó** 'they sell'.

- (10) *ká-šikú=Ø ndīxǎ,*  
 PL-sell=3 sandal  
 to sell sandals,
- (11) *ká-šikú=Ø kačíní,*  
 PL-sell=3 hat  
 to sell hats,
- (12) *ká-šikú=Ø tekèi, pañú sùni,*  
 PL-sell=3 blanket *pañó* also  
 to sell blankets and cloths (shawls) also,
- (13) *kiù wǎǎ žóó šǎǎ stáa,*  
 day that exist many tortilla  
 that day there are many tortillas,
- (14) *žóó šǎǎ tástila ndiši,*  
 exist many bread *aguardiente*  
 there is much bread, *aguardiente*,<sup>15</sup>
- (15) *te žóó ħ mércado kũñù,*  
 and exist one *mercado* meat  
 and there is a meat market,
- (16) *mercádó wǎǎ kuu=Ø k<sup>w</sup>ǎǎ=Ø kũñù rii, kũñù ndeší?ú*  
*mercado* that be.able=3 buy=3 meat sheep, meat goat  
 at that market you can buy sheep meat, goat meat,
- (17) *kũñù sndiki kũñù kini kũñù, ndí?i nu kũñú,*  
 meat cow meat pig meat all face meat  
 beef, pork, all kinds of meat,
- (18) *noò ka-kùnì maa xína?a.*  
 what PL-want self plural  
 whatever people want.
- (19) *sùni, žóó ñažǐũ xa=ká-šikó=Ø ndúa,*  
 also, exist people COMP=PL-sell=3 vegetables  
 Also, there are people who sell vegetables,
- (20) *xa=ká-šikó=Ø žá?a,*  
 COMP=PL-sell=3 chile  
 who sell chiles,

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<sup>15</sup>*Aguardiente* is cane liquor.

- (21) *xà=ká-šikó=Ø ndeʔè tètũũ,*  
 COMP=PL-sell=3 fruit cherry  
 who sell cherries,
- (22) *xa=ká-šikó=Ø nuní ndučí, k<sup>w</sup>aʔà ndátĩũ.*  
 COMP=PL-sell=3 corn beans many thing  
 who sell corn, beans, many things.
- (23) *te, ka-kíxáʔá ñažĩũ ka-kíxáʔá čáa nužàʔù xa-ñáʔa,*  
 and PL-begin people PL-begin arrive market NOM-early  
 And the people begin to arrive at the market in the morning,
- (24) *kúú ora xà=žóó šãã ñažĩũ,*  
 COP *hora* COMP=exist many people  
 it's the time when there are a lot of people,
- (25) *te ka ħĩ, ka úni ka kũũ, ñažĩũ ka-kíxáʔá, ká-xaʔa=Ø,*  
 and COP one COP three COP four people PL-begin PL-pass=3  
 and one, three, four people begin to pass by,
- (26) *ka úʔũ, ka íñu xa-ñíní, tú=xa=ñážĩũ nu žóó orá wãã,*  
 COP five COP six NOM-late NEG=COMP=people face exist *hora* then  
 at five, six in the afternoon there aren't any people at that time,
- (27) *ka-kixaʔà toʔo ká-žubaʔa=Ø puestú ka-kixaʔa=Ø ka-na-s-tútú=Ø.*  
 PL-begin people PL-have=3 *puesto* PL-begin=3 PL-REP-CAUS-together=3  
 the people who have stalls begin to gather (things) up.
- (28) *wãã kú ndiʔi ndatĩũ xa=ka-sáʔá=Ø ħĩ kúu nužáʔu.*  
 there COP all thing COMP=PL-do=3 one day market  
 That's all the things that they do on a market day.

### 9.3. Personal History

Told by Sabina Cortés Cruz, 1982.

- (1) *binà, nì-kì-sikó=rí staà kú žaʔu nùžáʔu žáʔa.*  
 now, CP-come-sell=1 tortilla COP sale market this  
 Now, I came to sell tortillas in the market here.<sup>16</sup>

<sup>16</sup>*Staà kú žaʔu* means *tortillas de venta*, that is, 'tortillas for sale'.



- (2) te, ni-kéndá, ni-kéndá ĩ ĩ ñažĩũ ni-kà-xika=Ø,  
and, CP-exit, CP-exit one people CP-PL-ask.for=3  
And some people came out who asked for,
- (3) ni-kà-xikà=Ø bà?à rù?ù.  
CP-PL-ask.for=3 good me  
they asked for me (in marriage).
- (4) te, tú=ní-tánda?a=rí, tú=tánda?a=rí xa=tánda?a bà?à=rí.  
and NEG=CP-marry=1, NEG=marry=1 COMP=marry well=1  
And I didn't marry, I didn't marry that I might marry well (later).
- (5) nì-kà-sá?a=Ø malďá xĩ=rí xiná?a.  
CP-PL-make=3 *maldad* with=1 plural  
They made fun of me.<sup>17</sup>
- (6) te-nì-ndoo=rí xĩ táa,  
and-CP-stay=1 with father  
And I stayed with my father,
- (7) ni-ndoo=rí xĩ náa xa=kú náa uù=rí,  
CP-stay=1 with mother COMP=COP mother two=1  
I stayed with my mother, who was my stepmother,
- (8) te wǎǎ ni-s-k<sup>wǎ</sup>?nũ rù?ù.  
and that CP-CAUS-grow me  
and she raised me.
- (9) wǎǎ ni-s-kée rù?ù.  
that CP-CAUS-eat me  
She fed me.
- (10) wǎǎ ni-xá?ni čúku rù?ù, wǎǎ ni-xá?ni.  
that CP-kill lice me, that CP-kill  
She killed lice for me, she killed (them).
- (11) ní-na-tĩĩ=Ø šíni=rí, ni-na-tĩĩ=Ø.  
CP-REP-grab=3 hair=1, CP-REP-grab=3  
She combed my hair, she combed (it).
- (12) sá?a=Ø trensá=ri, xà=ni-sá?a=Ø.  
make=3 *trenza*=1, COMP=CP-make=3  
She made my braids, she made (them).

<sup>17</sup>*Maldad* is a Spanish word meaning 'wickedness' or 'mischievousness'.

- (13) *xa=na-kikù=Ø saʔma=rí, ni-na-kikú=Ø.*  
 COMP=REP-sew=3 clothes=1 CP-REP-sew=3  
 She mended my clothes, she mended (them).
- (14) *te wāá kú náa=rí,*  
 and that COP mother=1  
 And that was my mother,
- (15) *ni-s-k<sup>w</sup>áʔnū=Ø rùʔù.*  
 CP-CAUS-grow=3 me  
 she raised me.
- (16) *wāá kú nùndoʔo nì-kà-tāʔā=rí.*  
 that COP hardship CP-PL-suffer=1  
 Those were the hardships we suffered.
- (17) *te ni-kéndá ndiži žíí=rí žáʔa.*  
 and CP-exit dead.person husband=1 here  
 And then my late husband appeared here.
- (18) *ni-xikà=ži rùʔù, xa=ni-žòò seʔe=rí.*  
 CP-ask.for=3POL.DEC me COMP=CP-exist children=1  
 He asked for me (in marriage), that I would have his children.  
 (lit. that our children would exist)
- (19) *ni-žòò seʔe, ni-žòò seʔe žáʔa.*  
 CP-exist children, CP-exist children here  
 I had children, I had children here.
- (20) *té ni-kéndá ndiži žíí=rí žáʔa,*  
 and CP-exit dead.person husband=1 here  
 And my late husband appeared here,
- (21) *ni-tīī=ží rùʔù, na-kée=na.*  
 CP-grab=3POL.DEC me, MOOD-say=1POL  
 he grabbed me, I tell you.
- (22) *Me robaron y me vino aquí,*<sup>18</sup>  
 They stole me, and I came here,
- (23) *por eso me quedé yo aquí pero lejos de allí.*  
 that's why I stayed here, far from home.

<sup>18</sup>The consultant probably meant *me vine* rather than *me vino* here.

## Lexicon

What follows is a working dictionary of Chalcatongo Mixtec. I consider the material in it to be reasonably accurate, but there are two areas in which a more detailed examination should eventually be made: tone and nasalization of vowels. Both present problems primarily because of the considerable degree of variation across speakers. I hope to return to these topics at a future date.

The Mixtec forms in this lexicon are alphabetized as follows: **a, ā, b, č, e, ě, ě, i, ɪ, i, ɨ, k, k<sup>w</sup>, l, m, n, nd, nč, nĵ, nž, ñ, ŋg, o, ǝ, p, r, s, š, t, u, ũ, w, x, ž, ʔ**. Oral vowels are alphabetized before nasal vowels, and, all other things being equal, high tone precedes mid tone, which precedes low tone. Glottalization is treated segmentally for purposes of ease of representation in the lexicon as in the grammar and is alphabetized as the last consonant.

The entries in the Mixtec-English half of the lexicon are ordered as follows: Mixtec form, lexical category, English translation, other category information (e.g., stem type in entries for verbs), and information on Spanish equivalent (where relevant). Entries in the English-Mixtec half are ordered in the same way, except that of course the English translation is given first, then lexical category, and then the Mixtec form. Some comments on the individual parts of the entries follow:

**MIXTEC FORMS:** If more than one form is given, this means that consultants differ or vary in their pronunciation of the word. (This most often occurs with tone, although other aspects—such as nasalization or vowel quality—also vary occasionally.) Hyphens are used to separate morphemes only when an affix is productive. If the form is a verb, the potential stem always precedes the realis stem, and the completive is given only if it is irregular. (However, completive forms of the verbs of motion—which are regular in formation—are listed because the realis stem is nonoccurring. See §8.1.)

In a very small number of instances, a phonetic transcription is provided after the Mixtec entry. This is done only for unusual cases, e.g., the entry for “Door.”

Finally, a two-word source is provided for trisyllabic words when that source is obvious, e.g., “Above (*adv*) čisikí (< \*iči sikì).” The asterisk indicates that the form given is the probable diachronic source and is not intended as a synchronic morphological analysis.

LEXICAL CATEGORY AND OTHER CATEGORY INFORMATION: The lexical categories used are *adjective*, *adverb*, *conjunction*, *demonstrative*, *determiner*, *greeting*, *interrogative*, *noun*, *number*, *preposition*, *quantifier*, and *verb*. Additional information given in some entries includes *completive*, *imperative*, *intransitive*, *plural*, *progressive*, *singular*, *stative*, and *transitive*. The abbreviations for these terms are given in the list which appears at the beginning of the grammar (pp. xv-xvi).

ENGLISH GLOSS: I often give two (or more) English forms as translations, to get across the breadth of senses of a Mixtec form. These are then cross-listed under each alternate translation.

SPANISH FORMS: Spanish forms are given in three situations: First, borrowed forms are listed as pronounced in Mixtec, and the Spanish source form is given in parentheses, e.g., "ačá (*n*) Axe (SP *hacha*)." Second, Spanish forms are given in cases where there is no English word, or where the English translation does not seem to adequately capture the sense of the Mixtec word or Spanish translation (these are generally culture items for which we have no real equivalent in English, e.g., the corn gruel called *atole*). Third, Spanish words are given that are incorporated in a Mixtec form, e.g., "Blonde hair (*n*) iši tekolo žáʔa (SP *color*)." I have tried to err on the side of excess in providing Spanish translations, rather than leave the English translation unclear or inexact.

Finally, in other cases (usually involving plant or animal species), under a general heading I have included specific Mixtec names with the notation "type unknown." These are forms for which the consultant could not provide a Spanish equivalent.

## Mixtec-English

### a

- ačá (*n*) Axe (SP *hacha*)  
ání (*n*) Mayoralty (SP *presidencia*)  
anú (*n*) Soul, spirit (SP *ánima, alma*)  
andíú (*n*) Heaven, sky  
arrós (*n*) Rice (SP *arroz*)  
aská (*adv*) Just now  
ásu (*adv*) As a matter of fact  
asú (*conj*) Than  
atókó (*n*) *Nochixtlán* (town name)  
axú (*n*) Garlic (SP *ajo*)  
aʔú inì (*adj*) Ill-bred, spoiled, wicked

### ã

- ãsũ (*adj*) Delicious, tasty

### b

- baká (*n*) Cow (SP *vaca*)  
bakò (*n*) Bird (type unk.)  
bása (*adv*) Later  
basa, basu (*adv*) Although  
bàʔà (*adj, adv*) Good, well  
    bàʔa=kà Better  
    bàʔà sãã=ka Best  
bàʔà (*conj*) But  
báʔù (*n*) Coyote  
bèè (*adj*) Heavy  
bèì (*vi, prog*) Come and return  
    kii (P)  
    ni-kii (*cp*)  
    ndíí (*hab*)  
    ñáʔã (*imp*)  
bekàà (*n*) Jail (< \*beʔe kaa)  
beñúʔũ, béñũʔú (*n*) Church (< \*beʔe  
    ñúʔú/ñúʔù)  
beání [beʔání], beʔe ání (*n*) Municipal  
    building (similar to city hall) (SP *pala-*  
    *cio municipal*)

beʔe (*n*) Building, house, store

beʔe ání, beání [beʔání] (*n*)  
Municipal building (similar to city  
hall) (SP *palacio municipal*)

beʔe čúú Chicken coop

beʔe kítí Horse corral

beʔe ñũũ Municipal building (similar  
to city hall) (SP *palacio municipal*)

beʔe ríí Sheep corral

bìči (*n*) Fan (flat, used for fires)

bíkó (*n*) Party

bíkò (*n*) Cloud

bíkó (*adj*) Cloudy

bílu (*n*) Cat

bílu lúí Kitten

bína (*adv*) Now, today

bína ñúʔni Right away, right now

bisaβ<sup>w</sup>elá (*n*) Great-grandmother (SP  
*bisabuela*)

bíšá (*adj*) Wet

biší, biši (*n*) Gray hair

bitá (*adj*) Smooth, soft

bitu (*n*) Whistle (SP *pito*)

bitù (*n*) Board, plank

bixi (*n*) Pineapple

bíʔža, bíʔnža (*n*) Prickly pear cactus (SP  
*nopal*)

bíʔža skóʔó *Nopal* (type unk.)

bīšī (*adj*) Sweet

bīšī (*adj*) Lukewarm

bīxī (*adj*) Cold

## č

čaa (*vt*) Play (a musical instrument) (P,R)

čaa (*vt*) Write (P,R)

čaà (*vi*) Arrive here at neutral goal (P)

ni-čaà (*cp*)

čàà (*n*) Man

čàà k<sup>w</sup>áá Blind man

čàà k<sup>w</sup>íʔná Pickpocket, robber  
(male)

čàà sá-tana Doctor

čàà s-náʔa Teacher

čáká (*n*) Fish

čakáʔnu, žuča káʔnū (*n*) Canyon

čakú, xíčakú (*vi*) Live, be alive (R)

kučáku (P)

čatànáte (*n*) Great-tailed grackle (SP  
*zanate*)

čaʔa (*n*) Gourd

čaʔa (*n*) Bug (type unk.)

čaʔma (*n*) Lungs

čaʔu, čáʔu (*vt*) Pay (P,R)

čáã (*vt*) Bring, carry (*imp*) (see *kundáʔá*)

čáã (*n*) Forehead

čáʔã, čáʔã=ka (*adv*) Not yet

čãʔã (*n*) Dirt, filth

čáʔã (*adj*) Dirty, filthy

čelu (*n*) Calf (SP *becerro*)

česúku, čisúku, čusúku, kusúkú (*vt*) Roll  
up, wrap (P,R)

žesúku (*stat*) Rolled up, wrapped

čete (*n*) Corn silk

- čétu, čítu (*vt*) Hold up, support (P,R)
- čeží?í, čeží?í, čiží?í, čižú?ú (*vt*) Carry in the mouth (P,R)
- čí-na-xa?a (*int*) Why
- číbu (*n*) Goat (SP *chivo*)
- čìì (*n*) Belly, stomach, under
- čìì (*conj*) Because
- čík<sup>w</sup>a?a (*vt*) Measure, weigh (P,R)
- žík<sup>w</sup>a?a (*stat*) Measured, weighed
- čilža (*n*) Lizard
- činínu (*adv*) Above, up (< \*iči nínu)
- činu (*adj*) Shy
- činù; nùžúšá; nùžúšá činú (*n*) Pitchpine, torchpine (< \*žúnú žúšá) (SP *ocote*)
- čindá?á (*vt*) Push (P,R)
- čindé (*vt*) Help (P,R)
- činde, čundee (*vt*) Put in (P)
- čínde, čúndee (R)
- čindéé iní (*vb*) Be encouraged, take heart (P,R) (SP *animarse*)
- číndikì (*vt*) Follow (P,R)
- žíndikì (*stat*) Follow
- čindí?u (*vt*) Lock in (P,R)
- kindí?u (*vi*) Lock oneself in (P,R)
- žíndí?u (*stat*) Locked in
- čindí?í (*vt*) Gore (P,R)
- čindúčá (*vt*) Rinse, wet (P,R)
- čindùxì, čùndùxì (*vt*) Bury (R)
- čùndùxì (P)
- kùndùxì (*vi*) Bury oneself (P,R)
- žundùxì (*stat*) Buried
- čiñú?ũ (*vt*) Worship (P,R)
- čirikóko (*n*) Worm
- čísa?í, čísa?u, číse?i (*vt*) Hide (P,R)
- késa?í, késá?u (*vi*) Disappear, hide (oneself) (P,R)
- žésa?u, žesa?í (*stat*) Hidden
- čisikí (*adv*) Above (< \*iči sikì)
- čísó (*vt*) Add (P,R)
- čísó tá?ā Pile, stack (P,R)
- čísó (*vt*) Answer (P,R)
- číso, číso (*n*) Husband's sibling (brother-in-law, sister-in-law)
- načíso, náčíso Mother-in-law
- tačíso, táčíso Father-in-law
- čisúku, česúku, čusúku, kusúkú (*vt*) Roll up, wrap (P,R)
- žésúku (*stat*) Rolled up, wrapped
- čišé?é (*vt*) Carry under the arm (P,R)
- čišé?e (*n*) Armpit
- číta?nu (*vt*) Fold (in half) (P,R)
- na-číta?nu Fold (several times) (P,R)
- žíta?nu (*stat*) Folded
- čitá?ā, čutá?ā (*vt*) Join, unite (P,R)
- žitá?ā, žútá?ā (*stat*) Joined, united
- čité?é (*vt*) Pinch (P,R)
- čítú (*vi*) Be crowded, full (P,R)
- čítu, čétu (*vt*) Hold up, support (P,R)
- čítu (*n*) Piglet
- čiží?í, čižú?ú, čeží?í, čeží?í (*vt*) Carry in the mouth (P,R)
- čižókó, čužókó (*vt*) Blow on, steam (P,R)
- čížúxia (*n*) Santa Catarina Yujia (town name)

čičúʔú, čičíʔí, čēčíʔí, čēčíʔí (*vt*) Carry  
in the mouth (P,R)

číʔi (*vt*) Plant, rub, smear, sow, spread  
(P,R)

žíʔí (*stat*) Planted, rubbed, smeared,  
sown, spread

číʔi (*vt*) Tie (a knot) (P,R)

žíʔi (*stat*) Tied (of a knot)

číʔlo (*n*) Pomegranate

čičù (*vt*) Rinse out the mouth (P,R)

čīngī, čīngī (*vi*) Curl, be curly (P,R)

čīkī (*n*) Seed

čīkī (*n*) Fruit of the *nopal* (prickly pear  
cactus) (SP *tuna*)

čīngī, čīngī (*vi*) Curl, be curly (P,R)

čīʔí, čīʔí (*n*) Skunk

čókó (*n*) Ant

čòò (*n*) Shoulder

čóʔo (*hort*) Let's go (and return) (see  
kíʔi)

čoʔó (*n*) Flea

čoʔo kʷáá (*Type of*) flea

čoʔò (*vi*) Cook (P,R)

čúbaʔa (*vt*) Guard, keep (P,R)

čúkú (*vt*) Arrange, put in place (P,R)

čuku (*n*) Louse, lice

čuku čúú (*Type of*) louse

čunáá (*vt*) Pay (P,R)

čúndaxi (*vt*) Soak, wet (P)

čundaxí (R)

ndáxi (*stat*) Wet

žúndaxi (*stat*) Soaked, wet

čundee, činde (*vt*) Put in (P)

čúndee, činde (R)

čùndùxì (*vt*) Bury (P) (see čindùxì)

čuñá (*vt*) Destroy (P,R)

čúsama (*vt*) Pile, stack, turn upside  
down (P,R)

čusndée (*vt*) Put on top (P)

čúsndée (R)

čusúku, česúku, čisúku, kusúkú (*vt*) Roll  
up, wrap (P,R)

žésúku (*stat*) Rolled up, wrapped

čutáʔā, čitáʔā (*vt*) Join, unite (P,R)

žútáʔā, žítáʔā (*stat*) Joined, united

čútútu (*vt*) Register (P,R)

čuxíkí (*vt*) Punch (P,R)

čužókó, čižókó (*vt*) Blow on, steam (P,R)

čúʔči (*n*) God, Jesus (SP *Chucho*)

čúkú (*n*) Fly, insect

čúkú ndíʔi, čúkú žáá Mosquito

čūù šíní (*n*) Star

čūù (*n*) Chicken, hen

čuku čúú (*Type of*) louse

čúʔū (*vt*) Pour, sow, throw out (P,R)

čúʔū inì (*vb*) Behave oneself, compre-  
hend, understand (P,R)

čūʔū íčí (*vb*) Direct, guide (P,R)

## ð

=ðe (*clitic*) He



**i**

ía (*adj*) Sour  
 ičá, íčà (*n*) Grass  
 ičáʔa, iči žáʔa (*adv*) Toward this place  
 ičāā (*adv*) Tomorrow  
 iči (*n*) Path, road, street  
     iči (*prep*) Toward  
     iči žáʔa, ičáʔa (*adv*) Toward this place  
 iči (*vi*) Be dry  
 ì (*adj*) Delicate, gentle  
 íkú (*adv*) Yesterday  
     íkú ñúũ, onde íkú ñúũ Day before yesterday  
 inà (*n*) Dog  
     inà síʔí Female dog  
     inà tík<sup>w</sup>eʔe Rabid dog  
 iǹ (*n*) In, inside, insides, stomach  
 ínú (*n*) Cigarette  
 ísá (*adv*) Next, shortly  
 isò, isù (*n*) Rabbit  
     isò labúrrú Hare (SP *liebre*)  
 isù (*n*) Deer  
 iši (*n*) Hair, wool  
     biší, biši Gray hair  
     iši ndúči Eyelashes  
     iši suká, sukà Eyebrow  
     iši tekolo žáʔa, iši žáá Blond hair (SP *color*)  
     iši žúʔu Beard, mustache  
     titaší iši Split ends

ità (*n*) Flower  
     ità mīnú Herb (SP *hierbabuena*; type of mint)  
     ità nùkúká Palm tree  
     ità tanáñā, žukù tináná Medicinal herb (type unk.)  
 itù (*n*) Cornfield, corn plant, crop (SP *milpa*)  
 itundúxia (*n*) Santa Cruz (town name)  
 íú (*adj*) Empty  
 íža, íʔa (*n*) Saint, god  
     íža síʔí, íʔa síʔí Virgin Mary  
     íʔa síʔí natividad [natiβiðáa] Virgin of the Nativity (SP *natividad*)

**ĩ**

íí, káʔí (*vi*) Be located in, at; of plural or collective subject (R-PL)  
     k<sup>w</sup>íñí (P-PL)  
 íñú (*n*) Spine, thorn  
     ñāñā íñú Mexican porcupine (SP *puerco espín*)  
     žukù íñú Bramble  
 íñū (*num*) Six

## ĩ

ĩĩ (num) One

ĩĩ=ka (quant) Another, other

ĩĩ na-náʔa (n) One moment, a short time in the future

ĩĩ siento One hundred (SP *ciento*)

ĩĩ xáʔa (n) Once, one time

ni-ĩĩ (n) Nobody

ĩĩ (num) Nine

ĩkàbà, ũkaba (vi) Lie down (P,R)

ĩkòò (vi) Sit down (P,R)

## k

káá (vi) Climb up, go up, rise (P,R)

ndáá (stat) Overflowed, risen

kaa (n) Iron, bell

kòò káá Rattlesnake

ndùžù kaa, ndùžùka Nail

kaa Be (copula, pre-adj) (R)

kuú (P)

kába, kábá (n) Cave, cliff, rock (SP *cueva*)

kaba (adj) Hard

kaba (vt) Braid, twist (P,R)

kača (vt) Spread, throw (P)

xàča, xačà (R)

kača (vt) Dig (P)

xáča (R)

kačáʔa, kučáʔa (vi) Dance (P)

xičáʔa, xíčaʔa (R)

kačì (n) Cotton

kačíní (n) Hat

kafé (adj) Brown (SP *café*)

káisikú, káišikú (vi) Be located (R-PL)

kúsikú (P-PL)

kaka (vi) Walk (P)

xíka (R)

kaka (vt) Ask for (P)

xíka (R)

kakà (n) Lime (caustic) (SP *cal*)

kákìʔi inì (vb) Hiccup (P,R)

kákú (vi) Be born (P)

kaku (R)

káná (vt) Call (P)

kána (R)

káná sikì (vb) Scream at, yell at

káná xíĩ (vb) Scream, yell

káná inì (vb) Vomit (P,R)

kánákaba (vi) Fall (P,R)

kání (vt) Build, construct (P)

káni, xání (R)

kání (táʔu) (vt) Hit (P)

xání (táʔu) (R)

kání inì (vb) Think (P)

xání inì (R)

káni (adj) Long (SG)

nání (PL)

kaníndi (vt) Stand (P)

xáníndi (R)

- kánde (vi) Be located in and hidden from view (R)  
kúnde (P)
- kandía, kundía (vt) Believe (P)  
kandía, xándía (R)
- kándii, xíndii (vi) Stand, be located standing (R)  
kúndíi (P)
- kandóʔó (n) (Type of) herb (SP *pitona*)
- kanžáa, kanžá, kāžáa (vi) Choke, drown (P,R)
- kánžaʔa, kénžaʔa (vi) Move near (P,R)
- káñá (adj) Touchy (one who touches everything) (SP *tentón*)
- káñá, ñáá (adj) Bad, crazy, difficult, stupid (SG), ndañá (PL)  
ndokáña, ndakáña (vi) Become agitated, disturbed, excited (P,R)
- kása (n) Brother-in-law (spouse's brother, sister's husband)
- kásí inì (vb) Breakfast, eat (first meal of day) (P)  
žásí inì (R)
- kásu (vt) Close, cover (P)  
xasú (R)  
ndasú (stat) Closed, covered
- kasú (vi) Roast, toast (P,R)
- káši (vi) Nurse, suck (P)  
xáši, žáši (R)
- kašūʔū (vt) Advise, tell (P)  
kášūʔū (R)
- kátá (vi) Itch (P,R)
- kátá (káá) (vt) Hang (P)  
xátá (káá) (R)
- káta (vi) Sing (P)  
xíta (R)
- kataxáʔá (vi) Dance (P,R)
- katí, katu (vt) Boil over, spill (P)  
xátí, xatu (R)
- kátú, kutuu, kutú (vi) Lie down, be located lying down (P)  
xítuu, xítú (R)  
ndátu (stat) Lying down, located lying down
- katu (vi) Make tortillas (P,R)
- katūʔū (vt) Ask (P,R)
- kaxá (n) Box (SP *caja*)
- káxí (adj) Correct, true
- kaxi (vt) Eat (P)  
žáxi (R)
- kážu (vi) Burn, be on fire (P,R)
- kažu (vi) Cough (P)  
kážu (R)
- káʔa (n) Hip
- káʔba (n) Dirt, filth  
káʔbá (adj) Dirty, filthy
- káʔni (vt) Kill (P)  
xáʔni (R)
- kaʔni (n) Sweat
- káʔnu (vt) Break (P)  
xáʔnu (R)
- káʔndi (vi) Explode, thunder (P,R)
- káʔña, káʔža (vt) Cut (P)  
xáʔña, xáʔža (R)
- káʔu (vt) Count (P,R)

- kaʔžu (*vt*) Dye, paint (P)  
 káʔžú (R)
- káá (*vt*) Become accustomed to, used to (P,R)
- káší (*vi*) Sneeze (P,R)
- kāžáa, kanžáa, kánža (*vi*) Choke, drown (P,R)
- káʔā (*vi*) Speak, talk (P,R)  
 káʔā kátá Mock, tease (SP *burlarse*)  
 káʔā nuù (*vb*) Scold  
 káʔā ndàʔú (xíí) (*vb*) Beg, plead  
 káʔā sóʔó (*vb*) Complain, denounce  
 káʔā súkú (*vb*) Speak loudly, yell  
 káʔā žaá (*vb*) Gossip, speak quietly, whisper
- káʔīī, íí (*vi*) Be located in, at; of plural or collective subject (R-PL)  
 k<sup>w</sup>íñí (P-PL)
- káʔmū (*vt*) Burn, smoke (P)  
 xáʔmū (R)
- káʔnū (*adj*) Big, fat (SG)  
 náʔnū (PL)
- kee (*vt*) Eat (P)  
 žée (R)
- keè (*vt*) Say (P,R)  
 keè kúní (P), keè xiní (R) Order (someone) (to do something)
- kenda (*vi*) Exit, go out (P,R)  
 ndéndá (*hab*)
- kendòò (*vi*) Be located (of a place) (P)  
 kéndoo (R)
- kénža, kēža (*vt*) Take away, remove (P,R)
- kénžaʔa, kánžaʔa (*vi*) Move near (P,R)
- kesámá, kusámá (*vt*) Eat (meal at middle of day) (P)  
 žesámá (R)
- késaʔí, késáʔu (*vi*) Disappear, hide (oneself) (P,R) (see čísaʔí)
- kešíní, kušíní (*vt*) Eat (evening meal) (P)  
 xišíní, žéšíní (R)
- ketáʔā, kitáʔā (*vt*) Find, meet (P,R)
- kexáʔá (*vi*) Begin, start (P,R)  
 ndexáʔá (*stat*) Begun, started
- kežíʔí, kežíʔí (*vt*) Bite (P)  
 žežíʔí, žežíʔí (R)
- keʔe (*vt*) Touch (P,R)
- kéī (*vt*) Put (P)  
 xéī (R)  
 kéī (ndiù) Lay (eggs)
- kéža, kénža (*vt*) Remove, take away (P,R)
- kii (*vi*) Come and return (P) (see bèì)
- kíkú (*vt*) Sew (P,R)
- kindíʔu (*vi*) Lock oneself in (P,R) (see čindíʔu)
- kiší (*vi*) Sleep (R)  
 kúsu (P)
- kitáʔā, ketáʔā (*vt*) Find, meet (P,R)
- kixi (*n*) Fever
- kíʔī (*vi*) Go and return (P)  
 čóʔo (*hort*)  
 k<sup>w</sup>áʔá (*imp*)  
 k<sup>w</sup>āʔà (*prog*)  
 xáʔā (*hab*)

- ni-xāʔā (*cp*)  
 kīʔī (*vt*) Take (P)  
 kīʔī (R)  
 žáʔa (*imp*)  
 kiki (*vi*) Harden (P,R)  
 kinè (*n*) Hog, pig  
 kinè siʔí Sow  
 kinè žíí Male pig  
 kini žùkú Wild pig (SP *jabalí*)  
 kũñũ kinè Pork  
 kisi (*n*) Pot, kettle (SP *olla*)  
 kisi (*n*) Ankle  
 kití (*vi*) Boil (P,R)  
 kití inè (nuè, xíí) (*vb*) Be, get angry (P,R)  
 kiti (*n*) Animal, horse  
 kiti mulá Mare (SP *yegua*)  
 kiti tátá Breeding animal  
 kíu (*vi*) Enter, go in (P,R)  
 ndíu (*hab*)  
 kiù (*n*) Day  
 kiží, sikiží (*n*) Blister  
 kiži (*n*) Earthenware jug  
 kiʔi (*vt*) Put on (shoes, jewelry) (P,R)  
 kíʔñi nũʔũ (*vt*) Grind one's teeth  
 kíʔu (*n*) Night  
 kíʔí (*adj*) Have recently given birth  
 kókó (*vt*) Swallow (P,R)  
 kóko (*adj*) Thick  
 kokó (*vt*) Light (P)  
 xoko (R)  
 kokúʔu, kukúʔu (*vi*) Be sick (P)  
 kúʔu (R)  
 kolíi (*n*) Hummingbird (SP *colibrí*)  
 kolór (*n*) Color (SP *color*)  
 kóní (*n*) Turkey hen  
 kóó (*n*) Low wall, border (separating plots of land) (SP *camellón*)  
 koo (*vi*) Exist, there is, are (P)  
 žóó (R)  
 kòò, koò (*n*) Snake  
 kòò káá Rattlesnake  
 kòò kífú, kòò kʷíí, kòò žúča, kòò sóʔó, kòò teʔžú Names of specific snakes (types unk.)  
 kòò žúči Lizard (type unk.)  
 kótó nžaa, kótó žaa (*vt*) Test, try (P)  
 xító nžaa, xító žaa (R)  
 koto (*vi*) Appear, seem (P)  
 xító (R)  
 koto (*vt*) Care for, take care of, watch out for, see (P)  
 xító (R)  
 kóžo (*vt*) Empty, pour (P,R)  
 kóʔlo (*n*) Turkey  
 kóʔó (*vt*) Drink (P)  
 xíʔi (R)  
 koʔo (*adj*) Loud, strong  
 koʔò (*n*) Plate  
 koʔo žúu *Molcajete* (small stone mortar for making *salsa*)  
 tikòʔó, tikókó Tray (made from a gourd)  
 ku-kʷéní=rí (*idiom*) I'm fine

- kú-ndaà (*vi*) Become clear, clear up, dissolve (P,R)  
 ku-šíí (*vi*) Be, become thin, weak (P,R)  
 kučáku (*vi*) Live, be alive (P)  
 xíčakú, čakú (R)  
 kučáʔa, kačáʔa (*vi*) Dance (P)  
 xičáʔa, xíčaʔa (R)  
 kúči (*vi*) Ripen (P)  
 xíči (R)  
 kučí (*vi*) Bathe (P)  
 xíči (R)  
 kúká (*adj*) Rich  
 kúkà (*n*) Comb  
 kúkúú (*vi*) Be located, moving around (P)  
 xíkúu (R)  
 kukúʔu, kokúʔu (*vi*) Be sick (P)  
 kúʔu (R)  
 kukúʔu žoò Menstruate  
 kunái (*vi*) Quiet down (P,R)  
 kunání (*vt*) Be named (P)  
 nání (R)  
 kunáʔá (*vt*) Remember (intentionally) (P)  
 náʔá (R)  
 kúní (*vt*) Know, see (P)  
 xiní (R)  
 keè kúní (P), keè xiní (R) Order (someone) (to do something)  
 kúní (soʔo) (*vb*) Hear, listen (P)  
 xiní (soʔo) (R)  
 kuní (*vt*) Want (P,R)  
 kuni (*adv*) Last night
- kunu (*vt*) Weave (P)  
 kúnu (R)  
 kunužà (núu), kununžà (núu) (*vb*) Hug (P,R)  
 kundátu (*vi*) Wait (P)  
 xíndatu, ndátu (R)  
 kundáʔá (*vt*) Bring, carry (P)  
 xindáʔá, xíndáʔá (R)  
 čáã (*imp*)  
 kundé (*vt*) Bear, endure (P,R)  
 kundee (*vi*) Be located in (P)  
 xíndee (R)  
 kundee (*vi*) Be located in and hidden from view (P)  
 kándee (R)  
 kundía, kandía (*vt*) Believe (P)  
 kandía, xándía (R)  
 kúndíi (*vi*) Stand, be located standing (P)  
 xíndii, kándii (R)  
 kundíí (*vt*) Cover (P,R)  
 kundiso (*vt*) Carry, be in charge of (P)  
 ndíso (R)  
 kundito (*vt*) Care for, take care of (P)  
 ndíto (R)  
 kundito (*vi*) Be awake (P)  
 ndíto (R)  
 kùndùxì (*vi*) Bury oneself (P,R) (see čindùxì)  
 kúnža núu (xíí) (*vb*) Relax, spend time (with) (P,R)  
 kunžàà (*vt*) Cost (P)  
 nžáá, žáá (R)

- kunžàà, kúžaa (*vi*) Live, reside (P)  
nžáá, žáá (R)
- kunžaka, kužaka (*vt*) Bring (a person)  
(P)  
žáka (R)
- kuña (*vt*) Open (P)  
xúñá (R)  
núña (*stat*) Open, opened
- kúñábaʔa (*vt*) Have, keep (P,R)
- kuñánuu (*vt*) Hold (P)  
xúñanuu (R)
- kusámá, kesámá (*vt*) Eat (meal at middle  
of day) (P)  
žesámá (R)
- kúsikú (*vi*) Be located (P-PL)  
káisikú, káišikú (R-PL)
- kusíki (*vi*) Play (P)  
xisíki (R)
- kúsndée (*vi*) Be located on top of (P)  
xísndée (R)
- kúsu (*vi*) Sleep (P)  
kiší (R)
- kusúkú, čisúku, česúku, čusúku Roll up,  
wrap (*vt*) (P,R)  
žésúku (*stat*) Rolled up, wrapped
- kúší (*adj*) Lazy
- kušíkó (*vi*) Smell, stink (P,R)
- kušíní, kešíní (*vt*) Eat (evening meal)  
(P)  
xišíní, žešíní (R)
- kušo (*vi*) Move (P,R)
- kutáu (*vt*) Owe (P)  
táu (R)
- kútaʔù=ná, kútaʔù=rí, kútaʔù šāã=rí  
nuù=ro (*idiom*) Thank you
- kutíí (*vt*) Hold (P,R)
- kútú (*vi*) Work in the fields (P)  
xítú (R)
- kutu (*n*) Nose
- kutuu, kutú, kátú (*vi*) Lie down, be  
located lying down (P)  
xítuu, xítú (R)  
ndátu (*stat*) Lying down, located  
lying down
- kutuʔa (*vt*) Learn (P)  
kútuʔa, túʔa, kutúʔa (R)
- kúu (*vi*) Be able to, can (P,R)
- kuú (*copula, pre-adj*) Be (P)  
kaa (R)
- kuú (*copula, pre-n*) Be (P)  
kúu (R)
- kuù (*vi*) Die (P)  
xíʔi (R)  
kuù nūʔnā (*idiom*) Be sleepy, tired  
kuù sòkò Be hungry
- kuxátú, xatù (*vi*) Be spicy (P)  
xátù, xatú (R)
- kúžaa (*vi*) Be located (P-SG)  
xížaa (R-SG)
- kúžaa, kunžàà (*vi*) Live, reside (P)  
žáá, nžáá (R)
- kužaka, kunžaka (*vt*) Bring (a person)  
(P)  
žáka (R)

- kuʔni (*vt*) Tie (P)  
 xuʔni (R)  
 núʔni (*stat*) Tied
- kúʔu (*vi*) Be sick (R)  
 kukúʔu, kokúʔu (P)  
 kúʔu žoð Menstruate
- kúʔu (*n*) Sister (of female)
- kúnú (*adj*) Deep
- kúnú (*vi*) Run (P)  
 xínú (R)
- kũñù Meat (*n*)  
 kũñù kinì Pork  
 kũñù sndiki Beef
- kúú (*vi*) Fall (of rain, snow, ice) (P)  
 kúú (R)  
 kúú saù (*vi*) Rain
- kũù (*num*) Four  
 kũù šíkó Eighty  
 kũù šíkó úʔũ Eighty-five  
 kũù šíkó ušì Ninety  
 kũù šíkó šíáʔũ Ninety-five
- kúʔũ (*vt*) Contain; have, put on, wear (clothes) (P)  
 ñúʔũ (R)
- kw**
- k<sup>w</sup>a-kú-žání (*idiom*) Soon (< \*k<sup>w</sup>āʔã kuú žani)
- k<sup>w</sup>a-noʔo (*vi, prog*) Go to base and return (see noʔò)
- k<sup>w</sup>á-noʔo (*imp*)
- k<sup>w</sup>áá (*vi*) Darken, get dark (P,R)
- k<sup>w</sup>aà (*n*) Stick (for planting), hoe (SP *coa*)
- k<sup>w</sup>áčí (*adj*) Small, thin
- k<sup>w</sup>àčì (*n*) Cause, fault
- k<sup>w</sup>àčì (*prep*) On account of, due to
- k<sup>w</sup>áku (*vi*) Laugh (P)  
 xakú (R)
- k<sup>w</sup>aliá, k<sup>w</sup>ália (*n*) Godmother (SP *comadre*), godchild
- k<sup>w</sup>anú (*vt*) Loan (P)  
 xanú (R)
- k<sup>w</sup>anduča (*vt*) Baptize (P)  
 xánduča (R)
- k<sup>w</sup>añúʔũ (*vi*) Be infected (P,R)
- k<sup>w</sup>artó (*n*) Room (SP *cuarto*)
- k<sup>w</sup>atáʔã (*vi*) Fight (P)  
 xatáʔã, xitáʔã (R)
- k<sup>w</sup>àtitú (*n*) Twins (SP *cuatitos*)
- k<sup>w</sup>atíú (*vt*) Use (P)  
 xātíú (R)
- k<sup>w</sup>ažú (*n*) Horse (SP *caballo*)
- k<sup>w</sup>ažú (*vt*) Plant, sow (P,R)
- k<sup>w</sup>aʔá (*adj*) Red
- k<sup>w</sup>aʔa (nuù) (*vt*) Give (P)  
 xáʔa (nuù) (R)  
 k<sup>w</sup>aʔa núũ Loan  
 k<sup>w</sup>aʔa patádá Kick (SP *patada*)  
 k<sup>w</sup>aʔa šíkí Punch, hit with the fist  
 k<sup>w</sup>aʔa táʔu Hit



- k<sup>w</sup>àʔa** (*n*) Opposite sex sibling (brother of female, sister of male)
- k<sup>w</sup>aʔà** (*quant*) Many  
**k<sup>w</sup>aʔà šáã** Many, various
- k<sup>w</sup>áʔna** (*adv*) Afterward, later
- k<sup>w</sup>āá** (*adj*) Yellow
- k<sup>w</sup>āā** (*vt*) Buy (P)  
**xáá** (R)
- k<sup>w</sup>áñū** (*vt*) Kick (P)  
**xāñū** (R)
- k<sup>w</sup>āngō** (*vi*) Twist (one's body) (P,R)
- k<sup>w</sup>āʔà** (*vi, prog*) Go and return (see **kíʔī**)  
**k<sup>w</sup>áʔá** (*imp*)
- k<sup>w</sup>áʔnū** (*vi*) Grow (P)  
**xáʔnū** (R)  
**káʔnū** (SG), **náʔnū** (PL) (*adj*) Big, fat  
**ñáʔnū**, **žáʔnū** Old (*adj*)
- k<sup>w</sup>áʔñá** (*vi*) Choke, strangle (P,R)
- k<sup>w</sup>éé** (*adj, adv*) Slow, slowly
- k<sup>w</sup>entá** (*prep*) As if, concerning, like (SP *cuenta*)
- k<sup>w</sup>éte**, **k<sup>w</sup>etón** (*n*) Firecracker (SP *cohete*)
- k<sup>w</sup>eʔè** (*n*) Sickness, illness  
**k<sup>w</sup>eʔè sažú** Cough  
**k<sup>w</sup>eʔè šiní**, **k<sup>w</sup>ešiní** Cold, flu  
**tik<sup>w</sup>eʔe** Rabies
- k<sup>w</sup>ía**, **k<sup>w</sup>íža** (*n*) Age, year  
**k<sup>w</sup>ía aba** Last year
- k<sup>w</sup>īčà** (*vt*) Water (P)  
**xičá** (R)
- k<sup>w</sup>íi** (*adj*) Blue, green
- k<sup>w</sup>íkó** (*vi*) Spin, turn (P)  
**xíkó** (R)
- k<sup>w</sup>ílí** (*ndóʔo*), **k<sup>w</sup>ílí nundóʔžo** Small black bird (type unk.) (*n*)
- k<sup>w</sup>ínú** (*vi*) Become numb (from cold), freeze (P,R)
- k<sup>w</sup>íso** (*vi*) Boil (P)  
**xisó** (R)
- k<sup>w</sup>ítá** (*vi*) Tire (P,R)
- k<sup>w</sup>íža**, **k<sup>w</sup>ía** (*n*) Age, year
- k<sup>w</sup>íʔa** (*inì*) (*adj*) Sad
- k<sup>w</sup>íʔná**, **čàà k<sup>w</sup>íʔná**, **ña-k<sup>w</sup>íʔná**, **xa-k<sup>w</sup>íʔná** (*n*) Pickpocket, robber
- k<sup>w</sup>íʔža** (*quant*) Little bit
- k<sup>w</sup>íñí** (*vi*) Be located in, at; of plural or collective subject (P-PL)  
**íí**, **káʔīī** (R-PL)
- k<sup>w</sup>íñí**, **k<sup>w</sup>íñí** (*adj*) Jealous, miserly, sharp
- k<sup>w</sup>íñí** (*adj*) Swollen
- k<sup>w</sup>īñí**, **k<sup>w</sup>īñí** (*n*) Jaguar (SP *jaguar*, *tigre*)
- k<sup>w</sup>īxí** (*adj*) White
- k<sup>w</sup>ítí** (*adj*) Short
- k<sup>w</sup>ítí** (*adv*) Just

## I

**ladó** (*n*) Side (SP *lado*)

**lagártú** (*n*) Lizard (SP *lagarto*)

**lák<sup>w</sup>á**, **lak<sup>w</sup>a** (*n*) Pus

**lančí**, **lančú** (*n*) Shepherd's hut

lánjaa, lāžá (n) Bluebird  
 láʔba (adj) Toothless  
 laʔži (n) Ground beans  
 lékú (adj) Scrawny  
 lélú (n) Lamb  
 limón (n) Lemon, lime (SP *limón*)  
 líu (n) Puppy  
 líʔi (n) Rooster  
 líí (n) Chick  
 líí (adj) Naked  
 líʔu (adj) Slippery, smooth  
 loo (n) Knee  
 lúčí, lúnči (adj) Black, dark, stained  
 lúlí (adj) Small  
 lúlú (n) Baby  
 lúnči, lúčí (adj) Black, dark, stained  
 luséro (n) Star (SP *lucero*)  
 lúú, lúu (adj) Beautiful, pretty  
 luʔú (adj) Hard, toasted

### m

ma- (prefix) Negative mood  
 máá (n) Self (reflexive and emphatic)  
     máni (adv) Only, purely (< \*máá nii)  
     máʔíí (n) Alone (< \*máá íí)  
 manì (vt) Love (P,R)  
 mandá (n) Cloth (rough white cotton) (SP  
     *manta*)  
 máʔá (quant) Exact, very

māʔñú (n) Center, middle  
     māʔñú (prep) Between  
 meke (n) Marrow  
     meke šíni Brain  
 méku (adj) Gray  
 mesá (n) Table (SP *mesa*)  
 mil (num) Thousand (SP *mil*)  
 miní (n) Lake, well  
 mírtú (n) Hummingbird (SP *chupamirto*)  
 miʔí (n) Garbage  
 míʔí (adj) Complete  
     míʔí kwítí (adv) Exactly  
 molí (n) Mole (chile sauce)

### n

=ná (clitic) I, we (polite)  
 na-čakù (vi) Be brought back to life,  
     revived (P)  
     ná-čakù (R)  
 na-čàʔu (vt) Repay (P)  
     ná-čàʔù (R)  
 na-čítaʔnu (vt) Fold (several times) (P,R)  
 na-ičì (vi) Dry (P,R)  
 ná-kaà (vi) Stretch, move (of a snake)  
     (P,R)  
 na-kaku (vi) Recover (from an illness)  
     (P)  
     ná-kaku (R)  
 ná-kani (vt) Tell (as a story) (P,R)  
 ná-kani (iní) (vb) Worry (P,R)

- na-kaxí (*vt*) Choose (P)  
 ná-kaxì (R)
- na-káʔña, na-káʔža (*vt*) Shorten (P,R)
- na-káá (*vt*) Become accustomed to, used to (P,R)
- na-kéí (*vi*) Move (P,R)
- na-kíkú (*vt*) Mend (P)  
 ná-kikú (R)
- na-kíʔí (*vt*) Gather (P)  
 ná-kíʔí (R)
- na-kiù (*int*) When (lit. 'what day')
- ná-koko (*vt*) Light (P,R)
- na-kúndé (*vi*) Hurry (P,R)
- ná-kùsù (*vi*) Go back to sleep (P,R)
- ná-kʷátu (*vi*) Pray (P,R)
- na-kʷaʔa (*vt*) Give back, return (P,R)
- na-kʷíža (*int*) When (lit. 'what year')
- ná-niʔi (*vt*) Find (P,R)
- na-ndežá (*vi*) Increase, thrive (P,R)
- ná-ndiʔi (*vt*) Need, use (P,R)
- na-ndúkú (*vt*) Look for, search for (P)  
 na-nduku (R)
- na-orá [naʔorá] (*int*) When (lit. 'what hour') (SP *hora*)
- na-s-čítú (*vt*) Refill (P,R)
- ná-s-ičí (*vt*) Dry (P,R)
- ná-s-káa (*vt*) Untangle (of hair) (P,R)
- ná-s-kaà (*vt*) Stretch (P,R)  
 ná-stá (*imp*)
- na-s-kéí (*vt*) Move (P,R)
- na-s-ťíʔí (*vt*) Shrink (P,R)
- na-s-tútú (*vt*) Gather, take away (P,R)
- na-sáa (*int*) How many
- na-sinú (*vt*) Shorten (P)  
 ná-sinú (R)
- na-siki (*int*) Against whom
- na-sókáni (*vt*) Revolve, turn over, upset (SP *voltear*) (P)  
 ná-sókáni (R)
- ná-stá (*vt, imp*) Stretch (see ná-s-kaà)
- na-stá (*vt*) Sweep (P,R)
- na-šúkʷíí (*vi*) Come back, return (P)  
 ná-šúkʷíí (R)
- na-tabá (*vt*) Draw (P,R)
- na-taʔnu (*vi*) Straighten out, untangle (P,R)
- na-táʔu (íní) (*vb*) Wake up (P,R)
- ná-tāā (*vt*) Fill (P)  
 na-tāā (R)
- na-tíí (*vt*) Catch, recover (P)  
 ná-tíí (R)
- na-tíí (*vt*) Comb (P)  
 ná-tíí (R)
- na-tíʔí (*vi*) Shrink, be tight (P,R)
- ná-too (*vi*) Drip (P,R)
- ná-tūʔū, ndá-tūʔū (*vi*) Chat, converse, speak, talk; (*vt*) discuss (R)  
 nda-tūʔū (P)
- na-xaà (*vi*) Arrive there at base (P)  
 ni-na-xáa (*cp*)
- ná-xáʔa (*int*) Why
- ná-xini, na-xíni (*vi*) Be drunk (P,R)
- na-xíí (*int*) With whom
- na-žoò (*int*) When (lit. 'what month')

- náá (*vi*) Be lost, disappear (P,R)  
 náá inì, náá iní (*vb*) Forget (P,R)
- náa (*n*) Mother  
 náa súká Grandmother  
 náa uè Step-mother  
 načíso, náčísó Mother-in-law  
 (< \*náa číso/čísó)
- nakača (*vt*) Wash (P,R)
- nakúnū, nakúnūū (*adv*) Shortly, soon
- náliná (*n*) Godmother (term of address)  
 (< \*náa liná)
- nama (*int*) When
- namà (*n*) Soap
- nána (*term of address*) Señora  
 nana nūū, nana nūū súká Grandmother  
 nana nūū súká Great-grandmother
- nání (*vt*) Be named (R)  
 kunání (P)
- náni (*adj*) Long (PL)  
 káni (SG)
- nándaʔa (*vi*) Wash (one's hands) (P,R)
- nažuú (*n*) Silence
- náʔá (*adv*) A long time
- náʔá (*vt*) Remember (intentionally) (R)  
 kunáʔá (P)
- naʔa (*n*) I, we (*polite*)  
 =ná (*clitic*) I, we (*polite*)
- naʔmà (*vi*) Confess (P,R)
- náñá (*n*) Vegetable pear (SP *chayote*)
- náʔnū (*adj*) Big, fat (PL)  
 káʔnū (SG)
- náʔnū, žáʔnū Old
- néné (*n*) Baby (SP *nene*)
- nendúči (*n*) Caterpillar
- néñú (*vi*) Become fat, swell (P,R)  
 ndéñú (*stat*) Fat, swollen
- néñú (*n*) Blackberry
- =ní (*clitic*) You (*polite*)
- ni-čaà (*vi, cp*) Arrive here at neutral goal  
 čaà (P)
- ni-ḥḥ (*n*) Nobody
- ni-kii (*vi, cp*) Come and return (see *bèì*)
- ni-na-xáa (*vi, cp*) Arrive there at base  
 na-xaà (P)
- ni-nóʔo (*vi, cp*) Go to base and return  
 (see *noʔò*)
- ni-xaà (*vi, cp*) Arrive there at neutral goal  
 xaà (P)
- ni-xáʔā (*vi, cp*) Go and return (see *kíʔī*)
- nii (*conj*) Not even, nor (SP *ni*)  
 niʔḥ (*n*) Nobody (< \*nii ḥ)
- nínu (*adv*) Above, up
- nišíʔú, ndèšiʔo, ndišíʔú (*n*) Goat (SP *chivo*)
- nižúʔu, nḥḥ žúʔu (*n*) Lips
- níʔi (*vt*) Get, receive (P,R)  
 níʔi šikò Smell
- niʔi (*adj, adv*) Hard, strong, tight
- níʔí (*n*) You (*polite*)
- níñí (*n*) Corn cob, ear (SP *mazorca*)
- níñì (*n*) Blood
- níʔi (*vi*) Shake, tremble (P,R)
- noð (*int*) What, which

noʔò (*vi*) Go to base and return (P)  
 ni-nóʔo (*cp*)  
 k<sup>w</sup>a-noʔo (*prog*)  
 k<sup>w</sup>á-noʔo (*imp*)  
 nú= (*clitic*) If  
 nùkaxí, nukàxí (*n*) Evergreen oak  
 (< \*žúnú kaxí) (SP *encino*)  
 nukúʔi (*n*) Forest (< \*žúnú kúʔi)  
 nunì (*n*) Corn kernel  
 nunì ába Corn from previous year  
 nunì xaʔà Cooked corn (SP *nixtamal*)  
 nũʔũ nunì Place on corn cob where  
 kernel was (SP *dientitos de maíz*)  
 nùndeʔé (*n*) Fruit tree  
 nùndeʔé tetúũ, nùndeʔé titúũ  
 Cherry tree  
 nundíí (*n*) Oak tree (< \*žúnú ndíí) (SP  
*roble*)  
 nundóʔo, tundóʔo (*n*) Accident, problem  
 nùnduá (*n*) Oaxaca City  
 núña (*stat*) Open, opened (see kuña)  
 núsá (*adv*) So, therefore  
 nútukéžò (*adv*) Almost  
 núú (*vi*) Climb down, descend, get down  
 (P,R)  
 nuù (*n*) Face, front, in, on  
 nužáʔu, žáʔu (*n*) Market, plaza  
 nužó (*n*) Flute  
 nužókó, ñũ žokó (*n*) *Pinotepa* (town  
 name)  
 nužòo (*n*) Reed (SP *carrizo*) (< \*žúnú  
 žòo)

nùžúšá; činù; nùžúšá činú (*n*) Pitchpine,  
 torchpine (< \*žúnú žúšá) (SP *ocote*)  
 nùʔiní, nuʔiní (*n*) Juniper (< \*žúnú iní)  
 núʔni (*stat*) Tied (see kuʔni)  
 núú (*adj*) First  
 nũʔũ (*n*) Tooth, teeth  
 nũʔũ nunì Place on corn cob where  
 kernel was (SP *dientitos de maíz*)

## nd

ndáá (*stat*) Overflowed, risen (see káá)  
 ndáa (*adj*) Clear, true  
 ndábá (*vi*) Jump (P,R)  
 ndaba (*adj*) Hard  
 ndákaa, ndáka (*n*) Key, lock  
 ndakáña, ndokáña (*vi*) Become agitated,  
 disturbed, excited (P,R)  
 ndakè (*adj*) Crisp, rough  
 ndakèʔ inì (*vb,vi*) Suffocate (P,R)  
 ndakú (*n*) Broom  
 ndaku (*vt*) Transform, change (P)  
 ndáku (R)  
 ndaníʔí (*vt*) Lift, put up, raise (P,R)  
 ndañá (*adj*) Bad, crazy, difficult, stupid  
 (PL), káñá, ñáá (SG)  
 ndañù, ndéñu (*adv*) Always, forever  
 ndása, tendasa, òndasa (*n*) Earthworm  
 ndàsà (*int*) How  
 ndasú (*stat*) Closed, covered (see kásu)

- ndata (*vi*) Break, crack open (P)  
     ndátá (R)  
 ndatíú (*n*) Thing  
 ndati (*n*) Shade, shadow  
 ndátu (*stat*) Lying down, located lying down (see kátú)  
 ndátu, xíndatu (*vi*) Wait (R)  
     kundátu (P)  
 ndatũ?ũ (*vi*) Chat, converse, speak, talk; (*vt*) discuss (P)  
     ndátũ?ũ, nátũ?ũ (R)  
 ndáxí (*vt*) Untie (P,R)  
 ndáxi (*stat*) Wet (see čúndaxi)  
 ndažó?o, nda?a žó?o (*n*) Dry corn plant, fodder, hay  
 nda?a (*n*) Arm, hand, leaf  
     nda?a bá?a Right hand  
     nda?a sáni, nda?a súrdu Left hand (SP *zurdo*)  
     nda?a žó?o, ndažó?o Dry corn plant, fodder, hay  
     nda?a žúkú Twig  
     nda?a žúnú Tree branch  
 nda?ba (*vi*) Die (as a fire), go out (P,R)  
 nda?bà (sí?ú) (*vt*) Take (a name) off a list (P,R)  
 ndá?u (*adj*) Poor  
 nda?ù (*n*) Stall (in market), wares (SP *puesto*)  
 ndéčé (*vi*) Fly (P,R)  
 ndéči, ndíči (*int*) In what direction, what way, where  
 ndée (*vi*) Stretch (P,R)  
 ndee (*vi*) Return downward (P,R)
- ndéénú (*n*) Shameless one  
 ndekàbà (*vi*) Walk, wander around (P,R)  
 ndekíu, ndikíu (*adv*) Every day, daily  
     ndekíu, ndikíu (*int*) What day  
 ndéndá (*vi, hab*) Exit, go out (see kenda)  
 ndéndatu, ndétàtu (*vi*) Rest (P,R)  
 ndendá?á, ndundá?á (*vt*) Drop, let go of (P,R)  
 ndéndoso (*vi*) Be more than sufficient (P,R)  
 ndéndo?o (*vi*) Leak, seep (P)  
     ndendó?ó (R)  
 ndendú (*n*) Both, a pair (< \*(?) uù)  
     nde?uní Three, a trio (< \*(?) unì)  
 ndéñú (*stat*) Fat, swollen (see néñú)  
 ndéñu, ndañù (*adv*) Always, forever  
 ndèší?o, ndiší?ú, niší?ú (*n*) Goat (SP *chivo*)  
 ndétàtu, ndéndatu (*vi*) Rest (P,R)  
 ndétĩ (*vi*) Stick (P,R)  
 ndéu (*int*) Where, which, who  
 ndexá?á (*stat*) Begin, start (see kexá?á)  
 ndežá (*vi*) Increase, thrive (P,R)  
 ndežú (*n*) Lightning  
 ndežu (*n*) Food  
 ndéžu?u (*vi*) Confess (P,R)  
 ndé?é, ndè?é (*vt*) Look, see (P)  
     ndé?é (R)  
 ndé?e (*vi*) Cry, bray (P,R)  
 nde?é (*adj*) Brave  
 nde?è (*n*) Fruit  
     nùnde?é Fruit tree (< \*žúnú nde?è)

- ndeʔè, ndeʔè tetúū, ndeʔè titúū  
Cherry
- ndeʔè, ndeʔè trāsnú Peach (SP  
*durazno*)
- ndéʔžu (*n*) Mud
- ndibíká (*vi*) Dawn cloudy (P,R)
- ndíči, ndéči (*int*) In what direction, what  
way, where
- ndičì (*adv*) At an angle, inclined, leaning
- ndìči (*n*) Green bean
- ndíí (*vi*) Dawn (P,R)
- ndibíká (*vi*) Dawn cloudy (P,R)
- ndíí (*vi, hab*) Come and return (see bèì)
- ndíká (*n*) Banana
- ndíká k<sup>w</sup>aʔá Red banana
- ndíká mánsanú Small yellow  
banana (SP *plátano manzanito*)
- ndíkandíí, ndíkandí (*n*) Sun
- ndíkandíí xíʔi (*idiom*) Eclipse of the  
sun
- ndiko (*adj*) Cold
- ndiko (*vt*) Grind (P)
- ndíko (R)
- ndikóʔndo (*n*) Toad
- ndíso (*vt*) Carry, be in charge of (R)
- kundiso (P)
- ndišíʔú, ndèšiʔo, nišíʔú (*n*) Goat (SP  
*chivo*)
- ndišíʔú lúlí Lamb
- ndíto (*vi*) Be awake (R)
- kundito (P)
- ndíto (*vt*) Care for; take care of (R)
- kundito (P)
- ndixa (*adj*) Certain, clear, true
- ndixanú, ndixinúú (*n*) *Tlaxiaco* (town  
name)
- ndíxi (*adj*) Clear, light (of the sky)
- ndíxì (*n*) Wing
- ndiža (*adv*) Truthfully
- ndiʔá (*adv*) A short time in the past
- ndíʔu (*adj*) Closed, locked
- ndīxā (*n*) Huarache, shoe, sandal
- ndikáʔá, ndikaʔa (*n*) Puma, mountain  
lion (SP *león*)
- ndiki (*n*) Horn (of an animal)
- ndiki (*n*) Year
- ndikíu, ndekíu (*adv*) Every day, daily
- ndikíu, ndekíu (*int*) What day
- ndik<sup>w</sup>ítí (*n*) Everything (< \*ndíʔí k<sup>w</sup>ítí)
- ndíší (*n*) Young corn (SP *elote*)
- ndišì (*n*) *Aguardiente* (alcoholic drink)
- ndíu (*vi, hab*) Enter, go in (see kíu)
- ndiù (*n*) Egg
- ndiži (*n*) Corpse
- ndíʔí (*quant*) All
- ndíʔí (*vi*) End, finish (P,R)
- ndiʔží (*n*) Pimple
- ndíʔži tikátá Insect bite
- ndīkī (*n*) Seed
- ndīkī (*n*) Onion
- ndókani, ndú-kani (*vi*) Stand up (P)
- ndokáni, ndu-káni (R)
- ndokáña, ndakáña (*vi*) Become agitated,  
disturbed, excited (P,R)

- ndoko (*n*) Zapote  
 ndoko íñú *Chirimoya*  
 ndoko kusú *White zapote*
- ndóndá (*vi*) Come off, peel off (P,R)  
 ndóó (*adv*) Straight  
 ndoo (*adj*) Clean  
 ndoò (*n*) Cane, cornstalk  
 ndoò stilá *Sugarcane (SP de Castilla, Castellano)*  
 ndòò (*vi*) Be left over, stay (P)  
 ndóo (R)  
 ndoso (*n*) Breast  
 ndosò (*n*) Stone god  
 ndóʔó, ndòʔo (*n*) *Adobe*  
 ndoʔò (*n*) Basket (deep, usually has carrying strap) (*SP tenate*)  
 ndu- (*inchoative prefix*) Become  
 ndu-bàʔà (*vi*) Get better, improve (P,R)  
 ndu-bíkó (*vi*) Cloud up (P,R)  
 ndu-bĩšĩ (*vi*) Become hot, heat up, warm up (P,R)  
 ndú-ičì [ndúʔičì] inì (nuù) (*vb*) Scorn (P,R)  
 ndu-kaba (*vi*) Lie down (P,R)  
 ndú-kani, ndókani (*vi*) Stand up (P)  
 ndu-káni, ndokáni (R)  
 ndú-kāʔnū, ndú-ñāʔnū (*vi*) Put on airs (P,R) (*SP engrandecerse*)  
 ndú-kòò (*vi*) Be seated, sit down (P,R)  
 ndu-kũʔũ íni (*vb*) Remember (the past) (P)  
 ndú-kũʔũ ini (R)
- ndu-k<sup>w</sup>áʔá (*vi*) Blush (P)  
 ndú-k<sup>w</sup>aʔa (R)  
 ndu-k<sup>w</sup>ítí (*vi*) Shrink (P,R)  
 ndú-ndaà (*vi*) Become clear, clear up, dissolve (P,R)  
 ndu-ndàki (*vi*) Become hard, stale, stiff (P,R)  
 ndu-ndáʔá, ndendáʔá (*vt*) Drop, let go of (P,R)  
 ndú-ñāʔnū, ndú-kāʔnū (*vi*) Put on airs (P,R) (*SP engrandecerse*)  
 ndu-ñúʔũ (*vi*) Get lost, lose one's way (P,R)  
 ndu-síí (*vi*) Separate (P,R)  
 ndú-tií (*vi*) Become tight, tighten (P,R)  
 ndu-tútú (*vi*) Reunite (P,R)  
 ndu-xáá (*vt*) Do something for the first time (P,R)  
 ndu-xáá saʔma Put on new clothes  
 ndú-žaa (*vi*) Pale, become pale (P,R)  
 ndúa (*vi*) Fall (P,R)  
 nduá (*n*) Arrow, heat, ray  
 nduà (*n*) Vegetable, eaten raw (edible grass, herb, leaf, bud, shoot, etc.) (*SP quelite*)  
 nduà néte Edible part of *guaje* tree  
 nduà ndusú *Papaloquelite* (edible herb)  
 nduàbé (*n*) *Aldama* (town name)  
 ndúbà (*vi*) Become excited, noisy, riotous (P,R)  
 nduča (*n*) Water  
 nduča k<sup>w</sup>áʔá *Tepache* (alcoholic drink)  
 nduča k<sup>w</sup>íxí *Pulque*



nduča úa Beer  
 nduča (*vi*) Dissolve (P,R)  
 ndučáʔá (*n*) Hot sauce, salsa  
 nduči (*n*) Eye  
 nduči (*n*) Bean  
     nduči k<sup>w</sup>áʔá Red bean  
     nduči k<sup>w</sup>íxí White bean  
     nduči labá Fava bean (SP *haba*)  
     nduči ndúu Large bean, type unk.  
     (SP *frijol grande, frijolón*)  
     nduči tílú, nduči tílúú Small white  
     bean (SP *alverja*)  
     nduči túú Black bean  
 ndúkú (*vt*) Look for, search for (P)  
     ndukú (R)  
 ndukù (*n*) Firewood  
 nduk<sup>w</sup>í (*vi*) Stand up (P)  
     ndúk<sup>w</sup>í (R)  
 ndundé inì (*vb*) Be encouraged, take  
     heart (P,R) (SP *animarse*)  
 nduša (*n*) *Posole*  
 ndúší (*adj*) Boastful, proud  
 nduši (*vi*) Heat, warm (P)  
     ndúší (R)  
 nduši (*n*) Honey  
 ndúú (*n*) Day  
 ndužu (*n*) Stake, stick  
     ndùžù kaa, ndùžùka Nail  
 ndúʔa (*adj*) Boiled, boiling  
 nduʔà (*n*) Countryside, plain  
     nduʔà mòlinú *Chapultepec* (town  
     name) (SP *molino*)  
     nduʔà ndéʔžu *Abasolo* (town name)

**nž**

nžáá, žáá (*vi*) Live, reside (R)  
     kunžàà, kúžaa (P)  
 nžáá, žáá (*vt*) Cost (R)  
     kunžàà (P)  
 nžaá, žaá (*adj*) Blue, purple, sky blue,  
     white

**ñ**

=ña (*clitic*) She  
 ñáá, káñá (*adj*) Bad, crazy, difficult,  
     stupid (SG), ndañá (PL)  
 ñábaʔa, žábaʔa (*vt*) Have (P,R)  
 ñáka (*adj*) Ugly  
 ñak<sup>w</sup>íʔná (*n*) (Female) pickpocket,  
     robber  
 ñáni (*n*) Brother (of male)  
 ñasíʔi, ñasiʔí (*n*) Wife (< \*ñāʔā síʔi)  
 ñažìù, ñažíú (*n*) Person  
 ñáʔa (*adv*) Early  
 ñaʔná, ñuáʔná (*n*) Mask  
 ñáá (*adj*) Dark  
 ñāmă (*n*) Corn husk (SP *totomostle*)  
 ñāñā īñú (*n*) Mexican porcupine (SP  
     *puerco espín*)  
 ñažíú, ñažìù (*n*) Person  
 ñáʔā (*vi, imp*) Come (and return) (see  
     bèì)

ñā?ā (n) Woman

ñak<sup>w</sup>í?ná (n) (Female) pickpocket, robber (< \*ñā?ā k<sup>w</sup>í?ná)

ñasí?i, ñasi?i Wife (< \*ñā?ā sí?i)

ñā?ā k<sup>w</sup>áá Blind woman

ñā?ā súcí Young woman

ñá?mī (n) Sweet potato

ñá?nū, žá?nū (adj) Old

ñélé (n) Person from San Miguel el Grande (derogatory)

ñū ñélé San Miguel el Grande (town name)

ñíní (adj) Late

ñíñí (n) Hail

ñiùti, ñiùtí, ñiùtí (n) Sand

ñí?i, ñí?i žoko, ñí?i (n) Steam bath

ñí?ná (n) Scarecrow

ñí?ní (adj) Hot, warm

ñíí (vt) Scratch (P,R)

ñíí (n) Leather, skin

ñíí, ñíí (n) Salt

ñí?i (adj) Mute

ñiùtí, ñiùti, ñiùtí (n) Sand

ñí?i, ñí?i, ñí?i žoko (n) Steam bath

ñíí žú?u, nižú?u (n) Lips

ñiùtí, ñiùti, ñiùtí (n) Sand

ñuá?ná, ña?ná (n) Mask

ñu?mà (n) Wax

ñú?ni (adv) No independent meaning; occurs only in bína ñú?ni 'right away, right now'

ñúk<sup>w</sup>i (n) Owl

ñūnū (n) Bag (made of net)

ñūnū čú?á Hammock

ñūñū (n) Hornet

šiò ñūñú Honeycomb, hornet's nest

ñūtáā, ñū ò táā (n) Earthquake

ñūtū (n) Knot, joint (in a plant) (SP *nudo*)

ñúú (vt) Pull (P,R)

ñū ò (n) Town

ñū ò ko?žó Mexico City

ñū ò ndéžá Chalcatongo

ñū ò ñélé San Miguel el Grande

ñū ò tik<sup>w</sup>á?á, ñū ò tik<sup>w</sup>à?a Ticua

ñū ò žokó, nužókó Pinotepa

ñū ò žuku ndáá Teposcolula

ñū ò táā, ñūtáā (n) Earthquake

ñūžíu (n) World

ñú?mā (n) Smoke

ñū?ná (n) Dream

ñú?ú (n) Earth, land, floor, dirt

ñú?ū (vt) Contain; have, put on, wear (clothes) (R)

kú?ū (P)

ñú?ù (n) Fire, light

ñū?ū (n) Teeth, tooth

0

okò (num) Twenty

okò šiá?ū Thirty-five

okò uši Thirty

okò ú?ū Twenty-five

one, onde (*prep*) Until, up to  
 onde ičáã (*adv*) Day after tomorrow  
 onde íkú ñũũ (*adv*) Day before  
 yesterday  
 orá (*conj*) When (SP *hora*)

## P

páa (*n*) Godfather (SP *compadre*)  
 pañú, pãñú (*n*) Shawl (SP *pañó, pañuelo*)  
 pero (*conj*) But (SP *pero*)  
 pípí (*n*) Turkey chick  
 primá (*n*) Cousin (female) (SP *prima*)  
 primú (*n*) Cousin (male) (SP *primo*)

## R

raba (*n*) Radish (SP *rábano*)  
 =rí (*clitic*) I, we (*familiar*)  
 rîî (*n*) Lamb, sheep (SP *borrego*)  
 =ro (*clitic*) You (*familiar*)  
 roʔo (*n*) You (*familiar*)  
 rùʔù (*n*) I, we (*familiar*)

## S

s-čítú (*vt*) Fill (P,R)  
 s-číngí, s-číngí (*vt*) Curl (P,R)

s-čóʔo (*vt*) Cook (P,R)  
 s-ičí (*vt*) Dry (P,R)  
 s-káa (*vt*) Open out, raise, unfold (P,R)  
 s-kaku (*vt*) Bear, have a child (P,R)  
 s-kána (*vt*) Knock over, throw, tip over  
 (P,R)  
 s-kándia (*vt*) Advise, counsel (P,R)  
 s-kánžaʔa, s-káʔaʔa (*vt*) Bring, place  
 nearby, lay aside (P,R)  
 s-kasú (*vt*) Roast, toast (P,R)  
 s-káši (*vt*) Nurse (P,R)  
 s-kaxí (*vt*) Feed (P)  
 s-kaxí (R)  
 s-káʔndi (*vt*) Explode (P,R)  
 s-káʔaʔa, s-kánžaʔa (*vt*) Bring, place  
 nearby, lay aside (P,R)  
 s-kee (*vt*) Feed (P,R)  
 s-kití (*vt*) Boil (P,R)  
 s-kítí inì (*vb,vt*) Anger (P,R)  
 s-kóʔo (*vt*) Remove corn from cob (P,R)  
 s-kúči (*vt*) Bathe (P,R)  
 s-kúní (*vt*) Scold (P,R)  
 s-k<sup>w</sup>áʔnũ (*vt*) Raise (children) (P,R)  
 s-k<sup>w</sup>áŋgǒ (*vt*) Twist (P,R)  
 s-k<sup>w</sup>áʔnǎ (*vt*) Choke, strangle (P,R)  
 s-k<sup>w</sup>íkó (*vt*) Shake, turn (P,R)  
 s-k<sup>w</sup>isó (*vt*) Boil (P,R)  
 s-náa (*vt*) Lose (P,R)  
 s-náa iní (*vb,vt*) Forget (P,R)  
 s-náʔa nuù (*vb*) Show, teach (P,R)  
 s-naʔà (*vt*) Light (P,R)  
 s-naʔà ñũʔũ Make a fire

- s-néñu (*vt*) Fatten (P,R)  
s-níʔní (*vt*) Chill, cool (P,R)  
s-núu, sinú (*vt*) Lengthen, lower (P,R)  
s-ndáá (*vt*) Lift, put up, raise (P,R)  
s-ndáxi (*vt*) Wet (P,R)  
s-ndáʔba (*vt*) Extinguish, put out (P,R)  
s-ndée (*vt*) Confess, stretch (P,R)  
s-ndíkó (*vt*) Chill, cool (P,R)  
s-ndíʔi (*vt*) End, finish (P,R)  
s-ndóó (*vt*) Abandon, leave (P,R)  
s-ndóo (*vt*) Allow, permit (P,R)  
s-ndú-kòò (*vt*) Sit (P,R)  
s-ndú-k<sup>w</sup>íi (*vt*) Detain, stand (P,R)  
s-ndúča (*vt*) Dissolve (P,R)  
s-nduší (*vt*) Heat, warm (P,R)  
s-tášo, s-tášio (*vt*) Move off of, out of (P,R)  
s-tíʔʔí (*vt*) Shrink (P,R)  
s-túnžáa, s-túžáa (*vt*) Roll (P,R)  
s-tútú (*vt*) Gather, take away (P,R)  
s-tuxí (*vt*) Hurt (P,R)  
s-túžáa, s-túnžáa (*vt*) Roll (P,R)  
sá-bàʔà (*vt*) Fix (P,R)  
sá-káni (*vt*) Stretch (P,R)  
sa-k<sup>w</sup>áčí (*vt*) Slice (P,R)  
sá-k<sup>w</sup>ítí (*vt*) Shorten (P,R)  
sá-lulí (*vt*) Tidy up (P,R)  
sá-ndiži (xíí) (*vb*) Play tricks on (P,R)  
sá-ndoo (*vt*) Clean (P,R)  
sá-tana (*vt*) Cure (P,R)  
saà (*n*) Bird  
sámá (*n*) Dinner, food  
sámá (*vt*) Exchange, trade (P,R)  
sami (*n*) Heron  
sanáá iní (*idiom*) Messy, unkempt  
sančáo (*n*) Yosondúa (town name) (SP *Santiago Yosondúa*)  
sánda (*vt*) Clarify, prove (P,R) (< \*sáʔa ndáa)  
sáni (*adv*) Always  
sánú (*adv*) Later  
sánu saù, sãñù sáo, sãĩ saù (*n*) Mixtec (language)  
sastìlá, sãstilá, sãʔã stilá (*n*) Spanish (language) (SP *Castellano*)  
sátĩũ (*vi*) Work (P,R)  
saù (*n*) Rain  
sánu saù, sãñù sáo, sãĩ saù Mixtec (language)  
sáʔa (*vt*) Do, make (P,R)  
sáʔba (*n*) Frog  
saʔba (*quant*) Half  
saʔba ndúú (*n*) Noon  
sáʔi (*vt*) Bless (P,R)  
saʔí (*n*) Secret  
saʔma (*n*) Cloth, clothing, dress  
saʔma žiní Cloth for tortillas, napkin  
saʔnda (*n*) Calf, leg muscle  
sáʔú (*vt*) Cover (oneself, one's head) (P)  
sáʔu (*R*)  
sãĩ saù, sãñù sáo, sánu saù (*n*) Mixtec (language)  
sãstilá, sastìlá, sãʔã stilá (*n*) Spanish (language) (SP *Castellano*)  
sãxĩ (*n*) Nephew

- sāʔā stilá, sāstilá, sastìlá (*n*) Spanish (language) (SP *Castellano*)
- sečání, seʔe čání (*n*) Grandchild
- sečání síʔí Granddaughter
- sečání žíí, sečání žíí Grandson
- sekásá (*n*) Son-in-law (< \*seʔe kása)
- sendáʔu, seʔe ndáʔu (*n*) Orphan
- sendúča (*n*) Godchild (< \*seʔe nduča)
- sesíʔí (*n*) Daughter (< \*seʔe síʔí)
- séte (*n*) Duck
- sete (*vt*) Shave (P,R)
- sexanú (*n*) Daughter-in-law (< \*seʔe xánu)
- sežíí, sežíí (*n*) Son (< \*seʔe žíí/žíí)
- seʔe (*n*) Child
- seʔe čání, sečání Grandchild
- seʔe ndáʔu, sendáʔu Orphan
- seʔe súká Grandchild, great-grandchild
- seʔe úu Step-child
- sía, síža (*n*) Chair (SP *silla*)
- sía (*vt*) Drop, let go of (P,R)
- síkʷí (*n*) Small toad
- sínu (*vt*) Finish (P,R)
- sinú, s-núu (*vt*) Lengthen, lower (P,R)
- síža, sía (*n*) Chair (SP *silla*)
- síʔú (*vt*) Frighten, scare (P,R)
- žúʔú (*stat*) Frightened, scared
- síxī (*vt*) Strain (P,R)
- sì (*adj*) Happy
- sik̀ (*n*) Back (animal), above
- čisik̀ (*adv*) Above (< \*iči sik̀)
- sik̀ soʔo Earring
- sik̀ súkū Necklace
- sik̀ tiʔí Hunchback
- síží (*vi*) Scorch, singe (P,R)
- sikiží, kiží (*n*) Blister
- síʔí (*adj*) Feminine
- síʔú (*n*) Name
- ndaʔbà (síʔú) (*vt*) Take (a name) off a list (P,R)
- siʔú, sùʔa (*n*) Chewing gum (SP *chicle*)
- síʔ (*adj*) Apart, separate
- síʔí (*n*) Leg
- síʔí ndáʔa Wrist
- síʔí xaʔà Ankle
- skée (*vt*) Harvest (P,R)
- skʷáʔa (*vt*) Study (P,R)
- skʷelá (*n*) School (SP *escuela*)
- snawa (*n*) Skirt (SP *enaguas*)
- snáʔa (*adj*) First
- sndik̀ (*n*) Bull, cow, ox
- sókáni, šokáni, šukáni (*vt*) Revolve, turn over, upset (P,R) (SP *voltear*)
- sókó (*n*) Well
- sòkò (*n*) Hunger
- sokóžo (*vt*) Empty (P,R)
- sòò (*n*) Husk, peel, shell, skin
- sopa (*n*) Soup (SP *sopa*)
- soʔo (*n*) Ear
- sóʔó (*adj*) Deaf
- sóã, súá (*adv*) Like that, thus
- spexó (*n*) Mirror (SP *espejo*)

staà (*n*) Tortilla  
     staà tilá, statilá, tastilá Bread (SP *de Castilla, Castellano*)  
     stáá Ball of *masa* (corn dough)  
     standéžú Tortilla with beans (SP *enfrijoladas*)  
 staxaʔá, staxàʔá (*n*) Liver  
 statilá, staà tilá, tastilá (*n*) Bread (SP *de Castilla, Castellano*)  
     statilá bīšī, tastilá bīšī Sweet bread  
 stoò (*n*) Uncle  
 sučí (*n*) Young person, young man  
     ñāʔā súčí Young woman  
     sučí ndáʔu Orphan  
     súčí (*adj*) Young  
 súčá (*vi*) Swim (P)  
     súčá (R)  
 sukà, iši suká (*n*) Eyebrow  
 súní (*adv*) Also, always, too  
 sutù (*n*) Priest  
 suu (*idiom*) Yes, it is  
 súú (*n*) Body  
 súú (*n*) *Memelitas de maíz* (type of tortilla)  
 súú xitì ndaʔa, xitì ndaʔa (*n*) Elbow  
 suu (*idiom*) Yes, it is  
 suxia, šušia (*n*) Turpentine  
 súʔa (*n*) Chocolate  
 sùʔa, siʔú (*n*) Chewing gum (SP *chicle*)  
 súʔma (*n*) Tail  
 suʔú (*vt*) Steal (P)  
     súʔú (R)  
 súá, sōā (*adv*) Like that, thus

sūkú (*adj*) Tall  
 sūkù (*n*) Neck, throat  
     sikè sūkù, žuku sūkù Necklace  
     sūkù ndáʔa Wrist  
 súʔnū (*n*) Shirt

## Š

šàà (*n*) Chin  
 šaʔbà (*n*) Ravine  
 šāā (*quant*) Many, much  
     kʷaʔà šāā Many, various  
 šāā, šāā ñáká (*adj*) Brave, fierce  
 šánúú (*adj*) First  
 šāʔā (*n*) Fat, grease, lard, oil  
 šáʔā=ka (*adv*) First  
 šéʔé (*n*) Ring  
 ši (*conj*) Or  
 ší-na-xaʔa (*int*) Why  
 šíí (*adj*) Thin, weak  
 šiì (*n*) Aunt  
 šíkó (*num*) Score, twentieth part  
 šikò (*n*) Odor, smell  
     šíkó (*adj*) Rotten, smelly  
 šíkó (*vt*) Sell (P)  
     šíkó (R)  
 šíku (*n*) Niece  
 šinì (*n*) Head, at the top of  
     šinì béʔe Attic, roof  
     šinì líʔi Cockscomb

šinì ndáʔa Finger  
 šinì xáʔa Toe  
 šinì xití, šinì žití Knee  
 šinì žúkú Hilltop  
 šínu (*n*) Cornsilk  
 šinù (*n*) Algae, scum  
 šinù, xinù (*n*) Oven  
 šiò, šoò (*n*) *Comal* (griddle on which  
 tortillas are cooked)  
 šiò ñũñú (*n*) Honeycomb, hornet's nest  
 šiòò, šòò (*n*) Skirt  
 šíã (*adv*) Tomorrow  
 šíãʔũ (*num*) Fifteen  
 šíĩ (*n*) Belt, side (of body)  
 šíĩ (*adv*) Leaning (against one's side)  
 šíñũ (*n*) Spanish moss (*SP paxtle*)  
 šíʔã (*n*) Eagle, sparrow hawk  
 šiki (*n*) Fist  
 šikì (*n*) Corner, wall  
 šókaba (*vi*) Turn over (P,R)  
 šokáni, šukáni, sókani (*vt*) Revolve, turn  
 over, upset (P,R) (*SP voltear*)  
 šoò, šiò (*n*) *Comal* (griddle on which  
 tortillas are cooked)  
 šòò, šiòò (*n*) Skirt  
 šòò kʷitá Slip (underskirt)  
 šukáni, šokáni, sókani (*vt*) Revolve, turn  
 over, upset (P,R) (*SP voltear*)  
 šukʷíĩ (*vi*) Return, turn over or around  
 (P)  
 šúkʷíĩ (R)  
 šuší (*vt*) Heat, warm (P,R)

šušia, suxia (*n*) Turpentine  
 šũʔũ (*n*) Bill, money

## t

tà-ní-kʷa (*greeting*) Good night  
 tà-ní-ndi, tándi Good morning  
 tà-ní-ñini, táñini Good afternoon,  
 evening  
 tà-ní-šiù, tá-úšiù [táʔúšiù] Good  
 noon  
 táa (*n*) Father, boss  
 táa súká Grandfather  
 táa uù Step-father  
 tačíso, táčisó Father-in-law (< \*táa  
 číso/čisó)  
 taba (*vt*) Take off, out (P)  
 tábá (R)  
 taba iní (*vb*) Be encouraged, take heart  
 (*SP animarse*) (P,R)  
 tabéʔe (*adv*) Outside (< \*žata beʔe)  
 tačì (*n*) Breath, wind, demon, spirit,  
 ghost, soul  
 tačíso, táčisó (*n*) Father-in-law (< \*táa  
 číso/čisó)  
 taká (*quant*) All  
 taká (*vi*) Assemble, congregate (P,R)  
 takà (*n*) Nest  
 tàkáa, žatà káa (*n*) Crowbar, hoe  
 tálinú (*n*) Godfather (term of address)  
 (< \*táa linú)

- táná, sá-tana (*vt*) Cure (P,R)  
 táná (*n*) Cure, medicine
- tana (*vi*) Complain (P,R)
- tàni (*n*) Sash (SP *faja*)
- tanú (*vt*) Dissolve (P,R)
- tándaʔa (*vt*) Marry (P,R)
- tastilá, statilá, staà tilá (*n*) Bread (SP *de Castilla, Castellano*)  
 tastilá bīšī, statilá bīšī Sweet bread
- tasù žáʔá, žáʔá (*n*) Large buzzard
- táta (*term of address*) Señor  
 táta abelú [aβelú] Great-grandfather (SP *abuelo*)  
 táta ñúũ, táta ñúũ súká, táa súká Grandfather  
 táta ñúũ káʔnũ Ancestor  
 táta ñúũ súká Great-grandfather
- táu (*vt*) Owe (R)  
 kutáu (P)
- taxa (*n*) Lightning
- táxí (*vt*) Order (P,R)
- táʔa (*vi*) Suffer (P,R)
- tàʔà (*n*) Bruise, bump
- táʔnu (*vi*) Bend, break, split (P,R)
- táʔu (*vi*) Break, crack, split (P,R)
- táʔu (*vt*) Roast (P,R)
- táʔu (*n*) Gift, present
- táʔá (*vi*) Quake (of the earth) (P,R)
- táʔā (*n*) Companion, family, friend, relative
- táʔā (*quant*) Every
- te (*conj*) And
- tekaži, tikàži, tikáží (*n*) Charcoal
- tékei, tikài, tikèi (*n*) Blanket
- tekó, ùkóo, tikóo (*n*) Tamale
- tekokó, tikokó (*n*) Worm
- tekuče, ùkiči, tikučì (*n*) Bat
- tek<sup>w</sup>aʔa, tik<sup>w</sup>aʔa, tik<sup>w</sup>àa (*n*) Orange
- tek<sup>w</sup>itì, tik<sup>w</sup>ití (*n*) Potato
- telúú, tilúú (*n*) Ball, rock, round thing
- teluú, tiluú (*n*) Buttocks
- tènana, ùnana (*n*) Tomato (plum) (SP *jitomate*)  
 tènana k<sup>w</sup>áʔá, ùnana k<sup>w</sup>áʔá Red tomato  
 tènana sóo, ùnana sóo *Tomatillo*
- tendaà, tìndáa (*n*) Fiber, rope (made from maguey) (SP *ixtle*)
- tendákú, tìndákú (*n*) Worm
- tendasa, tìndasa, ndása (*n*) Earthworm
- tendóʔo, tìndóʔo (*n*) Jar
- teñu, tiñúú (*n*) Owl
- tesìʔù (*vi*) Spit (P)  
 tésìʔu (R)
- tetíú (*vt*) Send (P)  
 tetíũ (R)
- texáʔā, tìxáʔā (*n*) Clay pot (SP *cazuela*)
- texíá (*vt*) Arrange, clean up, tidy (P,R)
- težíí, težíí (*adj*) *Macho* (of a person)
- téžu (*n*) Bench, stool
- teʔakè, tìʔakè (*n*) Repulsive person or thing
- téʔnde (*vi*) Cut, rip, tear (P,R)
- téʔžu (*vi*) Rot (P,R)
- tičíí, tičíí, tīčī, tīčī (*n*) *Tutuñí (de salsa)* (tortilla dipped in salsa)



- tičòò, tičoo (*n*) Potsherd (SP *tepalcate*)  
 tičóʔo (*n*) Birthmark (on face)  
 tikáʔžá (*n*) Corn fungus  
 tikáxī (*n*) Worm (infests cornfields)  
 tikokó, tekokó (*n*) Worm  
 tík<sup>w</sup>àʔa, tik<sup>w</sup>àʔá (*n*) Chigger  
 tilíngí, tilíngí (*adj*) Skinny, thin  
 tiluú, teluú (*n*) Buttocks  
 timí, timíí (*n*) Bee  
     timí ñūñú Honey bee  
 tindíka (*n*) Pine cone  
 tiñí, tiñíí (*n*) Mouse, rat  
 tìó (*n*) Basket (loosely woven, for washing *nixtamal*) (SP *chiquihuite*)  
 tirandúčí, tisandúčí (*n*) Caterpillar  
 tíšešé (*n*) Urine  
 titeʔé (*n*) Cockroach  
 tixi, tixíí (*n*) Buzzard  
 tíʔa (*quant*) Enough (more), a little bit more  
 tíʔi (*quant*) Enough, a little, a little bit  
 tiʔíñu (*n*) Foam  
 tíʔlu (*adj*) Small  
 tíí, tíí, tížó, tížú (*n*) Fingernail  
 tīū (*n*) Work  
     tíú Errand  
 tížó, tížú, tíí, tíí (*n*) Fingernail  
 =tí (*clitic*) It (*animal*)  
 tìčí, tùčí (*n*) Muscle, nerve, tendon, vein  
 tičí, tičí, tičíí, tičíí (*n*) *Tutuñí (de salsa)*  
     (tortilla dipped in salsa)  
 tičí (*n*) Avocado  
 tií (*adj*) Tight  
 tikà, tikàà, tiká (*n*) Grasshopper  
 tikačá, tikačaà (*n*) Dust, whirlwind  
 tikài, tikèi, tékei (*n*) Blanket  
     tikì káʔnu, tikèi ponchó Poncho  
 tikàkà, tikàká (*n*) Crow, raven  
 tìkaka íni (*n*) Tarantula  
 tìkànu, tikánú (*n*) Knot  
 tìkasi, tikàsī (*n*) Spoon  
 tikátá (*n*) Mange  
 tikàži, tikáží, tekaži (*n*) Charcoal  
 tikàžóko, žóko (*n*) Corn tassel  
 tikèi, tikài, tékei (*n*) Blanket  
     tikèi pončó, tikì káʔnū Poncho  
 tikiši (*n*) Termite  
 tikiči, tikuči, tekuče (*n*) Bat  
 tikíki (*adj*) Hard  
 tikókó, tikòʔó (*n*) Tray (made from a gourd)  
 tikoko žáú (*n*) Center of *maguey* from which pulque is extracted  
 tìkóo, tikóó, tekó (*n*) Tamale  
 tikoro žáʔnda (*n*) Rainbow (SP *arco iris*)  
 tikoto (*n*) Small black bug (type unk.)  
 tikòʔó, tikókó (*n*) Tray (made from a gourd)  
 tikòʔží (*n*) Dimple  
 tikúčá (*n*) Ball, rock, round thing  
 tikuči, tikiči, tekuče (*n*) Bat  
 tikúña (*n*) Blister, mole  
 tik<sup>w</sup>a ñúʔū (*n*) Hot coals  
 tik<sup>w</sup>àa, tik<sup>w</sup>aʔa, tek<sup>w</sup>aʔa (*n*) Orange

- tík<sup>w</sup>àžú, tík<sup>w</sup>àažúú (*n*) Guava (SP *guayaba*)
- tík<sup>w</sup>àʔá, tík<sup>w</sup>àʔa (*n*) Chigger
- tík<sup>w</sup>aʔa, tík<sup>w</sup>àa, tek<sup>w</sup>aʔa (*n*) Orange
- tík<sup>w</sup>eʔe (*n*) Rabies  
     inà tík<sup>w</sup>eʔe Rabid dog
- tík<sup>w</sup>ití, tek<sup>w</sup>ití (*n*) Potato
- tílašú k<sup>w</sup>añúʔũ (*n*) *Hierbamora*  
     (medicinal herb)
- tílúú, telúú (*n*) Ball, rock, round thing
- tìnana, tènana (*n*) Tomato (plum) (SP *jitomate*)  
     tìnana k<sup>w</sup>áʔá, tènana k<sup>w</sup>áʔá Red  
     tomato  
     tìnana sóó, tènana sóó *Tomatillo*
- tíni (*adv*) Both, various
- tíndáa, tendaà (*n*) Fiber, rope (made  
     from maguey) (SP *ixtle*)
- tíndaka, tìndakà (*n*) Wasp
- tìndákú, tendákú (*n*) Worm
- tìndasa, tendasa, ndása (*n*) Earthworm
- tíndóo (*n*) Spider
- tíndotó (*n*) Sty (of the eye)
- tíndóʔo, tendóʔo (*n*) Jar
- tíndúú (*n*) Tree trunk
- tíñúú, teñu (*n*) Owl
- tíñúu (*n*) Fruit of the Mexican hawthorn  
     (tree name: SP *tejocote*)
- tísúʔmá (*n*) Scorpion
- títaší íši (*n*) Split ends
- tíú (*vi*) Decompose, rot (P)  
     tíú (R)  
     tíú inì (*vb*) Have a stomachache
- tixáʔā, texáʔā (*n*) Clay pot (SP *cazuela*)
- tíʔakì, teʔakì (*n*) Repulsive person or  
     thing
- tíʔí (*adj*) Hunchbacked, lame
- tíʔu (*vt*) Suck (P,R)
- tíčī, tíčī, tíčīí, tíčīí (*n*) Tutuñí (de salsa)  
     (Tortilla dipped in salsa)
- tíí (*vt*) Catch, grab, hold (P,R)
- tíñíí, tíñí (*n*) Mouse, rat
- tíngí (*vi*) Cramp, tighten up (P,R)
- tíʔžī (*vi*) Shrink, be tight (P,R)  
     =to (*clitic*) He, she (*polite*)
- tolí (*n*) *Atole*
- tóo (*n*) Drop
- tóo (*vi*) Drip, drain, run (as water) (P,R)
- toʔò (*n*) Person, stranger (*respectful*)
- tríyu, tríu (*n*) Wheat (SP *trigo*)
- tú= (*clitic*) Negative  
     tú=k<sup>w</sup>ití (*n*) Nothing  
     tú=no-žó (*n*) Nobody
- tučà, tučà nunì (*n*) *Chile atole de maíz*
- tùči, tìči (*n*) Muscle, nerve, tendon, vein
- tuku (*adv*) Again
- tundóʔo, nundóʔo (*n*) Accident, problem
- tunžaa, túžaa (*vi*) Roll (P,R)
- túnči, tùnči (*n*) Cave, deep hole
- tútú (*vi*) Whistle (P)  
     tútu (R)
- tútú (*adj*) Together
- tutù (*n*) Paper
- túu (*adv*) No

túú (*vt*) Sting, bite (P)  
 túu (R)  
 tuxi (*vi*) Hurt oneself (P,R)  
 túžáa, tunžaa (*vi*) Roll (P,R)  
 túʔa, kútuʔa, kutúʔa (*vt*) Learn (R)  
 kutuʔa (P)  
 tũũ (*adj*) Black  
 tũú (*n*) Soot  
 tũũ (*n*) Feather  
 tũʔú (*n*) Message, word  
 túʔú (*adj*) Gossipy, lying

**U**

uà (*adj*) Bitter  
 unà (*num*) Eight  
 unì (*num*) Three  
 unì šíkó ušì Seventy  
 unì šíkó šĩáʔũ Seventy-five  
 úša, úšia (*num*) Seven  
 ušì (*num*) Ten  
 uù (*num*) Two  
 uù šíkó Forty  
 uù šíkó okò Sixty  
 uù šíkó okò úʔũ Sixty-five  
 uù šíkó šĩáʔũ Fifty-five  
 uù šíkó ušì Fifty  
 uù šíkó úʔũ Forty-five  
 úʔa (*adj*) Thick, dense

uʔà (*adj*) Salted, salty  
 uʔú (*vi*) Hurt (P,R)

**Ũ**

ũkaba, íkàbà (*vi*) Lie down  
 úʔũ (*num*) Five

**W**

wáã (*adv, det, n*) The, then, there  
 wãá (*dem, n*) That  
 welá (*n*) Grandmother (SP *abuela*)  
 welú (*n*) Grandfather (SP *abuelo*)

**X**

xa-bĩšĩ (*n*) Fruit, grapes  
 xa-k<sup>w</sup>áá (*n*) Darkness, night, blind  
 person  
 xa-k<sup>w</sup>aʔá (*n*) Red  
 xa-k<sup>w</sup>áá (*n*) Yellow  
 xa-k<sup>w</sup>íi (*n*) Blue, green (thing)  
 xa-k<sup>w</sup>íʔná (*n*) Pickpocket, robber  
 xa-k<sup>w</sup>ĩxĩ (*n*) White  
 xa-lúlí (*n*) Child, boy  
 xa-lúlí uù táʔã Twins  
 xa-lúlí žíkĩ Baby

- xa-méku (*n*) Gray (thing), wool thread  
 xa-náʔa (*n*) Past  
 xa-núú (*n*) First one  
 xa-ndáa (*n*) Truth  
 xa-ndūxī (*n*) Last year  
 xa-nʒaá (*n*) White, sky blue, blue, purple (thing)  
 xa-ñáʔa (*n*) Morning  
 xa-ñíní (*n*) Afternoon  
 xa-siʔí (*n*) Girl, woman  
 xa-súčí (*n*) Young man, young person  
 xa-šánúú, xa-núú (*n*) First one  
 xa-tūū (*n*) Black (thing)  
 xa-úʔu (*n*) Devil  
 xa-žíí, xa-žíí (*n*) Man, husband  
     xa-žíí súčí, xa-žíí súčí Bachelor  
 xáá (*adj*) New  
 xaa (*vi*) Blossom, sprout, flow (of water) (P,R)  
 xaà (*vi*) Arrive there at neutral goal (P)  
     ni-xaà (*cp*)  
 xáča (*vt*) Dig (R)  
     kača (P)  
 xačà, xàča (*vt*) Spread, throw (R)  
     kača (P)  
 xàkò, xàko (*n*) Opossum (SP *tlacuache*)  
 xakú (*vi*) Laugh (R)  
     kʷáku (P)  
 xàku (*n*) Corral  
 xakúu (*prep*) For  
 xání, káni (*vt*) Build, construct (R)  
     kání (P)
- xání inì (*vb*) Think (R)  
     kání inì (P)  
 xáni (táʔu) (*vt*) Hit (R)  
     kání (táʔu) (P)  
 xání (*vi*) Dream (P,R)  
 xáníndi (*vt*) Stand (R)  
     kaníndi (P)  
 xánu (*n*) Sister-in-law (brother's wife, spouse's sister)  
 xanú (*vt*) Loan (R)  
     kʷanú (P)  
 xanù (*n*) Coffin, trunk  
 xándía, kandía (*vt*) Believe (R)  
     kandía, kundía (P)  
 xánduča (*vt*) Baptize (R)  
     kʷanduča (P)  
 xasú (*vt*) Close, cover (R)  
     kásu (P)  
     ndasú (*stat*)  
 xáši, žáši (*vi*) Nurse, suck (R)  
     káši (P)  
 xátá (káá) (*vt*) Hang (R)  
     kátá (káá) (P)  
 xatáʔā, xitáʔā (*vi*) Fight (R)  
     kʷatáʔā (P)  
 xatíú (*vt*) Use (R)  
     kʷatíú (P)  
 xátí, xatu (*vt*) Boil over, spill (R)  
     katí, katu (P)  
 xátù, xatú (*vi*) Be spicy (R)  
     kuxátú, xatù (P)  
 xáu náʔá (*int*) How long (time)

- xáʔá *inì* (*idiom*) Egotistical  
 xáʔa (*nuù*) (*vt*) Give (R)  
 xàʔa (*vi*) Sleet, snow (P)  
     xáʔa (R)  
 xaʔá (*vt*) Pass by, pass over (P,R)  
 xaʔà (*n*) Foot  
     xáʔá (*adj*) On foot, standing  
 xaʔà (*n*) Time  
 xáʔni (*vt*) Kill (R)  
     káʔni (P)  
 xáʔnu (*vt*) Break (R)  
     káʔnu (P)  
 xáʔña, xáʔža (*vt*) Cut (R)  
     káʔña, káʔža (P)  
 xáá (*vt*) Buy (R)  
     kʷáá (P)  
 xāā (*adv*) Yes  
 xāñú (*vt*) Kick (R)  
     kʷāñū (P)  
 xātaʔni *iní* (*vb*) Love (P,R)  
 xātáʔā (*inì*) (*vb*) Like (P)  
     xātāʔā, xítāʔā (*inì*) (R)  
 xáʔā (*vi, hab*) Go and return (see kíʔī)  
 xáʔmū (*vt*) Burn, smoke (R)  
     káʔmū (P)  
 xáʔnū (*vi*) Grow (R)  
     kʷáʔnū (P)  
 xéī (*vt*) Put (R)  
     kéī (P)  
 xía (*vi*) Rot, sour (P,R)  
 xičá, xíčá (*adj*) Wide  
 xičá (*vt*) Water (R)  
     kʷičà (P)  
 xíčakú, čakú (*vi*) Live, be alive (R)  
     kučáku (P)  
 xičáʔa, xíčaʔa (*vi*) Dance (R)  
     kačáʔa, kučáʔa (P)  
 xíči, xìči (*n*) Creek  
     žuxíči Bank, shore (< \*žuʔu xíči)  
 xíči (*vi*) Ripen (R)  
     kúči (P)  
 xíči (*vi*) Bathe (R)  
     kučí (P)  
 xíká (*adj*) Far  
 xikà (*n*) Chest  
 xíka (*vi*) Walk (R)  
     kaka (P)  
 xíka (*vt*) Ask for (R)  
     kaka (P)  
 xikà (*n*) Corner, wall  
 xìka (*n*) Basket (may have handles,  
     relatively shallow) (SP *canasta*)  
 xíkó (*vi*) Spin, turn (R)  
     kʷíkó (P)  
 xíkuu (*vi*) Be located, moving around (R)  
     kúkúú (P)  
 xináʔa (*plural word*) Plural  
 xíni ñúʔu (*vt*) Need (P,R)  
 xiní (*vt*) Know, see (R)  
     kúní (P)  
 xiní (soʔo) (*vb*) Hear, listen (R)  
     kúní (soʔo) (P)  
 xínu (*vi*) Finish (P,R)

- xinù, šinù (*n*) Oven
- xíndatu, ndátu (*vi*) Wait (R)  
kundátu (P)
- xindáʔá, xíndáʔá (*vt*) Carry, bring (R)  
kundáʔá (P)  
čáã (*imp*)
- xíndee (*vi*) Be located in (R)  
kundee (P)
- xíndii, kándii (*vi*) Be located standing, stand (R)  
kúndíi (P)
- xisíki (*vi*) Play (R)  
kusíki (P)
- xísndée (*vi*) Be located on top of (R)  
kúsndée (P)
- xisó (*vi*) Boil (R)  
kʷíso (P)
- xišíní, žešíní (*vt*) Eat (evening meal) (R)  
kušíní, kešíní (P)
- xíta (*vi*) Sing (R)  
káta (P)
- xitáʔã, xatáʔã (*vi*) Fight (R)  
kʷatáʔã (P)
- xíto (*vi*) Appear, seem (R)  
koto (P)
- xíto (*vt*) Care for, take care of, watch out for, see (R)  
koto (P)
- xito (*n*) Bed
- xító nžaa, xító žaa (*vt*) Test, try (R)  
kótó nžaa, kótó žaa (P)
- xítú (*vi*) Work in the fields (R)  
kútú (P)
- xítuu, xítú (*vi*) Lie down, be located lying down (R)  
kutuu, kutú, kátú (P)  
ndátu (*stat*) Lying down, located lying down
- xítu inì (*vb*) Hurry (P,R)
- xížaa (*vi*) Be located (R-SG)  
kúžaa (P-SG)
- xíʔi (*vi*) Die (R)  
kuù (P)  
xíʔi nũʔnã (*idiom*) Be sleepy, tired  
xíʔi sòkò Be hungry
- xíʔi (*vt*) Drink (R)  
kóʔó (P)
- xiʔi (*n*) Mushroom  
xišíní Mushroom (type unk.)  
xíʔindí xa-nũʔũ, xindí xa-nũʔũ  
Large mushroom (type unk.)  
xiʔi káčá Yellow mushroom  
xiʔi náʔá, xiʔi náa, xiná Large yellow or orange mushroom  
xiʔi taká, xitaka Large mushroom with many fingerlike growths  
xiʔi tísu, xitísu, xiʔi tísu Small brown or black mushroom  
xiʔi žísi, xižísi, xižísu Large white mushroom
- xíí (*prep*) With
- xínũ (*vi*) Run (R)  
kúnũ (P)

xítā?ā, xátā?ā (inì) (vb) Like (R)  
 xātá?ā (inì) (P)  
 xí?a (vi) Bark (P,R)  
 xítì (n) Guts, tripe  
 xitì ko?ó (n) Bellybutton, navel  
 xití, šinì xití, šinì žití (n) Knee  
 xitè nda?a, súú xitè nda?a (n) Elbow  
 xoò (quant) Few, a little bit  
 xoko (vt) Light (R)  
 kokó (P)  
 xúñá (vt) Open (R)  
 kuña (P)  
 núña (stat) Open, opened  
 xúñanuu (vt) Hold (R)  
 kuñánuu (P)  
 xu?ni (vt) Tie (R)  
 ku?ni (P)  
 nú?ni (stat) Tied

**Ž**

=ža (clitic) She, he, it (supernatural being)  
 žáá, nžáá (vt) Cost (R)  
 kunžàà (P)  
 žáá, nžáá (vi) Live, reside (R)  
 kúžaa, kunžàà (P)  
 žaá, nžáá (adj) Blue, sky blue, white, purple  
 žaa (n) Tongue  
 žàà (n) Ash

žàà (n) Music, song  
 žába?a, ñába?a (vt) Have (P,R)  
 žáči (adv) Fast, quickly, rapidly, soon  
 žáči inì (adj) Agile  
 žáka (adv) All day  
 žáka (vt) Bring (a person) (R)  
 kužaka, kunžaka (P)  
 žakà, žakà níñí (n) Corn crib  
 žak<sup>w</sup>á (adj) Crooked, lopsided  
 žák<sup>w</sup>í, žak<sup>w</sup>í (n) Armadillo  
 žani (adj) Close, near  
 žani (prep) Near  
 žandúžukà, ža?a ndúžu kàà (n) Clove  
 žásí inì (vb) Breakfast, eat (first meal of day) (R)  
 kásí inì (P)  
 žáší (adj) Thin (e.g. paper)  
 žáši, xáši (vi) Nurse, suck (R)  
 káši (P)  
 žata (n) Back (human)  
 žatà xa-núú Second (one)  
 žata úkū, žata íkuu (n) Iturbide (town name)  
 žatà (n) Plow  
 žatà káa, tàkáa Crowbar, hoe  
 žáxi (vt) Eat (R)  
 kaxi (P)  
 žaù (n) Hole  
 žáú (n) Maguey  
 tikoko žáú Center of maguey from which pulque is extracted  
 žáú tílunčè, žáú tilúnčí, žáú tirírí Medicinal maguey (SP papalome)

- žáʔá, tasù žáʔá (*n*) Large buzzard  
 žáʔa (*vt*) Take (*imp*) (see kīʔī)  
 žáʔa (*adv*) Here  
 žaʔá (*dem, n*) This  
 žaʔa (*n*) Chile  
     žaʔa k<sup>w</sup>aʔá Red chile (type unk.)  
     žaʔa k<sup>w</sup>íi Serrano chile  
     žaʔa íčí Costeño chile  
     žaʔa ndíkí Red chile (type unk.)  
 žaʔa ndúžu kàà, žandúžukà (*n*) Clove  
 žáʔu (*adj*) Expensive  
 žáʔu, nužáʔu (*n*) Market, plaza  
 žáxí (*n*) Bowl, cup (made from a gourd)  
     (SP *jícara*)  
 žáʔnū, nāʔnū (*adj*) Old  
 žée (*vt*) Eat (R)  
     kee (P)  
 žesámá (*vt*) Eat (meal at middle of day)  
     (R)  
     kesámá, kusámá (P)  
 žesaʔí, žésaʔu (*stat*) Hidden (see čísaʔu)  
 žésúku (*stat*) Rolled up, wrapped (see  
     česúku)  
 žešíní, xišíní (*vt*) Eat (evening meal) (R)  
     kešíní, kušíní (P)  
 žežíʔí, žežíʔí (*vt*) Bite (R)  
     kežíʔí, kežíʔí (P)  
 =ži (*clitic*) He, she (*polite, younger or  
     deceased person*)  
 žíí (*adj*) Difficult  
 žii, žíí (*adj*) Masculine  
     te-žíí, te-žíí *Macho* (of a person)
- žík<sup>w</sup>aʔa (*stat*) Measured, weighed (see  
     čík<sup>w</sup>aʔa)  
 žíndikì (*stat*) Followed (see číndikì)  
 žíndíʔu (*stat*) Locked in (see číndíʔu)  
 žísi, žísi (*n*) Avocado leaf  
 žítaʔnu (*stat*) Folded (see čítaʔnu)  
 žítáʔā, žútáʔā (*stat*) Joined, united (see  
     čitáʔā)  
 žíʔí, žíʔí (*adj*) Raw  
 žíʔí (*stat*) Planted, rubbed, smeared,  
     sown, spread (see číʔí)  
 žíʔi (*stat*) Tied (of a knot) (see číʔi)  
 žiʔù (*n*) Excrement  
 žíí, žii (*adj*) Masculine  
 žíki (*n*) Gourd, pumpkin, squash  
     žíki tíndužù *Chilacayote*  
 žiki (*n*) Bone  
     žíki núu Cheek  
     žíki tíkú Needle  
 žísi, žísi (*n*) Avocado leaf  
 žiti (*n*) Candle  
     žiti žúša Torch  
 žíxi (*vi*) Become numb, fall asleep (a  
     body part) (P,R)  
 žiʔí, žíʔí (*adj*) Raw  
 žíkí, xa-lúlí žíkí (*n*) Baby  
 =žó (*clitic*) We (*inclusive*)  
 žóko, tikàžóko (*n*) Corn tassel  
 žokò (*n*) Steam  
 žókútú, žúkútú (*adj*) Tight  
 žóó (*v*) Exist, there is, are (R)  
     koo (P)  
     tú=no-žó (*n*) Nobody



- žoò (*n*) Month, moon  
 žòsò (*n*) *Metate*  
 žoʔo (*n*) Root  
 žoʔo (*adj*) Bent, twisted  
 žoʔo (*n*) Rope, cord (made from maguey) (SP *mecate*, *ixtle*)  
     žoʔo lía Thin rope (SP *lía*)  
     žutù, žoʔo žútu Carrying strap (SP *mecapal*)  
 žóʔó (*n*) We (*inclusive*)  
 žòkò (*n*) Hairbrush  
 žuà (*n*) Vegetable, eaten cooked (SP *quelite*)  
 žúbaʔa (*vt*) Have (P)  
     žubàʔà (R)  
 žubéʔé ([žuɸ<sup>w</sup>éʔé]) (*n*) Door (< \*žuʔu beʔe)  
 žúčá (*adj*) Tender, young  
 žuča (*n*) River  
     žuča káʔnū, čakáʔnu Canyon  
     žužúča Mouth of a river (< \*žuʔu žuča)  
 žúčí (*n*) Flour  
 žučì (*n*) Knife  
 žukóʔó (*n*) Braggart (SP *bocón*)  
 žúkú (*n*) Forest, hill, mountain  
     kini žùkú Wild pig (SP *jabalí*)  
 žuku sūkù, sikì súkū (*n*) Necklace  
 žuku šóo (*n*) *Progreso* (town name)  
 žuku žítí (*n*) *Santa María Yucuiti* (town name)  
 žukù (*n*) Herb, plant  
     žukù íñú Bramble  
     žukù tináná, ità tanáñā Medicinal herb (type unk.)  
 žúkútú, žókútú (*adj*) Tight  
 žumá (*n*) Language (SP *idioma*)  
 žúndaxi (*stat*) Soaked, wet (see čúndaxi)  
 žundúčá (*n*) Bank, shore (< \*žuʔu nduča)  
 žundùxì (*stat*) Buried (see čindùxì)  
 žúša (*n*) Pine needles  
 žuša (*n*) Corn dough (SP *masa*)  
 žútáʔā, žítáʔā (*stat*) Joined, united (see čitáʔā)  
 žutù, žoʔo žútu (*n*) Carrying strap (SP *mecapal*)  
 žuu (*n*) Palm mat (SP *petate*)  
 žuù (*n*) Rock, stone  
     koʔo žúu *Molcajete* (small stone mortar for making *salsa*)  
     žúú (*adj*) Hard, solid  
 žuxíči (*n*) Bank, shore (< \*žuʔu xíči)  
 žúʔa (*n*) Ice, snow  
 žuʔà (*n*) Cord, string, thread  
 žúʔú (*stat*) Frightened, scared (see síʔú)  
 žuʔu (*n*) Mouth, language  
     nižúʔu, ñíí žúʔu Lips  
     žubéʔé ([žuɸ<sup>w</sup>éʔé]) Door (< \*žuʔu beʔe)  
     žumá Language (SP *idioma*)  
     žundúčá Bank, shore (< \*žuʔu nduča)  
     žuxíči Bank, shore (< \*žuʔu xíči)  
     žužúča Mouth of a river (< \*žuʔu žuča)

žúnú (*n*) Stick, tree, wood

ità nùkúká Palm tree

nùkaxí, nukàxí Evergreen oak (SP  
*encino*)

nukúʔi Forest

nùndeʔé Fruit tree

nùndeʔé tetúũ, nùndeʔé titúũ  
Cherry tree

nundíí Oak tree (SP *roble*)

nužòo Reed (SP *carrizo*)

nùžúšá; činù; nùžúšá činú  
Pitchpine, torchpine (SP *ocote*)

nùʔiní, nuʔiní Juniper

ndaʔa žúnú Branch

## English-Mixtec

Although this section of the lexicon is titled “English-Mixtec,” note that some entries are actually in Spanish, when there is no word in English to translate the Mixtec word. This happens with town names, some names for flora and fauna, and terms for culture items (e.g., for a word like *metate*, the rectangular stone on which corn is ground).

### a

Abandon, leave ( <i>vt</i> ) s-ndóó (P,R)	Against whom ( <i>int</i> ) na-sikì
<i>Abasolo</i> (town name) ( <i>n</i> ) nduʔà ndéʔžu	Age, year ( <i>n</i> ) k <sup>w</sup> íža, k <sup>w</sup> ía
Able to, can ( <i>vi</i> ) kúu (P,R)	Agile ( <i>adj</i> ) žáci inì
Above, back (animal) ( <i>n</i> ) sikì	Agitated, disturbed, excited (to become) ( <i>vi</i> ) ndokáña, ndakáña (P,R)
Above ( <i>adv</i> ) čisikí (< *iči sikì)	<i>Aguardiente</i> (alcoholic drink) ( <i>n</i> ) ndišť
Above, up ( <i>adv</i> ) nínu, činínu (< *iči nínu)	<i>Aldama</i> (town name) ( <i>n</i> ) nduàbé
Accident, problem ( <i>n</i> ) nundóʔo, tundóʔo	Algae, scum ( <i>n</i> ) šinù
Accustomed to, used to (to become) ( <i>vt</i> ) kǎǎ, na-kǎǎ (P,R)	Alive (to be), live ( <i>vi</i> ) kučáku (P), xíčakú, čakú (R)
Add ( <i>vt</i> ) čísó (P,R)	All ( <i>quant</i> ) ndíʔí
<i>Adobe</i> ( <i>n</i> ) ndóʔó, ndòʔo	All ( <i>quant</i> ) táká
Advise, counsel ( <i>vt</i> ) s-kándia (P,R)	All day ( <i>adv</i> ) žáka
Advise, tell ( <i>vt</i> ) kašūʔū (P), kášūʔū (R)	Allow, permit ( <i>vt</i> ) s-ndóo (P,R)
Afternoon ( <i>n</i> ) xa-nííní	Almost ( <i>adv</i> ) nútukéžò
Afterward, later ( <i>adv</i> ) k <sup>w</sup> áʔna	Alone ( <i>n</i> ) máʔǎ (< *máá ǎ)
Again ( <i>adv</i> ) tuku	Also, always, too ( <i>adv</i> ) súní
	Although ( <i>adv</i> ) basu, basa
	Always ( <i>adv</i> ) sání
	Always, forever ( <i>adv</i> ) ndañù, ndéñu

Always, too, also (*adv*) súní  
 Ancestor (*n*) táta n̄ũũ káʔnũ  
 And (*conj*) te  
 Angled, inclined, leaning (*adv*) ndičì  
 Angry (to be, to get) (*vb*) kití inì (nuù, xíí) (P,R)  
     Anger (*vb,vt*) s-kítí inì (P,R)  
 Ankle (*n*) kisi, s̄ĩĩ xaʔà  
 Animal, horse (*n*) kiti  
     Breeding animal kiti tátá  
 Another, other (*quant*) ħ̄=ka  
 Answer (*vt*) čísó (P,R)  
 Ant (*n*) čókó  
 Apart, separate (*adj*) s̄ĩĩ  
 Appear, seem (*vi*) koto (P), xító (R)  
 Arm, hand, leaf (*n*) ndaʔa  
     Elbow (súú) xit̄ ndaʔa  
     Wrist sūkũ ndáʔa, s̄ĩĩ ndáʔa  
 Armadillo (*n*) žák<sup>w</sup>í, žak<sup>w</sup>í  
 Armpit (*n*) čišéʔe  
 Arrange, clean up, tidy (*vt*) texíá (P,R)  
 Arrange, put in place (*vt*) čúkú (P,R)  
 Arrive (here at neutral goal) (*vi*) čaà (P)  
     ni-čaà (*cp*)  
 Arrive (there at base) (*vi*) na-xaà (P)  
     ni-na-xáa (*cp*)  
 Arrive (there at neutral goal) (*vi*) xaà (P)  
     ni-xaà (*cp*)  
 Arrow, heat, ray (*n*) nduá  
 As a matter of fact (*adv*) ásu  
 As if, concerning, like (*prep*) k<sup>w</sup>entá (SP *cuenta*)

Ash (*n*) žàà  
 Ask (*vt*) katũʔũ (P,R)  
 Ask for (*vt*) kaka (P), xíka (R)  
 Assemble, congregate (*vi*) taká (P,R)  
 At the top of, head, top (*n*) šinì  
 Atole (*n*) tolí  
     Chile atole de maíz tučà, tučà nunì  
 Attic, roof (*n*) šinì béʔe  
 Aunt (*n*) šìi  
 Avocado (*n*) tičí  
 Avocado leaf (*n*) žísi, žisi  
 Awake (to be) (*vi*) kundito (P), ndíto (R)  
 Axe (*n*) ačá (SP *hacha*)

## b

Baby (*n*) žíkí, xa-lúlí žíkí; lúlú; néné (SP *nene*)  
 Bachelor (*n*) xa-žíí súčí, xa-žíí súčí  
 Back (animal), above (*n*) sik̄  
     Hunchback sik̄ tiʔí  
 Back (human) (*n*) žata  
 Bad, crazy, difficult, stupid (*adj*) káñá, ñáá (SG), ndañá (PL)  
 Bag (made of net) (*n*) n̄ũũ  
 Ball, rock, round thing (*n*) telúú, tilúú; tikúčá  
 Ball of corn dough (*n*) stáá  
 Banana (*n*) ndíká  
     Red banana ndíká k<sup>w</sup>aʔá

- Small yellow banana ndíká  
mánsanú (SP *plátano manzanito*)
- Bank, shore (n) žundúčá (< \*žužu  
nduča); žuxíči (< \*žužu xíči)
- Baptize (vt) k<sup>w</sup>anduča (P), xánduča (R)
- Bark (vi) xí?ā (P,R)
- Basket (deep, usually has carrying strap)  
(n) ndo?ò (SP *tenate*)
- Basket (loosely woven, for washing  
*nixtamal*) (n) tìó (SP *chiquihuite*)
- Basket (may have handles, relatively  
shallow) (n) xìka (SP *canasta*)
- Bat (n) tìkiči, tikuči, tekuče
- Bathe (vi) kučí (P), xíči (R)  
Bathe (vt) s-kúči (P,R)
- Be (copula, pre-adj) kuú (P), kaa (R)
- Be (copula, pre-n) kuú (P), kúu (R)
- Be located (vi) kúsikú (P-PL), káisikú,  
káišikú (R-PL), kúžaa (P-SG), xížaa  
(R-SG)
- Be located (in) (vi) kundee (P),  
xíndee (R)
- Be located (in and hidden from view)  
(vi) kundee (P), kándee (R)
- Be located (in, at) (of plural or collec-  
tive subject) (vi) k<sup>w</sup>íñí (P-PL), íí,  
ká?íí (R-PL)
- Be located (lying down), lie down  
(vi) kutuu, kutú, kátú (P), xítuu, xítú  
(R); Lying down (stat) ndátu
- Be located (moving around) (vi)  
kúkúú (P), xíkúu (R)
- Be located (of a place) (vi) kendòò  
(P), kéndoo (R)
- Be located (on top of) (vi) kúsndée  
(P), xísndée (R)
- Be located (standing), stand (vi)  
kúndíi (P), kándii, xíndii (R)
- Bean (n) nduči
- Black bean nduči túú
- Fava bean nduči labá (SP *haba*)
- Green bean ndìči
- Ground beans la?ži
- Large bean (type unk.) nduči ndúu  
(SP *frijol grande, frijolón*)
- Red bean nduči k<sup>w</sup>á?á
- Small white bean nduči tílú, nduči  
tílúú (SP *alverja*)
- White bean nduči k<sup>w</sup>íxí
- Bear, endure (vt) kundé (P,R)
- Bear, have a child (vt) s-kaku (P,R)  
To have recently given birth (adj) kí?í
- Beard, mustache (n) iši žúžu
- Beautiful, pretty (adj) lúú, lúu
- Because (conj) čìì
- Become (inchoative prefix) ndu-
- Become clear, clear up, dissolve (vi)  
ndú-ndaà, kú-ndaà (P,R)
- Become hot, heat up, warm up (vi)  
ndu-bíšì (P,R)
- Become lost, lose one's way (vi)  
ndu-ñú?ũ (P,R)
- Become hard, stale, stiff (vi) ndu-  
ndàki (P,R)
- Become tight, tighten (vi) ndú-tiì  
(P,R)
- Bed (n) xito
- Bee (n) timí, timíí  
Honey bee timí ñũñú
- Beef (n) kũñũ sndiki

Beer ( <i>n</i> ) nduča úa	Bite, sting ( <i>vt</i> ) túú (P), túu (R)
Beg, plead ( <i>vb</i> ) ká?ã ndà?ú (xíí) (P,R)	Bite (insect) ( <i>n</i> ) ndí?ži tikátá
Begin, start ( <i>vi</i> ) kexá?á (P,R)	Bitter ( <i>adj</i> ) uà
Begin, start ( <i>stat</i> ) ndexá?á	Black ( <i>adj</i> ) tũũ, ( <i>n</i> ) xa-tũũ
Behave oneself, comprehend, understand ( <i>vb</i> ) čũ?ũ inì (P,R)	Soot ( <i>n</i> ) tũú
Believe ( <i>vi, vt</i> ) kundía, kandía (P), kandía, xándía (R)	Black, dark, stained ( <i>adj</i> ) lúčí, lúnči
Bell, iron ( <i>n</i> ) kaa	Blackberry ( <i>n</i> ) něńú
Rattlesnake kòò káá	Blanket ( <i>n</i> ) tikài, tikèi, tékei
Belly, stomach, under ( <i>n</i> ) čìì	Bless ( <i>vt</i> ) sá?i (P,R)
Bellybutton, navel ( <i>n</i> ) xiti ko?ó	Blind person ( <i>n</i> ) xa-k <sup>w</sup> áá, čàà k <sup>w</sup> áá, ñā?ã k <sup>w</sup> áá
Belt, side (of body) ( <i>n</i> ) šīī	Blister ( <i>n</i> ) kiží, sikiží
Bench, stool ( <i>n</i> ) téžu	Blister, mole ( <i>n</i> ) tikúña
Bend, break, split ( <i>vi</i> ) tá?nu (P,R)	Blond hair ( <i>n</i> ) iši tekolo žá?a, iši žáá (SP <i>color</i> )
Bent, twisted ( <i>adj</i> ) žo?o	Blood ( <i>n</i> ) níñì
Best ( <i>adj</i> ) bà?à šāã=ka	Blossom, flow (of water), sprout ( <i>vi</i> ) xaa (P,R)
Better ( <i>adj</i> ) bà?a=kà	Blow on, steam ( <i>vt</i> ) čižókó, čužókó (P,R)
Get better, improve ( <i>vi</i> ) ndu-bà?à (P,R)	Blue, green ( <i>adj</i> ) k <sup>w</sup> íi, ( <i>n</i> ) xa-k <sup>w</sup> íi
Between ( <i>prep</i> ) mǎ?ñú	Blue, purple, sky blue, white ( <i>adj</i> ) žaá, nžaá, ( <i>n</i> ) xa-nžaá
Big, fat ( <i>adj</i> ) kǎ?nū (SG), nǎ?nū (PL)	Bluebird ( <i>n</i> ) lǎžá, lánjaa
Old nǎ?nū, žǎ?nū	Blush ( <i>vi</i> ) ndu-k <sup>w</sup> á?á (P), ndú-k <sup>w</sup> a?a (R)
Bill, money ( <i>n</i> ) šū?ũ	Board, plank ( <i>n</i> ) bitù
Bird ( <i>n</i> ) saà	Boastful, proud ( <i>adj</i> ) ndúší
Bird (small black) k <sup>w</sup> ílí (ndó?o), k <sup>w</sup> ílí nundó?žo	Body ( <i>n</i> ) súú
Bird (type unk.) bakò	Boil ( <i>vi</i> ) kití (P,R); k <sup>w</sup> íso (P), xisó (R)
Great-tailed grackle čatánáte (SP zanate)	Boil ( <i>vt</i> ) s-kití (P,R); s-k <sup>w</sup> isó (P,R)
Birthmark (on face) ( <i>n</i> ) tičó?o	Boil over, spill ( <i>vt</i> ) katu, katí (P), xatu, xátì (R)
Bite ( <i>vt</i> ) keží?í, keží?í (P), žeží?í, žeží?í (R)	Boiled, boiling ( <i>adj</i> ) ndú?a
	Bone ( <i>n</i> ) žiki

- Border, low wall (separating plots of land) (*n*) kóó (SP *camellón*)
- Born (to be) (*vi*) kákú (P), kaku (R)
- Boss, father (*n*) táa
- Both, a pair (*n*) ndendú (< \*(?) uù)  
Three, a trio ndeʔuní (< \*(?) unì)
- Both, various (*adv*) tíni
- Bowl, cup (made from a gourd) (*n*) žáxí (SP *jícara*)
- Box (*n*) kaxá (SP *caja*)
- Boy, child (*n*) xa-lúli
- Braggart (*n*) žukóʔó (SP *bocón*)
- Braid, twist (*vt*) kaba (P,R)
- Brain (*n*) meke šíni
- Bramble (*n*) žukù íñú
- Branch (of tree) (*n*) ndaʔa žúnú
- Brave (*adj*) ndeʔé
- Brave, fierce (*adj*) šāā, šāā ñáká
- Bray, cry (*vi*) ndéʔe (P,R)
- Bread (*n*) tastilá, statilá, staà tilá (SP *de Castilla, Castellano*)  
Sweet bread statilá bīšì, tastilá bīšì
- Break (*vt*) káʔnu (P), xáʔnu (R)  
Break, split, bend (*vi*) táʔnu (P,R)
- Break, crack, split (*vi*) táʔu (P,R)
- Break, crack open (*vi*) ndata (P), ndátá (R)
- Breakfast, eat (first meal of day) (*vb*)  
kásí inì (P), žásí inì (R)
- Breast (*n*) ndoso
- Breath, demon, ghost, soul, spirit, voice, wind (*n*) tačì
- Bring, carry (*vt*) kundáʔá (P), xindáʔá, xíndáʔá (R)  
čáā (*imp*)
- Bring, lay aside, place nearby (*vt*)  
s-káʔaʔa, s-kánʔaʔa (P,R)
- Bring (a person) (*vt*) kužaka, kunžaka (P), žáka (R)
- Broom (*n*) ndakú
- Brother (of female), sister (of male) (*n*)  
kʷàʔa
- Brother (of male) (*n*) ñáni
- Brother-in-law (sister's husband, spouse's brother) (*n*) kása  
Brother-in-law, sister-in-law (husband's sibling) (*n*) číso, čisó
- Brought back to life, revived (to be) (*vi*)  
na-čakù (P), ná-čakù (R)
- Brown (*adj*) kafé (SP *café*)
- Bruise, bump (*n*) tàʔà
- Brush (for hair) (*n*) žōkō
- Bug (*n*) čaʔa (type unk.)  
Bug, small black tikoto
- Build, construct (*vt*) kání (P), xání, káni (R)
- Building, house, store (*n*) beʔe
- Bull, cow, ox (*n*) sndikì
- Bump, bruise (*n*) tàʔà
- Burn, be on fire (*vi*) kážu (P,R)
- Burn, smoke (*vt*) káʔmū (P), xáʔmū (R)
- Bury (*vt*) čùndùxì (P), čùndùxì, čindùxì (R)  
Buried (*stat*) žundùxì  
Bury oneself (*vi*) kùndùxì (P,R)
- But (*conj*) bàʔà, pero (SP *pero*)

Buttocks (*n*) tiluú, teluú

Buy (*vt*) k<sup>w</sup>āā (P), xāā (R)

Buzzard (*n*) tixi, tixíi

Large buzzard žá?á, tasù žá?á

### C

Cactus (prickly pear) (*n*) bí?ža, bí?nža  
(SP *nopal*)

Calf (*n*) čelu (SP *becerro*)

Calf, leg muscle (*n*) sa?nda

Call (*vt*) káná (P), kána (R)

Scream, yell (*vb*) káná xíí

Scream at, yell at (*vb*) káná sikè

Can, be able to (*vi*) kúu (P,R)

Candle (*n*) žiti

Torch žiti žúsa

Cane, cornstalk (*n*) ndoò

Sugarcane ndoò stilá (SP *de Castilla, Castellano*)

Canyon (*n*) žuča ká?nū, čaká?nu

Care for, see, take care of, watch out for  
(*vt*) koto (P), xító (R)

Care for, take care of (*vt*) kundito (P),  
ndító (R)

Carry, be in charge of (*vt*) kundiso (P),  
ndíso (R)

Carry, bring (*vt*) kundá?á (P), xindá?á,  
xíndá?á (R)

čāā (*imp*)

Carry (in the mouth) (*vt*) čižú?ú, čiží?í,  
čeží?í, čeží?í (P,R)

Carry (under the arm) (*vt*) čišé?é (P,R)

Carrying strap (*n*) žutù, žo?o žútu (SP  
*mecapal*)

Cat (*n*) bílu

Catch, grab, hold (*vt*) tīí (P,R)

Catch, recover na-tīí (P), ná-tīí (R)

Caterpillar (*n*) nendúči, tisandúčí,  
tirandúčí

Cause, fault (*n*) k<sup>w</sup>àčì

Cave, cliff, rock (*n*) kábà, kábá (SP  
*cueva*)

Cave, deep hole (*n*) túnči, tùnči

Cazuela (clay pot) (*n*) texá?ā, tixá?ā

Center, middle (*n*) mā?ñú

Certain, clear, true (*adj*) ndixa

Chair (*n*) síža, sía (SP *silla*)

Chalcatongo (town name) (*n*) ñūñ ndéžá

Change, transform (*vt*) ndaku (P), ndáku  
(R)

Chapultepec (town name) (*n*) ndu?à  
mòlinú (SP *molino*)

Charcoal (*n*) tikàži, tikáží, tekaži

Chat, converse, speak, talk (*vi*); discuss  
(*vt*) nda-tū?ū (P), ndá-tū?ū, ná-tū?ū  
(R)

Chayote (vegetable pear) (*n*) náñá

Cheek (*n*) žiki núu

Cherry (*n*) nde?è, nde?è tetúū, nde?è  
títúū

Cherry tree nunde?é tetúū, nunde?é  
títúū

Chest (*n*) xikà

Chewing gum (*n*) si?ú, sù?a (SP *chicle*)

Chick (*n*) líí



- Chicken, hen (*n*) čũũ  
 Chicken coop beʔe čũũ  
 Chigger (*n*) tík<sup>w</sup>àʔa, tik<sup>w</sup>àʔá  
 Chilacayote (type of squash) (*n*) žíki  
 tíndužù  
 Child (*n*) seʔe  
 Grandchild seʔe čání, sečání  
 Grandchild, great-grandchild seʔe  
 súká  
 Orphan seʔe ndáʔu, sendáʔu  
 Step-child seʔe úu  
 Child, boy (*n*) xa-lúlí  
 Baby xa-lúlí žíkí  
 Twins xa-lúlí uè táʔã  
 Chile (*n*) žaʔa  
 Costeño chile žaʔa íčí  
 Red chile (type unk.) žaʔa k<sup>w</sup>aʔá  
 Red chile (type unk.) žaʔa ndfki  
 Serrano chile žaʔa k<sup>w</sup>íi  
 Chile atole de maíz (*n*) tučà, tučà nunì  
 Chill, cool (*vt*) s-níʔní (P,R); s-ndíkó  
 (P,R)  
 Chin (*n*) šàà  
 Chiquihuite (basket; loosely woven, for  
 washing *nixtamal*) (*n*) tìó  
 Chocolate (*n*) súʔa  
 Choke, drown (*vi*) kãžáa, kanžáa,  
 kánža (P,R)  
 Choke, strangle (*vi*) k<sup>w</sup>áʔñá (P,R)  
 Choke, strangle (*vt*) s-k<sup>w</sup>áʔñá (P,R)  
 Choose (*vt*) na-kaxí (P), ná-kaxì (R)  
 Church (*n*) beñúʔũ, béñũʔú (< \*beʔe  
 ñúʔú/ñúʔù)  
 Cigarette (*n*) ínú  
 City hall (municipal building) (*n*) beʔe  
 ání, beání [beʔání]; beʔe ñũũ (SP  
*palacio municipal*)  
 Clarify, prove (*vt*) sánda (P,R) (< \*sáʔa  
 ndáa)  
 Clay pot (*n*) texáʔã, tixáʔã (SP *cazuela*)  
 Clean (*adj*) ndoo  
 Clean (*vt*) sá-ndoo (P,R)  
 Clean up, tidy, arrange (*vt*) texíá (P,R)  
 Clear, light (of the sky) (*adj*) ndíxi  
 Clear, true (*adj*) ndáa  
 Clear, true, certain (*adj*) ndixa  
 Clear up, dissolve, become clear (*vi*)  
 ndú-ndaà, kú-ndaà (P,R)  
 Cliff, rock, cave (*n*) kábà, kábá (SP  
*cueva*)  
 Climb down, descend, get down (*vi*) núú  
 (P,R)  
 Climb up, go up, rise (*vi*) káá (P,R)  
 Overflowed, risen (*stat*) ndáá  
 Close, cover (*vt*) kásu (P), xasú (R)  
 Closed, covered (*stat*) ndasú  
 Close, near (*adj*) žani  
 Closed, locked (*adj*) ndíʔu  
 Cloth, clothing, dress (*n*) saʔma  
 Cloth for tortillas, napkin saʔma žiní  
 Cloth (rough white cotton) (*n*) mandá (SP  
*manta*)  
 Cloud (*n*) bíkò  
 Cloud up (*vi*) ndu-bíkó (P,R)  
 Cloudy (*adj*) bíkó  
 Dawn cloudy (*vi*) ndibíkó (P,R)

- Clove (*n*) žaʔa ndúžu kàà, žandúžukà
- Coals (hot) (*n*) tik<sup>w</sup>a ñúʔũ
- Cockroach (*n*) titeʔé
- Cockscomb (*n*) šinì líʔi
- Coffin, trunk (*n*) xanù
- Cold (*adj*) b̃ix̃i; ndiko
- Cold, flu (*n*) k<sup>w</sup>eʔè šinì, k<sup>w</sup>ešinì
- Color (*n*) kolór (SP *color*)
- Comal (griddle on which tortillas are cooked) (*n*) šiò, šòò
- Comb (*n*) kúkà
- Comb (*vt*) na-t̃h̃ (P), ná-t̃h̃ (R)
- Come and return (*vi*) kii (P)  
     bèl (*prog*)  
     ni-kii (*cp*)  
     ndíí (*hab*)  
     ñáʔã (*imp*)
- Come back, return (*vi*) na-šúk<sup>w</sup>ī (P),  
     ná-šúk<sup>w</sup>ī (R)
- Come off, peel off (*vi*) ndóndá (P,R)
- Companion, family, friend, relative (*n*)  
     táʔã
- Complain (*vi*) tana (P,R)
- Complain, denounce (*vb*) káʔã sóʔó  
     (P,R)
- Complete (*adj*) m̃íʔí
- Comprehend, understand, behave oneself  
     (*vb*) čúʔũ inì (P,R)
- Concerning, as if, like (*prep*) k<sup>w</sup>entá (SP  
     *cuenta*)
- Confess (*vi*) naʔmà (P,R); ndéžuʔu (P,R)
- Confess (cause to), stretch (*vt*) s-ndée  
     (P,R)
- Congregate, assemble (*vi*) taká (P,R)
- Construct, build (*vt*) kání (P), xání, kání  
     (R)
- Contain, have, put on, wear (clothes) (*vt*)  
     kúʔũ (P), ñúʔũ (R)
- Converse, speak, talk, chat (*vi*); discuss  
     (*vt*) nda-tũʔũ (P), ndá-tũʔũ, ná-tũʔũ  
     (R)
- Cook (*vi*) čoʔò (P,R)  
     Cook (*vt*) s-čóʔo (P,R)
- Cool, chill (*vt*) s-níʔní (P,R); s-ndíko  
     (P,R)
- Cord, rope (made from maguey) (*n*) žoʔo  
     (SP *mecate, ixtle*)
- Cord, string, thread (*n*) žuʔà
- Corn kernel (*n*) nunì  
     Cooked corn nunì xaʔà (SP  
     *nixtamal*)  
     Corn cob, ear níñí (SP *mazorca*)  
     Corn crib žakà, žakà níñí  
     Corn dough žuša (SP *masa*)  
     Corn from previous year nunì ába  
     Corn fungus tikáʔžá  
     Corn husk ñāmã (SP *totomostle*)  
     Corn silk šínu, čete  
     Corn tassel žóko, tikàžóko  
     Cornfield, corn plant, crop itù (SP  
     *milpa*)  
     Cornstalk, cane ndoò  
     Dry corn plant, fodder, hay ndaʔa  
     žóʔo, ndažóʔo  
     Place on corncob where kernel was  
     nũʔũ nunì (SP *dientitos de maíz*)  
     Remove corn from cob (*vt*) s-kóžo  
     (P,R)

Young corn *ndíší* (SP *elote*)  
 Corner, wall (*n*) *šikì, xikà*  
 Corpse (*n*) *ndiži*  
 Corral (*n*) *xàku*  
     Horse corral *beʔe kíti*  
     Sheep corral *beʔe ríí*  
 Correct, true (*adj*) *káxí*  
 Cost (*vt*) *kunžàà* (P), *žáá, nžáá* (R)  
 Cotton (*n*) *kačì*  
 Cough (*vi*) *kažu* (P), *kážu* (R)  
     Cough (*n*) *kʷeʔè sažú*  
 Counsel, advise (*vt*) *s-kándia* (P,R)  
 Count (*vt*) *káʔu* (P,R)  
 Countryside, plain (*n*) *nduʔà*  
 Cousin (female) (*n*) *primá* (SP *prima*)  
 Cousin (male) (*n*) *primú* (SP *primo*)  
 Cover (*vt*) *kundí í* (P,R)  
 Cover, close (*vt*) *kásu* (P), *xasú* (R)  
     Covered, closed (*stat*) *ndasú*  
 Cover (oneself, one's head) (*vt*) *sáʔú* (P),  
     *sáʔu* (R)  
 Cow (*n*) *baká* (SP *vaca*)  
 Cow, ox, bull (*n*) *sndikì*  
 Coyote (*n*) *báʔù*  
 Crack, split, break (*vi*) *táʔu* (P,R)  
 Crack open, break (*vi*) *ndata* (P), *ndátá*  
     (R)  
 Cramp, tighten up (*vi*) *tíngí* (P,R)  
 Crazy, difficult, stupid, bad (*adj*) *káñá,*  
     *ñáá* (SG), *ndañá* (PL)  
 Creek (*n*) *xíči, xìči*  
 Crisp, rough (*adj*) *ndakì*

Hard, stale, stiff (to become) (*vi*)  
*ndu-ndàki* (P,R)  
 Crooked, lopsided (*adj*) *žakʷá*  
 Crop, corn plant, cornfield (*n*) *itù* (SP  
*milpa*)  
 Crow, raven (*n*) *tikàkà, tikàká*  
 Crowbar, hoe (*n*) *žatà káa, tàkáa*  
 Crowded, full (to be) (*vi*) *čítú* (P,R)  
 Cry, bray (*vi*) *ndéʔe* (P,R)  
 Cup, bowl (made from a gourd) (*n*) *žáxí*  
     (SP *jícara*)  
 Cure (*vt*) *táná, sá-tana* (P,R)  
     Cure, medicine (*n*) *táná*  
 Curl, be curly (*vi*) *čīngī, čīngī* (P,R)  
     Curl (*vt*) *s-čīngí, s-čīngí* (P,R)  
 Cut (*vt*) *káʔña, káʔža* (P), *xáʔña, xáʔža*  
     (R)  
 Cut, rip, tear (*vi*) *téʔnde* (P,R)

## d

Daily, every day (*adv*), what day (*int*)  
*ndekíu, ndikíu*  
 Dance (*vi*) *kataxáʔá* (P,R); *kačáʔa,*  
     *kučáʔa* (P), *xičáʔa, xíčaʔa* (R)  
 Dark (*adj*) *ñáá*  
 Dark, stained, black (*adj*) *lúčí, lúnči*  
 Darken, get dark (*vi*) *kʷáá* (P,R)  
     Darkness, night (*n*) *xa-kʷáá*  
 Daughter (*n*) *sesíʔí* (< \**seʔe síʔi*)  
 Daughter-in-law (*n*) *sexanú* (< \**seʔe*  
     *xánu*)

- Dawn (*vi*) ndíí (P,R)  
 Dawn cloudy ndibíkó (P,R)  
 Day (*n*) kiù, ndúú  
 Day after tomorrow (*adv*) onde ičáã  
 Day before yesterday (*adv*) (onde) íkú ñũũ  
 Deaf (*adj*) sóʔó  
 Decompose, rot (*vi*) tíú (P), tiú (R)  
 Deep (*adj*) kúnú  
 Deer (*n*) isù  
 Delicate, gentle (*adj*) ì  
 Delicious, tasty (*adj*) ãsù  
 Demon, ghost, soul, spirit, voice, wind, breath (*n*) tačì  
 Denounce, complain (*vb*) káʔã sóʔó (P,R)  
 Dense, thick (*adj*) úʔa  
 Descend, get down, climb down (*vi*) núú (P,R)  
 Destroy (*vt*) čuñá (P,R)  
 Detain, stand (*vt*) s-ndú-k<sup>w</sup>íí (P,R)  
 Devil (*n*) xa-úʔu  
 Die (*vi*) kuù (P), xíʔi (R)  
 Hungry (to be) kuù sòkò  
 Sleepy, tired (to be) (*idiom*) kuù ñũʔñá  
 Die, go out (of a fire) (*vi*) ndaʔba (P,R)  
 Difficult (*adj*) žíí  
 Difficult, stupid, bad, crazy (*adj*) káñá, ñáá (SG), ndañá (PL)  
 Dig (*vt*) kača (P), xáča (R)  
 Dimple (*n*) tikòʔží  
 Dinner, food (*n*) sámá  
 Direct, guide (*vb*) čũʔũ íčí (P,R)  
 Dirt, earth, floor, land (*n*) ñũʔũ  
 Dirt, filth (*n*) čãʔã; káʔba  
 Dirty, filthy (*adj*) čãʔá; káʔbá  
 Disappear, be lost (*vi*) náá (P,R)  
 Disappear, hide (*vi*) késáʔu, késaʔí (P,R)  
 Discuss (*vt*); chat, converse, speak, talk (*vi*) nda-tũʔũ (P), ndá-tũʔũ, ná-tũʔũ (R)  
 Dissolve (*vi*) nduča (P,R)  
 Dissolve (*vt*) s-nduča (P,R)  
 Dissolve (*vt*) tanú (P,R)  
 Dissolve, clear up, become clear (*vi*) ndú-ndaà, kú-ndaà (P,R)  
 Disturbed, excited, agitated (to become) (*vi*) ndo-káña, nda-káña (P,R)  
 Do, make (*vt*) sáʔa (P,R)  
 Do something for the first time (*vt*) ndu-xáá (P,R)  
 Put on new clothes ndu-xáá saʔma (P,R)  
 Doctor (*idiom*) čàà sá-tana  
 Dog (*n*) inà  
 Female dog inà síʔí  
 Rabid dog inà tík<sup>w</sup>eʔe  
 Door (*n*) žubéʔé [žu<sup>w</sup>éʔé] (< \*žuʔu beʔe)  
 Drain, drip, run (as water) (*vi*) tóo (P,R)  
 Draw (*vt*) na-tabá (P,R)  
 Dream (*n*) ñũʔná  
 Dream (*vi*) xání (P,R)  
 Dress, cloth, clothing (*n*) saʔma  
 Drink (*vt*) kóʔó (P), xíʔi (R)

Drip, run (as water), drain (*vi*) *tóo* (P,R)  
 Drip *ná-too* (P,R)  
 Drop (*n*) *tóo*  
 Drop, let go of (*vt*) *ndendá?á*, *ndu-ndá?á*  
 (P,R)  
 Drop, let go of (*vt*) *sía* (P,R)  
 Drown, choke (*vi*) *kāžáa*, *kanžáa*, *kánža*  
 (P,R)  
 Drunk (to be) (*vi*) *ná-xini*, *na-xíni* (P,R)  
 Dry (to be) (*vi*) *ičì*  
 Dry (to be) (*vi*) *na-ičì* (P,R)  
 Dry (*vt*) *s-ičì*, *ná-s-ičì* (P,R)  
 Duck (*n*) *séte*  
 Due to, on account of (*prep*) *k<sup>w</sup>àčì*  
 Dust, whirlwind (*n*) *tikačá*, *tikačaà*  
 Dye, paint (*vt*) *ka?žu* (P), *ká?žú* (R)

## e

Eagle, sparrow hawk (*n*) *ší?ã*  
 Ear (*n*) *so?o*  
 Deaf (*adj*) *só?ó*  
 Earring *sikè so?o*  
 Early (*adv*) *ñá?a*  
 Earth, floor, land, dirt (*n*) *ñú?ú*  
 Earthquake (*n*) *ñūtáã*, *ñūè táã*  
 Earthworm (*n*) *tendasa*, *tëndasa*, *ndása*  
 Eat (*vt*) *kee* (P), *žée* (R)  
 Eat *kaxi* (P), *žáxi* (R)  
 Eat (evening meal) *kešíní*, *kušíní*  
 (P), *xišíní*, *žešíní* (R)

Eat (first meal of day), breakfast (*vb*)  
*kásí inì* (P), *žásí inì* (R)  
 Eat (meal at middle of day) *kesámá*,  
*kusámá* (P), *žesámá* (R)  
 Eclipse of the sun (*idiom*) *ndíkandí í*  
*xí?i*  
 Egg (*n*) *ndiù*  
 Egotistical (*idiom*) *xá?á inì*  
 Eight (*num*) *unà*  
 Eighty (*num*) *kūù šíkó*  
 Eighty-five *kūù šíkó ú?ũ*  
 Elbow (*n*) (*súú*) *xitè nda?a*  
 Empty (*adj*) *íú*  
 Empty (*vt*) *sokóžo* (P,R)  
 Empty, pour (*vt*) *kóžo* (P,R)  
 Encouraged (to be), take heart (*vb*)  
*ndundé inì*; *čindéé iní*; *taba iní*  
 (P,R) (SP *animarse*)  
 End, finish (*vi*) *ndí?í* (P,R)  
 End, finish (*vt*) *s-ndí?í* (P,R)  
 Endure, bear (*vt*) *kundé* (P,R)  
 Enough, a little, a little bit (*quant*) *tí?i*  
 Enough (more), a little bit more (*quant*)  
*tí?a*  
 Enter, go in (*vi*) *kíu* (P,R)  
*ndíu (hab)*  
 Errand (*n*) *tíú*  
 Work *tíu*  
 Evergreen oak (*n*) *nùkaxí*, *nukàxí*  
 (< \*žúnú *kaxí*) (SP *encino*)  
 Every (*quant*) *tá?ã*  
 Every day, daily (*adv*); what day (*int*)  
*ndekíu*, *ndíkíu*  
 Everything (*n*) *ndik<sup>w</sup>ítí* (< \*ndí?í *k<sup>w</sup>ítí*)

- Exact, very (*quant*) máʔá  
 Exactly (*adv*) míʔí kʷíʔí  
 Exchange, trade (*vt*) sámá (P,R)  
 Excited, agitated, disturbed (to become)  
 (*vi*) ndo-káña, nda-káña (P,R)  
 Excited, noisy, riotous (to become) (*vi*)  
 ndúbà (P,R)  
 Excrement (*n*) žiʔù  
 Exist, there are, there is (*vt*) koo (P), žóó  
 (R)  
 Exit, go out (*vi*) kenda (P,R)  
 Exit, go out (*hab*) ndéndá  
 Expensive (*adj*) žáʔu  
 Explode, thunder (*vi*) káʔndi (P,R)  
 Explode (*vt*) s-káʔndi (P,R)  
 Extinguish, put out (*vt*) s-ndáʔba (P,R)  
 Eye (*n*) nduči  
 Eyebrow sukà, iši suká  
 Eyelashes iši ndúči
- f**
- Face, front, in, on (*n*) nuù  
 Faja (sash) (*n*) tàni  
 Fall (*vi*) kánákaba (P,R); ndúa (P,R)  
 Fall (of rain, snow, ice) (*vi*) kúú (P), kúū  
 (R)  
 Rain (*vi*) kúú saù  
 Fall asleep (a body part), become numb  
 (*vi*) žíxi (P,R)  
 Family, friend, relative, companion (*n*)  
 táʔā
- Fan (flat, used for fires) (*n*) bìči  
 Far (*adj*) xíká  
 Fast, quickly, rapidly, soon (*adv*) žáči  
 Fat, big (*adj*) káʔnū (SG), náʔnū (PL)  
 Fat, grease, lard, oil (*n*) šāʔā  
 Fat (to become), swell (*vi*) néñú (P,R)  
 Fat, swollen (*stat*) ndéñú  
 Fatten (*vt*) s-néñu (P,R)  
 Father, boss (*n*) táa  
 Father-in-law tačíso, táčisó (< \*táa  
 číso/čisó)  
 Step-father táa uù  
 Fault, cause (*n*) kʷàčì  
 Fava bean (*n*) nduči labá (SP *haba*)  
 Feather (*n*) tũũ  
 Feed (*vt*) s-kee (P,R); s-káxí (P), s-kaxí  
 (R)  
 Feminine (*adj*) síʔi  
 Fever (*n*) kixi  
 Few, a little bit (*quant*) xoò  
 Fiber, rope (made from maguey) (*n*)  
 tendaà, tindáa (SP *ixtle*)  
 Field (of corn), corn plant, crop (*n*) itù  
 (SP *milpa*)  
 Fierce, brave (*adj*) šāā, šāā náká  
 Fifteen (*num*) šíáʔũ  
 Fifty (*num*) uù šíkó ušì  
 Fifty-five uù šíkó šíáʔũ  
 Fight (*vi*) kʷatáʔā (P), xatáʔā, xitáʔā (R)  
 Fill (*vt*) ná-tāā (P), na-tāā (R); s-čítú  
 (P,R)  
 Filth, dirt (*n*) čāʔā; káʔba  
 Filthy, dirty (*adj*) čāʔā; káʔbá

- Find (*vt*) ná-niʔi (P,R)  
 Find, meet (*vt*) ketáʔã, kitáʔã (P,R)  
 Finger (*n*) šinì ndáʔa  
 Fingernail (*n*) tížó, tížú, tíí, tíī  
 Finish (*vi*) xínu (P,R)  
     Finish (*vt*) sínu (P,R)  
 Finish, end (*vi*) ndíʔí (P,R)  
     Finish, end (*vt*) s-ndíʔi (P,R)  
 Fire, light (*n*) ñúʔù  
 Firecracker (*n*) kʷéte, kʷetón (SP *cohete*)  
 Firewood (*n*) ndukù  
 First (*adj*) snáʔa; šáʔã=ka; núú, šánúú  
     First one (*n*) xa-núú, xa-šánúú  
 Fish (*n*) čáká  
 Fist (*n*) šiki  
 Five (*num*) úʔū  
 Fix (*vt*) sá-bàʔà (P,R)  
 Flea (*n*) čoʔó  
     (Type of) flea čoʔo kʷáá  
 Floor, land, dirt, earth (*n*) ñúʔú  
 Flour (*n*) žúčí  
 Flow (of water), sprout, blossom (*vi*)  
     xaa (P,R)  
 Flower (*n*) ità  
     Herb ità mīnú (SP *hierbabuena*; type  
     of mint)  
     Herb, medicinal (type unk.) ità  
     tanáñã, žukù tináñã  
 Flu, cold (*n*) kʷeʔè šiní, kʷešiní  
 Flute (*n*) nužó  
 Fly (*vi*) ndéčé (P,R)  
 Fly, insect (*n*) čúkú  
 Foam (*n*) tiʔíñu  
 Fodder, hay, dry corn plant (*n*) ndaʔa  
     žóʔo, ndažóʔo  
 Fold (in half) (*vt*) čítaʔnu (P,R)  
     Fold (several times) na-čítaʔnu (P,R)  
     Folded (*stat*) žítaʔnu  
 Follow (*vt*) číndikì (P,R)  
     Followed (*stat*) žíndikì  
 Food (*n*) ndežu  
 Food, dinner (*n*) sámá  
 Foot (*n*) xaʔà  
     On foot, standing (*adj*) xáʔá  
 For (*prep*) xakúu  
 Forehead (*n*) čáã  
 Forest (*n*) nukúʔi (< \*žúnú kúʔi)  
 Forest, hill, mountain (*n*) žúkú  
 Forever, always (*adv*) ndañù, ndéñu  
 Forget (*vb*) náá inì, náá iní (P,R)  
     Forget (*vb,vt*) s-náa iní (P,R)  
 Forty (*num*) uè šíkó  
     Forty-five uè šíkó úʔū  
 Four (*num*) kũù  
 Freeze, become numb (from cold) (*vi*)  
     kʷínú (P,R)  
 Friend, relative, companion, family (*n*)  
     táʔã  
 Frighten, scare (*vt*) síʔú (P,R)  
     Frightened, scared (*stat*) žúʔú  
 Frog (*n*) sáʔba  
 Front, in, on, face (*n*) nuù





- Good, well (*adj, adv*) bàʔà  
 Best (*adj*) bàʔà šãã=ka  
 Better (*adj*) bàʔa=kà  
 Get better, improve (*vi*) ndu-bàʔà (P,R)  
 Good afternoon, evening (*greeting*)  
 tà-ní-ñini, tá-ñini  
 Good morning tà-ní-ndi, tá-ndi  
 Good night tà-ní-k<sup>w</sup>a  
 Good noon tà-ní-šiù, tá-úšiù [táʔúšiù]  
 Gore (*vt*) čindíki (P,R)  
 Gossip, speak quietly, whisper (*vb*) kãʔã žaá (P,R)  
 Gossipy, lying (*adj*) túʔú  
 Gourd (*n*) čaʔa  
 Gourd, pumpkin, squash (*n*) žíki  
*Chilacayote* žíki tíndužù  
 Grab, hold, catch (*vt*) tíí (P,R)  
 Grandchild (*n*) sečání, seʔe čání; seʔe súká  
 Granddaughter sečání síʔí  
 Grandson sečání žíí, sečání žíí  
 Grandfather (*n*) táta ñúú, táta ñúú súká, táa súká, welú (SP *abuelo*)  
 Grandmother (*n*) nana ñúú, nana ñúú súká, náa súká, welá (SP *abuela*)  
 Grapes, fruit (*n*) xa-bíší  
 Grass (*n*) ičá, íčà  
 Grasshopper (*n*) tikà, tikàà, tiká  
 Gray (*adj*) méku, (*n*) xa-méku  
 Wool thread (*n*) xa-méku  
 Gray hair (*n*) biší, biši  
 Grease, lard, oil, fat (*n*) šãʔã  
 Great-grandchild (*n*) seʔe súká  
 Great-grandfather (*n*) táta ñúú súká, táta abelú [aβelú] (SP *abuelo*)  
 Great-grandmother (*n*) nana ñúú súká, bisaβ<sup>w</sup>elá (SP *bisabuela*)  
 Great-tailed grackle (*n*) čatánáte (SP *zanate*)  
 Green, blue (*adj*) k<sup>w</sup>íi, (*n*) xa-k<sup>w</sup>íi  
 Green bean (*n*) ndìči  
 Grind (*vt*) ndiko (P), ndíko (R)  
 Grind (one's teeth) (*vt*) kíʔñi nūʔū  
 Ground beans (*n*) laʔži  
 Grow (*vi*) k<sup>w</sup>áʔnū (P), xáʔnū (R)  
 Big, fat (*adj*) káʔnū (SG), náʔnū (PL)  
 Old (*adj*) ñáʔnū, žáʔnū  
 Guard, keep (*vt*) čúbaʔa (P,R)  
 Guava (*n*) tik<sup>w</sup>àžú, tik<sup>w</sup>àažúú (SP *guayaba*)  
 Guide, direct (*vb*) čūʔū íčí (P,R)  
 Gum (chewing) (*n*) siʔú, sùʔa (SP *chicle*)  
 Guts, tripe (*n*) xítì
- ## h
- Hail (*n*) ñíñí  
 Hair, wool (*n*) iši  
 Blond hair iši tekolo žáʔa, iši žáá (SP *color*)  
 Gray hair biší, biši  
 Hairbrush žōkō  
 Split ends titaší íši

- Half (*quant*) saʔba
- Hammock (*n*) ñūnū čúʔá
- Hand, leaf, arm (*n*) ndaʔa  
 Left hand ndaʔa sáni, ndaʔa súrdū  
 (SP *zurdo*)  
 Right hand ndaʔa báʔa
- Hang (*vt*) kátá (káá) (P), xátá (káá) (R)
- Happy (*adj*) sî
- Hard (*adj*) kaba, ndaba, tikíki
- Hard, solid (*adj*) žúú
- Hard, strong, tight (*adj, adv*) niʔi
- Hard, toasted (*adj*) luʔú
- Harden (*vi*) kiki (P,R)
- Hare (*n*) isò labúrrú (SP *liebre*)
- Harvest (*vt*) skée (P,R)
- Hat (*n*) kačíní
- Have (*vt*) žúbaʔa (P), žubàʔà (R);  
 ñábaʔa, žábaʔa (P,R)  
 Have, keep kúñábaʔa (P,R)
- Have, bear a child (*vt*) s-kaku (P,R)
- Have, put on (clothes), wear, contain (*vt*)  
 kúʔū (P), ñúʔū (R)
- Have a stomachache (*vb*) tíú inì
- Hay, dry corn plant, fodder (*n*) ndaʔa  
 žóʔo, ndažóʔo
- He (*clitic*) =ðe
- He, she (*clitic, polite*) =to
- He, she (*clitic, polite, younger or de-*  
*ceased person*) =ži
- He, she, it (*clitic, supernatural being*) =ža
- Head, at the top of (*n*) šinì
- Hear, listen (*vb*) kúní (soʔo) (P), xiní  
 (soʔo) (R)
- Heat, ray, arrow (*n*) nduá
- Heat, warm (*vi*) nduší (P), ndúší (R)  
 Become hot, heat up, warm up (*vi*)  
 ndu-bĩšĩ (P,R)  
 Heat, warm (*vt*) s-nduší (P,R); šuší  
 (P,R)
- Heaven, sky (*n*) andíú
- Heavy (*adj*) bèè
- Help (*vt*) čindé (P,R)
- Hen, chicken (*n*) čūū
- Herb, plant (*n*) žukù  
 Bramble žukù íñú  
 Herb, medicinal (type unk.) ità  
 tanáñā, žukù tináñā  
 Hierbabuena (type of mint) ità mĩnú  
 Hierbamora tĩlašú kʷañúʔū  
 Pitona (type of herb) kandóʔo
- Here (*adv*) žáʔa
- Heron (*n*) sami
- Hiccup (*vb*) kákiʔi inì (P,R)
- Hide, disappear (*vi*) késáʔu, késaʔí  
 (P,R)  
 Hidden (*stat*) žésaʔu, žesaʔí  
 Hide (*vt*) čísaʔu, čísaʔí, číseʔi (P,R)
- Hill, mountain, forest (*n*) žúkú  
 Hilltop šinì žúkú
- Hip (*n*) káʔa
- Hit (*vt*) kʷaʔa táʔu (P), xáʔa táʔu (R);  
 kání (táʔu) (P), xání (táʔu) (R)
- Hit (with the fist), punch (*vb*) kʷaʔa šíkí  
 (P), xáʔa šíkí (R)
- Hoe, crowbar (*n*) žatà káa, tàkáa

Hoe, stick (for planting) (*n*) k<sup>w</sup>aà (SP *coa*)  
 Hog, pig (*n*) kinè  
 Hold (*vt*) kuñánuu (P), xúñanuu (R)  
 Hold, catch, grab (*vt*) t̃íí (P,R)  
     Hold kut̃íí (P,R)  
 Hold up, support (*vt*) čítu, čétu (P,R)  
 Hole (*n*) žaù  
     Cave, deep hole túnči, tùnči  
 Honey (*n*) nduši  
 Honeycomb, hornet's nest (*n*) šìò ñũñú  
 Horn (of an animal) (*n*) ndiki  
 Hornet (*n*) ñũñù  
     Honeycomb, hornet's nest šìò ñũñú  
 Horse (*n*) k<sup>w</sup>ažú (SP *caballo*)  
 Horse, animal (*n*) kitì  
     Mare kitì mulá (SP *yegua*)  
 Hot, warm (*adj*) ñí?ní  
 Hot sauce, salsa (*n*) ndučá?á  
 House, store, building (*n*) be?e  
 How (*int*) ndàsà  
     How long (time) xáu ná?á  
     How many na-sáa  
*Huarache*, sandal, shoe (*n*) ndīxà  
 Hug (*vb*) kunužà (núu), kununžà (núu)  
     (P,R)  
 Hummingbird (*n*) kolíí (SP *colibrí*),  
     mírtú (SP *chupamirto*)  
 Hunchback (*n*) sikè ti?í  
     Hunchbacked, lame (*adj*) tí?í  
 Hundred (*num*) siento (SP *ciento*)  
 Hunger (*n*) sòkò

Hungry (to be) (*vi*) kuè sòkò  
 Hurry (*vi*) na-kúndé (P,R); (*vb*) xítu inì  
     (P,R)  
 Hurt (*vi*) ú?u (P,R)  
 Hurt oneself (*vi*) tuxi (P,R)  
     Hurt (*vt*) s-tuxí (P,R)  
 Husband, man (*n*) xa-žíí, xa-žíí  
 Husband's sibling (brother-in-law, sister-  
     in-law) (*n*) číso, čisó  
 Husk, peel, shell, skin (*n*) sòò

## i

I, we (*n, familiar*) rù?ù  
     I, we (*clitic, familiar*) =rí  
 I, we (*n, polite*) na?a  
     I, we (*clitic, polite*) =ná  
 Ice, snow (*n*) žú?a  
 If (*clitic*) nú=  
 Ill-bred, spoiled, wicked (*adj*) a?ú inì  
 Illness, sickness (*n*) k<sup>w</sup>e?è  
     Cold, flu k<sup>w</sup>e?è šiní, k<sup>w</sup>ešiní  
     Cough k<sup>w</sup>e?è sažú  
     Rabies tik<sup>w</sup>e?e  
 I'm fine (*idiom*) ku-k<sup>w</sup>éní=rí  
 Improve, get better (*vi*) ndu-bà?à (P,R)  
 In, inside, insides, stomach (*n*) inì  
 In, on, face, front (*n*) nuè  
 In charge of (to be), carry (*vt*) kundiso  
     (P), ndíso (R)

In what direction, what way, where (*int*)  
ndéči, ndíči

Inclined, leaning, at an angle (*adv*) ndičì

Increase, thrive (*vi*) ndežá, na-ndežá  
(P,R)

Infected (to be) (*vi*) k<sup>w</sup>añũ?ũ (P,R)

Insect, fly (*n*) čúkú

Insect bite ndí?ži tikátá

Inside, insides, stomach, in (*n*) inì

Iron, bell (*n*) kaa

Nail ndùžù kaa, ndùžùka

It (*clitic, animal*) =ti

It, she, he (*clitic, supernatural*) =ža

Itch (*vi*) kátá (P,R)

*Iturbide* (town name) (*n*) žata úkũ, žata  
íkuu

## j

*Jabalí* (wild pig) (*n*) kini žùkú

Jaguar (*n*) k<sup>w</sup>ĩñí, k<sup>w</sup>ĩñí (SP *jaguar*,  
*tigre*)

Jail (*n*) bekàà (< \*be?e kaa)

Jar (*n*) tendó?o, tìndó?o

Jealous, miserly, sharp (*adj*) k<sup>w</sup>ĩñí,  
k<sup>w</sup>ĩñí

Jesus, God (*n*) čú?či (SP *Chucho*)

Join, unite (*vt*) čutá?ã, čitá?ã (P,R)

Joined, united (*stat*) žútá?ã, žítá?ã

Joint (in a plant), knot (*n*) ñũtũ (SP *nudo*)

Jug (earthenware) (*n*) kiži

Jump (*vi*) ndábá (P,R)

Juniper (*n*) nù?iní, nu?iní (< \*žũnú iní)

Just (*adv*) k<sup>w</sup>ítí

Just now (*adv*) aská

## k

Keep, guard (*vt*) čúba?a (P,R)

Keep, have kúñába?a (P,R)

Kettle, pot (*n*) kisi (SP *olla*)

Key, lock (*n*) ndákaa, ndáka

Kick (*vt*) k<sup>w</sup>áñũ (P), xāñũ (R); k<sup>w</sup>a?a  
patádá (P), xá?a patádá (R) (SP  
*patada*)

Kill (*vt*) ká?ni (P), xá?ni (R)

Kitten (*n*) bílu lúlí

Knee (*n*) xití, šinì xití, šinì žití; loo

Knife (*n*) žučì

Knock over, throw, tip over (*vt*) s-kána  
(P,R)

Knot (*n*) ùkánu, tikánú

Knot, joint (in a plant) (*n*) ñũtũ (SP *nudo*)

Know, see (*vt*) kúní (P), xiní (R)

## l

Lake, well (*n*) miní

Lamb (*n*) lélú, ndiší?ú lúlí

Lamb, sheep (*n*) rì (SP *borrego*)

Lame, hunchbacked (*adj*) tí?í

Land, dirt, earth, floor (*n*) ñú?ú

- Language, mouth (*n*) žuʔu  
 Language žumá (SP *idioma*)
- Lard, oil, fat, grease (*n*) šāʔā
- Last night (*adv*) kuni
- Last year (*n*) k<sup>w</sup>ía aba, xa-ndūxì
- Late (*adj*) ñíní
- Later (*adv*) bása, sánú
- Later, afterward (*adv*) k<sup>w</sup>áʔna
- Laugh (*vi*) k<sup>w</sup>áku (P), xakú (R)
- Lay (eggs) (*vt*) kέĩ (ndiù) (P), xέĩ (ndiù) (R)
- Lay aside, place nearby, bring (*vt*)  
 s-kāžaʔa, s-kánžaʔa (P,R)
- Lazy (*adj*) kúší
- Leaf, arm, hand (*n*) ndaʔa
- Leak, seep (*vi*) ndéndoʔo (P), ndendóʔó (R)
- Leaning, at an angle, inclined (*adv*) ndičì
- Leaning (against one's side) (*adv*) šíĩ
- Learn (*vt*) kutuʔa (P), kútuʔa, kutúʔa, túʔa (R)
- Leather, skin (*n*) ñíí
- Leave, abandon (*vt*) s-ndóó (P,R)
- Left hand (*n*) ndaʔa sáni, ndaʔa súrdú (SP *zurdo*)
- Left over (to be), stay (*vi*) ndòò (P), ndóo (R)
- Leg (*n*) sīʔí  
 Ankle sīʔí xaʔà
- Leg muscle, calf (*n*) saʔnda
- Lemon, lime (*n*) limón (SP *limón*)
- Lengthen, lower (*vt*) sinú, s-núu (P,R)
- Let go of, drop (*vt*) ndendáʔá, ndu-ndáʔá (P,R); sía (P,R)
- Let's go (*hort*) čóʔo
- Lice, louse (*n*) čuku  
 (Type of) louse čuku čúú
- Lie down (*vi*) ndu-kaba, íkàbà, ùkaba (P,R)
- Lie down, be located lying down (*vi*)  
 kutuu, kutú, kátú (P), xítuu, xítú (R)
- Lying down, be located lying down (*stat*) ndátu
- Lift, put up, raise (*vt*) nda-níʔí (P,R); s-ndáá (P,R)
- Light (*vt*) s-naʔà (P,R); kokó (P), xoko (R)  
 Light ná-koko (P,R)
- Light, fire (*n*) ñúʔù
- Light (of the sky), clear (*adj*) ndíxi
- Lightning (*n*) ndežú; taxa
- Like (*vb*) xātáʔā (inì) (P), xātāʔā, xítāʔā (inì) (R)
- Like, as if, concerning (*prep*) k<sup>w</sup>entá (SP *cuenta*)
- Like that, thus (*adv*) sōā, súā
- Lime (caustic) (*n*) kakà (SP *cal*)
- Lime, lemon (*n*) limón (SP *limón*)
- Lips (*n*) nižúʔu; ñíí žúʔu
- Listen, hear (*vb*) kúní (soʔo) (P), xiní (soʔo) (R)
- Little bit (*quant*) k<sup>w</sup>íʔža
- Little bit, a little, enough (*quant*) tíʔi
- Little bit, few (*quant*) xoò
- Little bit more, enough (more) (*quant*) tíʔa

Live, be alive (*vi*) kučáku (P), xíčakú, čakú (R)  
 Brought back to life, revived (to be) na-čakù (P), ná-čakù (R)

Live, reside (*vi*) kúžaa, kunžàà (P), žáá, nžáá (R)

Liver (*n*) staxaʔá, staxàʔá

Lizard (*n*) čílža; lagártú (SP *lagarto*)  
 Lizard (type unk.) kòò žúči

Loan (*vt*) kʷanú (P), xanú (R); kʷaʔa nūū (P), xáʔa nūū (R)

Lock, key (*n*) ndákaa, ndáka

Lock in (*vt*) čindíʔu (P,R)  
 Lock oneself in (*vi*) kindíʔu (P,R)  
 Locked in (*stat*) žíndíʔu

Locked, closed (*adj*) ndíʔu

Long (*adj*) káni (SG), náni (PL)

Look, see (*vt*) ndéʔé, ndèʔé (P), ndéʔé (R)

Look for, search for (*vt*) ndúkú, na-ndúkú (P), ndukú, na-nduku (R)

Lopsided, crooked (*adj*) žakʷá

Lose one's way, become lost (*vi*) ndu-ñúʔū (P,R)

Lost (to be), disappear (*vi*) náá (P,R)  
 Lose (*vt*) s-náa (P,R)

Loud, strong (*adj*) koʔo

Louse, lice (*n*) čuku  
 (Type of) louse čuku čúú

Love (*vt*) manì (P,R); (*vb*) xátaʔni iní (P,R)

Lower, lengthen (*vt*) sinú, s-núu (P,R)

Lukewarm (*adj*) bīšī

Lungs (*n*) čaʔma

Lying, gossipy (*adj*) túʔú

Lying down (to be located), lie down (*vi*) kutuu, kutú, kátú (P), xítuu, xítú (R)

Lying down, be located lying down (*stat*) ndátu

## m

*Macho* (of a person) (*adj*) te-žíí, te-žíí

*Maguey* (*n*) žáú  
 Center of *maguey* from which *pulque* is extracted tikoko žáú  
 Medicinal *maguey* žáú tílunčè, žáú tilúnčí, žáú tíríí (SP *papalome*)

Make, do (*vt*) sáʔa (P,R)

Make a fire (*vt*) s-naʔà ñúʔū (P,R)

Make tortillas (*vi*) katu (P,R)

Man (*n*) čàà

Man, husband (*n*) xa-žíí, xa-žíí

Mange (*n*) tikátá  
 Insect bite ndíʔži tikátá

Many (*quant*) kʷaʔà  
 Many, various kʷaʔà šáã

Many, much (*quant*) šáã

Mare (*n*) kiti mulá (SP *yegua*)

Market, plaza (*n*) nužáʔu, žáʔu

Marrow (*n*) meke

Marry (*vt*) tándaʔa (P,R)

*Masa* (corn dough) (*n*) žuša  
 Ball of *masa* stáá

Masculine (*adj*) žii, žíí

- Mask (*n*) ñuáʔná, ñaʔná
- Mat (made of palm) (*n*) žuu (SP *petate*)
- Mayoralty (*n*) ání (SP *presidencia*)
- Mazorca (corn cob, ear) (*n*) níñí
- Measure, weigh (*vt*) číkʷaʔa (P,R)  
Measured, weighed (*stat*) žíkʷaʔa
- Meat (*n*) kũñũ  
Beef kũñũ sndiki  
Pork kũñũ kinè
- Medicine, cure (*n*) táná
- Meet, find (*vt*) ketáʔā, kitáʔā (P,R)
- Memelitas de maíz (type of tortilla) (*n*)  
súú
- Mend (*vt*) na-kíkú (P), ná-kikú (R)
- Menstruate (*vi*) kukúʔu žoò (P), kúʔu  
žoò (R)
- Message, word (*n*) tũʔú
- Messy, unkempt (*idiom*) sanáá iní
- Metate (*n*) žòsó
- Mexican porcupine (*n*) ñāñā īñú (SP  
*puerco espín*)
- Mexico City (*n*) ñũũ koʔžó
- Middle, center (*n*) māʔñú
- Mirror (*n*) spexó (SP *espejo*)
- Miserly, sharp, jealous (*adj*) kʷíñí,  
kʷíñí
- Mixtec (language) (*n*) sāñù sáo, sáī saù,  
sánu saù
- Mock, tease (*vi*) káʔā kátá (SP *burlarse*)
- Molcajete (small stone mortar, for making  
*salsa*) (*n*) koʔo žúu
- Mole (chile sauce) (*n*) molí
- Mole, blister (*n*) tikúña
- Money, bill (*n*) šũʔũ
- Month, moon (*n*) žoò
- Morning (*n*) xa-ñáʔa
- Mosquito (*n*) čúkú ndíʔi, čúkú žáá
- Mother (*n*) náa  
Mother-in-law načiso, náčiso
- Mountain, forest, hill (*n*) žúkú
- Mountain lion, puma (*n*) ndikáʔá,  
ndikaʔa (SP *león*)
- Mouse, rat (*n*) tiñí, tñí
- Mouth, language (*n*) žuʔu  
Language žumá (SP *idioma*)  
Lips nižúʔu, ñí žúʔu  
Mouth of a river žužúča (< \*žuʔu  
žuča)
- Move (*vi*) kušo (P,R); na-kéī (P,R)  
Move (*vt*) na-s-kéī (P,R)
- Move (of a snake), stretch (*vi*) ná-kaà  
(P,R)
- Move near (*vi*) kánžaʔa, kénžaʔa (P,R)
- Move off of, out of (*vt*) s-tášo, s-tášio  
(P,R)
- Much, many (*quant*) šāā
- Mud (*n*) ndéʔžu
- Municipal building (similar to city hall)  
(*n*) beʔe ání, beání [beʔání]; beʔe  
ñũũ (SP *palacio municipal*)
- Muscle, nerve, tendon, vein (*n*) tìči, tùči
- Muscle of leg, calf (*n*) saʔnda
- Mushroom (*n*) xiʔi  
Mushroom, large xiʔindí xa-ñũʔũ,  
xindí xa-ñũʔũ  
Mushroom, large white xiʔi žísi,  
xižísi, xižísu

- Mushroom, large with many finger-like growths *xiʔi taká, xitaka*
- Mushroom, large yellow or orange *xiʔi náʔá, xiʔi náa, xiná*
- Mushroom, small brown or black *xiʔi tísu, xitísu, xiʔi tísú*
- Mushroom (type unk.) *xišíni*
- Mushroom, yellow *xiʔi káčá*
- Music, song (*n*) *žaà*
- Mustache, beard (*n*) *iši žúʔu*
- Mute (*adj*) *ñíʔi*
- n**
- Nail (*n*) *ndùžù kaa, ndùžù-ka*
- Naked (*adj*) *líí*
- Name (*n*) *síʔú*
- Named (to be) (*vt*) *kunání (P), nání (R)*
- Napkin, cloth for tortillas (*n*) *saʔma žiní*
- Navel, bellybutton (*n*) *xiti koʔó*
- Near, close (*adj*) *žani*
- Near (*prep*) *žani*
- Neck, throat (*n*) *sūkù*
- Necklace *žuku sūkù, sikì sūkù*
- Need (*vt*) *xíni ñúʔu (P,R)*
- Need, use (*vt*) *ná-ndiʔi (P,R)*
- Needle (*n*) *žiki tíkú*
- Pine needles *žúša*
- Negative (*clitic*) *tú=*
- Negative mood (*prefix*) *ma-*
- Nephew (*n*) *sáxī*
- Nerve, tendon, vein, muscle (*n*) *tìči, tùči*
- Nest (*n*) *takà*
- Net bag (*n*) *ññū*
- New (*adj*) *xáá*
- Do something for the first time (*vt*)  
*ndu-xáá (P,R)*
- Next, shortly (*adv*) *ísá*
- Niece (*n*) *šíku*
- Night (*n*) *kíʔu*
- Night, darkness (*n*) *xa-kʷáá*
- Nine (*num*) *ñ*
- Ninety *kūñ šíkó uši*
- Ninety-five *kūñ šíkó šíáʔū*
- No (*adv*) *túu*
- Nobody (*n*) *tú=nožó, niʔñ (< \*nii ñ)*
- Nochixtlán* (town name) (*n*) *atókó*
- Noisy, riotous, excited (to become) (*vi*)  
*ndúbà (P,R)*
- Noon (*n*) *saʔba ndúú*
- Nopal* (prickly pear cactus) (*n*) *bíʔža, bíʔnža*
- Nopal* (type unk.) *bíʔža skóʔó*
- Nopal* fruit *čikí (SP tuna)*
- Nor, not even (*conj*) *nii (SP ni)*
- Nose (*n*) *kutu*
- Not even, nor (*conj*) *nii (SP ni)*
- Not yet (*adv*) *čáʔã, čáʔã=ka*
- Nothing (*n*) *tú=kʷiti*
- Now, today (*adv*) *bína*
- Right away, right now *bína ñúʔni*
- Numb (from cold) (to become), freeze (*vi*) *kʷínú (P,R)*



Numb (to become), fall asleep (a body part) (*vi*) žíxi (P,R)  
 Nurse, suck (*vi*) káši (P), xáši, žáši (R)  
 Nurse (*vt*) s-káši (P,R)

## O

Oak (evergreen) (*n*) nùkaxí, nukàxí  
 (< \*žúnú kaxí) (SP *encino*)  
 Oak tree (*n*) nundíí (< \*žúnú ndíí) (SP  
*roble*)  
 Oaxaca City (*n*) nùnduá  
 Odor, smell (*n*) šikò  
 Oil, fat, grease, lard (*n*) šāʔā  
 Old (*adj*) nāʔnū, žāʔnū  
 Big, fat káʔnū (SG), nāʔnū (PL)  
 Grow (*vi*) kʷáʔnū (P), xáʔnū (R)  
 On, face, front, in (*n*) nuù  
 On account of, due to (*prep*) kʷàčì  
 On fire (to be), burn (*vi*) kážu (P,R)  
 One (*num*) ħ̄  
 One hundred ħ̄ siento (SP *ciento*)  
 One moment, a short time in the  
 future (*n*) ħ̄ na-náʔa  
 One thousand mil (SP *mil*)  
 One time, once (*n*) ħ̄ xáʔa  
 Onion (*n*) ndĥkĥ  
 Only, purely (*adv*) máni (< \*máá nii)  
 Open (*vt*) kuña (P), xúñá (R)  
 Open, opened (*stat*) núña  
 Open out, raise, unfold (*vt*) s-káa (P,R)

Opossum (*n*) xàkò, xàko (SP *tlacuache*)  
 Opposite sex sibling (brother of female,  
 sister of male) (*n*) kʷàʔa  
 Or (*conj*) ši  
 Orange (*n*) tikʷaʔa, tikʷàa, tekʷaʔa  
 Order (*vt*) táxí (P,R)  
 Order (someone) (to do something) (*vt*)  
 keè kúní (P), keè xiní (R)  
 Orphan (*n*) seʔe ndáʔu, sendáʔu, sučí  
 ndáʔu  
 Other, another (*quant*) ħ̄=ka  
 Outside (*adv*) tabéʔe (< \*žata beʔe)  
 Oven (*n*) šinù, xinù  
 Overflowed, risen (*stat*) ndáá (see káá)  
 Owe (*vt*) kutáu (P), táu (R)  
 Owl (*n*) nūkʷi; teñu, tiñúú  
 Ox, bull, cow (*n*) sndikì

## P

Paint, dye (*vt*) kaʔžu (P), káʔžú (R)  
 Pair, both (*n*) ndendú (< \*(?) uù)  
 Pale, become pale (*vi*) ndú-žaa (P,R)  
 Palm mat (*n*) žuu (SP *petate*)  
 Palm tree (*n*) ità nùkúká  
 Papalome (medicinal maguey) (*n*) žáú  
 tílunčè, žáú tilúnčí, žaú tirírí  
 Papaloquelite (edible herb) (*n*) nduà  
 ndusú  
 Paper (*n*) tutù  
 Party (*n*) bíkó  
 Pass by, pass over (*vt*) xaʔá (P,R)

- Past (*n*) xa-náʔa
- Path, road, street (*n*) iči  
Toward (*prep*) iči
- Paxtle (Spanish moss) (*n*) šīñū
- Pay (*vt*) čaʔu, čáʔu (P,R); čunáá (P,R)
- Peach (*n*) ndeʔè, ndeʔè trāsñú (SP *durazno*)
- Peel, shell, skin, husk (*n*) sòò
- Peel off, come off (*vi*) ndóndá (P,R)
- Permit, allow (*vt*) s-ndóo (P,R)
- Person (*n*) ñažīū, ñāžīú
- Person, stranger (*respectful*) (*n*) toʔò
- Pickpocket, robber (*n*) (čàà) kʷíʔná, ñakʷíʔná, xa-kʷíʔná
- Pig, hog (*n*) kinè  
Male pig kinè žíí  
Piglet čítu  
Pork kũñù kinè  
Sow kinè siʔí  
Wild pig kinè žùkú (SP *jabalí*)
- Pile, stack (*vt*) čísó táʔã (P,R)
- Pile, stack, turn upside down (*vt*) čúsama (P,R)
- Pimple (*n*) ndiʔží  
Insect bite ndiʔží tikátá
- Pinch (*vt*) čitéʔé (P,R)
- Pine cone (*n*) tindíka
- Pine needles (*n*) žúša
- Pineapple (*n*) bixi
- Pinotepa (town name) (*n*) nužókó, ñūū žokó
- Pitchpine, torchpine (*n*) činù; nùžúšá; nùžúšá činú (< \*žúnú žúšá) (SP *ocote*)
- Pittona (type of herb) (*n*) kandóʔó
- Place, bring nearby, lay aside (*vt*) s-káʔaʔa, s-kánʔaʔa (P,R)
- Plain, countryside (*n*) nduʔà
- Plank, board (*n*) bitù
- Plant, herb (*n*) žukù
- Plant, rub, smear, sow, spread (*vt*) číʔi (P,R)  
Planted, rubbed, smeared, sown, spread (*stat*) žíʔí
- Plant, sow (*vt*) kʷažú (P,R)
- Plate (*n*) koʔò
- Play (*vi*) kusíki (P), xisíki (R)
- Play (a musical instrument) (*vt*) čaa (P,R)
- Play tricks on (*vb*) sá-ndiží (xíí) (P,R)
- Plaza, market (*n*) nužáʔu, žáʔu
- Plead, beg (*vb*) káʔã ndàʔú (xíí) (P,R)
- Plow (*n*) žatà
- Plural (*plural word*) xináʔa
- Pomegranate (*n*) číʔlo
- Poncho (*n*) tikè káʔnū, tikèi pončo
- Poor (*adj*) ndáʔu
- Porcupine, Mexican (*n*) ñāñā īñú (SP *puerco espín*)
- Pork (*n*) kũñù kinè
- Posole (*n*) nduša
- Pot, kettle (*n*) kisi (SP *olla*)
- Pot (clay) (*n*) texáʔã, tixáʔã (SP *cazuela*)
- Potato (*n*) tikʷití, tekʷiti  
Sweet potato ñáʔmī

Potsherd (*n*) tičòò, tìčoo (SP *tepalcate*)  
 Pour, empty (*vt*) kóžo (P,R)  
 Pour, sow, throw out (*vt*) čúʔū (P,R)  
 Pray (*vi*) ná-k<sup>w</sup>átu (P,R)  
 Present, gift (*n*) táʔu  
 Pretty, beautiful (*adj*) lúú, lúu  
 Prickly pear cactus (*n*) bíʔža, bíʔnža (SP *nopal*)  
 Prickly pear fruit číkí (SP *tuna*)  
 Priest (*n*) sutù  
 Problem, accident (*n*) nundóʔo, tundóʔo  
 Progreso (town name) (*n*) žuku šoo  
 Proud, boastful (*adj*) ndúší  
 Prove, clarify (*vt*) sánda (P,R) (< \*sáʔa ndáa)  
 Pull (*vt*) ñúú (P,R)  
 Pulque (*n*) nduča k<sup>w</sup>íxí  
 Puma, mountain lion (*n*) ndikáʔá, ndikaʔa (SP *león*)  
 Pumpkin, squash, gourd (*n*) žiki  
 Punch (*vt*) čuxíkí (P,R)  
 Punch, hit (with the fist) (*vb*) k<sup>w</sup>aʔa šikí (P), xáʔa šikí (R)  
 Puppy (*n*) líu  
 Purely, only (*adv*) máni (< \*máa nii)  
 Purple, sky blue, white, blue (*adj*) žaá, nžaá, (*n*) xa-nžaá  
 Pus (*n*) lák<sup>w</sup>á, lak<sup>w</sup>a  
 Push (*vt*) čindáʔá (P,R)  
 Put (*vt*) kéī (P), xéī (R)  
 Put in (*vt*) čundee, činde (P), čúndee, činde (R)  
 Put in place, arrange (*vt*) čúkú (P,R)

Put on (clothes), wear, contain, have (*vt*) kúʔū (P), ñúʔū (R)  
 Put on new clothes ndu-xáá saʔma (P,R)  
 Put on (shoes, jewelry) kiʔi (P,R)  
 Put on airs (*vi*) ndú-kāʔnū, ndú-ñāʔnū (P,R) (SP *engrandecerse*)  
 Put on top (*vt*) čusndée (P), čúsndée (R)  
 Put out, extinguish (*vt*) s-ndáʔba (P,R)  
 Put up, raise, lift (*vt*) nda-níʔí (P,R); s-ndáá (P,R)

## Q

Quake (of the earth) (*vi*) táʔá (P,R)  
*Quelite* (vegetable, eaten raw; edible grass, herb, leaf, bud, shoot, etc.) (*n*) nduà  
 Vegetable, eaten cooked žuà  
 Quickly, rapidly, soon, fast (*adv*) žáči  
 Quiet down (*vi*) kunái (P,R)

## R

Rabbit (*n*) isò, isù  
 Hare isò labúrrú (SP *liebre*)  
 Rabies (*n*) tik<sup>w</sup>eʔe  
 Rabid dog inà tik<sup>w</sup>eʔe  
 Radish (*n*) raba (SP *rábano*)  
 Rain (*vi*) kúú saù (P), kúū saù (R)  
 Rain (*n*) saù

- Rainbow (*n*) tikoro žáʔnda (SP *arco iris*)
- Raise, lift, put up (*vt*) nda-níʔí (P,R);  
s-ndáá (P,R)
- Raise, unfold, open out (*vt*) s-káa (P,R)
- Raise (children) (*vt*) s-k<sup>w</sup>áʔnū (P,R)
- Rapidly, soon, fast, quickly (*adv*) žáči
- Rat, mouse (*n*) tiñí, tñíí
- Rattlesnake (*n*) kòò káá
- Raven, crow (*n*) tikàkà, tikàká
- Ravine (*n*) šaʔbà
- Raw (*adj*) žíʔí, žiʔí
- Ray, arrow, heat (*n*) nduá
- Receive, get (*vt*) níʔi (P,R)
- Recover, catch (*vt*) na-tíí (P), ná-tíí (R)
- Recover (from an illness) (*vi*) na-kaku  
(P), ná-kaku (R)
- Red (*adj*) k<sup>w</sup>aʔá, (*n*) xa-k<sup>w</sup>aʔá  
Blush (*vi*) ndu-k<sup>w</sup>áʔá (P), ndú-k<sup>w</sup>aʔa  
(R)
- Reed (*n*) nužòo (< \*žúnú žòo) (SP  
*carrizo*)
- Refill (*vt*) na-s-číú (P,R)
- Register (*vt*) čútútu (P,R)
- Relative, companion, family, friend (*n*)  
táʔā
- Relax, spend time (with) (*vb*) kúnža núu  
(xíí) (P,R)
- Remember (intentionally) (*vt*) kunáʔá  
(P), náʔá (R)  
Remember (the past) (*vb*) ndu-kūʔū  
íni (P), ndú-kūʔū ini (R)
- Remove, take away (*vt*) kénža, kéža  
(P,R)
- Repay (*vt*) na-čàʔu (P), ná-čàʔù (R)
- Repulsive person or thing (*n*) teʔakì,  
tiʔakì
- Reside, live (*vi*) kúžaa, kunžàà (P), žáá,  
nžáá (R)
- Rest (*vi*) ndéndatu, ndétàtu (P,R)
- Return, give back (*vt*) na-k<sup>w</sup>aʔa (P,R)
- Return, turn over or around (*vi*) šuk<sup>w</sup>íí  
(P), šúk<sup>w</sup>íí (R)  
Return, come back na-šúk<sup>w</sup>íí (P),  
ná-šúk<sup>w</sup>íí (R)
- Return (downward) (*vi*) ndee (P,R)
- Reunite (*vi*) ndu-tútú (P,R)
- Revived, brought back to life (to be) (*vi*)  
na-čakù (P), ná-čakù (R)
- Revolve, turn over, upset (*vt*) sókáni,  
šokáni, šukáni (P,R); na-sókáni (P),  
ná-sókáni (R) (SP *voltear*)
- Rice (*n*) arrós (SP *arroz*)
- Rich (*adj*) kúká
- Right away, right now (*adv*) bína nūʔni
- Right hand (*n*) ndaʔa báʔa
- Ring (*n*) šéʔé
- Rinse, wet (*vt*) čindúčá (P,R)
- Rinse out (the mouth) (*vt*) čiʔù (P,R)
- Riotous, excited, noisy (to become) (*vi*)  
ndúbà (P,R)
- Rip, tear, cut (*vi*) téʔnde (P,R)
- Ripen (*vi*) kúči (P), xíči (R)
- Rise, climb up, go up (*vi*) káá (P,R)  
Risen, overflowed (*stat*) ndáá
- River (*n*) žuča  
Mouth of a river žužúča  
Creek xíči, xìči
- Road, street, path (*n*) iči

- Roast (*vt*) táʔu (P,R)  
 Roast, toast (*vi*) kasú (P,R)  
     Roast, toast (*vt*) s-kasú (P,R)  
 Robber, pickpocket (*n*) (čàà) kʷíʔná,  
     ñá-kʷíʔná, xa-kʷíʔná  
 Rock, stone (*n*) žuù  
     Hard, solid (*adj*) žúú  
 Rock, cave, cliff (*n*) kábà, kábá (SP  
     *cueva*)  
 Rock, round thing, ball (*n*) telúú, tìlúú;  
     tikúčá  
 Roll (*vi*) tunžaa, túžáa (P,R)  
     Roll (*vt*) s-túnžáa, s-túžáa (P,R)  
 Roll up, wrap (*vt*) česúku, čisúku,  
     čusúku, kusúku (P,R)  
     Rolled up, wrapped (*stat*) žésúku  
 Roof, attic (*n*) šinì béʔe  
 Room (*n*) kʷartó (SP *cuarto*)  
 Rooster (*n*) líʔi  
     Cockscornb šinì líʔi  
 Root (*n*) žoʔo  
 Rope, cord (made from maguey) (*n*) žoʔo  
     (SP *mecate, ixtle*)  
     Thin rope žoʔo lía (SP *lía*)  
 Rope, fiber (made from maguey) (*n*)  
     tendaà, tìndáa (SP *ixtle*)  
 Rot (*vi*) téʔžu (P,R)  
 Rot, decompose (*vi*) tíú (P), tiú (R)  
 Rot, sour (*vi*) xía (P,R)  
 Rotten, smelly (*adj*) šíkó  
 Rough, crisp (*adj*) ndak̀̀  
 Round thing, ball, rock (*n*) telúú, tìlúú;  
     tikúčá
- Rub, smear, sow, spread, plant (*vt*) číʔi  
     (P,R)  
 Run (*vi*) kúnú (P), xínú (R)  
 Run, drain, drip (of water) (*vi*) tóo (P,R)
- S**
- Sad (*adj*) kʷíʔa (inì)  
 Saint, god (*n*) íʔa, íža  
 Salsa, hot sauce (*n*) ndučáʔá  
 Salt (*n*) ñíí, ñíí  
     Salted, salty (*adj*) uʔà  
 San Miguel el Grande (town name) (*n*)  
     ñūñ ñélé  
     Person from San Miguel (derogatory)  
     ñélé  
 Sand (*n*) ñiùti, ñiùtí, ñíí  
 Sandal, shoe, *huarache* (*n*) ndīxà  
 Santa Catarina Yujia (town name) (*n*)  
     čížúxia  
 Santa Cruz (town name) (*n*) itundúxia  
 Santa María Yucuiti (town name) (*n*)  
     žuku žítí  
 Sash (*n*) tàni (SP *faja*)  
 Say (*vt*) keè (P,R)  
     Order (someone) (to do something)  
     keè kúní (P), keè xiní (R)  
 Scare, frighten (*vt*) síʔú (P,R)  
     Scared, frightened (*stat*) žúʔú  
 Scarecrow (*n*) ñíʔná  
 School (*n*) skʷelá (SP *escuela*)

- Scold (*vt*) s-kúní (P,R); (*vb*) káʔã nuù (P,R)
- Scorch, singe (*vi*) síží (P,R)
- Score, twentieth part (*num*) šíkó
- Scorn (*vb*) ndú-ičì [ndúʔičì] inì (nuù) (P,R)
- Scorpion (*n*) tisúʔmá
- Scratch (*vt*) ñíí (P,R)
- Scrawny (*adj*) lékú
- Scream, yell (*vb*) káná xíí (P), kána xíí (R)  
Scream at, yell at káná sikà (P), kána sikà (R)
- Scum, algae (*n*) šinù
- Search for, look for (*vt*) ndúkú, na-ndúkú (P), ndukú, na-nduku (R)
- Seated (to be), sit down (*vi*) ndú-kòò (P,R)
- Second (one) (*n*) žatà xa-núú
- Secret (*n*) saʔí
- See, know (*vt*) kúní (P), xiní (R)
- See, look (*vt*) ndéʔé, ndèʔé (P), ndéʔé (R)
- See, take care of, watch out for, care for (*vt*) koto (P), xító (R)
- Seed (*n*) číkí; ndíkí
- Seem, appear (*vi*) koto (P), xító (R)
- Seep, leak (*vi*) ndéndoʔo (P), ndendóʔó (R)
- Self (reflexive, emphatic) (*n*) máá
- Sell (*vt*) šíkó (P), šíkó (R)
- Send (*vt*) tetíú (P), tetíú (R)
- Señor (term of address) táta
- Señora (term of address) nána
- Separate, apart (*adj*) s̄ñ
- Separate (*vi*) ndu-s̄ñ (P,R)
- Seven (*num*) úša, úšia
- Seventy unì šíkó ušì
- Seventy-five unì šíkó šíáʔū
- Sew (*vt*) kíkú (P,R)
- Shade, shadow (*n*) ndati
- Shake, tremble (*vi*) níʔi (P,R)
- Shake, turn (*vt*) s-kʷíkó (P,R)
- Shameless one (*n*) ndéénú
- Sharp, jealous, miserly (*adj*) kʷíñí, kʷíñí
- Shave (*vt*) sete (P,R)
- Shawl (*n*) pañú, pãñú (SP *pañó, pañuelo*)
- She (*clitic*) =ña
- She, he (*clitic, polite*) =to
- She, he (*clitic, polite, of younger or deceased person*) =ži
- She, he, it (*clitic, supernatural being*) =ža
- Sheep, lamb (*n*) riì (SP *borrego*)
- Shell, skin, husk, peel (*n*) sòò
- Shepherd's hut (*n*) lančí, lančú
- Shirt (*n*) súʔnū
- Shoe, *huarache*, sandal (*n*) ndíxà
- Shore, bank (*n*) žundúčá (< \*žuʔu nduča); žuxíči (< \*žuʔu xíči)
- Short (*adj*) kʷítí
- Shorten (*vt*) na-sinú (P), ná-sinú (R); na-káʔña, na-káʔža (P,R); sá-kʷítí (P,R)
- Shortly, next (*adv*) ísá
- Shortly, soon (*adv*) nakúnū, nakúnūū
- Shoulder (*n*) čòò

- Show, teach (*vb*) s-náʔa nuè (P,R)
- Shrink, be tight (*vi*) tíʔʒí, na-tíʔʒí (P,R);  
ndu-kʷítí (P,R)
- Shrink (*vt*) s-tíʔʒí, na-s-tíʔʒí (P,R)
- Shy (*adj*) činu
- Sibling, opposite sex (brother of female,  
sister of male) (*n*) kʷàʔa
- Sick (to be) (*vi*) kokúʔu, kukúʔu (P),  
kúʔu (R)
- Sickness, illness (*n*) kʷeʔè
- Side (of body), belt (*n*) šīī
- Leaning (against one's side) (*adv*) šīī
- Side lado (SP *lado*)
- Silence (*n*) nažuú
- Sing (*vi*) káta (P), xíta (R)
- Singe, scorch (*vi*) síʒí (P,R)
- Sister (of female) (*n*) kúʔu
- Sister (of male), brother (of female) (*n*)  
kʷàʔa
- Sister-in-law (brother's wife, spouse's  
sister) (*n*) xánu
- Sister-in-law, brother-in-law  
(husband's sibling) (*n*) číso, čisó
- Sit down (*vi*) íkòò (P,R); ndú-kòò (P,R)
- Sit (*vt*) s-ndú-kòò (P,R)
- Six (*num*) íñū
- Sixty uè šíkó okò
- Sixty-five uè šíkó okò úʔū
- Skin, husk, peel, shell (*n*) sòò
- Skin, leather (*n*) ñíí
- Skinny, thin (*adj*) tilíngí, tilíngí
- Skirt (*n*) šiòò, šòò; snawa (SP *enaguas*)
- Slip (underskirt) šòò kʷitá
- Skunk (*n*) číʔí, číʔí
- Sky, heaven (*n*) andíú
- Sky blue, white, blue, purple (*adj*) žaá,  
nžaá, (*n*) xa-nžaá
- Sleep (*vi*) kúsu (P), kiší (R)
- Go back to sleep ná-kùsù (P,R)
- Sleepy, tired (to be) (*idiom*) kuè ñūʔñá  
(P), xíʔi ñūʔñá (R)
- Sleet, snow (*vi*) xàʔa (P), xáʔa (R)
- Slice (*vt*) sa-kʷáčí (P,R)
- Slip (underskirt) (*n*) šòò kʷitá
- Slippery, smooth (*adj*) líʔu
- Slow, slowly (*adj, adv*) kʷéé
- Small (*adj*) lúlí; tíʔlu
- Small, thin (*adj*) kʷáčí
- Smear, sow, spread, plant, rub (*vt*) číʔi  
(P,R)
- Smell, stink (*vi*) kušíkó (P,R)
- Smell (*vt*) níʔi šikò
- Smell, odor (*n*) šikò
- Smelly, rotten (*adj*) šíkó
- Smoke (*n*) ñūʔmā
- Smoke, burn (*vt*) káʔmū (P), xáʔmū (R)
- Smooth, slippery (*adj*) líʔu
- Smooth, soft (*adj*) bitá
- Snake (*n*) kòò, koò
- Rattlesnake kòò káá
- Sneeze (*vi*) káší (P,R)
- Snow, ice (*n*) žúʔa
- Snow, sleet (*vi*) xàʔa (P), xáʔa (R)
- So, therefore (*adv*) núsá

- Soak, wet (*vt*) čúndaxi (P), čundaxí (R)  
 Soaked, wet (*stat*) žúndaxi  
 Wet (*stat*) ndáxi
- Soap (*n*) namà
- Soft, smooth (*adj*) bitá
- Solid, hard (*adj*) žúú
- Son (*n*) sežíí, sežíí (< \*seʔe žíí/žíí)
- Son-in-law (*n*) sekásá (< \*seʔe kása)
- Song, music (*n*) žaà
- Soon (*idiom*) k<sup>w</sup>a-kú-žání (< \*k<sup>w</sup>āʔā kuú žani)
- Soon, fast, quickly, rapidly (*adv*) žáči
- Soon, shortly (*adv*) nakúnū, nakúnūū
- Soot (*n*) tūú
- Soul, spirit (*n*) anú (SP *ánima, alma*)
- Soul, spirit, voice, wind, breath, demon, ghost (*n*) tačì
- Soup (*n*) sopa (SP *sopa*)
- Sour (*adj*) ía
- Sour, rot (*vi*) xía (P,R)
- Sow (*n*) kinè siʔí
- Sow, plant (*vt*) k<sup>w</sup>ažú (P,R)
- Sow, spread, plant, rub, smear (*vt*) číʔi (P,R)
- Sow, throw out, pour (*vt*) čúʔū (P,R)
- Spanish (language) (*n*) sastìlá, sãstìlá, sãʔã stìlá (SP *Castellano*)
- Spanish moss (*n*) šĩñū (SP *paxtle*)
- Sparrow hawk, eagle (*n*) šíʔã
- Speak, talk (*vi*) káʔã (P,R)  
 Beg, plead (*vb*) káʔã ndàʔú (xíí)  
 Complain, denounce (*vb*) káʔã sóʔó
- Gossip, speak quietly, whisper (*vb*) káʔã žaá
- Mock, tease káʔã kátá (SP *burlarse*)
- Scold (*vb*) káʔã nuù
- Speak loudly, yell (*vb*) káʔã súkú
- Speak, talk, chat, converse (*vi*); discuss (*vt*) nda-tūʔū (P), ndá-tūʔū, ná-tūʔū (R)
- Spend time, relax (with) (*vb*) kúnža núu (xíí) (P,R)
- Spicy (to be) (*vi*) kuxátú, xatù (P), xátù, xatú (R)
- Spider (*n*) tĩndóo
- Spill, boil over (*vt*) katu, katí (P), xatu, xatì (R)
- Spin, turn (*vi*) k<sup>w</sup>íkó (P), xíkó (R)
- Spine, thorn (*n*) íñū  
 Bramble žukù íñū
- Spirit, soul (*n*) anú (SP *ánima, alma*)
- Spirit, voice, wind, breath, demon, ghost, soul (*n*) tačì
- Spit (*vi*) tesiʔù (P), tésìʔu (R)
- Split, bend, break (*vi*) táʔnu (P,R)
- Split, break, crack (*vi*) táʔu (P,R)
- Split ends (in hair) (*n*) titaší íši
- Spoiled, wicked, ill-bred (*adj*) aʔú inì
- Spoon (*n*) tĩkasi, tĩkàsĩ
- Spread, plant, rub, smear, sow (*vt*) číʔi (P,R)
- Spread, throw (*vt*) kača (P), xàča, xačà (R)
- Sprout, blossom, flow (of water) (*vi*) xaa (P,R)
- Squash, gourd, pumpkin (*n*) žíki



- Stack, pile (*vt*) čísó tãʔã (P,R)
- Stack, turn upside down, pile (*vt*)  
čúsama (P,R)
- Stained, black, dark (*adj*) lúčí, lúnči
- Stake, stick (*n*) ndužu
- Stale, stiff, hard (to become) (*vi*) ndu-  
ndàki (P,R)
- Stall (in market), wares (*n*) ndaʔù (SP  
*puesto*)
- Stand, be located standing (*vi*) kúndíi  
(P), kándii, xíndii (R)
- Stand (*vt*) kaníndi (P), xáníndi (R)
- Stand up (*vi*) ndókani, ndú-kani (P),  
ndokáni, ndu-káni (R); nduk<sup>w</sup>ī (P),  
ndúk<sup>w</sup>ī (R)
- Stand, detain (*vt*) s-ndú-k<sup>w</sup>īī (P,R)
- Standing, on foot (*adj*) xáʔá
- Star (*n*) čũũ šíní; luséro (SP *lucero*)
- Start, begin (*vi*) kexáʔá (P,R)
- Start, begin (*stat*) ndexáʔá
- Stay, be left over (*vi*) ndòò (P), ndóo (R)
- Be located (of a place) (*vi*) kendòò  
(P), kéndoo (R)
- Steal (*vt*) suʔú (P), súʔú (R)
- Steam (*n*) žokò
- Steam, blow on (*vt*) čižókó, čužókó  
(P,R)
- Steam bath (*n*) ñíʔi, ñíʔi žoko, ñíʔi
- Step-child (*n*) seʔe úu
- Step-father táa uù
- Step-mother náa uù
- Stick (*vi*) ndé-tñī (P,R)
- Stick (for planting), hoe (*n*) k<sup>w</sup>aà (SP  
*coa*)
- Stick, stake (*n*) ndužu
- Stick, tree, wood (*n*) žúnú
- Stiff, hard, stale (to become) (*vi*) ndu-  
ndàki (P,R)
- Sting, bite (*vt*) túú (P), túu (R)
- Stink, smell (*vi*) kušíkó (P,R)
- Stomach, in, inside, insides (*n*) inì
- Have a stomachache (*vb*) tíú inì
- Stomach, under, belly (*n*) čìì
- Stone, rock (*n*) žuù
- Molcajete* (small stone mortar, for  
making *salsa*) (*n*) koʔo žúu
- Stone god (*n*) ndosò
- Stool, bench (*n*) téžu
- Store, building, house (*n*) beʔe
- Straight (*adv*) ndóó
- Straighten out, untangle (*vi*) na-taʔnu  
(P,R)
- Strain (*vt*) s'íxī (P,R)
- Stranger, person (*respectful*) (*n*) toʔò
- Strangle, choke (*vi*) k<sup>w</sup>áʔñá (P,R)
- Strangle, choke (*vt*) s-k<sup>w</sup>áʔñá (P,R)
- Strap (for carrying) (*n*) žutù, žoʔo žútu  
(SP *mecapal*)
- Street, path, road (*n*) iči
- Stretch (*vi*) ndée (P,R)
- Stretch, confess (*vt*) s-ndée (P,R)
- Stretch (*vt*) sá-káni (P,R)
- Stretch, move (of a snake) (*vi*) ná-kaà  
(P,R)
- Stretch (*vt*) ná-s-kaà (P,R)
- Stretch (*vt, imp*) ná-stá
- String, thread, cord (*n*) žuʔà

- Strong, loud (*adj*) koʔo
- Strong, tight, hard (*adj, adv*) niʔi
- Study (*vt*) sk<sup>w</sup>áʔa (P,R)
- Stupid, bad, crazy, difficult (*adj*) káñá,  
ñáá (SG), ndañá (PL)
- Sty (of the eye) (*n*) tindotó
- Suck (*vt*) tíʔu (P,R)
- Suck, nurse (*vi*) káši (P), xáši, žáši (R)
- Suffer (*vi*) táʔa (P,R)
- Sufficient (to be more than) (*vi*)  
ndéndoso (P,R)
- Suffocate (*vb,vi*) ndakìʔi inì (P,R)
- Sugarcane (*n*) ndoò stilá (SP *de Castilla, Castellano*)
- Sun (*n*) ndíkandíí, ndíkandí  
Eclipse of the sun (*idiom*) ndíkandíí  
xíʔi
- Support, hold up (*vt*) čítu, čétu (P,R)
- Swallow (*vt*) kókó (P,R)
- Sweat (*n*) kaʔni
- Sweep (*vt*) na-stá (P,R)
- Sweet (*adj*) bīšī  
Fruit, grapes (*n*) xa-bīšī  
Sweet bread (*n*) statilá bīšī, tastilá  
bīšī
- Sweet potato (*n*) ñáʔmī
- Swell, become fat (*vi*) néñú (P,R)  
Swollen, fat (*stat*) ndéñú
- Swim (*vi*) súčá (P), sučá (R)
- Swollen (*adj*) k<sup>w</sup>íñí
- t**
- Table (*n*) mesá (SP *mesa*)
- Tail (*n*) súʔma
- Take (*vt*) kīʔī (P), kīʔī (R)  
žáʔa (*imp*)
- Take (a name) (off a list) (*vt*) ndaʔbà  
(síʔú) (P,R)
- Take away, gather (*vt*) s-tútú, na-s-tútú  
(P,R)
- Take away, remove (*vt*) kénža, kěžza  
(P,R)
- Take care of, care for (*vt*) kundito (P),  
ndító (R)
- Take care of, watch out for, care for, see  
(*vt*) koto (P), xító (R)
- Take heart, be encouraged (*vb*) ndundé  
inì; čindéé iní; taba iní (P,R) (SP  
*animarse*)
- Take off, out (*vt*) taba (P), tábá (R)
- Talk, chat, converse, speak (*vi*); discuss  
(*vt*) nda-tùʔū (P), ndá-tùʔū, ná-tùʔū  
(R)
- Talk, speak (*vi*) káʔā (P,R)
- Tall (*adj*) súkú
- Tamale (*n*) tekó, tìkóo, tikóo
- Tarantula (*n*) tìkaka íni
- Tassel (of corn plant) (*n*) žóko, tìkàžóko
- Tasty, delicious (*adj*) āsū
- Teach, show (*vb*) s-náʔa nuù (P,R)  
Teacher (*n*) čàà s-náʔa
- Tear, cut, rip (*vi*) téʔnde (P,R)
- Tease, mock (*vi*) káʔā kátá (P,R) (SP  
*burlarse*)

- Teeth, tooth (*n*) nũʔũ  
 Grind one's teeth (*vt*) kíʔñi nũʔũ
- Tell, advise (*vt*) kašũʔũ (P), kášũʔũ (R)
- Tell (as a story) (*vt*) ná-kani (P,R)
- Ten (*num*) ušì
- Tender, young (*adj*) žúčá
- Tendon, vein, muscle, nerve (*n*) tìči, tùči
- Tepache (alcoholic drink) (*n*) nduča  
 kʷáʔá
- Teposcolula (town name) (*n*) ñũù žuku  
 ndáá
- Termite (*n*) tikiši
- Test, try (*vt*) kótó nžaa, kótó žaa (P),  
 xító nžaa, xító žaa (R)
- Than (*conj*) asú
- Thank you (*idiom*) kútaʔù=ná,  
 kútaʔù=rí, kútaʔù šãã=rí nuù=ro
- That (*dem, n*) wãá
- The, then, there (*adv, det, n*) wãã
- There are, there is, exist (*vi*) koo (P), žóó  
 (R)
- Therefore, so (*adv*) núsá
- Thick (*adj*) kóko
- Thick, dense (*adj*) úʔa
- Thin (of e.g., paper) (*adj*) žáší
- Thin, skinny (*adj*) tilíngí, tilíngí
- Thin, small (*adj*) kʷáčí
- Thin, weak (*adj*) šíí  
 Thin, weak (to be, become) (*vi*)  
 ku-šíí (P,R)
- Thing (*n*) ndatíú
- Think (*vb*) kání inì (P), xání inì (R)  
 Worry ná-kani (iní) (P,R)
- Thirty (*num*) okò ušì  
 Thirty-five okò šíáʔũ
- This (*dem, n*) žaʔá
- Thorn, spine (*n*) íñú
- Thousand (*num*) mil (SP mil)
- Thread, cord, string (*n*) žuʔa
- Thread (wool) (*n*) xa-méku
- Three (*num*) unì  
 Three, a trio (*n*) ndeʔuní (< \*(?) unì)
- Thrive, increase (*vi*) ndežá, na-ndežá  
 (P,R)
- Throat, neck (*n*) sũkũ
- Throw, spread (*vt*) kača (P), xàča, xačà  
 (R)
- Throw, tip over, knock over (*vt*) s-kána  
 (P,R)
- Throw out, pour, sow (*vt*) čúʔũ (P,R)
- Thunder, explode (*vi*) káʔndi (P,R)
- Thus, like that (*adv*) sóã, súá
- Ticua (town name) (*n*) ñũù tikʷáʔá, ñũù  
 tikʷàʔa
- Tidy, arrange, clean up (*vt*) texíá (P,R)
- Tidy up (*vt*) sá-lulí (P,R)
- Tie (*vt*) kuʔni (P), xuʔni (R)  
 Tied (*stat*) núʔni
- Tie (a knot) (*vt*) číʔi (P,R)  
 Tied (of a knot) (*stat*) žíʔi
- Tight (*adj*) žókútú, žúkútú; tii  
 Tighten (*vi*) ndú-tii (P,R)
- Tight, hard, strong (*adj, adv*) niʔi
- Tight (to be), shrink (*vi*) tíʔži, na-tíʔži  
 (P,R)
- Tighten up, cramp (*vi*) tíngí (P,R)

- Time (*n*) xaʔà  
 A long time (*adv*) náʔá  
 A short time in the future, a moment  
 (*n*) ʔí na-náʔa  
 A short time in the past (*adv*) ndiʔá
- Tip over, knock over, throw (*vt*) s-kána  
 (P,R)
- Tire (*vi*) kʷítá (P,R)
- Tired, sleepy (to be) (*idiom*) kuù ñũʔñá  
 (P), xíʔi ñũʔñá (R)
- Tlaxiaco (town name) (*n*) ndixanú,  
 ndixinú
- Toad (*n*) ndikóʔndo  
 Toad (small) síkʷí
- Toast, roast (*vi*) kasú (P,R)  
 Toast, roast (*vt*) s-kasú (P,R)
- Toasted, hard (*adj*) luʔú
- Today, now (*adv*) bína, bína ñũʔni
- Toe (*n*) šinì xáʔa
- Together (*adj*) tútú
- Tomato (plum) (*n*) tènana, tìnana (SP  
*jitomate*)  
*Tomatillo* tìnana sóó, tènana sóó  
 Tomato (red) tìnana kʷáʔá, tènana  
 kʷáʔá
- Tomorrow (*adv*) ičāā, šíā  
 Day after tomorrow onde ičāā
- Tongue (*n*) žaa
- Too, also, always (*adv*) súní
- Tooth, teeth (*n*) nũʔũ  
 Toothless (to be) (*adj*) láʔba
- Top, at the top of, head (*n*) šinì  
 Attic, roof šinì béʔe
- Cockscomb šinì líʔi
- Finger šinì ndáʔa
- Hilltop šinì žúkú
- Knee šinì xití, šinì žití
- Toe šinì xáʔa
- Torch (*n*) žiti žúša
- Torchpine, pitchpine (*n*) činù; nùžúšá;  
 nùžúšá činú (< \*žúnú žúšá) (SP  
*ocote*)
- Tortilla (*n*) staà  
 Ball of *masa* (corn dough) stáá  
 Bread statilá, staà tilá, tastilá (SP  
*de Castilla, Castellano*)  
 Make tortillas (*vi*) katu (P,R)  
*Memelitas de maíz* (type of tortilla)  
 súú  
 Tortilla dipped in salsa tičīí, tičīí,  
 ŋčī, ŋčī (SP *tutuñí de salsa*)  
 Tortilla with beans standéžú (SP  
*enfrijoladas*)
- Totomostle (corn husk) (*n*) ñāmā
- Touch (*vt*) keʔe (P,R)
- Touchy (one who touches everything)  
 (*adj*) káñá (SP *tentón*)
- Toward (*prep*) iči  
 Toward this place (*adv*) iči žáʔa,  
 ičáʔa
- Town (*n*) ñũù
- Trade, exchange (*vt*) sámá (P,R)
- Transform, change (*vt*) ndaku (P), ndáku  
 (R)
- Tray (made from a gourd) (*n*) tikòʔó,  
 tikókó

- Tree, wood, stick (*n*) žúnú  
 Branch ndaʔa žúnú  
 Cherry tree nundeʔé tetúū, nundeʔé títúū  
 Evergreen oak nùkaxí, nukàxí (SP *encino*)  
 Fruit tree nundeʔé  
 Juniper nùʔiní, nuʔiní  
 Oak tree nundíí (SP *roble*)  
 Palm tree ità nùkúká  
 Pitchpine, torchpine činù; nùžúšá; nùžúšá činú (SP *ocote*)  
 Reed nužòo (SP *carrizo*)  
 Trunk tindúú  
 Tremble, shake (*vi*) níʔi (P,R)  
 Trio, three (*n*) ndeʔuní (< \*(?) unì)  
 Both, a pair ndendú (< \*(?) uù)  
 Tripe, guts (*n*) xítì  
 True, certain, clear (*adj*) ndixa  
 True, clear (*adj*) ndáa  
 Trunk, coffin (*n*) xanù  
 Trunk (of a tree) (*n*) tindúú  
 Truth (*n*) káxí, xa-ndáa  
 Truthfully (*adv*) ndiža  
 Try, test (*vt*) kótó nžaa, kótó žaa (P), xító nžaa, xító žaa (R)  
 Turkey (*n*) kóʔlo  
 Turkey hen kóní  
 Turkey chick pípí  
 Turn, spin (*vi*) kʷíkó (P), xíkó (R)  
 Turn, shake (*vt*) s-kʷíkó (P,R)  
 Turn around, turn over, return (*vi*) šukʷíí (P), šúkʷíí (R)  
 Turn over (*vi*) šókaba (P,R)  
 Turn over, upset, revolve (*vt*) sókání, šokání, šukání (P,R); na-sókání (P), ná-sókání (R) (SP *voltear*)  
 Turn upside down, pile, stack (*vt*) čúsama (P,R)  
 Turpentine (*n*) suxia, šušia  
 Tutuñí (*de salsa*) (tortilla dipped in salsa) (*n*) tičíí, tičíí, tíčī, tíčī  
 Twenty (*num*) okò  
 Twentieth part, score šíkó  
 Twenty-five okò úʔū  
 Twig (*n*) ndaʔa žúkú  
 Twins (*n*) xa-lúlí uù táʔā; kʷàtitú (SP *cuatitos*)  
 Twist, braid (*vt*) kaba (P,R)  
 Twist (one's body) (*vi*) kʷāngō (P,R)  
 Twist (*vt*) s-kʷāngō (P,R)  
 Twisted, bent (*adj*) žoʔo  
 Two (*num*) uù
- U**
- Ugly (*adj*) ñáka  
 Uncle (*n*) stoò  
 Under, belly, stomach (*n*) čìì  
 Understand, behave oneself, comprehend (*vb*) čúʔū inì (P,R)  
 Unfold, open out, raise (*vt*) s-káa (P,R)  
 Unite, join (*vt*) čutáʔā, čitáʔā (P,R)  
 United, joined (*stat*) žútáʔā, žítáʔā  
 Unkempt, messy (*idiom*) sanáa iní

Untangle, straighten out (*vi*) na-taʔnu  
(P,R)

Untangle (of hair) (*vt*) ná-s-káa (P,R)

Untie (*vt*) ndáxí (P,R)

Until, up to (*prep*) onde, one

Up, above (*adv*) nínu, činínu (< \*iči  
nínu)

Up to, until (*prep*) onde, one

Upset, revolve, turn over (*vt*) sókáni,  
šokáni, šukáni (P,R); na-sókáni (P),  
ná-sókáni (R) (SP *voltear*)

Urine (*n*) tíšešé

Use (*vt*) k<sup>w</sup>atíú (P), xatíú (R)

Use, need (*vt*) ná-ndiʔi (P,R)

Used to, accustomed to (to become) (*vt*)  
káá, na-káá (P,R)

## V

Various, both (*adv*) tíni

Various, many (*quant*) k<sup>w</sup>aʔà šáã

Vegetable, eaten cooked (*n*) žuà (SP  
*quelite*)

Vegetable, eaten raw (edible grass, herb,  
leaf, bud, shoot, etc.) (*n*) nduà (SP  
*quelite*)

Edible part of *guaje* tree nduà néte  
*Papaloquelite* nduà ndusú

Vegetable pear (*n*) náñá (SP *chayote*)

Vein, muscle, nerve, tendon (*n*) tìči, tùči

Very, exact (*quant*) máʔá

Virgin Mary (*n*) íža siʔí, íʔa siʔí

Virgin of the Nativity íʔa siʔí  
natividad [natiβiðáa] (SP *natividad*)

Voice, wind, breath, demon, ghost, soul,  
spirit (*n*) tači

Vomit (*vb*) káná inì (P,R)

## W

Wait (*vi*) kundátu (P), xíndatu, ndátu (R)

Wake up (*vb*) na-táʔu (íní) (P,R)

Walk (*vi*) kaka (P), xíka (R)

Walk, wander around (*vi*) ndekàbà (P,R)

Wall, corner (*n*) šikì, xikà

Wall (low), border (separating plots of  
land) (*n*) kóó (SP *camellón*)

Want (*vt*) kuní (P,R)

Wares, stall (in market) (*n*) ndaʔù (SP  
*puesto*)

Warm, heat (*vi*) nduši (P), ndúší (R)

Lukewarm (*adj*) bíšì

Warm, heat (*vt*) s-nduší (P,R); šuší  
(P,R)

Warm up, become hot, heat up (*vi*)  
ndu-bíšì (P,R)

Warm, hot (*adj*) níʔní

Wash (*vt*) nakača (P,R)

Wash (one's hands) nándaʔa (P,R)

Wasp (*n*) tìndaka, tìndakà

Watch out for, care for, see, take care of  
(*vt*) koto (P), xító (R)

Water (*n*) nduča

Water (*vt*) k<sup>w</sup>ìčà (P), xičá (R)

- Wax (*n*) ñuʔmà
- We (*n*, *PL inclusive*) žóʔó  
=žó (*clitic*)
- We, I (*n*, *familiar*) rùʔù  
=rí (*clitic, familiar*)
- We, I (*n*, *polite*) naʔa  
=ná (*clitic, polite*)
- Weak, thin (*adj*) šíí  
Weak, thin (to be, become) (*vi*)  
ku-šíí (P,R)
- Wear, contain, have, put on (clothes) (*vt*)  
kúʔū (P), ñúʔū (R)
- Weave (*vt*) kunu (P), kúnu (R)
- Weigh, measure (*vt*) číkʷaʔa (P,R)  
Weighed, measured (*stat*) žíkʷaʔa
- Well (*n*) sókó
- Well, good (*adj, adv*) bàʔà
- Well, lake (*n*) miní
- Wet (*adj*) bíšá
- Wet (*stat*) ndáxi (see čúndaxi)  
Wet (*vt*) s-ndáxi (P,R)
- Wet, rinse (*vt*) čindúčá (P,R)
- What, which (*int*) noò
- What day (*int*); daily, every day (*adv*)  
ndekíu, ndikíu
- What way, where, in what direction (*int*)  
ndéči, ndíči
- Wheat (*n*) tríyu, tríu (SP *trigo*)
- When (*conj*) orá (SP *hora*); (*int*) nama;  
na-kiù (lit. 'what day'); na-orá  
[naʔorá] (lit. 'what hour') (SP *hora*);  
na-žoò (lit. 'what month'); na-kʷíža  
(lit. 'what year')
- Where, in what direction, what way (*int*)  
ndéči, ndíči
- Where, which, who (*int*) ndéu
- Which, what (*int*) noò
- Which, who, where (*int*) ndéu
- Whirlwind, dust (*n*) tikačá, tikačaà
- Whisper, gossip, speak quietly (*vb*) káʔā  
žaá (P,R)
- Whistle (*n*) bitu (SP *pito*)
- Whistle (*vi*) tútú (P), tútu (R)
- White (*adj*) kʷixí, (*n*) xa-kʷixí
- White, blue, purple, sky blue (*adj*) žaá,  
nžaá, (*n*) xa-nžaá
- Who, where, which (*int*) ndéu
- Why (*int*) ná-xáʔa, ší-na-xaʔa,  
čí-na-xaʔa
- Wicked, ill-bred, spoiled (*adj*) aʔú inì
- Wide (*adj*) xičá, xíčá
- Wife (*n*) ñasíʔi, ñasiʔí (< \*ñāʔā síʔi)
- Wind, breath, demon, ghost, soul, spirit,  
voice (*n*) tačì
- Wing (*n*) ndíxì
- With (*prep*) xíí  
With whom (*int*) na-xíí
- Woman (*n*) ñāʔā  
Blind woman ñāʔā kʷáá  
Wife ñasíʔi, ñasiʔí (< \*ñāʔā síʔi)  
Young woman ñāʔā súčí
- Woman, girl (*n*) xa-siʔí
- Wood, stick, tree (*n*) žúnú
- Wool, hair (*n*) iší  
Wool thread xa-méku
- Word, message (*n*) tūʔú

Work ( <i>n</i> ) tīū	Yell, speak loudly ( <i>vb</i> ) káʔā súkú (P,R)
Errand tīū	Yellow ( <i>adj</i> ) kwāā, ( <i>n</i> ) xa-kwāā
Work ( <i>vi</i> ) sātīū (P,R)	Yes ( <i>adv</i> ) xāā
Work (in the fields) ( <i>vi</i> ) kútú (P), xítú (R)	Yes, it is ( <i>idiom</i> ) suu
World ( <i>n</i> ) nūžíu	Yesterday ( <i>adv</i> ) íkú
Worm ( <i>n</i> ) tìndákú, tendákú; tikokó, tekokó, čirikóko	Day before yesterday ( <i>onde</i> ) íkú nūū
Earthworm ndása, tendasa, tìndasa	Yosondúa (town name) ( <i>n</i> ) sančáo (SP <i>Santiago Yosondúa</i> )
Worm (infests cornfields) tikáxī	You ( <i>n, familiar</i> ) roʔo
Worry ( <i>vb</i> ) ná-kani (iní) (P,R)	=ro ( <i>clitic, familiar</i> )
Worship ( <i>vt</i> ) činūʔū (P,R)	You ( <i>n, polite</i> ) níʔí
Wrap, roll up ( <i>vt</i> ) česúku, čisúku, čusúku, kusúkú (P,R)	=ní ( <i>clitic, polite</i> )
Wrapped, rolled up ( <i>stat</i> ) žésúku	Young, tender ( <i>adj</i> ) žúčá
Wrist ( <i>n</i> ) sūkù ndáʔa, sīʔī ndáʔa	Young man, young person ( <i>n</i> ) sučí; xa-súčí
Write ( <i>vt</i> ) čaa (P,R)	Young woman nāʔā súčí
	Young ( <i>adj</i> ) súčí

**y**

Year ( <i>n</i> ) ndiki
Year, age ( <i>n</i> ) kwíža, kwía
Last year kwía aba; xa-ndūxì
Yell, scream ( <i>vb</i> ) káná xíí (P), kána xíí (R)
Yell at, scream at káná síkì (P), kána síkì (R)

**z**

Zapote ( <i>n</i> ) ndoko
Chirimoya ndoko íñú
White zapote ndoko kusú



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