The report committee for Justin Daniel McIntosh
certifies that this is the approved version of the following report:

Grammatical Sketch of Teotepec Chatino

APPROVED BY

SUPERVISING COMMITTEE:

Supervisor: _____
Anthony C. Woodbury

_____
Nora C. England

Grammatical Sketch of Teotepec Chatino

by

Justin Daniel McIntosh, B.A.

Report

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I would like to thank the community of *jychę*^{r} *ʔya*$^{34(+0)}$ *jʔo*^{31} - Santa Lucía Teotepec for their support and collaboration in the process of documenting their language. Since 2007 I have had the opportunity to know, work with and live among the people of this community. Particularly, I thank the family Quintas Salinas as they have made me feel at home during my long stays in their town. I want to thank Reginaldo Quintas Figueroa for his active and enthusiastic collaboration during many hours of elicitation. I appreciate our trekking through the mountains to conduct interviews with elders. We have both learned much from one another as we discovered many things about his language.

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Abstract

Grammatical Sketch of Teotepec Chatino

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Justin Daniel McIntosh, M.A.
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SUPERVISOR: Anthony C. Woodbury

Teotepec Chatino is a Zapotecan language of the Otomanguean stock, spoken in the Southeastern Sierra Madre, in the state of Oaxaca, Mexico. Although other varieties of the Chatino language family have been described - Panixtlahuaca (Pride, 1963; Pride and Pride, 2004), Yaitepec (Rasch, 2002), Quiahije (Cruz, E, 2004; Cruz, E. et al., 2008), Tataltepec (Pride and Pride, 1970; Pride, 1984), Zacatepec (Villard, 2008), Zenzontepec (Campbell, 2009; Carleton, 2000) - there are no previous descriptions of Teotepec Chatino.

Among the many interesting features of Teotepec Chatino is an inventory of twelve lexical tones. These tones distinguish between lexical items and have grammatical functions. The basic word order is VSO, however the language exhibits the alternative orders of SVO and OVS. These orders have specific semantic and pragmatic functions. The language has aspectual prefixes and some derivational patterns. There is verbal and nominal compounding which plays an important role in the formation of complex concepts. Animate direct objects are optionally marked by *ʔi*^{r} 'to'. The presence or absence of this marker with nominal constituents encodes whether an object is alienably or inalienably possessed. Teotepec Chatino has a vigesimal number system - a common areal feature of other languages in the region. There is a complex set of motion verbs that encode spatial orientation and reference. There are several constructions that result in complex sentences. These include relative clauses, complement clauses, adverbial clauses and conjunctions. There are a number of interesting temporal adverbs that are used to define different time events. The description and analysis of these aspects of Teotepec Chatino is based on data gathered through elicitation and oral texts. This work is a preliminary sketch of the language and should not be considered exhaustive.

Foreword

A note on fieldwork and methodology

In 2007 I was invited to travel to Teotepec with the Chatino Language Documentation Project (CLDP) of the University of Texas at Austin where I became acquainted with the community and was introduced to the local authorities. At that point I asked for and was granted permission to engage in a locally-based linguistic documentation project.

An important aspect of conducting fieldwork in Teotepec has been the inclusion of younger community members in the documentation and description of their language. This has involved training individuals to write Teotepec Chatino with precision, seminars and workshops on the tone system, and how this system relates to the grammar and compares with other varieties of Chatino. This has included training on the basic essentials of recording and documentation of texts with elder speakers. In turn, this has coincided with specialized training on the use of solid state recorders, video cameras, computers and computer programs for the technical process of documentation, transcription and translation of these texts. All of this has been done with the intent to create a context where the Chatino language is valued, honored and preserved in order to inspire young speakers to understand and appreciate the intricate details encoded in the lexicon and grammar of their language. Much of the work in this grammatical sketch is representative of this process and is partially the outcome of this collaborative and dynamic interaction.

The following work is based on fieldwork in the community of Santa Lucía Teotepec during the summers of 2007, 2008 and 2009 and the winter of 2007/08. The corpus consists of approximately 160 hours of elicitation and contains four short texts of natural discourse transcribed and translated. This work was gathered and recorded with the aid of Reginaldo Quintas Figueroa, Wilebaldo Velazco Mendoza, Moises Reyes Quintas, the support of others within the community of Santa Lucia Teotepec and the permission of the authority of the *Agencia Municipal* during administrations of 2007, 2008 & 2009. All of this material is being archived at AILLA (Archive of Indigenous Languages of Latin America) and ELAR (Endangered Languages Archive) as part of the Hans Rausing Endangered Languages Project in the School of Oriental and African Studies London, England.

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Abbreviations

ADJ	adjective
ADV	adverb
AL	alienable
ART	article
ASP	aspect
C	completive aspect
CAUS	causative
CDA	Cerro del Aire
CLDP	Chatino Language Documentation Project
COMP	complementizer
DAT	dative
DEM	demonstrative
ESN	essence
FOC	focus
H	habitual aspect
INAL	inalienable
INFL	inflection
INTS	intensifier
IP	interrogative particle
N	noun
NEG	negation
NOM	nominalizer
NP	noun phrase
P	potential aspect
PAN	Panixtlahuaca
PERS	person
POSS	possessive
PG	progressive aspect
PRO	pronoun
REL	relativizer
RP	respected person
SMC	San Martin Caballero
SJQ	San Juan Quiahije
SP	Spanish
TAT	Tataltepec
TEMP	temporal
TEO	Teotepec
V	verb
VP	verb phrase
YAI	Yaitepec
ZAC	Zacatepec
ZEN	Zenzontepec
1PLEX	first person exclusive
1PLIN	first person plural inclusive
1S	first person singular
2PL	second person plural
2S	second person singular
3PL	third person plural
3S	third person singular

Glossing Conventions

The glossing conventions for this grammatical sketch are based on the Leipzig Glossing Rules for the interlinear texts (MPI). The conventions herein conform to the needs of the Teotepec Chatino in order to represent the language in as transparent a manner as possible. The particular conventions employed in this grammatical sketch are the following:

1. Interlinear glosses are left-aligned vertically, word by word.

2. Many to one glosses for grammatical category abbreviations, aspect, person, number labels and words in the metalanguage composed of more than one lexeme are separated with periods (.) in the gloss-line:

   jykɻ^{31}
   C.eat.1S
   'I ate.'

   xtɻʔ^{20}
   short.1S
   'I am short.'

   tʔwɻ^{20}
   mouth.POSS.1S
   'my mouth.'

3. Morphemes and clitics are separated with the (=) equals symbol in the object language and/or the gloss line:

   xi^{34}*=sna*$^{2(r)}$ *xniʔ*$^{0(34)}$ *ʔį*^{r} *kta*^{23}
   CAUS=run dog DAT cow
   'The dog will make the cow(s) run.'

4. Compound words constructed of two or more independent lexemes are joined with the (-) dash in both the object language and gloss line:

   jyku^{r} *kna*^{r} *jo*^{r} *se*^{31} *ja*$^{2(r)}$*-slya*^{r}
   C.eat hidden Jose tortilla-castilla(bread)
   'Jose ate the bread while hiding.' *'Jose comió el pan a escondidas.'*(SP)

Chapter 1

Chatino and the community of Santa Lucía Teotepec

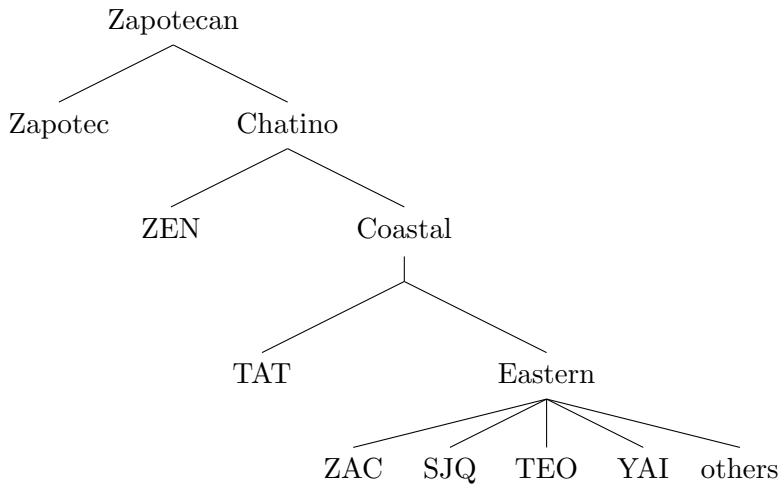
1.1 Introduction

Chatino refers to a group of Zapotecan languages coordinate with Zapotec of the Otomanguean language family of central southern Mexico. Otomanguean is one of the five unrelated language families that make up the Meso-American linguistic area (Campbell, L. et al., 1986). The Chatino people have historically lived in the southern Sierra Madre Mountains of Oaxaca. It is estimated that there are about 42,000 Chatino speakers in Oaxaca (INEGI, 2009). However, there are Chatino speakers who live in many other parts the Mexican Republic and in the United States of America. There is quite a bit of variation within the language and different degrees of intelligibility between communities. To date efforts to describe Chatino have covered a limited area and scope of the language.

There are differences over how to divide the Chatino language. Franz Boas conducted some of the earliest work on Chatino during a field trip in the early part of the twentieth century. He divided Chatino into three distinct groupings, what he labeled as the "first dialect", included many of the communities surrounding Santa Catarina Juquila and Santiago Yaitepec, the second was made up of the Tataltepec de Valdés, and the third consisted of Santa Cruz Zenzontepec, San Jacinto Tlacotepec, and Santa María Tlapanalquiahuitl (Boas, 1913). It was not until historical reconstruction work by Upson and Longacre (1965) that included lexicon from Yaitepec, Tataltepec and Zenzontepec, considered the three original groupings proposed by Boas.

Following the analysis of Boas (1913), Woodbury (2008); Campbell and Woodbury (2010), and most recently Campbell (2011) there is strong evidence that the original groupings of Boas was correct. The Chatino Language Documentation Project (CDLP) at the University of Texas at Austin has identified three distinct languages or dialects; Zenzon-

tepec, Tataltepec and the rest which the CLDP calls 'Eastern Chatino'. Continuing with Campbell (2011) Tataltepec and Eastern Chatino form an intermediate subgrouping apart from Zenzontepec known as Coastal Chatino. From Coastal Chatino comes the division of Tataltepec and Eastern. Although Ethnologue indicates six different varieties of Chatino; Zenzontepec and Tataltepec and breaks the rest into four sub-groups, the dialects of - Zacatepec, Eastern Highland, Western Highland and Nopala (Lewis, 2009), Campbell makes a strong argument that there is no evidence to support this type of grouping. Campbell's analysis is based on sound change, morphological change and semantic changes as well as the reconstructed tone system proposed by Campbell and Woodbury (2010). The tree below represents the zapotecan language family with Campbell's 2011 Chatino language classification:



The Eastern Chatino grouping is likewise based on the similarity of linguistic features that exist in the eastern part of the Chatino region; such as, lexical cognates, tone classes, and semantics. Because of the differences in the tone systems of Eastern Chatino every Eastern Chatino community forms is its own language sub-group. Nonetheless, when two politically separate communities arise from the same speech community, people will speak virtually the same language apart from naturally occurring innovation that takes place over time. This is true in the cases of the communities of San Juan Quiahije and Cieneguilla, Lachao Viejo and Lachao Nuevo, and Santa Lucía Teotepec and Cerro del Aire. Otherwise, Eastern Chatino changes with each given community and there is no discernible basis for internal subgrouping despite suggestions made by Ethnologue and Pride and Pride (2004).

Chatino within Otomanguean

Otomanguean is a deep language family. According to Kaufman (2006) Otomanguean is comprised of seven language groups; Oto-Pamean, Chinanteco, Chorotegan, Tlapanecan, Mazatecan, Zapotecan and Mixtecan. This includes languages spoken in Mexico, and the now extinct Manguean languages of Honduras, Nicaragua and Costa Rica. The Otomanguean family is divided into eastern and western. Chatino belongs to eastern Otomanguean and is a branch of the Zapotecan language family.

Figure 1.1: Map of Otomanguean Languages in Mexico (Maunus)

Purpose

The purpose of this work is to provide a grammatical sketch of Santa Lucía Teotepec Chatino (TEO). This description will provide a brief structural-functional analysis of the language. It may be useful to the professional linguist engaged in the study and/or documentation of Chatino and to the individual interested in a practical writing system and grammatical description.

It is hoped that with this work a clearer orientation of Teotepec Chatino will emerge within the Eastern varieties and will result in a more complete picture of Chatino overall. This will provide a platform for description and analysis of Teotepec Chatino, comparative

work with the other varieties of Chatino, and continued scholarly work on Chatino and Zapotecan languages.

1.1.1 Previous research

Previous work on Chatino languages includes: Carleton (2000) and Waksler and Carleton (2002) on ZEN, McKaughan and McKaughan (1951) (McKaughan, 1954) on YAI, Pride (1961, 1963) on YAI, Pride and Pride (1970) on TAT, Pride and Pride (2004) on PAN and other varieties, Rasch (2002) on YAI, Upson (1956, 1960, 1968), Upson and Longacre (1965) on TAT, ZEN, YAI, and others. At the University of Texas at Austin within the Chatino Language Documentation Project, Professor Anthony Woodbury and several graduate students have made significant descriptions of Chatino; Campbell (2009, 2010, 2011), and Campbell and Woodbury (2010) on ZEN and other varieties, Cruz, E (2004); Cruz, E. (2007), Cruz, E. and Woodbury (2005, 2006); Cruz, H (2009) on SJQ and Eastern, McIntosh (2009, 2010) on TEO, Sullivant and Woodbury (2009) on TAT, and Villard (2008) on ZAC. All of these publications contribute to a larger corpus and more detailed description of Chatino. Indeed, continued work is needed to compose a broader and much more complete description of the Chatino languages. There are no previously published works on Teotepec Chatino, however there is one publication on Nopala Chatino: Wardle and Wardle (1980). This is one of the geographically closer varieties of Chatino spoken near Santa Lucía Teotepec. This work includes five short texts of the Nopala variety with a brief explanation of the orthography, however there is no description of the tone system.

In 2003, Emiliana Cruz, Hilaria Cruz and Anthony Woodbury traveled to Teotepec. They collected 5.2 hours of audio elicitation and 2.3 hours of text, totaling 7.5 hours. Based on this field work E. Cruz proposed a preliminary phonological outline and a tone write-up. This laid a basis for comparative work and a preliminary analysis for continued work on and description of Teotepec Chatino.

1.1.2 Sociolinguistic situation

Like other communities throughout the state of Oaxaca, Chatino communities are divided into one of three different types of political entities based on population and political status. This creates a hierarchical system of power. The superordinate entity is the *municipio* - 'municipality'. The next group after *municipio* is the *agencia* 'agency', also known as *agencia municipal* - 'municipal agency' and the smallest, least politically powerful of these entities is the *rancho* 'ranch'. The *rancho* is usually under the political organization of an *agencia*. Thus a municipality may have several *agencias* under its governance and an *agencia* may contain several *ranchos*. Money and financing from the state comes through

the municipality and is funneled down to the agencies and the ranches.

Teotepec Chatino is spoken in the *agencias* of Santa Lucía Teotepec, Cerro del Aire, La Cañada de Atotonilco, and San Martin Caballero and the *ranchos* of Cerro Armadillo, Cañada de Flores, Cerro Niño, Cerro Cuero, La Maltraca, Aguacatal and La Cienega. The two largest communities where Teotepec Chatino is spoken are Santa Lucia Teotepec and Cerro del Aire. Figure 1.2, below, shows some of the Teotepec speaking communities.[1]

Figure 1.2: Southern Chatino Region Map

In 1957 the community of Teotepec was divided by violent civil war. Because of this, as much as half of the community moved down the mountain to a ranch community and established Cerro del Aire as an *agencia*. Another smaller group moved closer to the coast and formed the *agencia* San Martín Caballero. As a result of this conflict Teotepec lost its municipality status. The municipality seat was moved to Santos Reyes Nopala. Today, Teotepec and Cerro del Aire are *agencias* that pertain to the municipality of Santo Reyes Nopala, Oaxaca. This new status has produced long lasting negative social and economic

[1]Communities noted in yellow speak Teotepec Chatino. Other communities noted in green speak other varieties of Eastern Chatino. Communities noted in red are where Chatino is spoken by less than 10% of the population.

effects in these communities, at the same time, this may be one of the reasons why the variety of Teotepec Chatino continues to be spoken across so many communities and has remained vital.

Language vitality

Vitality of Chatino is a question of cultural concern and academic interest. In the Eastern Chatino communities there appears to be two tendencies: In some communities the use of Chatino is decreasing rapidly and in others this process is much slower. If we compare some of the different Eastern Chatino communities with Teotepec we can see that although there is language attrition in Teotepec it remains a vital linguistic community. According to the 2000 Mexican census 9 percent of the population speaks Chatino in Santa Catarina Juquila (454 people out of 5044). In the town of Santos Reyes Nopala, only 26 percent of the population speak Chatino (1176 people out of 4581). In San Marcos Zacatepec 39 percent of the population speak Chatino. Other Eastern Chatino communities like that of San Juan Quiahije, Cieneguilla, San Miguel Panixtlahuaca, Santiago Yaitepec all have a population of Chatino speakers that fall into at least the low 80s percentile. Teotepec reports a similar number, where 83 percent of its inhabitants speak Chatino (1151 people out of 1379). The following table outlines the percentage of Chatino speakers in some of the Eastern Chatino communities:

Table 1.1: Number of Chatino Speakers in Eastern Chatino Communities

Municipality	Community	Total Population	Chatino Speakers	%
Santa Catarina Juquila	Santa Catarina Juquila	5044	454	9%
Santa Catarina Juquila	San Marcos Zacatepec	1181	464	39%
San Juan Quiahije	San Juan Quiahije	2095	1696	81%
San Juan Quiahije	Cieneguilla	1429	1185	83%
San Miguel Panixtlahuaca	Panixtlahuaca	5389	4389	81%
Santiago Yaitepec	Yaitepec	3080	2612	85%
Santos Reyes Nopala	Santa Lucía Teotepec	1379	1151	83%
Santos Reyes Nopala	Cerro del Aire	1198	975	81%
Santos Reyes Nopala	Cañada Atotonilco	437	379	80%
Santos Reyes Nopala	Santos Reyes Nopala	4581	1176	26%
Santa Maria Temaxcaltepec	Temaxcaltepec	1212	1025	85%
Villa de Tututepec de Melchor Ocampo	San Martín Caballero	315	97	31%

Nopala and Juquila are economic centers that, over the course of the last 150 years, have been progressively dominated by non-indigenous *mestizo* outsiders. Because the census data does not make dialectical discriminations within a given population, the number of speakers in these centers may very well be of 'other' Chatino varieties who have recently arrived.

This outsider domination and political economic shift has been a major reason of language loss in both of these communities.

Today, a majority of the Chatino communities are experiencing language attrition and are in danger of loosing their language completely. Nopala and Juquila are just further along in this process. Attitudes regarding the value of the Chatino language, perceptions about what it means to be Chatino and what it means to speak an indigenous language spread across a wide spectrum. In Teotepec, some younger speakers feel shame for not speaking Chatino well but feel embarrassed to speak their language outside the community because of negative attitudes that exist among the *mestizo* population.

Education inside and outside of Chatino communities has been another major factor in language shift and the so-called castilianization of the indigenous population. Castilianization is a process whereby a community like Teotepec is slowly changed from a Chatino speaking community, to a bilingual community which eventually becomes a monolingual Spanish or a castilianized community. Despite the fact that bilingual instructors are to be trained to conduct bilingual education curricula, teachers in indigenous communities are always under-equipped and underprepared for the task of educating the youth in the local language. 'Bilingual education' has merely taken language shift a step further by institutionalizing a policy of Spanish language education taught by teachers who are bilingual; however they almost never speak the language of the community where they are assigned to teach. Due to this phenomenon among other reasons, Teotepec is slowly changing from a Chatino speaking community to a bilingual community.

Migration is another factor that may be affecting the vitality of Chatino language in Teotepec. However, there is a history of seasonal migration for work to other Mexican communities where Chatino is not spoken. Nonetheless, in the last 15 years, political economic factors have led to increased immigration to the United States. Although this migration is also cyclical the cycles are for much longer periods of time unlike the historical seasonal migration. It is common for people to leave for five or more years. Although the intention is to leave for a few years oftentimes people do not return. Some die crossing the border or in accidents on the other side, some encounter legal problems and end up in jail, and others simply stay in the United States. A majority of the individuals who have been migrating have been men between the ages of 17 to 55, however recently more young women have been making this trip to work in United States. This situation impacts the way the language is transferred to the youth. Increasingly children grow up with one immediate family member in the United States and are raised by their mothers or grandmothers. This has had a strong impact on the political economy of the community and throughout the region and is increasingly becoming a major factor that influences attitudes about the language and the manner in which it is transferred.

In Teotepec, Chatino is spoken and used daily in most transactions by children and elders, from the playground to ritual contexts. The language is used for prayers during *mayordomo* celebrations, for political and governmental activities, and for community announcements heard over the community's loud speaker system. Despite this rich daily use of Chatino in the community, there are children that do not speak or understand Chatino even though their peers are native speakers. Conversely, there are some children who have grown up not speaking Chatino at home but have become fluent in the language.

Language shift is a complex and complicated situation. It is clear that this process is well underway in Teotepec and it is surprising to see how the language pops up where one might not expect. Community elders readily acknowledge the reality of language shift. Many of the older speakers who I have interviewed explain that young people are not using the language and that it is not being transferred to the youth. It appears absurd to these community members that young people would feel shame to speak the language that is of the people and community.

1.1.3 Linguistic profile of Teotepec Chatino

The following is a very brief profile of Teotepec Chatino:

Teotepec Chatino phonology exhibits five oral vowels and four nasal vowels. The language has a contrast of apico-dental and lamino-alveolar consonants. There is a system of twelve lexical tones that mark both lexical and grammatical differences (person in verbs and possession in inalienably possessed nouns). This tone system further features more than twenty-five sandhi rules. Teotepec Chatino also exhibits:

- Monosyllabic simple stems with suppletive morphology in the aspectual system.
- Demonstrative nouns that indicate proximal, distal and non-present objects.
- Vigesimal number system.
- Alienably and inalienably possessed nouns.
- Nominal and verbal compounding to express complex concepts.
- VSO word order, however SVO and OVS orders are used for pragmatic reasons, including topicalization of subjects.
- The marker $\gamma\dot{\imath}^{r}$ 'to/of', is used to indicate alienable possessed noun relationships, mark direct objects (depending on the animacy of the object), and mark indirect objects.
- Motion verbs that encode information about the speaker and subject in relation to their deictic base.
- Productive verb derivation with causative constructions.
- Complex sentence constructions with relative, complement and adverbial clauses.

Chapter 2

Phonology

2.1 Introduction

This section will describe the phonological patterns found in Teotepec Chatino and introduce the orthography. A brief description of the phonemic inventory, syllable structure, and tones will be presented at the beginning. After this a more in-depth description of the phonology will follow in the subsequent sections. Descriptions of the orthography and how it relates to the phonemes in their practical representations will be included throughout this section.

2.2 Phonemic inventory

Teotepec Chatino has five oral vowel phonemes and four nasal vowel phonemes[1] shown in 2.1:

Table 2.1: Vowel Phonemes of Teotepec Chatino (phonemic inventory)

	oral vowels			nasal vowels		
	front	central	back	front	central	back
high	/i/		/u/	/į/		
mid	/e/		/o/	/ę/		/ǫ/
low		/a/			/ą/	

[1]The practical writing system for the nasalized vowels includes both graphemes < ǫ > and < ų >. This is for when the nasal /ǫ/ sounds like [ų], see §2.4.3.

Table 2.2: Vowel Phonemes of Teotepec Chatino (practical orthography)

	oral vowels			nasal vowels		
	front	central	back	front	central	back
high	i		u	į		
mid	e		o	ę		ǫ / ų
low		a			ą	

There are 20 consonant phonemes shown below in 2.3. Table 2.4 shows the practical writing system for the language. This system was developed based on the orthography proposed by Rasch (2002) and further elaborated on by Cruz, E (2004) keeping in mind the constraint of one symbol per phoneme. The practical orthography deviates from the IPA in the following areas: the series of lamino-alveolars, the palatal, the labio-velar and the laryngeals. This is explained in subsequent sections.

Table 2.3: Consonants of Teotepec Chatino (phonemic inventory)

	Bilabial	Apico-dental	Lamino-alveolar	Palatal	Velar	Labio-velar	Laryngeal
Occlusive	p	t, d	t̻		k	k^w	ʔ
Affricate		ts	t̻ʃ̻				
Fricative		s	ʃ̻				h
Nasal	m	n	n̻				
Tap		ɾ					
Lateral		l	l̻				
Glide	w			j			

Table 2.4: Consonants of Teotepec Chatino (practical orthography)

	Bilabial	Apico-dental	Lamino-alveolar	Palatal	Velar	Labio-velar	Laryngeal
Occlusive	p (b)	t, d	ty, dy		k, g	kw	7
Affricate		ts	ch				
Fricative		s	x				j
Nasal	m	n	ny				
Tap		r					
Lateral		l	ly				
Glide	w			y			

2.3 The phonological word template

The basic root shape of Teotepec Chatino is monosyllabic. More conservative varieties like those of Zenzontepec and Zacatepec continue to maintain the polysyllabic root. Tataltepec is less innovative and more conservative in regard to penultimate syllable reduction. It does preserve /a/ and in some cases /u/ and /i/ in the penultimate syllable. Other varieties depending on their innovative nature may retain more or less of the penultimate syllable. Teotepec, Like many other varieties of Eastern Chatino, has lost the penultimate syllables. The phonological word in Teotepec can have the following form:

$$(\mathrm{n/m})(\mathrm{C_1})\mathrm{C_2}(\mathrm{S})\mathrm{V}^T(\mathrm{?})^2$$

The morphological root is a monosyllable. Any polysyllabic words are considered compounds. The tone-bearing unit then is the syllable or root. Every root bears one tone. For example; *jychɇ^r ɣya$^{34(+0)}$ jɣo^{31}* lit. *'pueblo cerro santo'* or 'Santa Lucía Teotepec'.[3] All simplex native and most loan words in Teotepec Chatino conform to the above syllable shape. Given the mono-syllabification of the language this has left many consonant clusters. There are a few words that have clusters of three consonants word initially. Because of this the above template is needed. Some examples of different possible syllable shapes are outlined below:

[2] $\mathrm{C_1}$ can be an obstruent or a glottal and reserves a space for the special consonant cluster /hj/ $< jy >$. In this situation $\mathrm{C_2}$ is a glottal /h/ or /ʔ/ and (S) is a sonorant consonant that can either be a nasal /n/ $< n >$, /n̲/ $< ny >$ or a glide /j/ $< y >$, /w/ $< w >$, see table 2.7 below. The superscript ^{T} is used to show where the tone is represented in the writing system. The glottal stop is the only consonant that can occur in coda position and only one glottal stop is allowed per word.

[3] The tone /r/ is the unmarked tone described as the 'relaxed' tone. For a full description of the Teotepec tone system see §2.6.

Table 2.5: Syllable shapes: CV(7) - (n/m)CV(7)

/pi$^{1(+0)}$/	‘young turkey’	/nt̨^{2}/	‘people’
/na^{r}/	‘carbon’	/nda꞉^{r}/	‘bean’
/ti^{r}/	‘just’	/ntsi^{23}/	‘nanche’
/ʃi^{r}/	‘sweet’	/nt̪i̪^{31}/	‘bedbug’
/ka^{13}/	‘yesterday’	/nką꞉^{31}/	‘coconut’
/ku^{r}/	‘he/she will eat’	/nkąʔ^{23}/	‘his/her mucus’
/ko^{3}/	‘fog’	/nk^{w}ę^{3}/	‘ripe’
/ʔo^{31}/	‘with’	/nʔa^{r}/	‘house’
/ʧaʔ^{13}/	‘word’	/mta^{13}/	‘black’
/ʧoʔ^{2}/	‘pineapple’	/mt̨^{13}/	‘white’
/k^{w}ę^{34}/	‘bat’	/mtsoʔ^{2}/	‘mud’
/hu̯꞉^{31}/	‘thread’	/msa꞉$^{2(+0)}$/	‘weevil’
/ʧǫʔ^{3}/	‘at.back.of’	/msi̪^{3}/	‘late/afternoon’
/kąʔ^{13}/	‘that’	/mʧi̪^{2}/	‘monkey’
/k^{w}ę̨ʔ^{3}/	‘armadillo	/mla̪^{23}/	‘mule’

Table 2.6: Syllable shapes: CCV(7) - (n/m)CCV(7)

/skąʔ^{21}/	‘he/she will tie’	/ndʔą^{r}/	‘corn cob’
/kti$^{2(+0)}$/	‘seven’	/nską^{2}/	‘corner’
/ktseʔ^{13}/	‘pus’	/nsk^{w}a^{r}/	‘chayote squash’
/knaʔ^{31}/	‘meat’	/nsk^{w}aʔ^{2}/	‘maize’
/kla$^{2(+0)}$/	‘twenty’	/nt̪kǫʔ^{r}/	‘fist’
/kle^{23}/	‘mayor’	/nkʔa^{3}/	‘green’
/kla̪ʔ^{3}/	’bitter’	/nk^{w}he^{r}/	‘goose foot’
/kn̪aʔ^{3}/	‘honey’	/mwjuʔ^{r}/	‘spider’
/k$^{(w)}$tį̨ʔ^{2}/	‘head lice’	/msk^{w}a^{34}/	‘he/she laid down’
/hʧe^{r}/	‘maguey fiber’	/msk^{w}ą^{20}/	‘I laid down’
/hya^{r}/	‘sugar cane’	/mnʔą$^{2(+0)}$/	‘I saw’
/hwi$^{1(+0)}$	‘whistle’	/mʔni^{3}/	‘he/she did’
/hn̪aʔ^{13}	‘chile’	/mʔni^{3}/	‘he/she did’
/hʔo^{34}/	‘saint’		
/ʔni^{r}/	‘animal’		

Table 2.7: Syllable shapes: CC(S)V(7) - (n/m)CC(S)V(7)

/tʔjɻ^{31}/	'I will lower it'	/nsʔju$^{1(+0)}$/	'he/she cut's it
/tʔwa^{2}/	'cold'	/nsʔjǫ^{r}/	'I cut it'
/sʔju$^{1(+0)}$/	'he/she will cut it'	/nsʔja$^{1(+0)}$/	'he/she yells'
/sʔjɻ^{r}/	'I will cut it'	/nsʔjɻ^{r}/	'I yell'
/ʃʔja$^{1(+0)}$/	'he/she will yell'	/ndʔja$^{1(+0)}$/	'he/she lowers it'
/ʃʔjɻ^{r}/	'I will yell'	/ndʔjɻ^{31}/	'I'm lowering it'
/kʔni^{2}/	'he/she will do'	/ndʔja^{31}/	'pretty'
/kʔju^{34}/	'flea'	/ndʔjo^{34}/	'he/she is drinking'
/hjʧɐ^{r}/	'village	/ndʔjǫ^{34}/	'I'm drinking'
/hjkʷaʔ^{r}/	'swamp'	/ndʔjǫ^{34}/	'I'm drinking'
/hjʔa^{31}/	'his/her mother'	/msʔjǫ^{31}/	'I cut it'
/hjʔɻ^{3}/	'he/she will wash'	/msʔja^{34}/	'he/she yelled'
/hjla$^{2(+0)}$/	'he/she will arrive'	/msʔju^{13}/	'he/she cut it'
/hjlɻ$^{2(+0)}$/	'I'm arriving'	/msʔjǫ^{31}/	'I cut it'
/hʔwa^{2}/	'banana'	/msʔjɻ^{31}/	'I yelled'
/(hj)ʔna^{34}/	'plate of food'	/mdʔja^{3}/	'he/she lowered it'
/(hj)ʔni^{21}/	'he/she is doing'	/mdʔjɻ^{r}/	'I lowered it'
/(hj)ʔja^{34}/	'mountain'		
/(hj)ʔja^{31}/	'he/she will lower it'		

Considering syllable structure outlined at the beginning of this section - (n/m)(C_1)C_2(S)V^T(ʔ) in relation to the example set for CC(S)V(7) in table 2.7 above; C_1 can be an obstruent or a glottal and reserves this space for the special consonant cluster /hj/ $< jy >$. In this situation C_2 is a glottal /h/ or /ʔ/ and the position directly preceding the vowel is a sonorant consonant (S) that can either be a nasal /n/ $< n >$, /n̻/ $< ny >$ or a glide /j/ $< y >$, /w/ $< w >$. Likewise, for the examples in the pre-nasal set (n/m)(C_1)C_2(S)V(7); C_2 is a glottal and the position preceding the vowel is a sonorant consonant (S).

2.4 Vowel phonemes

2.4.1 Introduction

The following section describes the phonemes in Teotepec Chatino. Because there are 12 lexically contrastive tones it is difficult to find true minimal pairs. Below are some minimal and near minimal pairs to account for the vowel contrasts. In the subsequent sections vowel length and nasalization features are described.

2.4.2 Oral vowel phonemes

The following minimal pairs (aside from tone) illustrate vowel contrasts:

ka^{3}	'left'	ktsa7^{r}	'it will get wet'
ke^{3}	'his/her head'	ktse7^{13}	'pus'
kii^{13}	'reed'	ktyi7^{3}	'frog'
ko$^{2(+0)}$	'he/she will grind'	ktso7^{2}	'it will rot'
ku^{r}	'he/she will eat'		

2.4.3 Nasal vowel phonemes

Nasalization changes the quality of the vowel. The sound [ụ] is not included in the phonemic vowel inventory because [ǫ] and [ụ] do not contrast in nasal contexts and are found in complementary distribution. Because there are some speakers that use [ụ] for what is [ǫ], the grapheme, < ụ > is used in some contexts to represent the written language; [jų̣ų̣^{31}] for /jǫ̨ǫ̨^{31}/ 'thread'. Verbs inflected for 1st person singular are nasalized and marked with a tone clitic. First person inalienably possessed nouns are also nasalized and carry a first person tone clitic. The contrasting 2nd and 3rd persons are not nasalized however they are marked with a different tone. Additionally, some vowels show a difference among their oral, and nasalized counterparts:

/i̧/ is [ɪ̨]
/ę/ is [ɛ̨]
/ǫ/ is [ɔ̨]
/a̧/ is [ɑ̨]

Below are examples of minimal and near minimal pairs for oral and nasal vowels:

Table 2.8: Oral and nasal vowel minimal and near minimal pairs

Oral	Gloss		Nasal	Gloss
/ka$^{2(+0)}$/	'he/she will be'	≠	/ką$^{2(+0)}$/	'I will be'
/swe^{r}/	'your chin'	≠	/swę^{20}/	'my chin'
/tykwiʔ^{r}/	'he/she will speak'	≠	/kwįʔ$^{1(+0)}$/	'I will speak'
/ko$^{2(+0)}$/	'he/she will grind'	≠	/kǫ^{20}/	'I will grind'
/ku^{r}/	'he/she will eat'	≠	/kǫ$^{1(+0)}$/	'I will eat'

2.4.4 Vowel length

Teotepec Chatino distinguishes long and short vowels. The duration of long vowels is about .10 ms, .05 ms. longer than short vowels. Below is a list of minimal and near minimal pairs of long and simple vowel pairs for TEO:

Table 2.9: Long and simple vowel minimal and near minimal pairs

kaa$^{2(+0)}$	'nine'	≠	ka^{13}	'yesterday'
naa^{r}	'us' 1PLIN	≠	na^{34}	'coal'
ngąą^{31}	'coconut'	≠	ngą7^{23}	'his/her mucus'
laa^{3}	'church'	≠	la^{31}	'open'
kyee^{r}	'rock'	≠	ke^{34}	'flower'
tii^{2}	'ten'	≠	ti^{13}	'rope'
kwii^{r}	'star'	≠	kwi^{r}	'liquor'
kii7^{r}	'fire'	≠	kwi7^{34}	'baby'
tyoo^{31}	'adobe'	≠	tyo^{r}	'rain'
yuu^{r}	'earth'	≠	yu^{r}	'him'

Following Campbell (2011) vowel length usually derives from historical dimoraic, monosyllabic words. This contrast can be seen in the varieties of ZAC, TAT and ZAC. This length may have been retained in PAN (Pride and Pride, 2004) and is presented here in TEO. It appears that in SJQ this length has not been retained. The table below presents contrastive monosyllabic examples for the Chatino varieties of ZEN, TAT, ZAC, SJQ, and TEO:

Table 2.10: Monosyllabic words of ZEN, TAT, SAC, SJQ and TEO

ZEN	TAT	ZAC	SJQ	TEO	Gloss
kàá	kaá	kaa	ka^{24}	kaa$^{2(+0)}$	'nine'
naa	naa	nạ-ntee^{m}	na^{4}	naa^{r}	'us'
nkàą́^{21}	ngạą́	ngạạ^{mh}	ngạ^{1}	ngạą́^{31}	'coconut'
laa	laà	laa^{mm}	la^{42}	laa^{3}	'church'
kyee	kee	kee	ke^{4}	kyee^{r}	'rock'
tíi	tií	tii	ti^{24}	tii$^{2(+0)}$	'ten'
kii7	kii7	kii7	ki7^{4}	kii7^{r}	'fire'
lí-tyúu	tyuú	tyoo^{mh}	tyu^{3}	tyoo^{31}	'adobe'
yuu	yuu	yoo	yu^{4}	yuu^{r}	'earth'
kii	kiì	kii^{mm}	ki^{42}	kii^{3}	'bamboo'
koo	koò	koo^{mm}	ko^{42}	koo^{3}	'cloud/fog'
jii	jiì	jii^{mm}	ji^{42}	jii^{3}	'ashes'
koǫ	kǫǫ́	kǫǫ^{mm}	kǫ^{42}	kǫǫ^{3}	'tuber'
yáà	yaá	yaa^{mh}	ya^{3}	yaa^{31}	'nopal'

Vowel phonemes /a/ and /ą/

/a/		/ą/	
ka^{13}	‘yesterday’	ską^{r}	‘topil’ (SP) ‘community guard’
ta^{3}	‘shrimp’	ką$^{2(+0)}$	‘he/she will be’
sa^{23}	‘cup’	tjyą^{23}	‘bone’
na^{r}	‘coal’	tą^{3}	‘fat’
xaa^{31}	‘luminance’	ską7^{21}	‘he/she will tie’
la^{31}	‘open’		
kwa^{13}	‘broom’		
mta^{13}	‘black’		
skwa^{31}	‘soup’		
sna$^{2(+0)}$	‘three’		
t7a^{r}	‘party’		
tla^{21}	‘hard’		
ka7^{r}	‘leaf’		
na7^{3}	‘I’		
kwa7^{r}	‘dew’		
skwa7^{2}	‘cockroach’		
tlya7^{2}	‘cold’		

Table 2.11: Minimal pairs for /a/

/a/ ≠ /i/:	ka^{13}	‘yesterday’	≠	kii^{34}	‘hay’
/a/ ≠ /i/:	kwa^{34}	DEM	≠	kwi^{r}	‘liquor’
/a/ ≠ /i/:	na7^{3}	‘I’ 1S	≠	ni7^{34}	‘inside’
/a/ ≠ /e/:	kla^{r}	‘fish’	≠	kle^{23}	‘mayor’
/a/ ≠ /e/:	ktsa7^{r}	‘he/she will get wet’	≠	ktse7^{13}	‘pus’
/a/ ≠ /ą/:	ta^{3}	‘shrimp’	≠	tą^{3}	‘grease’
/a/ ≠ /ą/:	ty7a^{r}	‘water’	≠	ty7ą^{r}	‘he/she will walk’
/a/ ≠ /ą/:	tykwa^{2}	‘he/she will sit’	≠	tykwą^{13}	‘steel’
/a/ ≠ /o/:	kla^{r}	‘fish’	≠	klo^{2}	‘he/she will grow’
/a/ ≠ /o/:	kna7^{31}	‘meat’	≠	kno7^{34}	‘worm’
/a/ ≠ /u/:	na^{r}	‘carbon/coal’	≠	nu^{r}	NOM

Vowel phonemes /e/ and /ę/

/e/		/ę/	
ke^{3}	'his/her head'	tę^{31}	'mosquito'
ke^{34}	'flower'	xę^{3}	'wide'
kyee^{r}	'rock'	x7ę^{21}	'scorpion'
kle^{23}	'mayor'	mtę^{13}	'white'
sne^{31}	'toad'	ntę^{2}	'people'
nde^{34}	'here'	stę^{r}	'plum'
s7we^{r}	'good'	jychę^{r}	'village'
kwe7^{3}	'swine'	kwę7^{3}	'armadillo'
kwee7^{21}	'crab'		
snye7^{r}	'his/her child'		
tse7^{r}	'tongue'		
jyche7^{2}	'thorn'		
tje7^{r}	'salt'		

Table 2.12: Minimal and near minimal pairs for /e/

/e/ ≠ /i/:	kwe7^{3}	'swine'	≠	kwi7^{34}	'baby'
/e/ ≠ /i/:	ne7^{r}	'people'	≠	ni7^{34}	'inside'
/e/ ≠ /ę/:	swe^{r}	'your chin'	≠	swę^{20}	'my chin'
/e/ ≠ /a/:	sne^{31}	'toad'	≠	sna$^{2(+0)}$	'three'
/e/ ≠ /a/:	kle^{23}	'mayor'	≠	kla^{r}	'fish'
/e/ ≠ /a/:	ne7^{r}	'people'	≠	na7^{3}	'I' 1s
/e/ ≠ /o/:	kle^{23}	'mayor'	≠	klo^{2}	'he/she will grow'
/e/ ≠ /u/:	kyee^{r}	'stone'	≠	kyu^{2}	'horse'

Vowel phonemes /i/ and /ɨ/

/i/		/ɨ/	
pi$^{1(+0)}$	‘turkey chick’	skɨ^{23}	‘he/she will burn’
si^{13}	‘butterfly’	skyɨ^{r}	‘feather’
tii$^{2(+0)}$	‘ten’	tyjɨ^{2}	‘leather’
mti^{r}	‘seed’	ntyɨ^{31}	‘bed bug’
nyi^{r}	‘straight’	tykwɨ7$^{1(+0)}$	‘I will speak’
kii^{34}	‘grass’	cha^{3}-chɨ7$^{1(+0)}$	‘a little bit’
lwii^{31}	‘clean’		
ntsi^{23}	‘nanche’		
sti^{r}	‘his/her father’		
lyi7^{2}	‘parrot’		
sti7^{3}	‘milk’		
kwi7^{34}	‘baby’		
kii7^{r}	‘fire’		
tykwi7^{r}	‘he/she will speak’		

Table 2.13: Minimal pairs for /i/

/i/ ≠ /ɪ/:	tykwi7^{r}	‘he/she will speak’	≠	tykwɨ7$^{1(+0)}$	‘I will speak’
/i/ ≠ /ɪ/:	kji^{13}	‘fox’	≠	kjɨ7$^{1(+0)}$	‘skin’
/i/ ≠ /e/:	kwi7^{34}	‘baby’	≠	kwe7^{3}	‘swine’
/i/ ≠ /e/:	ni7^{34}	‘inside’	≠	ne7^{r}	‘people’
/i/ ≠ /a/:	kii^{34}	‘straw’	≠	ka^{13}	‘yesterday’
/i/ ≠ /a/:	kwi^{r}	‘liquor’	≠	kwa^{34}	‘demonstrative’
/i/ ≠ /a/:	ni7^{34}	‘inside’	≠	na7^{3}	‘I’ 1SG
/i/ ≠ /o/:	kii7^{r}	‘flame’	≠	ko7^{31}	‘moon’
/i/ ≠ /u/:	kii^{34}	‘straw’	≠	ku^{r}	‘he/she will eat’

Vowel phonemes /o/ and /ǫ/

/o/		/ǫ/	
koo$^{2(+0)}$	'he/she will grind'	pyǫ^{23}	'shawl'
klo^{2}	'it will grow'	skǫ^{34}	'his/her arm'
lyo^{2}	'he/she will remove it'	ktǫ^{r}	'bee'
sko^{2}	'minnow'	styǫ$^{2(+0)}$	'purple dove'
jyso^{34}	'avocado'	tsǫ^{2}	'warm'
koo7^{31}	'moon'	kǫ^{20}	'I will grind'
sko7$^{1(+0)}$	'grasshopper'	tkwǫ^{3}	*'tenate'* (SP) 'tortilla basket'
kjo7^{r}	'it will sting'	jytǫ^{13}	'gun'
mtso7^{2}	'mud'	jytǫ7^{r}	'pot'
cho7^{2}	'pineapple'	ntkǫ7^{r}	'fist'
lyi7^{2}	'parrot'		

Table 2.14: Minimal pairs for /o/

/o/ ≠ /i/:	koo7^{31}	'moon'	≠	kii7^{r}	'flame'
/o/ ≠ /e/:	klo^{2}	'he/she will grow'	≠	kle^{23}	'mayor'
/o/ ≠ /a/:	klo^{2}	'he/she will grow'	≠	kla^{r}	'fish'
/o/ ≠ /a/:	kno7^{34}	'worm'	≠	kna7^{31}	'meat'
/o/ ≠ /u/:	ko^{3}	'fog'	≠	ku^{r}	'he/she will eat'
/o/ ≠ /ǫ/:	ko$^{2+(+0)}$	'he/she will grind"	≠	kǫ^{20}	'I will grind'
/ǫ/ ≠ /u/:	kǫ^{20}	'I will grind'	≠	ku^{r}	'he/she will eat'

Vowel phoneme /u/

/u/	
jy7yu^{31}	‘man’
yuu^{r}	‘earth’
ku^{r}	‘he/she will eat’
kyu^{23}	‘horse’
xu7^{13}	‘sir’
mbyu7^{r}	‘spider’
k7yu$^{2(+0)}$	‘five’
7ụ^{r}	‘you’ (SG & PL) (honorific)

Table 2.15: Minimal pairs for /u/

/u/ ≠ /i/:	ku^{r}	‘he/she will eat’	≠	kii^{34}	‘straw’
/u/ ≠ /e/:	kyu^{2}	‘horse’	≠	kyee^{r}	‘stone’
/u/ ≠ /a/:	nu^{r}	NOM	≠	na^{r}	‘carbon/coal’
/u/ ≠ /o/:	ku^{r}	‘he/she will eat’	≠	koo^{3}	‘fog’

2.5 Consonants

In the following section each phoneme is considered with regard to its place of articulation. Minimal pairs or near-minimal pairs are presented to show the contrast between phonemes. Because it is difficult to find true minimal pairs some of the following examples differ in tone as well as contrast with respect to consonants. The phonemes are considered in as many contexts as possible.

2.5.1 Bilabials

Bilabials are generally not common in Chatino however they do exist in the language. The distribution of these sounds is described below:

/p/

The phoneme /p/ is a bilabial voiceless stop and is represented as 'p' in the orthography. In Teotepec Chatino this sound is found principally in Spanish borrowings; lapi^{23} *'lapiz'* (SP) 'pencil' and onomatopoetic words like pi^{2}'turkey chick'.

pa^{23}	[pa^{23}]	/pa^{23}/	'father'
pyǫ^{23}	[pjǫ^{23}]	/pjǫ^{23}/	'shawl (*rebozo* (SP))'

Table 2.16: Minimal pairs for /p/

/p/ ≠ /w/:	pa^{23}	'father'	≠	ba^{2} ([ba^{2}] /wa^{2}/)	'us' clitic (1PLEX)
/p/ ≠ /m/:	pa^{23}	'father'	≠	ma^{2}	'mother'
/p/ ≠ /t/:	pi$^{1(+0)}$	'turkey chick'	≠	ti^{13}	'rope'

/m/

The phoneme /m/ is a bilabial nasal and is found more frequently in Teotepec Chatino than other Chatino varieties. It is commonly found in the completive aspect of the verbal system and has some distribution in nouns and adjectives. Rasch (2002) analyzes /m/ as phonetically realized from the cluster /nw/ and is hesitant to identify it as a phoneme because of its limited distribution in Yaitepec Chatino. If we compare a few words from the other eastern Chatino varieties of ZAC and SJQ we can see how this sound is an innovation in Teotepec Chatino (see table 2.17 below).

Table 2.17: ZAC /nkw/ and /nku/ = ø in SJQ = /m/ in TEO

ZAC	SJQ	TEO	Gloss
nkosi̱^{2}	sɐ̨^{42}	msi̱^{3}	'afternoon/late'
nkwiyo7^{32}	wyu7^{2}	mbyo7^{r}	'spider'
nkwixi^{03}	xi^{14}	mxi$^{2(+0)}$	'tomato'

The above table shows lexemes from ZAC that haven't lost their penultimate vowel. In SJQ and TEO we can see how the reduction of the vowel in the first syllable in 'tomato' and 'afternoon' has become /m/ for TEO and has disappeared completely in SJQ.

In Teotepec Chatino /m/ occurs in borrowed as well as indigenous words. It occurs at the beginning of monosyllabic words and in historical disyllabic dimoraic words that have lost the penultimate syllable.

mti^{r}	/mti^{r}/	'grain'
mti^{2}	/mti^{2}/	'rubbish'
mta^{13}	/mta^{13}/	'black'
mda^{31}	/mda^{31}/	'he/she gave'
msaa(7)^{2}	/msaː^{2}/	'weevil'
mxa^{23}	/mʃa^{23}/	'mass'
msi̱^{3}	/msi̱^{3}/	'afternoon/late'
mtɐ̨^{13}	/mtɐ̨^{13}/	'white'
mtso7^{2}	/mtsoʔ^{2}/	'mud'
mb7ya^{3}	/mwʔja^{3}/	'he/she lowered it'
mble^{23}	/mwle^{23}/	'serving cloth (*servilleta* (SP)'
mchii^{23}	/mʧiː^{23}/	'monkey'
mn7ą^{3}	/mnʔą^{3}/	'he/she saw'
ms7ą^{r}	/msʔą^{r}/	'he/she filled'

Table 2.18: Near-minimal pairs for /m/

/m/ ≠ /p/:	ma^{2}	'mother'	≠	pa^{23}	'father'
/m/ ≠ /n/:	ma^{2}	'mother'	≠	na^{34}	'carbon'
/m/ ≠ /n/:	mtɐ̨^{13}	'white'	≠	ntɐ̨^{2}	'people'

/w/

This sound has the following phonetic realizations:

/w/ → [b]/$^{\#}$__ [+vd]

/w/ is pronounced as a bilabial stop when it is word initial before a voiced sound:

ba^{2}	[ba^{2}]	/wa^{2}/	'-us' (1PLEX)(clitic)
ba^{2}-re7^{r}	[ba^{2}-reʔ^{r}]	/wa^{2}-reʔ^{r}/	'us' (1PLEX)
bra^{23}	[bra^{23}]	/wra^{23}/	'hour'

/w/ → [b]/ m __

/w/ is pronounced as a bilabial stop when it follows /m/[4]:

mb7ya^{31}	[mbʔja^{31}]	/mwʔja^{31}/	'he/she lowered it'
mbyo7^{r}	[mbjuʔ^{r}]	/mwjuʔ^{r}/	'spider'
mble^{23}	[mble^{23}]	/mwle^{23}/	'serving cloth (*servilleta* (SP))'
ke^{34}-mblo^{r}	[ke^{34}-mblo^{r}]	/ke^{34}-mwlo^{r}/	'Angel's Trumpet (*brugmansia* (SP))'

/w/ → [w̥] /__ [-son]

/w/ is devoiced before a voiceless consonant:

wxo^{23}	[w̥ʃo^{23}]	/wʃo^{23}/	'peso' (SP)

/w/ → [w]/ elsewhere:

swe^{23}	[swe^{23}]	/swe^{23}/	'his/her chin'
xwe^{r}	[ʃwe^{r}]	/ʃwe^{r}/	'small'
jwi$^{1(+0)}$	[hwi$^{1(+0)}$]	/hwi$^{1(+0)}$/	whistle
lwii^{31}	[lwiː^{31}]	/lwiː^{31}/	'clean'
kwe7^{3}	[kweʔ^{3}]	/kweʔ^{3}/	'swine'
7wɐ^{r}	[ʔwɐ^{r}]	/ʔwɐ^{r}/	'you'
ngwɐ^{3}	[ngwɐ^{3}]	/nkwɐ^{3}/	'ripe'
j7wa^{2}	[hʔwa^{2}]	/hʔwa^{2}/	'banana'
j7wa^{3}	[hʔwa^{3}]	/hʔwa^{3}/	'granary'
t7wa^{r}	[tʔwa^{r}]	/tʔwa^{r}/	'his/her mouth'
s7we^{r}	[sʔwe^{r}]	/sʔwe^{r}/	'good'
xa^{31}-ndwi$^{1(+0)}$	[ʃa^{31}-ndwi$^{1(+0)}$]	/ʃa^{31}-ndwi$^{1(+0)}$/	'lightning'

[4]Because of the very clear plosive quality of the /w/ after /m/ and before a voiced sound the grapheme <*b*> is used in the practical writing system for these contexts.

Because of the limited distribution of this phoneme there are not very many true minimal pairs to contrast in order to show its phoneme status.

Table 2.19: Near minimal pairs for /w/

/w/ ≠ /p/:	ba^{2} (/wa^{2}/ [ba^{2}])	'us' clitic (1PLEX)	≠	pa^{23}	'father'
/w/ ≠ /m/:	$7we^{r}$	PRO.2S	≠	$7mi^{r}$	PRO.2S
/w/ ≠ /j/:	$wa7^{34}$	'already'	≠	$ya7^{34}$	'his/her hand'

2.5.2 Apico-dentals

The apico-dentals are /t/, /d/, /ts/, /s/, /n/, /ɾ/ and /l/. They are produced by putting the tongue just above the back of the teeth and in front of the alveolar ridge.

/t/

The phoneme /t/ is a dental voiceless stop, represented as 't' in the orthography. This sound has a wide distribution. It may occur in first position preceding the vowels /i/, /e/, /o/ and /a/, and consonants /ʔ/, /k^{w}/, /l/, /l̪/, /n/ and /n̪/. It occurs in second position following the consonants /k/ and /s/, it occurs following the apico-dental and bilabial nasals /n/ and /m/ and can occur following these nasal sounds preceding sounds /j/ and /k^{w}/.

$ta^{1(+0)}$	/ta^{1}/	'he/she will give'
ta^{3}	/ta^{3}/	'shrimp'
ti^{13}-ke^{3}	/ti^{13}-ke^{3}/	'tumpline'
ti^{13}	/ti/	'rope'
to^{3}-$xo7^{3}$	/to^{3}-ʃo$ʔ^{3}$/	'hen'
$tę^{3}$	/$tę^{3}$/	'lard'
$tę^{31}$	/$tę^{31}$/	'mosquito'
$t7a^{r}$	/tʔa^{r} /	'party'
$t7a^{3}$	/tʔa^{3}/	'his/her relative'
$t7wa^{3}$	/tʔwa^{3}/	'his/her mouth'
$tkwa^{2(+0)}$	/t$k^{w}a^{2}$/	'two'
tla^{3}	/tla^{3}/	'night'
$tlya^{13}$	/t̪la^{13}/	'food'
$tlya7^{2}$	/t̪$laʔ^{2}$/	'cold'
tlo^{31}	/tlo^{31}/	'his/her face'
tnu^{r}	/tnu^{r}/	'big'

tnya^{r}	/t$\underset{\sqcup}{\text{n}}$ą^{r}/	‘cooking griddle (*comal* (SP))’
kta^{34}	/kta^{34}/	‘dust’
kta^{23}	/kta^{23}/	‘cow’
jyta^{13}	/hjta^{13}/	‘edible greens’
sti^{r}	/sti^{r}/	‘father’
styi7^{3}	/s$\underset{\sqcup}{\text{t}}$iʔ^{3}/	‘milk’
jytǫ^{13}	/hjtǫ^{13}/	‘rifle’
k(w)tį7^{2}	/k$^{(w)}$tįʔ^{2}/	‘louse’
mta^{13}	/mta^{13}/	‘black’
mtę^{13}	/mtę^{13}/	‘white’
ntę^{2}	/ntę^{2}/	‘people’
ntja$^{1(+0)}$	/ntha^{1}/	‘lazy’
ntkwi^{34}	/ntk^{w}i^{34}/	‘errand’

Table 2.20: Minimal pairs for /t/

/t/ ≠ /p/:	ti^{13}	‘rope’	≠	pi^{2}	‘turkey chick’
/t/ ≠ /s/:	ti^{13}	‘rope’	≠	si^{r}	‘butterfly’
/t/ ≠ /n/:	ti^{13}	‘rope’	≠	ni^{34}	‘now’
/t/ ≠ /m/:	ta$^{1(+0)}$	‘he/she will give’	≠	ma^{2}	‘mother’
/t/ ≠ /$\underset{\sqcup}{\text{t}}$/:	ta^{3}	‘shrimp’	≠	tya^{31}	‘squirrel’
/t/ ≠ /h/:	ta^{3}	‘shrimp’	≠	ja^{r}	‘no’
/t/ ≠ /ts/:	tą^{3}	‘lard’	≠	tsą^{r}	‘day’
/t/ ≠ /d/:	mta^{13}	‘black’	≠	mda^{31}	‘he/she gave’
/t/ ≠ /h/:	tnyi^{2}	‘money’	≠	jnyi^{34}	‘bird’

/d/

The phoneme /d/ was historically an allophone of /t/ and thus only occurs in the restricted environment following the apico-dental sonorant /n/. However pairs like *mta*^{13} ‘black’ and *mda*^{31} ‘he/she gave’ (table 2.20 above) clearly show how it is now a phoneme. *mta*^{13} ‘black’ results from vowel loss and the innovation of the cluster [ng] → [m], as we can see from the form in ZAC Chatino - *ngata*^{31} ‘black’.

nda$^{1(+0)}$-kji^{13}	/nda^{1}-khi^{13}/	'onion'
ndaa^{r}	/nda:^{r}/	'bean'
nde^{34}	/nde^{34}/	'here'
xa^{31}-ndwi$^{1(+0)}$	/ʃa^{31}-ndwi^{1}/	'lightning'
ndya^{31}	/ndja^{31}/	'he/she is submitting'
nd7ą^{r}	/nd?ą^{r}/	'corn'
nd7ya^{31}	/nd?ja^{31}/	'pretty/fancy'

/ts/

The apico-dental voiceless affricate /ts/ is written 'ts' in the orthography. The sound is a single integral affricate. The phoneme is found word initially preceding vowels /a/, /e/ and /o/, in second position following consonants /k/ and /n/ and preceding vowels /i/, /e/, /a/, /o/ and /u/.

tsa^{31}	/tsa^{31}/	'he/she will go'
tse7^{r}	/tse?^{r}/	'tongue'
tso7^{13}-kwę$^{31(13)}$	/tso?^{13}-k^{w}ę^{31}/	'right side'
tsǫ^{2}	/tsǫ^{2} /	'warm'
tsą^{r}	/tsą^{r} /	'day'
ktsi^{34}	/ktsi^{34}/	'yellow'
ntsi^{23}	/ntsi^{23}/	'nanche'
jytsi7^{2}	/hjtsi?^{2}/	'he/she will burry'
ktsa7^{r}	/ktsa?^{r}/	'he/she will get wet'
ktse7^{13}	/ktse?^{13}/	'puss'
ktso7^{2}	/ktso?^{2}/	'it will rot'
ntso7^{2}	/ntso?^{2}/	'mud'
ktsę^{2}	/ktsę^{2}/	'he/she will be scared'

Table 2.21: Minimal pairs for /ts/

/ts/ ≠ /t/:	tsą^{r}	'day'	≠	tą^{3}	'lard'
/ts/ ≠ /t/:	ktsi^{34}	'yellow'	≠	kti$^{2(+0)}$	'seven'
/ts/ ≠ /s/:	ktsi^{34}	'yellow'	≠	ksi^{23}	'cross'
/ts/ ≠ /t̻/:	ktsi7^{13}	'iguana'	≠	ktyi7^{13}	'frog'

/s/

The apico-dental fricative /s/ is written ‘s’ in the orthography. This sound can occur in the onset of a word preceding vowels /a/ and /i/, it occurs as the first consonant in a cluster preceding: /l/, /k/, /t̻/, /n̻/, /l̻/, /k/ and /ʔ/, it can occur in the second position of a cluster following /k/ and it can occur in the third position following the cluster /hy/.

si^{13}	/si^{13}/	‘butterfly’
sa^{23}	/sa^{23}/	‘cup’
sne^{31}	/sne^{31}/	‘toad’
sna$^{2(+0)}$	/sna^{2}/	‘three’
sla^{2}	/sla^{2}/	‘sleepy’
ska^{r}	/ska^{r} /	‘one’
sko7$^{1(+0)}$	/skoʔ^{1}/	‘grasshopper’
skwa^{31}	/sk^{w}a^{31} /	‘soup’
skwa7^{2}	/sk^{w}aʔ^{2}/	‘cockroach’
skwa7^{r}	/sk^{w}aʔ^{r}/	‘gourd’
styɻ^{r}	/st̻ɻ^{r}/	‘feather’
snye7^{r}	/sn̻eʔ^{r}/	‘his/her child’
slya7^{31}	/sl̻aʔ^{31}/	‘cotton’
ską^{r}	/ską^{r}/	‘topil’ (SP) ‘community guard’
ską^{3}	/ską^{3}/	‘corn dough (*masa* (SP))’
skǫ^{34}	/skɥ^{34}/	‘his/her arm’
s7yu$^{1(+0)}$	/sʔju^{1}/	‘he/she will cut’
s7we^{13}	/sʔwe^{13}/	‘good’
s7we^{2}	/sʔwe^{2}/	‘he/she will separate’
msa(7)$^{2(+0)}$	/msa(ʔ)^{2}/	‘weevil’
nską^{r}	/nską^{r}/	‘corner’
nskwa^{r}	/nsk^{w}a^{r}/	‘chayote squash’
nskwa7^{2}	/nsk^{w}aʔ^{2}/	‘maize’
ksi^{23}	/ksi^{23}/	‘cross’
ksya^{23}	/ksja^{23}/	‘heart’
jyso$^{34(+0)}$	/hjso^{34}/	‘avocado’
jysę^{r}	/hjsę^{r}/	‘sand’

Table 2.22: Minimal pairs for /s/

/s/ ≠ /ʃ/:	sa$^{34(+0)}$	'cup'	≠	xa^{2}	'orange'
/s/ ≠ /p/:	si$^{13(+0)}$	'butterfly'	≠	pi$^{1(+0)}$	'turkey chick'
/s/ ≠ /n/:	si$^{13(+0)}$	'butterfly'	≠	ni$^{34(+0)}$	'now'
/s/ ≠ /t/:	sla$^{13(+0)}$	'sleepy'	≠	tla^{21}	'hard'
/s/ ≠ /ts/:	ksi^{23}	'cross'	≠	ktsi$^{34(+0)}$	'yellow'
/s/ ≠ /k/:	slya7$^{1(+0)}$	'sheep'	≠	klya7^{3}	'bitter'
/s/ ≠ /j/:	slo^{r}	'thorn'	≠	jylo^{r}	'his/her eye'

/n/

The apico-dental /n/ can be the first or last C in a cluster; /n/ can be C_1 or S in (n)C_1C_2(S)V and it can be C_2 if there is no S.

na^{r}	/na^{r}/	'coal'
naa^{r}	/naː^{r}/	'us' (1PLIN)
na7^{3}	/naʔ^{3}/	'I'
ne7^{r}-kna$^{34(+0)}$	/neʔ^{r}-kna^{34}/	'thief'
ni$^{34(+0)}$	/ni^{34}/	'now'
ni7$^{34(+0)}$-kǫ$^{0(34(+0))}$	/niʔ^{34}-kų^{0}/	'sky'
n7ą^{r}	/nʔą^{r}/	'house'
lo^{r}-ntę^{3}	/lo^{r}-ntę^{3}/	'hill'
ngąą^{31}	/nkąː^{31}/	'coconut'
ntja$^{1(+0)}$	/ntha^{1}/	'lazy'
ng7a^{3}	/nkʔa^{3}/	'green'
ng7a^{31}	/nkʔa^{31}/	'red'
nską^{2}	/nską^{2}/	'corner'
nskwa^{r}	/nsk^{w}a^{r}/	'chayote squash'
nskwa7^{2}	/nsk^{w}aʔ^{2}/	'maize'
nda$^{1(+0)}$-kji$^{13(+0)}$	/nda^{1}-khi^{13}/	'onion'
ni7$^{34(+0)}$	/niʔ^{34}/	'inside'
xa^{31}-ndwi$^{1(+0)}$	/ʃa^{31}-ndwi^{1}/	'lightning'

sna$^{2(+0)}$	/sna^{2}/	‘three’
xni7$^{34(+0)}$-kne7$^{2(+0)}$	/ʃniʔ^{34}-kneʔ$^{2)}$/	‘puppy’
kna7^{31}	/knaʔ^{31}/	‘meat’
kno7$^{34(+0)}$	/knoʔ^{34}/	‘worm’
kna^{31}	/kna^{31}/	‘snake’
kna^{r}	/kna^{r}/	‘mirror’
jne^{2}	/hne^{2}/	‘he/she heard’
jyla^{r}-kne7^{31}	/h’yla^{r}-kneʔ^{31}/	‘young corn’
yno^{31}	/jno^{31}/	‘he/she stayed’
yni^{3}	/jni^{3}/	‘his/her neck’
7ni^{r}	/ʔni^{r}/	‘animal’
jy7na$^{34(+0)}$	/hjʔna^{34}/	‘his/her plate’
la^{3}-k7na^{2}	/la^{3}-kʔna^{2}/	‘gecko’

Table 2.23: Minimal pairs for /n/

/n/ ≠ /p/:	na^{r}	‘carbon’	≠	pa^{3}	‘father’
/n/ ≠ /s/:	ni^{34}	‘now’	≠	si^{13}	‘butterfly’
/n/ ≠ /t/:	ni^{34}	‘now’	≠	ti^{13}	‘rope’

/ɾ/

The apico-dental flap /ɾ/, ‘r’ in the orthography, is found in loan words and a couple of native words. It can occur as a single consonant in the onset of a word or as the second consonant in a cluster.

raa^{31}	/ɾaː^{31}/	‘scratched’
ba^{2}-re7$^{34(+0)}$	/wa^{2}-ɾeʔ^{34}/	‘us’ (1PLEX)
bra^{23}	/wɾa^{23}/	‘hour’
rą^{r}	/ɾą^{r}/	‘object’
rę7^{r}	/ɾęʔ^{2}/	‘people’
7or^{2}nu^{3}	/ʔoɾ^{2}.nu^{3}/	‘oven’

Table 2.24: Minimal pairs for /ɾ/

/ɾ/ ≠ /l/:	raa^{31}	‘scratched’	≠	laa^{3}	‘church’

/l/

The apico-dental lateral /l/, is written 'l' in the orthography. The phoneme /l/ is found as a single consonant in the onset of a word, as the first consonant in a cluster, as the second consonant in a cluster and as the third consonant in a cluster in sum, /l/ can be C_2, C_1 or S in (n)C_1C_2(S)V.

la^{31}	/la^{31}/	'open'
laa^{3}	/laː^{3}/	'church'
lo^{r}	/lo^{r}/	'in'
la^{r}-k7ya^{21}	/la^{r}-kʔja^{21}/	'eagle'
la^{r}-k$^{(w)}$so7$^{34(+0)}$	/la^{r}-k$^{(w)}$soʔ^{34}/	'turkey'
la^{r}-xu^{21}	/la^{r}-ʃu^{21}/	'buzzard/vulture'
la^{r}-k7na^{2}	/la^{r}-kʔna^{2}/	'lizard'
lo^{r}-ntę^{3}	/lo^{r}-ntę^{3}/	'hill'
lo^{r}-yuu^{r}	/lo^{r}-juː^{r}/	'at/in the land'
lwii^{31}	/lwiː^{31}/	'clean'
l7o$^{13(+0)}$	/lʔo^{13}/	'corral'
kla$^{2(+0)}$	/kla^{2}/	'twenty'
kla^{r}	/kla^{r}/	'fish'
kyla$^{13(+0)}$	/kjla^{13}/	'it will dissolve'
jyka^{r}-k$^{(w)}$laa^{3}	/hjka^{r}-k$^{(w)}$laː^{3}/	'bamboo'
jylo^{r}	/hjlo^{r}/	'his/her eye'
jyla$^{34(+0)}$	/hjla^{34}/	'puddle'
jyla7^{2}	/hjlaʔ^{2}/	'red mamey'

Table 2.25: Minimal pairs for /l/

/l/ ≠ /ɾ/:	laa^{3}	'church'	≠	raa^{31}	'scratched'
/l/ ≠ /n/:	laa^{3}	'church'	≠	naa^{r}	'us' (1PLIN)
/l/ ≠ /n/:	kla^{r}	'fish'	≠	kna^{r}	'mirror'
/l/ ≠ /h/:	l7o$^{13(+0)}$	'corral'	≠	j7o$^{34(+0)}$	'saint'

2.5.3 Lamino-alveolars

The lamino-alveolars are /t̻/, /ʧ/, /ʃ/, /n̻/ and /l̻/. These sounds are produced by placing the blade of the tongue against or just behind the alveolar ridge.

/t̻/

The lamino-alveolar stop /t̻/ is represented as 'ty' in the orthography. This consonant is found in the initial position preceding vowels /o/ and /a/ and the consonant /j/, and it can occur in the second position of a cluster following /ʃ/, /s/, /n/ and /k/. The allophone of /t̻/, [d̻], is found in the restricted environment occurring only after the voiced nasal alveolar /n/ preceding a vowel; /t̻/ → [d̻]/n_ [+vd] or [/ʔ/].[5]

tyoo^{r}	/t̻oː^{r}/	'rain'
tyo^{31}	/t̻o^{31}/	'adobe'
tya^{31}	/t̻a^{31}/	'squirrel'
tykwa^{2}	/t̻k^{w}a^{2}/	'he/she will sit'
ti$^{2(+0)}$-tykwa$^{1(+0)}$	/ti^{2}-t̻k^{w}a^{1}/	'twelve'
ty7a^{r}	/t̻ʔa^{r}/	'water'
ty7ą^{r}	/t̻ʔą^{r}/	'he/she will walk'
tyjɻ^{2}	/t̻hɻ^{2}/	'he/she will pass
tyo7$^{34(+0)}$	/t̻oʔ^{34}/	'maguey'
tyǫ$^{34(+0)}$	/t̻ǫ^{34}/	'some'
xtyo^{31}	/ʃt̻o^{31}/	'cat'
ka^{r}-styo^{3}	/ka^{r}-st̻o^{3}/	'large pitcher (*cantaro* (SP))'
styǫ$^{2(+0)}$	/st̻ǫ^{2}/	'purple dove'
styɻ^{r}	/st̻ɻ/^{r}	'feather'
ktye7^{3}	/kt̻eʔ^{3}/	'ant'
tykwi7^{r}	/t̻k^{w}iʔ^{r}/	'he/she will talk'
ntykwi7^{21}	/nt̻k^{w}iʔ^{21}/	'he/she is talking'
ndyo^{31}	/nt̻o^{31}/	'he/she is submitting'
ndyo$^{2(+0)}$	/nt̻o^{2}/	'he/she grinds'
cha$^{13(+0)}$-ndyu^{21}	/ʧa^{13}-nt̻u^{21}/	'world'

[5] In this context /t̻/ <ty> is written <dy>: ndyo^{31} [nd̻o^{31}] 'he/she is submitting' and ndyo$^{2(+0)}$ [nd̻o^{2}] 'he/she grinds'

Table 2.26: Minimal pairs for /t̪/

/t̪/ ≠ /t/:	tya^{31}	'squirrel'	≠	ta^{3}	'shrimp'
/t̪/ ≠ /t/:	tyjɻ^{2}	'he/she will pass'	≠	tjɻ^{r}	'leather'
/t̪/ ≠ /ʧ/:	tyo7^{34}	'maguey'	≠	cho7^{13}	'badger'

/ʧ/

The lamino-alveolar affricate /ʧ/ is a single integrated sound and is represented as 'ch' in the orthography. This phoneme is found as a single consonant in the onset of a word and as the second consonant of a cluster.

cha$^{13(+0)}$-ndyu^{21}	/ʧa^{13}-nd̪u^{21}/	'world'
cha^{r}-kchi$^{1(+0)}$	/ʧa^{r}-kʧi^{1}/	'rabbit'
chi^{r}	/ʧi^{r}/	'grinding stone'
cha7$^{13(+0)}$	/ʧaʔ^{13}/	'word'
cho7^{2}	/ʧoʔ^{2}/	'pineapple'
cho7^{3}	/ʧoʔ^{3}/	'badger'
chǫ7^{3}	/ʧǫʔ^{3}/	'at.back.of'
kcha^{3}	/kʧa^{3}/	'sun'
kchi$^{13(+0)}$-msę^{3}	/kʧi^{13}-msę^{3}/	'tiger'
jycha^{r}	/hjʧa^{r}/	'contagious illness'
jychę^{r}	/hjʧę^{r}/	'village'
jyche7^{2}	/hjʧeʔ^{2}/	'thorn'
jychą7^{3}-ke^{3}	/hjʧąʔ^{3}-ke^{3}/	'his/her hair'

Table 2.27: Minimal pairs for /ʧ/

/ʧ/ ≠ /ts/:	cha^{2}-	female referent	≠	tsa$^{2(+0)}$	‘he/she will go’
/ʧ/ ≠ /t̲/:	cha^{2}-	female referent	≠	tya^{31}	‘squirrel’
/ʧ/ ≠ /t̲/:	cho7$^{13(+0)}$	‘badger’	≠	tyo7$^{34(+0)}$	‘agave’
/ʧ/ ≠ /ʃ/:	chi^{r}	‘grinding stone’	≠	xi^{r}	‘sweet’
/ʧ/ ≠ /k/:	cho7$^{13(+0)}$	‘badger’	≠	koo7^{31}	‘moon’
/ʧ/ ≠ /s/:	jychę^{r}	‘village’	≠	jysį^{r}	‘sand’

/ʃ/

This is a lamino-alveolar fricative /ʃ/, ‘x’ in the orthography. This phoneme is found as a single consonant in the onset of a word and as the first or second consonant of a cluster.

xa^{31}	/ʃa^{31}/	‘light/luminescence’
xa^{2}	/ʃa^{2}/	‘orange’
xi^{r}	/ʃi^{r}/	‘sweet/candy’
xi$^{34(+0)}$-lyu^{3}	/ʃi^{34}-l̲u^{3}/	‘he/she will make it spin’
xo7$^{13(+0)}$	/ʃoʔ^{13}/	‘he/she will gather up’
xu7$^{13(+0)}$	/ʃuʔ^{13}/	‘sir’
to^{3}-xo7^{3}	/to^{3}-ʃoʔ^{3}/	‘hen’
xę^{3}	/ʃę^{3}/	‘wide’
xǫ$^{1(+0)}$	/ʃǫ^{1}/	‘he/she will fight’
x7ę^{21}	/ʃʔę^{21}/	‘scorpion’
x7ya$^{34(+0)}$	/ʃʔja^{34}/	‘he she will yell’
xka^{r}-lyu^{23}	/ʃka-l̲u^{23}/	‘mezcal’
xtyi^{23}	/ʃt̲i^{23}/	‘machete’
xtyo^{31}	/ʃt̲o^{31}/	‘cat’
xti7$^{1(+0)}$	/ʃtiʔ^{1}/	‘he/she will dismember’
xlyu^{23}	/ʃl̲u^{23}/	‘knife’
xwe^{r}	/ʃwe^{r}/	‘small’
xni7$^{34(+0)}$	/ʃneʔ^{34}/	‘dog’
xye7^{3}-xi^{r}	/ʃjeʔ^{3}-ʃi^{r}/	‘sweet lemon’
ti$^{2(+0)}$-xka^{3}	/ti^{2}-ʃka^{3}/	‘eleven’
xkǫ^{2}	/ʃkǫ^{2}/	‘he/she will sew’

mxa^{23}	/mʃa^{23}/	‘mass’
mxi$^{2(+0)}$	/mʃi^{2}/	‘tomato’
wxo^{23}	/w̥ʃo^{23}/	‘peso’

Table 2.28: Minimal pairs for /ʃ/

/ʃ/ ≠ /s/:	xa^{2}	‘orange’	≠	sa^{23}	‘cup’
/ʃ/ ≠ /k/:	xo7$^{13(+0)}$	‘he/she will join’	≠	koo7^{31}	‘moon’
/ʃ/ ≠ /t/:	mxa^{23}	‘mass’	≠	mta$^{13(+0)}$	‘black’
/ʃ/ ≠ /ts/:	xa^{31}	‘light/luminescence’	≠	tsa$^{2(+0)}$	‘he/she will go’
/ʃ/ ≠ /hj/:	x7ya^{23}	‘he she will yell’	≠	jy7ya$^{34(+0)}$	‘mountain’
/ʃ/ ≠ /h/:	xa^{2}	‘orange’	≠	ja^{r}	‘no’

/n̻/

The lamino-alveolar nasal /n̻/ is represented as ‘ny’ in the orthography. This sound can occur as a single consonant in the onset of a word, as the second consonant in a cluster or as the third consonant of a cluster.

nyi^{r}	/n̻i^{r}/	‘straight’
tnyi^{2}	/tn̻i^{2}/	‘money’
knya7^{31}	/kn̻aʔ^{31}/	‘deer’
knya7^{3}	/kn̻aʔ^{3}/	‘honey’
tnya7^{r}	/tn̻aʔ^{r}/	‘rat’
jnya7^{3}	/hn̻aʔ^{3}/	‘chest/strongbox’
jnya7$^{13(+0)}$	/hn̻aʔ^{13}/	‘chili’
snye7^{r}	/sn̻eʔ^{r}/	‘his/her child’
tnyą$^{13(+0)}$	/tn̻ą^{13}/	‘work’
tnyą^{r}	/tn̻ą^{r}/	‘cooking griddle (*comal* (SP))’
jy7nya^{3}	/hjʔn̻a^{3}/	‘bed’

Table 2.29: Minimal pairs for /n̪/

/n̪/ ≠ /n/:	nyi^{r}	‘straight’	≠	ni^{34}	‘now’
/n̪/ ≠ /n/:	knya7^{31}	‘deer’	≠	kna7^{31}	‘meat’
/n̪/ ≠ /l̪/:	knya7^{3}	‘honey’	≠	klya7^{3}	‘bitter’

/l̪/

The lamino-alveolar lateral /l̪/, ‘ly’ in the orthography, it is a single consonant in that it can be found in the onset of a word, or as the second consonant in a cluster.

lyu^{r}	/l̪u^{r}/	‘floor’
lyi7$^{1(+0)}$	/l̪iʔ^{1}/	‘parrot’
xlyu$^{34(+0)}$	/ʃl̪u^{34}/	‘knife’
slya7^{31}	/sl̪aʔ^{31}/	‘cotton’
klya7^{3}	/kl̪aʔ^{3}/	‘bitter’

Table 2.30: Minimal pairs for /l̪/

/l̪/ ≠ /n̪/:	klya7^{3}	‘bitter’	≠	knya7^{3}	‘honey’

2.5.4 Palatals

/j/

This is a voiced palatal glide /j/, written 'y' in the orthography. This sound can occur as a single consonant in the onset of a word, as the first consonant (C_2) in a cluster, as (S) in a cluster, and as the second consonant of a special cluster /hj/ < *jy* >, licensed in the C_1 position: /__ C_2(S)V^T(ʔ).

yaa^{31}	/jaː^{31}/	'prickly pear cactus'
yuu^{r}	/juː^{r}/	'earth'
yą^{3}	/ją^{3}/	'poison/venom'
ya7$^{34(+0)}$	/jaʔ^{34}/	'his/her hand'
yla$^{2(+0)}$	/jla^{2}/	'well/pool'
yja^{r}	/jha^{r}/	'tortilla'
yjo^{3}	/jho^{3}/	'squash'
yją^{r}	/jhą^{r}/	'year'
jya^{r}	/hja^{r}/	'sugar cane'
jya7^{r}	/hjaʔ^{r}/	'his/her foot'
jyta$^{13(+0)}$	/hjta^{13}/	'edible greens (*chepil* (SP))'
jyto^{2}-yuu^{r}	/hjto^{2}-juː^{r}/	'earthen hole/pit'
jytso7$^{34(+0)}$	/hjtsoʔ^{34}/	'pimple'
jysę^{r}	/hjsę^{r}/	'sand'
jyso$^{34(+0)}$	/hjso^{34}/	'avocado'
jyna^{r}	/hjna^{r}/	'sandal (*huarache* (SP))'
jytye$^{34(+0)}$	/hjt̪e^{34}/	'pitch pine'
jytyi$^{34(+0)}$	/hjt̪i^{34}/	'paper'
jyla^{2}	/hjla^{2}/	'he/she will arrive'
jyla^{r}-kne7^{31}	/h'jla^{r}-kneʔ^{31}/	'young corn'
jyla$^{34(+0)}$	/hjla^{34}/	'puddle'
jylo^{r}	/hjlo^{r}/	'his/her eye'
jyla7^{2}	/hjlaʔ^{2}/	'red mamey'
jycha^{r}	/hjʧa^{r}/	'contagious illness'
jychę^{r}	/hjʧę^{r}/	'village'
jyka^{r}	/hjka^{34}/	'tree'
jykwa$^{13(+0)}$	/hjk^{w}a^{13}/	'cornmeal porridge'
jykwi^{3}	/hjk^{w}i^{3}/	'it will boil'
jykwį7$^{1(+0)}$	/hjk^{w}ę^{1}/	'I will swallow'

jy7na$^{34(+0)}$	/hjʔna^{34}/	'his/her plate'
jy7yu^{31}	/hjʔju^{31}/	'man'
jy7ya^{21}	/hjʔja^{21}/	'he/she will lower'
jy7ya^{r}	/hjʔja^{r}/	'mountain'
ksya^{23}	/ksja^{23}/	'heart'
mbyo7^{r}	/mwjoʔ^{r}/	'spider'
k7yu$^{2(+0)}$	/kʔju^{2}/	'five'
x7ya$^{1(+0)}$	/ʃʔja^{1}/	'he/she will yell'
s7yu$^{1(+0)}$	/sʔju^{1}/	'he/she will cut'
nd7ya^{r}	/ndʔja^{r}/	'pretty/fancy'
mb7ya^{3}	/mwʔja^{3}/	'he/she lowered it'

Table 2.31: Minimal pairs for /j/

/j/ ≠ /t͡ʲ/:	yuu^{r}	'earth'	≠	lyu^{2}	'floor'
/j/ ≠ /h/:	ya7$^{34(+0)}$	'his/her hand'	≠	jaa7^{3}	'sleeping mat'

In Teotepec Chatino the cluster /hj/ < *jy* > results from the palatalization of the velar stop /k/ preceding the front high vowel /i/ in the penultimate syllable. In ZAC Chatino this sound of /k/ + high front vowel /i/ has been left intact. In the SJQ Chatino the reduction of the vowel has left the velar stop /ky/ or /ki/ and in some cases it has resulted in the laminal /t͡ʲ/. In Teotepec Chatino this has resulted in the consonant cluster /hj/ < *jy* >. Below are a few examples to illustrate this point:

Table 2.32: /k/ + /i/ = /ky/, /ki/ or /t͡ʲ/ in SJQ and the cluster /hj/ in TEO

ZAC	SJQ	TEO	Gloss
kita^{31} /kita^{31}/	kta^{3} /kta^{3}/	jyta$^{13(+0)}$ /hjta^{13}/	'greens (*chepil* (SP))'
ki7yo^{21} /kiʔo^{21}/	ky7yu^{1} /kʸʔyu^{1}/	jy7yu^{31} /hjʔju^{31}/	'man'
kiko^{21} /kiko^{21}/	tyko^{1}/t͡ʲko^{1}/	jyko^{31} /hjko^{31}/	'well/pool'

2.5.5 Velars

The velar consonants are the following: /k/ and /k^{w}/.

/k/

This is a voiceless velar /k/ represented as 'k' in the orthography. /k/ is found as the single consonant in the onset of a word, the first consonant of a consonant cluster and the second consonant of a cluster. The allophone of /k/, [g], occurs only after the nasal alveolar /n/ preceding a voiced sound or the glottal stop:

/k/ → [g]/n __ [+vd] or [ʔ].[6]

ka$^{13(+0)}$	/ka^{13}/	'yesterday'
ka^{3}	/ka^{3}/	'left'
kaa$^{2(+0)}$	/kaː^{2}/	'nine'
ka7^{r}	/kaʔ^{r}/	'leaf'
ka7^{31}	/kaːʔ^{31}/	'plank'
ke^{3}	/ke^{3}/	'his/her head'
ke$^{34(+0)}$	/ke^{34}/	'flower'
kii$^{34(+0)}$	/kiː^{34}/	'grass'
kii7^{r}	/kiːʔ^{r}/	'flame/fire/light/electricity'
ko^{3}	/ko^{3}/	'fog'
koo7^{31}	/koʔ^{31}/	'moon'
kǫ^{2}	/kǫ^{2}/	'land turtle'
ku^{r}	/ku^{r}/	'he/she will eat'
kǫ$^{34(+0)}$	/kǫ^{34}/	'tall'
kǫ$^{1(+0)}$	/kǫ^{1}/	'I will eat'
kya$^{1(+0)}$	/kja$^{1(+0)}$/	'tomorrow'
kya7$^{34(+0)}$	/kja7$^{34(+0)}$/	'soap'
kya7^{13}	/kjaʔ^{13}/	'measuring tape'
kyǫ7^{2}	/kjǫʔ^{2}/	'wart'
kja^{r}	/kha^{r}/	'he/she will die'
kji$^{13(+0)}$	/khi^{13}/	'fox'
kjį^{3}	/khį^{3}/	'bag'
kjo7^{r}	/khoʔ^{r}/	'it will sting'

[6]In this context /k/ is written <g>: ngąą^{31} [ngąː^{31}]'coconut' and ng7a^{3} [ngʔa^{3}] 'green'

kjwi^{21}	/khwi^{21}/	‘he/she will kill’
kjwi7^{2}	/khwiʔ^{2}/	‘he/she will sell’
ktyi$^{34(+0)}$	/k̪ti^{34}/	‘knitted’
ktyi7$^{13(+0)}$	/k̪tiʔ^{13}/	‘frog’
ktye7^{3}	/k̪teʔ^{3}/	‘ant’
k7i$^{1(+0)}$	/kʔi^{1}/	‘he/she will toast’
k7ɻ^{r}	/kʔɻ^{r}/	‘wind/air’
k7o^{2}	/kʔo^{2}/	‘he/she will show it’
k7ǫ$^{1(+0)}$	/kʔǫ^{1}/	‘I will drink’
k7yu$^{2(+0)}$	/kʔju^{2}/	‘five’
kla^{r}	/kla^{r}/	‘fish’
kla$^{2(+0)}$	/kla^{2}/	‘twenty’
klaa^{3}	/kla:^{3}/	‘bamboo’
kle^{23}	/kle^{23}/	‘mayor’
klo^{2}	/klo^{2}/	‘he/she/it will grow’
klya7^{3}	/k̪laʔ^{3}/	‘bitter’
kna^{r}	/kna^{r}/	‘mirror’
kna^{31}	/kna^{31}/	‘snake’
kna7^{31}	/knaʔ^{31}/	‘meat’
kno7$^{34(+0)}$	/knoʔ^{34}/	‘worm’
knya7^{3}	/k̪naʔ^{3}/	‘honey’
knya7^{31}	/k̪na:ʔ^{31}/	‘deer’
ksi^{23}	/ksi^{23}/	‘cross (*cruz* (SP))’
ksya^{23}	/ksja^{23}/	‘heart (*corazón* (SP))’
kta^{23}	/kta^{23}/	‘cow (*vaca*’ (SP)’
kti$^{2(+0)}$	/kti^{2}/	‘seven’
kt̨^{r}	/kt̨^{r}/	‘sprout’
ktǫ^{r}	/ktǫ^{r}/	‘bee’
ktsi$^{34(+0)}$	/ktsi^{34}/	‘yellow’
ktst̨^{2}	/ktst̨^{2}/	‘he/she will be scared’
ktsa7^{r}	/ktsaʔ^{r}/	‘it will become wet’
ktsi7^{2}	/ktsiʔ^{2}/	‘he/she will discover’
ktsi7^{13}	/ktsiʔ^{13}/	‘iguana’
ktse7^{3}	/ktseʔ^{3}/	‘pus’
ktso7^{2}	/ktsoʔ^{2}/	‘it will rot’

ska^{r}	/ska^{r}/	'one'
ska^{23}	/ska^{23}/	'sugar (*azúcar* (SP))'
skąˀ^{r}	/skąˀ^{r}/	'community guard'
skąˀ7^{21}	/skąˀ^{21}/	'he/she will tie'
sko^{2}	/sko^{2}/	'minnow'
sko7$^{1(+0)}$	/skoˀ^{1}/	'grasshopper'
skǫ$^{34(+0)}$	/skǫ^{34}/	'his/her arm'
ngaą^{31}	/nkąˑ^{31}/	'coconut'
ng7a^{3}	/nkˀa^{3}/	'green'
ng7a^{31}	/nkˀa^{31}/	'red'
jyka^{r}	/hjka^{r}/	'tree'
jyko^{r}	/hjko^{r}/	'comb'
jyko^{31}	/hjko^{31}/	'well/pool'
xkǫ^{r}	/ʃkǫ^{r}/	'he/she will sew'

Table 2.33: Near minimal pairs for /k/

/k/ ≠ /k^{w}/:	kii$^{34(+0)}$	'grass'	≠	kwii^{r}	'star'
/k/ ≠ /k^{w}/:	kii7^{r}	'flame/fire/light/electricity'	≠	kwi7$^{34(+0)}$	'baby'

/k^{w}/

The labio-velar, 'kw' in the orthography, can occur as a single consonant in the onset of a word, the first consonant of a cluster or the second consonant in a cluster. There are also a few examples of /k/ and /w/ as a cluster. The word for 'swine' in ZAC Chatino is *kowe7*$^{3-24}$, The cognate in Teotepec Chatino is *kwe7*^{3}. Because of the vowel loss in the penultimate syllable this form contrasts diachronically with the word for 'crab' *kwee7*^{21} in Teotepec Chatino. However since this cluster does not contrast synchronically they are both written in the same manner. The allophone of /k^{w}/ g^{w}, occurs only after the voiced nasal alveolar consonant /n/ preceding a voiced sound or the laryngeal fricative:

$$/k^{w}/ \rightarrow [gw]/n \_\_ [+vd] \text{ or } /h/.^{7}$$

[7]Because of the voiced quality of this sound in this environment it is written <gw> after the nasal: ngwę^{3} [ng^{w}ę^{3}] 'ripe' and ngwje^{r} [ng^{w}he^{r}] 'goose foot'.

kwa^{13}	/k^{w}a^{13}/	‘broom’
kwii^{r}	/k^{w}iː^{r}/	‘star’
ja^{2}-kwa^{r}	/ha^{2}-k^{w}a^{r}/	‘four’
kwa7^{r}	/k^{w}aʔ^{r}/	‘dew’
kwee7^{21}	/k^{w}eːʔ^{21}/	‘crab’
kwi^{34}	/k^{w}i^{34}/	‘liquor’
kwi7^{r}	/k^{w}iʔ^{r}/	‘baby’
kwi7^{2}-la^{r}	/k^{w}iʔ^{2}-la^{r}/	‘he/she will approach’
kwɻ7^{3}	/k^{w}ɻʔ^{3}/	‘armadillo’
kwla^{r}	/k^{w}la^{r}/	‘old/elder’
kwę$^{34(+0)}$	/k^{w}ę^{34}/	‘bat’
kweę^{3}	/k^{w}ęː^{3}/	‘noisy’
kwji$^{1(+0)}$	/k^{w}hi^{1}/	‘he/she will waste’
k(w)jɻ^{3}	/k^{w}hɻ^{3}/	‘bag’
kwtɻ7^{2}	/k^{w}tɻʔ^{2}/	‘louse’
tykwa^{2}	/t̪k^{w}a^{2}/	‘he/she will sit’
tykwą$^{13(+0)}$	/t̪k^{w}ą^{13}/	‘machine/iron’
tykwi^{31}	/t̪k^{w}i^{31}/	‘difficult’
tykwi7^{r}	/t̪k^{w}iʔ^{r}/	‘he/she will speak’
skwa^{2}	/sk^{w}a^{2}/	‘six’
skwa^{31}	/sk^{w}a^{31}/	‘soup/mole’
tkwa^{2}	/tk^{w}a^{2}/	‘two’
jykwa$^{13(+0)}$	/hjk^{w}a^{13}/	‘cornmeal porridge’
jykwi^{3}	/hjk^{w}i^{3}/	‘it will boil’
jykwi7^{r}	/hjk^{w}iʔ^{r}/	‘he/she spoke’
jykwę$^{1+0}$	/hjk^{w}ę^{1}/	‘I will swallow’
skwa7^{2}	/sk^{w}aʔ^{2}/	‘cockroach’
nskwa^{r}	/nsk^{w}a^{r}/	‘chayote squash’
nskwa7^{2}	/nsk^{w}aʔ^{2}/	‘maize’
ngwę^{3}	/nk^{w}ę^{3}/	‘ripe’
ngwje^{r}	/nk^{w}he^{r}/	‘goose foot’

Table 2.34: Minimal and near minimal pairs for /k^{w}/

/k^{w}/ ≠ /k/:	kwii^{31}	‘star’	≠	kii$^{34(+0)}$	‘grass’
/k^{w}/ ≠ /k/:	kwi7$^{34(+0)}$	‘baby’	≠	kii7^{r}	‘flame/fire/light/electricity’
/k^{w}/ ≠ /w/:	kwa$^{13(+0)}$	‘broom’	≠	wa7^{13}	‘already’

2.5.6 Laryngeals

/ʔ/

This is a glottal stop /ʔ/, '7' in the orthography. This phoneme is only allowed to occur once per word. In the syllable structure: (n/m)(C_1)C_2(S)V^T(ʔ), the glottal stop /ʔ/ can only be C_2 never C_1. It is the only consonant that can occur in coda position.

7o^{31}	/ʔo^{31}/	'with/also'
7ụ^{r}	/ʔụ^{r}/	'you/you all/honorific'
7wẹ^{r}	/ʔwẹ^{r}/	'you'
7ni^{r}	/ʔni^{r}/	'animal'
t7a^{r}	/tʔa^{r}/	'party'
t7a^{3}	/tʔa^{3}/	'his/her relative'
j7o^{34}	/hʔo^{34}/	'saint/god'
nd7ą^{r}	/ndʔą^{r}/	'corn'
t7wa^{r}	/tʔwa^{r}/	'his/her mouth'
s7yu$^{1(+0)}$	/sʔju^{1}/	'he/she will cut'
s7we^{r}	/sʔwe^{r}/	'good'
s7we^{2}	/sʔwe^{2}/	'he/she will separate'
s7yu$^{1(+0)}$	/sʔju^{1}/	'he/she will cut'
x7ya$^{1(+0)}$	/ʃʔja^{1}/	'he/she will yell'
k7yu$^{2(+0)}$	/kʔju^{2}/	'five'
(jy)7ya$^{34(+0)}$	/(hj)ʔja^{34}/	'mountain'
j7wa^{2}	/hʔwa^{2}/	'banana'
j7wa^{3}	/hʔwa^{3}/	'granary'
nd7ya^{r}	/ndʔja^{r}/	'pretty/fancy'
mb7ya^{3}	/mwʔja^{3}/	'he/she lowered it'
cha7$^{13(+0)}$	/ʧaʔ^{13}/	'word'
cho7$^{13(+0)}$	/ʧoʔ^{13}/	'badger'
cho7^{2}	/ʧoʔ^{2}/	'pineapple'
jaa7^{3}	/haːʔ^{3}/	'sleeping mat'
jnya7$^{13(+0)}$	/hn̪aʔ^{13}/	'chili'
ktsa7^{r}	/ktsaʔ^{r}/	'he/she will get wet'
ktse7$^{13(+0)}$	/ktseʔ^{13}/	'puss'
ktso7^{2}	/ktsoʔ^{2}/	'it will rot'
kwa7^{r}	/k^{w}aʔ^{r}/	'dew'
kwe7^{3}	/kweʔ^{3}/	'swine'
kwee7^{21}	/k^{w}eːʔ^{21}/	'crab'

kwi7^{31}-la$^{2(+0)}$	/k^{w}iʔ^{31}-la^{2}/	‘he/she will approach’
jytsi7^{2}	/hjtsiʔ^{2}]	‘he/she will bury’
jyla7^{2}	/hjlaʔ^{2}/	‘red mamey’
jykwa7^{13}	/hjk^{w}aʔ^{13}/	‘cornmeal porridge’
jykwi7^{r}	/hjk^{w}iʔ^{r}/	‘he/she spoke’
sko7$^{1(+0)}$	/skoʔ^{1}/	‘grasshopper’
skwa7^{2}	/sk^{w}aʔ^{2}/	‘cockroach’
snye7^{r}	/s̻neʔ^{r}/	‘his/her child’
slya7^{31}	/s̻laʔ^{31}/	‘cotton’
nskwa7^{2}	/nsk^{w}aʔ^{2}]	‘maize’

Table 2.35: Minimal pairs for /ʔ/:

/ʔ/ ≠ /k/: 7o^{31} ‘with/also’ ≠ ko^{3} ‘fog’

/h/

The laryngeal fricative /h/, ‘j’ in the orthography, can occur as a single consonant in the onset of a word in [jy]C$_2$(S)V^T(ʔ), or as C$_1$ or C$_2$ in: (n)(C$_1$)C$_2$(S)V^T(ʔ).

ja^{r}	/ha^{r}/	‘no’
jii^{3}	/hiː^{3}/	‘ash’
jaa7^{3}	/haːʔ^{3}/	‘sleeping mat’
juu̱^{31}	/hǫ̱ː^{31}/	‘thread’
jni^{2}	/hni^{2}/	‘money’
jne^{2}	/hne^{2}/	‘he/she will hear’
jnyi$^{34(+0)}$	/hn̻i^{34}/	‘bird’
jnya7$^{13(+0)}$	/hn̻aʔ^{13}/	‘chili’
jlya^{31}	/hl̻a^{31}/	‘Ixpantepec’
jlya7^{r}	/hl̻aʔ^{r}/	‘bedbug’
jya^{r}	/hja^{r}/	‘sugar cane’
jya7^{r}	/hjaʔ^{r}/	‘his/her foot’
j7o$^{34(+0)}$	/hʔo^{34}/	‘saint’
jyta$^{13(+0)}$	/hjta^{13}/	‘edible greens (*chepil* (SP))’
jyto^{2}-yuu^{r}	/hjto^{2}-juːʳ/	‘earthen hole/pit’
jytso7$^{34(+0)}$	/hjtsoʔ^{34}/	‘pimple’
jysę^{r}	/hjse̜^{r}/	‘sand’

jyso$^{34(+0)}$	/hjso^{34}/	‘avocado’
jyna^{r}	/hjna^{r}/	‘sandal/huarrache’
jyla^{2}	/hjla^{2}/	‘he/she will arrive’
jyla$^{34(+0)}$	/hjla^{34}/	‘puddle’
jyla^{r}-kne7^{31}	/hjla^{r}-kneʔ^{31}/	‘young corn’
jylo^{r}	/hjlo^{r}/	‘his/her eye’
jyla7^{2}	/hjlaʔ^{2}/	‘red mamey’
jytye$^{34(+0)}$	/hjt̻e^{34}/	‘pitch pine’
jytyi$^{34(+0)}$	/hjt̻i^{34}/	‘paper’
jycha^{r}	/hjʧa^{r}/	‘contagious illness’
jychę^{r}	/hjʧę^{r}/	‘village’
jyka^{r}	/hjka^{34}/	‘tree’
jykwa$^{13(+0)}$	/hjk^{w}a^{13}/	‘cornmeal porridge’
jykwi^{3}	/hjk^{w}i^{3}/	‘it will boil’
jykwį7$^{1(+0)}$	/hjk^{w}ę^{1}/	‘I will swallow’
jy7na$^{34(+0)}$	/hjʔna^{34}/	‘his/her plate’
jy7yu^{31}	/hjʔju^{31}/	‘man’
jy7ya^{21}	/hjʔja^{21}/	‘he/she will lower’
jy7ya^{r}	/hjʔja^{r}/	‘mountain’
j7wa^{2}	/hʔwa^{r}/	‘banana’
j7wa^{3}	/hʔwa^{3}/	‘granary’
yja^{r}	/jha^{r}/	‘tortilla’
yjo^{3}	/jho^{3}/	‘squash’
yją^{r}	/jhą^{r}/	‘year’
kja^{r}	/kha^{r}/	‘he/she will die’
kji$^{13(+0)}$	/khi^{13}/	‘fox’
kjį$^{13(+0)}$	/khį^{13}/	‘skin’
kjo7^{r}	/khoʔ^{r}/	‘it will sting’
k(w)jį^{3}	/k$^{(w)}$hį^{3}/	‘bag’
ngwje^{r}	/nk^{w}he^{r}/	‘goose foot’

Table 2.36: Minimal pairs for /h/

/h/ ≠ /t/:	ja^{r}	‘no’	≠	ta^{3}	‘shrimp’
/h/ ≠ /l/:	j7o$^{34(+0)}$	‘saint’	≠	l7o$^{13(+0)}$	‘corral’
/h/ ≠ /ʃ/:	ja^{r}	‘no‘	≠	xa^{23}	‘orange’
/h/ ≠ /j/:	jaa7^{3}	‘sleeping mat’	≠	ya7$^{34(+0)}$	‘his/her hand’

2.6 Tone system

Teotepec Chatino has 12 lexical tones. If we consider the method of description employed by Pike (1948), the Teotepec system realizes a combination of pitch-registry (single target) and pitch-contour (multi-target) tones. This results in four auditory presentations: level, ascending, descending and complex. As noted in §2.3, the simple stem of the word in Teotepec Chatino is monosyllabic. Each stem carries one tone: *jychę^{r} ʔya*^{34} *jʔo*^{31} 'pueblo cerro santo' 'Santa Lucía Teotepec'. Because of the complexity of the tone inventory numbers are used to represent the twelve different tones. These numbers correspond with the relative fundamental frequency - F_0 of each tone class.

Teotepec Chatino has three basic level tones: high /1/, mid /2/ and mid-low /3/, there are three ascending tones: /21/, /20/ and /31/, there are four descending tones: /13$^{(+0)}$/, /23/, /34$^{(+0)}$/ and /r/, and there is one complex tone: /232/. The number /0/ is used to represent the highest pitch target of the ascending tone /20/ and the floating sandhi tone /$^{(+0)}$/. The floating tone isn't realized on the surface level and only occurs in sandhi contexts. The descending tone, /34$^{(+0)}$/, falls below /3/, thus the tone category /4/ is utilized to represent the lowest pitch target. The range of tones is represented as /0/ super-high, /1/ high, /2/ mid-high, /3/ mid-low and /4/ low. Any combination of numbers represents pitch-contours on multi-target tones, and the notation (+0) on the tones /1$^{(+0)}$/, /2$^{(+0)}$/, /13$^{(+0)}$/, and /34$^{(+0)}$/ represents an underlying super-high floating tone. Table 2.37, below, outlines the basic tone inventory for Teotepec Chatino.

Table 2.37: Teotepec Chatino tone inventory

level:	1$^{(+0)}$	2, 2$^{(+0)}$	3	
ascending:	21	20	31	
descending:	13$^{(+0)}$	23	34$^{(+0)}$	(r)
complex:		232		

In isolation there are: three level tones, three ascending tones, four descending tones and one fall rise tone. The descending tone represented as /r/ is the unmarked tone. Because this tone doesn't really have a pitch target it descends slightly making it appear like tone /23/ on the surface level, however, the sandhi rules differentiate these two tones and define them as distinct tone classes (cf. Table 2.48 and Appendix B). Lastly, there are two different tones in the mid-high tone class /2/. One has a floating sandhi tone and the other doesn't. This is described in §2.6.1.[8]

[8]All of the examples in the following section were recorded with Reginaldo Quintas Figueroa, a young

The arguments for the existence of twelve lexical tones are the following: Each tone is distinct and sounds different from the other tones. Each tone has its own sandhi rules and constraints. There is a correspondence among the other Eastern Chatino varieties and likewise the tones here easily fit as cognate with those of the rest of Eastern Chatino. This cognate set will be referred to throughout the remainder of the paper. The Eastern Chatino tones are organized into sets. These sets are identified with the letters - *A* through *J* - cf.Table 2.48 and Appendix B (Cruz, H. and Woodbury, 2005; Campbell and Woodbury, 2010).

2.6.1 Level tones

(2.1) **Level tones**

ta$^{1(+0)}$	'he/she will give' - Set H
sko^{2}	'minnow fish' - Set B
kǫ^{3}	'tuber' - Set G

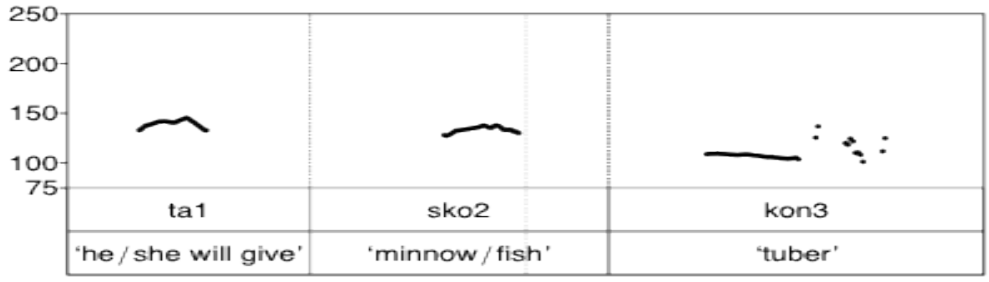


Figure 2.1: Level Tones

Tone /1$^{(+0)}$/ is a high tone. It has a floating super-high tone that is realized in sandhi contexts. This tone is present in nouns as well as verbs. Below is a list of minimal pairs that represent this tone class.

man from the community of Santa Lucia Teotepec who has worked on the Chatino Language Documentation Project in Teotepec since the beginning of summer 2007.

Table 2.38: Minimal pairs for tone /$1^{(+0)}$/ - Set H

/$1^{(+0)}$/ ≠ /3/:	ta$^{1(+0)}$	'he/she will give'	≠	ta^{3}	'shrimp'
/$1^{(+0)}$/ ≠ /$2^{(+0)}$/:	k7o$^{1(+0)}$	'he/she will show'	≠	k7o$^{2(+0)}$	'he/she will drink'
/$1^{(+0)}$/ ≠ /31/:	tya$^{1(+0)}$	'tomorrow'	≠	tya^{31}	'squirrel'

Tone /2/ is a mid-high tone. This tone is divided into two distinct classes. One group of tone 2 has a floating tone and is represented as /$2^{(+0)}$/. The other doesn't have a floating tone and is be represented as /2/. In isolation these two tones sound virtually the same and both register a very similar F_0 level across speakers. Below is a table with a list of words that represent these two distinct but very similar tone classes:

Set B		Set J	
mti^{2}	'rubbish'	sna$^{2(+0)}$	'three'
cho7^{2}	'pineapple'	skwa$^{2(+0)}$	'six'
tlya7^{2}	'cold'	kn7i$^{2(+0)}$	'he/she will do'
skwa7^{2}	'cockroach'	kaa$^{2(+0)}$	'nine'
nskwa7^{2}	'maize'	kla$^{2(+0)}$	'twenty'

Table 2.39: Minimal pairs for tone /2/ - Sets B & J

/2/ ≠ /r/:	mti^{2}	'rubbish'	≠	mti^{r}	'grain'
/2/ ≠ /3/:	cho7^{2}	'pineapple'	≠	cho7^{3}	'badger'
/2/ ≠ /31/:	skwa$^{2(+0)}$	'six'	≠	skwa^{31}	'soup'
/2/ ≠ /31/:	xa^{2}	'orange'	≠	xaa^{31}	'luminescence'

Tone /3/ is a mid-low tone. This tone is essentially inert in that it virtually doesn't give or receive any tones or create sandhi changes in adjacent tones. Below is a list of minimal pairs that represents this tone class.

Table 2.40: Minimal pairs for tone /3/ - Set G

/3/ ≠ /1$^{(+0)}$/:	ta^{3}	'shrimp'	≠	ta$^{1(+0)}$	'he/she will give'
/3/ ≠ /2/:	j7wa^{3}	'granary'	≠	j7wa^{2}	'banana'
/3/ ≠ /2/:	cho7^{3}	'badger'	≠	cho7^{2}	'pineapple'
/3/ ≠ /31/:	ng7a^{3}	'green'	≠	ng7a^{31}	'red'
/3/ ≠ /31/:	knya7^{3}	'honey'	≠	knya7^{31}	'deer'
/3/ ≠ /13$^{(+0)}$/:	jnya7^{3}	'chest/strongbox'	≠	jnya7$^{13(+0)}$	'chili'
/3/ ≠ /13$^{(+0)}$/:	ka^{3}	'left'	≠	ka$^{13(+0)}$	'yesterday'
/3/ ≠ /34$^{(+0)}$/:	ke^{3}	'his/her head'	≠	ke$^{34(+0)}$	'flower'
/3/ ≠ /21/:	ke^{3}	'his/her head'	≠	ke^{21}	'your head'

2.6.2 Ascending tones

The ascending tones are /31/, /21/ and /20/[9]. Tone /31/ begins at the same level as tone /3/ and ascends to tone /1/. Tone /21/ begins at the same level as tone /2/ and ascends to the high tone /1/. Tone /20/ begins at the same level as tone /2/ and ascends to the super high tone /0/ (figure 2.2 and tables 2.41, 2.42 and 2.43).

(2.2) **Ascending tones**

ngaa^{31}	'coconut' - Set E
ntyku^{21}	'he/she is eating' - Set H
kna^{20}	'I will yell'

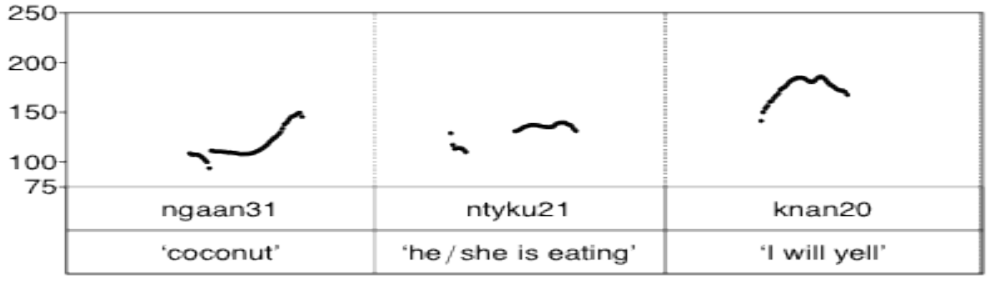


Figure 2.2: Ascending Tones

Tone /31/ is an ascending tone that begins around the same pitch of the tone /3/ and rises to the pitch of tone /1/. This tone exhibits tone spreading in certain contexts. This process is explained in §2.6.5. Below is a list of minimal pairs that represents this tone class.

Table 2.41: Minimal pairs for tone /31/ - Set E

/31/ ≠ /2/:	skwa^{31}	'soup'	≠	skwa$^{2(+0)}$	'six'
/31/ ≠ /2/:	xaa^{31}	'luminescence'	≠	xa^{2}	'orange'
/31/ ≠ /3/:	ng7a^{31}	'red'	≠	ng7a^{3}	'green'
/31/ ≠ /3/:	knya7^{31}	'deer'	≠	knya7^{3}	'honey'
/31/ ≠ /r/:	ka7^{31}	'plank'	≠	ka7^{r}	'leaf'

[9]Tone class /20/ does note correlate to a tone set based on the work by Cruz, H. and Woodbury (2005)

Tone /21/ is essentially inert in that this tone doesn't have any sandhi tones that spread to other tones nor does it receive any sandhi tones from any other tone category. Below is a list of minimal pairs that represent this tone class.

Table 2.42: Minimal pairs for tone /21/ - Set I

/21/ ≠ /3/:	ya^{21}	'you went'	≠	ya^{3}	'he/she went'
/21/ ≠ /3/:	ndla^{21}	'you are arriving'	≠	ndla^{3}	'he/she is arriving'
/21/ ≠ /3/:	n7ą^{21}	'you saw'	≠	n7ą^{3}	'he/she saw'
/21/ ≠ /3/:	kwee7^{21}	'crab'	≠	kwe7^{3}	'swine'
/21/ ≠ /3/:	ntyku^{21}	'he/she is eating'	≠	ntyku^{3}	'you are eating'

Tone /20/ is a tone that begins at the level of tone /2/ and ascends to the super-high tone /0/. This tone appears to be restricted to verbal constituents. This is the case for SJQ Chatino as well. The equivalent tone for SJQ is tone /40/ and it is found in the same verbal cognates noted here. Below is a list of minimal pairs that represent this tone class.

Table 2.43: Minimal pairs for tone /20/

/20/ ≠ /13$^{(+0)}$/:	nskwą^{20}	'I lay down'	≠	nskwą$^{13(+0)}$	'I am lying down'
/20/ ≠ /13$^{(+0)}$/:	yną^{20}	'I cried'	≠	yną$^{13(+0)}$	'I am crying'
/20/ ≠ /r/:	ntkwą^{20}	'I sweep'	≠	ntkwą^{r}	'I am sweeping'

2.6.3 Descending tones

(2.3) **Descending tones**

jyta$^{13(+0)}$	'edible green/*chepil* (SP)' - Set F
ska^{23}	'sugar' - Set K
ke$^{34(+0)}$	'flower' - Set C
yja^{r}	'tortilla' - Set A

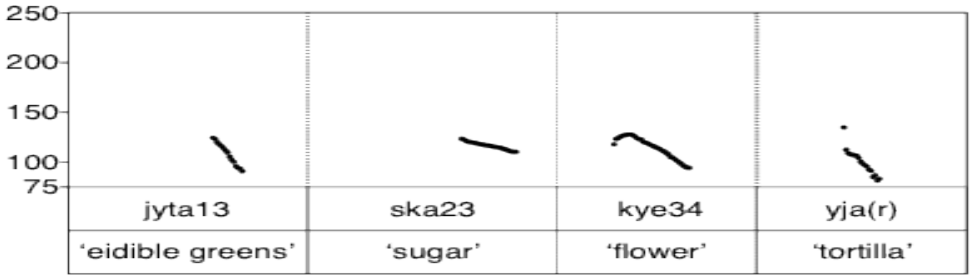


Figure 2.3: Descending Tones

Tone /13$^{(+0)}$/ is a descending tone that begins around the same pitch of the tone /1/ and falls to the pitch of tone /3/. This tone has a floating tone and exhibits tone sandhi in certain contexts. This process is explained in §2.6.5. Below is a list of minimal pairs that represent this tone class.

Table 2.44: Minimal pairs for tone /13$^{(+0)}$/ - Set F

/13$^{(+0)}$/ ≠ /2/:	ktsi7$^{13(+0)}$	'iguana'	≠	ktsi7^{2}	'he/she will burry'
/13$^{(+0)}$/ ≠ /2/:	s7we$^{13(+0)}$	'good'	≠	s7we^{23}	'he/she will separate'
/13$^{(+0)}$/ ≠ /2/:	kwa$^{13(+0)}$	'broom'	≠	kwa^{2}	'he/she will sweep'
/13$^{(+0)}$/ ≠ /3/:	jnya7$^{13(+0)}$	'chile'	≠	jnya7^{3}	'strong box'
/13$^{(+0)}$/ ≠ /3/:	ka$^{13(+0)}$	'yesterday'	≠	ka^{3}	'left'
/13$^{(+0)}$/ ≠ /r/:	jykwa$^{13(+0)}$	'flat'	≠	jykwa^{r}	'even'

Tone /23/ is a descending tone that begins around the same pitch of the tone /2/ and falls to the pitch of tone /3/. This tone category is found almost exclusively with Spanish loan words. There aren't any true minimal pars in the database. Below is a list of words that represent this tone class.

Tone class /23/ - Set K

pyǫ^{23}	'shawl'
mxa^{23}	'mass'
mble^{23}	'napkin'
mblya^{23}	'mule'
sa^{23}	'cup'
ska^{23}	'sugar'
ntsi^{23}	'nanche'
xo^{23}	'cheese'
xtyi^{23}	'machete'
xlyu^{23}	'knife'
yma^{23}	'lime'
kta^{23}	'cow'
ksi^{23}	'cross'
kle^{23}	'mayor'
ksya^{23}	'heart'

Tone /34$^{(+0)}$/ is a descending tone that begins around the same pitch of the tone /3/ and falls to the pitch of tone /4/. This tone has a floating tone and exhibits tone sandhi in certain contexts. This process is explained in §2.6.5. Below is a list of minimal pairs that represent this tone class:

Table 2.45: Minimal and near minimal pairs for tone /34$^{(+0)}$/ - Set C

/34/ ≠ /2/:	jnyi^{34}	'bird'	≠	jni^{2}	'money'
/34/ ≠ /2/:	k7yu^{34}	'flea'	≠	k7yu^{2}	'five'
/34/ ≠ /3/:	ke^{34}	'flower'	≠	kyee^{r}	'rock'
/34/ ≠ /3/:	kwę^{34}	'bat'	≠	kweę^{3}	'noisy'
/34/ ≠ /r/:	jyta^{34}	'flour'	≠	jyta^{r}	'tobacco'
/34/ ≠ /r/:	kii^{34}	'grass'	≠	kii7^{r}	'fire'
/34/ ≠ /r/:	jyso^{34}	'avocado'	≠	jyso^{r}	'net'
/34/ ≠ /13/:	kya7^{34}	'soap'	≠	kya7^{13}	'measuring tape'

Tone /r/ is the largest tone category. This is the unmarked or default tone and. In terms of acoustic features this tone is essentially a descending tone that begins at about the same pitch as tone /2/ and falls to the pitch of tone /3/. Because there is no particular pitch target this tone has been identified as the 'relaxed' tone and is thus marked with /r/.

This tone doesn't generate tone sandhi, however it acts as a recipient. The F_0 level of this tone changes through assimilation and interpolation of preceding tones. The sandhi rules for tones /r/, /23/ and /$13^{(+0)}$/ are all distinct (cf. Table 2.48 and Appendix B). In addition the fact that words with tone /23/ are almost exclusively Spanish loan words, sandhi rules are yet another way to differentiate between the tones /r/ and /23/. This is explained in detail in §2.6.6. Below is a list of minimal pairs that represent this tone class.

Table 2.46: Minimal and near minimal pairs for tone /r/ - Set A

/r/ ≠ /3/:	skąʳ	'community guard'	≠	skąˀ³	'corn dough'
/r/ ≠ /3/:	t7aʳ	'party'	≠	t7aˀ³	'relative'
/r/ ≠ /2/:	t7waʳ	'his/her mouth'	≠	t7waˀ²	'cold'
/r/ ≠ /31/:	knaʳ	'mirror'	≠	knaˀ³¹	'snake'
/r/ ≠ /31/:	tkwęʳ	'long'	≠	tkweęˀ³¹	'road'
/r/ ≠ /31/:	tyooʳ	'rain'	≠	tyooˀ³¹	'adobe'
/r/ ≠ /34/:	naaʳ	'us (INCL)'	≠	naʳ	'carbon/coal'
/r/ ≠ /34/:	jysoʳ	'net'	≠	jysoˀ³⁴	'avocado'
/r/ ≠ /$13^{(+0)}$/:	tnyąʳ	'comal'	≠	tnyąˀ$^{13(+0)}$	'work'
/r/ ≠ /$13^{(+0)}$/:	jytaʳ	'tobacco'	≠	jytaˀ$^{13+0}$	'edible greens'

2.6.4 Fall rise tone

Tone /232/ is a fall rise tone. It begins at the level of a mid level tone /2/ and falls to a mid-low level tone /3/ and then raises back up to /2/. Thus far I have only encountered this tone in 2nd person singular verbs. This tone may be the result of a tone clitic for the second person singular. For some speakers these 2s lexemes fall into the class of set G, tone /3/ as noted in Appendix B. There appears to have been some sort of tone shift for the speakers who do not exhibit this complex tone in their speech. Below is a list of minimal pairs that represent this tone class.

Table 2.47: Minimal and near minimal pairs for tone /232/

/232/ ≠ /r/:	tykwi7^{232}	'you will speak' (P)	≠	tykwi7^{r}	'he/she will speak' (P)
/232/ ≠ /r/:	ntykwi7^{232}	'you speak' (H)	≠	ntykwi7^{r}	'he/she speaks' (H)
/232/ ≠ /r/:	xkwa^{232}	'you will lie down' (P)	≠	xkwa^{r}	'he/she will lie down' (P)
/232/ ≠ /r/:	nskwa^{232}	'you lie down' (H)	≠	nskwa^{r}	'he/she lies down' (H)
/232/ ≠ /1$^{(+0)}$/:	nd7ya^{232}	'you lower it' (H)	≠	nd7ya$^{1(+0)}$	'he/she lowers it' (H)
/232/ ≠ /1$^{(+0)}$/:	ny7ą^{232}	'you will see' (P)	≠	ny7ą$^{2(+0)}$	'he/she will see' (P)
/232/ ≠ /2$^{(+0)}$/:	k7ni^{232}	'you will do' (P)	≠	k7ni$^{2(+0)}$	'he/she will do' (P)
/232/ ≠ /2$^{(+0)}$/:	7ni^{232}	'you do' (H)	≠	7ni$^{2(+0)}$	'he/she does' (H)
/232/ ≠ /2$^{(+0)}$/:	tsa^{232}	'you are going' (PG)	≠	tsa$^{2(+0)}$	'he/she goes' (H)
/232/ ≠ /2$^{(+0)}$/:	jyla^{232}	'you will arrive' (P)	≠	jyla$^{2(+0)}$	'he/she arrives' (H)
/232/ ≠ /2$^{(+0)}$/:	n7ą^{232}	'you see' (H)	≠	n7ą$^{2(+0)}$	'he/she sees' (H)

(2.4) **Fall rise tone**

tykwi7^{232}	k7ni^{232}	xkwa^{232}	ny7aą^{232}
'you will talk'	'you will do'	'you will lie down'	'you will see'

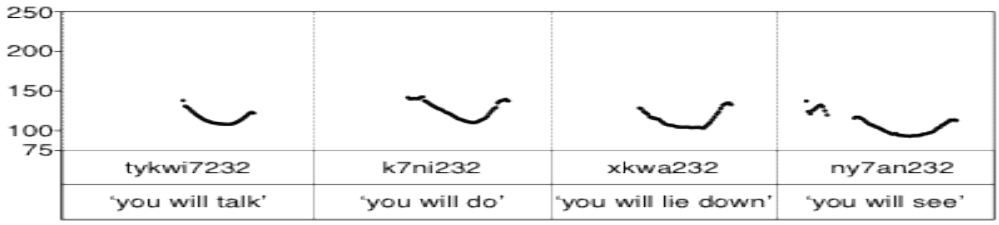


Figure 2.4: Complex Tone

2.6.5 Tone sandhi

Teotepec Chatino exhibits processes of tone sandhi. There are two strategies for how these tones are realized in Teotepec Chatino: through tone spreading and the realization of floating tones. In the context of tone spreading, noted in figure (2.5) below, the high tone that exists on the surface level of the of tone /31/ spreads to the adjacent word. In this context the sandhi tone of the preceding word is spread to the following lexeme. In the second process the word root carries the sandhi tone. In isolation this tone is inaudible. This tone exists below the surface level and is realized in only particular situations of connected speech.

The following figure (2.5) is an example of the verb *mdaa*$^{31(+0)}$ 'he/she gave' followed by nouns from the tone classes A, C, F and H. Respectively; *jyka*^{r} 'tree', *jyka*^{34} 'flour', *kji*$^{13(+0)}$ 'fox', and *sko7*$^{1(+0)}$ 'grasshopper'.

	(a)	(b)	(c)	(d)	(e)
(2.5)	mdaa^{31}	+ jyka^{r}	+ jyta$^{34(+0)}$	+ kji$^{13(+0)}$	+ sko7$^{1(+0)}$
	'he/she gave'	'tree'	'flour'	'fox'	'grasshopper'

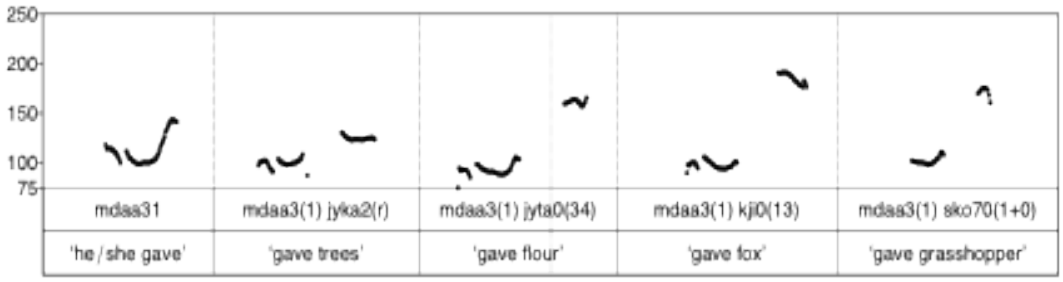


Figure 2.5: Tone 31 plus tones (r), $34^{(+0)}$, $13^{(+0)}$ & $1^{(+0)}$

In the above example the high tone of the ascending tone /31/ spreads to an adjacent word and changes its pitch. Example 2.5-b shows what occurs when tone /31/ precedes words with the unmarked /r/ tone, *jyka*^{r} 'tree'. In this case, because this tone lacks a particular pitch target, the pitch of tone /r/ is raised through assimilation to a mid level tone. Examples 2.5-c, d and e demonstrate what happens when the high tone of /31/ spreads to a word with an underlying floating high tone /+0/. In these examples we can see that when tone /31/ precedes tones /$34^{(+0)}$/, /$13^{(+0)}$/ and /$1^{(+0)}$/ the spreading tone in combination with the underlying floating tone of the adjacent lexeme is realized as a super

high tone /0/. Lastly, it is important to point out how the high part of tone /3**(1)**/ is lost as a result of its rightward spread. We can see this in the pitch track for examples 2.5 - b, c, d and e. What remains is the mid-low tone on the sandhi source tone, as exemplified in the word *mdaa*$^{3(1)}$ 'he/she gave'.

To following figure (2.6) demonstrates the second tone sandhi strategy of Teotepec Chatino. The verb *ta*$^{1(+0)}$ 'he/she will give' is followed by a set of nouns from the tone sets A, C, F and B. Respectively; *yja*^{r} 'tortilla', *ke*^{34} 'flower', *jyta*$^{13(+0)}$ 'edible greens/*chepil* (SP)', and *lyi7*^{2} 'parrot'.

	(a)	(b)	(c)	(d)	(e)
(2.6)	ta$^{1(+0)}$	+ yja^{r}	+ ke$^{34(+0)}$	+ jyta$^{13(+0)}$	+ lyi7^{2}
	'he/she will give'	'tortilla'	'flower'	'greens'	'parrot'

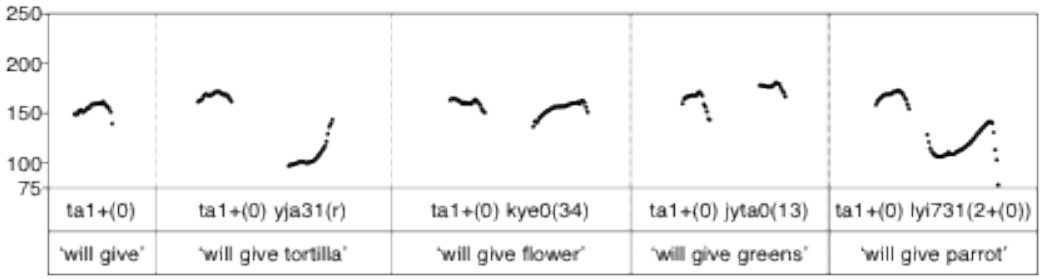


Figure 2.6: Tone 1(+0) plus tones (r), 34$^{(+0)}$, 13$^{(+0)}$ & 2

The the verb *ta*$^{1(+0)}$ is from tone set H. This is a high tone that has an underlying super-high floating tone. When this tone precedes certain lexical tones the super-high floating tone is realized on the adjacent lexeme which results in a tone change similar to that noted above in figure (2.5). The tone to the right of the sandhi source changes, however; in this case we see that there is no change in the surface of the originating sandhi tone source. Only the recipient of the sandhi tone exhibits a pitch change. This is the main difference between the realization of the underlying floating tones, noted above in (2.6), and tone spreading of the high tones from the ascending tone /31/, noted in figure (2.5). In the above example 2.6-b the unmarked /r/ tone pitch changes from slightly falling to sharply ascending, the resulting tone appears much like tone /31/. In examples 2.6-c, d and e, tones /34$^{(+0)}$/ and /13$^{(+0)}$/ change to the super-high tone /0/ after /1$^{(+0)}$/ and tone /2/ changes to /31/ respectively.

The following figure (2.7) shows how the underlying floating tone of tone /$34^{(+0)}$/ realizes tone sandhi on lexemes from tone sets A, C, F and H. Respectively; *jyka*^{r} 'tree', *kii*^{34} 'ash', *jyta*$^{13(+0)}$ 'greens', and *msa7*$^{1(+0)}$ 'weevil'. Consider the following examples:

	(a)	(b)	(c)	(d)	(e)
(2.7)	yoo$^{34(+0)}$	+jyka^{r}	+ kii$^{34(+0)}$	+ jyta^{13}	+ msa7$^{1(+0)}$
	'he/she ground	'tree'	'ash'	'greens'	'weevil'

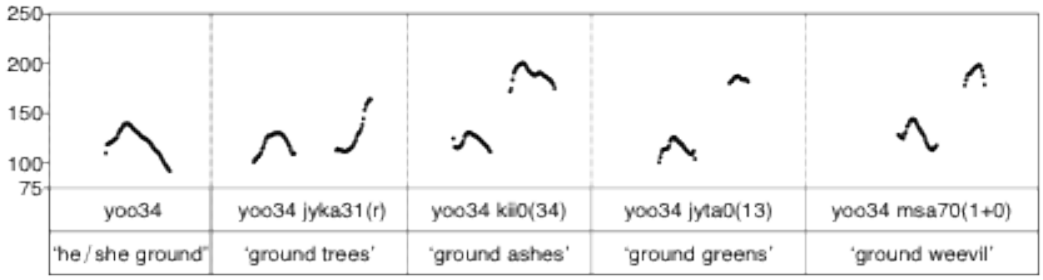


Figure 2.7: Tone $34^{(+0)}$ plus tones (r), $34^{(+0)}$, $13^{(+0)}$ & $1^{(+0)}$

Like tone /$1^{(+0)}$/ of set H, tone /$34^{(+0)}$/ of set C doesn't experience any surface level change when it precedes a tone sandhi recipient, it simply realizes the floating tone on the following word. In the above examples of figure (2.7) tone /r/ becomes an ascending tone similar to tone /31/ when it follows /$34^{(+0)}$/. Tones /$34^{(+0)}$/, /$13^{(+0)}$/ and /$1^{(+0)}$/ are all realized as super high tone /0/ when the are preceded by /$34^{(+0)}$/.

In many cases, tones that are sources of sandhi are also recipients. However because tone /r/ has no pitch target this tone allows interpolation of sandhi tones, but it is not a source of sandhi. The pitch of the unmarked /r/ tone becomes a mid-tone /2/ after tone /31/ and an ascending /31/ tone after tones /$34^{(+0)}$/ and /$1^{(+0)}$/.[10] Noted in the following section, we will see that in certain environments of connected speech, tone /r/ allows floating tones to pass over it to be realized on lexemes further along in a given utterance.

[10]cf. Table 2.48 and Appendix B

2.6.6 Distinctions in the tone *(r)* 'relaxed'

Other varieties of Eastern Chatino like that of San Juan Quiahije and San Marcos Zacatepec have sandhi rules that apply to a single tone class (Cruz, E. and Woodbury, 2006; Villard, 2007). Likewise, in Teotepec Chatino there are tones that appear to have the same F_0, however they allow different sandhi processes to occur within what appears to be the same tone class.

As noted above, the unmarked 'relaxed' tone /r/ of set A allows pitch changes through interpolation or of assimilation of sandhi tones. However, this process is determined by the tone subclass as it is divided in two groups. Some tones in this group accept sandhi while others reject it. The tones of this class that accept sandhi tones also allow them to be realized further along in an utterance of connected speech. This creates a context of 'long distance' tone sandhi.

The following figure (2.8) presents three meaningful sentence contexts where the verb *jyku*^{r} 'he/she eats of tone /r/ precedes another /r/ tone on the word *yja*^{r} 'tortilla', followed by the tone /13$^{(+0)}$/ on the demonstrative nouns *re*^{13} 'this' and *kwa*^{13} 'that' respectively. Because these sentences are headed by an NP with an /r/ tone there are no sandhi changes in these examples:

(2.8)

(a) jyku^r yja^r	(b) jyku^r yja^r re$^{13(+0)}$	(c) jyku^r yja^r kwa$^{13(+0)}$
'he/she ate tortilla'	'he/she ate this tortilla'	'he/she ate that tortilla'

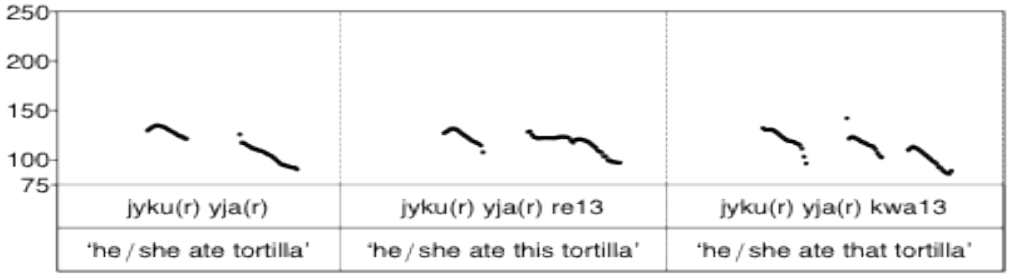


Figure 2.8: Tone /r/ + Tone 13$^{(+0)}$

The following figure (2.9) likewise presents three meaningful sentence contexts where the same verb as noted in (2.8), *jyku*^{r} 'he/she ate', precedes the noun *kla*^{r} 'fish', and the demonstrative nouns *re*^{13} 'this' and *kwa*^{13} 'that' respectively. Likewise, as noted above there are no sandhi changes in these examples either.

(2.9)

(a) jyku^{r} kla^{r}	(b) jyku^{r} kla^{r} re$^{13(+0)}$	(c) jyku^{r} kla^{r} kwa$^{13(+0)}$
'he/she ate fish'	'he/she ate this fish'	'he/she ate that fish'

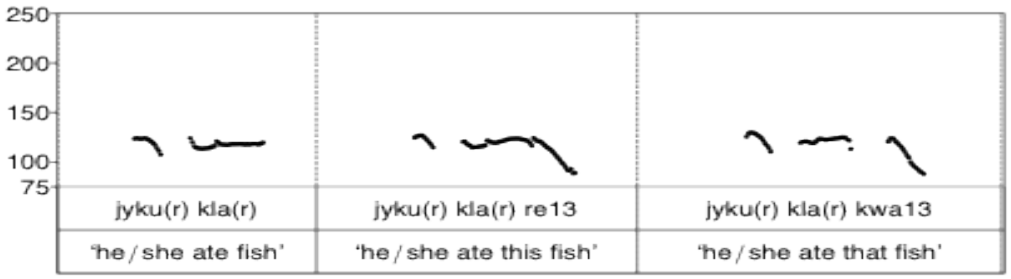


Figure 2.9: Tone /r/ + Tone 13$^{(+0)}$

The following figure (2.10) has three meaningful sentences that begin with the demonstrative pronoun *nu-kwa*$^{13(+0)}$ 'he/she' (NOM-DEM.3S) which precedes the verb *jyku*^{r} 'he/she ate' followed by the noun *jya*^{r} 'tortilla', then followed by the demonstrative noun *re*$^{13(+0)}$ 'this', and lastly with the adjective *mten*$^{13(+0)}$ 'white' placed between the noun and demonstrative.

(2.10)

(a) nu-kwa$^{13(+0)}$ jyku^{r} yja$^{2(r)}$	(b) nu-kwa$^{13(+0)}$ jyku^{r} yja$^{2(r)}$ re$^{13(+0)}$	(c) nu-kwa$^{13(+0)}$ jyku$^{2(r)}$ yja^{r} mtę$^{0(13(+0))}$ re$^{0(13(+0))}$
'he ate tortilla'	'he ate this tortilla'	'he ate that white tortilla'

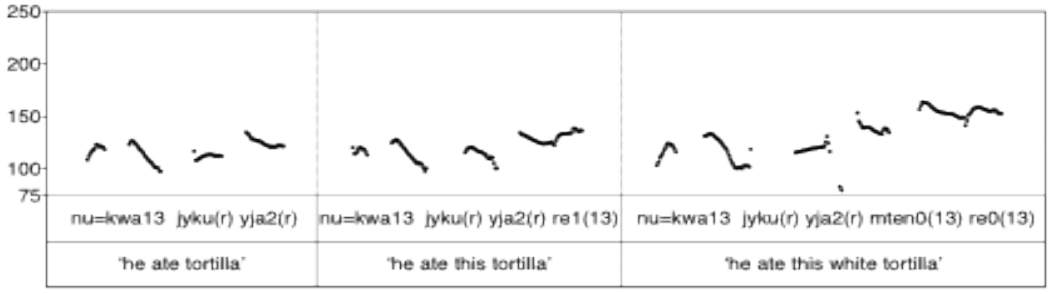


Figure 2.10: Weak Tone /r/

In example 2.10-a, above, because the word *yja*^{r} is phrase final it takes the floating tone of the demonstrative pronoun *nu-kwa*$^{13(+0)}$ 'he/she' (NOM-DEM.3S). This tone first passes over the lexeme *jyku*^{r} 'he/she ate', raising its F_0 slightly, and then this sandhi tone is realized on the word *yja*^{r} 'tortilla' raising the pitch of the /r/ tone to a mid-level tone. In example 2.10-b the floating tone passes over the two lexemes jyku^{r} 'he/she ate' and yja^{r} 'tortilla' where the sandhi tone is realized phrase finally on the demonstrative noun *re*$^{13(+0)}$ 'this'. Through a process of dissimulation the tone of *re*$^{13(+0)}$ changes from /13$^{(+0)}$/ to /1/. In example 2.10-c the same tone passes to the word *mtę*$^{13(+0)}$ 'white', crossing two lexemes. This raises the pitch of that tone while realizing a combination of floating tone sandhi and tone dissimulation changing the pitch of the tone on the demonstrative re$^{13(+0)}$ 'this', to the super-high tone /0/. Examples 2.10-b and c are tokens of 'long distance' sandhi realized over two lexemes in a meaningful sentence.

Figure (2.11), likewise, has three meaningful sentences headed with the same demonstrative pronoun *nu-kwa*$^{13(+0)}$ 'he/she' (NOM-DEM.3S) followed by the verb *jyku*^{r} 'he/she ate' as noted above in figure (2.10). However these lexemes are followed by the noun *kla*^{r} 'fish'. This example sentence also ends with the same demonstrative noun *re*$^{13(+0)}$ 'this' and the same adjective *mtę*$^{13(+0)}$ 'white' is put in between the noun and the demonstrative in 2.11-b and c respectively.

(2.11)

(a) nu-kwa$^{13(+0)}$ jyku$^{31(r)}$	(b) nu-kwa$^{13(+0)}$ jyku$^{31(r)}$	(c) nu-kwa$^{13(+0)}$ jyku$^{31(r)}$
kla^{r}	kla^{r} re$^{13(+0)}$	kla^{r} mtę$^{13(+0)}$ re$^{31(13(+0))}$
'he ate fish'	'he ate this fish'	'he ate this white fish'

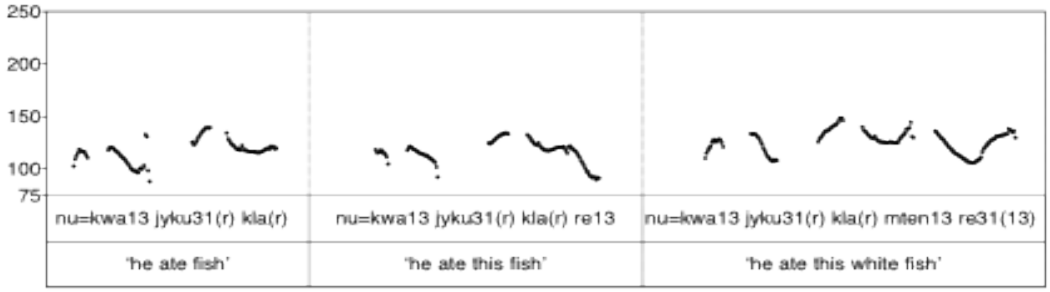


Figure 2.11: Weak and Strong Tone /r/

The sandhi rules apply to the second lexeme of the phrase *jyku*^{r} 'he/she ate'. In 2.11-a the tone of the independent pronoun *nu-kwa*$^{13(+0)}$ 'he/she' changes the pitch of tone /r/

to an ascending tone. However, in 2.11-b the lexeme *kla*^{r} 'fish' doesn't allow the tone spreading to continue towards the end of the sentence as noted in the example 2.10-b. The tone dissimilation process noted in example 2.10-c between the lexemes *mtɕ*^{31} 'white' and *re*$^{31(13(+0))}$ 'this', can also be seen here in example 2.11-c. This process changes the pitch of the demonstrative *re*$^{13(+0)}$ from /13$^{(+0)}$/ to /31/. Because the inertia of the long distance sandhi is blocked by the lexeme *kla*^{r} we do not se the combination of this tone mixed with the dissimilation in example 2.11-c thus the pitch of the sandhi tone does not reach as high of an F_0 point as in example 2.10-c.

As can be seen above in figures 2.10 and 2.11 the unmarked /r/ tone has a weak /r^{W}/ and strong /r^{S}/ counterpart. The tone /r^{S}/ rejects sandhi processes and it doesn't allow tone spreading or floating tones to pass to other lexical items further along in the stream of speech. Conversely, tone /r^{W}/ accepts sandhi and allows tone spreading and floating tones to be passed further along in an utterance. If there are enough words with the /r^{W}/ tones in a row, a process of 'long distance' sandhi can occur as noted in figure 2.10.

2.6.7 Distinctions in the mid-high tone /2/ - Sets B and J

As noted above for the /r/ tone class there is a two way split within the tone /2/ class. In isolation these two tones sound virtually the same and register a very similar F_0 level across speakers. This tone is divided into two distinct groupings based on different sandhi rules of each tone. Although the tones in figure 2.12 sound the same and have about the same F_0 they are distinct in their sandhi behavior.

(2.12) (a) koo^{2} 'he/she will grind (b) sna$^{2(+0)}$ 'three'

Figure 2.12: Distinctions in Tone /2/

The lexeme *koo*^{2} *'he/she will grind'* is from tone /2/ - set B and *sna*$^{2(+0)}$ *'three'* is from tone /2$^{(+0)}$/ - set J.

The class /2/ - set B, creates tone changes with the tone /r/, its own tone class /2-B/ and class /$2^{(+0)}$/ - set J.

(2.13)

(a) koo^{2} yja$^{2(r)}$	(b) koo^{2} sko$^{34(2)}$
'he/she will grind tortilla'	'he/she will grind fish/minnow'

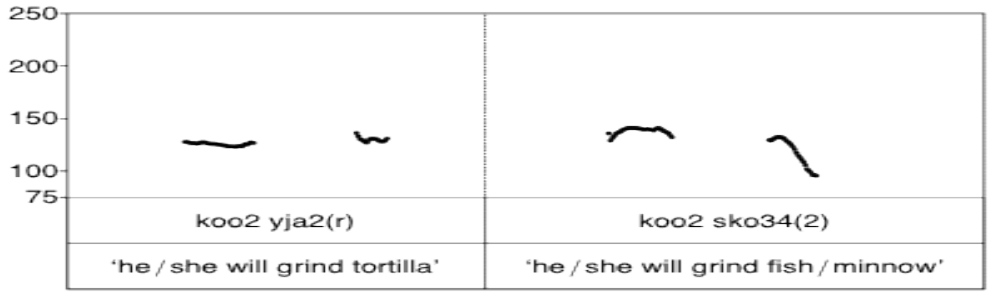


Figure 2.13: Tone /2-B/

In figure (2.13), above, we can see how the tone class /2-B/ does have an effect on the tones /r/ and /2-B/. The pitch of tone /r/ changes to /2/ in 2.13-a. In 2.13-b we can see the process of tone dissimilation that occurs when tone /2-B/ precedes another tone of the same class. This process changes the pitch of tone /2-B/ to tone /34/.

The following table outlines the sandhi rules for tone /2/ set B.

Set B	/2/	/2/	/2/
tone change	/r/ [2]	/2/ [34]	/$2^{(+0)}$/ [31]

The class /$2^{(+0)}$-J/ has a floating tone which has an effect on the tones /r/, /$34^{(+0)}$/, /31/ and /$13^{(+0)}$/. In figure (2.14), below, we can see how tone class /$2^{(+0)}$-J/ creates sandhi changes with tones /$34^{(+0)}$/, /31/ and /$13^{(+0)}$/.

(2.14)

(a)	(b)	(c)
sna$^{2(+0)}$ + ke$^{34(+0)}$ 'flower'	sna$^{2(+0)}$ + ngaa̱^{31} 'coconut'	sna$^{2(+0)}$ + jyta$^{13(+0)}$ 'greens'
'three flowers'	'three coconuts'	'three greens'

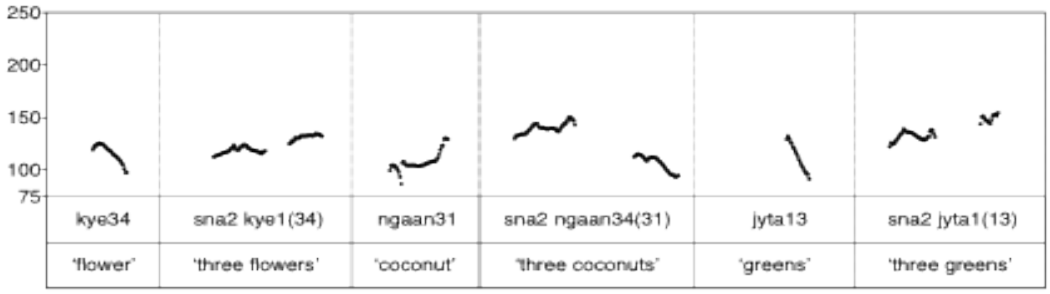


Figure 2.14: Tone /$2^{(+0)}$-J/

The following table outlines the sandhi rules for tone /$2^{(+0)}$/ set J.

Set J	/$2^{(+0)}$/	/$2^{(+0)}$/	/$2^{(+0)}$/	/$2^{(+0)}$/
tone change	/r/ [0]	/$34^{(+0)}$/ [0]	/31/ [34]	/$13^{(+0)}$/ [0]

This distribution of tone sandhi rules for tone /2/ allows for the clarification of the distinct properties of these two tones that, on the surface level appear to have very similar F_0 pitch realizations. Tone set /$2^{(+0)}$-J/ does not have any effect on tone set /2-B/. However, /$2^{(+0)}$-J/ creates sandhi changes with tones /r/, /$34^{(+0)}$/, /31/ and /$13^{(+0)}$/. In this way tone sets /2-B/ and /2-J/ have a type of complementary distribution. Tone /2-B/ interacts with tones /r/, /2-B/ and /2-J/ but not tones /$34^{(+0)}$/, /31/ and /$13^{(+0)}$/. Tone set J /$2^{(+0)}$/, interacts with tones /r/, /$34^{(+0)}$/, /31/ and /$13^{(+0)}$/ but not set /2-B/. One last note regarding tone /$2^{(+0)}$/. This tone changes to tone /31/ when it occurs following all tone classes except for its own tone /$2^{(+0)}$/ and tone /31/. Table 2.48 on the following page outlines all of the sandhi rules for Teotepec Chatino.

The following table shows the basic sandhi relations between the different tone classes in Teotepec Chatino. The tone classification used here and proposed by Cruz, H. and Woodbury (2005) refers to the different tone sets in Eastern Chatino.[11]

	Set/*juego*	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*
	1st tone →	/r/	/2/	/34$^{(+0)}$/	/23/	/31/	/13$^{(+0)}$/	/3/	/1$^{(+0)}$/	/21/	/2$^{(+0)}$/
Set/*juego*	*2nd tone*										
A	/r/	-	r → 2	r → 31	r → 0	r → 2	r → 31	r → 2	r → 31	-	r → 0
B	/2/	-	2 → 34	2 → 31	2 → 34	-	2 → 31	-	2 → 31	-	-
C	/34$^{(+0)}$/	-	-	34$^{(+0)}$→0	-	34$^{(+0)}$→0	34$^{(+0)}$→0	-	34$^{(+0)}$→0	-	34$^{(+0)}$→0
D	/23/	-	-	-	-	-	-	-	-	-	-
E	/31/	-	-	-	-	31→13	-	-	-	-	31→ 34
F	/13$^{(+0)}$/	-	-	13→0	-	13→0	13→0	-	13→0	-	13→0
G	/3/	-	-	-	-	-	-	-	-	-	-
H	/1$^{(+0)}$/	-	-	1$^{(+0)}$→0	1$^{(+0)}$→3	-	1$^{(+0)}$→ 2	-	1$^{(+0)}$→0	-	-
I	/21/	-	-	-	-	-	-	-	-	-	-
J	/2$^{(+0)}$/	2$^{(+0)}$→31	2$^{(+0)}$→31	2$^{(+0)}$→31	2$^{(+0)}$→31	-	2$^{(+0)}$→31	2$^{(+0)}$→31	2$^{(+0)}$→31	2$^{(+0)}$→31	-

Table 2.48: Tone sandhi rules for second position tones of Teotepec Chatino

2.6.8 Conclusion

Because of the different sandhi rules it is possible to identify the tone of each root and predict the sandhi changes in connected speech. However, there is still more work to be done in order to make an exhaustive description of the tone system complete with all the sandhi patterns. More work with texts and a deeper look at the verbal system will yield more about the tones of Teotepec Chatino.

[11] cf. Appendix (B) for another example of this rule chart complete with lexical items for each of the different sandhi rules.

Chapter 3

Basic morphosyntax

3.1 Introduction

This chapter includes an explanation of the more basic to more complex constructions found in the language. This format will provide the reader with some of the basic elements of the morphology and syntactic features. This will lead up to and build on more complex constructions as the chapter moves along.

3.2 Simple sentences

3.2.1 Verb inflections

This section outlines the basic verb categories and forms of inflection. It begins with description of the different aspects of Teotepec Chatino. Afterwards, the different marking for the aspectual system is discussed and the last sections examine the patterns of subject person marking on verbs.

3.2.2 Aspect overview

Teotepec Chatino verbs realize four distinct aspects: Completive (C), Potential (P), Habitual (H) and Progressive (PG). These aspectual categories are distinguished through prefixes, consonant mutations, and tone changes. Aspectual morphemes are difficult to predict because there is a fair amount of irregularity in the system.

3.2.3 Aspect marking in Teotepec Chatino

There are many suppletive verb forms in all four aspects of Teotepec Chatino. The completive aspect has the least amount of suppletion and serves well as the citation form, however the potential aspect is most commonly the default given when one elicits infinitives in Spanish. This aspect is also used for imperative mood expressions and may be useful for determining the root because *k-* and *ø* are its two most common allomorphs. The habitual and progressive aspects have the greatest amount of suppletive forms and although they are virtually identical in their segmental shape they have different tones. The tone of the progressive, potential and habitual depend on the tone of the completive. The tones of the completive and progressive aspects align while the tones for habitual and potential aspects align. This is true for the other Chatino varieties of San Juan Quiahije (SJQ), and Zacatepec (ZAC).

Table 3.1 below illustrates the allomorphs for all aspects:

Table 3.1: Aspectual allomorphs

Completive	m-, mb-, jy-, y-
Potential	x-, k-, jy-, ty-, ts-, ny-, ø
Habitual	n-, nt-, nty-, ns-, l-, ø
Progressive	n-, nt-, nty-, ns-, l-, ø

Table 3.3, on the following page, presents a list of conjugated third person singular verbs in all aspects. Verb tones demonstrate some patterns of regularity. This leads to a certain degree of predictability according to aspect. Normally we see the following pattern:[1]

Table 3.2: Aspectual tone patterns

Completive	Progressive	Habitual/Potential
A	I ∼ H	A/A
B	C	J/J
C	C	J/J
C	F	A/A
E	E	H/H
E	F∼E	20/20
F	F∼J	J/J
G	I	G/G
G	I	B/B

[1]This pattern is summarized from tables 3.3 and 3.9 (below).

Table 3.3: 3S verb aspects

Gloss	Completive	Set	Progressive	Set	Habitual	Set	Potential	Set
'speak'	jykwi7^{r}	A	ntykwi7^{21}	I	ntykwi7^{r}	A	tykwi7^{r}	A
'cut'	ms7yu$^{13(+0)}$	F	ns7yu$^{13(+0)}$	F	ns7yu$^{1(+0)}$	H	s7yu$^{1(+0)}$	H
'go out'	mdy7o^{31}	E	ndy7o^{31}	E	ndy7o$^{1(+0)}$	H	ty7o$^{1(+0)}$	H
'eat'	jyku^{r}	A	ntyku^{21}	I	ntyku^{r}	A	ku^{r}	A
'grind'	yoo$^{34(+0)}$	C	ndyoo$^{34(+0)}$	C	ndyoo$^{2(+0)}$	J	koo$^{2(+0)}$	J
'walk'	md7ą^{r}	A	nd7aą$^{1(+0)}$	H	ty7ą^{r}	A	nd7ą^{r}	A
'give'	mdaa^{31}	E	ndaa^{31}	E	ndaa$^{1(+0)}$	H	taa$^{1(+0)}$	H
'lie down'	mskwa^{34}	C	nskwa^{13}	F	nskwa^{r}	A	xkwa^{r}	A
'sleep'	yja7$^{13(+0)}$	F	lja7$^{2(+0)}$	J	ntjya7$^{2(+0)}$	J	kja7$^{2(+0)}$	J
'drink'	y7o$^{34(+0)}$	C	nd7yo$^{34(+0)}$	C	nd7yo$^{2(+0)}$	J	k7o$^{2(+0)}$	J
'cry'	yna$^{13(+0)}$	F	na$^{2(+0)}$	J	na$^{2(+0)}$	J	kna$^{2(+0)}$	J
'wash'	mjy7ą^{3}	G	ntjy7ą^{21}	I	ntjy7ą^{3}	G	jy7ą^{3}	G
'pinch'	mxu^{31}	E	nxu^{31}	E	nxu^{20}	-	kxu^{20}	-
'hit/punch'	mkǫ7^{31}	E	ntykǫ7$^{13(+0)}$	F	ntykǫ7^{20}	-	jykǫ7^{20}	-
'see'	mn7a^{3}	G	n7a$^{2(+0)}$	J	ny7a$^{2(+0)}$	J	n7a$^{2(+0)}$	J

3.2.4 The uses of aspectual morphemes

The following section outlines the contexts where the different aspects occur. At this point the use of the different aspects will be briefly described. A more complete analysis will be provided at a later time when my investigation of texts yields a more ample corpus.

Potential aspect

The potential aspect occurs in various grammatical constructions. It is particularly used to express something that is going to occur. It is also used in imperative mood constructions, complement clauses and in verb compound clauses. Because this aspect is often the default given when eliciting verbs it is used as the citation form. Below are examples of events that have not yet occurred and imperative constructions.

(3.1) ***k7ni***$^{2(+0)}$ *ka*^{r} *bi*^{13}*no*^{r} *tnyo*^{13}*-jychę*^{r}
P.DO Gabino work-community ('tequio' 'community work')
'Gabino will do community work.' *(tequio)* (SP) 'community work' (elicited)

(3.2) ***tsa***^{31} *jwa*^{13}*na*^{r} *bi*^{2}*-ya*$^{1(+0)}$
P.GO Juana Nopala
'Juana will go to Nopala.' (elicited)

The following examples (3.3), (3.4) and (3.5) illustrate the use of the potential to formulate commands. These verb forms are constructions used to directly command the address to perform some action. The imperative mood always involves a second person subject. The subjects in examples (3.4) and (3.5) have explicit 2nd person plural subjects marked with the pronoun *ʔɥ^{r}* (boldface). Structurally there is no difference for expressing a future event or expressing the imperative mood with the potential aspect. Intonation, context and choice of subject all play a role in distinguishing between these two verb forms. One of the following examples was elicited, and the other two are from the text *'la mano de metate'* as told by Wilebaldo Velazco Mendoza:

(3.3) *ja^{r}* ***tsa***^{232} *bi^{2}-ya$^{1(+0)}$*
NEG P.GO.**2s** Nopala
'don't go to Nopala.' (elicited)

(3.4) *xi^{34}=ty7o^{20}* *nu^{r}-nga^{3}* *xi^{34}=ty7o^{20}=**(7)ɥ**^{r}* *kii7^{r}* *xwe^{r}-ti^{r}* *jwiɻ^{2}*
CAUS=P.gather.up well, CAUS=P.gather.up=**2pl** flame children" C.say
ni^{r} *ʔɻ^{r}* *lo7^{13}* ***kwna**^{r}* ***=(7)ɥ**^{r}* *yka^{r}*
3S.RP to and, "P.search=**2p** wood
" 'gather up fire children.' ", she said to them," 'and you all look for wood.' "
(00:02:37.080 - 00:02:41.570)

(3.5) ***kwna**^{r}* ***-tʔɻ**^{2}**=(7)ɥ**^{r}* *jyka^{r}*
P.search-gather.up=**2p** wood
" 'search for and gather up wood.' " (00:02:41.970 - 00:02:43.270)

Completive aspect

Verbs in the completive aspect are used to express activities that have been completed. Example (3.6) is from the text *'la mano de metate'*. (3.7) was elicited:

(3.6) *lo7^{13}* ***mdya**$^{2(+0)}$* *ni^{r}* *la$^{1(+0)}$* *kwa^{13}* *ni^{34}*
and C.go 3S.RP place there now
and she went just to there (00:01:26.420 - 00:01:27.910)

(3.7) ***mskwa**^{13}* *(k)to^{13}-xo7^{r}* *lo^{2}* *yuu^{r}*
C.lie hen on earth
'the hen laid down on the ground' (elicited)

Habitual aspect

Verbs in the habitual aspect are used to express actions that occur in a habitual pattern. This can be in the present or in the past. These occur in some of the narrative texts. (3.8) is from the text *'la mano de metate'*. (3.9) was elicited.

(3.8) ***na***^{r} *rą*^{r} *ykwa7*^{r} *s7ę*^{r} *nskwa*^{34} *kyee*^{r} *jychi*^{r}
H.name it swamp place PR.lie stone 'metate' (SP)
'It is called the swamp where the stone of the 'metate' is lying.' (00:00:08.960 - 00:00:12.760)

(3.9) *ndya*^{r} *xa*^{31} ***nx7ya***$^{1(+0)}$ *se*^{31}
all time H.cry Jose
'Jose cries all the time.' (elicited)

Progressive aspect

Verbs in the progressive aspect are used to express incomplete action in progress at a specific time. This is often thought of as 'present tense' when elicited from speakers. This aspect can occur in the past, future and in the present. Example (3.10) was elicited and (3.11) is from the text *'la mano de metate'*.

(3.10) *nu*^{r}*-kwa*^{13} ***ntyku***^{21} *ndaa*^{r}
NOM-DEM PG.eat beans
'he is eating beans' (elicited)

(3.11) *lo7*^{13} *(xi*^{34}*)* *ni*^{2}*-cha7*^{13} *xi*^{34}***=kwta***^{r} *snye7*^{r} *jyko*^{31} *lo7*^{13} *yna*$^{0(13)}$
and CAUS why CAUS=PR.bathe.2S child -well and PR.cry.2S
"and why are you bathing your child and crying?" (00:01:53.870 - 00:01:56.760)

To elicit the habitual and progressive forms can be a little tricky in that they are often confused by speakers for a type of 'present tense'. It is easy to confuse the progressive and habitual because of their identical shape. As noted above in table 3.3, the tones for the potential and habitual aspects align perfectly. Once the potential form has been elicited one may then elicit the progressive. After this, all that needs to be done is to add the tone from the potential aspect form to the progressive and this will give the habitual aspect verb. Often, at first, this form must be constructed in this manner in order to get a speaker to reliably be able to identify and produce the form. Additionally, the use of the temporal adverb phrase ndya^{r} xa^{31} 'all the time' can help to get a speaker to identify this verbal aspect.

3.2.5 Person marking on verbs

Person marking on verbs is realized through morphological changes on the verb. For the singular verb forms all of this takes place on the verbal root. The tone for third person singular is the unmarked root. Second person singular verbs are marked by a tone that contrasts with that of the 3rd person form. First person singular verbs are marked with a tone contrast and a nasal vowel. Consider the following paradigm:

Table 3.4: Person marking on verbs (singular forms)

Chatino	Gloss	English
jyku^{r}	C.eat.ø	'he/she ate'
jyku^{232}	C.eat.2S	'you ate'
jyk**ǫ**^{31}	C.eat.1S	'I ate'

In contrast with the singular forms above, which consist of stem changes such as tone contrasts and nasalization of the stem vowel, the plural forms incorporate separate words. These consist of clitic subject markers that follow the bare stem. The first, second and third person plural forms are arguments as shown by their non co-ocurrence in the clause with the subject clitic: **=rą**^{r}**, =ba**^{r}**, =(7)ų**^{r}, and **=ne7**^{r}.

Table 3.5: Person marking on verbs (plural forms)

Chatino	Gloss	English
jyku^{r}=**rą**^{r}	C.eat=1PLIN	'we ate'
jyku^{r}=**ba**^{3}	C.eat=1PLEX	'we ate'
jyku^{r}=**(7)ų**^{r}	C.eat=2P	'you all ate'
jyku^{r}=**ne7**^{r}	C.eat=3P	'they ate'

The following table 3.6 summarizes subject person marking for Teotepec Chatino:

Table 3.6: Subject marking on verbs

3S	2S	1S	1PLIN	1PLEX	2PL	3PL
stem	stem	stem	stem	stem	stem	stem
original tone	changed tone	changed tone +nasalized V	+ rą^{r}	+ ba^{3}	+ 7ų^{r}	+ ne7^{r}

Third person singular forms do not take any subject marking on the verb. The same is true of all the plural forms. These forms show subject agreement through the incorporation of pronominal markers. As mentioned above, the first person singular form may exhibit nasalization on the vowel if it is not already nasalized and there is usually a tone contrast between the second and third persons.

The following table 3.7 shows the pronominal markers for Teotepec Chatino:[2]

Table 3.7: Pronominal markers for Teotepec Chatino

Person	Singular	Plural
3 human	ø	ne7^{r} ~ rę7^{r}
3 animal	7ni^{r}	7ni^{r}
3 inanimate	na^{13}	na^{13}
2	tone contrast	(7)ų^{r}
1	nasal vowel	rą^{r} (1PLIN) & ba^{3} (1PLEX)

The person marking system in Chatino distinguishes between inclusive and exclusive 1st person plural referents. These two forms are obligatorily marked with subject pronoun-clitics (in boldface below) and have distinct functions in how they index an addressee. The exclusive form contrasts with the inclusive to refer to a first person role where the speaker and addressee are both included e.g. 1PLIN, 'we' = [me (others) and you] and 1PLEX, 'we' = [me and others but not you]. Consider the examples in the following table:

Table 3.8: First person plural inclusive and exclusive verb forms

Chatino	Gloss	English
ku^{r}=**ba**^{3}	P.eat=1PLEX	'we will eat' - [all of us, not you]
ku^{r}=**rą**^{r}	P.eat=1PLIN	'we will eat' - [all of us and you]
yą^{3}=**ba**^{3}	C.go=1PLEX	'we went' - [all of us, not you]
yą^{3}=**rą**^{r}	C.go=1PLIN	'we went' - [all of us and you]

The figure below shows verb inflection for Teotepec Chatino:

$$\textit{Vinfl} = \text{ASP} + \text{stem } (+\text{PERS})$$

[2]This table was adapted from Rasch (2002)

Table 3.9 below outlines some of the tone patterns for 3rd person singular verbs and their tone sets in the four aspects. Presented in the four columns are the four aspects of Chatino verbs with the corresponding tone set for each verb represented. This grouping reflects the complexity of the morphology and root tone for each aspect. The completive and potential aspects both have different morphology. The habitual and progressive aspects have almost identical forms and the potential and habitual aspects have almost identical tone sets. Because the verbs presented are all in the third person this grouping demonstrates different tone sets for what can be considered the base tone for the verbal roots.[3]

Table 3.9: 3rd person singular tone patterns and Sets for all aspects

Completive	Set	Potential	Set	Habitual	Set	Progressive	Set	Gloss
jykwi7^{r}	A	tykwi7^{r}	A	ntykwi7^{r}	A	ntykwi7^{21}	I	'to speak'
md7ą^{r}	A	ty7ą^{r}	A	nd7ą^{r}	A	nd7ą^{21}	I	'to walk'
yku^{r}	A	ku^{r}	A	ntyku^{r}	A	ntyku^{21}	I	'to eat'
y7o^{34}	C	k7o$^{2(+0)}$	J	nd7yo$^{2(+0)}$	J	nd7o^{34}	C	'to drink'
yoo^{34}	C	koo$^{2(+0)}$	J	ndyo$^{2(+0)}$	J	ndyo^{34}	C	'to grind'
mskwa^{34}	C	xkwa^{r}	A	nskwa^{r}	A	nkwa^{13}	F	'to lie down'
mdy7o^{31}	E	ty7o$^{1(+0)}$	H	ndy7o$^{1(+0)}$	H	ndy7o^{31}	E	'to leave'
ms7ya^{31}	E	x7ya$^{1(+0)}$	H	ns7ya$^{1(+0)}$	H	ns7ya^{31}	E	'to yell'
mt7i^{31}	E	k7i$^{1(+0)}$	H	nd7i$^{1(+0)}$	H	nd7i^{31}	E	'to toast'
mdaa^{31}	E	ta$^{1(+0)}$	H	nda$^{1(+0)}$	H	nda^{31}	E	'to give'
mkǫ7^{31}	E	jykǫ7^{20}	-	ntykǫ7^{20}	-	ntykǫ7^{13}	F	'to hit'
ynǫ^{31}	E	jynǫ^{20}	-	ynǫ^{20}	-	jynǫ^{31}	E	'to stay'
yna^{13}	F	kna$^{2(+0)}$	J	na^{2}	J	na$^{2(+0)}$	J	'to cry'
ms7yu^{13}	F	s7yu$^{1(+0)}$	H	ns7yu$^{1(+0)}$	H	ns7yu^{13}	F	'to cut'
mkwa^{13}	F	kwa$^{2(+0)}$	J	ntkwa$^{2(+0)}$	J	ntkwa^{13}	F	'to sweep'
yja7^{13}	F	kja7^{31}	E	lja7$^{2(+0)}$	J	lja7^{31}	E	'to sleep'
m7nii^{3}	G	k7ni^{2}	B	7ni^{2}	B	y7ni^{21}	I	'to do/make'
mjy7ą^{3}	G	jy7ą^{3}	G	ntjy7ą^{3}	G	ntjy7ą^{21}	I	'to wash'
mn7ą^{3}	G	ny7ą$^{2(+0)}$	J	n7ą$^{2(+0)}$	J	n7ą^{3}	G	'to see'
mdya$^{2(+0)}$	J	tya$^{2(+0)}$	J	ndya$^{2(+0)}$	J	ndya$^{2(+0)}$	J	'to go'

[3]Tone class /20/ does not correlate to a tone set based on the work of Cruz, H. and Woodbury (2005) but it is cognate to the tone /40/ in SJQ Chatino.

The two tables below outline some of the tone patterns on potential and completive aspect verbs. In the first table, third person singular verbs are marked with tones /r/, /2/, /3/, /$1^{(+0)}$/, and /$2^{(+0)}$/. The second person singular forms have the tones /3/ and /$1^{(+0)}$/. First person singular verbs are marked with tones /20/, /r/, /$1^{(+0)}$/ and /$2^{(+0)}$/. One could predict that when the root tone for the 3rd person singular is from tone sets A, G, H or J we get tone /3/ - set G, for 2nd person singular. Because the tone for 1st person is a little irregular it is more difficult to predict based on the tone of the 3rd person singular root; this will have to be marked in the lexicon.

Table 3.10: Tone patterns on potential aspect verbs

3s Tone Set	3s	2s	1s
A	r	3	20, $1^{(+0)}$
A	r	3	r
B	2	$1^{(+0)}$	20, $1^{(+0)}$
G	3	3	$2^{(+0)}$
H	$1^{(+0)}$	3	r
J	$2^{(+0)}$	3	$1^{(+0)}$
J	$2^{(+0)}$	3	$2^{(+0)}$

In the following table, third person singular verbs are marked with tones /r/, /2/, /34/, /31/, /13/, /3/ and /$2^{+(0)}$/. The second person singular forms have the tones /3/, /21/ and /31/. First person singular verbs are marked with tones /20/, /31/, /$2^{+(0)}$/, /$1^{(+0)}$/, /21/, /23/, /3/ and /r/.

Table 3.11: Tone patterns on completive aspect on verbs

3s Tone Set	3s	2s	1s
A	r	3	20, 31, $2^{(+0)}$, $1^{(+0)}$
A	r	21	21
B	2	31	20
C	34	31	20, 31
E	31	21	31, 23, 20, $1^{(+0)}$
F	13	3	r
F	13	31	20, 31
G	3	21	r, 3, 31, 1^{+0}, $2^{(+0)}$, 21
J	$2^{(+0)}$	21	$2^{(+0)}$

Based on the above table it may be possible to predict that when the root tone for the 3rd person singular is from tone sets B, C, and F we get tone /31/ - set E, for 2nd person singular. Or if the 3rd person singular form is from tone sets A, E, and G we get tone /21/ - set I, for 2nd person singular. Also if we get set A or F in 3rd person singular we can find tone /3/ - set G. It appears that, as likewise noted for the potential aspect, the tone for the completive 1st person is pretty irregular. Thus is would be difficult to predict the tone of the 1st person based on the tone of the 3rd person singular root; this will also have to be marked in the lexicon.

3.3 Components of the noun phrase

This section presents the different possible combinations of noun phrases. The discussion begins with a presentation of the nouns which are divided into two categories: pronouns and lexical nouns. The section on pronouns discusses the independent pronouns and the demonstrative adjectives. The discussion of lexical nouns covers the difference between alienably and inalienably possessed nouns, the nominalizer nu^r, noun phrases that function as third person pronouns, and numerals.

3.3.1 Independent pronouns

Independent pronouns can precede or follow the verb and they can follow the grammatical category they modify. All of these pronouns can occur as subject pronouns, and the third person singular pronoun can also occur as a direct or indirect object pronoun. Lastly, these pronouns may also occur in constructions with alienably possessed nouns.

As noted earlier, subject marking on singular verbs is generally realized through tone contrast for all second person and for some first person forms. If one wants to emphasize the subject in the singular forms, personal pronouns can be incorporated in the VP but it is not required.

The following table 3.12 presents a paradigm of the independent person pronouns of Teotepec Chatino:

Table 3.12: Independent person pronouns of Teotepec Chatino

3S	2S	1S	1PLIN	1PLEX	2PL	3PL
nu^r-kwa^{13}	7wę^r ∼ 7mi^r	na7^3	naa^r	ba^3-re7^{34}	7ų^r	ne7^r

As noted in §3.2.5 the person marking system in Chatino distinguishes between inclusive and exclusive first person plural referents. The first person plural inclusive and exclusive forms can both be marked by independent pronouns before the verb (optional) and clitics after the verb (obligatory). Below in table 3.13 we see the same verbs as noted above in table 3.8 however, with independent pronouns (in boldface) preceding the verb.

Table 3.13: First person plural inclusive and exclusive verb forms

Chatino	Gloss	English
ba^{3}-re7^{34} ku^{r}=ba^{3}	1PLEX.PRO P.eat=1PLEX	'we will eat' - all of us, not you
naa^{r} ku^{r}=rą^{r}	1PLIN.PRO P.eat=1PLIN	'we will eat' - all of us
ba^{3}-re7^{34} yą^{3}=ba^{3}	1PLEX.PRO C.go=1PLEX	'we went' - all of us, not you
naa^{r} yą^{3}=rą^{r}	1PLIN.PRO C.go=1PLIN	'we went' - all of us

Thus it is considered ungrammatical to say *ba^{3}-re7^{34} ku^{r}* 'we will eat' (without the clitic *ba^{3}* but you can say *7mi^{r} ku^{r}* 'you will eat'.

Table 3.14, below, outlines three kinds of markers for pronominal elements: Unmarked independent pronouns, clitic pronouns, and independent pronouns marked with the dative *7į^{r}* 'to/of'. *7iį^{r}* is important in Teotepec Chatino syntax, it indicates alienable possession and introduces pronominal objects, animate objects and indirect objects in relative clauses.[4] This marker is analyzed as a dative which refers to a general oblique case. Dative markers typically express indirect object relationships and a range of meanings similar to that covered by the preposition 'to' or 'of' in English.

Table 3.14: Pronouns for Teotepec Chatino

Element	**Unmarked**		**Marked (with 7į^{r} 'to')**
Pronoun	**Independent**	**Clitic**	**Independent**
3 PERS [-animate]	rą^{13}	ø; =rą^{13}	7į^{31} =rą^{13}
3 PERS [+animate -human]	7ni^{r}	ø	7į^{31} =7ni^{r}
3 PERS indef [+human]	rę7^{r} = ne7^{r} = ni^{r}	ø; =rę7^{r}	7į^{r} =rę7^{r}
3 PERS def [+human]	ø	ø; =yu^{r} ('him'), =ni^{r} ('respected person')	7į^{r} ø
2S PERS	7mi^{r} ∼ 7wę^{r}	=[Mid Tone]	7į^{232} (< 7į^{r} + Mid Tone)
1S PERS	na7^{3}	=[+Nasal] + [High Tone]	7yą^{31} (< 7į^{r} + na7^{3})
1PLIN	naa^{r}	=rą^{r}	7į^{r} =rą^{r}
1PLEX	ba^{3}-re7^{34}	=ba^{3}	7į^{r} =ba^{3}
2P PERS	7ų^{r}	=ų^{r}	7į^{r} =(7)ų^{r}

[4]The dative is discussed in §3.3.3 Lexical nouns, §3.5 Simple sentence constructions and §3.9.1 Relative clauses.

3.3.2 Demonstrative adjectives

There are three demonstrative pronouns in Teotepec Chatino. These pronouns occur following the noun they modify: re^{34} 'this', designates a proximal entity, kwa^{13} 'that', designates a distal entity and $kǫ7^{3}$ 'the previously mentioned', designates an entity already mentioned that is not present during the moment of discourse.

Below is a table of demonstrative adjectives with the following subject nouns: nu^{r} [+human] , 7ni^{r} [+animate -human], na^{34} [-animate - human]. To express 'this one' one would say nu^{r} re^{34}; to say 'this animal' one would say $7ni^{r}$ re^{34}, and in order to say 'this thing' one would say na^{34} $re^{0(34)}$, to express an inanimate non-human proximal entity. If one wants to say 'this dog' one would say $xni7^{34}$ $re^{0(34)}$.

Table 3.15: Demonstrative adjectives of Teotepec Chatino

Demonstratives:	re^{34} 'this'	kwa^{13} 'that'	$kǫ7^{3}$ 'previously mentioned'
human - nu^{r}	nu^{r} re^{34}	nu^{r} kwa^{13}	nu^{r} kǫ7^{3}
animal - $7ni^{r}$	7ni^{r} re^{34}	7ni^{r} kwa^{13}	7ni^{r} kǫ7^{3}
inanimate - na^{34}	na^{34} re$^{0(34)}$	na^{34} kwa$^{0(13)}$	na^{34} kǫ7^{3}

3.3.3 Lexical nouns

Lexical nouns in Teotepec Chatino present an opposition between inalienable and alienable possessed nouns. Cross linguistically this is attested in North American, Pacific and Russian languages (Nichols, 1988). It is almost a linguistic universal according to Nichols (1988) that the inalienable set of nouns is a small closed tightly bound set of nouns whereas the alienable nouns are a large open set.

Inalienably possessed nouns

In Teotepec Chatino like in SJQ Chatino, inalienable nouns are a set of nouns which include internal and external body parts, nouns of excrement, kin terminology and other nouns considered intimately associated with the possessor; $ty7i^{31}$ 'your voice' and $ky7i^{31}$ 'your scent' (Cruz, E., 2007). These nouns are head marked. The pronominal possessor and possessum are fused together in a single element; $t7wǫ^{20}$ 'my mouth'. The tone of the 1s and 2s possessors are marked on the head of the possessive construction and in the 1s the vowel is nasalized. As noted below pronoun clitics disambiguate who the possessor is in the possessive relationship. For the third person singular the demonstrative adjective nu^{r}-kwa^{13} 'he/she' may also be used to disambiguate the possessive relationship. The pronoun

generally follows the possessed form of the noun in these constructions. For example, *sʔna*^{34} *nu*$^{31(r)}$-*kwa*$^{1(13)}$, 'his / her plate of food'. We can see that in this example the sandhi rules change the tone of the pronoun.

Based on the three tone groups represented in table 3.16, below – /r/, /34/ and /3/ – one can predict what the second person tone will be. If the 3S tone is /r/ the 2S will be /34/, if the 3S form is /34/ the 2S will be /31/ and lastly, there is one example where if the 3S form is /3/ the 2S is /232/. Generally speaking the tone for the 1S is a mid-high ascending tone /20/. This doesn't appear to change given the tone of the nominal root.

Table 3.16: Person marking on inalienable nouns

3S	2S	1S	1PLIN	1PLEX	2PL	3PL	*xniʔ*^{34} 'dog'
t7wa^{r}	t7wa^{34}	t7wą^{20}	t7wa^{r} rą^{r}	t7wa^{r} ba^{3}	t7wa^{r} (7)ų^{r}	t7wa^{r} ne7^{r}	t7wa^{r} xni7^{34}
'his/her mouth'	'your mouth'	'my mouth'	'our mouth'	'our mouth'	'your mouth'	'their mouth'	'dog's mouth'
l7ya^{r}	l7ya^{34}	l7yą^{20}	l7ya^{r} rą^{r}	l7ya^{r} ba^{3}	l7ya^{r} (7)ų^{r}	l7ya^{r} ne7^{r}	l7ya^{r} xni7^{34}
'his/her tooth'	'your tooth'	'my tooth'	'our tooth'	'our tooth'	'your tooth'	'their tooth'	'dog's tooth'
skǫ^{34}	skǫ^{31}	skǫ^{20}	skǫ^{34} rą^{r}	skǫ^{34} ba^{3}	skǫ^{34} (7)ų^{r}	skǫ^{34} ne7^{r}	skǫ^{34} xni7$^{0(34)}$
'his/her arm'	'your arm'	'my arm'	'our arm'	'our arm'	'your arm'	'their arm'	'dog's arm'
ty7i^{34}	ty7i^{31}	ty7į^{20}	ty7i^{34} rą^{r}	ty7i^{34} ba^{3}	ty7i^{34} (7)ų^{r}	ty7i^{34} ne7^{r}	ty7i^{34} xni7$^{0(34)}$
'his/her voice'	'your voice'	'my voice'	'our voice'	'our voice'	'your voice'	'their voice'	'dog's voice'
ky7i^{34}	ky7i^{31}	ky7į^{20}	ky7i^{34} rą^{r}	ky7i^{34} ba^{3}	ky7i^{34} (7)ų^{r}	ky7i^{34} ne7^{r}	ky7i^{34} xni7$^{0(34)}$
'his/her scent'	'your scent'	'my scent'	'our scent'	'our scent'	'your scent'	'their scent'	'dog's scent'
xnyi^{3}	xnyi^{232}	xnyį^{20}	xnyi^{3} rą^{r}	xnyi^{3} ba^{3}	xnyi^{3} (7)ų^{r}	xnyi^{3} ne7^{r}	xnyi^{3} xni7^{34}
'his/her reflection'	'your reflection'	'my reflection'	'our reflection'	'our reflection'	'your reflection'	'their reflection'	'dog's reflection'
snye7^{r}	snye7^{34}	snyę7^{20}	snye7^{r} rą^{r}	snye7^{r} ba^{3}	snye7^{r} (7)ų^{r}	snye7^{r} ne7^{r}	snye7^{r} xni7^{34}
'his/her child'	'your child'	'my child'	'our child'	'our child'	'your child'	'their child'	'dog's child'
ste7^{r}	ste7^{34}	stę7^{20}	ste7^{r} rą^{r}	ste7^{r} ba^{3}	ste7^{r} (7)ų^{r}	ste7^{r} ne7^{r}	ste7^{r} xni7^{34}
'his/her clothes'	'your clothes'	'my clothes'	'our clothes'	'our clothes'	'your clothes'	'their clothes'	'dog's clothes'
s7na^{34}	s7na^{31}	s7ną^{20}	s7na^{34} rą^{r}	s7na^{34} ba^{3}	s7na^{34} (7)ų^{r}	s7na^{34} ne7^{r}	s7na^{34} xni7$^{0(34)}$
'his/her plate'	'your plate'	'my plate'	'our plate'	'our plate'	'your plate'	'their plate'	'dog's plate'
s7wa^{34}	s7wa^{31}	s7wą^{20}	s7wa^{34} rą^{r}	s7wa^{34} ba^{3}	s7wa^{34} (7)ų^{r}	s7wa^{34} ne7^{r}	s7wa^{34} xni7$^{0(34)}$
'his/her load'	'your load'	'my load'	'our load'	'our load'	'your load'	'their load'	'dog's load'

Alienably possessed nouns

Alienably possessed nouns are a large class of nouns. This possessive relationship is identified with the dative particle *ʔį*^{r} 'of'. For the singular forms this is expressed with the dative and the independent 1SG pronoun fused together - *ʔį*^{r} 'dative' + *naʔ*^{3} '1S' = *ʔyǫ*^{31}. The plural forms are expressed with the dative *ʔį*^{r} and the independent pronouns separately - 7į^{r} 'dative' + nu$^{2(r)}$-kwa^{13} '3S' and 7į^{r} 'dative' + 7mi^{r} '2S' (Table 3.14 above). It is not unusual to find a dative marker acting as a possessive marker since the possessor can be analyzed as a recipient.

Table 3.17: Dative markers for alienably possessed nouns of Teotepec Chatino

3S	2S	1S	1PLIN	1PLEX	2PL	3PL
7i^{31} (nu^{r}-kwa^{13})	7i^{3} (7mi^{r})	7yą^{31} (na7^{3})	7i^{31} naa^{r}	7i^{31} ba^{3}-re7^{34}	7i^{31} 7u^{r}	7i^{31} ne7^{r}

The following table shows how speakers may use the personal pronoun for 3S to disambiguate the referent. Likewise, a person's name may be given to identify the possessor. This same strategy of personal pronoun use can occur with 1S and 2S persons in order to provide particular emphasis and/or clarify who the speaker is indexing. If one wants to use a full NP then one could say; *xni7*^{34} *7in*^{31} *jwa*^{13}*na*^{r} 'Juana's dog' *lit.* 'dog of Juana'.

Table 3.18: Person marking on alienable nouns

3S	jyka^{r}-xlya^{r} 7i^{31} nu$^{2(r)}$-kwa$^{1(13)}$ stick-castilla of 3S 'his/her chair'	n7ą^{r} 7i^{31} nu$^{2(r)}$-kwa$^{1(13)}$ house of 3S 'his/her house'	xni7^{34} 7i^{31} nu$^{2(r)}$-kwa$^{1(13)}$ dog of 3S 'his/her dog'
2S	jyka^{r}-xlya^{r} 7i^{34} (7mi$^{2(r)}$) stick-castilla of 2S 'your chair'	n7ą^{r} 7i^{34} (7mi$^{2(r)}$) house of 2S 'your house'	xni7^{34} 7i$^{0(34)}$ (7mi$^{2(r)}$) dog of 2S 'your dog'
1S	jyka^{r}-xlya^{r} 7yą^{31} (na7^{3}) stick-castilla of 1S 'my chair'	n7ą^{r} 7yą^{31} (na7^{3}) house of 1S 'my house'	xni7^{34} 7yą^{31} (na7^{3}) dog of 1S 'my dog'
1PLIN	jyka^{r}-xlya^{r} 7i^{31} naa$^{2(r)}$ stick-castilla of 1PLIN 'our chair'	n7ą^{r} 7i^{31} naa$^{2(r)}$ house of 1PLIN 'our house'	xni7^{34} 7i^{31} naa$^{2(r)}$ dog of 1PLIN 'our dog'
1PLEX	jyka^{r}-xlya^{r} 7i^{31} ba^{3} stick-castilla of 1PLEX 'our chair'	n7ą^{r} 7i^{31} ba^{3} house of 1PLEX 'our house'	xni7^{34} 7i^{31} ba^{3} dog of 1PLEX 'our dog'
2PL	jyka^{r}-xlya^{r} 7i^{31} (7)u^{r} stick-castilla of 2PL 'you all's chair'	n7ą^{r} 7i^{31} (7)u^{r} house of 2PL 'you all's house'	xni7^{34} 7i^{31} (7)u^{r} dog of 2PL 'you all's dog'
3PL	jyka^{r}-xlya^{r} 7i^{31} ne7$^{2(r)}$ stick-castilla of 3PL 'their chair'	n7ą^{r} 7i^{31} ne7$^{2(r)}$ house of 3PL 'their house'	xni7^{34} 7i^{31} ne7$^{2(r)}$ dog of 3PL 'their dog'

Noted above are the different sandhi changes that occur given the different forms. Both tones /31/ and /34$^{(+0)}$/ are sources and recipients of sandhi. Tone /34$^{(+0)}$/ goes to tone /0/ after tones /34$^{(+0)}$/, /31/, /13$^{(+0)}$/, /1$^{(+0)}$/ and /2$^{(+0)}$/. Tone /31/ goes to tone /13/ after tone /31/ and goes to tone /13/ after /2$^{(+0)}$/ (cf. Table 2.48 and Appendix B).

The following table 3.19 outlines the different mechanisms of possessive constructions in Teotepec Chatino:

Table 3.19: Inalienable and alienable possession mechanisms

Persons	**Inalienable**	**Alienable**
3S	N + bare stem	N + 7i^{31} *or* 7i^{31} + nu^{r}-kwa^{13}
2S	N + tone contrast	N + 7i^{34} *or* 7i^{34} + 7mi^{r}
1S	N + tone contrast + nasalization	N + 7ya^{31}
1PLIN	N + (no person marking) + =ra^{r}	N + 7i^{31} =ra^{r}
1PLEX	N + (no person marking) + =ba^{3}	N + 7i^{31} =ba^{3}
2PL	N + (no person marking) + =(7)u^{r}	N + 7i^{31} =(7)u^{r}
3PL	N + (no person marking) + =ne7^{r}	N + 7i^{31} =ne7^{r}

Alternately, Alienable = N + 'marked' PRO (+NP possessor) possessum (or: DAT PRO)

3.3.4 Nominalizer *nu^{r}*

The light noun stem *nu^{r}* may serve as a head to adjectives and nouns. The examples below from the text *'la mano de metate'* present occurrences of this noun stem functioning as a nominalizer preceding both nouns and adjectives.

(3.12) *lo7^{13}* ***nu^{r}*** *jn7a^{31}* *ka7^{3}* *jwi^{r}* *7i^{r}* *ni^{r}* *ja^{r}* *s7i$^{2(+0)}$* *cha7^{13}* *ka7^{3}*
and NOM woman there C.SAY to 3S.RP no cause that there
'and the woman said to her,"it isn't for that" ' (00:01:57.770 - 00:02:02.760)

(3.13) *jykwi7^{r}* *ni^{r}* *7o^{31}* ***nu^{r}*** *xwe^{r}-ti^{r}* *ka7^{3}* *mde^{21}* *jyka$^{2(r)}$*
C.SPEAK 3S.RP with NOM little-just(children) that C.CARRY wood
'she told the children who carried the wood...' (00:02:44.780 - 00:02:50.230)

(3.14) *lo7^{13}* ***nu^{r}*** *jy7yu^{31}* *nu^{r}-kwla^{r}* *la^{r}* *ka7^{3},* *ka7^{3}* *nu^{r}* *msnyi^{r}* *ni^{r}*
and NOM man NOM-elder more there, there REL C.GRAB 3S.RP
nu^{r}-nga^{3} *tso7^{2}* *ka^{3}*
then, side left
'and the man, the largest (eldest) grabbed the left side.' (00:04:40.900 - 00:04:49.480)

In examples (3.12) and (3.14), *nu^{r}* precedes the nouns *jn7a^{31}* 'woman' and *jy7yu^{31}* 'man'. In these examples *nu^{r}* appears to function as a way to make the subject more definite, indexing subjects already mentioned in the discourse. In examples (3.13) and (3.14) this particle precedes the adjectives, *xwe^{r}-ti^{r}* and *kwla^{r}* respectively, appearing to index while nominalizing both the adjective phrase 'little ones/children' and the adjective 'elder'.

3.3.5 Third person pronoun-like phrases

In addition to the independent pronouns presented in §3.3.1, Teotepec Chatino has a productive third person noun phrase construction. This form gives information about the referent such as gender, number, age, and spatial location. Included below are noun phrases with the light noun *nu^{r}* and the pronoun *ne7^{r}*. As noted above, *nu^{r}* creates a more definite subject, it indexes a specific individual who has a given characteristic. *ne7^{r}*, on the other hand, identifies a person more generally, e.g., nu^{r} 'the one who...' and ne7^{r} 'person who...'.

Table 3.20: Third person pronoun-like phrases

nu^{r} jn7ą^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (the/that one who is female)
ne7^{r} jn7ą^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (the/that female person)
nu^{r} xwe^{r} (re^{34}, kwa^{13}, ką7^{3})	'he/she' (the/that one who is childish)
ne7^{r} xwe^{r} (re^{34}, kwa^{13}, ką7^{3})	'he/she' (the/that child)
nu^{r} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he/she' (the/that one who is childish/small)
ne7^{r} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he/she' (the/that child)
nu^{r} j7yu^{31} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he' (the/that one who is childish/small)
ne7^{r} j7yu^{31} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he' (the/that boy)
nu^{r} nj7^{31} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (the/that one who is childish/small)
ne7^{r} jn7ą^{31} lyo7^{13}-ti$^{31(2(+0))}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (the/that girl)
nu^{r} j7yu^{31} xwe$^{2(r)}$ (re^{34}, kwa^{13}, ką7^{3})	'he' (this/the/that one who is a boy)
ne7^{r} j7yu^{31} xwe$^{2(r)}$ (re^{34}, kwa^{13}, ką7^{3})	'he' (this/the/that boy)
nu^{r} jn7ą^{31} xwe$^{2(r)}$ (re^{34}, kwa^{13}, ką7^{3})	'she' (this/the/that one who is a girl)
ne7^{r} jn7ą^{31} xwe$^{2(r)}$ (re^{34}, kwa^{13}, ką7^{3})	'she' (this/the/that girl)
nu^{r} re^{34}, kwa^{13}, ką7^{3}	'this' (he/she, that one)
ne7^{r} re^{34}, kwa^{13}, ką7^{3}	'this' (he/she, that person)
yu^{r} j7yu^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he' (this/that one who is male)
ne7^{r} j7yu^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'he' (this/that man)
nu^{r} jn7ą^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (this/that one who is female)
ne7^{r} jn7ą^{31} (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (this/that female)
nu^{r} kwla^{r} (re^{34}, kwa^{13}, ką7^{3})	'he/she' (this/that one who is elder)
ne7^{r} kwla^{r} (re^{34}, kwa^{13}, ką7^{3})	'he/she' (this/that elder)
nu^{r} jn7ą^{31} kwla$^{2(r)}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (this/that one female who is elder)
ne7^{r} jn7ą^{31}-kwla$^{2(r)}$ (re$^{0(34)}$, kwa$^{0(13)}$, ką7^{3})	'she' (this/that female elder)

3.3.6 Numerals

The Chatino number system like many other Meso-American languages is vigesimal (Campbell, L. et al., 1986). In this system the number twenty serves as a base that forms numbers from 20 to 100. In the numbers eleven to fourteen and sixteen to nineteen there are examples that demonstrate a system based on the numbers 10 and 15 (Campbell, E. and E. Cruz, 2009). In these cases the numbers are formed with ten or fifteen + primary number (i.e. 1, 2, 3 etc.). See below:

Table 3.21: Numerals 01 - 20 of Teotepec Chatino

ska^{r}	'one'	ti$^{2(+0)}$ xka^{2}	'eleven'
tkwa$^{2(+0)}$	'two'	ti$^{2(+0)}$ tykwa$^{1(+0)}$	'twelve'
sna$^{2(+0)}$	'three'	ti$^{2(+0)}$ xna$^{1(+0)}$	'thirteen'
ja^{r}-kwa^{r}	'four'	ti$^{2(+0)}$ jykwa^{2}	'fourteen'
k7yu$^{2(+0)}$	'five'	tj7yǫ$^{2(+0)}$	'fifteen'
skwa$^{2(+0)}$	'six'	tj7yǫ$^{2(+0)}$ xka^{2}	'sixteen'
k(w)ti$^{2(+0)}$	'seven'	tj7yǫ$^{2(+0)}$ tykwa$^{1(+0)}$	'seventeen'
sno7^{r}	'eight'	tj7yǫ$^{2(+0)}$ xna$^{1(+0)}$	'eighteen'
kaa$^{2(+0)}$	'nine'	tj7yǫ$^{2(+0)}$ jykwa^{2}	'nineteen'
tii$^{2(+0)}$	'ten'	kla$^{2(+0)}$	'twenty'

In the above examples we can see the process of palatalization of the initial consonants for the primary numbers 1 - 4 and 6 - 9 in the constructions for 11 - 14 and 16 - 19 respectively. This palatalization signifies 'another'. As we can see in the number eleven we have, *ti*$^{2(+0)}$ *xka*^{3} - which literally means 'ten + another one' = 'eleven'. The same strategy is used for *tj7yǫ*$^{2(+0)}$ *xka*^{3} 'fifteen + another one' = 'sixteen'.

Table 3.22: Numerals 20 - 39 of Teotepec Chatino

kla$^{2(+0)}$	'twenty'	kla$^{2(+0)}$ kyi^{34}	'thirty'
kla$^{2(+0)}$ ntkwa^{2} ska^{r}	'twenty one'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} ska^{r}	'thirty one'
kla$^{2(+0)}$ ntkwa^{2} tkwa^{r}	'twenty two'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} tkwa^{r}	'thirty two'
kla$^{2(+0)}$ ntkwa^{2} sna^{r}	'twenty three'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} sna^{r}	'thirty three'
kla$^{2(+0)}$ ntkwa^{2} ja^{2}-kwa^{2}	'twenty four'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} ja^{2}-kwa^{2}	'thirty four'
kla$^{2(+0)}$ m7yu^{r}	'twenty five'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} k7yu^{r}	'thirty five'
kla$^{2(+0)}$ ntkwa^{2} skwa^{r}	'twenty six'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} skwa^{r}	'thirty six'
kla$^{2(+0)}$ ntkwa^{2} k(w)ti^{r}	'twenty seven'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} k(w)ti^{r}	'thirty seven'
kla$^{2(+0)}$ ntkwa^{2} sno7^{r}	'twenty eight'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} sno7^{2}	'thirty eight'
kla$^{2(+0)}$ ntkwa^{2} kaa^{r}	'twenty nine'	kla$^{2(+0)}$ kyi^{34} 7wi^{31} kaa^{r}	'thirty nine'

Above, the numbers 21 to 29 utilize the existential verb *ntkwa*^{2} 'seated', for numbers that count to thirty. From numbers 31 to 40 we can see how a different process is utilized with the predicate in the habitual aspect *(ns)7wi*^{r} 'exists' to count higher numbers.

Below we have the set of numbers 40 to 59. Here we can see the use of the vigesimal system in the number forty with *tkwa*$^{2(+0)}$ *yla*$^{2(+0)}$ 'two twenties'. The number fifty is composed of the compound *t7wa*$^{2(+0)}$ 'forty' + kyi$^{1+(0)}$ 'ten' = fifty. In the other eastern Chatino varieties of San Juan Quiahije and Yaitepec *t7wa*$^{2(+0)}$ 'forty' is used to express forty, however Teotepec Chatino this form only appears in the number fifty. (Campbell, E. and E. Cruz, 2009; Rasch, 2002).

Table 3.23: Numerals 40 - 59 of Teotepec Chatino

tkwa$^{2(+0)}$ yla$^{2(+0)}$	'forty'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$	'fifty'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} ska^{2}	'forty one'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} ska^{2}	'fifty one'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tkwa^{r}	'forty two'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} tkwa^{r}	'fifty two'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} sna^{r}	'forty three'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} sna^{r}	'fifty three'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} ja^{2}-kwa^{2}	'forty four'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} ja^{2}-kwa^{2}	'fifty four'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} k7yu^{r}	'forty five'	t7wa$^{2(+0)}$ 7wi^{31} k7yu^{r}	'fifty five'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} skwa^{r}	'forty six'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} skwa^{r}	'fifty six'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} k(w)ti^{r}	'forty seven'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} k(w)ti^{r}	'fifty seven'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} sno7^{2}	'forty eight'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} sno7^{2}	'fifty eight'
tkwa$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} kaa^{r}	'forty nine'	t7wa$^{2(+0)}$ kyi$^{1+(0)}$ 7wi^{31} kaa^{r}	'fifty nine'

Below we can see that the number sixty is composed of *sna*$^{2(+0)}$ *yla*$^{2(+0)}$, 'three twenties'. The numbers 70 - 79 employ the use of the predicate *(ns)7wi*^{r} 'exists' as used in the numbers for counting above 29. Additionally, as noted for the numbers 10 - 19 we have the use of the number ten plus a primary number with the initial palatalized consonant. Thus we get - 'three twenties 'exists/has' ten + palatal consonant on number (1)' - *sna*$^{2(+0)}$ *yla*$^{2(+0)}$ *7wi*^{31} *tii*$^{2(+0)}$ *xka*^{r} = 'seventy-one' .

Table 3.24: Numerals 60 - 79 of Teotepec Chatino

sna$^{2(+0)}$ yla$^{2(+0)}$	'sixty'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tii^{r}	'seventy'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} ska^{2}	'sixty one'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tii^{r} xka^{2}	'seventy one'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tkwa^{r}	'sixty two'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tii^{r} tykwa^{2}	'seventy two'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} sna^{r}	'sixty three'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tii^{r} xna^{2}	'seventy three'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} ja^{2}-kwa^{2}	'sixty four'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} tii$^{r)}$ jykwa^{2}	'seventy four'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} k7yu^{r}	'sixty five'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} t7yǫ^{r}	'seventy five'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} skwa^{r}	'sixty six'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} t7yǫ^{r} xka^{2}	'seventy six'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} k(w)ti^{r}	'sixty seven'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} t7yǫ^{r} tykwa^{2}	'seventy seven'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} sno7^{2}	'sixty eight'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} t7yǫ^{r} xna^{2}	'seventy eight'
sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} kaa^{r}	'sixty nine'	sna$^{2(+0)}$ yla$^{2(+0)}$ 7wi^{31} t7yǫ^{r}jykwa^{2}	'seventy nine'

In this final set of numbers, below, we can see the vigesimal strategy for eighty - *ja*^{2}*-kwa*^{r} *yla*$^{2(+0)}$ 'four twenties'. The numbers 90 to 99 are expressed with the strategy noted above for the groups 11 to 19 and 70 to 79. This employs the use of the base vigesimal system with the ten and fifteen number systems added to make larger units.

Table 3.25: Numerals 80 - 99 of Teotepec Chatino

ja^{2}-kwa^{r} yla^{r}	'eighty'	ja^{2}-kwa^{r} yla$^{2(+0)}$ 7wi^{31} tii^{r}	'ninety'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} ska^{2}	'eighty one'	ja^{2}-kwa^{r} yla$^{2(+0)}$ 7wi^{31} tii^{r} xka^{2}	'ninety one'
ja^{2}-kwa^{r} yla$^{2(+0)}$ 7wi^{31} tkwa^{r}	'eighty two'	ja^{2}-kwa^{r} yla$^{2(+0)}$ 7wi^{31} tii^{r} tykwa^{2}	'ninety two'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} sna^{r}	'eighty three'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} tii^{r} xna^{2}	'ninety three'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} ja^{2}-kwa^{2}	'eighty four'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} tii^{r} ykwa^{2}	'ninety four'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} k7yu^{r}	'eighty five'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} t7yǫ^{r}	'ninety five'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} skwa^{r}	'eighty six'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} t7yǫ^{r} xka^{2}	'ninety six'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} k(w)ti^{r}	'eighty seven'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} t7yǫ^{r} tykwa^{2}	'ninety seven'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} sno7^{2}	'eighty eight'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} t7yǫ^{r} xna^{2}	'ninety eight'
ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} kaa^{r}	'eighty nine'	ja^{2}-kwa^{r} yla$^{2(+0)}$7wi^{31} t7yǫ^{r}ykwa^{2}	'ninety nine'

The following are the numbers for one-hundred and above:

Table 3.26: Numerals 100 and above of Teotepec Chatino

ska^{r} syę-to^{13}	'one-hundred'	ska^{r} mi$^{2(+0)}$	' one-thousand'
tkwa$^{2(+0)}$ syę-to^{13}	'two-hundred'	tkwa$^{2(+0)}$ mi$^{2(+0)}$	'two-thousand'
sna$^{2(+0)}$ syę-to^{13}	'three-hundred'	sna$^{2(+0)}$ mi$^{2(+0)}$	'three-thousand'
ja^{2}-kwa^{r} syę-to^{13}	'four-hundred'	ja^{2}-kwa^{r} mi$^{2(+0)}$	'three-thousand'
k7yu$^{2(+0)}$ syę-to^{13}	'five-hundred'	k7yu$^{2(+0)}$ mi$^{2(+0)}$	'five-thousand'
skwa$^{2(+0)}$ syę-to^{13}	'six-hundred'	skwa$^{2(+0)}$ mi$^{2(+0)}$	'six-thousand'
k(w)ti$^{2(+0)}$ syę-to^{13}	'seven-hundred'	k(w)ti$^{2(+0)}$ mi$^{2(+0)}$	seven-thousand'
sno7^{r} syę-to^{13}	'eight-hundred'	sno7^{r} mi$^{2(+0)}$	'eight-thousand'
kaa$^{2(+0)}$ syę-to^{13}	'nine-hundred'	kaa$^{2(+0)}$ mi$^{2(+0)}$	'nine-thousand'

With the productive use of the vigesimal pattern described for the first ninety-nine numerals one might expect to encounter *k7yu*$^{2(+0)}$ *yla*$^{2(+0)}$ 'five twenties' - for one-hundred. Indeed this is the way Chatino speakers would have historically expressed the number one-hundred however, people have incorporated the spanish loan word *ciento syę-to*^{13} to say 'one-hundred'. Likewise, the number for 'thousand' *mi*$^{2(+0)}$ is a Spanish loan word.

To create larger numbers, the strategy used for the numbers 1 - 99 is simply combined with numbers *syę-to*$^{13(+0)}$ and *mi*$^{2(+0)}$ with the use of the predicate *(ns)7wi*^{r} 'exists'. For example, to express the number 465 one would say:

(3.15) *ja*^{2}*-kwa*^{r} *syę-to*$^{13(+0)}$ ***7wi***^{31} *sna*$^{2(+0)}$ *yla*$^{2(+0)}$ ***7wi***^{31} *k7yu*$^{2(+0)}$
four hundred H.exist three twenty H.exist five
'four-hundred and sixty five'

I have encountered one piece of evidence for the use of *kʔyu*$^{2(+0)}$ *yla*$^{2(+0)}$ 'five twenties' to express 100. It is used when counting by *'almud'*, an old Spanish volume measure for dry goods such as grains, measured with a *jicara* (SP) 'gourd', which measures 2 kilograms. When speakers get to 100 they say, *kʔyu*$^{2(+0)}$ *yla*$^{2(+0)}$ 'five twenties'.

3.3.7 Attributive adjectives

Below are examples of attributive adjectives. Their order is head - modifier. In the following examples we can see how the adjectives follow the nouns that they modify.

(3.16) *ndaa*^{r} ***tnyǫ***^{r}
beans spicy
'spicy beans' (elicited)

(3.17) *slyɻ́*^{20} ***xɛ***^{3}
underwear.1S wide
'loose underwear' (elicited)

(3.18) *pan*^{3}*-ta*^{2}*-lon*^{3} ***xɛ***^{3}
pants wide
'loose pants' (elicited)

The following show adjectives in more complex constructions. The same pattern of head - modifier is also found here. In (3.19) we can see that the demonstrative *kwa*^{13} can come between the noun and the adjective. Example (3.20) shows a verb phrase construction with a modified noun.

(3.19) *jyka*^{r} *sne*^{13} *kwa*$^{0(13)}$ ***kwla***^{r} *rǫ*^{r}
tree *ceiba* DEM old OBJ/DEM
'that old *ceiba* tree' (elicited)

(3.20) *tsa*^{232} *jychɛ*^{r}***-kwla***^{r}
PR.go.2S village-old
'you are going to Teotepec' - *lit.* 'old-town' (elicited)

3.3.8 Compound nouns

Teotepec Chatino has lexical compounding that can occur with noun headed and verb headed compounds. Below are two different nominal compound constructions: noun + noun and noun + adjective. In the following constructions the modifier comes after the head noun. This modifier can be an alienably possessed or inalienably possessed noun or an adjective. These noun compounds have the same sandhi rules as in the phrase level. The following sections outline these two types of nominal compound constructions.

3.3.9 Noun + noun compounds

Below are noun + noun compounds. Some of the nouns in these constructions are inalienably possessed (cf.§3.3.3 lexical nouns), so that either one or both of the nouns may be possessed in this manner. There are also constructions where only the modifier, the noun in second position, is inalienably possessed and other constructions consist of two nouns juxtaposed.

Table 3.27: Noun + noun compounds

Chatino	Gloss	English
ne7^{r}-pi^{2}	person-turkey	'foreigner/gringo'
ne7^{r}-chi^{2}-ya7^{2}	person-mexico	'Mexican'
ne7^{r}-tą^{21}	person-lard	'Mestizo'
ne7^{r}-xa7^{13}	person-valley	'valley person'
ne7^{r}-cha7^{13}-tnyo^{31}	person-word-work	'Chatino'
ne7^{r}-nkwa^{2} kyii^{31}	people-seated-grass	'locals'
ne7^{r}-j7o^{31}	person-doctor	'doctor'
ne7^{r}-yta^{31}	person-outside	'outsider'
cha7^{13}-x7ą$^{31(2(+0))}$	word-problem	'curse word'
cha7^{13}-slya^{r}	word-Castilla, *'Castellano'* (SP)	'Castilian'
ty7a^{r}-skwe^{3}	water-egg	'egg white'
ty7a^{r}-sye7^{13}	water-(?)	'saliva'
yni^{3}-ya7^{34}	(its).neck-(its).hand	'wrist'
te7$^{2(+0)}$-yjchą7^{r}	cloth-(its).hair	'blanket'
kye^{2}-n7ą^{r}	head-house	'roof'
n7ą^{r}-kii7^{r}	house-fire	'kitchen'
n7ą^{r}-xkla^{23}	house-school	'school'
n7ą^{r}-tykǫ^{34}	house-iron	'jail'
tyoo^{r}-kyee^{r}	rain-rock	'hail'
ti^{13}-skwe^{r}	(its).rope-(its).egg	'prostate'
jyka^{r}-skwe^{r}	stick-egg	'penis'

3.3.10 *la*^{r} and *to*^{13} + noun compounds

There are two groups of noun compounds that are headed by the words: *la*^{r} and *to*^{13}. The meaning of *la*^{r} may come from proto-Zapotecan *koːla* 'old' as Kaufman (1993) notes with the reconstruction of *koːla kwettzi* 'old buzzard'. Given the reduction in syllable structure in Teotepec Chatino, *koːla* may have been reduced to *la*^{r} for these types of constructions.

Table 3.28: *la*^{r} headed compounds

la^{r}-kwso7^{3}	'turkey'
la^{r}-k7na^{2}	'crocodile'
la^{r}-k7ya^{2}	'eagle'
la^{r}-xu^{2}	'buzzard'
la^{r}-s7yu^{2}	'buzzard' (another type)
la^{r}-kye^{2}	'rooster'
la^{r}-sne^{31}	'toad'
la^{r}-x7ą^{2}	'devil'
la^{r}-skwa^{r}	'mask'

la^{r} could be an adjective that doesn't fit the contemporary syntax, *[mod-N] modifier preceding the head. *la*^{r} could refer to small animals and/or birds however, 'devil' and 'mask' fall outside of this category. Thus it could be that it simply means 'creature'. The *la*^{r} headed compounds do seem in some sense grotesque. However, it makes more sense if the overall grouping including devil and mask is categorized as [+animate, -human]. The word for elephant in SJQ Chatino has a similar construction - *la*^{4} *nse*^{14} however, in Teotepec Chatino the head for this lexeme is *li*^{2}; *li*^{2} *nse*^{r} 'elephant'.

On the following page there is a list of *to*^{13} headed noun compounds. If we consider Kaufman's reconstruction of 'hole' from proto-Zapotecan the head of the following *to*^{13} headed noun compounds appears to come from the second syllable of this form ke**ːʔ.tyu**, 'hole'.

There are two examples in the database of words that appear to have a similar kind of meaning: *to7*^{13} *la*^{r} 'center (of town)' and *to7*^{13} *n7ą*$^{31(r)}$ 'door' (center of house). The first lexeme of these compounds does have the same tone as the *to*^{13} headed compounds however it is closed by the glottal stop *to7*^{13}. If we consider the form of the word for *tu7wa* 'mouth' in Tataltepec Chatino, one could argue that these examples come from a compound of 'mouth of' which would account for the glottal stop. Center of town and center of house could be loosely translated to mean 'mouth of house' or 'mouth of town'. These examples appear to identify a particular opening or entrance where the *to*^{13} compounds appear to identify a type of cavity.

Table 3.29: to^{13} headed compounds

to^{13}-ską^{3}	'ear canal'
to^{13}-syę7$^{31(r)}$	'nostril'
to^{13}-yni^{3}	'throat'
to^{13}-ky7i$^{0(34)}$	'chest cavity'
to^{13}-skǫ$^{0(34)}$	'arm pit'
to^{13}-kjį^{3}	'pocket'
to^{13}-lja$^{31(r)}$ ndǫ$^{2(r)}$	'space between the legs'
to^{13}-kye$^{31(r)}$	'cave'
to^{13}-tna$^{31(r)}$	'window'
to^{13}-ti^{2}	'creek'
to^{13}-yuu$^{31(r)}$	'hole' (in the earth)
to^{13}-nską^{2}-n7ą^{r}	'corner' (internal)

3.3.11 Noun + adjective compounds

The following examples are analyzed as compound words because of their idiomatic or single lexical item meanings however, they do not otherwise differ from the productive noun + adjective NP's.

Table 3.30: Noun + adjective - compounds

Chatino	gloss	English
ja^{r}-slya^{r}	tortilla-castilian	'bread' *'tortilla-castilla'*(SP)
jyka^{r}-xlya^{r}	stick-saddle	'chair'
ne7^{r}-kwla^{r}	person-elder	'elder'
ne7^{r}-kna^{34}	person-robbery	'thief'
ne7^{r}-ndyo7^{r}	person-crazy	'loony/goofy'
xni7^{34}-kne7^{31}	dog-young	'puppy'
nu^{r}-jy7yu^{31}	NOM-man	'macho'

Below are the basic morphological rules for Nouns and NP's in Teotepec Chatino:

Table 3.31: Morphological rules for nouns in Teotepec Chatino

	Nominal head type	+	Modifying lexeme
N *infl* →	N *stem*	+	PERS
N →	N *stem*	+	N *stem*
N →	N *infl*	+	N *infl*
N →	N *stem*	+	N *infl*
N →	N	+	ADJ

This table shows specific examples of the morphological rules for Nouns and NP's:

N *infl* →	N *stem*	+	PERS	CHAT & English
(1)	t7wa	+	-n^{20}	t7wą^{20}
	mouth	+	POSS.1S.INAL	'my mouth'
N →	N *stem*	+	N *stem*	
(2)	ne7^{r}	+	pi^{2}	ne7^{r}-pi^{2}
	'people'	+	'turkey'	'gringo/foreigner'
N →	N *infl*	+	N *infl*	
(3)	yni^{3}	+	ya7^{34}	yni^{3}-ya7^{34}
	'(its).neck'	+	'(its).hand'	'wrist'
N →	N *stem*	+	N *infl*	
(4)	xni7^{34}	+	7yą^{31}	xni7^{34} 7yą^{31}
	dog	+	POSS.1S.AL	'my dog'
N →	N	+	ADJ	
(5)	cha7^{13}	+	s7we^{13}	cha7^{13}-s7we^{13}
	word/thing	+	good	'good word/thing'

In (1) we can see how the inalienably possessed noun is inflected for 1S with the tone /20/ and the nasal vowel, (2) shows a compound noun construction with two uninflected noun stems, (3) shows a compound with two inflected noun stems, (4) has an example of an alienably possessed noun with the dative inflected for 1S, and (5) shows a compound with a noun root and an adjective modifying the noun. As noted in the preceding sections all of these morphological processes are quite productive in Teotepec Chatino.

The following table outlines the basic ordering of noun phrases for Teotepec Chatino:

Table 3.32: Noun phrase rules for Teotepec Chatino

NP → N (N) (DEM) (ADJ) (DEM)

3.4 Syntax - ordering of constituents in the clause *expressions of verb + subject*

This section outlines the different simple verbal constructions in Teotepec Chatino. In intransitive clauses the least marked most common pattern is [VS], however it is possible to have the order S[V] as well. The following discussion will begin with basic and move to more complex constructions.

3.4.1 Verb

This section will review the discussion about morphological person marking on verbs outlined in §3.2.5. For first and second person verb constructions the subject is marked directly on the verb. The first person verb has a nasalized vowel and a tone change from that of the third person stem. The second person singular is marked with a tone change only. The third person is not marked and has the base tone for a given verbal root. Thus the only way to tell the 2s from the 3s is by a tone contrast.

(3.21) *jykwį̃ʔ*^{31}
C.speak.**1s**
'I spoke.' (elicited)

(3.22) *jykwiʔ*^{232}
C.speak.**2s**
'You spoke.' (elicited)

(3.23) *jykwiʔ*^{r}
C.speak
'He/she spoke.' (elicited)

For the plural persons, the subject is obligatorily marked following the verb with a pronoun clitic. The tone of the verb is that of the 3s verbal root.

(3.24) *jykwiʔ*^{r}*=**rą̲***^{r}
C.speak=1PLIN
'We spoke.' (elicited)

(3.25) *jykwiʔ*^{r}*=**ba***^{3}
C.speak=1PLEX
'We spoke.' (elicited)

3.4.2 Verb + NP subject

The other unmarked verb construction is when the overt NP subject directly follows the verb. This can be a full noun phrase (3.27) or a lexical noun (3.26). The examples below are from the text, *'la mano de metate'*.

(3.26) *xa*^{31} *mtykǫ*^{r} ***dyose***^{23} *7ị*^{r} *rẹ7*^{r}
when C.collect god to him
'When god collected him...' (00:00:30.940 - 00:00:32.200)

(3.27) *md7o*^{31} ***nu***^{r} ***-jn7ą***^{31} *ką7*^{3} *yą*$^{2(+0)}$ *7o*^{31} *snye7*$^{2(r)}$ *ką7*^{3} *lo7*^{13}
C.leave NOM-woman there C.come.(here=base) with child there and
'The woman left and came with her child.' (00:04:00.520 - 00:04:07.300)

3.4.3 Verb + pronoun

This construction is used less frequently in the language. In the example below the 3S independent pronoun *nu*^{r}*-kwa*^{13} follows the verb.

(3.28) *jykwi7*^{r} ***nu***^{r} ***-kwa***^{13}
C.speak PRO.3S
'He/she spoke.' (elicited)

In the above example (3.28) the verb is unmarked and thus the pronoun identifies the subject of the clause. The other independent pronouns and pronoun clitics for 3PL, 2PL, 1PLIN & 1PLEX may also occupy this position. However, the independent pronouns and pronoun clitics may not occupy the same slot at the same time. The following examples illustrate how this works with 2S verbs.

(3.29) *jykwi7*^{r} ***7mi***^{r}
C.speak PRO.2S
'You spoke.' (elicited)

(3.30) ***7mi***^{r} *jykwi7*^{232}
PRO.2S C.speak.2S
'You spoke.' (elicited)

(3.31) **jykwi7*^{232} ***7mi***^{r}
C.speak.2s PRO.2S
'You spoke.' (elicited)

In example (3.29) the subject is marked with the independent pronoun *ʔmiʳ* 'you', (3.30) shows the verb marked with the 2S subject on the verb with the tone clitic /232/. Example (3.31) shows that the tone clitic and the independent pronoun cannot be in the same position. When the verb is marked with the second person singular tone clitic /232/ and the second person singular pronoun *ʔmiʳ* following the verb root the clause is ungrammatical because these both occupy the [S] position at the same time. Following Bresnan and McHombo (1987), "In anaphoric agreement, the verbal affix is an incorporated pronominal argument of the verb, and the coreferential NP has a non-argument function—either as an adjunct to the pronominal argument, or as a topic or focus of the clause or discourse structure." Keeping in line with the [VSO] order of the language the subject marker is inside the clause when it follows the verb and is extracted as an adjunct when it is fronted outside the clause, S [V_ (O)]. In example (3.30) we can see how the pronoun is still permitted before the verb when the verb is marked with the 2S tone clitic.

3.4.4 NP + verb

The following are other examples where the subject precedes the verb. This construction is not common in texts, in that it deviates from the most common least marked word order of [VSO]. Typically when the [S] precedes the verb in Teotepec Chatino it is being emphasized and is a word order used for topicalization or focus. Continuing with the discussion from §3.4.3, above, we can see how examples (3.32) to (3.35) have an NP that precedes the verb. In examples (3.32) and (3.33) the subject is marked with both the NP that precedes the verb and the corresponding tone clitic on the verb.

(3.32) *naʔʳ* *yjɻaʔ*^{31}
PRO.1S C.sleep.1S
'I slept.' (elicited)

(3.33) *ʔmiʳ* *jyla*^{232} *bra*^{3} *waʔ*^{34} *skwa*$^{31(2(+0))}$
PRO.2S P.arrive.(here/there=base).2S hour ADV six
'You will arrive at six o'clock.' (elicited)

(3.34) *nuʳ-kwa*^{13} *jykwiʔ*$^{31(r)}$
PRO.3S C.speak
'He/she spoke.' (elicited)

(3.35) *jwa*^{13}*naʳ* *mskwa*$^{0(34)}$*-tyʔa*$^{2(r)}$
Juana C.lie-water
'Juana swam.' (elicited)

3.5 Simple sentence constructions

The least marked pattern for transitive clauses in Teotepec Chatino is VSO. The two other acceptable patterns for transitive clauses are S[V_O] and O[VS_]. In these orders the [S] and [O] are extracted as adjuncts to the clause. Word order and grammatical marking define the function of participants in an event. As noted above, in simple intransitive clauses, the position after the verb is typically filled with a subject. A direct object can occur in the second or third position following the verb. This depends on the grammatical category and the animacy of the object. If the object is pronominal or animate in can and in some cases must be introduced by the dative marker *ʔi^{r}*. If the objects are inanimate they are unmarked and occur directly after the verb (cf. table 3.14) .

3.5.1 Direct objects

(3.36) *jyku^{r}* *nda^{31}nye^{r}* *nsna^{23}*
C.eat Daniel apple
'Daniel ate an apple.' (elicited)

(3.37) *yjwiʔ^{34}* *jwa^{13}na^{r}* ***(ʔi^{r})*** *xniʔ$^{0(34)}$*
C.sell Juana (DAT) dog
'Juana sold the dog.' (elicited)

(3.38) *yjwiʔ^{34}* *jwa^{13}na^{r}* ***ʔi^{r}*** *nu^{2}* *jyʔyu$^{13(31)}$*
C.sell Juana DAT.3S NOM man
'Juana sold the man.' (elicited)

In the above examples we can see how in (3.36) the object is inanimate and does not require the dative marker *ʔi^{r}*. In (3.37) the object is animate and the dative marker is optional. In the last example, (3.38), we can see that the dative marker is required. Essentially, inanimates are unmarked, animate nonhumans are optionally marked, and humans are obligatorily marked. The order for these types of constructions is [VSO]. The subject can be fronted in all of the above examples; i.e *nda^{31}nye^{r}* [jyku^{r} _ nsna^{23}] 'Daniel ate an apple', which creates S[V_O] order.

Below we can see this construction with pronouns as direct objects.

(3.39) *mnʔa^{21}* ***ʔyą^{r}***
C.see.2S DAT.1S
'You saw me.' (elicited)

(3.40) *jykwiʔ^{r}* ***ʔi^{31}***
C.speak DAT.2S
'He/she spoke of you.' (elicited)

(3.41) *lo7*^{13} *nu*^{r} *jn7ɑ*^{31} *kɑ7*^{3} *jwɻ*^{r} ***7ɻ***^{r} *ni*^{r} *ja*^{r} *s7i*$^{2(+0)}$ *cha7*^{13} *kɑ7*^{3}
and NOM woman there C.say to 3S.RP "no NEG that there
'And the woman said to her,"it isn't for that. . ." '(00:01:57.770 - 00:02:03.310)

Example (3.39) is a construction with the dative marker for the 1s. In (3.40) we can see the use of the dative for the 2s and in the example (3.41), from the text *'la mano de metate'*, we can see how the pronoun *ni*^{r} is preceded by the dative marker as well.

3.5.2 Indirect objects

In indirect constructions beneficiaries/recipients are marked with the dative *7ɻ*^{r} just like animate direct objects. Because of this, when there are animate objects and indirect objects the two are distinguished by word order, where the direct object always precedes the indirect object.

(3.42) *yjwi7*^{34} *jwa*^{13}*na*^{r} *nsna*^{23} *7ɻ*^{31} *ne7*^{r}*-jn7ɑ*$^{13(31)}$
C.sell Juana apples DAT person-woman
'Juana sold apples to the woman.' (elicited)

(3.43) *yjwi7*^{34} *jwa*^{13}*na*^{r} ***(7ɻ***$^{2(r)}$***)*** *nu*$^{r(2)}$*-jy7yu*$^{13(31)}$ *7ɻ*$^{13(31)}$ *ne7*^{r}*-jn7ɑ*$^{13(31)}$
C.sell Juana (DAT) NOM-man DAT person-woman
'Juana sold the man to the woman.' (elicited)

Above are two examples where the verb takes a third argument. In these constructions this argument is marked with the dative *7ɻ*^{r}. In example (3.42) we can see that the direct object doesn't require the dative because it is an inanimate object. However in (3.43) we can see the use of the dative for both the direct object and the recipient. It is interesting to note that in this construction the dative that marks the direct object is optional. This shows that the dative marking is optional with human direct objects only when there is an indirect object as well. The sentence has the same reading with or without this marker.

3.5.3 Relational nouns and like constructions

In Teotepec Chatino, like other Meso-American languages, spatial location relative to the object is expressed through inalienably possessed noun constructions. Relational nouns are the head and their NP "possessors" are their explicit complements. Relational nouns are inalienably possessed nouns and therefore take person marking. These nouns derive mostly from body part terms which function as spatial referents. Because these function as locational complements within the sentence they are considered locational noun phrases. Below is an example from the text *'la mano de metate'*:

(3.44) *ykwa7^{r}* *n7ɻ^{r}* *chǫ7^{3}* *re^{34}*
swamp PG.exist (at)back.of(it) here
'A swamp that is here in back of (Teotepec).' (00:00:06.300 - 00:00:08.730)

The above example serves to illustrate the use of the relational noun chǫ7^{3} '(at)back.of(it)', as it is expressed in the text. In this example we can see how the relational NP functions as a locational complement within the sentence. Below is a list of a few elicited examples that demonstrate some of the different relational nouns and like constructions in Teotepec Chatino. The following examples all include the prepositions in parenthesis because of how the whole relational NP functions as a locational complement within the sentence.

Table 3.33: Relational nouns in Teotepec Chatino

Noun	Literal meaning	Spatial reference	Example phrase	Gloss
ni7^{13}	'intestines'	(at) inside of	ni7^{13} ny7ą$^{31(r)}$	'inside the house'
t7wa^{3}	'mouth'	(at) edge of	t7wa^{3} n7ą^{r}	'the edge of the house'
si7^{r}	'rib'	(at) side of	si7^{r} n7ą^{r}	'the side of the house
chǫ7^{3}	'back'	(at) back of	chǫ7^{3} n7ą$^{2(r)}$	'behind of the house'
ke^{3}	'head'	(at) head of	ke^{3} jy7nyą^{3}	'head of the bead' ('headboard')
lja^{r}	'space'	(at) space of	to^{13} lja$^{31(r)}$ ndǫ$^{2(r)}$	'space (between) of the legs'
jya7^{r}	'foot'	(at) foot of	jya7^{r} jy7nyą^{3}	'foot of the bed'
jya7^{r}	'foot'	(at) foot of	jya7^{r} n7ą^{r}	'foundation of the house'
ya7^{34}	'hand'	(at) hand of	ya7^{34} n7ą$^{31(r)}$	'doorknob/lock'

Laminalization to express - 'interior'

Teotepec Chatino utilizes a derivational morphological process of laminalization to create locational nouns that refer spatially to the interior. As noted by Campbell, E. and E. Cruz (2009), this form may have come from a historical prefix 'li'. Below are a few examples of nouns that refer to buildings, earth and other closed spaces that undergo this process to express interior.

Table 3.34: Laminalization of nouns - *'interior of':*

Chatino	English	laminalized form	Gloss
n7ą^{r}	'house'	ny7ą$^{31(r)}$	'(in) the house' interior
yuu^{r}	'earth'	lyuu^{r}	'(in) the earth' interior
l7o^{34}	'corral'	ly7o^{34}	'(in) the corral/graveyard' interior

3.5.4 Adverbs

Adverbs often occur before the verb they modify. They can be separated from the verb with *ʔa*^{31}, a post-ADV/post-ADJ modifier. This modifier is used as an intensifier and in the examples below translates to 'very'.

(3.45) *ndla*^{13} *(ʔa*^{31}*)* *ntykuʳ*
quickly INTS H.eat
'He/she eats (very) quickly.' (elicited)

(3.46) *tyaʔʳ* *(ʔa*^{31}*)* *ntykuʳ*
slowly INTS H.eat
'He/she eats (very) slowly.' (elicited)

(3.47) **??ntykuʳ* *tyaʔʳ* *(ʔa*^{31}*)*
H.eat slowly INTS
'He/she eats (very) slowly.' (elicited)

The example 3.47 receives mixed responses. The adverb appears to prefer the pre-verbal position.

The lexemes *tyaʔʳ* 'slow' and *ndla*^{13} 'fast' have different syntactic heads weather they modify nouns or verbs. It may be that some adjective roots have two lexemes, and adjective lexeme and an adverb lexeme. In the following examples nouns are modified by what look like the same heads as above. Consider the following elicited examples:

(3.48) *tyaʔʳ* *(ʔa*^{31}*)* *tiʔ*^{34} *ntɛ*$^{31(2(+0))}$
slow INTS ESN people
'Person who is late/person who is slow.' (elicited)

(3.49) *ntɛ*$^{2(+0)}$ *tyaʔ*$^{2(r)}$ *(ʔa*^{31}*)* *tiʔ*^{34}
people slow INTS ESN
'Person who is (very) slow.' (elicited)

(3.50) *ndla*^{31} *(ʔa*^{31}*)* *tiʔ*^{34} *ntɛ*$^{31(2(+0))}$
fast INTS ESN people
'Person in a hurry/person who is fast.' (elicited)

(3.51) *ntɛ*$^{2(+0)}$ *ndla*^{31} *(ʔa*^{31}*)* *tiʔ*^{34}
people fast INTS ESN
'Person who is (very) fast.' (elicited)

In the above examples we can see that *tya7^{r}* 'slow' and 'fast' *ndla*^{13} can modify both nouns and verbs. When modifying nouns directly, they are adjectives, not adverbs unless you have a relative clause in which case the clause, not the adverb is the modifier. Changing the order where the verb precedes the modifier in the utterance changes the meaning to give a more adverbial reading, focusing on the manner in which something is done. When the noun follows the modifier, as we see in (3.48) and (3.50), the modifier is more adjectival. In these examples the modifier describes the person rather than the manner in which the person does things. For examples (3.48) to (3.51) to be grammatical the particle *ti7*^{34} 'essence' is required. These may be complex predicate constructions that consist of the adjective root plus the noun *ti7*^{34}.

3.5.5 Copula constructions with NP complements

The verb ka^{r} 'he/she is (being)' functions as a copular verb. This verb relates an entity to a characteristic. Like other verbs it carries aspect person marking and in these types of clauses generally occurs clause initially. In the following examples the meaning changes depending on the aspect.

Example (3.52), in the progressive aspect, gives the reading that the subject of the sentence is a teacher, while example (3.53), in the habitual aspect, gives the reading that the person is a substitute teacher. It appears that this is a more temporal state than that of the progressive aspect.

(3.52) *(nu-kwa*^{13}*)* *ka*^{r} *ska*^{r} *ne7*^{r}*-stro*^{23}
NOM-DEM.3S PR.be NUM/ART person-teacher
'He is a teacher.' (elicited)

(3.53) *(nu-kwa*^{13}*)* *ntyka*$^{2(+0)}$ *ne7*^{r}*-stro*^{23}
NOM-DEM.3S H.be person-teacher
'(He) is being a teacher' (acting as a teacher in someone's place) (elicited)

Examples (3.54) and (3.55) show the copula verb in the potential and completive aspects.

(3.54) *(nu-kwa*^{13}*)* *ka*$^{2(+0)}$ *ska*^{r} *ne7*^{r}*-stro*^{23}
NOM-DEM.3S P.be NUM/ART person-teacher
'He is going to be a teacher.' (elicited)

(3.55) *(nu-kwa*^{13}*)* *mkwa*^{34} *ne7*^{r}*-stro*^{23}
NOM-DEM.3S C.be person-teacher
'(He) was a teacher.' (elicited)

Examples (3.56) and (3.57) show the copula describing a characteristic that is closely associated with the essence of an individual.[5]

(3.56) *(nu-kwa^{13})* *ka^{r}* *nu^{r}* *jn7ą^{31}*
NOM-DEM.3S PR.be NOM woman
'She is a woman.' (elicited)

(3.57) *(nu-kwa^{13})* *ka$^{2(+0)}$* *nu$^{2(r)}$* *jn7ą^{31}*
NOM-DEM.3S P.be NOM woman
'She is going to be a woman.' (elicited)

In the next example we can see how one's trade is expressed with the habitual aspect.[6] It seems that this would be expected in (3.52) however in that example we get the progressive.

(3.58) *(nu-kwa^{13})* *ntyka$^{2(+0)}$* *la^{2}-skwa7^{3}*
NOM-DEM.3S H.be mask
'(He) is a mask maker.' (elicited)

The two following examples demonstrate how the subject can precede the copula verb placing the copula in second position.

(3.59) *jychę^{r}* *7ya^{34}-j7o$^{31(r)}$* *ka^{r}* *rą^{r}* *ska^{r}* *jychę^{r}* *tlyu^{13}*
village mountain-holy/saint PR.be OBJ ART village big
'Santa Lucía is a big town.'
('Santa Lucía Teotepec es un pueblo grande.')(SP) (elicited)

(3.60) *jychę^{r}* *7ya^{34}-j7o$^{31(r)}$* *ka$^{2(+0)}$* *rą$^{2(r)}$* *ska^{r}* *jychę^{r}* *tlyu^{13}*
village mountain-holy/saint P.be OBJ ART village big
'Santa Lucía is going to be a big town'
('Santa Lucía Teotepec va a ser un pueblo grande')(SP)(elicited)

[5]When ka^{r} 'he/she is being' is preceded by nu-kwa^{13} the tone changes to /31/ - ka^{31}. When ka$^{2(+0)}$ 'he/she will be' is preceded by nu-kwa^{13} the tone changes to /31/ - ka^{31}.

[6]Mask makers make masks for the Easter celebration that happens every year during *Semana Santa* 'holy week' - (the week that precedes Easter Sunday).

3.5.6 Non-verbal predicate adjectives

In predicate adjectives, the subject and adjective are juxtaposed with no overt copula. When there is no overt NP subject, the adjective takes person marking. When the NP subject is present, the subject directly precedes the adjective.

Predicate + [PERS]

Predicate adjectives are marked for person with nasalization, tone contrast, or with a pronoun clitic to function as predicates - noted below in examples (3.61), (3.62) and (3.63) respectively:

(3.61) *xtɋʔ*^{20}
short.1S
'I am short.' (elicited)

(3.62) *xtaʔ*^{34}
short.2S
'You are short.' (elicited)

(3.63) *xtaʔ*^{r} *=rɋ*^{r}
short=PLIN
'We are short.' (elicited)

Predicate + subject NP

In predicate adjectives that include a noun phrase subject, the adjective occurs directly following the NP as seen in the elicited example below:

(3.64) *xuʔ*^{34} *pe*^{3}*da*^{2}*sito*^{13} *jɻ*^{2}*-yaʔ*^{r} *xtaʔ*$^{1(+0)}$
mr. pedacito(sp) INTS short
'Mr. Pedacito (nickname) is really short.' *'Señor pedacito es bien chaparro'* (SP) (elicited)

3.5.7 Possessive predicates

The verbs *nʔɻ*^{r} 'lives/exists' and *sʔwi*^{r} 'exists' are used as possessive predicates. These predicates can take person and aspect marking. The following examples outline briefly how these function. This first example does not have an overt possessor argument.

(3.65) *nʔɻ*^{r} *sna*$^{31(2(+0))}$ *tʔa*^{r} *ngwla*^{31}
H.exist three relative brother/sister
'She has three brothers.' (elicited)

The following examples do have overt possessor arguments however rather than functioning as subjects they are indirect objects. The predicates of these constructions encode a possessed relationship . In all of these cases the dative, *ʔi*^{r} is used to add this argument. In the following examples with overt possessor arguments read more like: 'There exists three dogs to Juana', as seen below in (3.67).

(3.66) *nʔi*^{r} *sna*$^{31(2(+0))}$ *xniʔ*$^{0(34)}$ *ʔi*^{r} —
H.exist three dog DAT ø
'He/she has three dogs.' (elicited)

(3.67) *nʔi*^{r} *sna*$^{31(2(+0))}$ *xniʔ*$^{0(34)}$ *ʔi*$^{2(r)}$ *jwa*^{13}*na*^{r}
H.exist three dog DAT Juana
'Juana has three dogs.' (elicited)

(3.68) *sna*$^{2(+0)}$ *xniʔ*$^{0(34)}$ *nʔi*$^{2(r)}$ *ʔi*^{r} *jwa*^{13}*na*^{r}
NUM dog H.exist DAT Juana
'Juana has three dogs.' (elicited)

(3.69) *jwa*^{13}*na*^{r} *nʔi*$^{2(r)}$ *sna*$^{2(+0)}$ *xniʔ*$^{2(34)}$ *ʔi*^{r} —
Juana H.exist NUM dog DAT ø
'Juana has three dogs.' (elicited)

Xni7^{34} 'dog' is the direct object of 'exist' and jwa^{13}na^{r} 'Juana', the indirect object, is an *ʔi*^{r} complement. In the above examples the possessed direct object can follow or precede the predicate. The argument of the indirect object (overt possessor) can follow the direct object (possessum), the predicate, or it can be fronted preceding the predicate leaving the dative marker in situ as seen in (3.69).

The following orders are all ungrammatical:

*jwa^{13}na^{r} 7į^{31} n7į$^{31(r)}$ sna$^{2(+0)}$ xni7^{34}
*n7į$^{31(r)}$ jwa^{13}na^{r} 7į^{31} sna$^{2(+0)}$ xni7^{34}
*sna$^{2(+0)}$ xni7^{34} n7į$^{31(r)}$ jwa^{13}na^{r}7į^{31}
*sna$^{2(+0)}$ xni7^{34} n7į$^{31(r)}$ jwa^{13}na^{r}

The following example is from the text - *la mano de metate*. Likewise the possessor is marked with the dative *ʔi*^{r} however, in these examples the possessor is represented with the pronoun *ni*^{r} 'her/him'.

(3.70) *nʔi*^{r} *tkwa*$^{2(+0)}$ *yu*^{r}*-xwe*^{r}*-ti*^{34} *ʔi*^{31} ***ni***$^{2(r)}$ *tkwa*$^{2(+0)}$ *snyeʔ*^{r} ***ni***^{r} *mdʔi*^{r}
H.exist two man-little-just DAT her, two children her C.exist.
'She has two children, two children were born to her.' (00:00:58.560 - 00:01:02.190)

3.5.8 Locational predicates

Locational predicates consist of *nskwa*^{34} 'he/she lies', *ntkwa*$^{2(+0)}$ 'he/she sits' and *nʔi*^{r} 'he/she lives/exists'. The first two are positional verbs and the third is an existential. These verbs generally occur sentence initially and can take aspect and person marking. Consider the elicited examples below:

(3.71) ***nskwa***^{13} *ska*^{r} *na*$^{0(34)}$ *lo*^{r} *msa*^{23}
H.lie ART/NUM thing on table
'There is a thing on the table.' (elicited)

(3.72) *nde*^{34} ***ntkwa***$^{0(13)}$ *xlo*^{23} *ʔyą*^{31}
DEM H.sit hat POSS.1S
'Here is my hat.' (elicited)

(3.73) ***nʔi***^{r} *klyʔo*^{31}
H.exist wife
'His wife is present.' (elicited)

3.5.9 Existential predicates

The following section presents a few examples of how existential predicates function in Teotepec Chatino. As we saw with locational and possessive predicates the use of *nʔi*^{r} 'he/she exists/lives' and *ntkwa*$^{2(+0)}$ 'he/she sits' are utilized for existential predicates. Likewise as noted in §3.3.6, the predicates *sʔwi*^{r} 'he/she exists' and *ntkwa*$^{2(+0)}$ 'he/she sits' are utilized as existential predicates to form higher numbers.

(3.74) ***nʔi***^{r} *la*$^{1(+0)}$ *yja*$^{31(r)}$
H.exist more tortilla
'There are more tortillas.' (elicited)

(3.75) ***nsʔwi***^{r} *ntę*$^{2(+0)}$ *tykwiʔ*^{r} *chaʔ*^{13} *re*$^{31(r)}$
H.exist people P.speak word this
'There are people who talk about this.' (elicited)

(3.76) *kwa*^{13} ***ntkwa***$^{31(2(+0))}$ *ska*^{r} *jnyi*^{34}
DEM H.sit one bird
'Over there, is a bird.' (elicited)

3.6 Interrogation and negation

3.6.1 Negation

Negation in Teotepec Chatino makes use of two strategies. The particles *ja*^{r} and *sʔi*$^{2(+0)}$ communicate negation. *ja*^{r} is used for sentential negation and *sʔi*$^{2(+0)}$ is used for constituent negation. These words can occur phrase initially or preceding the element that is negated. The following examples are affirmative sentences followed by the same clause negated.

Sentential negation:

(3.77) *jyku*^{r} *jo*^{r} *se*^{31}
C.eat Jose
'Jose ate.' (elicited)

(3.78) ***ja***^{r} *jyku*^{r} *jo*^{r} *se*^{31}
NEG C.eat Jose
'Jose didn't eat.' (elicited)

(3.79) *jyku*^{r} *kna*^{r} *jo*^{r} *se*^{31} *ja*$^{2(r)}$*-slya*^{r}
C.eat hidden Jose tortilla-castilla
'Jose ate the bread while hiding.'
'Jose comió el pan a escondidas.'(SP) (elicited)

(3.80) ***ja***^{r} *jyku*^{r} *kna*^{r} *jo*^{r} *se*^{31} *ja*$^{2(r)}$*-slya*^{r}
NEG C.eat hidden Jose tortilla-castilla
'Jose didn't eat the bread while hiding.'
'Jose no comió el pan a escondidas.'(SP) (elicited)

Sentential negation with existentials:

(3.81) *nsʔwi*^{r} *sna*^{r} *xwa*^{13}
H.exist huaraches Juan
'Juan has huaraches. (SP)' (elicited)

(3.82) ***ja***^{r} *nsʔwi*^{r} *sna*^{r} *xwa*^{13}
NEG H.exist huaraches Juan
'Juan doesn't have huaraches. (SP)' (elicited)

(3.83) *nʔɻ*^{r} *ska*^{r} *ntɕ*$^{2(+0)}$ *re*^{34}
H.live NUM people DEM
'A person lives here.' (elicited)

(3.84) ***ja***^{r} $n7ị^{r}$ ska^{r} $nt\varrho^{2(+0)}$ re^{34}
NEG H.live NUM people DEM
'A person doesn't live here.' (elicited)

(3.85) ***ja***^{r} $ns7wi^{r}$ $knya7^{31}$
NEG H.exist deer
'There are no deer.' (elicited)

(3.86) ***ja***^{r} $ns7wi^{r}$ $knya7^{31}$ $re^{0(+34)}$
NEG H.exist deer DEM
'There are no deer here.' (elicited)

Constituent negation

The following example shows how $s7i^{2(+0)}$ is used for constituent negation. This strategy negates a single element without negating the entire clause resulting in a construction similar to a cleft in English. $s7i^{2(+0)}$ occurs preceding the element that it negates:

(3.87) ***s7i***$^{2(+0)}$ $knya7^{31}$ ka^{r} nu^{r} $mn7\varrho^{21}$
NEG deer PG.be REL C.see.2S
'You did not see a deer.' (elicited)

(3.88) $*ja^{r}$ $knya7^{31}$ ka^{r} nu^{r} $mn7\varrho^{21}$
NEG deer PG.be REL C.see.2S
'You did not see a deer.' (elicited)

The last example is ungrammatical because of the use of the sentential negative particle ja^{r} in place of the constituent negative particle $s7i^{2(+0)}$. The $s7i^{2(+0)}$ form behaves like a verb taking an argument where the participant is being negated.

3.6.2 Interrogative constructions

Interrogative constructions are of two kinds in Teotepec Chatino. The first is polar negation with the interrogative clitic $a^{2(+0)}$. This clitic is clause final. The second consists of content interrogative lexemes that usually appear clause initially. These two types will be outlined in the following sections.

Polar interrogatives

Polar interrogatives are formed with the use of the interrogative clitic $a^{2(+0)}$. This clitic follows the verb, which results in a change of intonation and often what appears to be an elongation of the vowel for the verbal lexemes that have the low central vowel [a]. These forms can occur in interrogatives by themselves or with the sentential negation particle, ja^{r} 'no' at the beginning of the question.

(3.89) *jykwi7*^{232}=***a***$^{31(2(+0))}$
C.speak.2S=IP
'You spoke?' (elicited)

(3.90) *jykwi7*^{232} *7o*^{13} *nu-kwa*$^{0(13)}$=***a***$^{31(2(+0))}$
C.speak.2S CONJ NOM-DEM.3S=IP
'You spoke to him?' (elicited)

(3.91) *ta*^{20} *jykwi7*^{232} *7o*^{13}=***a***$^{31(2(+0))}$
IP C.speak.2S CONJ=IP
'What, you spoke to him?' (elicited)

(3.92) *tykwi7*^{r} *7o*^{13}=***a***$^{31(2(+0))}$
P.speak.2S CONJ=IP
'You will speak to him?' (elicited)

(3.93) *xkwa*^{232}=***a***$^{31(2(+0))}$
P.lie.down.2S=IP
'You're going to lie down?' (elicited)

(3.94) *tsa*^{232}=***a***$^{31(2(+0))}$
P.go.(there≠base.)2S=IP
'You're going to leave?' (elicited)

The following interrogative clauses can begin with the sentential negation lexeme - ja^{r} 'no'. This construction incorporates the use of the $a^{2(+0)}$ particle as noted in the preceding section above. These types of interrogative constructions are considered a polite form of asking a question or making a type of suggestion.[7]

(3.95) ***ja***^{r} *ku*^{31}*-(yja*$^{2(r)}$*)*=***a***$^{31(2(+0))}$
NEG P.eat.2S-tortilla=IP
'You're not going to eat?' (elicited)

[7]In the first example below, the use of $yja^{2(r)}$ 'tortilla', in the verb phrase; ku^{31}-(yja$^{2(r)}$) 'to eat tortilla', is optional. This compound construction has become lexicalized to signify - 'to eat'.

(3.96) ***ja***^{r} $k7o^{2(+0)}$ $kafe^{23}$=***a***$^{31(2(+0))}$
NEG P.drink.2S coffee=IP
'You're not going to drink coffee?' (elicited)

(3.97) ***ja***^{r} tsa^{232}=***a***$^{31(2(+0))}$
NEG P.go.2S=IP
'You're not going to go?' (elicited)

(3.98) ***ja***^{r} $x7i^{21(+0)}$ ja^{r}-$jyt\varrho7^{r}$=***a***$^{31(2(+0))}$
NEG P.buy.2S tamale=IP
'You're not going to buy tamales?' (elicited)

(3.99) ***ja***^{r} $kjwi7^{232}$ la^{r}-$kwso7^{3}$ kwa^{13} $7\tilde{i}^{r}$=***a***$^{31(2(+0))}$
NEG P.sell.2S turkey DEM POSS.2S=IP
'You're not going to sell that turkey?' (elicited)

Content interrogatives

The second strategy for forming questions in Teotepec Chatino is with the use of interrogative lexemes to form content questions. The content interrogative lexemes below, in all cases but one, are compounds in that they are comprised of two otherwise independently functioning lexemes. Depending on the context and subject the content interrogatives are compounded with the light noun[8] nu^{r}, the lexeme for inanimate objects na^{13}, the temporal adverb xa^{31}, or the complementizer $cha7^{13}$. The word for 'where' $la^{1(+0)}$ is optionally a reduplication set 'place/where'. Below are the main content interrogatives:

Table 3.35: Interrogative lexemes for Teotepec Chatino

kwi^{r}-nu^{r}	'who/which'	kwi^{r}-na^{13}	'what'
ni^{2}-xa^{31}	'when'	ni^{2}-na^{13}	'which thing'
ni^{2}-cha7^{13}	'why'	la$^{1(+0)}$(la$^{1(+0)}$)	'where'

kwi^{r}-nu^{r} - 'who?/which?'

Beginning with the basic single predicate clause (3.100), we can see how in example (3.101) kwi^{2} 'which' is used as an independent interrogative. In example (3.102) the light noun nu^{r} is compounded with the interrogative lexeme to indicate the unknown animate possessor argument; 'whose'. Example (3.103) is an answer to this line of questioning. These last two examples use the dative marker $7\tilde{i}^{r}$ 'of' for the possessed argument kto^{3} 'chicken'.

[8]The light noun nu^{r} is also explained in §3.3.5 - Third person pronoun-like phrases and §3.9.1 - Relative clauses.

(3.100) *mnʔɻ*^{3} *me*^{r}*lo*^{31} *ska*^{r} *kto*^{3} *ka*^{13}
C.see Carmelo ART/NUM chicken yesterday
'Carmelo saw a chicken yesterday.' (elicited)

(3.101) ***kwi***^{2} *kto*^{3} *mnʔɻ*^{3} *me*^{r}*lo*^{31} *ka*$^{0(13)}$
IP chicken C.see Carmelo yesterday
'Which chicken did Carmelo see yesterday?' (elicited)

(3.102) ***kwi***^{2}***-nu***^{r} *ʔɻ*^{31} *kto*^{3} *mnʔɻ*^{3} *me*^{r}*lo*^{31} *ka*$^{0(13)}$
IP-NOM POSS chicken C.see Carmelo yesterday
'Whose chicken did Carmelo see yesterday?' (elicited)

(3.103) *kto*^{3} *ʔɻ*^{31} *jwa*^{r}*na*$^{31}{}_{i}$ *ka*^{r} *ʔɻ*^{r}*-ø*$_{i}$
chicken POSS Juana$_{i}$ P.be RN= 3$_{i}$
'The chicken is Juana's'. (elicited)

kwi^{2}***-na***^{13} ***- 'what?'***

The following examples (3.104) - (3.107) use the inanimate nominal argument *na*^{13} 'thing', to form a compound with the interrogative *kwi*^{2}. The use of the noun for inanimate objects identifies an unknown subject of an interrogative construction when compounded with the content interrogative lexeme allomorphs *kwi*^{2} ∼ *ni*^{13} 'what'.

(3.104) ***kwi***^{2}***-na***^{13} *ʔya*^{31} *niʔ*$^{0(34)}$ *kjɻ*^{3} *kwa*^{31}
IP-thing PG.carry.2S in bag DEM
'What are you carrying in the bag?' (elicited)

(3.105) ***kwi***^{2}***-na***^{13} *(s)ʔwi*^{31} *niʔ*$^{0(34)}$ *kjɻ*^{3} *kwa*^{31} *ʔɻ*^{31}
IP-thing PG.exist in bag DEM POSS.2S
'What do you have in your bag?' (elicited)

ni^{r}***-na***^{13} ***- 'what?'***

(3.106) ***ni***^{2}***-na***^{13} *jyku*^{232}
IP-thing C.eat.2S
'What did you eat?' (elicited)

(3.107) ***kwi***^{2}***-na***^{13} *mʔni*^{21}
IP-thing C.do.2S
'What did you do?' (elicited)

ni*^{2}*-xa*^{31} - *'when?'

The temporal adverb *xa*^{31} - 'light/time', is used with the interrogative *ni*^{2} to make the compound construction for 'when'.

(3.108) ***ni*^{2}*-xa*^{31}** *jyku*^{232}
IP-TEMP.ADV C.eat.2S
'When did you eat?' (elicited)

(3.109) ***ni*^{2}*-xa*^{31}** *tsa*^{232}
IP-TEMP.ADV P.go.(there≠base)2S
'When will you go?' (elicited)

la*$^{1(+0)}$*(la*$^{1(+0)}$*)* - *'where?'

The interrogative for 'where' is used alone, or with the reduplication of the word *la*$^{1(+0)}$ - 'place/where' to inquire where someone is going or where they went.

(3.110) ***la*$^{1(+0)}$*(la*$^{1(+0)}$*)*** *ya*^{21}
where-where P.go.(there≠base)2S
'Where did you go?' (elicited)

(3.111) ***la*$^{1(+0)}$*(la*$^{1(+0)}$*)*** *tsa*^{232}
where-where P.go.(there≠base)2S
'Where are you going to go?' (elicited)

(3.112) ***la*$^{1(+0)}$*(la*$^{1(+0)}$*)*** *ɣni*^{34} *tɣi*^{2}
where-where DAT pain
'Where does it hurt?' (elicited)

(3.113) ***la*$^{1(+0)}$*(la*$^{1(+0)}$*)*** *ntya*^{3} *nskwaʔ*^{2} *ɣį*$^{31(r)}$
where-where PG.sow.2S maize POSS.2S
'Where do you sow your corn?' (elicited)

Possible responses for examples (3.112) and (3.113):

Table 3.36: Some responses to interrogatives

nde^{34} s7ę$^{2(r)}$	'here place' or 'this place'
s7ę^{r} re^{34}	'place here' or 'this place'
la$^{1(+0)}$ kwa^{13}	'over there'
∗s7ę^{r} nde^{34}	'place here' or 'place this'
∗re^{34} s7ę$^{2(r)}$	'here place' or 'place this'

In the above table we can see how the lexemes for 'place' are used in the responses for the above questions. It is interesting to note that the demonstratives *nde*^{34} and *re*^{34} have a strict order. *nde*^{34} can precede the place lexeme *s7ę*^{r} and *re*^{34} can follow it but not the other way around.

ni*^{2}*-cha7*^{13} - *'why?'

To inquire 'why', the complementizer *cha7*^{13} is compounded with interrogative *ni*^{2}.

(3.114) ***ni*^{2}*-cha7*^{13} *(j)n7ą*^{2} *7a*^{31} *ntę*$^{2(+0)}$ *n7į*$^{2(r)}$ *re*^{34}
IP-COMP much INTS people PG.exist DEM
'Why are there so many people here?' (elicited)

(3.115) ***ni*^{2}*-cha7*^{13} *ya*^{3} *bi*^{2}*-ya*$^{1(+0)}$
IP-COMP C.go.(there≠base) Nopala
'Why did he go to Nopala?' (elicited) (he already left and returned)

Example (3.116) is a possible answer to the question in (3.115). This utterance utilizes the lexeme *s7ya*^{2} 'reason/cause of' to explain why the person went to Nopala.

(3.116) ***s7ya*^{2}** *ya*^{3} *7o*^{31} *nela*^{23} *7į*^{31}
reason C.go.(there≠base) CONJ *panela* POSS.3S
'He went with his *panela*'(SP)[9] (*lit. whole cane sugar*) [in order to sell it] (elicited)

[9] *panela* - a type of semi-refined whole cane sugar product, sold in round discs about an inch and a half thick by five inches in diameter. A historically strong part of the local economy of Teotepec.

3.7 Verbs of motion

Teotepec Chatino has a set of verbs that express motion. This set of predicates encodes deictic information that allows the hearer to know where the subject is in relation to their base and in which direction they are traveling.[10]

The table below shows the four aspects of 3S motion verb forms:[11]

Table 3.37: Motion verbs

Aspect	Potential	Progressive	Habitual	Completive
Sense	3S	3S	3S	3S
go there = base	tya$^{2(+0)}$	ndya$^{2(+0)}$	ndya$^{2(+0)}$	mdya$^{2(+0)}$
come here = base	tyą$^{2(+0)}$	yą$^{2(+0)}$	yą$^{2(+0)}$	yą^{3}
go there ≠ base	tsa$^{2(+0)}$	ya^{r}	ndy7ą^{r}	yą^{3}
come here ≠ base	ką^{r}	jyą^{r}	-	yą^{3}
arrive (here/there) = base	jyla$^{2(+0)}$	-	ndla$^{2(+0)}$	ndla^{3}
arrive there ≠ base	tya^{r}	-	ndya^{r}	ndyą^{r}
arrive (here/there) ≠ base	tyą^{r}	-	ndyą^{r}	mdyą^{r}
walk about	ty7ą^{r}	nd7ą^{21}	ndy7ą^{r}	md7ą^{r}

tya$^{2(+0)}$ - 'go.(there=base)'

The predicate, *tya*$^{2(+0)}$ 'will.go.(there=base)' encodes the meaning that one will go to base. Thus the subject of the sentence would have to be a resident of the town where they are returning in order for this construction to be grammatical. If a person who is not from one of the towns in examples (3.117) and (3.118) then the predicate *tsa*$^{2(+0)}$ - 'will go.(there≠base)' would be used as noted in (3.119).

(3.117) *tya*$^{2(+0)}$ *jychę^{r}-kwla^{r}*
P.return.(there=base) village-old *(Teotepec)*
'He will go to Teotepec' (Teotepec resident)

(3.118) *tya*$^{2(+0)}$ *jychę^{r}-kwi^{r}*
P.return.(there=base) village-new *(Cerro del Arie)*
'He will go to *Cerro del Aire*' (a resident of *CDA*)

[10]The concept of base is linked to the deictic center of ones home and is extended to ones community. For example, Teotepec is base for a speaker when they leave town. Ones home is base when they goes out from their residence to their corn field to work or to collect wood.

[11]Table is adopted from Cruz, H. and Woodbury (2008). For a complete set of paradigms see Appendix (A)

(3.119) *tsa*$^{2(+0)}$ *jychę*^{r}*-kwi*^{r}
P.go.(there≠base) village-new *(Cerro del Aire)*
'He will go to *Cerro del Aire*' (outsider)

tyą$^{2(+0)}$ **- 'come.(here=base)'**

The following examples show how this predicate encodes the meaning that the subject will come to base. In example (3.120) a resident of Teotepec is returning home from outside the community. In (3.121) someone is returning home after working in their cornfield. Example (3.122) would have to be uttered by someone in Teotepec for it to be grammatical because in this clause the people from *CDA* are coming to *TEO*.

(3.120) *tyą*$^{2(+0)}$ *jychę*^{r}
P.come.(here=base) village
'He comes to town (base - TEO)'

(3.121) *ty7o*$^{1(+0)}$ *lo*^{r}*-jyla*^{r} *tyą*$^{31(2(+0))}$ *jychę*$^{31(r)}$
P.leave of.the.corn.field P.come.(here=base) village
'He leaves his corn field and comes to town (base - TEO)'

(3.122) *tyą*$^{2(+0)}$ *ne7*^{r}*-jychę*^{r}*-kwi*$^{2(r)}$
P.come.(here=base) people-village-new
'The people from Cerro del Aire will come to town (base - TEO)'

tsa$^{2(+0)}$ **- 'go.(there≠base)'**

The predicate *tsa*$^{2(+0)}$ 'will.go(there≠base)' is used for movement to a place considered 'non-base'. For that reason the first example (3.123) can be used for virtually anyone who is going out from their base. In this sense the following example (3.124) is used for outsiders who are coming to Teotepec. This is precisely why example (3.125) is considered ungrammatical. In order to express this one would have to say, *tya*$^{2(+0)}$ *jychę*^{r}*-kwla*^{r} - 'go.(there=base) *TEO*'.

(3.123) *tsa*$^{2(+0)}$ *lo*^{r}*-nd7a*^{2}
P.go.(there≠base) Oaxaca
'He will go to Oaxaca'

(3.124) *tsa*$^{2(+0)}$ *jychę*^{r}*-kwla*^{r}
P.go.(there≠base) village-old
'He will go to Teotepec' (outsider)

(3.125) **tsa*$^{2(+0)}$ *jychę*^{r}*-kwla*^{r}
P.go.(there≠base) village-old
'He will go to Teotepec' (Teotepec resident)

kǫ^{r} - 'come.(here≠base)'

The predicate *kǫ^{r}* 'will.come(here≠base)' encodes meaning of the movement of outsiders who come to a non-base destination.

(3.126) *kǫ^{r}* *ne7^{r}-j7o^{31}* *jychę^{r}* *re^{34}*
P.come.(here≠base) people-doctor village here
'Doctors will come here to Teotepec' (outsider)

(3.127) *kǫ^{r}* *ne7^{r}-j7o^{31}* *bi^{2}-ya$^{1(+0)}$*
P.come.(here≠base) people-doctor Nopala
'Doctors will come to Nopala' (people from outside Nopala)

(3.128) *kǫ^{r}* *ne7^{r}-cha7^{13}-tnyǫ$^{31(r)}$* *jychę^{r}* *re^{34}*
P.come.(here≠base) people-word-work village here
'Chatino people will come here to Teotepec' (outsider)

The following example shows how this verb cannot express that a person from Teotepec will come to Teotepec.

(3.129) **kǫ^{r}* *ne7^{r}-nkwa^{r}-kyii$^{2(+0)}$* *jychę^{r}* *re^{34}*
P.come.(here≠base) people-PG.seated-grass(locals) village here
'Teotepecan people will come here to Teotepec' (Teotepec residents)

jyla$^{2(+0)}$ - 'arrive.(here/there=base)

This predicate encodes a meaning of movement of arriving back at base after being away. Because of this (3.131) is ungrammatical since it expresses that Teotepec residents will arrive at Nopala. To express this the verb *tya^{r}* - 'will go(there≠base)' would have to be used. Consider the following examples:[12]

(3.130) *jyla$^{2(+0)}$* *ne7^{r}-skǫ^{r}* *yaa^{3}* *lo^{r}-nd7a^{2}*
P.arrive.(here/there=base) people-topil C.go(there≠base) oaxaca
'The community-guard that went to Oaxaca will arrive' (Teotepec residents)

(3.131) **jyla$^{2(+0)}$* *ne7^{r}-nkwa^{r}-kyii$^{2(+0)}$* *re$^{0(34)}$* *bi^{2}-ya$^{1(+0)}$*
P.arrive.(here/there=base) people-seated-grass(locals) here Nopala
'Those from here will arrive in Nopala' (Teotepec residents)

[12]The word *topil* is a Nahuatl loan that signifies "staff of office". In the context of the system of cargos in the local government a *topil* is one who acts as part of the community guard.

tya^{r} - 'arrive.(there≠base)

The following examples show how *tya*^{r} 'will.arrive≠base' encodes the meaning of movement to a non-base destination. Example (3.133) is ungrammatical because the speaker would have to be outside of the destination in order express this type of meaning. The speaker could use the verb *jyla*$^{2(+0)}$ 'will arrive(here/there=base)', as noted in the previous set of examples, to be grammatical.

(3.132) *tya*^{r} *bi*^{2}*-ya*$^{1(+0)}$
P.arrive.(there≠base) Nopala
'He will arrive in Nopala' (Teotepec residents)

(3.133) **tya*^{r} *jychẹ*^{r}*-re*^{34}
P.arrive.(there≠base) village-here
'He will arrive at this village'

tyạ^{r} - 'arrive.(here/there≠base)'

The last set of motion verbs is used to encode arrival to a non-base destination from either inside or outside that destination. As noted below we can see how one can speak of an outsider who arrives in Teotepec, however if a Teotepec resident arrives at their town this predicate cannot be used.

(3.134) *tyạ*^{r} *ne7*^{r}*-pi*$^{1(+0)}$ *jychẹ*^{r} *re*^{34} *tya*$^{1(+0)}$
P.arrive.(here/there≠base) people-turkey,chick village here tomorrow
'The foreigner will arrive tomorrow.'

(3.135) **tyạ*^{r} *ne7*^{r}*-nkwa*^{r}*-kyii*$^{2(+0)}$ *re*$^{0(34)}$ *tya*$^{1(+0)}$
P.arrive.(here/there≠base) people-PG.seated-grass(locals) here tomorrow
'The people from here will arrive tomorrow.'

3.8 Verb derivation

Verb derivation in Teotepec Chatino is used to create causative constructions and to create more complex verbal constructions that consist of more than the verb. Causative constructions are expressed with the use of the derivational bound morpheme *xi*^{34}- and through a periphrastic construction with the use of the predicate *ʔni*^{2} 'to do/make'. The following section outlines and discuss these two causative patterns and other verbal compounding processes.

3.8.1 Causative constructions

3.8.2 *xi*^{34}-causatives

The following examples illustrate the function of the verbal prefix *xi*^{34}-. This prefix is the head of the verb phrase. It can take aspect marking and attaches to the beginning of an intransitive verb making it transitive thus deriving a causative meaning. The following examples contrast simple non-causative clauses with causative ones.

(3.136) *xna*^{r} *kta*^{23}
P.run cow
'The cow(s) will run.'

(3.137) ***xi***^{34}*=sna*$^{2(r)}$ *xniʔ*$^{0(34)}$ *ʔi*^{r} *kta*^{23}
CAUS=run dog DAT cow
'The dog will make the cow(s) run.'

(3.138) *kʔo*$^{2(+0)}$ *xwa*^{13}
P.drink Juan
'Juan will drink.'

(3.139) *m****xi***^{34}*-kʔo*$^{0(2(+0))}$ *xwa*$^{0(13)}$ *ʔi*^{r} *mba*^{2}*-re*^{3} *ʔi*^{r}
C.CAUS=P.drink Juan DAT compadre DAT
'Juan made his *'compadre'*(SP) drink.'

The table below demonstrates the derivation process for the xi^{34}-causatives:

Table 3.38: xi^{34} - causatives

Intransitive	Gloss	Transitive	Gloss
kja7$^{2(+0)}$	P.sleep	xi^{34}=kja7$^{0(2(+0))}$	CAUS=P.sleep
jynya^{31}	P.move	xi^{34}=jnya^{31}	CAUS=P.move
kta^{r}-jyko^{31}	P.bathe-pool/well	xi^{34}=kta$^{2(r)}$-jyko^{31}	CAUS=P.bathe-pool/well
kwtę^{r}	P.fall(tree)	xi^{34}=ktę$^{2(r)}$	CAUS=P.fall (tree)
jytyu^{34}	P.fall(from above)	xi^{34}=tyu$^{0(34)}$	CAUS=P.fall (from above)
jlyu$^{1(+0)}$	P.fall(from standing)	xi^{34}=tlyu$^{31(2(+0))}$	CAUS=P.fall (from standing)
k7o$^{2(+0)}$	P.drink	xi^{34}=k7o$^{0(2(+0))}$	CAUS=P.drink
jy7wa$^{1(+0)}$	P.flow	xi^{34}=k7wa$^{31(1(+0))}$	CAUS=P.flow

3.8.3 *7ni*^{2}-causatives

The other strategy for forming causatives is with a periphrastic construction that uses the predicate *7ni*^{2} 'to do/make'. These forms can take aspect and person marking. Below are some elicited examples.

The following examples are *7ni*^{2}-causative constructions with adjectives.

(3.140) *k7ni*^{2} *cha*$^{2(r)}$ *xtyi*^{23} *7į*^{31}
P.make sharp machete POSS
'He will sharpen his machete.'

(3.141) *m7ni*^{3} *xtye*^{r} *7į*^{31}
C.make foolish DAT
'He played stupid.' - *'Se hizo menso.'* (SP)

The following is a *7ni*^{2}-causative constructions with a noun.

(3.142) *k7ni*^{2} *y7we*^{34} *jo*$^{2(r)}$*se*^{31} *jtyi*$^{0(34)}$ *7į*^{31} *nda*$^{2(r)}$*nye*^{31}
P.make pieces Jose paper(book) DAT Daniel
'Jose will rip up daniel's book.'
'José hará pedazos del libro de Daniel' (SP)

Examples (3.143) and (3.144) show *ʔni*^{2}-causative constructions with verbs. These two example sentences have the structure of complement clauses outlined briefly in §3.9.2. It appears that this type of construction may simply be a complement of the verb *ʔni*^{r} 'to make'. The final example (3.145) contrasts a simple clause in the completive aspect with (3.144).

(3.143) *mʔni*^{3} *tyo*^{2} *chaʔ*^{13} *mtyɻ*$^{0(34)}$ *jyka*^{r}
C.make pedro that C.burn wood
'Pedro made the wood burn.'

(3.144) *mʔni*^{3} *jwa*^{13}*na*^{r} *chaʔ*^{13} *mtyɻ*$^{0(34)}$ *yja*$^{2(r)}$
C.make Juana that C.burn tortillas
'Juana made the tortillas burn.'

(3.145) *mtyɻ*^{34} *jwa*^{13}*na*^{r} *yja*$^{31(r)}$
C.burn Juana tortillas
'Juana burnt the tortillas.'

Below are some examples of *ʔni*^{2}-causative constructions:

Table 3.39: *ʔni*^{2} - causatives

Adj/Noun	Gloss	Derived Form	Gloss
cha^{r}	'sharp'	k7ni^{2} cha$^{2(r)}$	'sharpen'
xtye^{r}	'foolish'	k7ni^{2} xtye$^{2(r)}$	'make a fool of'
ko7^{2}	'dirty'	k7ni^{2} ko7$^{34(2)}$	'make dirty'
n7ą^{31}=ti7^{34}	'weak'	k7ni^{2} n7ą^{31}=ti7^{34}	'weaken'
mtę^{13}	'white'	k7ni^{2} mtę^{13}	'white wash'
mso^{3}	'docile'	k7ni^{2} mso^{3}	'make docile'
s7wa^{21}	'level'	k7ni^{2} s7wa^{21}	'make equal'
mblo7^{r}	'round'	k7ni^{2} mblo7$^{2(r)}$	'make round'
tkwę^{r}	'long'	k7ni^{2} tkwę$^{2(r)}$	'lengthen'
tlyu^{34}	'large'	k7ni^{2} tlyu^{34}	'enlarge'
tno^{r}	'big(respect)'	k7ni^{2} tno$^{2(r)}$	'to make big'
y7we^{34}	'pieces'	k7ni^{2} y7we^{34}	'to tear up'

Both of the above strategies are means for producing causative constructions. The *xi*^{34}-causatives can take aspect morphology as noted in (3.139) and can make an intransitive verb transitive. The *ʔni*^{2}-causative forms can also take aspect morphology as noted in examples (3.143) and (3.144) and they take an adjectives and make it part of the verb phrase causative construction. These processes appear to be limited to a certain set of verbs and adjectives and are not totally productive.

3.8.4 Compound verbs

Verbal compounding is a way to produce more complex verbal predicates. Some verbs in Teotepec Chatino use two independent roots to express one meaning. Below are examples of compounds that can be formed of verb + noun and verb + verb.

The following are verbs composed of a verb + noun:

(3.146) *mskwǫ*^{20}*-ty7a*$^{2(r)}$
C.lie.1S-water
'I swam.'

(3.147) *ku*^{r}*-sǫ*^{21}
P.eat-afternoon/late
'He/she will eat dinner.'

The above examples have only the verbal part of the construction inflected for person. This appears to be optional as there are some examples in the corpus that show the verbal and nominal parts of the construction with the nasalization occurring on both the noun and verb for 1st person singular constructions.

Below are some examples of compounds that are composed of verb+verb. These examples are from the text, *la mano de metate*.

(3.148) *kwna*$^{1(+0)}$*-t7i*^{31}*=(7)u*^{r} *jyka*^{r}
P.search-put=2P wood
' "Search for and gather up wood." ' (00:02:41.970 - 00:02:43.270)

(3.149) *ndla*^{23}*-yla*^{2} *ni*^{r} *s7ǫ*^{r} *ntkwa*^{r} *ni*^{r} *wa7*^{34}*-ni*$^{0(34)}$
H.arrive-P.arrive 3S.RP place H.sit PRO.3S ADV.TEMP
'It arrived where it has been until now.' (00:04:10.950 - 00:04:13.290)

(3.150) *mt7o*^{31}*-(n)skwa*$^{0(34)}$ *7i*^{r} *7ya*^{13} *kyee*$^{31(r)}$ *s7ǫ*^{r} *nskwa*^{2} *wa7*^{34}*-ni*$^{0(34)}$
C.go.out-PG.lie to near(below) stone place H.lie now
'It came out lying on a stone, where it is to this day.' (00:03:48.920 - 00:03:51.310)

3.9 Complex sentences

3.9.1 Relative clauses

In §3.3.5 the "light" noun head, *nu*^{r} was introduced and discussed. In that section it was noted that this particle may precede adjectives and create N + Adj constructions like the following; *nu*^{r} *jnʔa̰*^{31} 'the one who is female' or *nu*^{r} *jyʔyṵ*^{31} 'the one who is male'.

When *nu*^{r} precedes a V[SO] clause it functions as a link to the preceding clause with which it shares a participant. In this context *nu*^{r} functions as a relativizer and creates a relative clause construction. The following examples, from Cruz, E. et al. (2010), show the distribution of the relative clause in relation to the main clause.

This first example is an unmarked, basic V[SO] transitive clause.

(3.151) *yjwiʔ*^{34} *jwa*^{13}*na*^{r} *nsna*^{23}
C.sell Juana apple
'Juana sold apples.'

In the following example the inanimate [O] argument is relativized.

(3.152) ***nsna***^{23} *nu*^{r} *yjwiʔ*^{34} *jwa*^{13}*na*^{r}
apple REL C.sell Juana
'The apples that Juana sold.'

The following examples are ditransitive clauses. These examples contain the three basic constituents of a ditransitive clause - [VSO] - *Verb, Subject (Agent), Object (Theme)* and/or *(Recipient)*. In these type of constructions when another argument is brought on stage, depending on its animacy, the dative marker *ʔḭ*^{r} is used to mark this extra argument. In these first three examples this marker acts like the preposition 'to' in English. The first example (3.153) is the matrix clause used in elicitation to create the relativized clauses that follow. Note how in this clause the dative marker is not used for the inanimate direct object *nsna*^{23} 'apple' and how it is used for the animate indirect object *neʔ*^{r}*-jnʔa̰*$^{13(31)}$ 'the woman'.

(3.153) *yjwiʔ*^{34} *jwa*^{13}*na*^{r} *nsna*^{23} *ʔḭ*^{31} *neʔ*^{r}*-jnʔa̰*$^{13(31)}$
C.sell Juana apple DAT people-woman
'Juana sold apples to the woman.'

The following examples show how the recipient and theme arguments of the ditransitive clause are relativized. Example (3.154) shows a relativized inanimate theme. When this argument is relativized it leaves a gap between the agent and the recipient. Example (3.155) has a relativized animate recipient. When this argument is relativized it is moved to the front of the clause leaving the dative marker *ʔḭ*^{31} in situ.

(3.154) *mdyu*^{34} ***nsna***^{23} *nu*^{r} *[yjwi7*^{34} *jwa*^{13}*na*^{r} — *7i*$^{13(31)}$ *nu*^{r}*-jn7a*$^{13(31)}$*]*
C.fall apple REL [C.sell Juana — DAT NOM-woman]
'The apples that Juana sold to the woman fell .'

(3.155) *mblyu*^{31} ***nu***$^{2(r)}$***-jn7a***$^{13(31)}$ *nu*^{r} *[yjwi7*$^{1(34)}$ *jwa*^{13}*na*^{r} *nsna*^{23} *7i*^{31} — *]*
C.fall NOM-woman REL [C.sell Juana apple DAT —]
'The woman that Juana sold the apples to fell .'

The following examples have animate theme arguments and show how the use of the dative marker is constrained by an animacy hierarchy. In cases of arguments that are (+animate -human) the marker is optional and in cases of (+animate +human) arguments the marker is obligatory. The first clause below is an unmarked V[SO] clause. The use of the dative is optional in this case. When the patient is relativized in (3.157) the relativizer *nu*^{r} is used.

(3.156) *yjwi7*^{34} *jwa*^{13}*na*^{r} *(7i*^{31}*)* *xni7*^{34}
C.sell Juana (DAT) dog
'Juana sold the dog.'

(3.157) ***xni7***^{34} *nu*$^{31(r)}$ *[yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} — *]*
dog REL [C.sell Juana —]
'The dog that Juana sold.'

The following examples show the distribution of the dative marker in ditransitive clauses. Example (3.158) is the matrix clause used for elicitation of the following relative clauses. Note how in this example the dative marker is optional. If it is included in the clause it acts as an alienable possessive marker for the object 'dog'. In (3.159) when the theme argument 'dog' is relativized the dative marker disappears. If the marker were to be included in the clause it would be considered ungrammatical.

(3.158) *yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} *(7i*^{31}*)* *xni7*^{34} *7i*$^{31(13)}$ *nu*$^{31(r)}$*-jn7a*$^{13(31)}$
C.sell Juana (DAT) dog DAT NOM-woman
'Juana sold the dog to the woman.'

(3.159) *mblyu*^{31} ***xni7***^{34} *nu*$^{31(r)}$ *[yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} — *7i*$^{13(31)}$ *nu*$^{2(r)}$*-jn7a*$^{13(31)}$*]*
C.fall dog REL [C.sell Juana — DAT NOM-woman]
'The dog that Juana sold to the woman fell.'

In the following example the argument 'the woman' is relativized. When this argument is relativized the dative marker is left in situ just as we saw in (3.154) above. Also, note that the dative marker for the theme 'dog' is optional. When the dative is in place it acts as a possessive construction denoting that it was Juana's dog that was sold to the woman. Without this marker it is not clear if the dog that was sold belonged to Juana or not.

(3.160) *mblyu*^{31} ***nu***$^{2(r)}$***-jn7ǫ***$^{13(31)}$ *nu*$^{2(r)}$ *[yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} *(7ɻ*$^{31(13)}$*)* *xni7*^{34} *7ɻ*^{31}
C.fall NOM-woman REL [C.sell Juana (DAT) dog DAT
—]
—]
wanted reading: 'The woman that Juana sold a dog to fell.'
2nd reading: 'The woman to whom Juana sold her (own) dog fell .'

The following examples present ditransitive clauses with human themes and patients. Because the basic transitive clause is formed in essentially the same way as in the above examples for animate arguments, here only the ditransitive clauses is presented. The following example is the basic matrix for the ditransitive clause:

(3.161) *yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} *(7ɻ*^{31}*)* *nu*^{r}*-jy7yu*^{31} *7ɻ*$^{31(13)}$ *nu*$^{31(r)}$*-jn7ǫ*$^{13(31)}$
C.sell Juana (DAT) NOM-man DAT NOM-woman
'Juana sold the man to the woman.'

In (3.162) we can see that the dative marker for the theme can be optionally left in situ and we get the same reading. As noted above (3.159) this is impossible for the examples that have theme arguments that are (+animate -human) in this position. In (3.162) because the theme argument is (+human) the dative can be left. Additionally, when the dative is left in place the sandhi rules continue across the 'gap' left where the relativized theme was. This is evidence that the clause is continuous.

(3.162) *mblyu*^{31} ***nu***^{r}***-jy7yu***^{31} *nu*$^{31(r)}$ *[yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} *(7ɻ*$^{13(31)}$*)* — *7ɻ*$^{13(31)}$
C.fall NOM-man REL [C.sell Juana (DAT) — DAT
nu$^{2(r)}$*-jn7ǫ*$^{13(31)}$*]*
NOM-woman]
'The man that Juana sold to the woman fell.'

When the dative marker is left in place in (3.163) and in (3.160) above, we get two different readings. When the dative is included preceding the theme *nu*$^{r\,34}$*-jy7yu*^{31} 'the man' it denotes a possessive relationship. In that case we can see that it was Juana's husband that was sold to the woman who fell.

(3.163) *mblyu*^{31} ***nu***$^{2(r)}$***-jn7ǫ***$^{13(31)}$ *nu*$^{2(r)}$ *[yjwi7*$^{0(34)}$ *jwa*^{13}*na*^{r} *(7ɻ*$^{31(13)}$*)*
C.fall NOM-woman REL [C.sell Juana (DAT)
nu$^{r\,34}$*-jy7yu*^{31} *7ɻ*^{31} *—]*
NOM-man DAT —]
wanted reading: 'The woman that Juana sold the man to fell .'
2nd reading: 'The woman to whom Juana sold her husband fell.'

The data above shows some of the distribution of relative clauses in relation to the different types of arguments in transitive and ditransitive sentences. The animacy hierarchy of these arguments and how they are marked with the dative *ʔi^{r}* is also briefly touched upon and outlined.

3.9.2 Complement clauses

Complement clauses are introduced with the complementizer *chaʔ*^{13}. This lexeme introduces a clause that is a clausal/sentential complement of a main verb taking a clausal complement such as: [O] complements that include verbs of communication, verbs of manipulation, complements with sentential negation, demonstrative adverbs, temporal adverbs, modal adverbs, affirmative focus, and constituent negation. The following elicited examples are based on the work of Cruz, E. et al. (2008). This section provides a point of departure and some useful comparative data for complement clauses in Teotepec Chatino.

The following examples are basic complement clauses that show the verb inflected in three of the four aspects in Chatino. In these constructions the complementizer occurs after the verb. The structure of the complement clause reflects the basic [VSO] word order of Teotepec Chatino. The following examples are [O] complements of the verb of communication *tykwiʔ*^{r} 'to say'.

(3.164) *ntykwiʔ*^{r} ***chaʔ***^{13} *tsa*$^{2(+0)}$
H.say COMP P.go.(there≠base)
'He says that he is going to leave.'

(3.165) *ntykwiʔ*^{r} ***chaʔ***^{13} *ya*^{3}
H.say COMP C.go.(there≠base)
'He says that he left.'

(3.166) *ntykwiʔ*^{r} ***chaʔ***^{13} *ndya*$^{31(r)}$
H.say COMP H.arrive.(there≠base)
'He says that he arrives.'

The following is an [O] complement of the verb of manipulation *ʔni*^{r} 'to do/make'.

(3.167) *mʔni*^{3} *jwa*^{13}*na*^{r} *chaʔ*^{13} *tya*^{31} *nu-kwa*$^{0(13)}$ *xi*^{23} *ʔi*^{31} *da-nye*^{13}
C.do Juana COMP P.hand-in NOM-DEM.3S sweet DAT Daniel
'Juana made him turn in the candy to Daniel.'

The following examples show a complement clause with the sentential negation in the complement. In these examples the negative particle comes after the complementizer and precedes the verb. Example (3.168) is an [O] complement of the verb of communication 'to say' and (3.169) is an [O] complement of the verb of manipulation 'to do/make'.

(3.168) *ntyki7^{r}* *cha7^{13}* ***ja^{r}*** *ya^{3}*
H.say COMP NEG C.go.(there≠base)
'He says that he didn't go.'

(3.169) *m7ni^{3}* *jwa^{13}na^{r}* *cha7^{13}* ***ja^{r}*** *tya^{31}* *rę7^{r}* *nskwa7^{2}* *7į^{31}* *mį^{13}ga^{r}*
C.do Juana COMP NEG P.hand.in them maize to dominga
'Juana made it so that they wouldn't hand over the maize to Dominga.'

Below is a complement clause with the temporal adverb *wa7^{13}* - 'already'. This adverb follows the complementizer and precedes the verb.

(3.170) *ntykwi7^{r}* *cha7^{13}* ***wa7^{13}*** *ya^{3}*
H.say COMP ADV.TEMP C.go.(there≠base)
'He says that he already left.'

Teotepec Chatino has two different modal adverbs, *chę^{r}-cha7^{3}* and *7ę^{r}-la^{31}* 'maybe' or 'possibly'. In examples (3.171) and (3.172) the adverb follows the complementizer showing that the scope of the adverb is inside the complement clause. In example (3.173) the adverb precedes the complementizer. The following examples are complements of the verb of communication *tykwi7^{r}* 'to say':

(3.171) *jwa^{13}na^{r}* *ntykwi7^{r}* *cha7^{13}* ***chę^{r}-cha7^{3}*** *tsa$^{2(+0)}$* *bi^{2}-ya$^{1(+0)}$*
Juana H.say COMP perhaps P.go.(there≠base) Nopala
kya$^{1(+0)}$
tomorrow
'Juana says that perhaps she will go to Nopala tomorrow.'

(3.172) *jwa^{13}na^{r}* *ntykwi7^{r}* *cha7^{13}* ***7ę^{r}-la^{31}*** *tsa$^{2(+0)}$* *bi^{2}-ya$^{1(+0)}$* *kya$^{1(+0)}$*
Juana H.say COMP perhaps P.go.(there≠base) Nopala tomorrow
'Juana says that perhaps she will go to Nopala tomorrow.'

(3.173) *jwa^{13}na^{r}* *ntykwi7^{r}* ***7ę^{r}-la^{31}*** *cha7^{13}* *tsa$^{2(+0)}$* *bi^{2}-ya$^{1(+0)}$* *kya$^{1(+0)}$*
Juana H.say perhaps COMP P.go.(there≠base) Nopala tomorrow
'Juana says that perhaps she will go to Nopala tomorrow.'

The following examples present virtually the same sentences as above; however, in these examples the verb of communication *ntykwi7^{r}* 'he/she speaks' is replaced with the verb

of report *jwi̱*^{2} 'he/she said/reported'. This verb is distinct in that it is used mostly for reporting other people's speech. It appears to have limited aspectual forms in that the potential aspect has not been encountered. There also appears to be a restriction on the distribution of this verb in relation to the modal adverb. Example (3.174) allows the modal adverb to precede the complementizer and in (3.175) when the adverb follows the complementizer the sentence is ungrammatical.

(3.174) *jwa*^{13}*na*^{r} *jwi̱*^{2} ***7e̱***^{r}***-la***^{31} *cha7*^{13} *tsa*$^{2(+0)}$ *bi*^{2}*-ya*$^{1(+0)}$ *kya*$^{1(+0)}$
Juana H.say perhaps COMP P.go.(there≠base) Nopala tomorrow
'Juana says that perhaps she will go to Nopala tomorrow.'

(3.175) **jwa*^{13}*na*^{r} *jwi̱*^{2} *cha7*^{13} ***7e̱***^{r}***-la***^{31} *tsa*$^{2(+0)}$ *bi*^{2}*-ya*$^{1(+0)}$ *kya*$^{1(+0)}$
Juana H.say COMP perhaps P.go.(there≠base) Nopala tomorrow
'Juana says that perhaps she will go to Nopala tomorrow.'

The two following examples below show the distribution of the complementizer with the same adverb as above:

(3.176) ***che̱***^{r}***-cha7***^{3} *jy7ya*$^{2(+0)}$ *tyoo*$^{0(r)}$ *kya*$^{1(+0)}$
perhaps P.fall rain tomorrow
'Perhaps it will rain tomorrow.'

(3.177) ***7e̱***^{r}***-la***^{31} *(cha7*^{13}*)* *jy7ya*$^{2(+0)}$ *tyoo*$^{0(r)}$ *kya*$^{1(+0)}$
perhaps COMP P.fall rain tomorrow
'It is possible that it will rain tomorrow.'

The optional complementizer in (3.177) gives a slightly different reading than without the complementizer as in (3.176). When the adverb precedes the complementizer as in (3.177) it is a predicate. As we see in the example (3.175) the verb of report *jwi̱*^{2} 'says/reports' doesn't permit this kind of predicate, but the other verb of communication *tykwi7*^{r} 'to say' does (3.172). Thus example (3.173) has 3 clauses: [Juana says [it is possible [she will go to Nopala tomorrow]]]. The main clause is 'Juana says', the rest is its complement in object position, while 'go to Nopala tomorrow' is a complement clause subject of 'be possible'.

The following examples show a complement clause with pre or post demonstrative adverbs (boldface) with the existential predicate *n7i̱*$^{2(+0)}$ 'he/she lives'.

(3.178) *ntykwi7*^{r} *cha7*^{13} *n7i̱*$^{2(+0)}$ ***kwa***$^{0(13)}$
H.say COMP H.live DEM
'He says that he lives there.'

(3.179) *ntyki7*^{r} *cha7*^{13} ***kwa***$^{0(13)}$ *n7i̱*$^{2(+0)}$
H.say COMP DEM H.live
'He says that there he lives.'

The following examples show a complement clause with pre and post verbal temporal (boldface) adverbs. The adverb may precede or follow the verb in the complement clause.

(3.180) *jwi̱*^{2} *cha7*^{13} *ya*^{3} ***ka***^{13}
C.say COMP C.go.(there≠base) yesterday
'He said that he went yesterday.'

(3.181) *jwi̱*^{2} *cha7*^{13} ***ka***^{13} *ya*^{3}
C.say COMP yesterday C.go(there≠base)
'He said that he went yesterday.'

(3.182) *jykwi7*^{r} *cha7*^{13} *ndy7a*$^{31(r)}$ ***ndya***^{r} ***tsa***^{r}
C.say COMP H.go.(there≠base) all day
'He said that he goes every day.'

Below is a complement with sentential negation and the temporal adverb *ti7*^{31} 'still':

(3.183) *ntykwi7*^{r} *cha7*^{13} ***ti7***^{31} *ji*$^{1(+0)}$ *tsa*$^{31(2(+0))}$
H.say COMP still NEG P.go.(there≠base)
'He says that he still hasn't left.'

Below is an example of a complement clause with affirmative focus:

(3.184) *ntykwi7*^{r} *cha7*^{13} *kwi7*$^{2(+0)}$ *nu*^{r}*-jn7a*^{31} *kwa*$^{0(13)}$ *mn7i*^{3} *yja*^{r}
H.say COMP same NOM-woman DEM C.make tortilla
'He says that, that same woman was the one who made tortillas.'

The following is an example of constituent negation of example (3.184) above. The constituent negative particle *s7i*^{r} precedes the item that it negates.

(3.185) *ntykwi7*^{r} *cha7*^{13} ***s7i***^{r} *nu*^{r}*-jn7a*^{31} *kwa*$^{0(13)}$ *mn7i*^{3} *yja*^{r}
H.say COMP NEG NOM-woman DEM C.make tortilla
'He says that, it wasn't that woman who made tortillas.'

Examples (3.178) through (3.183) above, show how the temporal adverb and demonstrative noun may precede or follow the verb in a complement clause. If there is negation in the complement clause as seen in (3.168), (3.169), (3.183), and (3.185) depending on whether there is sentential or constituent negation the negative particle either precedes the verb of the complement, as in sentential negation, or the constituent as seen in (3.185).

The above examples hint at the wide and complex distribution of complement clauses in Teotepec Chatino. These examples outline part of a theme that will have be a separate work that will come later with more research.

3.9.3 Adverbial clauses

This section briefly outlines dependent clauses that communicate cause, reason, purpose, temporal and locative information. In some of the examples the subordinating conjunctions that link these clauses also occur as lexical nouns or are derived from a noun. This appears to be a rich and little studied aspect of Chatino grammar. Examples (3.186) and (3.187) use the adverb *xa*^{31} 'when'. This adverb is derived from the noun 'light'. It also refers to time and can be used in the following manner *ndya*^{r} *xa*^{31} 'all the time' or 'all day'. This adverb can be used in other constructions. For example, it is used in the adverbial phrase *xa*^{31}-*wa7*^{34} 'already when'. It also comes up in the adverbial phrases *xa*^{31}-*kǫ7*^{3} 'and so/then' or *xa*^{31}-*kǫ7*^{2} 'in those times'. This is a compound of the temporal adverb and the demonstrative for a non-present argument. In (3.188) the use of the adverb *s7ni*^{23} 'before', is preceded by the existential predicate *ns7wi*^{3} 'existing', to express a sense of time past. Example (3.189) uses the adverb *ka*^{13} 'yesterday'. In (3.190) the adverb phrase *ndya*^{r} *tsǫ*^{r} 'all day' is used to express an activity that occurs habitually.

The following is a table of the adverbs discussed in the section below. This list is not exhaustive.

Table 3.40: Adverbs

Time:	chǫ7^{3}	'after'	wa7^{34}	'already'
	xa^{31}	'when'/'light'	s7ni^{23}	'before'
	xa^{31}-kǫ7^{3}	'then/and so'	ni^{34}	'now'
	ti7^{31}	'still'	jyni^{r}	'right now'
	ndya^{r}-tsǫ^{r}	'all day'	ndya^{r}-xa^{31}	'all the time'
	tsǫ^{r}	'today'	ka^{13}	'yesterday'
Reason:	s7ya^{r}	'reason'	cha7^{13}	'so that/why'
			chǫ7^{r}	'cause'
Location:	s7ę^{r}	'place'	la^{r}	'where'

The following are some examples that occurred more frequently from the text *la mano de metate* and a couple elicited examples from other sections of this paper.

3.9.3.1. Time

The following are temporal clauses introduced by *xa*^{31} modifying a matrix clause:

(3.186) *lo7*^{13} ***xa***^{31} *nkwa*^{13}=*ti7*$^{0(34)}$ *ni*$^{31(r)}$ *ni*^{34} *md7o*^{31} *ni*$^{2(r)}$ *mdya*^{2} *ni*^{r}
and when C.want=ESN 3S.RP, well C.leave 3S.RP C.go 3S.RP
'When she wanted, well she went out and she left' (00:01:03.930 - 00:01:06.490)

(3.187) ***xa***^{31} *mskwę*^{2} *nu*^{r}*-jn7ą*^{31} *ką7*^{3} *tlo*^{31} *ti*^{34}*-kwą*$^{0(34)}$ *ni*^{34} *wa7*^{34} *mn7ą*^{3}
when C.lift NOM-woman that face just-above now already C.see
jyą^{r} *ni*^{r}
PG.come 3S.RP
'When she lifted her face the young woman saw that the grandmother was coming.' (00:01:40.310 - 00:01:44.170)

The following three examples below are temporal adverbs in a single clauses:

(3.188) *nda*$^{1(+0)}$ *ne7*^{r}*-kwla*^{r}*,* *ns7wi*^{r} ***s7ni***^{r} *cha7*^{13}
H.give.3P people-elder PG.exist before word
'Talk of the elders from before...' (00:00:16.900 - 00:00:20.720)

(3.189) *mn7ą*^{3} *me*^{r}*lo*^{31} *ska*^{r} *kto*^{3} ***ka***^{13}
C.see carmelo ART/NUM chicken yesterday
'Carmelo saw a chicken yesterday.' (elicited)

(3.190) *jykwi7*^{r} *cha7*^{13} *ndy7ą*$^{31(r)}$ ***ndya***^{r} ***tsą***^{r}
C.say COMP H.go.(there≠base) all day
'He said that he goes every day.' (elicited)

3.9.3.2. Reason/cause and purpose

The adverb s7ya^{r} 'reason/cause':

(3.191) ***s7ya***^{r} *na*^{13} *nu*^{r}*,* *nu*^{r} *nkwa*^{13} *j7o*$^{0(34)}$
reason it NOM, NOM C.be saint/holy
'Because it became a saint. (00:05:48.610 - 00:05:50.820)

The adverb chǫ7^{r} 'cause' is used to express reason.

(3.192) *lo7*^{13} *nu*^{r} *jn7ą*^{31} *ką7*^{3} *jwį*^{r} *7į*^{r} *ni*^{r} *ja*^{r} *s7i*$^{2(+0)}$ *cha7*^{13} *ką7*^{3}
and NOM woman there C.say to 3S.RP "no NEG that there
nu^{r} *ta*^{2} *ynąą*$^{2(+0)}$ *ta*^{2} ***chǫ7***^{r} *nu*^{r} *xi*^{34}*=kwtą*^{r} *snye7*^{r}
NOM ? PG.cry.1s ? because NOM CAUS=PG.bathe.1S child
-jyko^{31}
-well/pool(bathe)
'And the woman said to her,"it isn't for that, that I am crying, nor is it because I am bathing my child." ' (00:01:57.770 - 00:02:03.310)

3.9.3.3. Location

The following examples show the use of the locational adverb **s7ę**^{r} 'place'. In the following examples this word precedes the existential *nskwa*^{34} 'lie' in order to express a location.

(3.193) *na*^{r} *rą*^{r} *jykwa7*^{r} ***s7ę***^{r} *nskwa*^{34} *kyee*^{r} *jychi*^{r}
H.name it swamp place PG.lie stone 'metate'
'It is called the swamp where the stone of the 'metate' lay' (00:00:08.960 - 00:00:12.760)

(3.194) ***s7ę***^{r} *nskwa*^{34} *kyee*^{r} *jychi*^{r} *kwa*^{13} *ni*^{34}
place PG.lie stone 'metate' there now
'The place of the stone of the 'metate'...' (00:00:14.180 - 00:00:16.060)

Afterword

This grammatical sketch outlines some of the different aspects of Teotepec Chatino while maintaining a high level of fidelity to the representation of the lexical tones. This has been done through the development of an array of test for tone and comparative analysis of SJQ and other Eastern varieties of Chatino. It is important that the tones are represented as accurately as possible because of the intricacy of the system in relation to the grammar; specifically, how tone marks person in the verbal system, identifies the possessor in inalienable possessed nouns, and in the specification of lexemes in the lexicon.

There is much work to be done in order to make a complete description of Teotepec Chatino. I intend to continue working on and conducting fieldwork on this language. My goal is to create a description based on texts collected from elders. These text will result in a description that not only describes the grammar but also includes aspects of history, culture and the political economy of the community where the language is spoken.

As much as possible this work has been based on a community centered language documentation project. In as many ways as possible I have worked with the Teotepec local government and community members. Much of this work has been conducted in concert with a range of speakers from different ages and backgrounds. Much of the elicitation was done with Reginaldo Quintas-Figueroa, Wilebaldo Velazco Mendoza and Moises Reyes Quintas. The texts I have collected are from a variety of speakers − mostly elders. The text included in Appendix (C) was a story told by Wilebaldo Velazco Mendoza.

As mentioned at the beginning of this description, an important aspect of my fieldwork has been to work with young people in the documentation and description of Teotepec Chatino. This has included training young people to write their variety of Chatino with precision, explanations about grammatical aspects of the language, the tone system and how this relates and compares to the other varieties of Chatino. This also involves including these individuals in the documentation and recording of texts with elders. This work has involved training on the technical aspects of the use of solid state recorders, computers and computer programs, and video cameras for the technical and engaging process of documentation, transcription and translation of texts. The intent is to train and inspire young people to be able to document their language, to plant some seeds for future generations of speakers so that others who speak Teotepec Chatino may want to work on its description and documentation. Likewise, it is important to create a context where the Chatino language is valued and can be honored so others can know and appreciate the details encoded in its lexicon and grammatical system. To this end, it is important to educate young people how to recognize that Chatino, like any language, is rich and complex and that it deserves to be acknowledged and appreciated.

Appendix

A. Motion verbs

Table 41: Motion verbs of Teotepec Chatino

Aspect	Potential			Progressive		
Sense	3s	2s	1s	3s	2s	1s
go there = base	tya$^{2(+0)}$	tya^{232}	tyą$^{2(+0)}$	ndya$^{2(+0)}$	ndya^{232}	ndy7ą$^{2(+0)}$
come here = base	tyą$^{2(+0)}$	tyą^{232}	tyą$^{1(+0)}$	yą$^{2(+0)}$	yą^{232}	yą$^{1(+0)}$
go there ≠ base	tsa$^{2(+0)}$	tsa^{232}	(t)s7ą$^{1(+0)}$	ya^{r}	ya^{232}	y7ą$^{2(+0)}$
come here ≠*base*	ką^{r}	ką^{232}	ką$^{1(+0)}$	jyą^{r}	jyą^{232}	jyą$^{1(+0)}$
arrive (here/there) = base	jyla$^{2(+0)}$	jyla^{232}	jyla$^{1(+0)}$	-	-	-
arrive there ≠ base	tya^{r}	tya^{232}	ty7ą^{r}	-	-	-
arrive (here/there) ≠ base	tyą^{r}	tyą^{232}	tyą$^{1(+0)}$	-	-	-
walk about	ty7ą^{r}	ty7ą^{232}	ty7ą$^{1(+0)}$	nd7ą^{21}	nd7ą^{3}	nd7ą$^{1(+0)}$
Aspect	Habitual			Completive		
Sense	3s	2s	1s	3s	2s	1s
go there = base	ndya$^{2(+0)}$	ndya^{232}	ndy7ą$^{2(+0)}$	mdya$^{2(+0)}$	mdya^{21}	mdyą$^{2(+0)}$
come here = base	yą$^{2(+0)}$	yą^{232}	yą$^{1(+0)}$	yą^{3}	yą^{21}	yą^{31}
go there ≠ base	ndy7ą^{r}	ndy7ą^{232}	ndy7ą$^{2(+0)}$	yą^{3}	ya^{21}	y7ą^{21}
come here ≠*base*	-	-	-	yą^{3}	yą^{21}	yą^{31}
arrive (here/there) = base	ndla$^{2(+0)}$	ndla^{232}	ndlą$^{2(+0)}$	ndla^{3}	ndla^{21}	ndlą^{3}
y arrive there ≠ base	ndya^{r}	ndya^{232}	ndy7ą^{r}	ndyą^{r}	ndyą^{232}	ndyą$^{2(+0)}$
arrive (here/there)	ndyą^{r}	ndyą^{232}	ndyą^{r}	mdyą^{r}	mdyą^{21}	mdyą^{31}
walk about	ndy7ą^{r}	ndy7ą^{232}	nd7yą$^{1(+0)}$	md7ą^{r}	md7ą^{232}	md7ą$^{1(+0)}$

B. Sandhi rules of Teotepec Chatino

The following table shows the basic sandhi relations between the different tone classes in Teotepec Chatino. The tone classification proposed by Cruz, H. and Woodbury (2005) refers to the different cognate tone categories of Eastern Chatino.

Table 42: Tone sandhi rules for second position tones of Teotepec Chatino

juego *1st tone* →	Chatino	*A* ku^{r}	*B* koo^{2}	*C* yoo$^{34(+0)}$	*D* nsnee^{23}	*E* mdaa^{31}	*F* mkwaa$^{13(+0)}$	*G* mdee^{3}	*H* ta$^{1(+0)}$	*I* ntyku^{21}	*J* sna$^{2(+0)}$
English		P.EAT	P.GRIND	C.GRIND	H.WATER	C.GIVE	C.SWEEP	C.CARRY	P.GIVE	N.EAT	'three'
juego	*2nd tone*										
A - 'tortilla'	yja^{r}	-	yja^{2}	yja^{31}	yja^{0}	yja^{2}	yja^{31}	yja^{2}	yja^{31}	-	yja^{0}
B - 'rubbish'	mti^{2}	-	mti^{34}	mti^{31}	mti^{34}	-	mti^{31}	-	mti^{31}	-	-
C - 'flower'	ke$^{34(+0)}$	-	-	kye^{0}	-	kye^{0}	kye^{0}	-	kye^{0}	-	kye^{0}
D - 'sugar'	ska^{23}	-	-	-	-	-	-	-	-	-	-
E - 'coconut'	ngaa̱^{31}	-	-	-	-	ngaa̱^{13}	-	-	-	-	ngaa̱^{13}
F - 'greens/*chepil* (SP)'	jyta$^{13(+0)}$	-	-	jyta^{0}	-	jyta^{0}	jyta^{0}	-	jyta^{0}	-	jyta^{0}
G - 'tubber'	kǫ^{3}	-	-	-	-	-	-	-	-	-	-
H - 'grasshopper'	sko7$^{1(+0)}$	-	-	sko7^{0}	sko7^{3}	-	sko7^{2}	-	sko7^{0}	-	-
I - 'crab'	kwee7^{21}	-	-	-	-	-	-	-	-	-	-
J - 'three'	sna$^{2(+0)}$	sna^{31}	sna^{31}	sna^{31}	sna^{31}	-	sna^{31}	sna^{31}	sna^{31}	sna^{31}	-

C. Text - *la mano de metate*

La Mano de Metate

Narrator: Wilebaldo Velazco Mendoza

Transcribed and translated by: Gabriel Cruz Reyes and Justin D. McIntosh

Edited by: Justin D. McIntosh

Introductory notes:

This text was recorded with Wilebaldo Velazco Mendoza. It is a tale about the creation of the sun and the moon. This is a common story told throughout the Chatino region and is often referred to as *el sol y la luna* 'the sun and the moon' or the *la nana* 'the grandmother'. In this version *Señor Wilebaldo* refers to the story as *la mano de metate* 'the grinding stone of the metate'. This is in reference to the stone used for grinding corn used in conjunction with a *metate* which is a flat grinding surface the hand stone is used against for grinding corn into flour for tortillas. The following translation and transcription includes the Teotepec Chatino text, a line for the part of speech and a line for the free translation in English. This text was recorded during the summer of 2008 and was transcribed and translated in ELAN with the assistance of different speakers. This most resent version was worked on by Gabriel Cruz Reyes in the summer of 2010.

Transcription and translation:[13]

(195)	*Bueno*^{23},	*ni*^{34}	*xkwiʔ*^{r}*=rą*^{r}	*nu-nga*^{3},	*ska*^{r}	*chaʔ*^{13}	*ʔį*^{31}
	well	now	CAUS.talk=1PLIN	well,	one	word	of

well, now we will make a talk about. . .
(00:00:01.410 - 00:00:04.460)

(196)	*jykwaʔ*^{r}	*nʔį*^{r}	*chǫʔ*^{3}	*re*^{34}
	swamp	PR.exist	behind	here

a swamp that is behind here (Teotepec) (00:00:06.300 - 00:00:08.730)

(197)	***na***^{r}	*rą*^{r}	*jykwaʔ*^{r}	*sʔę*^{r}	*nskwa*^{34}	*kyee*^{r}	*jychi*^{r}
	H.name	it	swamp	place	PR.lie	stone	'metate'

It is called the swamp where the stone of the 'metate' is (00:00:08.960 - 00:00:12.760)

(198)	*sʔę*^{r}	*nskwa*^{34}	*kyee*^{r}	*jychi*^{r}	*kwa*^{13}	*ni*^{34}
	place	PR.lie	stone	'metate'	there	now

the place of the stone of the 'metate' (00:00:14.180 - 00:00:16.060)

[13] In the following transcription the notation system includes both the underlying and surface realization of the tones. This takes into consideration the sandhi rules and how they phonetically manifest on a surface level. When a sandhi tone is realized the underlying tone is in parenthesis following the sandhi surface level phonetic tone realization. This should not be confused with notations for the floating tones that are noted as (+0) following a lexical tone (cf. §2.6 Tone system).

(199) *nda*$^{1(+0)}$- *ne7^{r}-kwla^{r}*, *ns7wi^{r}* *s7ni^{r}* *-cha7*^{13}
H.give- person-elder PR.exist before -word
Talk of the elders from before (00:00:16.900 - 00:00:20.720)

(200) *ne7^{r}-jlyo^{r}* *n7i^{r}* *ni7*^{13} *(jy)ka^{r}-ke*$^{0(34)}$ *ntykwi7^{r}=rą^{r}* *re*^{34}
person-deceased C.live in stem-flower H.say=1PLIN here
ne7^{r}-jlyo^{r} *ta*^{3}*na*^{2}*syu*^{3}
person-deceased Tanacio
The deceased man that lived in the place of the flowers, the deceased man Tanacio (00:00:20.780 - 00:00:26.050)

(201) *ką7*^{3} *nu^{r}* *nda*$^{1(+0)}$*-cha7*$^{0(13)}$
that NOM H.give-word
That talk (story) - *Lit. 'give word'* (00:00:26.820 - 00:00:28.060)

(202) *ska^{r}* *ne7^{r}-kwla^{r}* *7a*^{31} *ka^{r}* *rę7^{r}*
one person-elder very PR.be person
This person was very old (00:00:29.040 - 00:00:30.480)

(203) *xa*^{31} *mtykǫ^{r}* *dyose*^{23} *7i^{r}* *rę7^{r}*
when C.collect god to person(him)
When god collected him (00:00:30.940 - 00:00:32.200)

(204) *lo71*^{3} *jwi*^{2}*-rę7^{r}* *ni*^{34} *s7ya^{r}* *kye*$^{31(r)}$
and C.say-3PL well because stone
and it is said that because of this stone (00:00:33.310 - 00:00:35.330)

(205) *kyee^{r}* *nu^{r}* *ka*^{3} *kyee^{r}* *ntykwi7^{r}=rą^{r}* *re*^{34} *7o*^{31} *kyee^{r}*
stone NOM H.be stone H.say=1PLIN here with stone
the stone that we say here, the stone of. . . (00:00:36.340 - 00:00:40.930)

(206) *jy7ą*^{31}*=rą^{r}-kwla^{r}* *ni*$^{31(34)}$ *chǫ7*^{3} *re*^{34} *ka^{r}* *ntkwa*^{13} *ni^{r}*
grandma=1PLIN-elder well behind here PR.be H.sit 3S.RP
our grandmother, that lived here behind (Teotepec) (00:00:42.270 - 00:00:46.240)

(207) *kwa*^{13} *mk7ą^{r}* *ni^{r}*
there C.live 3S.RP
there she lived (00:00:46.730 - 00:00:47.820)

(208) *nu^{r}-nga*^{3} *mkwa*^{34} *ni*$^{31(r)}$ *ntę*$^{2(+0)}$ *cha*^{13}*-ndyu*^{21} *s7ni^{r}*
well C.be 3S.RP people world before
well, it was the people of the world before (00:00:49.100 - 00:00:51.130)

(209) *lo7*^{13} *mkwa*^{13} *ni*$^{31(r)}$ *kǫ7*^{3} *ni*^{r} *ka*^{r}, *yoo*^{34} *jychi*$^{31(r)}$ *nskwa*^{34} *chǫ7*^{3} *re*^{34}
and C.be 3S.RP that 3S.RP PR.be, C.grind 'metate' PR.lie behind here

and it was her that would grind on the stone behind here (Teotepec) (00:00:52.660 - 00:00:57.010)

(210) *n7i*^{r} *tkwa*$^{2(+0)}$ *yu*^{r}*-xwe*^{r}*-ti*^{r} *7i*^{r} *ni*^{r}, *tkwa*$^{2(+0)}$ *snye7*^{r} *ni*^{r}, *md7i*^{r}
H.exist two man-little-just of 3S.RP, two children 3S.RP, C.live

she has two little children, she had two children (00:00:58.560 - 00:01:02.190)

(211) *lo7*^{13} *xa*^{31} *nkwa*^{13}*=ti7*$^{0(34)}$ *ni*$^{31(r)}$ *ni*^{34} *md7o*^{31} *ni*$^{2(r)}$ *mdya*^{2} *ni*^{r}
and when C.want=ESN 3S.RP, well C.leave 3S.RP C.go 3S.RP

when she wanted, well she went out and she left (00:01:03.930 - 00:01:06.490)

(212) *lo*^{r} *jykwa7*^{r} *(k)wa*^{13} *7i*^{31} *ni*$^{2(r)}$ *xa*^{31}*-kǫ7*^{3} *md7o*^{31} *ni*^{r} *mdya*^{2} *ni*^{r}
in swamp that of 3S.RP and.so C.leave 3S.RP C.go 3S.RP
xka^{21} *s7e*^{r} *ni*^{r} *lo7*^{13} *ja*^{r} *mdyǫ*^{r} *7a*^{31} *ni*$^{2(r)}$
other place 3S.RP and no C.return INTS 3S.RP

in the swamp, when she wanted she went out and left to anther part and never returned. (00:01:07.300 - 00:01:11.960)

(213) *kwi7*^{2}*-ny7ǫ*$^{2(r)}$ *mdya*$^{31(2(+0))}$ *ka*^{r} *ni*^{r}
forever C.go PR.be 3S.RP

she left forever (00:01:12.300 - 00:01:13.550)

(214) *kǫ7*^{3} *nu*^{r}, *ynu7*^{13}*-skwa*^{2} *kyee*^{r}*-jychi*^{r} *ntykwi7*^{r}*=rǫ*^{r} *7o*^{31} *t7wa*^{3} *jykwa7*^{r}
that NOM C.stay-H.lie stone-'metate' H.speak=1PLIN with edge/mouth swamp

this is how the stone was left on the edge of the swamp. (00:01:13.950 - 00:01:17.570)

(215) *chǫ7*^{3} *re*^{34}, *nu*^{r} *ntykwi7*^{r}*=rǫ*^{r} *7o*^{31}
behind here NOM H.say=1PLIN with

over here behind, where they say (00:01:17.980 - 00:01:20.150)

(216) *to7*^{3}*-ti*^{2} *la*^{3} *jychi*^{r} *jwi*^{2}*-re7*^{r}, *kwa*^{13}*-ny7ǫ*$^{31(r)}$ *ntykwi7*^{r}*-re7*^{r} *7o*^{31} *rǫ*^{r} *kwa*^{13}*-ny7ǫ*$^{31(r)}$ *na*^{13}*=rǫ*^{r}
creek where 'metate' C.say-3P how H.speak-3P with it how H.name=1PLIN

the creek of the 'metate', is how they say, that is what it is called (00:01:20.710 - 00:01:23.980)

(217) *lo7*^{13} *mdya*$^{2(+0)}$ *ni*^{r} *la*$^{1(+0)}$ *kwa*^{13} *ni*^{34}
and C.go 3S.RP place there now
and she went just to there (00:01:26.420 - 00:01:27.910)

(218) *xa*^{31} *wa7*^{34} *mdya*^{21} *ni*^{r} *la*$^{1(+0)}$ *kwa*^{13} *ni*^{r} *lo7*^{13} *ntkwa*^{13} *ska*^{r} *nu*^{r}
when already C.go 3S.RP place there 3S.RP and H.sit one NOM
jn7ǫ^{31}
woman
when she arrived, a woman was there (00:01:30.030 - 00:01:32.630)

(219) *xi*^{34}*=kwta*^{r}*-* *rę7*^{r} *snye7*^{r} *rę7*^{r} *-jyko*^{31}
CAUS=PR.bathe people child people -well/pool(bathe)
bathing her child in the river. (00:01:33.260 - 00:01:35.910)

(220) *lo7*^{13} *ja*^{r} *mn7ǫ*^{3} *nu*^{r} *jn7ǫ*^{31} *kǫ7*^{3} *md7o*^{31}*-tkwi*^{13} *ni*^{r} *ndya*^{2} *ni*^{r}
and no C.see NOM woman that C.come.out she PR.go 3S.RP
and the young woman didn't see the grandmother approaching. (00:01:37.010 - 00:01:39.920)

(221) *xa*^{31} *mskwę*^{2} *nu*^{r} *jn7ǫ*^{31} *kǫ7*^{3} *tlo*^{31} *ti*^{34}*-kwǫ*$^{0(34)}$ *ni*^{34} *wa7*^{34} *mn7ǫ*^{3}
when C.lift NOM woman that face just-above now already C.see
jyǫ^{r} *ni*^{r}
PR.come 3S.RP
when she lifted her face the young woman saw that the grandmother was coming. (00:01:40.310 - 00:01:44.170)

(222) *lo7*^{13} *jwį*^{2} *ni*^{r} *7į*^{31} *xa*^{2}*-kǫ7*^{3} *ni*^{34}*,* *s7ya*$^{2(r)}$ *nu*^{r} *yna*^{13} *nu*^{r} *jn7ǫ*^{31}
and C.say 3S.RP to and.so now, "reason NOM PR.cry NOM woman
kǫ7^{3} *ntkwa*^{13}
there H.sit"
and the grandmother said (asked herself) then,"why was the woman there crying?". (00:01:45.220 - 00:01:48.690)

(223) *lo7*^{13} *jwį*^{2} *ni*^{r} *7į*^{r} *nu*$^{31(r)}$ *jn7ǫ*^{31} *kǫ7*^{3} *ni*^{34}*,* *ni*^{2}*-cha7*^{13} *yna*$^{0(13)}$
and C.say 3S.RP to NOM woman there, "now, why PR.cry.2S"
and she said to the woman, "why are you crying?". (00:01:49.890 - 00:01:52.390)

(224) *"lo7*^{13} *(xi*^{34}*)* *ni*^{2}*-cha7*^{13} *xi*^{34}*=kwta*^{r}*-* *snye7*^{r} *-jyko*^{31} *lo7*^{13}
and why CAUS.PR.bathe.2S child -well/pool(bathe) and
yna$^{0(13)}$ *„*
PR.cry.2S
"and why are you bathing your child and crying?" (00:01:53.870 - 00:01:56.760)

(225) *lo7*^{13} *nu*^{r} *jn7ą*^{31} *ką7*^{3} *jwį*^{r} *7į*^{r} *ni*^{r} *ja*^{r} *s7i*$^{2(+0)}$ *cha7*^{13} *ką7*^{3} *nu*^{r}
and NOM woman there C.say to 3S.RP "no NEG that there NOM
ta^{2} *ynǫ*$^{2(+0)}$ *ta*^{2} *chǫ7*^{r} *nu*^{r} *xi*^{34}*=kwtą*^{r} *snye7*^{r} *jyko*^{31}
? PR.cry.1s ? because REL CAUS.PR.bathe.1S child -well/pool(bathe)
and the woman said to her,"it isn't for that, that I am crying, nor is it because I am bathing my child." (00:01:57.770 - 00:02:03.310)

(226) *nu*^{r} *lye*^{r}*-la*^{2} *t7i*^{2}, *t7i*^{2} *(n)s7wi*^{r} *tyę*^{2}, *s7ya*^{2} *nu*^{r}
"NOM much-more pain, pain PR.EXIST chest(in.my), reason NOM
xi^{34}*=kwtą*^{20} *snye7*^{r} *ni*^{34}
CAUSE.PR.bathe.1S child now
"what pains me most is that I am bathing my child now." (00:02:03.840 - 00:02:08.950)

(227) *lo7*^{13} *xa*^{31} *wa7*^{34} *ngwi*^{31} *snye7*^{r} *ndi7*$^{2(+0)}$ *7a*^{31} *xa*^{2}*-ką7*^{3} *lo7*^{13}
and when already clean child moment INTS and.so and
kų$^{1(+0)}$, *kų*$^{1(+0)}$ *7į*^{r} *lo*^{r} *yla*^{r} *n7į*^{r} *nde*^{34} *lo*^{r}*-ką7*^{3}
P.throw.1S, P.throw.1S to in well/pool PR.exist here and-so(then)
"and when my child is clean in a moment I will throw him into the pool/well here." (00:02:09.500 - 00:02:14.260)

(228) *ku*^{r} *nu*^{r}
P.EAT NOM
"he will eat." (00:02:15.200 - 00:02:16.060)

(229) *x7na*^{r}*=ba*^{3}, *nde*^{34} *ns7wi*^{r} *x7na*^{r}*=ba*^{3} *kwa*^{13}*-(ny7ą*$^{31(r)}$*)* *jwį*^{2} *nu*^{r}
master=1PLEX, here H.live master=1PLEX, that-so C.say NOM
jn7ą^{31} *ką7*^{3} *7į*^{r} *ni*^{r}
woman there to 3S.RP
"our master, that lives here", she said to her (the grandmother)' (00:02:16.460 - 00:02:20.590)

(230) *lo7*^{13} *xa*^{31} *wa7*^{34} *(7)ų*^{r} *jyta*^{2} *nu*^{r} *lyo7*^{13}*-ti*$^{31(r)}$ *ką7*^{3} *7į*^{r} *nu*^{r}
and when already 2S.HON C.bathe NOM little-just that to NOM
jn7ą^{31} *ką7*^{31} *-jyko*^{31} *ką7*^{3} *jwį*^{2} *ni*^{r} *7į*^{34} *ni*$^{31(r)}$
woman that -well/pool(bathe) that C.SAY 3S.RP to 3S.RP
'and when the child was finished being bathed by the woman, the grandmother said to her. . .'(00:02:22.450 - 00:02:28.180)

(231) *“ja*^{r} *ta*^{3} *snye7*^{23} *ku*^{r} *na7*^{3} *tą*^{r} *na*^{13} *ku*^{r} *x7na*^{r} *ndi*^{2}
no P.give.2S child P.eat, I P.give.1S something P.eat master now
7a^{31} *’*
INTS
‘ “you will not give your child to your master to eat.” ’(00:02:29.150 - 00:02:33.120)

(232) *lo7*^{13} *tkwa*$^{2(+0)}$ *nu*^{r} *xwe*^{r}*-ti*^{r} *md7ą*^{r} *7o*^{31} *ni*^{r} *ką7*^{3} *lo7*^{13}
and two NOM little-just(children) C.carry with 3S.RP then and
jwį^{2} *ni*^{2} *7į*^{34} *ni*$^{31(r)}$
C.say 3S.RP to 3S.RP
‘and she had two children that she brought with her, and the grandmother said to them. . .’ (00:02:33.990 - 00:02:37.050)

(233) *xi*^{34}*=ty7o*^{20} *nu*^{r}*-nga*^{3} *xi*^{34}*=ty7o*^{20}*=(7)ų*^{r} *kii7*^{r} *xwe*^{r}*-ti*^{r} *jwį*^{2}
CAUS.gather.up well, CAUS.gather.up=2P flame little-just(children) C.say
ni^{r} *7į*^{r} *lo7*^{13} *kwna*$^{1(+0)}$*=(7)ų*^{r} *jyka*^{r}
3S.RP to and, P.search=2P wood
‘ “gather up fire children.”, she said to them,“you all look for wood.” ’(00:02:37.080 - 00:02:41.570)

(234) *kwna*$^{1(+0)}$*-t7į*^{31}*=(7)ų*^{r} *jyka*^{r}
“P.search-put=2P wood”
‘ “search for and gather up wood.” ’ (00:02:41.970 - 00:02:43.270)

(235) *lo7*^{13}*-ką7*^{3} *xi*^{34}*=ty7o*^{20} *ni*^{r} *kii7*^{r} *xa*^{31} *wa7*^{34} *ndlya*^{r}*,* *jyka*^{r} *ką7*^{3}
and-so(that) CAUS=gather.up she flame when already C.arrive, wood then
lo7^{31} *jykwi7*^{r} *ni*^{r} *7o*^{31} *nu*^{r} *xwe*^{r}*-ti*^{r} *ką7*^{3} *mdę*^{21} *jyka*$^{2(r)}$
and C.say her with NOM little-just(children) that C.carry wood
and she herself gathered up fire when the wood arrived. And she told the children who carried the wood... (00:02:44.780 - 00:02:50.230)

(236) *mdę*^{21} *kyee*^{r}*,* *mdę*^{21}
C.carry stone C.carry
“carry stones, carry” (00:02:51.490 - 00:02:52.910)

(237) *s7wa*^{2} *lo*^{r} *kii7*^{r} *ką7*^{3}
P.put in fire that
“put them on the fire.” (00:02:53.710 - 00:02:55.210)

(238) *xa*^{31} *wa7*^{34} *mkwa*^{2} *ng7a*^{31} *kyee*^{r} *kɻ7*^{3} *7ɻ*^{34} *ni*^{r} *ni*^{34} *lo71*^{3} *jwɻ*^{2} *ni*^{r}
when already C.be red stone that of her now and C.say 3S.RP
7ɻ^{31} *nu*^{r}
to NOM

when the stones began to become red, the grandmother said to the... (00:02:56.000 - 00:02:59.560)

(239) *nu*^{r} *jn7ɻ*^{31} *nu*^{r} *xi*^{34}*=kwta*^{r} *snye7*^{r} *kɻ7*^{3} *ni*^{34}
NOM woman NOM CAUS=P.BATH child that now

woman that was bathing her child... (00:03:00.120 - 00:03:02.130)

(240) *"nde*^{34} *kɻ*^{r} *lo7*^{13} *tyɻ*^{r}*=rɻ*^{r} *t7wa*^{r} *yla*$^{2(+0)}$ *re*^{34}, *s7ya*^{2}
here P.come and P.stand=1PLIN edge/mouth pool/well here, reason
ny7ɻ^{r} *nu*^{r}*-nga*^{3} *x7na*^{r} *(7)ɻ*^{r} *s7ya*^{2} *wa7*^{34}*"*
P.see so master 2S.HON reason already

"come here and we will stand on the edge of the water, so that your master sees us..." (00:03:03.610 - 00:03:08.670)

(241) *"wa7*^{34} *k7o*^{2}*=rɻ*^{r} *7ɻ*^{31} *s7ya*^{2} *ntkwa*^{13} *kwi7*^{34} *(k)wa*^{13} *to7*^{13}*-skɻ*^{31}
already P.show=1PLIN to so.that H.sit baby that in-arms2.POSS
ni^{34}, *lo7*^{13} *kw7ni*$^{2(+0)}$ *cha7*^{13} *kɻ*^{2} *7ɻ*^{31} *kwi7*^{2} *ni*^{34}, *lo7*^{13} *xa*^{31}
now, and P.make that P.throw to baby now, and when
kw7ni^{2} *cha7*^{13} *kɻ*^{232} *kwi7*^{34} *kɻ7*^{3} *lo7*^{13} *na7*^{3} *nu*^{r}*-nga*^{3}*"*
P.make.2s that P.throw.2s baby that and I, well . . .

"we will show him that the baby is now ready in your arms, make like to throw him, make like to throw him and I will throw..." (00:03:11.010 - 00:03:17.840)

(242) *"na7*^{3} *kɻ*$^{1(+0)}$ *kyee*^{r} *re*^{34} *lo*^{r} *ty7a*^{r} *re*^{34}*"*
I P.throw.1S stone here en water here

"I will throw the stone in the water here." (00:03:18.570 - 00:03:21.800)

(243) *"s7ya*^{2} *ku*^{r} *x7na*^{r}*"*
resaon P.eat master

"so that your master will eat." (00:03:21.920 - 00:03:23.790)

(244) *lo7*^{13} *kɻ7*^{3} *msnyi*^{r} *ni*^{r}, *ni*^{r} *na*^{13}*.na*$^{31(r)}$*-kwla*^{r} *kɻ7*^{3} *nu*^{r}*-nga*^{3} *kyee*^{r}
and so C.grab 3S.RP, 3S.RP grandmother-elder there well stone
kɻ7^{3} *ngɻ*^{34} *ni*^{r} *ndya*$^{31(2(+0))}$ *lo*^{r} *ty7a*^{r} *kɻ7*^{3}
there C.throw she C.go in water there

and so the grandmother took the stone up and threw it in the well and it went into the water. (00:03:24.460 - 00:03:30.670)

(245) *lo7*^{13} *ny7ɻ*^{r} *ndya*$^{2(+0)}$ *kyee*^{r} *kɻ7*^{3} *lo*^{r} *ty7a*^{r} *kɻ7*^{3} *msnyi*^{r} *kwna*^{31} *kɻ7*^{3}
and like H.go stone there in water there C.grab snake there
7ɻ^{r} *rɻ*^{r}
to it

and as the stone went into the water the snake grabbed it. (00:03:31.320 - 00:03:35.450)

(246) *(nd7ɻ*$^{2(+0)}$*),* *nd7ɻ*$^{2(+0)}$*-t7wa*^{r} *kwna*^{31} *kɻ7*^{3} *7ɻ*^{31} *rɻ*^{r} *xa*^{31} *nu*^{r} *wa7*^{34}*,*
(trapped) C.trap-mouth snake there to it when NOM already
ngwi^{31}*=ti7*$^{0(34)}$ *kwna*^{31} *kɻ7*^{3} *s7ya*^{2} *na*^{13} *tyke7*^{2} *ka*^{2} *rɻ*^{r}
C.realize=ESN snake there reason thing hot PR.be it

grabbed, the snake grabbed the stone with its mouth, the stone was very hot... (00:03:36.510 - 00:03:44.280)

(247) *kɻ7*^{3} *nu*^{r} *mt7o*^{31} *7ɻ*^{31} *lo*^{r} *yla*$^{2(+0)}$ *kɻ7*^{3} *mt7o*^{31} *(n)skwa*$^{0(34)}$ *(7)ɻ*^{r} *lo*^{r}
there NOM C.go.out to in pool there C.go.out PR.lie to in
yla$^{2(+0)}$ *kɻ7*^{3}
clearing there

there the snake came out of the well, it came out lying in a clearing. (00:03:44.900 - 00:03:48.180)

(248) *mt7o*^{31} *(n)skwa*$^{0(34)}$ *(7)ɻ*^{r} *7ya*^{13} *kye*$^{31(r)}$ *s7ɻ*^{r} *nskwa*^{2} *wa7*^{34}*-ni*$^{0(34)}$
C.go.out PR.lie to near(below) stone place H.lie already-now

it came out lying on a stone, where it is to this day. (00:03:48.920 - 00:03:51.310)

(249) *lo7*^{13} *wa7*^{34}*-ni*^{34} *ns7wi*^{r} *kyee*^{r} *kɻ7*^{3} *t7wa*^{r} *7ɻ*^{r} *ja*^{r}*-sta*^{23} *wa7*^{34}*-ni*^{34}*,*
and already-now H.exist stone there mouth of until already-now
lo7^{13} *ja*^{r} *jylyo*$^{1(+0)}$*=ti7*$^{0(34)}$*=rɻ*^{r} *ni*^{34} *cha*^{13}*-ndyu*^{21} *ka*^{r} *rɻ*^{r} *ni*^{34} *ni*^{34}
and no PR.know-ESN.1PLIN now world PR.be it when, when,
ni^{34}*,* *ni*^{34} *xa*^{31} *ka*^{r} *rɻ*^{r}
when, when, when PR.be it

and now it still has the stone in its mouth, and we don't know what world it was when this occurred. (00:03:52.540 - 00:03:58.750)

(250) *xa*^{31} *nu*^{r} *wa7*^{34} *mdyi*^{r} *jyta*^{34}*-* *nu*^{r}*-nga*^{3} *kwi7*^{34} *kɻ7*^{3} *-jyko*^{r}*,*
when NOM already C.finish P.bathe- the baby there -well/pool,
xa^{2}*-kɻ7*^{3} *nu*^{r} *md7o*^{31} *nu*^{r} *jn7ɻ*^{31} *kɻ7*^{3} *yɻ*$^{2(+0)}$ *7o*^{31} *snye7*^{r} *kɻ7*^{3} *lo7*^{13}
and.so NOM C.leave NOM woman there C.come with child there and

when the woman finished bathing her child then, she left and came with her child. (00:04:00.520 - 00:04:07.300)

(251) *md7o*^{31} *ni*^{r} *na*^{13}*.na31(r)* *kǫ7*^{3} *yǫ*$^{2(+0)}$ *ni*^{r} *7o*^{31} *nu*^{r} *xwe*^{r}*-ti*^{r}
C.go.out 3S.RP grandma there H.come her with NOM little-just(child)
kǫ7^{3} *7o*^{31} *ni*^{r}
there with her
the grandmother left and came with the child and his mother. (00:04:07.610 - 00:04:10.340)

(252) *ndla*^{3}*-yla*$^{2(+0)}$ *ni*^{r} *s7ę*^{r} *nu*^{r} *ntkwa*^{2} *ni*^{r} *wa7*^{34}*-ni*^{34}
C.arrive-P.arrive 3S.RP place NOM H.sit she already-now
she arrived where she is today. (00:04:10.950 - 00:04:13.290)

(253) *nu*^{r}*-nga*^{3} *(7ya)* *s7ę*^{r} *nu*^{r} *ntykwi7*^{r}*=rǫ*^{r} *7o*^{31} *kyee*^{r}
well (below) place NOM H.speak=1PLIN with stone
well, the place where we say the stone of... (00:04:13.290 - 00:04:15.620)

(254) *kyee*^{r} *7ı̨*^{31} *jy7ǫ*^{r}*=rǫ*^{r} *kwla*^{r} *kǫ7*^{3}
stone of grandmother=1PLIN elder there
the stone of our great grandmother (00:04:16.670 - 00:04:17.900)

(255) *kǫ7*^{3} *jytę*^{13}*-tykwa*$^{0(13)}$ *ni*$^{2(r)}$*,* *ni*^{r} *kǫ7*^{3}*,* *7o*^{31} *nu*^{r}*-nga*^{3} *7o*^{31} *nu*^{r}
there C.enter-P.sit 3S.RP, 3S.RP there with well, with NOM
xwe^{r}*-ti*^{r} *kǫ7*^{3} *7ı̨*^{r} *ni*^{r}
little-just(children) there of 3S.RP
there she sat, well, with her children she sat there. (00:04:18.110 - 00:04:24.370)

(256) *lo7*^{13} *m7ya* *sla*^{13} *ni*^{r}
and C.come.down sleep 3S.RP
and she became sleepy (*lit. sleep came down*). (00:04:24.900 - 00:04:26.260)

(257) *xa*^{31} *nu*^{r} *wa7*^{34} *mtjı̨*^{34}*-xa*^{31}*=ti7*$^{0(34)}$ *ni*^{r} *xa*^{2}*-kǫ7*^{3} *ni*^{34}
when NOM already C.wake-when=ESN 3S.RP then, well
when she woke, well... (00:04:27.180 - 00:04:30.170)

(258) *m* *xi*^{34}*=n7ı̨*^{3} *ni*^{r} *ti*^{34}*-kwǫ*$^{0(34)}$ *xa*^{2}*-kǫ7*^{3} *wa7*^{34} *n7ı̨*^{3} *ni(r)*
C.CAUS.look 3S.RP just-up and.so already C.see 3S.RP H.sit
ntkwa^{13} *nu*^{r} *ka*^{r} *j7o*^{34}*-kcha*^{3} *kǫ7*^{3}
NOM PR.be holy-sun there
She looked up and, where he was, is where the holy sun is. (00:04:30.220 - 00:04:34.810)

(259) *xa*^{31} *mb7ya*^{2} *tla*^{r} *kǫ7*^{3} *ni*^{r} *n7ı̨*^{3} *7a*^{31} *ni*^{r} *ntkwa*^{13} *j7o*^{34}*-koo7*^{31}
when C.descend night there 3S.RP C.see INTS 3S.RP H.sit holy-moon
When night came she saw the holy moon. (00:04:35.830 - 00:04:38.760)

(260) *lo7*^{13} *j7o*^{34}*-kcha7*^{3} *kǫ7*^{3} *ni*^{34} *ja*^{r} *ska*^{r} *na*^{13} *mkwa*^{r} *7i*^{31} *kǫ7*^{3} *xa*^{2}*-kǫ7*^{3},
and holy-sun there so, not one thing C.pass to there and.so,
kǫ7^{3} *nu*^{r} *msnyi*^{r} *nu*^{r}*-jy7yu*^{31} *nu*^{r}*-lyo7*^{13} *la*^{r} *kǫ7*^{3} *lo7*^{13} *nu*^{r}*-jy7yu*^{31}
there REL C.grab NOM-man NOM-small more there and NOM-man
nu^{r}*-kwla*^{r} *la*^{r} *kǫ7*^{3}, *kǫ7*^{3} *nu*^{r} *msnyi*^{r} *ni*^{r} *nu*^{r}*-nga*^{3} *tso7*^{2} *ka*^{3}
NOM-elder more there, there REL C.grab 3S.RP then, side left
not one thing happened to the holy sun then, because it grabbed the littlest child, the eldest grabbed the left side. (00:04:40.060 - 00:04:49.480)

(261) *lo7*^{13} *tso7*^{13} *ka*^{3} *kǫ7*^{3} *ni*^{34} *kǫ7*^{3} *nu*^{r}*-nga*^{3} *nu*^{r} *ng7ǫ*^{31} *7ni*^{r} *7i*^{31} *rǫ*^{r}
and side left there well, there well, REL H.adhere animal to it
and on the left side was a maggot that grabbed on to it. (00:04:50.050 - 00:04:55.210)

(262) *lo7*^{13}*-kǫ7*^{3} *cha7*^{13} *ti7*^{34} *ni*^{34} *ny7ǫ*^{r}*=rǫ*^{r} *lo*^{r} *koo7*^{31} *kǫ7*^{3} *ni*^{34}
and-so(that) because ESN now H.see=1PLIN in moon there well
and because of that we see in the moon then. (00:04:55.520 - 00:04:57.770)

(263) *nkwa*^{r} *man-cha*^{23} *lo*^{r} *koo7*^{31} *kǫ7*^{3}
C.be stain on moon there
there is a stain on the moon there. (00:04:58.630 - 00:05:00.390)

(264) *ntkwi*^{31} *na*^{13} *ntkwi*^{31} *lo*^{r} *rǫ*^{r}
H.have thing H.have on it
it has something in it's eye. (00:05:00.830 - 00:05:02.350)

(265) *kǫ7*^{3} *ka*^{r} *nu*^{r} *ngǫ7*^{31} *7ni*^{r} *nu*^{r} *nu*^{r} *nu*^{r} *nu*^{r}
there H.be REL C.adhere animal REL REL REL REL
there is something that the animal stuck there... (00:05:02.500 - 00:05:05.930)

(266) *nu*^{r} *ka*^{r} *xi*^{2}*-jyka7*^{13} *7a* *jwi*^{2}*=rǫ*^{r} *re*^{34}
REL H.be fly INTS C.say=1PLIN here
here we say that is the fly (00:05:07.290 - 00:05:09.160)

(267) *lo7*^{13} *j7o*^{34}*-kcha*^{3} *kǫ7*^{3}, *kǫ7*^{3} *nu*^{r} *msnyi*^{r} *nu*^{r}*-lyo7*^{13} *la*^{r} *kǫ7*^{3}
and holy-sun there, there REL C.grab NOM-little more there
and the holy sun that grabbed the smallest child. (00:05:10.330 - 00:05:12.670)

(268) *kwi7*$^{2(+0)}$*-ny7ǫ*$^{2(r)}$ *nu*^{r} *ntkwa*^{13} *j7o*^{34}*-kcha*^{3} *kǫ7*^{3} *ti*^{34}*-kwǫ*$^{0(34)}$ *xa*^{2}*-kǫ7*^{3},
equal-how NOM H.sit holy-sun there just-above and-so,
kwi7$^{2(+0)}$*-kwa*^{34}*-ny7ǫ*$^{0(31)}$ *nu*^{r} *ntkwa*^{13} *7a*^{31} *nu*^{r}*-nga*^{3} *j7o*^{34}*-koo7*^{31} *kǫ7*^{3}
equal-there-how NOM H.sit INTS well, holy-moon there
ni^{34}
now
[and] that is how the holy sun is there then, just like how the holy moon is there too. (00:05:13.910 - 00:05:18.910)

(269) *kǫʔ*^{3} *nu*^{r} *ka*^{r} *tkwa*$^{2(+0)}$ *snyeʔ*^{r} *ni*^{r} *na*^{13}*.na31*^{r} *nu*^{r} *jyʔwi*^{r}
and.so(there) REL PR.be two child 3S.RP grandma REL C.live
lo^{r} *jykwaʔ*^{2} *chǫʔ*^{3} *re*^{34}
in swamp behind here
And so the two children of the grandmother who lived behind here(Teotepec) (00:05:19.490 - 00:05:23.370)

(270) *xa*^{2}*-kǫʔ*^{3} *ndla*$^{2(+0)}$ *ni*^{r} *sʔę*^{r} *nu*^{r} *ntkwa*^{13} *ni*^{r} *waʔ*^{34}*-ni*$^{0(34)}$
and-so H.arrive 3S.RP place REL H.sit 3S.RP already-now
and so she arrived to be where she is now. (00:05:25.180 - 00:05:27.550)

(271) *ynaʔ*^{13}*-tkwa*^{2}*,* *ynaʔ*^{13}*-tkwa*^{2} *ni*^{r} *nu*^{r}*-nga*^{3}
C.stay-H.sit, C.stay-H.sit 3S.RP and.so
she stayed there. (00:05:27.580 - 00:05:29.320)

(272) *ka*^{r} *ni*^{r} *kyee*^{r} *waʔ*^{34}*-ni*$^{0(34)}$
PR.be it.3S.RP stone already-now
the stone is there now. (00:05:31.480 - 00:05:33.120)

(273) *kyee*^{r} *jyʔǫ*^{r}*=rǫ*^{r} *kwla*^{r}
stone grandmother=1PLIN elder
the stone of our great grandmother. (00:05:34.060 - 00:05:35.710)

(274) *ntykwiʔ*^{r}*=rǫ*^{r} *ʔo*^{31}*=rǫ*^{r} *kǫʔ*^{3} *chaʔ*^{13} *jyʔǫ*^{2} *ʔa*^{31} *ntę*^{2}*,* *nʔį*^{2} *ʔa*^{31}
H.speak=1PLIN with=1PLIN there that many INTS people, much INTS
we say that well, for that many people, many (00:05:35.750 - 00:05:37.800)

(275) *ntę*^{2}*,* *nkwa*^{34}*-kyi*^{31} *re*^{34} *jyʔǫ*^{2} *ʔa*^{31} *ntę*^{2} *jyta*$^{31(2(+0))}$ *jyʔǫ*^{2} *ʔa*^{31}
people local here, many INTS people outsider many INTS
ndyʔwi^{34}*-lyo*^{3}*,* *ʔį*^{31} *rǫ*^{r}
H.recognize to this(place)
people, of Teotepec, very many people outside recognize this place. (00:05:38.330 - 00:05:43.300)

(276) *lyeʔ*^{13} *(ʔ)a*^{31} *ndyʔwi*^{r}*-lyo*^{3} *neʔ*^{r} *ʔį*^{34} *rǫ*^{r}*,* *kyee*^{r} *sʔwe*^{13} *ʔa*^{31}*,* *kyee*^{r}
many INTS H.recognize people of it, stone good INTS stone
tnɥ^{3} *ʔa*^{31} *ka*^{r}*=rǫ*^{r}
big.(respect) INTS PR.be-it
very many know of it because it is a very good stone, very respected (00:05:45.250 - 00:05:48.600)

(277) *sʔya*^{r} *na*^{13} *nu*^{r}*,* *nu*^{r} *nkwa*^{13} *jʔo*$^{0(34)}$
reason it REL, REL C.be saint/holy
because it became a saint. (00:05:48.610 - 00:05:50.820)

(278) *jʔo*^{34} *ka*^{r} *yoo*^{34} *lo*^{r} *ka*^{r} *lo*^{r} *kyee*^{r}*-jychi*^{r} *nskwa*^{34} *chǫʔ*^{3} *re*^{34}
holy/saint H.be C.grind on H.be on stone-'metate' PR.lie behind here
it was the virgin that would grind on the stone behind here (Teotepec) (00:05:51.320 - 00:05:54.570)

(279) *na*^{13} *nskwa*$^{0(34)}$ *na*$^{0(13)}$ *waʔ*^{34}*-ni*$^{0(34)}$, *sʔi*^{34} *chaʔ*$^{0(13)}$ *kwnyi*$^{0(31)}$
it PR.lie it already-now, NEG word lie
it is there now, and it is not a lie. (00:05:54.720 - 00:05:56.500)

(280) *nskwa*^{34}*=rǫ*^{r} *waʔ*^{34}*-ni*$^{0(34)}$, *tykǫʔ*$^{1(+0)}$ *(ny)ʔǫ31*^{r} *sʔę*^{r} *mdʔį*^{2} *jyaʔ*^{r}*-ni*^{r}
PR.lie-it already-now, H.see how place C.put foot-3S.RP
yoo^{34} *ni*^{r} *ʔį*^{34}*=rǫ*^{r} *lo*^{r} *kyee*^{r}*-jychi*^{r}
C.grind 3S.RP to-it on stone-'metate'
it is there, you can see the mark that she left where she put her knees when she would grind on the 'metate' stone. (00:05:56.500 - 00:06:00.220)

(281) *ntę*^{2} *nu*^{r} *ndyʔǫ*^{3}*-ti*^{34} *kwa*^{13} *ntyka*$^{31(2(+0))}$ *jlyo*$^{1(+0)}$*=ti*$^{0(34)}$ *neʔ*^{r}
people NOM C.walk.about-just there H.be(able) H.know=ESN people
sʔya^{r}, *ni*^{34} *kyee*^{r} *ka*^{r}*=rǫ*^{r}
reason, now stone H.be-it
the people that go there will know which stone it is. (00:06:00.650 - 00:06:05.160)

(282) *sʔi*$^{2(+0)}$ *kyee*^{r} *nyʔǫ*^{r}*-ti*^{34} *ka*^{r}*=rǫ*^{r} *kyee*^{r} *ʔį*^{31} *sti*^{2}*=rǫ*^{r} *ndyose*^{23},
NEG stone that(how)-just H.be-it stone of father=1PLIN god,
kyee^{r} *ʔį*^{31} *ndyose*^{23}, *ka*^{r}*=rǫ*^{r}
stone of god H.be-it
it is not some regular stone, it is the stone of our father god, it is the stone of god. (00:06:05.770 - 00:06:10.510)

(283) *kǫʔ*^{3} *nu*^{r} *yoo*^{34} *ʔį31(r)=rǫ*^{r} *ntykwiʔ*^{r} *ntę*^{2} *cha*^{2}*-ndyu*^{21} *sʔni*^{r} *ni*^{34}
there REL C.grind to-it H.speak people world before, now
it was him that would grind on the stone, the people of the world before now would say this. (00:06:10.560 - 00:06:13.190)

(284) *naa*^{r} *loʔ*^{13} *ja*^{r} *nʔį*^{r}*=rǫ*^{r} *loʔ*^{r} *ni*^{r}, *naʔ*^{13} *loʔ*^{13} *ja*^{r} *nʔį*$^{2(+0)}$
us.1PLIN and no C.see=1PLIN and it(3S.RP), I and no C.see.1S
and us we didn't see it, and I didn't see it. (00:06:13.210 - 00:06:16.110)

(285) *ntykwįʔ*$^{1(+0)}$*-tį*^{13} *chǫʔ*^{3} *kwa*^{13}*-nyʔǫ31*^{r} *kwen-to*^{23} *nsʔwi*^{r} *ʔį*^{31}*=rǫ*^{r}
P.speak.1S-just.1S reason there-how story H.exist of-it
I am talking because that is what the story is about. (00:06:16.110 - 00:06:18.560)

(286) *loʔ*^{13} *kǫʔ*^{3} *chaʔ*^{13} *ka*^{r} *ntykwįʔ*$^{1(+0)}$
and that reason H.be PR.speak.1S
and that is why I'm speaking. (00:06:18.560 - 00:06:19.820

(287) *sʔya*^{r} *waʔ*^{34} *ka*^{r} *jlyo*$^{1(+0)}$*=tiʔ*^{34} *ʔna*^{r} *nyʔɑ*^{r} *ndya*^{r} *kwen-to*^{23} *ʔi*^{r} *rɑ*^{r}
reason already H.be H.know=ESN ? how H.arrive story of it
so that we know how the story goes. (00:06:20.330 - 00:06:23.270)

(288) *loʔ*^{13} *jytɛ*$^{1(+0)}$*-ntkwa*^{2} *ni*^{r} *sʔɛ*^{r} *ntkwa*^{13} *ni*^{r} *waʔ*^{34}*-ni*^{34},
and ? -C.sit it.3S.RP place H.sit it.(3S.RP) already-now,
xa^{2}*-kɑʔ*^{3} *ni*^{34} *kɑʔ3* *nu*^{r}
and.so, now there NOM
and it is there now where it is then. (00:06:24.300 - 00:06:27.460)

(289) *kwiʔ*$^{2(+0)}$*-nyʔɑ*^{r} *ynɨ*^{3} *chaʔ*^{13} *jyka*^{r} *kɑʔ*^{3} *ʔi*^{r} *ni*^{r}
reason-how C.stay that wood there of 3S.RP
that is how her wood got there. (00:06:27.880 - 00:06:29.440)

(290) *ja-sta*^{23} *cha*^{13}*-ndyu*^{21} *waʔ*^{34}*-ni*^{34} *nʔi*^{r} *jyka*^{r} *kɑʔ*^{3} *ʔi*^{31} *ni*^{r} *nu*^{r}
until world already-now H.exist wood there of 3S.RP REL
and even today(in this world), her wood exists. (00:06:29.440 - 00:06:31.900)

(291) *nu*^{r} *nʔi*^{r}*=rɑ*^{r} *jyʔɑ*^{r}*=rɑ*^{r}
REL H.exist-it much-it
she has quite a lot. (00:06:32.840 - 00:06:34.220)

(292) *nʔi*^{r} *jyka*^{r} *kɑʔ*^{3} *ʔi*^{34} *ni*^{r} *nu*^{r}, *nʔi*^{r} *jytye*^{34} *ʔi31*^{r} *ni*^{r} *nʔi*^{r}
H.exist wood there of 3S.RP REL, H.exist pine of 3S.RP, H.exist
she has wood there, she has pine, she has. (00:06:34.220 - 00:06:37.090)

(293) *ndyʔwi*^{r}*-lyo*^{r} *ntɛ*^{2} *sʔɛ*^{r} *ntkwa*^{13} *ni*^{r} *loʔ*^{13} *kwiʔ*$^{2(+0)}$ *lo*^{r} *nyʔɑ*^{r}
H.recognize people place H.sit 3S.RP and so in how
ndyʔwi^{r}*-lyo*^{r} *ntɛ*^{2} *sʔɛ*^{r} *ntkwa*^{13} *ni*^{r} *kɑʔ*^{3} *ni*^{34}
H.recognize people place H.sit 3S.RP there now
people know the place where she is, people know this place where then.
(00:06:37.910 - 00:06:41.430)

(294) *kwa*^{13}*-nyʔɑ31*^{r} *ndyʔwi*^{r}*-lyo*^{3} *ntɛ*^{2}, *lo*^{r} *jykwaʔ*^{r} *chɑʔ*^{3} *re*^{34} *ntɛ*^{2} *nu*^{r}
that-how H.recognize people, in swamp behind here people REL
tiʔ$^{2(+0)}$ *ndyʔwi*^{r}*-lyo*^{r}
still H.recognize
people recognize the swamp behind here, people still know of it. (00:06:41.450 - 00:06:45.050)

(295) *tiʔ*$^{2(+0)}$ *ni*^{34} *nu*^{r} *chaʔ*^{13} *ʔi*^{r} *ndyose*^{23}, *jwɨ*^{2}*=rɑ*^{r} *re*^{34}
still now NOM word of god C.say=1PLIN here
now that is the word of god, we say here. (00:06:45.610 - 00:06:47.590)

(296) *lo7*^{13} *nteˀ*^{2} *nu*^{r} *ja*^{r} *ns7wi*^{r}*-lyo*^{r} *7a*^{31} *s7ya*^{r}, *ti7*^{34} *ni*^{34} *ni*^{34}
and people REL no H.recognize INTS how, ESN now, now
and the people don't know it now. (00:06:48.000 - 00:06:50.030)

(297) *jy7ą*^{r} *7a*^{31} *cha7*^{13} *jy7ą*^{r} *7a*^{31}, *jy7ą*^{r} *7a*^{31} *ny7ą*^{r} *n7į*^{r} *cha7*^{13}
much INTS that many INTS many INTS how H.exist that
cha^{13}*-ndyu*^{21} *ti7*^{34} *ni*^{34} *ni*^{34}
world ESN now, now
because of many things, many ways exist in the world today. (00:06:50.040 - 00:06:53.860)

(298) *n7eˀ*^{r} *ne7*^{r} *kwa*^{13} *ti7*$^{2(+0)}$ *ndy7wi*^{r}*-lyo*^{r}*-reˀ7*^{r} *ndyose*^{23}
some people there still H.recognize-3P god
some people still recognize that of god. (00:06:55.300 - 00:06:58.880)

(299) *n7eˀ*^{r} *ne7*^{r} *wa7*^{34} *ja*^{r} *nd7wi*^{r}*-lyo*^{r} *7a*^{31} *reˀ7*^{r} *ndyose*^{23}, *lo7*^{13}
some people already no H.recognize INTS people god, and
7na^{r}*-re*^{34} *ti7*^{34} *ndya*^{r} *jy7ą*^{r}*=ti7*^{34}*=rą*^{r} *n7eˀ*^{r}*=rą*^{r} *7į*^{r}
?-here ESN H.arrive recognize-ESN-1PLIN some=1PLIN of
there are some people that don't recognize god and some of us still recognize that... (00:06:58.890 - 00:07:03.180)

(300) *7į*^{r} *kyee*^{r} *ką7*^{3}
of stone there
of the stone (00:07:03.920 - 00:07:04.860)

(301) *kwa*^{13}*-ny7ą31*^{r} *ka*^{r} *n7į*^{r} *cha7*^{13} *7į*^{r} *kyee*^{r} *ką7*^{3}
that-how PR.be H.exist that of stone there
That is how the situation is with the stone. (00:07:05.180 - 00:07:07.120)

(302) *nu*^{r} *s7eˀ*^{r} *ntkwa*^{13} *jy7ą*^{r}*=rą*^{r} *kwla*^{r} *lo7*^{13} *ką7*^{3} *cha7*^{13} *jn7ą*^{13}
NOM place H.sit grandma=1PLIN elder and there that woman
7a^{31}, *nteˀ*^{2} *nu*^{r} *jlyo*$^{1(+0)}$*=ti7*^{34} *cha7*^{13} *7į31*^{r}*=rą*^{r}
INTS, people NOM H.know=ESN that of-this
the place of the ancient mother, that is why many people know of this. (00:07:07.440 - 00:07:11.820)

(303) *pe-ro*^{23}, *ni*^{34} *ni*^{34}, *nu*^{r}*-nga*^{3}
but, now, now well
but now, now, well... (00:07:12.690 - 00:07:14.150)

(304) *lyo^{r}=ba^{3} -re7^{34} 7ɻ^{r} rɋ^{r} lo^{r} jytyɻ^{34} re^{34}, lyo^{r}=ba^{3} -re7^{34}*
P.copy=1PLEX of it on paper here, P.copy=1PLEX in place
ni7^{13} s7ɕ^{r} nu^{r} ntykwi7^{r} yu^{r} 7o^{31}
REL H.speak man with
we record this written on paper, we record this what the people say about... (00:07:14.270 - 00:07:18.260)

(305) *7o^{31} ni7^{13} tykɥ^{13} ndy7ɋ^{r} 7o^{31} ne7^{r} re^{34} s7ya^{r} nu^{r}-nga^{3}*
with in steel(machine) PR.walk.about with people here reason well
with a recorder (machine) that this person brings so that... (00:07:18.260 - 00:07:21.990)

(306) *ska^{r} gra^{2}=ba^{3} -do^{2}, ska^{r} jynɋ$^{2(+0)}$ rɋ^{r}*
one recording, one P.stay it
a recording will stay. (00:07:22.150 - 00:07:26.150)

(307) *s7i$^{2(+0)}$ cha7^{13} ta^{r} tykwi7^{r} ta^{r} n7ɕ^{r} nu^{r} tykwi7^{r} cha7^{13} ta^{r} s7i$^{2(+0)}$,*
NEG that if P.speak if some REL P.speak that if NEG,
kɋ7^{3} cha7^{13} ska^{r} ni^{34}, ska^{r} ntɕ^{2} ni^{34}, ska^{r} ny7ɋ^{r} jlyo$^{1(+0)}$=ti7^{34}-rɕ7^{r}
there because one then, one person well, one how H.know-ESN-3P
It isn't that if they say or is someone says that yes, because of that then each person, each knows differently. (00:07:27.070 - 00:07:33.020)

(308) *na7^{3} ni^{34} jlyo$^{1(+0)}$-tɻ7^{13} ska^{r} ny7ɋ^{r}, ny7ɋ^{r} ntykwɻ7^{r} wa7^{34}-ni^{34}*
I well, H.know-ESN.1S one how, how PR.speak.1S already-now
s7ya^{r} nu^{r} jwi^{34} ne7^{r} mtsa7^{13}, ne7^{r}-jlyo$^{1(+0)}$ ta^{3}na^{2}syu^{3}
reason NOM C.say people C.advise, people-deceased Tanacio
ntykwi7^{r}=rɋ^{r} re^{34}
H.speak=1PLIN here
I know a certain story because someone told me, the deceased Tanacio. (00:07:33.710 - 00:07:39.850)

(309) *ta^{3}na^{2}syu^{3}, ni7^{13} jyka^{r} ke^{34} jykwi7^{r} ne7^{r} 7o^{31} ntɕ^{2}-kwla^{r}, y7wi^{r}*
Tanacio in stem flower C.say people with people-elder C.live
cha^{13}-ndyu^{21} s7ni^{r} kɋ7^{3} ka^{r} ne7^{r} ntykwi7^{r} kwa^{13}-ny7ɋ31^{r}
world before there PR.be people H.speak that-how
Tanacio of the place of the flowers spoke with the old ones, who lived in the old world, that is why they speak that way. (00:07:40.450 - 00:07:45.530)

(310) *lo7^{13} ny7ɋ^{r} m7ni^{3}-chɋ7^{13} na7^{3} 7ɻ^{r} ne7^{r}-jlyo$^{2(+0)}$ ta^{3}na^{2}syu^{3} kɋ7^{3},*
and how C.make-word.1S I to people-deceased Tanacio there
xa^{31} nu^{r}
when NOM
and like I asked the deceased Tanacio, when... (00:07:46.210 - 00:07:49.240)

(311) *lyǫʔ*^{13} *niʲ*^{34} *loʔ*^{13} *waʔ*^{34} *tiʔ*^{34}*-xweʳ* *laʳ* *ʔa*^{31} *neʔʳ* *xa*^{2}*-kǫʔ*^{3}
little.1S now and already ESN-little more INTS people then
I was a child and was more tender then. (00:07:49.770 - 00:07:53.830)

(312) *loʔ*^{13} *kwiʔ*$^{2(+0)}$ *kwa*^{13}*-nyʔǫ31*^{r} *mʔniʲ*^{3}*-chaʔ*^{13} *neʔʳ* *ʔɻ*^{31}
and also that-how C.make-word people of
and also like he asked the people of... (00:07:54.370 - 00:07:56.130)

(313) *ntɛ*^{2}*-kwlaʳ* *nuʳ* *ndyʔwiʳ* *cha*^{13}*-ndyu*^{21} *sʔniʳ*
people-elder REL C.live world before
the elders that lived in the world before (00:07:56.280 - 00:07:58.110)

(314) *ʔɻʳ* *sti*^{13} *rɛʔʳ* *ʔɻʳ* *jwɻ*^{2} *rɛʔʳ*
to father people to C.speak people
To his father it was said. (00:07:58.250 - 00:07:59.710)

(315) *kwiʔ*$^{2(+0)}$ *tiʲ*^{34} *nyʔǫʳ* *ntywiʔʳ* *neʔʳ* *jaʳ* *jlyo*$^{1(+0)}$*=tiʔ*^{34} *rɛʔʳ* *niʲ*^{34} *tsǫʳ*,
like just how C.talk people no H.know=ESN people what day,
niʲ^{34} *braʲ*^{3} *kaʳ* *rǫʳ*
what hour PR.be it
as it was said, they didn't know when, nor at what time it was. (00:08:00.260 - 00:08:04.660)

(316) *tsaʳ* *kwa*^{13} *tiʲ*^{34} *nyʔǫʳ* *xkwiʔʳ=rǫʳ* *sʔyaʳ* *kaʳ* *jlyo*$^{1(+0)}$*=tiʔ*^{34}*=rǫʳ*
P.go there just how CAUS.speak=1PLIN reason PR.be H.know-ESN-1PLIN,
niʲ^{34} *nyʔǫʳ* *nʔɻʳ* *chaʔ*^{13} *ʔɻʳ* *rǫʳ*
well how H.exist word of it
just to that point we will speak so that we will know of the situation (of the swamp of the 'metate') (00:08:07.530 - 00:08:10.910)

(317) *tsaʳ* *kwa*^{13}*-tiʲ*^{34} *kwen-to*^{23} *kaʳ* *rǫʳ*
P.go there-just story PR.be it
that is going to be the whole story. (00:08:11.170 - 00:08:12.490)

(318) *kwʔniʳ*
P.make
make... (00:08:12.800 - 00:08:13.240)

(319) *kwʔniʲ*^{3} *ntɛ*^{2} *chaʔ*^{13} *tlyu*^{2}*=tiʔ*^{34}, *chaʔ*^{13} *jykwɻʔ*$^{2(+0)}$ *reʔ*^{34} *tsaʳ*
P.make people that P.forgive=ESN, that C.speak.1S ? P.go
kwa^{13}*-tiʲ*^{34} *(ny)ʔǫʳ*
there-just how
that the people forgive me for what I have told is all. (00:08:13.790 - 00:08:16.770)

(320) *Allí* *esta*
there it.is
there it is. (00:08:17.290 - 00:08:18.090)

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VITA

Justin D. McIntosh was born in San Francisco, California on August 28th 1972, the son of Michael and Susan McIntosh. He grew up in the Portland area of Oregon. McIntosh completed his BA in Latin American Studies, History and Literature at the Evergreen State College in Olympia, Washington in 1999. He wrote a thesis report about the political economy and history of coffee in the Chatino region of Oaxaca, Mexico. After the completion of his undergraduate degree McIntosh spent nearly seven years as an education consultant working throughout the United States. He began his graduate studies in Linguistics at the University of Texas at Austin in 2006. He joined the Chatino Language Documentation Project in spring of 2007 and has been working on documenting Teotepec Chatino.

justindmcintosh@utexas.edu

This report was typed by the author.