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**PHONOLOGY, TONE AND THE FUNCTIONS OF TONE
IN
SAN JUAN QUIAHIJE CHATINO**

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**PHONOLOGY, TONE AND THE FUNCTIONS OF TONE
IN
SAN JUAN QUIAHUJE CHATINO**

by

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To Isabel, my mother; to Frida my daughter and the memory of
Tomás Carlos Cruz Lorenzo, my father

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The dissertation is a basic description of segmental phonology, tone, and the functions of tone in the San Juan Quiahije (SJQ) variety of Eastern Chatino. Chatino languages are spoken in the southern part of Oaxaca, Mexico. Chatino languages form a subgroup that is coordinate with the Zapotec languages in the Zapotecan family of the Otomanguean linguistic stock. The dissertation focuses on the sound system of SJQ Chatino, its system of tones, and the lexical, morphological, and syntactic functions of the tone system. SJQ Chatino is of special interest because it is a Chatino variety that has reduced nearly all historic simple stems to monosyllables, leaving behind complex consonant clusters; it has an exceptionally large tone system and complex system of tonal sandhi; the tones mark significant grammatical contrasts in addition to lexical units; and tone sandhi is significant in cuing syntactic and discourse structure.

This description starts with an introduction to the language, its language family, a typological overview, a brief history of my fieldwork, and the methodology undertaken in

this study. The work then describes the segmental phonology, including syllable structure and the distribution of the consonant and vowel phonemes, and the tones and tone sandhi, arguing for a system of fourteen contrastive tones at the lexical level. The work then turns to the functions of tone, including the restrictions on the lexical tone system according to the part of speech, with special emphasis on numeral words; the use of tone in marking possessor person and number in inalienably possessed nouns, and in marking aspect and subject person and number in verb; and tone in Spanish loan words. The description and analysis of these aspects of Quiahije Chatino is based on data gathered through elicitation and oral texts as well as my own intuitions as a native speaker of SJQ Chatino.

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Abbreviations

1PLEX	first person plural 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
A	agent
ADJ	adjective
ADV	adverb
ALI	alienable
ART	article
C	consonant
c.p	personal conversation
CAUS	causative
CIEN	Cieneguilla de Quiahije
CL	clitic
CI	cluster
CLDP	Chatino Language Documentation Project
COM	completive aspect
COMP	complementizer
COND	conditional
CONJ	conjunction
COP	copula
DAT	dative
DEF	definite
DEM	demonstrative
DEM.Abs	demonstrative absent (<i>no^L kq̣q^{LM}</i>)
DEM.Abs	demonstrative absent (<i>kq̣q^{LM}</i>)
DEM.Abs	demonstrative absent (<i>kq̣q^{MO}</i>)
DEM1	demonstrative (<i>nde^M</i>)
DEM1	demonstrative (<i>no^L nde^M</i>)
DEM2	demonstrative (<i>kwa^H</i>)
DEM3	demonstrative (<i>no^L kwa^{MH}</i>)
DEM3	demonstrative (<i>no^L kwa^H</i>)
DEM3	demonstrative (<i>kwa^{MH}</i>)
DEM3	demonstrative (<i>neq^L kwa^{MH}</i>)
EC	Eastern Chatino
EMPH	emphatic
ESN	essence

EX	exclusive
EXCL	exclamation
F1	person inflection on noun and verb
F1+0	floating tone with +0
FOC	focus
FW	function words
G	glide
H	high tone
HAB	habitual aspect
hum	human
IMPE	imperative
IN	inclusive
INA	inalienable
IND	indefinite
	<i>Instituto Nacional de Estadística, Geografía e</i>
INEGI	<i>Informática</i>
INTJ	interjection
INTS	intensifier
IP	interrogative particle
L	low tone
LM	low rise tone
LOC	locative
M	mid tone
MH	high rise tone
ML	falling tone
MRC	marker, dative
N	noun
N.1PLEX	possessed noun first person plural exclusive
N.1PLIN	possessed noun first person plural inclusive
N.1S	possessed noun first person singular
N.2S	possessed noun second person singular
N.3	possessed noun third person (singular)
NEG	negation
NHUM	no human
NL.1S	locative noun first person (singular)
NL.2P	locative noun plural second person
NL.2S	locative noun second person (singular)
NL.3	locative noun third person
NL.EX	locative noun plural exclusive
NL.IN	locative noun plural inclusive
NLP	noun location phrase
NOM	nominalizer
NOP	Santos Reyes Nopala Chatino

NP	noun phrase
NUM	number
ONOM	onomatopoeia
P	potential aspect
PAN	San Miguel Panixtlahuaca Chatino
PRG	progressive aspect
PRO	pronoun
PRO.A.0SM	pronoun agent third person (<i>yu</i>)
PRO.A.2P	pronoun agent second person (<i>wə</i>)
PRO.A.IN	pronoun agent plural inclusive (<i>Vn</i>)
PRO.A.INAN	pronoun agent inanimate (<i>rq^{MH}</i>)
PRO.A.Inan	thing (<i>rq^{MH}</i>)
PRO.A.INDEF.H	pronoun agent indefinite (<i>req</i>)
PRO.A.PLEX	pronoun agent plural first person (exclusive) (<i>wa^{LM}</i>)
Q	question
REFL	reflexive
REL	relativizer
S	sonorant
SJL	San Juan Lachao Chatino
SJLV	San Juan Lachao Viejo Chatino
SJQ	San Juan Quiahije Chatino
SP	Spanish
TAT	Tataltepec de Valdés Chatino
TEMP	temporal
TEO	Santa Lucía Teotepec Chatino
TR	transitive
V	verb
VP	verb phrase
WCH	Western Chatino
W1	word 1
W2	word 2
YAI	Santiago Yaitepec Chatino
YOL	Santa María Yolotepec
ZAC	San Marcos Zacatepec Chatino
ZAP	Zapotec
ZEN	Santa Cruz Zenzontepec Chatino

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Chapter 1

Chatinos And Their Language

1.1 CHATINOS AND THEIR TERRITORY

The Chatinos of San Juan Quiahije, a mountain pine forest community, call themselves *neq^L tnyd^H* and their language *chaq^{MH} tnyd^{ML}*. San Juan Quiahije and Cieneguilla are located in the southwestern mountains of Oaxaca. The cool, inland mountaintop community of Cieneguilla lies at about 1,600 meters above sea level, and the community of San Juan Quiahije lies another 350 meters higher (*Google Earth*).

The Chatino territory is located in the southwestern part of the state of Oaxaca, Mexico (see Figure 1.1). Historically, Chatinos lived near the Pacific coast, and even as far as Río Verde was probably occupied by Chatinos prior to the Late Postclassic, but they were largely displaced by Mixtecs at c. AD 1100 (Joyce 2010). The majority of Chatino communities are located in the district of Juquila, though some can be found in the Sola de Vega district to the north. To the west, Juquila borders the Jamiltepec district, whose indigenous population speaks Coastal Mixtec. To the east, it borders the Pochutla and Miahuatlán districts, whose indigenous populations speak Southern Zapotec. The territory borders the Pacific coast to the south and Sola de Vega (in the mountains of the Sierra Madre del Sur) to the north.

The Chatino population is concentrated mainly in the municipalities of Santos Reyes Nopala (NOP), San Juan Quiahije (SJQ), San Miguel Panixtlahuaca (PAN), Santiago Yaitepec (YAI), Santa Cruz Zenzontepec (ZEN), San Juan Lachao Nuevo (SJM), Santa Maria Temaxcaltepec (SMT), Santa Catarina Juquila (SCJ) and Tataltepec

de Valdés (TAT). Except for the municipality of Santa Cruz Zenzontepec in the Sola de Vega district, all of these communities belong to the Juquila district. (See Figure 1.1)

Figure 1.1: Districts of Oaxaca in which Chatino Speakers are Located(adapted from Cordero Avendaño 1986:15)

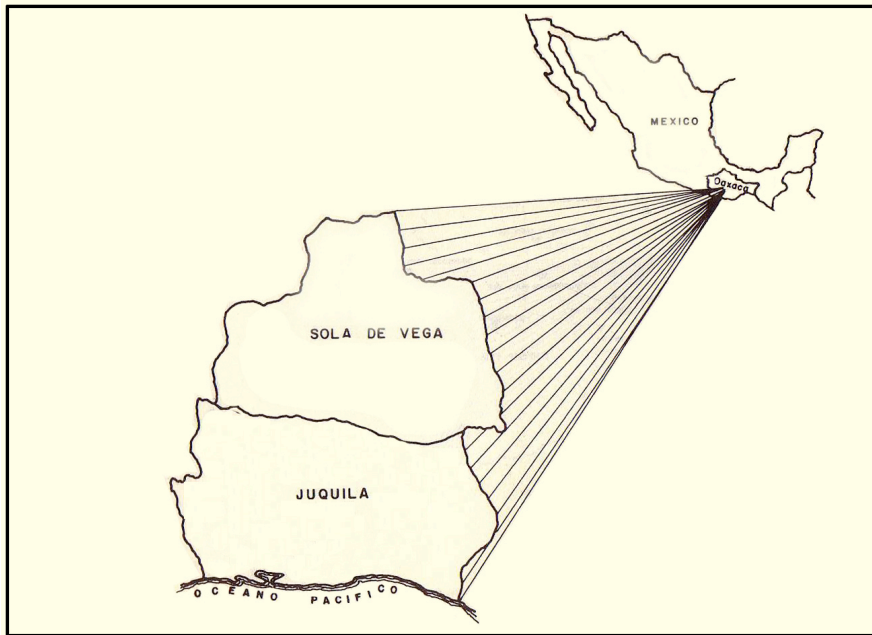
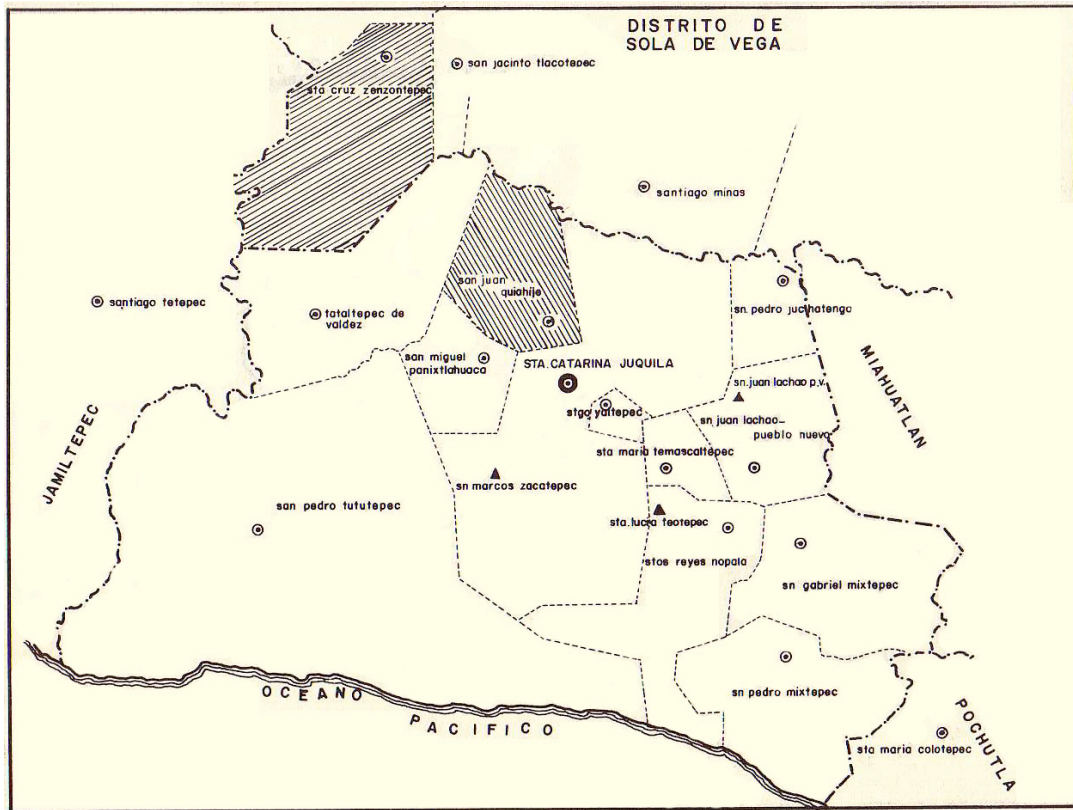


Figure 1.2: Municipalities in the Chatino Region (adapted from Cordero Avendaño 1986:16)



1.2 ECONOMY AND SOCIO-POLITICS

The economy of the Chatino people is based primarily on subsistence farming. Chatinos grow corn, beans, squash, chilies and various other vegetables for their own consumption. The current socio-political situation of the Chatinos is the result of years of conquest. They were first controlled by the Mixtecs, whose rule lasted about 300 years (Barabás and Barabás 1990). During the Mexican Independence movement (1810-1821) movement, most of their territory was taken by *criollos* (Europeans born in the New World) and foreigners (Greenberg 1981). During the rule of dictator Porfirio Díaz (1876-1910), more of the indigenous communal lands were dispossessed. Chatinos cultivated

cochineal dye for commerce until the mid-nineteenth century, when the price and demand for this product waned and the cultivation of coffee was introduced. As the market for coffee grew, *mestizos* took more of their territory for coffee plantations, cattle and other cash crops (sugar cane, cotton, fruits, etc.). The Chatinos were prevented from growing coffee by mestizos. The laws created were Chatinos were unable to grow coffee themselves; instead they had to work on coffee plantations.

During the Mexican Revolution (1910-1920), Chatinos supported the Zapatistas. Today there is an active oral tradition about this time; people recount stories that their grandparents told them. Unfortunately, the triumph of the new regime did not change anything with respect to land rights or the racism that Chatinos were suffering from *mestizos*.

The tension among Chatinos and *mestizos* is still a reality. Currently, the political arena in the Chatino territory is controlled by *mestizo* landowners. Furthermore, Chatinos are not present in district offices; *mestizos* control politics even in the majority-Chatino communities. The lack of space for Chatinos to be part of the local politics has created tensions between indigenous people and the *mestizos*, and often leads to assassination.

In more recent years, Chatinos are migrating to urban areas and to the US. Some of their destinations in the US are: Florida, North Carolina, New York, Washington and Alabama. They work low wage jobs such as in Chinese restaurants and carpentry or as day laborers.

1.3 CHATINO CULTURE

The Chatinos are an indigenous group that displays great cultural diversity. Their crafts, such as pottery, weaving and sewing, as well as their music, cuisine and religion vary by location.

While both men and women make crafts with *ixtle* (agave fiber, sisal), such as bags, fishing nets and hammocks, other production is divided between the sexes. Mainly it is men who play music, and most women weave and make pottery.

Though Chatinos still produce some crafts, they have abandoned making others. The craft of weaving textiles with backstrap looms has almost disappeared from the region. Only the community of Santiago Yaitepec continues weaving, and their children learn how to weave at a young age. In some places this tradition has almost vanished. One example is San Juan Quiahije where only elderly women know how to weave, but they do not practice it. The main textile products that are still made are bags, belts for adults and napkins for tortillas.

More commonly, Chatino women embroider products such as shirts, napkins and tablecloths. Pottery-making also remains common; people make pots and tortilla griddles (*comales*). Chatinos know Santa María Magdalena Tiltepec as the main community that makes and sells pottery. Furthermore, some Chatinos continue the tradition of making string from the agave plant (*ixtle*). This custom is uncommon, however, and is found mainly in the Zenzontepec area northwest of San Juan Quiahije. Historically, *ixtle* was used to make net bags, hammocks, and nets for fishing; now people use plastic for these products.

The most common musical genres heard in the Chatino communities are *chilenas*, *corrido*, *banda*, *cumbia* and *chirimía*. Though the *chilena* is considered to be a traditional music of the Chatinos, it is a popular genre among not only indigenous but also non-indigenous communities along the coast of Oaxaca and Guerrero states. This music was brought from Chile into the coastal area around 1822 (Stanford 1998) and is usually played with guitar and violin. The *chilena* music is not as common today due to the introduction of other types of music such as *cumbia*, *ranchero* and *narco corrido*, a type

of rancho. The only place that I have heard *chirimía* in my travels in the region was in Tataltepec de Valdés. This type of music is not played today in other parts of the Chatino region. This music was brought from Europe to the Americas in the seventeenth century (Friedlander 1977).

In the Chatino region, every community usually has at least three names, one each in Nahuatl (or some other indigenous language), Spanish and Chatino. Interestingly, San Juan Quiahije is the official name for a village that has no name in Chatino. When people refer to the village, they say *kichi* (*kiqya^M*) ‘village (hills)’, but no one knows the meaning of the word “Quiahije”, which is clearly not of Nahuatl origin.

In the region, each community celebrates its patron saint, which is the saint of the local Catholic Church and the name of the village. San Juan Quiahije has its celebration on June 24, on the birthday of Saint John the Baptist. Chatinos have many rituals which celebrate not only the seasons of the year, such as the seasons for planting and harvesting, but also the cycle of life: birth, marriage and death (Cordero 1986; Cruz 2009). For these types of rituals, *banda* music is commonly played during this last type of ritual.

1.4 CHATINO LANGUAGE

The Otomanguean language family has many classifications. Chatino is one member of this Otomanguean language family (see Figure 1.3), and it belongs to a genetic sub-group within the Zapotecan branch (Upson and Longacre 1965). Within the Chatino sub-branch, there are three main divisions (Boas 1913; Woodbury 2009): Zenzontepec (ZEN), Tataltepec (TAT), and numerous types of Eastern Chatino, as shown in Figure below.

Figure 1.3: Position of Chatino in the Otomanguean language family

- ❖ Otomanguean (Many subfamilies)
 - Zapotecan
 - Zapotec (at least five languages, many sub-varieties)
 - Chatino (3 languages)
 - Zenzontepec Chatino
 - Coastal Chatino branch
 - Tataltepec Chatino
 - Eastern Chatino (many sub-varieties)
 - The Eastern Chatino of San Marcos Zacatepec
 - The Eastern Chatino of San Juan Quiahije
 - The Eastern Chatino of Santiago Yaitepec
 - The Eastern Chatino of Santa Lucía Teotepec
 - The Eastern Chatino of San Juan Lachao
 - The Eastern Chatino of Panixtlahuaca
 - Others

1.5 INTERNAL CLASSIFICATION

Campbell shows that TAT and the others form an intermediate group to the exclusion of ZEN, which he calls Coastal Chatino, and the “others” form a genetic group within Coastal Chatino that he calls Eastern Chatino (Campbell 2011).

Various researchers have offered proposals for the internal genetic structure of Chatino (Boas 1913, Upson and Longacre 1965, López Castañeda 1990, Pride and Pride 2004, and, in the context of the Chatino Language Documentation Project (CLDP), Woodbury 2009 and Campbell 2011). Each of these proposals has agreed that Zenzontepec and Tataltepec Chatino are distinct from the Eastern Chatino variety. A variety of Eastern Chatino is spoken in twenty-one communities, but it is not clear how Eastern Chatino is split up or if there is an internal classification within Eastern Chatino.

Boas (1913) made the first classification. According to Ezéquiél Vásquez, Chatino was spoken in the villages listed in Table 1.1. The classification also came from a priest who traveled in the region. The priest told Eutimio Pérez where Chatino was spoken, who in turn told Boas. Using the intuitions of Vásquez and Pérez, Boas classified Chatino into three varieties and he grouped the speaking communities as follows:

Table 1.1: Boas Classification

Dialects	Villages
First Dialect	Juquila Yaitepec Temaxcaltepec Teotepec Cuixtla Tiltepec Nopala San Gabriel Mixtepec Lachao Yolotepec Manialtepec Ixpantepec Quiahije Ixtapan Zacatepec Panixtlahuaca Tepenixtlahuaca
Second Dialect	Tataltepec
Third Dialect	Tlapanalquiahuitl Tlacotepec Zenzontepec

What Boas called the ‘first dialect’, Upson and Longacre (1965) called ‘Yaitepec’. López Castañeda (1990) divided the first dialect into two parts, termed Yaitepec and Nopala. Pride and Pride (2004) called the first dialect ‘Zona Alta’. Finally, the CLDP (Woodbury 2009, Campbell 2011) named the first dialect ‘Eastern Chatino’. The classification is summarized in Table 1.2.

Table 1.2: Classifications Offered for Chatino

Boas 1913	López Castañeda 1990	Pride and Pride 2004	CLDP 2010
First dialect	Yaitepec; Nopala	Eastern Highland Nopala Western Highland Zacatepec	Eastern
Second dialect	Tataltepec	Tataltepec	Tataltepec
Third dialect	Zenzontepec	Zenzontepec	Zenzontepec

1.5.1 Eastern Classification

Linguistically, Eastern Chatino (ECH) varieties present significant differences among each other. This can be seen in the lexicon, the tone system, the degree of monosyllabification, the pronominal system and vowel phonemes. The Ethnologue (2009) makes four divisions among ECH (see Table 1.3). This classification is based on ‘Diccionario Chatino de la Zona Alta’ (Pride and Pride 2004). During the 1990s, Velia López Castañeda and Mario Jesús Salgado Ruedas worked with and trained indigenous educators in the Chatino region. They divided Eastern Chatino into two branches (see Table 1.2). Neither the Prides nor the teachers provided any linguistic evidence for the ECH classification (Woodbury 2009). The following table shows the classification that researchers have proposed for Eastern Chatino.

Table 1.3: Classification Offered for Eastern Chatino

Community	Boas	Castañeda	Ethnologue	CLDP classification
Santo Reyes Nopala	First Dialect	NOP	[cya]	Santo Reyes Nopala
Santa María Temaxcaltepec	First Dialect	NOP	[cya]	Santa María Temaxcaltepec

Table 1.3: Continue

Community	Boas	Castañeda	Ethnologue	CLDP classification
Santa María Magdalena Tiltepec	First Dialect	NOP	[cya]	Santa María Magdalena Tiltepec
Santa Lucía Teotepec	First Dialect	NOP	[cya]	Teotepec
Cerro del Aire	Not included	NOP	[cya]	Teotepec
Santiago Cuixtla	First Dialect	NOP	[cya]	Santiago Cuixtla
Atotonilco	Not included	NOP	[cya]	Atotonilco
San Gabriel Mixtepec	First Dialect	NOP	[cya]	San Gabriel Mixtepec
San Miguel Panixtlahuaca	First Dialect	YAI	[ctp]	San Miguel Panixtlahuaca
San Juan Quiahije	First Dialect	YAI	[ctp]	Quiahije
Cieneguilla de Quiahije	Not included	YAI	[ctp]	Quiahije
Santiago Yaitepec	First Dialect	YAI	[ctp]	Santiago Yaitepec
San José Ixtapan	First Dialect	YAI	[ctp]	San José Ixtapan
Santa Cruz Tepenixtlahuaca	First Dialect	YAI	[ctp]	Santa Cruz Tepenixtlahuaca
San Francisco Ixpantepec	First Dialect	YAI	[ctp]	San Francisco Ixpantepec
Santa María Amialtepec	First Dialect	YAI	[ctp]	Santa María Amialtepec
San Juan Lachao Nuevo	First Dialect	YAI	[cly]	Lachao
San Juan Lachao Viejo	First Dialect	YAI	[cly]	Lachao
Santa María Yolotepec	First Dialect	YAI	[cly]	Santa María Yolotepec
San Marcos Zacatepec	First Dialect	YAI	[ctz]	San Marcos Zacatepec

Table 1.3: Continue

Santa Catarina Juquila	First Dialect	YAI	[ctz]	Santa Catarina Juquila
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In table 1.3, there are three groupings of communities where the same Chatino is spoken: Teotepec and Cerro del Aire; San Juan Quiahije and Cieneguilla; and San Juan Lachao Nuevo and Viejo. This is the result of each community founding another community, as seen in the names of the communities of San Juan Lachao Viejo (Old San Juan Lachao) and San Juan Lachao Nuevo (New San Juan Lachao).

For the CLDP, the Boasian three-way distinction would be more appropriate for Chatino classification than the one in Ethnologue (Woodbury 2009). The research done by members of CLDP, in particular the historical analysis of Campbell, considers Eastern Chatino to be made up of independent genetic units, distinct from the others because all the sub-variants show a common set of innovations and retentions (Campbell 2011).

Table 1.4: Isoglosses and Innovations in Chatino (Campbell 2011)

	ZEN	TAT	ZAC	SJQ	YAI	TEO
1. monosilabification	-	√ /-	-	√	(√)	√
2. reflex of *ky	ch	ty	ky	ky,y,k	(ky, ky)	(ty, y)
3. lam. of *tz, *s before *i	√	-	-	-	(-)	(-)
4. lam. of *tz / *s after *i	-	√	√	√	(√)	(√)
5. lam. of *tz after *e	-	√	-	-	(-)	(-)
6. lam. of *tz before penult.*e	-	√	√	(√)	√	√
7. floating tone		√	√	√	√	√
8. metathesis of *7itá 'water'	-	-	√	√	√	√
9. *-aja7 'sleep' > 'sleep'	-	√	√	√	√	(√)
10. *lutĩ 'vine' > 'rope'	-	-	√	√	√	√
11. causative xi- / x-	-	√	(√)	√	√	(√)

Based on the data from table 1.4, the following observations are made:

- a. The isoglosses of rows 4, 6, 7, 9, and 11 together show that all the Chatino varieties except ZEN form a sub-group within the family, Coastal Chatino (Campbell 2011).
- b. The isoglosses in rows 8 and 10 suggest that all the variants of Coastal Chatino except TAT form a genetic subgroup within Coastal Chatino; this subgroup is Eastern Chatino (Campbell 2011).

1.6 SAN JUAN QUIAHUJE TONE TYPOLOGY

SJQ features four tone levels, which places it among the more complex tone languages in the world, as only a handful of languages including Trique (Longacre 1952) and Usila Chinantec (Skinner 1962) (both Otomanguean) some Hmong-Mien languages (Chang 1953) and the Ngamambo variety of the Moghamo Grassfields Bantu language (Asongwed and Hyman 1976) have been described as having a larger inventory of tone levels at five each. Furthermore, SJQ allows for more than one tone to be linked to a syllable, resulting in tone contours involving each of the four tone levels. These binary tones function as phonemic units and are not the result of the preservation of tones following the loss of a vowel the tone contours can be found in Zacatepec Chatino on trisyllabic verbs, so contour tone formation precedes vowel syncopation. All told, there are fourteen tone categories which create ten distinct surface melodies, involving either level tones at one of the four tone levels, or else a f0 rise or fall between two levels. These inventories of tonal phonemes and surface melodies are among the largest of any described language.

Adding even greater complexity to SJQ tone is its use of floating tones which do not normally surface on the associated syllable but instead on the following syllable. While SJQ is not the only Otomanguean language to feature floating tones (Peñoles

Mixtec (Daly 2000), Northern Pame (Avelino 1997) *inter alia*), nor the only language described as having more than one level of floating tone (Hollenbach analyzes Magdalena Peñasco Mixtec as having High and Low floating tones (2000) and Paster (2003) describes Gã (Niger-Congo) as having both floating High and Low tones).

An even further complication is the phonemic tone sandhi which takes place. In this type of sandhi when a syllable of a given tone category (say the level, “toneless” Low tone) is changed into a different tone category (in this case the falling Mid-Low tone) when following words which are suitable sandhi triggers. It bears mentioning that this kind of change is not the result of a delayed realization of a pitch target (though this may be the historic origin of such processes), but rather a phonemic change in which one set of tone targets is replaced with another, and the melody of the triggering tone is unaffected (cf. Tone 3 sandhi in Mandarin (Chao 1968)).

There are a few important differences between the Eastern Chatino tone systems (of which SJQ's tone system is one of the most fully described) and other Chatino tone systems. Zenzontepec Chatino and Tataltepec Chatino have fewer phonemic tone levels, with two levels each (though a phonetic Mid level is found in Zenzontepec Chatino)(Sullivant and Woodbury 2009; Campbell 2011). The tone bearing unit in Zenzontepec Chatino, in common with Zapotec tone systems, is the mora, as can be seen in the reduced tone inventories on monomoraic (i.e. short monosyllabic) words, whereas in Coastal Chatino (comprising Tataltepec Chatino and Eastern Chatino) the tone is assigned to a word, which following a process of monosyllabification is now coterminous with the syllable in SJQ Chatino.

Also noteworthy is that in no Chatino language does non-modal phonation interact with the tone categories, unlike the case with the closely related Zapotec languages where laryngealization is a phonemic feature of some tone categories (Beam

de Azcona 2004 *inter alia*). The only non-modal phonation observed in SJQ is breathiness in Low-tone sequences, which may be a phonetic effect and not a phonemic property of the tone category.

1.6.1 San Juan Quiahije as Eastern Chatino

Traveling to different Chatino communities, I have found that SJQ Chatino is very different from other Chatino varieties. The varieties that I do not understand are ZEN and TAT. When communicating with these speakers, I have ended up switching to Spanish with those who know it. As regards Eastern Chatino, I can only communicate in a few varieties. I have heard most of the Eastern varieties spoken in the commercial center Juquila. I can converse with people from Yaitepec, Ixpantepec, Amialtepec, and Panixtlahuaca. The variety that I can understand the most is Panixtlahuaca, while I can understand Zacatepec and Yolotepec very little. In Teotepec and Lachao I was not able to communicate in Chatino with older speakers.

Historically, Chatino had polysyllabic as well as monosyllabic roots (Campbell 2011), and many Chatino varieties are undergoing or have undergone a process of monosyllabification wherein some or all non-tonic syllables undergo vowel syncope or are deleted (Campbell 2009; Sullivan 2010). Today, ZEN exhibits original root shapes, including disyllabic ones; the changes are in progress currently in TAT, where most non-root vowels have syncopated and many TAT words (especially verbs) currently exist in doublets of syncopated and disyllabic forms (e.g. *ndyatè* ~ *ntyè* ‘s/he is untying it’) (Sullivant Wordlist, work in progress). The majority of the Eastern Chatino variants have completely monosyllabified, with the exception of the Zacatepec variety which still preserves its polysyllabic roots as well as three of its original non-root vowels. The tones of three of the varieties are represented with letters (ZEN, TAT and ZAC) and two

varieties represent their tones with numbers (YAI and SJQ). Table 5 shows some lexemes from these five variants. The CLDP uses alphabet letters to create a tone cognate system for the Chatino varieties (Tone Set). These are tone-cognate sets based on H. Cruz & Woodbury 2006 and on Campbell & Woodbury 2010. The reader should see substantial patterns of correspondences from dialect to dialect, within each of the sets.

Table 1.5: Chatino Lexemes

Tone Set	Coastal Chatino					Gloss
	ZEN	TAT	Eastern Chatino			
			ZAC	YAI	SJQ ¹	
A	<i>tzaka</i> ^X	<i>tzaka</i> ^X	<i>tzaka</i>	<i>ska</i> ³	<i>ska</i>	‘one’
B’	<i>nkwxixi</i> ^{MH2}	<i>nguxixi</i> ^X	<i>ngwixixi</i> ^{0L}	<i>mxi</i> ²⁴	<i>wxi</i> ^{HL+0}	‘tomato’
B	<i>k-una</i> ^{XM}	<i>k-una</i> ^L	<i>k-ona</i> ^L	<i>kwna</i> ²⁴	<i>kwna</i> ^{HL+0}	‘will cry’
B’	<i>k-oo</i> ^{MH}	<i>k-oo</i> ^L	<i>k-oo</i> ^L	<i>ko</i> ²⁴	<i>ko</i> ^{HL+0}	‘will grind’
C	<i>keta</i> ^{XM}	<i>katya</i> ^L	<i>kita</i> ^M	<i>kita</i> ²³	<i>kta</i> ^M	‘flour’
D	<i>n-te-katz</i> ^{qXM}	<i>n-xatz</i> ^{qL}	<i>nda-katz</i> ^{q0L}	<i>ntzun</i> ¹⁴	<i>nts</i> ^{qH+0}	‘is heating’
D	<i>suka</i> ^{XM}	<i>ska</i> ^L	<i>soka</i> ^{LM}	<i>ska</i> ²³⁻⁰	<i>sna</i> ^{H+0}	‘apple’
E	<i>kwea</i> ^{HM}	<i>kwaya</i> ^H	<i>kwina</i> ^{MH}	<i>kwna</i> ¹	<i>kwna</i> ^H	‘snake’
E	<i>nka-xityi</i> ^X	<i>nkwx-sti</i> ^H	<i>nga-sityi</i> ^{MH}	<i>msty</i> ¹	<i>nsti</i> ^H	‘laughed’
F	<i>lo7o</i> ^{MH}	<i>lo7o</i> ^H	<i>lo7o</i> ^R	<i>l7o</i> ³²	<i>lqo</i> ^{MH}	‘fence’
F	<i>kwilixi</i> ^{MH}	<i>kwlixixi</i> ^H	<i>losi</i> ^R	<i>wsi</i> ³²	<i>wsi</i> ^{MH}	‘butterfly’
F	<i>nkate</i> ^{MH}	<i>ngate</i> ^{qH}	<i>ngate</i> ^{qR}	<i>ngte</i> ³²	<i>nte</i> ^{MH}	‘white’
F	<i>laka</i> ^{MH}	<i>laka</i> ^H	<i>kaka</i> ^R	<i>ka</i> ³²	<i>nka</i> ^{MH}	‘yesterday’
F	<i>keta</i> ^{MH}	<i>katya</i> ^H	<i>kita</i> ^R	<i>kyta</i> ³²	<i>kta</i> ^{MH}	‘chepil’
G	<i>nkume</i> ^X	<i>ngumi</i> ^L	<i>ngowe</i> ^{MM}	<i>ngwe</i> ¹²	<i>nkwe</i> ^{LM}	‘ripe’
G	<i>y-ujwi</i> ^X	<i>ndy-ujwi</i> ^L	<i>y-ujwi</i> ^{MM}	<i>yjwi</i> ³²	<i>yjwi</i> ^{LM}	‘killed’
G	<i>kwitye</i> ^{7X}	<i>kwtye</i> ^{7L}	<i>kwitye</i> ^{7MM}	<i>kwtye</i> ⁷¹²	<i>kwtyeq</i> ^{LM}	‘ant’
H	<i>ki-xityi</i> ^X	<i>xtyi</i> ^L	<i>xityi</i> ^{L0}	<i>xtyi</i> ²¹	<i>xtyi</i> ^{M0}	‘will laugh’
H	<i>k-u-taa</i> ^{MH}	<i>taa</i> ^L	<i>k-o-taa</i> ^{L0}	<i>ta</i> ⁴³	<i>ta</i> ^{M0}	‘will give’

¹ SJQ represents the glottal stop with ‘q’ and in other varieties it is represented with ‘7’.

² Voicing is entirely predictable in ZEN (C[-vd] → C[+vd]/n__ and thus is not indicated here unlike all other Chatino where a voicing contrast, however marginal, can be found in the same environment.

Table 1.5: Continue

Coastal Chatino

Tone Set	Eastern Chatino					Gloss
	ZEN	TAT	ZAC	YAI	SJQ ³	
J	<i>nya7q^x</i>	<i>nya7q^x</i>	<i>nya7q^L</i>	<i>ny7q^l</i>	<i>n'yq^{ML+H}</i>	'will see'
J'	<i>tukwa^{Hx}</i>	<i>tkwa^H</i>	<i>tokwa</i>	<i>tkwa^l</i>	<i>tkwa^{ML}</i>	'two'

The innovations of San Juan Quiahije, as shown in table 1.5, can be summarized as follows:

- Loss of non-final syllable nuclei

ZEN	SJQ	
<i>nkatε^{MH}</i>	<i>nte^{MH}</i>	'white'

- Loss of historical vowel length

ZEN	SJQ	
<i>k-oo^{MH}</i>	<i>ko^{HL+0}</i>	'will grind'

- Innovative vowel length and complex tones through person-number cliticization

SJQ		
<i>ykq^{ML}q^{+H}</i>		'we all ate'
<i>ylq^Mq^H</i>		'we all danced'

- SJQ innovation of 14 lexical tones (Discussed with more detail in Chapter 3, but note in the table above that ZEN has only five lexical tones, TAT only has 7 (Sullivant and Woodbury 2011), and neither YAI nor ZAC make some of the distinctions shown in SJQ)

³ SJQ represents the glottal stop with 'q' and in other varieties it is represented with '7'.

- Along with Coastal Chatino, innovation of a tone distribution of one per non-compound lexeme (unlike ZEN, where tones are one per mora)

- Innovation of Set B (HL+0) along with Eastern Chatino

ZAC SJQ
k-oo^L *ko^{HL+0}* ‘will grind’

- Innovation of a Set H tone (/M0/) along with all Eastern Chatino in nouns and potential and habitual aspects of set E verbs, e.g. *nsti^H* ‘laughed’, *nxtyi^{M0}* ‘laughs’, *xtyi^{M0}* ‘will laugh’

- Set J (24), found in numbers and potential verbs, and largely unique to SJQ

nyqq^{ML+H} ‘will see’ *tkwa^{ML}* ‘two’

- Along with ZAC and YAI, the innovation of a Set D (H+0), for progressives of Set B verbs

ntsq^{H+0} ‘is heating’

And—uniquely in SJQ—the merger of Set K, which includes Spanish loan words, with Set D in the /H+0/ tone category:

ska^{H+0} ‘sugar’

SJQ Chatino verbs realize four distinct aspects: Completive (C), Potential (P), Habitual (H) and Progressive (PRG). The aspectual categories are distinguished through morphology and tone contrasts:

Table 1.6: Aspect

C	PRG	H	P	Gloss
<i>yku</i>	<i>ntyku</i> ^{+H}	<i>ntyku</i>	<i>ku</i>	‘eat’
<i>kwa</i> ^{MH}	<i>ntykwa</i> ^{MH}	<i>ntykwa</i> ^{HL+0}	<i>kwa</i> ^{HL+0}	‘sweep’
<i>yo</i> ^M	<i>nd’yo</i> ^M	<i>ndiyo</i> ^{HL+0}	<i>ko</i> ^{HL+0}	‘grind’
<i>sta</i> ^H	<i>nsta</i> ^H	<i>nsta</i> ^{M0}	<i>sta</i> ^{M0}	‘smash’
<i>ya</i> ^{LM}	<i>nkyā</i> ^{ML+H}	<i>nkyā</i> ^{ML+H}	<i>kya</i> ^{ML+H}	‘go’

The innovation of San Juan Quiahije aspect, as shown in table 1.6, can be summarized as follows:

- There are only five tones found on verbs in the completive for verbs where tone varies with aspect (Sets A /X/, F /MH/, C /M/, E /H/, G) /LM/.
- PRG and H are always prenasalized, whereas (unlike most Chatino) the nasal element in the completive is usually lost.
- The H and P of a verb always have the same tone.

1.7 CHATINO VITALITY

The 1895 census counted about 9897 speakers of Chatino (INEGI 2005). In 2005 they counted 42791 Chatino speakers. One explanation for this large difference is that the population grew. Other possibilities are that earlier census takers did not try to count many speakers, or that if speakers could, they denied speaking Chatino for sociopolitical reasons. In Mexico, census information has been insufficient in regards to indigenous languages.

Currently Spanish is replacing Chatino, like many other indigenous languages of Mexico. In many Chatino communities, Spanish is now the main language that children use. During my visits to different areas of the Chatino region, I observed that many

young people are speaking more Spanish and less Chatino. The vitality in each community is different, but one general observation is that schools do not use Chatino in the classrooms. Classes are taught in Spanish, even in so-called *escuelas bilingües*.

The tables below showing numbers of speakers are divided according to variety. Each section describes the vitality of each variety starting with ZEN, TAT and Eastern Chatino. Table 1.7 shows the survey results regarding the Chatino language (INEGI 2004).

Table 1.7: Chatino Census

Year	Speakers
1895	9897
1910	11681
1930	8208
1950	8259
1960	10231
1970	11780
2000	40722
2005	42791

The census record shows that the number of Chatino speakers has been growing. Nevertheless, while Chatino used to be the language of daily communication, this is no longer the case, especially with children. In many communities, Spanish is becoming the preferred language for all domains of communication, and children are acquiring Spanish as a first language.

1.7.1 Zenzontepec Vitality

In the ZEN area, twelve communities use Chatino as a primary language, ten communities use Spanish as a primary language and three communities speak Spanish and Chatino. There is one community (Las Trojes) where they speak three languages:

Chatino, Mixtec, and Spanish. Also, there is another community in the area which speaks only Mixtec, San Lucas Atoyaquillo.

Table 1.8: Zenzontepec Vitality⁴

Community	Population ⁵	Language used	Young Speakers
Agua Ceniza	200-400	Only Spanish	Spanish
Cinco Cerros	200	Only Spanish	Spanish
La Huichicata	400	Only Spanish	Spanish
La Paz	230-300	Only Spanish	Spanish
El Portillo	500-600	Only Spanish	Spanish
Llano el Temblor	130-250	Only Spanish	Spanish
Mano del Señor	400-700	Only Spanish	Spanish
Piedra Letra	300	Only Spanish	Spanish
Piedra que Menea	450-800	Only Spanish	Spanish
Santa Maria Siempre Viva	200	Only Spanish	Spanish
Santa Cruz Zenzontepec	600	Majority Spanish	Spanish
El Cucharal	300-400	Chatino and Spanish	Spanish
La Aurora	350-600	Chatino and Spanish	Spanish and Chatino
San Pedro del Río	1000	Majority Chatino	Majority Chatino
El Limoncillo	600-750	Majority Chatino	Majority Chatino
La Concha	500-600	Majority Chatino	Majority Chatino
La Palma	300-350	Majority Chatino	Majority Chatino
La Soledad (cofradía)	650-800	Majority Chatino	Majority Chatino
Piedra Grande	500-900	Majority Chatino	Majority Chatino

⁴ The vitality of Zenzontepec was estimated by Eric Campbell and Tranquilino Cavero Ramírez.

⁵ The population numbers came from *Instituto Nacional para el Federalismo y el Desarrollo Municipal, Gobierno del Estado de Oaxaca*. <http://www.inafed.gob.mx/work/templates/enciclo/oaxaca/>

Table 1.8: Continue

Community	Population ⁶	Language used	Young Speakers
Quinicuena	800-1000	Majority Chatino	Majority Chatino
Rancho Viejo	400	Majority Chatino	Majority Chatino
San Isidro Calabazo	500	Majority Chatino	Majority Chatino
San José	600	Majority Chatino	Majority Chatino
Santa María	1800	Majority Chatino	Majority Chatino
Tlapanalquiahuitl			
Corral de Piedra	254	Chatino and Spanish	Spanish
Las Trojes (Trojas)	334	Chatino, Mixtec, and Spanish	Spanish
San Lucas Atoyaquillo	176	Mixtec	Spanish
San Jacinto Tlacotepec	1600-2000	15 Chatino speakers	Spanish

1.7.2 Tataltepec Vitality

Tataltepec is the only community that speaks this variety. Tataltepec is a mixed town where *mestizos* and Chatinos share the same village. Only adult Chatinos speak the language; few young people acquire the language. In 2008, I found one girl who spoke Chatino because she had extensive contact with her grandparents. This variety will disappear because Spanish is replacing Chatino here as well (see Table 1.9).

Table 1.9: Tataltepec Vitality

Community	Population	Language used	Young Speakers
Tataltepec de Valdés	2842	Majority Spanish	Spanish

⁶ The population numbers came from *Instituto Nacional para el Federalismo y el Desarrollo Municipal, Gobierno del Estado de Oaxaca*. <http://www.inafed.gob.mx/work/templates/enciclo/oaxaca/>

1.7.3 Eastern Chatino Vitality

There are three communities (Zacatepec, Lachao Nuevo and Nopala) that are rapidly changing. In these two communities, young people are not acquiring Chatino as their first language. There are two communities that use both Spanish and Chatino (Yolotepec and Tiltepec), where the majority of youth are bilingual in Chatino and Spanish. The commercial center in the region is Juquila, and Spanish is used there, though there are still a few people, all very elderly, who speak the native Chatino of this town. Juquila is the place where many varieties of Chatino concentrate due to migration. Near Juquila, there are twelve communities where vitality is very strong, so children are acquiring Chatino as their first language. (See Table 1.10.)

Table 1.10: Eastern Chatino Vitality⁷

Community	Population	Language used	Young Speakers
San Marcos Zacatepec	996	Majority Spanish	Spanish
San Juan Lachao Nuevo	1042	Majority Spanish	Majority Spanish
Santos Reyes Nopala	4554	Majority Spanish	Spanish
Santa María Tiltepec	546	Chatino and Spanish	Bilingual
Santa Maria Yolotepec	1404	Chatino and Spanish	Bilingual
San Miguel Panixtlahuaca	5724	Chatino	Bilingual
Santiago Yaitepec	3665	Chatino	Bilingual
San Francisco Ixpantepec	548	Chatino	Chatino
San Juan Lachao Viejo	764	Chatino	Bilingual
Santa Cruz Tepenixtlahuaca	2514	Chatino	Chatino
Cieneguilla San Juan	1495	Chatino	Chatino
San José Ixtapan	1000	Chatino	Chatino
Santa Lucía Teotepec	1637	Chatino	Chatino
Santa María Temaxcaltepec	1517	Chatino	Chatino

⁷ The language use assessments are mine, based on my visits in many of these communities or on discussions with local people.

Table 1.10: Continue

Community	Population	Language used	Young Speakers
Santiago Cuixtla	1285	Chatino	Chatino
Santa María Amialtepec	370	Chatino	Chatino
San Juan Quahije	4154	Chatino	Chatino
Santa Catarina Juquila	5579	Spanish	Spanish

1.7.4 Vitality in San Juan Quiahije

According to the 2005 Mexican census, of the 4,154 people populating San Juan Quiahije and Cieneguilla, all but 638 residents speak Chatino. There are a total of 1740 people who are bilingual in both Chatino and Spanish, or 53% of the total population. The great majority of these (1557) are under 30. Because the vast majority of those who are bilingual are young, it is probable that this community will be largely bilingual with increasing monolingualism in Spanish in 20 years.

Chatino in Quiahije has a strong base, but there is no support for its use in the classrooms. The first obstacle for the transmission of Chatino in San Juan Quiahije is that the teachers are not locals. This is one of the most serious problems of indigenous education: teachers are not distributed based on the linguistic needs of communities. In fact, a teacher who speaks Chatino might be sent to a Zapotec community, where she is forced to communicate in Spanish. This is because new teachers are sent to remote regions, and experienced teachers are placed in more urban areas. New teachers are placed in distant and less desirable positions because of seniority; a senior teacher will get a desirable position even if he does not speak the language of the community.

Another problem that indigenous people of San Juan Quiahije face is a lack of options for school. When they finish high school, young people are forced to leave their communities if they want to pursue a higher education. When faced with the choice between leaving the community to pursue an education or staying in the community, many indigenous choose to abandon their education. Of the approximately 4,154

inhabitants of the municipality of San Juan Quiahije, only about 9 people are college graduates and 3 have studied at the graduate level. Now the migration to the United States has had a major impact on the community as young people graduating from middle school leave to work in the US.

1.8 PREVIOUS RESEARCH

When I started my research on Chatino in 2003, it was not a well-described language. The literature that I found on the Chatino people is mainly ethnographic. The early linguistic research was done by Christian missionaries under the auspices of the Summer Institute of Linguistics. Though I have not been able to find a date for the arrival of the SIL missionaries in the Chatino region, I surmise that they began to arrive in the late 1940s since the first published work on Chatino by an SIL researcher is dated 1951: Since 2003, the Chatino Language Documentation Project CLDP, based at the University of Texas at Austin, has been documenting the languages, producing word lists, phonological, morphological, and syntactic descriptions, historical reconstructions, ethnographic descriptions and records of historical events, both as published articles as well as publicly-available manuscripts. This has been the framework for all of my own linguistic work in the Chatino region.

For comparative and general linguistics, there is a list of researchers who have worked on the topic. Franz Boas was one of the pioneers of comparative work of Chatino (1913). He posited three varieties of Chatino: a first variety (ZEN), a second variety (TAT) and a third variety (ECH). Jaime de Ángulo compared Zapotecan languages, including Chatino (n. d). Robert E. Longacre and B. W. Upson researched the internal historical phonology of the Chatino language family through the proto-Chatino phonology of Yaitepec, Tataltepec, Zenzontepec and Papabuco (although Papabuco was

later shown to be a Zapotec language and not a member of Chatino proper) (1965). Later, this work was revisited by Eric Campbell (2010), who includes Terrance Kaufman's (1993) work on proto-Zapotecan in his study of isoglosses within the Chatino varieties (2010). Doris Bartholomew (1980) argued in favor of the influence of Chatino on the development of Pochutec in her work "Otomanguean Influence on Pochutla Aztec." In the CLDP group, Anthony Woodbury and Eric Campbell have been working on comparative Chatino, focusing especially on internal classification (Campbell 2011; Woodbury 2009), the reconstruction of tone (Campbell & Woodbury 2010), and in Campbell's case the wider relations of Chatino. Emiliana Cruz and Eric Campbell have written on the comparative number systems of Chatino (Campbell and Cruz 2009).

Furthermore, Hilaria Cruz, Jeff Rasch, Justin McIntosh, Ryan Sullivant, Stephanie Villard, Anthony C. Woodbury and I are working on assembling cognates across the Coastal Chatino varieties of Tataltepec, Zacatepec, Teotepec, Quiahije, Yaitepec and Panixtlahuaca.

1.8.1 Research in Each Variety

This section will discuss research on Chatino language, culture and history.

1.8.1.1 Zenzontepec

Troi Carleton has worked and published on the Zenzontepec variety. Her work includes syntactic analysis and a lexical database (a Shoebox lexical database on Zenzontepec Chatino containing about 5000 entries). Carleton has published a number of articles, including articles with Rachelle Waksler titled 'Pronomial Markers in Zenzontepec Chatino' (2000) and 'Marking Focus' (2002). With the Project for the Documentation of the Languages of Mesoamerica (PDLMA), Eric Campbell (work in progress) is currently working on this variety. His main focuses are a grammar, a

dictionary, a historical analysis and pedagogical materials. Some of Campbell's work includes, (2007) 'Zenzontepec Chatino ethnobiological classification'; (2008) 'Transitivity in Zenzontepec Chatino'; (2009) 'Sound symbolism in Zenzontepec Chatino'; (2011), 'Zenzontepec Chatino aspect morphology and Zapotecan verb classes'; and (2011) 'Valency classes in Zenzontepec Chatino'.

1.8.1.2 Tataltepec

For the Tataltepec variety, Leslie and Kitty Pride have published a number of works, including the dictionary 'Vocabulario Chatino de Tataltepec' (1970). Additionally, Leslie Pride detailed its tone system in 'Tono y contraste en la penúltima sílaba de Tataltepec' (1984). Currently, under the CLDP auspices, Ryan Sullivant is doing research on this variety. His goal is to produce a grammar and a dictionary, as well as pedagogical material. He has written a number of papers on the tone system and some on the grammar, (2011) 'Tataltepec Chatino Verb Classification and Aspect Morphology'; (2010) 'Discrimination between high and low tones in Tataltepec de Valdés Chatino: A Report from an English Pilot Study'; and Sullivant and Woodbury (To appear).

1.8.1.3 Eastern Chatino

Yaitepec

There has been much research done on Eastern Chatino, but the village that is the most studied is Santiago Yaitepec. Howard and Barbara McKaughan published 'Diccionario de la lengua chatina' (1951) and the phonological analysis 'Chatino formulas and phonemes'. Pride and Pride did extensive work on Yaitepec Chatino: Kitty Pride published the analysis 'Chatino syntax' (1965) and the article on the Chatino numerical system 'Numerals in Chatino' (1961), and Leslie Pride wrote 'Chatino tone

structure' (1963). Jessamine Upson wrote 'Some Chatino riddles analyzed' (1956), 'A preliminary structure of Chatino' (1960) and 'Chatino length and tone' (1968).

In 2002, Jeff Rasch wrote 'The basic morpho-syntax of Yaitepec Chatino' for his doctoral dissertation. His work, being the first thorough documentation of a Chatino variety, has been the basis for many subsequent studies of Chatino, and specifically for the present grammatical sketch of Eastern Chatino. Rasch is currently working on a dictionary (work in progress) of Zenzontepec Chatino under the auspices of the PDLMA.

San Miguel Panixtlahuaca

Only Leslie and Kitty Pride have worked on Panixtlahuaca Chatino. In 2004, they published a dictionary which concentrates on Panixtlahuaca but includes other varieties of Coastal Chatino (TAT, YAI, ZAC and SJQ). Additionally, they produced pedagogical materials for the PAN variety, including short stories.

San Marcos Zacatepec

Since 2006, Stephanie Villard has worked on this variety. She has done extensive work on the phonology and syntax. Some of Villard's work includes, (2008) 'Los tonos del chatino de San Marcos Zacatepec'; (2009) 'Grammatical Sketch of Zacatepec Chatino'; (2010) 'Zacatepec Chatino verb classification and aspect morphology' and (2009) '*Diccionario del idioma chatino: variante de San Marcos Zacatepec*'. Hilaria Cruz, Woodbury, and myself have conducted fieldwork on ZAC. Hilaria Cruz and Woodbury in 2006 published and presented a preliminary analysis of the tone system and proposed a practical orthography of ZAC.

Santa Lucia Teotepec

In 2007, Justin McIntosh, under the auspices of the CLDP, started working on Teotepec Chatino. McIntosh has published work on tones and a grammar entitled 'Grammatical Sketch of Teotepec Chatino' (2011). In addition, he has done work on a

word list and pedagogical material. These are available in <http://sites.google.com/site/lenguachatino/recursos-pedagogicos/teotepec>. McIntosh has written several works including (2010) ‘Los tonos del chatino de Santa Lucía Teotepec’.

San Juan Quiahije

Carmen Cordero wrote an ethnographic study on San Juan Quiahije titled ‘Stina jo’o Kucha, El santo padre Sol: contribución al conocimiento socio-religioso del grupo étnico chatino’ (1986). However, the majority of the work on this language has been done by the CLDP, and the main researchers for this variety are Hilaria Cruz (H. Cruz), Anthony Woodbury, myself, and, before his death, Thomas Smith Stark. Our work includes phonology, morphology, syntax and language revitalization. Each researcher works on different topics but the nature of our research is through collaboration.

Since 2003, Hilaria Cruz has worked on this variety. H. Cruz focused on oratory in ‘Persuasive speech of governmental authorities: a comprehensive analysis of poetic, rhetorical, and linguistic structure of traditional Chatino oratory (2009). Some of H. Cruz’s work includes, (2007) ‘Chatino situation types’; (2008) ‘Interrogative Constructions in San Juan Quiahije Chatino’; (2008) ‘Notion of base in some motion verbs in San Juan Quiahije Chatino’; (2010) Cruz, Hilaria & Anthony C. Woodbury ‘Parallelism and elipsis in Chatino speech: the borders of poetry and grammar’; (2008) Smith-Stark, Thomas, Hilaria Cruz y Emiliana Cruz ‘*Complementación en el chatino de San Juan Quiahije*’;

I wrote on phonology in ‘The phonological patterns and orthography of San Juan Quiahije’ (2004). I have also created pedagogical materials, such as the website www.lenguachatino.com. Some of my work includes, (2006) Cruz, Emiliana & Anthony C. Woodbury ‘*El sandhi de los tonos en el Chatino de Quiahije*’, (2008) ‘Noun Possession in Cha73 Jnya24 (Chatino) from Kchin4 K7ta2 (San Juan Quiahije)’; (to

appear) ‘Números en la variante chatina de San Juan Quiahije’; (2010) Campbell, Eric & Emiliana Cruz ‘El sistema numérico del proto-chatino’y. In *Las memorias del Congreso de Idiomas Indígenas de Latinoamérica-IV*. Archive of the Indigenous Languages of Latin America and (2010) Cruz, Emiliana, Hilaria Cruz, Reginaldo Figueroa, Justin McIntosh, Camille Woodbury & Anthony C. Woodbury ‘Ditransitivos en el chatino oriental’.

Finally, Anthony Woodbury, as a director of the CLDP, has done and continues doing extensive work in all the varieties of Chatino, including historical analysis, phonology and syntax, and has written papers such as ‘Tone in San Juan Quiahije Chatino verb inflection for person and number’ (2008).

1.9 MY FIELDWORK

My fieldwork took place in my hometown, Cieneguilla, San Juan Quiahije. During a period of eight years, I lived in Quiahije at least 3 months per year. I also did fieldwork in Chatino communities where they speak the other varieties, Zenzontepec, Tataltepec, Zacatepec, Teotepec, San Juan Lachao Nuevo, San Juan Lachao Viejo and Juquila. I was born and raised in Cieneguilla, San Juan Quiahije, (see Figure 1.4) until I was seven years old, when we moved to Oaxaca City, about eight hours away by bus. I always maintained strong connections with the community. My family visited home at least once a year. I was also familiar with the region from a young age when I would travel with my father throughout the Chatino region. In 2003, I started talking with the authorities in Cieneguilla and San Juan Quiahije about the possibilities of doing research in the village, and they agreed. Even though I was able to work with anyone in the community, I started working mainly with my own family. I recorded stories, plant names and kitchen conversations with my aunt Luisa Baltazar García (Figure 1.6). I

recorded folk tales with Antonieta Apolonio (Figure 1.7), who remembers stories that her parents told her as a child. My mother, grandfather, uncles, and cousins were all eager to be recorded (Figure 1.7). During this trip, I started a list of words to study the phonology of the language. In the following year, I recorded oratory with Felix Baltazar (Figure 1.5), who is a great orator. I continued working with Luisa and other people in the community. During my fieldwork in the summers, I taught writing in the community. It was challenging to teach as well as do fieldwork, but I needed to teach out the writing system that I was proposing for this variety.

Doing research at home presents great challenges. For example, it is hard to work when there are practical matters that people must attend to. During every field trip, someone needed my help, and I was obligated as an educated member of the community to provide it. For example, once a person died while attempting to cross the border between Mexico and the U.S. I had to assist until the body was brought back to the village. This case took at least two weeks away from the time I had to do my fieldwork, but that was nothing compared to what the family was going through.

My fieldwork at home is full of activities that I can often use for my research. However, sometimes I turn off the anthropologist mindset and become part of the community. There are times that I wish I had the recorder ready because I miss an opportunity to record something great. However, I am not always ready or willing to record everyone. Once on my day off, I went to visit my great aunt Margarita, on the way there, other members of my family called me to go drink *atole* (a corn drink) with them. I walked into their kitchen and there was a group of elderly women making tortillas. They were having fun, they were joking and laughing out loud. One of the woman started speaking to me, and the rest of the women participated. The woman told me about how she would flirt when she was young, and the rest told their flirting stories. I wish I had

had a video camera or at least an audio recorder, but that was my day off, and I just enjoyed that great morning with all of these women.

My political position is not simple either, especially when I have to take sides. San Juan Quiahije is the seat of the municipality of the same name, which contains Cieneguilla, and it is not uncommon for the two communities to argue over funding. I do research in both communities. One day, I was caught in the middle of their dispute. The authorities of Cieneguilla went to block the main road that connects Oaxaca City with the coast. Since I had recording equipment, they asked me to go record the event. I knew that soon the authorities in San Juan would find out about me going to record the event. They did find out, but fortunately they never questioned me about it. I try my best to be neutral in political disputes because I want to continue working in both communities.

The question of religion is not easy either, because I am expected to belong to one. Often people want to know if I am Catholic or Evangelical. I usually maintain good relationships with both. I work with both; I need a variety of people to work with. However, some people take religion to heart, and they stop working with me if I am working with someone from a different religion.

As a Cieneguilla citizen and as a researcher, I have a bigger role to play. I have to be part of the political and social life of the community. Though this can be a challenge, it also has many rewards. It has taught me the value of having a community and that I must do my duty in order to be a part of it.

Figure 1.4: San Juan Quiahije (adapted from Cordero Avendaño 1986:15)

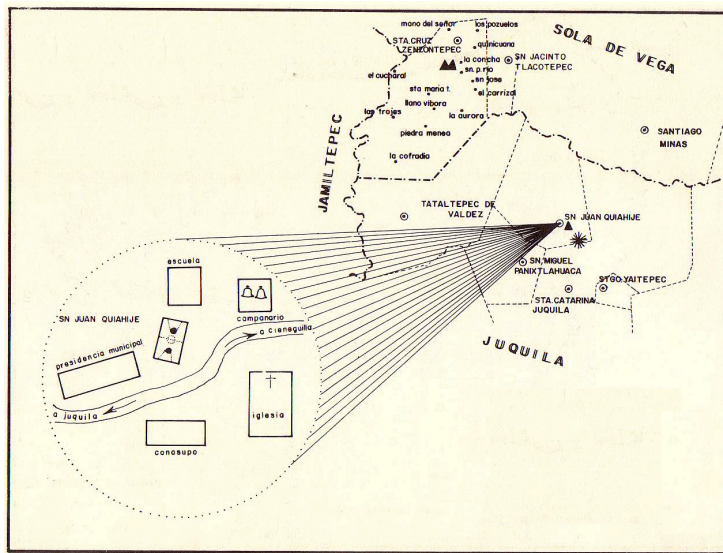


Figure 1.5: Félix Baltazar



Figure 1.6: Luisa Baltazar García



Figure 1.7: Antonieta Apolonio



Figure 1.8: My family



Front left to right: Yolanda Cruz, Hilaria Cruz, Laurencia Cruz, Tiburcia Cruz, Emiliana Cruz. Back left to right: Unknown, Isabel Cruz, Agustin Cruz, Tomás Cruz (baby), Marcos Cruz, Lorena Cruz (baby), Bonificia Apolonio, Elia Cruz (baby). The picture was taken approximately in December of 1977.

1.9.1 Methodology

The methodology I used centered on the collection and analysis of recorded audio and video texts in a variety of genres, including narratives about place names, toponyms, public meetings, women's anecdotes, folk tales, ritual prayers, reported speech, explanations of past and present daily life, historical accounts of the village and the surrounding villages (San Juan and Cieneguilla), political views, jokes, naturally occurring conversations, farming, cooking, weaving, pottery making and many hours of elicitation. I have recorded about 70 hours of text and 20 hours of videotapes of natural discourse, which has been archived in The Archive for the Indigenous Languages of Latin America (AILLA) and The Endangered Language Archive (ELAR). The data used

in this description come from a number of sources. Primarily, I collected the data during my fieldwork in San Juan Quiahije and Cieneguilla and from my intuition as a native speaker.

From 2003 through 2005, the texts were recorded with two types of digital recorder. The first two years, I recorded with a Sony MZM200 Professional Portable Hi MD Recorder. In 2005, I recorded with different equipment, including a Zoom H4 Handy recorder, a Marantz Solid-state recorder PMD670 and a TASCAM HD-P2 Portable High-Definition Stereo Audio Recorder. I transcribed using the ELAN program. I transcribed and translated the texts used in this dissertation.

1.9.2 Presentation of Examples

The examples are presented in four lines, illustrated in 1.1: (i) Transcription with post-sandhi representation of tone; (ii) underlying lexical-level transcription with no sandhi effects; (iii) gloss; and (iv) free translation. Line (i) is a phonemic segmental representation with surface-phonemic tones. Line (ii) is a phonemic segmental representation but with lexical tones. The difference is that the lexical tones are the underlying tones assigned to each lexical word as it would be listed in a lexicon; whereas the surface-phonemic tones are the tone phonemes you hear in context as a result of external tone sandhi interactions among the words.

1.1	(i)	Post-sandhi:	<i>ntqɑ^{LM}</i>	<i>xwɑ^{MH}</i>	<i>qɪ^{ML}</i>	<i>tyu^{HL}</i>	<i>kwa⁰</i>
		Pre-sandhi					
	(ii)	(Lexical):	<i>ntqɑ^{LM}</i>	<i>xwɑ^{MH}</i>	<i>qɪ</i>	<i>tyu^{HL+0}</i>	<i>kwa^{MH}</i>
	(iii)	Gloss:	see.3s.C	John	MRC	Peter	that
	(iv)	Translation:	'Peter saw John'				

In this example, the lexical representation *tyu^{HL+0}* 'Peter' is shown in line (ii) as having a floating tone (+0); in line (i), that floating tone is 'donated', according to sandhi

rules I will discuss, to the word shown as kwa^{MH} ‘that’ in line (ii), converting it to the representation kwa^0 . Likewise, qi ‘MRC’, which is toneless in line (ii), becomes qi^{ML} under the influence of xwa^{MH} , according to another rule I will discuss. It is important to note that /ML/, the acquired tone, is independently motivated as a surface phonemic tone of SJQ Chatino. That is why I term the post-sandhi level (i) as “phonemic”, not “phonetic.” . The next example in 1.2 comes from a text.

1.2 $sqwe^{MH}$ rq^{MH} $ndywiq^{ML}$ jqq^{M0}
 $sqwe^{MH}$ rq^{MH} $ndywiq$ jqq^{M0}
 good PRO.A.Inan C.say.3s then
 ‘‘It’s fine,’’ he replied.’ {text.a.1}

Compound words constructed of two or more independent lexemes are joined with a hyphen (-) in both the gloss line and the object.

1.3 yku $ja^L-ktonq^{+H}$
 C.eat.3s tortilla-pot
 ‘s/he ate tortilla’

The majority of the examples in the description are taken from texts, as is shown in 1.2; the source of the example is given next to the free translation. Unless otherwise noted, all transcriptions and translations are mine.

Chapter 2

Segmental Phonology

2.1 INTRODUCTION

This chapter describes the segmental phonology of the San Juan Quiahije variety of Eastern Chatino (SJQ). It also introduces the practical orthography that is used in this description. The chapter is structured as follows: the phonemic inventory is outlined in section 2.2; the phonological word template is described in 2.3; the vowels are described in 2.4; and the consonants are described in section 2.5. The tone system will be discussed separately in chapter 3.

2.2 PHONEMIC INVENTORY

The segmental phonemic inventory of SJQ consists of nine vowels and twenty-two consonants.

2.2.1 Vowels

The vowels are realized in two sets: oral and nasal. There are five oral vowels and four nasal vowels. \vee indicates a nasalized vowel. The vowels are shown in phonemic representation in Table 2.1, and their corresponding orthographic symbols are shown in Table 2.2. The vowels are discussed in more detail in 2.4

Table 2.1: Vowels: IPA Orthography

Oral Vowels	Nasal Vowel					
	front	central	back	front	central	back
high	/i/		/u/	/ĩ/		
mid	/e/		/o/	/ẽ/		/õ/
low		/a/			/ã/	

Table 2.2: Vowels: Practical Orthography

	front	central	back	front	central	back
high	i		u	ĩ		
mid	e		o	ẽ		ɔ
low		a			ą	

2.2.2 Consonants

There are twenty-one consonant phonemes. Table 2.3 shows them in an IPA based phonemic representation; Table 2.4 shows them in the practical orthography. The similarities and differences between the practical orthography and the IPA are as follows:

- The bilabials, apico-dentals, velar, and labio-velars are represented as in the IPA orthography, except that $r = /r/$.
- The laminal alveolars are represented by a y following a coronal consonant: $ty = /tʲ/$, $dy = /dʲ/$, $ny = /nʲ/$, $ly = /lʲ/$.
- The alveo-palatals are represented as $ch = /tʃ/$, $x = /ʃ/$, $y = /j/$.
- The laryngeals are indicated by $q = /ʔ/$, $j = /h/$.

Table 2.3: Consonants: IPA Orthography

	Bilabials	Apico-dentals	Lamino-alveolars	Palatal	Velar	Labio-velars	Laryngeals
stops	p	t d	t̚ d̚		k	kw	ʔ
affricates		ts dz	tʃ				
fricatives		s	ʃ				h
nasals	m	n	ɲ				
tap		r					
laterals		l	l̥				
glides				j		w	

Table 2.4: Consonants: Practical Orthography

	Bilabials	Apico- dentals	Lamino- alveolars	Palatal	Velar	Labio- velars	Laryngeals
stops	p	t d	ty dy		k	kw	q
affricates		ts dz	ch				
fricatives		s	x				j
nasals	m	n	ny				
tap		r					
laterals		l	ly				
glides				y		w	

From here on, only the practical orthography will be used except in a few instances where clarification is needed. In the practical orthography the sequences composed of /t, d, l, n/ followed by /y/ are separated with an apostrophe (') in order to distinguish them from the laminal series digraphs. These sequences are audible as Cy clusters and are entirely distinct from the corresponding laminal sounds.

The tone system in SJQ shows fourteen phonemic tones. Some tones are level or nearly level, some rise, and some fall. Some of the level and falling tones have a high floating tone that surfaces on following words when sandhi processes are realized (discussed in 3.4).

Table 2.5: Tone System in SJQ

	Phonemic
Level	/H/
	/H+0/
	/M/
	/_ /
	/L/
Rising	/M0/
	/+H/
	/MH/
	/LM/

Table 2.5: Continue

	Phonemic
Falling	/L+0/ /0L+0/ /HL+0/ /ML+H/ /ML/

2.3 THE SIMPLE (NON-COMPOUND) PHONOLOGICAL WORD TEMPLATE

SJQ is a dialect of Eastern Chatino that lost the non-final syllables and is becoming a variety with monosyllabic simple (non-compound) stems. As shown in Chapter 1 (see Table 1.5), there are varieties of Chatino that still retain some disyllabic stems; for example, within Eastern Chatino, compare Zacatepec (Woodbury 2010) and Yolotepec (Pride and Pride 2004) which are disyllabic, to SJQ, which has become monosyllabic:

ZAC⁸	YOL⁹	SJQ	
<i>kita</i>	<i>kita</i>	<i>kta^{MH}</i>	‘ <i>chepil</i> ¹⁰ ’
<i>kyaja</i>	<i>kyaja</i>	<i>kyja</i>	‘tortilla’
<i>xune^{7M}</i>	<i>xune’</i>	<i>xneq^M</i>	‘dog’

The simple phonological word in SJQ reflects the loss of the penultimate vowel, and it has the same shape as a syllable, with only one exception, in which a penultimate-syllable /i/ is retained after certain stops. The following formula represents the SJQ simple phonological word:

(n)(C₁(i)).{C₂, LS}V(q)

⁸ The glottal stop is represented with 7 in Zacatepec.

⁹ The glottal stop is represented with (’) apostrophe in Yolotepec.

¹⁰ Chepil is an edible herb.

The initial consonant cluster can be thought of as a sequence of an optional nasal segment, plus two further components, the first having the shape $C_1(i)$, and the second having the shape $\{C_2, LS\}V(q)$ where C is any consonant, L is a laryngeal (j or q), and S is a nasal or glide sonorant. These two components generally correspond to the first syllable and the second consonant, respectively, of disyllabic stems in conservative Chatino varieties, as we have just seen. Note that $/i/$ is mentioned explicitly in the first part of the formula because it is the only V that is ever retained in penultimate syllables. This formula consists of several parts. Going from right to left, they are: a nuclear vowel with an optional final glottal stop; either a laryngeal (L) plus sonorant (S) sequence, or else any single consonant; a C or C_i that reflects the remnant of the historical non-final syllable ($/i/$ is mentioned explicitly because it is the only V that is ever retained in penultimate syllables); and an initial optional nasal segment $/n/$.

A period is used for convenience to show the old syllable boundary but is not required for the formula. Likewise, the two instances of the symbol ‘ C ’ are subscripted as C_1 and C_2 . We may think of those clusters that involve a former penultimate syllable (i.e. parts before the inserted period) as secondary cluster since they arose historically through the reduction of the penultimate syllable. I illustrate this by breaking it down into the following sub-cases:

CV(q)

ti^{MH}	‘rope’
si^{MH}	‘butterfly’
xa^{MH}	‘light’
na^{MH}	‘thing’
kaq^H	‘wood’
toq	‘bang’
tuq^{LM}	‘cough’
teq	‘cloth’
keq^{HM}	‘difficult’

tyuq ‘belly, bottom of’

nCV(q)

ntq^{MH} ‘black’
nteq^{MH} ‘flat’
nde^M ‘here’
ntq^{LM} ‘broke’
nka^{MH} ‘yesterday’
nka^{ML+H} ‘is’
nti^{HL+0} ‘garbage’
nda^L ‘bean’
nkaq ‘leaf’
ndx^{iHL+0} ‘monkey’

(n)LSV(q)

jne^{LM} ‘blood’
jme^{HLyu⁰} ‘medicine’
jme^{HL+0yu} ‘medicine’
nqne^{ML+H} ‘s/he ‘makes’
jna ‘mirror’
jnya^{MH} ‘work’
jnyi^H ‘liar’
jya^L ‘sugar cane’
jwa^{M0} ‘long’
qwa^{HL+0} ‘banana’
qnyo^{ML} ‘fifteen’
jnaq^H ‘meat’

(n)C.CV(q)

steq ‘cloth of’
xta^L ‘mark’
yka ‘tree’
kla^{ML+H} ‘twenty’
xtyi^{H+0} ‘machete’
ska^{H+0} ‘sugar’
yjaq^H ‘I slept’
kwa^{MH} ‘broom’
kla^L ‘fish’

<i>ktyiq^M</i>	‘frog’
<i>t'yeq^{LM}</i>	‘sour’
<i>l'yaq^{LM}</i>	‘outside’
<i>ntyka^{ML+H}</i>	‘s/he is smart’
<i>ntykaq^{M0}</i>	‘noticeable’
<i>ntyka^M</i>	‘s/he got well’
<i>nty.kiq^M</i>	‘I am upset’
<i>ntykq^{MH}</i>	‘s/he closes’
<i>ntswiq^{M0}</i>	‘charcoal’
<i>nxkeq^{M0}</i>	‘s/he cheats’
<i>nskq^{MH}</i>	‘closed’
<i>ntykaq^{M0}</i>	‘noticed’
<i>ntykeq^M</i>	‘s/he is upset’
<i>nxnyi</i>	‘s/he grabs’
<i>nslq</i>	‘I open’
<i>nslu^H</i>	‘s/he is dropping’
<i>nsnyaq^H</i>	‘s/he is pinching’

(n)C.LSV(q)

<i>ntsquy^H</i>	‘s/he cut’
<i>ntyqya^{HL+0}</i>	‘s/he buys’
<i>nxqya^{M0}</i>	‘s/he cries’
<i>ntsquy^{M0}</i>	‘s/he cuts’
<i>kjwi^{ML+H}</i>	‘s/he will kill’
<i>yjwi^{LM}</i>	‘s/he killed’
<i>ntjwi^{+H}</i>	‘s/he is killing’
<i>ntjwi^{ML+H}</i>	‘s/he kills’
<i>kwqyu^M</i>	‘flea’
<i>kwqya^L</i>	‘eagle’
<i>kjwiq^{HL+0}</i>	‘will sell’

(n)Ci.CV(q)

<i>ndika^{ML+H}</i>	‘will be’; ‘is smart’
<i>tiqu^L</i>	‘water’
<i>kilo</i>	‘eye of’
<i>kichiq^{M0}</i>	‘chick’
<i>kixu^{H+0}</i>	‘cheese’
<i>kitq^H</i>	‘hammock’
<i>kiqyu^H</i>	‘man’

<i>kinyaq^L</i>	‘luggage’
<i>kij̃</i>	‘skin of’
<i>kila^L</i>	‘corn’
<i>kina^L</i>	‘sandal’
<i>kisu^L</i>	‘bag’
<i>kiyaq</i>	‘feet of’
<i>kitsaq^{HL+0}</i>	‘to inform’
<i>kitye^M</i>	‘pine (<i>ocote</i>)’
<i>kila^M</i>	‘pool’
<i>kija (kyja)</i>	‘tortilla’
<i>nkila^{MH}</i>	‘is melting’

(n)Ci.LSV(q)

<i>kiqna^M</i>	‘plate’
<i>kiqnya^{LM}</i>	‘bed’
<i>kiqya^M</i>	‘mountain’
<i>kiqya</i>	‘sin’
<i>kiqyu^H</i>	‘man’
<i>ndiqya^{MH}</i>	‘carrying’

Rasch (2002, p. 45) posits the retention of a penultimate vowel /i/ in words like *tiqa^L* ‘water’. According to him, /i/ is the only vowel that can occur in a non-final position. Table 2.6 shows the correspondence of this vowel in SJQ Chatino to cognate stems in Zacatepec Chatino, which does not delete penultimate vowels in disyllabic stems. As we will discuss further in the vowel section, penultimate /i/ is of limited distribution: it occurs after velars and alveolars.

Table 2.6: Penultimate /i/

ZAC ¹¹	SJQ	Gloss
<i>ndika^L</i>	<i>ndika^{ML+H}</i>	‘will be’
<i>tiqa</i>	<i>tiqa^L</i>	‘water’
<i>kiloo</i>	<i>kilo</i>	‘eye of’
<i>kichiq^{L0}</i>	<i>kichiq^{M0}</i>	‘chick’

¹¹ The superscript letters are tone representation. Discussed in chapter 3.

Table 2.6: Continue

ZAC ¹²	SJQ	Gloss
<i>kixo</i> ^{LM}	<i>kixu</i> ^{H+0}	‘cheese’
<i>kitq</i> ^{MH}	<i>kitq</i> ^H	‘hammock’
<i>kiqyo</i> ^{MH}	<i>kiqyu</i> ^H	‘man’
<i>kinyaq</i> ^{MM}	<i>kinyaq</i> ^L	‘luggage’
<i>kiji</i>	<i>kij</i> ^L	‘skin of’
<i>kila</i>	<i>kila</i> ^L	‘corn’
<i>kina</i>	<i>kina</i> ^L	‘sandal’
<i>kiso</i>	<i>kisu</i> ^L	‘bag’
<i>kiyaq</i>	<i>kiyaq</i>	‘feet of’
<i>kitzaq</i> ^L	<i>kitsaq</i> ^{HL+0}	‘to inform’
<i>kitye</i> ^M	<i>kitye</i> ^M	‘pine (<i>ocote</i>)’

Throughout this discussion, particularly in comparisons to conservative varieties of Eastern Chatino, I have been equating the SJQ syllable with the simple stem, except in the cases where a penultimate vowel /i/ occurs. We will revisit this topic in chapters 3 and 4, where (respectively) contractions and compounds will be discussed.

2.4 VOWELS

There are nine vowels, five oral and four corresponding nasalized vowels. In this section the vowels are organized based on their position (front, central, back) and tongue height (high, mid, low). Additionally, all the vowels except /u/ can be contrastively nasalized (V_{c} = nasalized vowel). Phonologically in SJQ there is no evidence that there is a correlation between the vowels and the tones (to be discussed in Ch. 3). As the simple word template indicates, the vowels are not word initial; they follow a consonant and are optionally followed by glottal stop, or, in the case of the penultimate syllable reduced /i/, another syllable.

The following are minimal pairs (except for tone) contrasting oral and nasal vowels:

¹² The superscript letters are tone representation. Discussed in chapter 3.

ka^{ML+H}	‘will be’	≠	kq^{ML+H}	‘I will be’
swe	‘egg’	≠	$swe\epsilon$	‘vagina of’
ki^{LM}	‘bamboo’	≠	k_i^L	‘swelling’
ko^H	‘huge’	≠	kq^{HL+0}	‘we will grind’
ku^{LM}	‘you will eat’	≠	kq^{LM}	‘tuber’

2.4.1 Vowel Length

According to Campbell (2011), vowel length in Chatino may have arisen secondarily: the vowels of monosyllabic stems became long, while those of disyllabic stems remained short. This contrast is still readily evident in ZEN (Campbell 2011) and TAT (Sullivan 2011). In EC, ZAC retains this distinction very clearly (Woodbury 2010); and some original vowel length may have been retained in PAN (Pride and Pride 2004) and TEO (McIntosh 2011). However, no vowel length has been retained in SJQ (although it arises secondarily in complex stems arising from clitic contraction, as will be discussed in Ch. 3). I found two words that looked like a good minimal pair for vowel length. To my surprise, the difference between these two words was a tone distinction and length. The following examples are words that I thought were minimal pairs for vowel length, but what is happening here is a tone issue and not vowel lengthening. The tone which phonetically sounds like [ML] (mid-low) is divided into two groups. One (/ML+H/) has a floating tone that only is heard on a following word (see Ch. 3), and sounds shorter. The other (/ML/) mainly shows up in number words (see Ch. 6), has no floating tone, and sounds longer. Following are the examples of /ML+H/ vs. /ML/:

$ka^{ML+H}[ka]$	‘will be’	≠	$ka^{ML}[ka:]$	‘nine’
$ti^{ML+H}[ti]$	adverb marker	≠	$ti^{ML}[ti:]$	‘ten’

Although the words sound similar in isolation except for length, I argue that the tone difference, and not underlying length, accounts for this otherwise very sporadic apparent minimal pair.

It may well be relevant that SJQ is the only variety of Eastern Chatino, so far as we know, that has developed an extensive system of clitic contractions leading to bimoraic syllables with complex tones. Therefore, it has repurposed vowel length for a new type of contrast. (This is discussed in more detail in Ch. 3). Alongside that, the SJQ variety does not clearly exhibit contrastive vowel length in simple syllables. As noted the vowel length is preserved in ZEN, TAT, and in several EC varieties including ZAC. The contrast between long and short vowels in ZEN is found in limited environments (Campbell 2009). In TAT there are vowel length contrasts (Sullivant 2010). In ZAC, vowel length is contrastive (Villard 2009). In TEO apparently there is a vowel length distinction (McIntosh 2011), although it is not clear if it is phonemic. In proto-Chatino the stems that were historically monosyllabic mostly had long vowels. The fact that after monosyllabification in ZEN, the remaining syllable remained short has led to a limited but real distinction of vowel length (Campbell 2009). In table 2.7 are some examples of monosyllabic words which retained vowel length in the mentioned varieties but have lost it in SJQ Chatino.

Table 2.7: Eastern Chatino Cognates of Zenzontepec Monosyllabic Long-Vowel Words

ZEN	TAT	ZAC	TEO	SJQ	Gloss
<i>choo</i>	<i>tyoo</i>	<i>kyoo</i>	<i>tyo</i>	<i>kyo</i>	‘rain’
<i>kyee</i>	<i>kee</i>	<i>kee</i>	<i>kyee</i>	<i>ke^L</i>	‘rock’
<i>kii</i>	<i>kiĩ</i>	<i>kii^{MM}</i>	<i>kii³</i>	<i>ki^{LM}</i>	‘bamboo’
<i>kāá</i>	<i>kaá</i>	<i>kaa</i>	<i>kaa²⁽⁺⁰⁾</i>	<i>kaa^{ML}</i>	‘nine’
<i>koo</i>	<i>koò</i>	<i>koo^{MM}</i>	<i>ko³</i>	<i>ko^{LM}</i>	‘cloud’
<i>jii</i>	<i>jĩ</i>	<i>jii^{MM}</i>	<i>ji³</i>	<i>ji^{LM}</i>	‘ashes’
<i>koq</i>	<i>koò</i>	<i>kq^{MM}</i>	<i>kq³</i>	<i>kq^{LM}</i>	‘sweet potato’

Table 2.7: Continue

ZEN	TAT	ZAC	TEO	SJQ	Gloss
<i>kyeē</i>	<i>keè</i>	<i>kee^M</i>	<i>kye³⁴</i>	<i>ke^M</i>	‘flower’
<i>yáā</i>	<i>yaà</i>	<i>yaa^R</i>	<i>yaa³¹</i>	<i>ya^{MH}</i>	‘cactus’
<i>laa</i>	<i>laà</i>	<i>laa^{MM}</i>	<i>laa³</i>	<i>la^{LM}</i>	‘church’

2.4.2 Oral Vowels

There are five oral vowels in SJQ. Some vowels are more common than others. It is difficult to find true minimal pairs due to the number of tones in SJQ. The following are minimal sets (except for tone) contrasting the five oral vowels:

- ka^M* ‘possible’
- ke^M* ‘flower’
- ki^M* ‘bamboo’
- ko^H* ‘huge’
- ku* ‘s/he will eat’

Following are examples for each vowel phoneme:

Phoneme /a/

- qwa^{LM}* ‘we’
- xlya^{ML+H}* ‘s/he will agree’
- l’yaq^{LM}* ‘outside’
- tyqa^L* ‘water’
- jlyaq^{LM}* ‘bitter’
- yka* ‘tree’
- ykwa^{MH}* ‘corn drink (*atole*)’
- knyaq^{MH}* ‘pepper (*chile*)’
- tykaq^L* ‘gourd’
- ntsa^H* ‘broke’

Phoneme /e/

- qne* ‘animal’
- kche^L* ‘rope (*yute*)’
- kcheq^{M0}* ‘little’
- lqwe^L* ‘wing’
- t’yeq^{LM}* ‘sour’

<i>swe</i>	‘egg’
<i>t’ye^{+H}</i>	‘essence’
<i>jne^{LM}</i>	‘blood’
<i>lyqe^{HL+H}</i>	‘will lick’
<i>wje^H</i>	‘rash’

Phoneme /i/

The vowel *i* is never found following the glide *y*. The vowel *i* is also the only vowel permitted in nonfinal syllables.

<i>kxiq^{LM}</i>	‘blue’
<i>nkqi</i>	‘toasted’
<i>(k)wji^{MH}</i>	‘skunk’
<i>sqwi</i>	‘there is’
<i>ki^{LM}</i>	‘bamboo’
<i>knyi^M</i>	‘bird’
<i>ktyi^H</i>	‘embroidery’
<i>kityi^M</i>	‘paper’
<i>kwchi^{MH}</i>	‘tiger’
<i>kichi</i>	‘grinding stone (<i>metate</i>)’
<i>kiqya^M</i>	‘mountain’

Phoneme /o/

The vowel *o* is never found following the glide *w*.

<i>yqo^M</i>	‘s/he drank’
<i>kyqo^L</i>	‘lime’
<i>jqo^H</i>	‘witchcraft’
<i>jlo</i>	‘first’
<i>jlyo^{+H}</i>	‘cover up’
<i>jno^{LM}</i>	‘lobster’
<i>xqo^{MH}</i>	‘forest’
<i>kqo^{MO}</i>	‘s/he will drink’
<i>qnyo^{ML}</i>	‘fifteen’
<i>knoq^M</i>	‘worm’

Phoneme /u/

The vowel *u* is never found following the glide *w*.

<i>ntyku</i> ^{+H}	‘is eating’
<i>sqyu</i> ^M	‘seed’
<i>ksu</i> ^L	‘bag’
<i>kuq</i> ^{MH}	‘piece’
<i>kyqyu</i> ^H	‘macho’
<i>kxu</i> ^{H+0}	‘cheese’
<i>l’yu</i> ^{+H}	‘on the ground’
<i>nchu</i> ^{M0} - <i>yaq</i> ^M	‘s/he is clapping’

2.4.3 Nasalized Vowels

The nasalized vowels occur with or without a final glottal stop. A phoneme /*u*/ is not included in the vowel inventory because [ɔ] and [u] do not contrast with each other in a nasal context (cf. Rasch 2002 for Yaitepec Eastern Chatino, where the two apparently do contrast.). In SJQ the phoneme [u] and [ɔ] vary by speaker and in some cases by phonological environment; but they never participate in minimal pairs, for example [jɔ^{MH}] or [ju^{MH}] ‘thread’. Also, *ku* ‘s/he will eat’ and *ko*^{HL+0} ‘s/he will grind’ have different vowels but, in potential 1S they both become [ɔ] or [u], e.g. *kɔ/ku*^{M0} ‘I will grind’ *kɔ/ku*^{M0} ‘I will eat’. Nasalization is a marker of first person singular and first person plural inclusive in verb inflection, and in noun inflection, it marks inalienable possession: I discuss the relevant alternations in Ch. 4, in the discussion of clitic contractions, and in Ch. 6 in the treatment of person inflection in possessed nouns and in verbs.

It should seem that *ɔ* versus *u* might contrast in the 1sg forms of *ko*^{HL+0} ‘will grind’ versus *ku* ‘will eat’; however, both of these appear homophonously as *kɔ*^{M0}, with no vowel (or tone) distinction at all. The following are near minimal pairs contrasting the four nasal vowels with the oral vowels:

<i>q</i>	≠	a	<i>qq</i>	‘house’	≠	<i>na^L</i>	‘us’
<i>e</i>	≠	e	<i>qe</i>	‘wind’	≠	<i>ke^L</i>	‘rock’
<i>i</i>	≠	i	<i>qi</i>	‘hers/his’	≠	<i>ti^L</i>	‘skinny’
<i>o</i>	≠	o	<i>qo</i>	‘my spouse’	≠	<i>qo</i>	‘spouse of’

Following are examples for each nasal vowel phoneme:

Phoneme /ã/

<i>sq^H</i>	‘pot’
<i>skq^{HL+0}</i>	‘mucus of’
<i>skw^{LM}</i>	‘corn dough’
<i>sta^{LM}</i>	‘your nail’
<i>tykw^{MH}</i>	‘metal’
<i>t’y^H</i>	‘steam bath’
<i>tq^{ML+H}</i>	‘my family’
<i>tqw^{MO}</i>	‘my mouth’
<i>tyka^H</i>	‘necklace’
<i>tyjy^{LM}</i>	‘bone of’

Phoneme /ẽ/

<i>qe^{MO}</i>	‘fan’
<i>je^{LM}</i>	‘bag’
<i>kwte^H</i>	‘mosquito’
<i>ntsw^{HL+0}</i>	‘orange’
<i>nkwe^{LM}</i>	‘ripe’
<i>nte^{HL+0}</i>	‘people’
<i>tqe^{HL+0}</i>	‘heavy’
<i>se^H</i>	‘moss’
<i>tqe^{LM}</i>	‘pitcher’
<i>se^{MO}</i>	‘silence’
<i>steq</i>	‘my cloths’

Phoneme /ĩ/

Phoneme /ĩ/ it can not occur after the glide /y/

nk_i^M	‘burned’
ki^{ML+H}	‘my head’
kji_xkq	‘my ear’
kxi^{LM}	‘bride’
$kchi^L$	‘town’
kji^L	‘leather of’
kqi^M	‘excrement’
sty_i	‘feather of’
$xkiq^{M0}$	‘curved’

Phoneme /õ/

The phoneme q does not follow w .

$ktqq^L$	‘pot’
ktq^L	‘bee’
$nkq^{HL+0}-ke^0$	‘land turtle’
$ntyqq^{M0}$	‘I drink’
$ntyqq^{HL+0}$	‘we drink’
pyq^{H+0}	‘scarf’
$skoq^{M-H}$	‘arm of’
$sq^{LM}-jyka^{LM}$	‘root’
yqq^M	‘hit’
$xtyq^{M0}$	‘cat’

2.4.3.1 Nasal Consonants and Vowels

In SJQ when a nasal consonant precedes a vowel, the vowel is automatically nasalized:

neq	[nẽʔ]	‘thing’
knoq ^M	[knõʔ ^M]	‘gusano’
yna ^{MH}	[jnã ^{MH}]	‘s/he cried’

In the orthography, we write these vowel simply as /a, e, i, o/. This contrasts with ZAC (Woodbury 2010) and YAI (Rasch 2002) where a nasalized vs. oral vowel distinction persists, at least for the vowel /a/, after nasal consonants. It is especially

audible in those dialects because /a/ acquires a far back and rounded vowel quality, while the non-nasal does not have a back quality:

ZAC

yanan^R [janã^R] ‘olote’

yona^R [jona^R] ‘s/he cried’

YAI

kwna [kw^ənã] ‘snake’

SJQ

ynq^{MH} [jnã^{MH}] ‘olote’

ynq^{MH} [jnã^{MH}] ‘s/he cried’

2.5 CONSONANTS

The segments described in this section are organized into their natural classes, grouped by place of articulation. Throughout the description that follows, the allophonic realizations are discussed for each phoneme, as well as its distribution with respect to both vowels and other consonants.

2.5.1 Bilabial Consonants

There are two bilabial consonants in SJQ, /p, m/. They are not commonly found in native SJQ words. They are generally found in borrowed words from Spanish and in onomatopoeic words.

Phoneme /p/

The phoneme /p/ is a bilabial voiceless stop and is represented as *p* in the practical orthography. In SJQ Chatino this sound is found principally in Spanish borrowings, e.g.

pe^Lro^L ‘but’, and in some onomatopoeic words, e.g. *prom^L* ‘bang’. The consonant sound [b] is an allophone of /p/, e.g., *npa^{HL+0}* [mba^{HL+0}] ‘*compadre*’:

/p/--> [b] / __N (where N is a nasal consonant)

/p/--> [p] elsewhere.

These are examples of the phoneme *p*:

<i>pe^Lro^L</i>	‘but’
<i>pi^{M0}-lu^L</i>	‘tadpole’
<i>pi^{M0}-ksuq^M</i>	‘male turkey’
<i>pi^{M0}-kteq^M</i>	‘female turkey’
<i>pi^{M0}</i>	‘turkey’
<i>ple^L</i>	‘stupid’
<i>pya^{H+0}</i>	‘papaya’
<i>pyq^{H+0}</i>	‘shawl’
<i>prom^L</i>	‘bang’

The following are minimal pairs or near minimal pairs for *p*:

p	≠	m	<i>pa^{M0}</i>	‘father’	≠	<i>ma^{M0}</i>	‘mother’
p	≠	k	<i>pi^{M0}</i>	‘turkey’	≠	<i>ki^M</i>	‘grass’
p	≠	w	<i>pa^{M0}</i>	‘father’	≠	<i>wa^M</i>	‘already’

Phoneme /m/

The phoneme /m/ is common in Spanish borrowings and in vocative words. It is represented as *m* in the practical orthography. The phoneme /m/ is usually in word initial position but it is found in final position in *prom^L* ‘bang’. This is a complete anomaly since (as we have seen) words don’t end in consonants other than /ʔ/, and it suggests this is an onomatopoeic word.

These are examples of the phoneme *m*:

ma^{M0}-*steq*^L ‘grandmother’
ma^{M0}-*xuq*^{MH} ‘old lady’
ma-nda^{HL+0} ‘errand’
mi^{M0}-*nyiq*^{ML} ‘puppy’

There is one word with /m/ in SJQ that does not have any clear Spanish source, *mi*^{M0}-*nyiq* ‘puppy’, but more research needs to be done about the origin of this word. For the word *ma*^{M0}-*steq*^L ‘dear-grandmother’ the first word of the compound is a vocative and the second part is a word in Chatino ‘grandmother’. Examples of ‘puppy’ in other Chatino varieties are¹³:

ZEN	TAT	ZAC	TEO	SJQ	
<i>mpichuq</i>	<i>minyiq</i> ^L	<i>meq</i> ^H	<i>xniq</i> ³⁴	<i>kneq</i> ²⁺⁰	<i>mi</i> ^{M0} <i>nyiq</i> ^{ML} ‘puppy’

2.5.2 Apico-dental Consonants

There are eight phonemes in the apico-dental inventory /t, d, ts, dz, s, n, r, l/. These are produced by touching the tip of the tongue against the back of the teeth and the alveolar ridge. The contrasts of apico-dentals versus laminals are discussed in the laminal section. The following are minimal pairs or near minimal pairs for some apico-dentals:

t	≠	d	<i>nta</i> ^{MH}	‘black’	≠	<i>nda</i> ^{MH}	‘carrying’
n	≠	r	<i>ne</i> ^M	‘today’	≠	<i>re</i> ^M	‘here’
n	≠	l	<i>na</i> ^{MH}	‘thing’	≠	<i>la</i> ^M	‘quick’
r	≠	l	<i>re</i> ^M	‘here’	≠	<i>le</i> ^{H+0}	‘tortilla cloth’
s	≠	ts	<i>sa</i> ^L	‘light’	≠	<i>tsa</i> ^L	‘tight’
l	≠	d	<i>nla</i> ^{MH}	‘s/he is singing’	≠	<i>nda</i> ^{MH}	‘s/he gave’
d	≠	n	<i>nde</i> ^M	‘here’	≠	<i>ne</i> ^M	‘today’
nn	≠	nd	<i>nna</i> ^{MH}	‘s/he is crying’	≠	<i>nda</i> ^{MH}	‘s/he gave’
n	≠	nn	<i>na</i> ^{MH}	‘thing’	≠	<i>nna</i> ^{MH}	‘s/he is crying’
ts	≠	ch	<i>tsa</i> ^L	‘tight’	≠	<i>cha</i> ^L	‘sharp’
dz	≠	ts	<i>qo</i> ^M <i>ndziq</i> ^L	‘sacred fire’	≠	<i>ntsiq</i> ^{MH}	‘s/he is hiding’

¹³ The data was gathered from personal conversation with the CLDP members: Eric Campbell (ZEN), Ryan Sullivan (TAT), Stéphanie Villard and Anthony Woodbury (ZAC) and Justin McIntosh (TEO).

Phoneme /t/

The phoneme /t/ is a voiceless dental stop and is represented as *t* in the practical orthography. This phoneme has a wide distribution in SJQ. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i)).{C₂, LS}V(q). /t/ also forms a penultimate weak syllable with the vowel /i/ in a few words, e.g., *tiqa*^L ‘water’. The sequences composed of /t/ + /y/ are written with an apostrophe, e.g. *t'yeq*^{LM} ‘sour’ in order to disambiguate the sequence from the laminal sound written as *ty*, from which it is phonetically completely distinct.

These are examples of the phoneme *t*:

<i>ta</i> ^{M0}	‘s/he will give’	<i>nti</i> ^{HL+0}	‘garbage’
<i>teq</i>	‘cloth’	<i>ntq</i> ^{LM}	‘was cut’
<i>ti</i> ^{MH}	‘rope’	<i>nteq</i> ^{+H}	‘hungry’
<i>toq</i> ^M	‘bang’	<i>ntiq</i> ^{+H}	‘s/he is nursing’
<i>tuq</i> ^{LM}	‘flu’	<i>wta</i> ^{HL+0}	‘cattle’
<i>tu</i> ^{MH} - <i>kwq</i> ^M	‘sky’	<i>yta</i>	‘I planted’
<i>tu</i> ^{MH} - <i>tqwa</i> ^L	‘the inside mouth of’	<i>yteq</i> ^L	‘I nursed’
<i>tu</i> ^{MH} - <i>xkaq</i> ^{M0}	‘crater’	<i>nta</i> ^{MH}	‘black’
<i>tu</i> ^{MH} - <i>xqi</i> ^M	‘intestines of’	<i>nteq</i> ^{+H}	‘hungry’
<i>tu</i> ^{MH} - <i>ke</i> ^{LF}	‘cave’	<i>nti</i> ^{HL+0}	‘garbage’
<i>tu</i> ^{MH} - <i>sqq</i> ^{ML}	‘water pool’	<i>ntu</i> ^{H+0}	‘stupid’
<i>tu</i> ^{MH} - <i>ti</i> ^{LF}	‘creek’	<i>ntq</i> ^M	‘uneven’
<i>tq</i> ^{LM}	‘grease’	<i>nte</i> ^{MH}	‘came in’
<i>te</i> ^{LM}	‘you will take’	<i>nteq</i> ^{MH}	‘flat land’
<i>tq</i> ^{LM}	‘who’	<i>ntq</i> ^{LM}	‘rip’
<i>tqa</i> ^L	‘party’	<i>kta</i> ^M	‘dust’
<i>tqwa</i> ^L	‘mouth of’	<i>kti</i> ^{MH}	‘delicate’
<i>tka</i> ^{ML+H} <i>ti</i> ^{+H}	‘a little’	<i>ktu</i> ^{LM}	‘chicken’
<i>tji</i> ^L	‘hard’	<i>ktq</i> ^H	‘hammock’
<i>tjq</i> ^{LM}	‘bone’	<i>kte</i> ^M	‘will be washed’
<i>tsaq</i> ^{LM}	‘wet’	<i>ktq</i> ^L	‘bee’
<i>chaq</i> ^{MH} <i>tnya</i> ^{ML}	‘Chatino’	<i>wta</i> ^{HL+0}	‘cattle’
<i>tno</i> ^L	‘big’	<i>sta</i> ^H	‘s/he smashed’
<i>t'yaq</i> ^L	‘slow’	<i>steq</i>	‘cloth of’
<i>tlya</i> ^{HL+0}	‘morning’	<i>sti</i>	‘s/he laid down’
<i>tla</i> ^{MH}	‘mean’	<i>stu</i> ^{H+0}	‘its will’

<i>xta^L</i>	‘border’	<i>stq^{HL+0}</i>	‘s/he pilled’
<i>sta^H</i>	‘smashed’	<i>ste^{HL+0}</i>	‘s/he will enter’
<i>ste_ç</i>	‘my father’	<i>stq^{LM}</i>	‘s/he cut’
<i>stq</i>	‘I cut’	<i>tkwa^{ML}</i>	‘two’
<i>nsta^H</i>	‘I am smashing’	<i>tkwi^H</i>	‘difficult’
<i>nste_ç^{L+0}</i>	‘came in’	<i>tkwq^{LM}</i>	‘tenate’
<i>nta</i>	‘I plant’	<i>tkwe_ç^L</i>	‘long’
<i>ntkwa^{HL+0}</i>	‘s/he is sitting’	<i>tqi^{HL+0}</i>	‘poor’
<i>tqi^L</i>	‘pain’	<i>tiqua^L (tyqa^L)</i>	‘water’
<i>tqe^{HL+0}</i>	‘heavy’	<i>tka^{ML+H}</i>	‘just’
<i>tnya^{MH}</i>	‘work’	<i>twe^L</i>	‘slowly’

The consonant *t* is found in word initial position preceding the oral vowels *a*, *i*, and, to a lesser extent, *u*. Following *t*, the vowels *e* and *o* always precede a glottal stop. The vowel *a* never occurs after a *t* and preceding a glottal stop. The consonant *t* precedes the vowel *o* in a few onomatopoeic words. With *w* I found only *wtaq^M* ‘fox’. The consonant *t* in word initial position is not found preceding a vowel *i*.

Phoneme /d/

The phoneme /d/ is a voiced apico-dental stop and is represented as *d* in the practical orthography. This is shown by minimal pairs like *nte^{HL+0}* ‘people’ ~ *nde^{HL+0}* ‘s/he is carrying’, contrary to other Chatino varieties, such as Zacatepec, in which [d] is a voiced allophone of its counterpart [t] when /t/ is preceded by a nasal consonant (Villard 2009). Historically /d/ was an allophone of /t/, and it still only occurs following the apico-dental sonorant /n/. However, it contrasts in that position with /t/ due to the loss of a penultimate vowel. For example, *nte^{HL+0}* ‘people’ is cognate with Zacatepec *natē^L* ‘people’, which shows that the /t/ was originally separated from /n/ by the vowel /a/ and protected from assimilation to [d].

It is interesting that SJQ has only developed this contrast between voiced and voiceless stops for apico-dental and (as we will see) for lamino-alveolars; and not for bilabial or velar stops.

These are examples of the phoneme *d*:

<i>nda</i> ^L	‘bean’
<i>nde</i> ^M	‘here’
<i>ndi</i> ^{+H} - <i>tiq</i> ^M	‘s/he is thirsty’
<i>ndaq</i>	‘legs of’
<i>nde</i> _ç ^{+H}	‘s/he is carrying’
<i>ndq</i> ^{+H}	‘you are standing’
<i>ndxin</i> ^{HL+0}	‘monkey’
<i>nd’ya</i> ^L	‘all’
<i>ndwa</i> ^{HL+0}	‘s/he is sitting’
<i>ndika</i> ^{ML+H}	‘s/he is smart’

The consonant *d* never precedes the vowel *o*. It only precedes the vowel *a* when *a* is followed by a glottal stop. Nasal vowels that occur with *d* are *ɔ*, *ɛ*, and *ɔ̃*. The high nasal vowel *ĩ* does not occur with *d* in SJQ.

Table 2.8: Vowels that Combine with *d*

nd	oral V	nasal V
ndV	a, e, i	ɔ, ɛ, ɔ̃
ndVɔ̃	a	-

Phoneme /ts/

The phoneme /ts/ is a voiceless apico-dental affricate and is represented as *ts* in the practical orthography. It can occur as a single consonant in the onset of a word or syllable or as the first or second consonant in the syllable formula. The fact that it occurs in clusters is strong evidence that /ts/ is itself a unitary affricate phoneme and not a cluster, since treating it as a cluster would require very special revisions to the syllable formula.

These are examples of the phoneme *ts*:

<i>tsa</i> ^L	‘tightly’
<i>tsi</i> ^M	‘Zacatepec’
<i>tsq</i> ^L	‘day’
<i>tse</i> _ç ^L	‘steam’

<i>tsaq^{LM}</i>	‘wet’
<i>tseq</i>	‘tongue of’
<i>(k)tsiq^{MH}</i>	‘iguana’
<i>tsuq^{+H}</i>	‘other side’
<i>ntsa^L-riq^M</i>	‘learned its lesson’
<i>ntsi^{H+0}</i>	‘ <i>Byrsonima crassifolia</i> ¹⁴ ’
<i>ntse^{+H}</i>	‘s/he is scared’
<i>ntsq^{H+0}</i>	‘s/he heating up’
<i>ktsa^L-riq</i>	‘will learn’
<i>ktsi^M</i>	‘yellow’
<i>ktsu^L</i>	‘will sprout’
<i>ktsqq^M</i>	‘blonde’
<i>ytsaq^{MH}</i>	‘s/he told’
<i>ytsqq^H</i>	‘I told’

The consonant *ts* does not precede the vowel *o*. It precedes the vowel *e* only when *e* precedes a glottal stop. The vowel *e* does not occur with *ts* in the context of a glottal *q*. The high vowel *i* does not occur with *ts* in SJQ.

Table 2.9: Vowels that Combine with *ts*

ts	oral	nasal
tsV	a, i	ɔ, ɛ
tsVq	a, e, i, u	-
ntsV	a, i	ɛ, ɔ
ktsV	a, i, u	ɔ
ytsV	-	ɛ
ytsVq	a	ɔ

Phoneme /dz/

The phoneme /dz/ is a voiced apico-dental affricate and is represented as *dz* in the practical orthography. The phoneme *dz* is always prenasalized. This consonant is not common in SJQ. The phoneme /dz/ is not an allophone of /ts/, which can also occur after a nasal, e.g. *ntsi^{H+0}* ‘*nanche*’ and *qo^M-ndzi^L* ‘sacred fire’.

¹⁴ This is a fruit and it grows in San Marcos Zacatepec and other tropical areas.

These are examples of the phoneme *dz*:

<i>qo^M-ndziq^L</i>	‘sacred fire’
<i>ndzwiq^{M0}</i>	‘charcoal’
<i>ndzwe^{HL+0}</i>	‘orange’
<i>ndzwaq^{HL+0}</i>	‘hierba santa’

Phoneme /s/

The phoneme /s/ is a voiceless dental fricative and is represented as *s* in the practical orthography. The consonant can occur as a single consonant in the onset of a word or as C₁ or C₂ in the syllable formula.

These are examples of the phoneme *s*:

<i>sa^L</i>	‘light’	<i>skq^M</i>	‘arm of’	<i>snoq^L</i>	‘eight’
<i>se^{H+0}</i>	‘judge’	<i>skaq^{LM}</i>	‘gourd’	<i>swe</i>	‘egg’
<i>su^{LM}</i>	‘laying down’	<i>skeq^H riq^M</i>	‘imagined’	<i>swi^{M0}</i>	‘cleaned’
<i>sq^L</i>	‘I am light’	<i>skuq^{M0}</i>	‘grasshopper’	<i>swε</i>	‘vagina of’
<i>sε^L</i>	‘sand’	<i>skq^{HL+0}</i>	‘mucus of’	<i>nqne^{+H} swaq^{ML}</i>	‘tantrum’
<i>sq^{MH}</i>	‘they fought’	<i>skq^{HL+0}</i>	‘will close’	<i>swiq^{HL+0}</i>	‘turn off’
<i>saq^{MH}</i>	‘he rips’	<i>skwa^{MH}</i>	‘laying down’	<i>swεq^{L+0}</i>	‘I turn off’
<i>seq^M</i>	‘theater’	<i>skwi^{HL+0}</i>	‘smooth’	<i>syd^{H+0}</i>	‘heart’
<i>siq</i>	‘side of’	<i>skwq^{LM}</i>	‘corn dough’	<i>syu^{H+0}</i>	‘custom’
<i>soq^M</i>	‘you picked’	<i>skwε^{L+0}</i>	‘I lifted’	<i>syaq^M</i>	‘Amialtepec ¹⁵ ’
<i>saq^{L+0}</i>	‘I tear’	<i>skwaq^{HL+0}</i>	‘corn’	<i>syeq^{MH}</i>	‘is happy’
<i>seq</i>	‘my side’	<i>slya^{ML+H}</i>	‘accepted’	<i>syqq^{LM}</i>	‘my payment’
<i>siq</i>	‘nose of’	<i>slye</i>	‘is stupid’	<i>syeq^{MH}</i>	‘I was happy’
<i>sqd^H</i>	‘lover of’	<i>slyi^{H+0}</i>	‘pants’	<i>sla^{MH}</i>	‘dream of’
<i>sqi^H</i>	‘not’	<i>slyq^{ML+H}</i>	‘I accepted’	<i>slu^L</i>	‘thorn’
<i>sq^{ML+H}</i>	‘I will go’	<i>slyaq^H</i>	‘cotton’	<i>slq</i>	‘I opened’
<i>sqε^{L+0}</i>	‘I bought’	<i>sta^H</i>	‘smashed’	<i>slq^{L+0}</i>	‘I threw’
<i>sqwa^{HL+0}</i>	‘s/he put’	<i>sti</i>	‘father of’	<i>slaq^{M0}</i>	‘elastic’
<i>sqwe^{MH}</i>	‘good’	<i>stu^{H+0}</i>	‘wish’	<i>sleq^{M0}</i>	‘fat’
<i>sqwi</i>	‘exist’	<i>stq</i>	‘I smashed’	<i>ksu^M</i>	‘avocado’
<i>sqwq^{L+0}</i>	‘I put’	<i>stε</i>	‘my father’	<i>ksi^{H+0}</i>	‘cross’
<i>sqwe^{L+0}</i>	‘I divided’	<i>stq^{LM}</i>	‘pulled’	<i>wsa^{H+0}</i>	‘cup’

¹⁵ This is a name of a village near San Juan Quiahije.

<i>sqya^H</i>	‘scream’	<i>staq^{MO}</i>	‘short’	<i>wse^{H+0}</i>	‘judge’
<i>sqyu^H</i>	‘cut’	<i>steq</i>	‘cloth of’	<i>wsi^{MH}</i>	‘butterfly’
<i>sqyq</i>	‘I cried’	<i>staq</i>	‘nail of’	<i>snyiq</i>	‘child of’
<i>sqyq</i>	‘I cut’	<i>steq</i>	‘my cloth’	<i>sna^{LM}</i>	‘sandal of’
<i>sqna^L</i>	‘scarce’	<i>snyi</i>	‘s/he took’	<i>sne^H</i>	‘frog’
<i>sqne</i>	‘long ago’	<i>snyaq^H</i>	‘s/he pinched’		
<i>ska^L</i>	‘one’	<i>sneq^{MH}</i>	‘cheese ring’		
<i>sku^{HL+0}</i>	‘baby fish’	<i>skq^L</i>	‘corner’		

The consonant *s* precedes the oral vowels *a, e, i, o, u* and the nasal vowels *q, e, q*. *s* can also precede the vowel *i*, but only if a glottal stop follows, e.g. *siq* ‘nose of’.

Phoneme /n/

The phoneme /n/ is a voiced apico-alveolar nasal and is represented as *n* in the practical orthography. It can only be the optional initial nasal in the formula, never C_1 . In SJQ there are in fact *nn* clusters, e.g. *nna^{MH}* ‘s/he is crying’. However, there are no words of the form *nnCV(?)*, and this is in fact ruled out by the claim that the /n/ of a /nC/ cluster is never C_1 in the formula and instead the initial (n) of the formula. The following is a minimal pair contrasting simple *n* vs. the cluster *nn*:

n ≠ *nn* *na^{MH}* ‘thing’ ≠ *nna^{MH}* ‘s/he is crying’

The following are examples of ‘s/he is crying’ in other Chatino varieties, which shows that the elements of the nasal cluster originate in different syllables:

ZEN ZAC TAT SJQ
nch-ūná *nky-ona^R* *ndy-unq* *nna^{MH}* ‘s/he is crying’ (Campbell 2009)

The *n* of the root of more conservative varieties is preserved in a few cases in SJQ. The phoneme /n/ changes to [ŋ] when it precedes a /k/, e.g. *nta^{MH}* [nta^{MH}] ‘black’ vs. *nka^{MH}* [ŋka^{MH}] ‘yesterday’; and /n/ sounds like [n̥] when it precedes /d̥/, e.g. *nda^{MH}* [n̥da^{MH}] ‘s/he gave’ vs. *ndya^{MH}* [n̥d̥ya^{MH}] ‘s/he returned’. The phoneme /n/ sounds like [m]

before /p/, e.g., npa^{HL+0} [mbā^{HL+0}]. And the phoneme /n/ becomes voiceless after /j/, e.g. [jnɛ^{LM}]

In the orthography, sequences composed of *n* + *y* are written with an apostrophe, e.g. *n'yɑ*^{ML+H} ‘s/he looks’. This is to distinguish this sequence from the lamino-alveolar sound written *ny*, which is completely distinct.

These are examples of the phoneme *n*:

<i>na</i> ^{MH}	‘thing’	<i>nkwa</i> ^M	‘I was’
<i>ne</i> ^M	‘today’	<i>nkwe</i> ^{LM}	‘ripe’
<i>ni</i> ^L	‘marker’	<i>kna</i> ^H	‘snake’
<i>no</i> ^L	‘NOM’	<i>kne</i> ^{ML+H}	‘will sound’
<i>naq</i> ^{HL+0}	‘s/he washed’	<i>kno</i> ^{+H}	‘will be arrested’
<i>neq</i>	‘stomach of’	<i>knaq</i> ^H	‘meat’
<i>nqne</i> ^{ML+H}	‘does’	<i>kneq</i> ^H	‘young’
<i>nka</i> ^{MH}	‘yesterday’	<i>knoq</i> ^M	‘worm’
<i>nkɔn</i> ^{HL+0}	‘turtle’	<i>tne</i> ^{LM}	‘blood’
<i>nkwa</i> ^M	‘was’	<i>tno</i> ^L	‘big’
<i>nkwi</i> ^{MH}	‘spoiled’	<i>jna</i> ^M	‘thief’
<i>ncha</i> ^L	‘breaks’	<i>jne</i> ^{M0}	‘will ask’
<i>nchu</i>	‘s/he shoots’	<i>jno</i> ^L	‘big’
<i>nchaq</i> ^L	‘s/he wets’	<i>jnaq</i> ^H	‘meat’
<i>nchuaq</i> ^L	‘s/he defecates’	<i>xna</i> ^{M0}	‘you will ran’
<i>nchi</i>	‘s/he twists’	<i>xno</i> ^{M0}	‘s/he left’
<i>nchaq</i>	‘I wet’	<i>xneq</i> ^M	‘dog’
<i>nchaq</i> ^{M0}	‘I defecate’	<i>sna</i> ^{MH}	‘s/he ran away’
<i>nta</i>	‘s/he plants’	<i>sne</i> ^H	‘frog’
<i>ntu</i> ^{H+0}	‘stupid’	<i>sneq</i> ^{MH}	‘cheese ring’
<i>nteq</i> ^{+H}	‘hungry’	<i>snoq</i> ^L	‘eight’
<i>ntiq</i> ^{+H}	‘s/he nursed’	<i>yna</i> ^H	‘copal’
<i>nta</i> ^M	‘uneven’	<i>yne</i> ^{LM}	‘neck of’
<i>nte</i> ^M	‘washed’	<i>yno</i> ^{+H}	‘s/he was grabbed’
<i>nteq</i> ^{MH}	‘flat land’	<i>ntykwa</i>	‘s/he meets’
<i>nta</i> ^{LM}	‘pulled out’	<i>ntykwi</i> ^{M0}	‘s/he hangs’
<i>ntsa</i> ^H	‘broken’	<i>ntykwa</i> ^{HL+0}	‘s/he shakes’
<i>ntsi</i> ^{H+0}	‘ <i>nanche</i> ’	<i>ntykwe</i> ^{HL+0}	‘s/he vomits’
<i>ntsu</i> ^{LM}	‘sprouted’	<i>ntykweng</i> ^{M0}	‘I speak’
<i>nxqya</i> ^{M0}	‘cries’	<i>nskwa</i> ^{MH}	‘s/he is laying down’
<i>n'yɑ</i> ^{ML+H}	‘s/he looks’	<i>nskwi</i> ^{HL+0}	‘smooth’

<i>nkwa^M</i>	‘was’	<i>ntyqwi</i>	‘exists’
<i>nkwi^{MH}riq^M</i>	‘found out’	<i>ntyqwe_ɛ^{MO}</i>	‘I exist’
<i>kina^L</i>	‘sandal’	<i>jne^{LM}</i>	‘blood’

The consonant *n* occurs widely with the vowels *a* and *e* and to a lesser extent with the vowels *i*, *o*, and *u*. In SJQ the sequence ‘nu’ does not occur because there can never be a nasalized ‘u’. There are only four nasal vowels found in this variety /a, ɛ, ɪ, o/. Right after /n/, you only get nasal vowels, never non-nasal, because of the nasalization rule: every vowel is nasalized when is after an /n/.

Phoneme /r/

The phoneme /r/ is a dental flap and is represented by *r* in the practical orthography. It is not common in SJQ, but it is found in a few borrowings, in the demonstrative, and in a few high-frequency morphemes, e.g. *rq^{MH}* ‘that’, *req* ‘them’, *riq^M* ‘essence’. It can occur as a single consonant in the onset of a word or a syllable. These are examples of the phoneme *r*:

<i>re^M ~nde^M</i>	‘here’
<i>wra^{H+0}</i>	‘hour’
<i>wa^{LM} re^M</i>	‘us exclusive’

Phoneme /l/

The phoneme /l/ is an apico-dental lateral and is represented as *l* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i)).{C₂, LS}V(q). The sequences composed of *l* + *y* are written with an apostrophe, e.g. *l'yaq^{LM}* ‘outside’ in order to distinguish them in the orthography from *ly*, which represents the lamino-alveolar lateral.

These are examples of the phoneme /l/:

<i>lqa</i> ^{ML+H}	‘s/he broke’	<i>nlu</i> ^{HL+0}	‘s/he grows’
<i>lqo</i> ^{MH}	‘fence’	<i>nlq</i> ^{L+0}	‘I sing’
<i>lqu</i> ^{HL+0}	‘alive’	<i>nsla</i> ^{M0}	‘s/he opens’
<i>lqya</i> ^L	‘tooth of’	<i>nslu</i> ^{M0}	‘s/he dropped’
<i>la</i> ^M	‘quick’	<i>ple</i> ^L	‘stupid’
<i>(w)le</i> ^{H+0}	‘tortilla cloth’	<i>sla</i> ^H	‘s/he opened’
<i>lo</i>	‘on’	<i>slu</i> ^L	‘thorn’
<i>lu</i> ^L	‘liver’	<i>slaq</i> ^{M0}	‘slingshot’
<i>lq</i>	‘I let go’	<i>sleq</i> ^{M0}	‘thick’
<i>lq</i> ^{L+0}	‘I took out’	<i>tla</i> ^{MH}	‘mean’
<i>luq</i> ^{M0}	‘coconut’	<i>tlo</i> ^{MH}	‘skirt’
<i>jla</i> ^{MH}	‘mean’	<i>wla</i> ^H	‘s/he was born’
<i>jle</i> ^{H+0}	‘angle’	<i>xla</i> ^{H+0}	‘school’
<i>jlo</i> ^L	‘first’	<i>qne</i> ^H <i>xlq</i> ^{ML+H}	‘pretend’
<i>kla</i> ^{ML+H}	‘twenty’	<i>yla</i> ^{LM}	‘s/he arrived’
<i>klu</i> ^{HL+0}	‘s/he will grow’	<i>ylq</i> ^{LM}	‘I arrived’
<i>klaq</i> ^{HL+0}	‘sapote’	<i>l’ya</i> ^{HL+0}	‘Mary’
<i>kliq</i> ^{M0}	‘big eyes’	<i>liye</i> ^{LM}	‘healthy’
<i>nla</i> ^{HL+0}	‘s/he sings’	<i>lwi</i> ^{MH}	‘clean’
<i>kila</i> ^{MH}	‘will melt’	<i>kwla</i> ^L	‘fish’
<i>wle</i> ^{H+0}	‘tortilla cloth’	<i>jlo</i> ^H	‘face of’

It is not common for the phoneme *l* to precede the vowels *i* and *e*. Minimal pairs for *li* and *lyi* are not found. It is more common to find *i* following *ly*. Nasal *ɨ* and *ɛ* do not follow *l*. The phoneme /l/ gets devoiced after /j/, e.g. *jlo* [h̥lo] ‘first’.

2.5.3 Lamino-alveolar Consonants

The lamino-alveolars are / t̪, d̪, tʃ, ʃ, n̪, and ɭ / . These sounds are produced by placing the blade of the tongue against the alveolar ridge. The following are minimal pairs or near minimal pairs for lamino-alveolars:

ty	≠	t	<i>tya</i> ^{MH}	‘s/he will ‘return’	≠	<i>nta</i> ^{MH}	‘black’
dy	≠	d	<i>ndya</i> ^{MH}	‘s/he returned’	≠	<i>nda</i> ^{MH}	‘s/he gave’
ny	≠	n	<i>nya</i> ^L	‘griddle (<i>comal</i>)’	≠	<i>na</i> ^L	‘us’
ly	≠	l	<i>lya</i> ^{HL+H}	‘s/he peels’	≠	<i>la</i> ^H	‘open’
ch	≠	x	<i>nchi</i> ^{HL+H}	‘untangle’	≠	<i>xi</i> ^{HL+H}	‘s/he roll’
x	≠	s	<i>xqq</i> ^{HL+H}	‘tasty’	≠	<i>sqq</i> ^{HL+H}	‘humble’

ty	≠	t'y	tya ^{MH}	'will return'	≠	t'ya ^{ML+H}	'will arrive'
dy	≠	d'y	nda ^{M0}	's/he gives'	≠	nd'ya ^{+H}	'exist'
ny	≠	n'y	nya ^L	'comal'	≠	n'ya ^{ML+H}	'looks'
ly	≠	l'y	lya ^{HL+H}	's/he peeled'	≠	l'ya ^{HL+H}	'Mary'

Phoneme / t̥ /

The phoneme / t̥ / is a voiceless lamino-alveolar stop and is represented as *ty* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i)).{C₂, LS}V(q). These are examples of the phoneme *ty*:

tyqa ^L	'water'	tywiq ^{HL+0}	'turn off'
tyqi ^M	'smell'	ktye ^M	'pine'
tyqo ^{M0}	's/he will leave'	ktyi ^M	'paper'
tyqa	's/he will walk'	ktyeq ^{LM}	'ant'
tyqi	's/he will stay'	ktyiq ^M	'frog'
tyqwi	's/he will exist'	ktyiq ^{HL+0}	'lice'
tyqwε ^{M0}	'I will exist'	xtya ^{M0}	's/he placed'
tyqyu ^{MH}	'lighting'	xtyi ^{M0}	's/he laughs'
tyka ^M	'will get better'	xtyu ^M	's/he throw'
tyku ^L	'brush'	xtyq ^{M0}	'I put'
tyka ^M	'I will get better'	xtyi ^{M0}	'I dry'
tykaq ^L	'gourd'	xtyq ^{M0}	'cat'
tykeq ^{HL+0}	'hot'	nxtya ^{M0}	's/he puts'
tykaq ^H	'collar'	nxtyi ^{M0}	's/he laughs'
tykwa ^{MH}	'will sprout'	nxtyu ^M	's/he drops'
tykwi ^{M0}	's/he will hang'	nxtya ^{M0}	'I put'
tykwε ^H	'bed bug'	nxtyi ^{M0}	'I lay down'
tykweq ^{M0}	'I will speak'	sty ^L riq ^M	's/he will be nauseas'
tyji ^L	'itchy'	sty ^{H+0}	'pitcher'
tyjya ^{LM}	'bone'	styq ^L	'milk of'
tywi ^{M0}	'will clean'	nsty ^{+H} riq ^M	's/he he is always nauseas'
tya ^H /wtya ^H	'squirrel'	nsty ^H	'laughing'
tyi ^L	'will finish'	ntya	's/he bathes'
tyu ^{MH}	'brick'	ntyi	'dry'
tyq ^{MH}	'I will return'	ntyq ^{M0}	'I bathe'
xi ^L -tyi ^L	'my village'	ntyi ^{MH}	'I erased'
tyq ^M	'many'	ntyiq ^{HL+0}	'closed eyes'
tyaq ^{HL+0}	'will rip'	ntyiq	'nurses'

<i>tyuq^L</i>	‘belly button of’	<i>(w)tye^M</i>	‘pine’
<i>tyiq^{LM}</i>	‘salty’	<i>(w)tyeq^{LM}</i>	‘ant’

In regard to vowels, most of the vowels appear with *ty* except for *e*, *o*, and *ɛ*.

Phoneme / d_ɹ /

The phoneme / d_ɹ / is a voiced lamino-alveolar stop and is represented as *dy* in the practical orthography. These are examples of the phoneme *dy*:

<i>ndya^{MH}</i>	‘s/he returned’
<i>ndyi^L</i>	‘finished’
<i>ndyq^{MH}</i>	‘I returned’

However, /dy/ is phonemically distinct from /ty/, which also can occur after /n/:
ntyi ‘dry’ vs. *ndyi* ‘finished’, and *ntyq^{MO}* ‘I bathe’ vs. *ndyq^{MH}* ‘I returned’. The only vowels that *dy* precedes are *a*, *i*, and *ɔ*.

Table 2.10: Vowels that Combine with *dy*

<i>dy</i>	oral V	nasal V
ndyV	a, i	ɔ

Phoneme /tʃ/

The phoneme /tʃ/ is a voiceless lamino-alveolar affricate and is represented as *ch* in the practical orthography. It can occur as a single consonant in the onset of a word.

These are examples of the phoneme *ch*:

<i>cha^L</i>	‘sharp’
<i>che^{MH}</i>	‘friend’
<i>chi^{MH}-nyi^{ML}</i>	‘true’
<i>chq^{LM}</i>	‘long time’
<i>chaq^{MH}</i>	‘language’
<i>chuq^{HL+0}</i>	‘pineapple’
<i>chiq^{MO}</i>	‘little’
<i>chq^{LM}</i>	‘back of’

<i>kcha</i> ^L	‘crazy’
<i>kche</i> ^{MO}	‘messy hair’
<i>kchi</i> ^L	‘grinding stone (<i>metate</i>)’
<i>kcheq</i> ^{MO}	‘small’
<i>kchiq</i> ^{MO}	‘chick’
<i>kchuq</i> ^{MH}	‘gay’
<i>kchq</i> ^{LM}	‘hair’
<i>kchq</i> ^{MO}	‘I will defecate’
<i>ncha</i> ^H	‘broke’
<i>nchu</i> ^{LM}	‘s/he fired’
<i>nchq</i>	‘I brake’
<i>nchi</i> ^{MO}	‘s/he twist’
<i>nchaq</i> ^{LM}	‘s/he got wet’
<i>nchuq</i>	‘s/he defecates’
<i>nchaq</i> ^{MO}	‘pinecone’
<i>nchq</i> ^{MO}	‘I defecate’
<i>wchi</i> ^{MH}	‘tiger’
<i>kichiq</i> ^{MO}	‘chicks’

The phoneme *ch* does not precede the vowel *o*. The vowel *ɛ* does not occur with *ch*.

Table 2.11: Vowels that Combine with *ch*

ch	oral V	nasal V
kchV	a, e	-
wchV	i	-
chV	a, e, i	ɔ
nchV	a, u	ɔ, ɨ
kchVq	e, i, u	ɔ, ɔ
nchVq	a, u	ɔ, ɔ
chVq	a, u	ɨ, ɔ

It is also notable that /tʃ/ is never voiced when preceded by a nasal consonant.

Phoneme /ʃ/

The phoneme /ʃ/ is a voiceless lamino-alveolar fricative and is represented as *x* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i)).{C₂, LS}V(q). These are examples for phoneme *x*:

<i>xa</i> ^{MH}	‘light’	<i>xkeq</i> ^{M0}	‘s/he imagines’
<i>xe</i> ^{M0} <i>ke</i> ^L - <i>lo</i> ^L	‘green eyes’	<i>xkq̄q̄</i> ^H	‘your shirt’
(<i>w</i>) <i>xi</i> ^L	‘sweet’	<i>xkiq̄</i> ^{M0}	‘uneven’
<i>xu</i> ^{H+0}	‘currency’	<i>xkwa</i> ^{HL+0}	‘s/he will lie down’
<i>xi</i> ^{LM}	‘wide’	<i>xkwe</i> ^{M0}	‘dam’
<i>xq̄q̄</i> ^{HL+0}	‘tasty’	<i>xkwi</i> ^{M0}	‘s/he wakes up’
<i>xqa</i> ^H	‘olan’	<i>xkw̄q̄</i> ^{L+0}	‘I lay down’
<i>xqe</i> ^{M0}	‘rooster’	<i>xkw̄q̄</i> ^{L+0}	‘I answer’
<i>xqi</i> ^{HL+0}	‘s/he will buy’	<i>xlȳa</i> ^{LM}	‘worn’
<i>xqo</i> ^{MH}	‘forest’	<i>xlyu</i> ^{H+0}	‘knife’
<i>xq̄q̄</i> ^{H+0}	‘mean’	<i>xlȳq̄</i> ^{ML+H}	‘I will accept’
<i>xqi</i> ^{L+0}	‘I will buy’	<i>xlȳq̄</i> ^{LM}	‘I turn over’
<i>xna</i> ^{HL+0}	‘s/he runs’	<i>xla</i> ^{H+0}	‘school’
<i>xne</i> ^{HL+0}	‘will spread’	<i>xnya</i> ^{MH}	‘custom’
<i>xno</i> ^{M0}	s/he left’	<i>xnyi</i>	‘s/he takes’
<i>xnaq̄</i> ^{OL+0}	‘I feel’	<i>sq̄yu</i> ^M - <i>xnyaq̄</i> ^{MH}	‘bulls’
<i>xneq̄</i> ^M	‘dog’	<i>xta</i> ^L	‘line’
<i>xq̄nya</i> ^{MH}	‘lip’	<i>xtya</i> ^{M0}	‘s/he placed’
<i>xq̄nyi</i> ^L	‘scary’	<i>xtyi</i> ^{M0}	‘s/he laughs’
<i>xq̄wa</i> ^{H+0}	‘will pay’	<i>xtyu</i> ^M	‘s/he dropped’
<i>xq̄we</i> ^{MH}	‘s/he left over’	<i>xtȳq̄</i> ^{M0}	‘I put’
<i>xq̄w̄q̄</i> ^{L+0}	‘I will pay’	<i>xtȳq̄</i> ^{M0}	‘I laugh’
<i>xq̄w̄q̄</i> ^{L+0}	‘my leftovers’	<i>xtȳq̄</i> ^{M0}	‘cat’
<i>xq̄ya</i> ^{M0}	‘s/he will cry’	<i>xwa</i> ^{MH}	‘John’
<i>xq̄yu</i> ^{M0}	‘s/he will cut’	<i>xwe</i> ^L	‘small’
<i>xq̄yq̄</i>	‘I will cry’	<i>xwi</i> ^{H+0}	‘basket’
<i>xq̄yq̄</i>	‘I will cut’	<i>xw̄eq̄</i> ^{HL+0}	‘s/he will burn’
<i>xka</i> ^{ML+H}	‘s/he plucked’	<i>xyaq̄</i> ^M	‘mixing’
<i>xkq̄</i> ^{ML+H}	‘I pulled’	<i>xyuq̄</i> ^L	‘malicious’
<i>xkq̄</i> ^{M0}	‘I will feed’	<i>xyq̄q̄</i> ^{L+0}	‘I will mix’
<i>xku</i> ^{M0}	‘will feed’	<i>xyq̄q̄</i> ^L	‘I am malicious’
<i>xkaq̄</i> ^{H+0}	‘fly’	<i>kxa</i> ^{H+0}	‘needle’
<i>kixa</i> ^{H+0}	‘needle’	<i>ndx̄i</i> ^{HL+0}	‘monkey’

The back vowels do not commonly occur with *x*. Oral vowels *o* and *u* occur with *x* in only a few instances.

Phoneme / ŋ̥ /

The phoneme / ŋ̥ / is a voiceless lamino-alveolar nasal and is represented as *ny* in the practical orthography. It can occur as a single consonant in the onset of a word or a

syllable or as second consonant in the syllable formula (n)(C₁(i).{C₂,LS}V(q). It never appears as C₁.

These are examples of the phoneme *ny*:

<i>nya^L</i>	‘flat griddle’
<i>nyi^L</i>	‘straight’
<i>nyi^{L+0}</i>	‘I dig up’
<i>nyaq^{HL+0}</i>	‘s/he will wash’
<i>mi^{M0}-nyi^{ML}</i>	‘puppy’
<i>knya^{L+0}</i>	‘I will make’
<i>knyi^M</i>	‘bird’
<i>knyaq^{MH}</i>	‘pepper (<i>chile</i>)’
<i>tnya^{MH}/jnya^{MH}</i>	‘work’
<i>jnyi^{HL+0}/tnyi^{HL+0}</i>	‘money’
<i>jnyaq^{LM}/tnyaq^{LM}</i>	‘honey’
<i>xnya^{MH}</i>	‘costume’
<i>xnyi</i>	‘s/he takes’
<i>xqnya^M</i>	‘lip of’
<i>xqnyi^L</i>	‘s/he is sad’
<i>ji^L-xnyaq^{MH}</i>	‘bulls’
<i>snyi</i>	‘s/he took’
<i>snyaq^{HL+0}</i>	‘tick’
<i>snyiq</i>	‘child of’
<i>nsnyi^{+H}</i>	‘s/he is taking’
<i>qnya</i>	‘mine’
<i>qnyi^L</i>	‘deep’
<i>qnyo^{ML}</i>	‘fifteen’

The phoneme /ny/ only comes before nasal vowels, because all vowels after nasals are nasal. The phoneme /ny/ gets devoiced after /j/, e.g. *jnya^L* ‘spicy’.

Phoneme / ɺ /

The phoneme / ɺ / is a voiceless lamino alveolar lateral and is represented as *ly* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i).{C₂,LS}V(q).

These are examples of the phoneme *ly*:

<i>wlya</i> ^{H+0}	‘mule’
<i>lyi</i> ^{M0}	‘long’
<i>lyq</i> ^{L+0}	‘I will pile’
<i>lyi</i> ^{HL+0}	‘my co-parenthood’
<i>lyq</i> ^{L+0}	‘I took it out’
<i>lyiq</i> ^{M0}	‘parrot’
<i>lyuq</i> ^{M0}	‘small’
<i>ti</i> ^{ML} <i>lykwa</i> ^{+H}	‘fourteen’
<i>jlya</i> ^{MH} / <i>tlya</i> ^{MH}	‘lunch’
<i>jlyq</i> ^{L+0} / <i>tlyq</i> ^{L+0}	‘I farted’
<i>jlyi</i> ^L / <i>tlyi</i> ^L	‘slippery’
<i>jlyu</i> ^M / <i>tlyu</i> ^M	‘big’
<i>jlyaq</i> ^L / <i>tlyaq</i> ^L	‘cold’
<i>xlya</i> ^{LM}	‘worm’
<i>xlyq</i> ^{ML}	‘I am jealous’
<i>xlyu</i> ^{LM}	‘s/he turned over’
<i>xlyq</i> ^{ML+H}	‘I will accept’
<i>nxlya</i> ^{ML+H}	‘s/he is jealous’
<i>nxlyu</i> ^{M0}	‘s/he turns over’
<i>slya</i> ^{ML+H}	‘s/he accepted’
<i>slye</i> ^L	‘stupid’
<i>slyi</i> ^{H+0}	‘pants’
<i>slyaq</i> ^H	‘cotton’
<i>slyq</i> ^{ML+H}	‘I accepted’
<i>nlyq</i> ^{L+0}	‘I always piled’

Before a voiceless sound, /ly/ is devoiced, e.g. *ti*^{ML} *lykwa*^{+H} ‘fourteen’

In ZEN the number ‘fourteen’ has a word with /l/. The phoneme /l/ merged with the word ‘four’ in SJQ (Campbell and Cruz 2009).

ZEN	SJQ	Gloss
<i>li jakwa</i>	<i>ti</i> ^{ML} <i>lykwa</i> ^{+H}	‘14’

There is only one case where *ly* precedes the vowel *e*, *slye*^L ‘stupid’, but this word could be a borrowing from Spanish, it could come from *simple* ‘simple’. *ly* does not follow *e*.

2.5.4 Palatal Consonant

Phoneme /j/

The phoneme /j/ is a voiced palatal glide and is represented as *y* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable; or as the first or second consonant in the syllable formula; and as *S* in the *LS* cluster in the syllable formula, either with or without a preceding consonant. These are examples of the phoneme *y*:

<i>ya</i> ^{MH}	‘cactus’	<i>yjwiq</i> ^M	‘s/he sold’
<i>ye</i> ^{LM}	‘a lot’	<i>yjweq</i> ^{L+0}	‘I sold’
<i>yo</i> ^{MH}	‘food’	<i>yna</i> ^{MH}	‘s/he cried’
<i>yu</i> ^L	‘soil’	<i>yna</i> ^H	‘incense resin (<i>copal</i>)’
<i>yq</i> ^{LM}	‘s/he came’	<i>yne</i> ^{LM}	‘neck of’
<i>yq</i> ^{L+0}	‘I grinded’	<i>yno</i> ^{+H}	‘s/he grabbed’
<i>yqa</i> ^{LM}	‘green’	<i>yla</i> ^{LM}	‘s/he arrived’
<i>yqo</i> ^M	‘s/he drank’	<i>ylaq</i>	‘s/he touched’
<i>yqu</i> ^M	‘s/he grew’	<i>ylaq</i> ^{LM}	‘I arrived’
<i>yq</i> ^{ML+H}	‘s/he will wash’	<i>ylaq</i> ^H	‘I touched’
<i>yqi</i> ^{MH}	‘s/he touched’	<i>yweq</i> ^{M0}	‘curse’
<i>yq</i> ^{MH}	‘s/he hit’	<i>kya</i> ^{M0}	‘tomorrow’
<i>yqwa</i> ^{MH}	‘luggage of’	<i>kyo</i> ^L	‘rain’
<i>yqwe</i> ^{MH}	‘piece’	<i>kya</i> ^{ML+H}	‘s/he will return’
<i>yqwi</i>	‘it was’	<i>kyaq</i>	‘feet of’
<i>yka</i>	‘tree’	<i>kyaq</i>	‘my feet’
<i>yku</i>	‘s/he ate’	<i>pyq</i> ^{H+0}	‘scarf’
<i>ykq</i> ^H	‘I ate’	<i>jyaq</i>	‘s/he is coming’
<i>ykq</i> ^{MH}	‘shirt’	<i>jya</i> ^L	‘sugar cane’
<i>ykwa</i> ^{MH}	‘corn drink’	<i>jyu</i> ^{HL+0}	‘horse’
<i>yki</i> ^H	‘boiled’	<i>jyaq</i> ^M	‘soap’
<i>ykwe</i> ^M	‘s/he vomited’	<i>jyaq</i> ^M	‘I am rich’
<i>ykwaq</i> ^M	‘swamp’	<i>xyaq</i> ^M	‘mixing’
<i>kwiq</i>	‘s/he spoke’	<i>xyuq</i> ^L	‘malicious’
<i>kwqq</i>	‘s/he slapped’	<i>xyqq</i> ^{L+0}	‘I will mix’
<i>kweq</i> ^H	‘I spoke’	<i>xyqq</i> ^L	‘I am malicious’
<i>yta</i>	‘s/he planted’	<i>sya</i> ^{H+0}	‘heart’
<i>ytiq</i>	‘s/he nursed’	<i>syu</i> ^{H+0}	‘custom’
<i>ytaq</i>	‘chewed’	<i>syaq</i> ^M	‘ <i>Amialtepec</i> ’
<i>ytsaq</i> ^{MH}	‘s/he told’	<i>syeq</i> ^{MH}	‘is happy’

<i>yja</i>	‘tortilla’	<i>syqq^{LM}</i>	‘my payment’
<i>yjo^{LM}</i>	‘squash’	<i>syεq^{MH}</i>	‘I was happy’
<i>yjq</i>	‘year’	<i>wyuq^L</i>	‘spider’
<i>yjaq^{MH}</i>	‘s/he slept’	<i>yma^{H+0}</i>	‘alma’
<i>yjoq</i>	‘s/he stung’	<i>nxqya^{M0}</i>	‘cries’
<i>yjaq^H</i>	‘I slept’	<i>nxqyq</i>	‘I cry’
<i>yjqq</i>	‘I stung’	<i>nxyaq^M</i>	‘s/he mixes’
<i>yjwi^{LM}</i>	‘s/he hit’	<i>nxyqq^{L+0}</i>	‘I mix’
<i>yjwe</i>	‘I hit’		

The phone /j/ has a voiceless allophone [j̥] when it occurs before voiceless consonants.

<i>ykq^{MH}</i>	[jkḁ̄ ^{MH}]	‘shirt’
<i>ykwa^{MH}</i>	[jkwa ^{MH}]	‘corn drink’ (<i>atole</i>)
<i>ykwa^L</i>	[jkwa ^L]	‘even’
<i>ykwaq^M</i>	[jkwḁ ^M]	‘wet place’
<i>ykwaq^L</i>	[jkwḁ ^L]	‘marsh’
<i>yqu^{M0}</i>	[j̥u ^{M0}]	‘embarrassed’
<i>ytsaq^{MH}</i>	[j̥tsḁ ^{MH}]	‘s/he told’
<i>ytse^L</i>	[j̥tse̥ ^L]	‘steam’
<i>yjq</i>	[j̥tsā]	‘year’
<i>yjo^{LM}</i>	[j̥ho ^{LM}]	‘squash’
<i>yka</i>	[j̥ka]	‘tree’

The phoneme *y* never precedes the vowel *i*. The vowel *a* occurs most frequently right after *y*. The phoneme /j/+/y/ coalesce into a single phonetic voiceless “y” sound [j̥], e.g., *yka* ‘tree’.

2.5.5 Velar Consonant

Phoneme /k/

The phoneme /k/ is a voiceless velar stop and is represented as *k* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i).{C₂,LS}V(q)). /k/ also forms

a penultimate weak syllable with the vowel /i/, e.g. *kiqya^M* ‘mountain’, *kila^M* ‘pond’, *kiqi^M* ‘excrement’. Furthermore, the phoneme /k/ is voiced to [g] when it follows /n/ but since there is no phonemic distinction of voicing between [k] and [g] after /n/, I write all these words with /k/, e.g. *nka^{ML+H}* ‘is’, pronounced [ŋga^{ML}].

These are examples of the phoneme *k*:

<i>ka^M</i>	‘it will be possible’	<i>nka^{ML+H}</i>	‘is’
<i>ke^M</i>	‘flower’	<i>nkq^H</i>	‘coconut’
<i>ki^M</i>	‘grass’	<i>nkq^M</i>	‘s/he threw’
<i>ko^{LM}</i>	‘clouds’	<i>nkoq^{HL+0}</i>	‘bubble’
<i>ku</i>	‘s/he will eat’	<i>liq^{M0}</i>	‘swing set’
<i>kq</i>	‘s/he will come’	<i>tsqq</i>	‘I will get wet’
<i>ki^{HL+0}</i>	‘we can handle it’	<i>ktsqq^M</i>	‘blonde’
<i>kq^{LM}</i>	‘tuber’	<i>kja</i>	‘s/he will die’
<i>kaq^H</i>	‘wood’	<i>kjq</i>	‘I will die’
<i>keq^{MH}</i>	‘difficult’	<i>kji^L</i>	‘skin’
<i>kiq^L</i>	‘light’	<i>kjaq^{HL+0}</i>	‘s/he will sleep’
<i>koq^{MH}</i>	‘moon’	<i>kjoq</i>	‘s/he will pinch’
<i>kuq^{MH}</i>	‘piece’	<i>kjq^{M0}</i>	‘I will sleep’
<i>kq^{LM}</i>	‘that’	<i>kjq^{M0}</i>	‘I will pinch’
<i>kqi</i>	‘s/he will be toasted’	<i>kjwi^{ML+H}</i>	‘s/he will hit’
<i>kqo^{HL+0}</i>	‘s/he will drink’	<i>kjwe</i>	‘I will hit’
<i>kqu^{HL+0}</i>	‘s/he will survive’	<i>kxa^{H+0}</i>	‘needle’
<i>kqi^M</i>	‘excrement’	<i>kxu^{H+0}</i>	‘cheese’
<i>kq^M</i>	‘deaf’	<i>kxiq^M</i>	‘wild’
<i>kqwi^{MH}</i>	‘drunk’	<i>skal^L</i>	‘one’
<i>kqwe^{MH}</i>	‘I am drunk’	<i>sku^{HL+0}</i>	‘little fish’
<i>kqnya^{LM}</i>	‘bed’	<i>skq^L</i>	‘corner’
<i>kqnyi^L</i>	‘deep’	<i>skq^M</i>	‘arm of’
<i>kiqna^M</i>	‘plate’	<i>skaq^{LM}</i>	‘gourd’
<i>kitye^M</i>	‘pine’	<i>skeq^H riq^M</i>	‘imagined’
<i>kityi^M</i>	‘paper’	<i>skuq^{M0}</i>	‘grasshopper’
<i>kcha^L</i>	‘crazy’	<i>skaq^{HL+0}</i>	‘mucus of’
<i>kche^{M0}</i>	‘messy hair’	<i>skq^{HL+0}</i>	‘will close’
<i>kchi^L</i>	‘grinding stone (<i>metate</i>)’	<i>knya^{L+0}</i>	‘I will make’
<i>kcheq^{M0}</i>	‘small’	<i>knyi^M</i>	‘bird’
<i>kchiq^{M0}</i>	‘chick’	<i>kinyaq^{MH}</i>	‘pepper (<i>chile</i>)’
<i>kchuq^{MH}</i>	‘gay’	<i>nka^{MH}</i>	‘yesterday’
<i>kchq^{LM}</i>	‘hair’	<i>nku^{H+0}</i>	‘Wednesday’

<i>kchqq</i> ^{M0}	‘I will defecate’	<i>nki</i> ^M	‘burned’
<i>ktā</i> ^M	‘dust’	<i>nka</i> ^{HL+0}	‘turtle’
<i>kti</i> ^{MH}	‘delicate’	<i>nkaq</i> ^L	‘leave’
<i>ktu</i> ^{LM}	‘chicken’	<i>nkeq</i> ^{MH}	‘cooked’
<i>ktā</i> ^H	‘hammock’	<i>nkiq</i> ^{L+0}	‘I cooked’
<i>kte</i> ^M	‘will be washed’	<i>kya</i> ^{M0}	‘tomorrow’
<i>ktq</i> ^L	‘bee’	<i>kyo</i> ^L	‘rain’
<i>ktq</i> ^L	‘pot’	<i>kyq</i> ^{ML+H}	‘will come back’
<i>ktsa-riq</i> ^M	‘will learn’	<i>kyaq</i>	‘feet of’
<i>ktsi</i> ^M	‘yellow’	<i>kyaq</i>	‘my feet’
<i>ktsu</i>	‘will sprout’	<i>kla</i> ^L	‘fish’
<i>ktsaq</i>	s/he will get wet’	<i>klu</i> ^{H+0}	‘soup’
<i>ktsiq</i> ^{MH}	‘iguana’	<i>klq</i> ^{ML+H}	‘I will come back’
<i>ktseq</i> ^{MH}	‘pus’	<i>kiquy</i> ^H	‘man’
<i>ktsuq</i> ^{MH}	‘pimple’	<i>kigo</i> ^L	‘lime’
<i>kiquya</i> ^{LM}	‘bed’	<i>kitsq</i> ^{HL+0}	‘s/he will warm up’
<i>kitā</i> ^H	‘hummock’	<i>kina</i> ^L	‘mirror’
<i>kisu</i> ^M	‘avocado’	<i>kityi</i> ^M	‘paper’
<i>kila</i> ^M	‘pool’	<i>kixiq</i> ^M	‘bush’
<i>kichi</i> ^L	‘metate’	<i>kiji</i>	‘skin of’
<i>kinyi</i> ^M	‘bird’		

2.5.6 Labiovelar Consonants

There are two labio-velar phonemes: /k^w/ and /w/. The following are near labio-velar minimal pairs:

k ^w	≠	w	<i>kwa</i> ^{MH}	‘broom’	≠	<i>wa</i> ^{MH}	‘already’
k	≠	k ^w	<i>ka</i> ^{ML+H}	‘will be’	≠	<i>kwa</i> ^{HL+0}	‘that one’

Phoneme /k^w/

The phoneme /k^w/ is a voiceless labiovelar stop and is represented as *kw* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable or as the first or second consonant in the syllable formula (n)(C₁(i).{C₂,LS}V(q). Furthermore, the phoneme /k^w/ is voiced to [g^w] when it is preceded by a nasal: [ŋg^wa^M]

‘was’ and [ŋg^wɛ^{LM}] ‘ripe’; since there is no phonemic distinction, I write these words with *kw* e.g. *nkwa*^M ‘was’ and *nkwe*^{LM} ‘ripe’ These are examples of the phoneme *kw*:

<i>k(w)tyeq</i> ^{LM}	‘ant’
<i>k(w)tyiq</i> ^M	‘lizard’
<i>kwa</i> ^{MH}	‘that’
<i>kwɛ</i> ^{L+0}	‘I sat’
<i>kwaq</i> ^{MH}	‘help’
<i>kwɛ</i> ^M	‘bat’
<i>kweq</i> ^{M0}	‘crab’
<i>kweq</i> ^{LM}	‘armadillo’
<i>kwi</i> ^H	‘flute’
<i>kwiq</i> ^M	‘baby’
<i>kwla</i> ^L	‘fish’
<i>kwtaq</i> ^M	‘fox’
<i>nkwaq</i> ^M	‘I was’
<i>nkwe</i> ^{LM}	‘ripe’
<i>nkwi</i> ^{MH} <i>riq</i> ^M	‘s/he found out’
<i>ntkwa</i> ^{HL+0}	‘s/he is sitting’
<i>skwaq</i> ^M	‘s/he threw’
<i>skwa</i> ^{MH}	‘s/he is laying’
<i>skwen</i> ^{MH}	‘I climbed’
<i>skwi</i> ^{HL+0}	‘smooth’
<i>ti</i> ^{ML} <i>lykwa</i> ^{+H}	‘fourteen’
<i>tkwa</i> ^{ML}	‘two’
<i>tykwa</i> ^{HL+0}	‘will sit’
<i>tykwaq</i> ^{HL+0}	‘we will sit’
<i>xkwa</i> ^{HL+0}	‘will lay down’
<i>xkwaq</i> ^{HL+0}	‘we lay down’
<i>ykwa</i> ^{MH}	‘corn drink’
<i>kwtyiq</i> ^{HL+0}	‘lice’

The phoneme *kw* is found as a word initial consonant preceding the oral vowels *a*, *i*. It precedes the vowels *e* and *ɪ* when they are followed by a glottal stop. The nasal vowel *ɔ* does not occur after *kw*.

Phoneme /w/

The phoneme /w/ is voiceless labiovelar glide and is represented as *w* in the practical orthography. It can occur as a single consonant in the onset of a word or a

syllable or as the first or second consonant in the syllable formula (n)(C₁(i).{C₂,LS}V(q).

The phoneme /w/ becomes voiceless before any voiceless consonant¹⁶:

<i>wqɛ^L</i>	[w _◦ ?ɛ ^L]	‘wind’
<i>wqne^L</i>	[w _◦ ?ne ^L]	‘animal’
<i>wqya^L</i>	[w _◦ ?ja ^L]	‘eagle’
<i>wsi^{MH}</i>	[w _◦ si ^{MH}]	‘butterfly’
<i>wtaq^M</i>	[w _◦ ta? ^M]	‘wolf’

The phoneme /w/ is devoiced after /j/, e.g. *jwi^{M0}* [hw_i^{M0}] ‘whistle’.

Before a palatal or lamino-alveolar sound, *w* is fronted to [ɥ], as in:

<i>wlya^{H+0}</i>	[ɥlya ^{H+0}]	‘mule’
<i>Wya^{M0}</i>	[ɥja ^{M0}]	‘Nopala’

If the preceding sound is both palatal or laminal, and voiceless, a voiceless [ɥ] occurs:

<i>wchi^{MH}</i>	[ɥ _◦ çi ^{MH}]	‘tiger’
<i>wji^{MH}</i>	[ɥ _◦ hji ^{MH}]	‘skunk’
<i>wjyaq^{HL+0}</i>	[ɥjja? ^{HL+0}]	‘mushroom’
<i>wxa^{H+0}</i>	[ɥfa ^{H+0}]	‘mass’
<i>wtya^H</i>	[ɥtɔ ^H]	‘squirrel’

These are examples of the phoneme *w* as a voiced glide:

<i>tywa^{+H}</i>	‘clear’	<i>kqwe^{HL+0}</i>	‘s/he will copulate’
<i>tywe^{ML+H}</i>	‘to slice’	<i>kqwe^{HL+0}</i>	‘to copulate (us)’
<i>tywi^{M0}</i>	‘to be clean’	<i>tyqwi</i>	‘will be’
<i>twiq^{HL+0}</i>	‘turn off’	<i>ntyqwi</i>	‘exist’
<i>ndywa^{HL+0}</i>	‘s/he sits’	<i>ntyqwe^{M0}</i>	‘I exist’
<i>ndywe^{ML+H}</i>	‘s/he cuts’	<i>tqwa^{HL+0}</i>	‘cold’
<i>ndywi^{M0}</i>	‘s/he hangs’	<i>tqwa^{M0}</i>	‘my mouth’
<i>ndywa^{L+0}</i>	‘I sit’	<i>xqwa^{H+0}</i>	‘will pay’

¹⁶ Younger speakers do not have the /w/ in these words.

<i>ndyweq</i> ^{M0}	‘I speak’	<i>xqwe</i> ^{MH}	‘her/his leftovers’
<i>lo twa</i> ^{+H}	‘clear’	<i>xqwa</i> ^{L+0}	‘I will pay’
<i>twe</i> ^{LM}	‘slow’	<i>xqwe</i> ^{L+0}	‘my leftovers’
<i>twe</i> ^{MH}	‘path’	<i>sqwa</i> ^{HL+0}	‘s/he put’
<i>ndwa</i> ^{HL+0}	‘s/he sits’	<i>sqwe</i> ^{MH}	‘good’
<i>ndwe riq</i> ^M	‘worry’	<i>sqwi</i>	‘exist’
<i>ndwa</i> ^{L+0}	‘I sit’	<i>yqwa</i> ^{MH}	‘carry on’
<i>ndwe</i> ^H	‘I am cutting’	<i>yqwi</i>	‘s/he existed’
<i>ntswē</i> ^{HL+0}	‘orange’	<i>yqwe</i> ^{L+0}	‘I split’
<i>ntswaq</i> ^{HL+0}	hierva santa	<i>swi</i> ^{M0}	‘s/he cleaned’
<i>ntswiq</i> ^{M0}	‘charcoal’	<i>swē</i>	‘vagina.N.1S’
<i>xwa</i> ^{LM}	‘pawpaw’	<i>nqne</i> ^{+H} <i>swaq</i> ^{ML+H}	‘tantrum’
<i>xwe</i> ^L	‘small’	<i>swiq</i> ^{HL+0}	‘turn off’
<i>xwi</i> ^{H+0}	‘basket’	<i>swēq</i> ^{L+0}	‘I turn off’
<i>swe</i>	‘egg’	<i>lwi</i> ^{MH}	‘clean’

In regard to the vowels, *o* and *u* never occur after *w*. The consonant *w* precedes the oral vowels *a*, *e*, and *i* and the nasal vowels *q* and *ē*; it never precedes *ī*.

2.5.7 Laryngeal Consonants

There are two laryngeals in the language, glottal stop /ʔ/ and the voiceless laryngeal fricative /h/, written as *q* and *j*, respectively, in the practical orthography. The following are minimal pairs for the laryngeals:

<i>q</i>	≠	<i>j</i>	<i>qi</i>	‘his’	≠	<i>jī</i> ^L	‘music’
<i>j</i>	≠	<i>jw</i>	<i>ji</i> ^{M0}	‘missing’	≠	<i>jwi</i> ^{M0}	‘whistle’
<i>jy</i>	≠	<i>j</i>	<i>jya</i> ^L	‘sugar cane’	≠	<i>ja</i> ^L	‘between’

Phoneme /ʔ/

The phoneme /ʔ/ is a glottal stop and is represented as *q* in the practical orthography. This glottal stop can occur only one time in a single stem, but it can co-occur with the other laryngeal *j*, e.g. *jqo*^M ‘sacred’. It can occur as a single consonant in the onset of a word or a syllable; it also can occur in the formula sequence SL before glides and nasals, with or without a preceding consonant; however it cannot occur as the

first consonant in any other CC sequence (see table 2.17). It is also the only consonant that occurs in word final position, e.g. *naq^{LM}* ‘me’. These are examples of the phoneme *q*:

<i>qa^{MH}</i>	‘tamarind’	<i>sqyq</i>	‘I cut’	<i>yqwe^{M0}</i>	‘I existed’
<i>qo^M</i>	‘saint’	<i>sqna^L</i>	‘scarce’	<i>kqi</i>	‘will roast’
<i>qu^{HL+0}</i>	‘alive’	<i>sqne^L</i>	‘long ago’	<i>kyqo^L</i>	‘lime’
<i>qa^L</i>	‘house’	<i>ke^L lqya^L</i>	‘teeth of’	<i>kqu^M</i>	‘will revive’
<i>qe^{M0}</i>	‘fan’	<i>tyqa^L</i>	‘water’	<i>kqi^M</i>	‘excrement’
<i>qi</i>	‘his/hers’	<i>tyqi^M</i>	‘smell’	<i>kqq^M</i>	‘deaf’
<i>qq^H</i>	‘with me’	<i>tyqo^{M0}</i>	‘will leave’	<i>kqwi^{MH}</i>	‘drunk’
<i>qna^{LM}</i>	‘to us’	<i>tyqq</i>	‘will walk’	<i>kqwe^{MH}</i>	‘I am drunk’
<i>qne^L</i>	‘animal’	<i>tyqi</i>	‘will stay’	<i>kqnya^{LM}</i>	‘bed’
<i>qwa^{HL+0}</i>	‘banana’	<i>tyqq^{M0}</i>	‘I will leave’	<i>kqnyi^L</i>	‘deep’
<i>qwe^{MH}</i>	‘bottle’	<i>tyqwa^L</i>	‘equal’	<i>kqna^M</i>	‘plate’
<i>qwa^L</i>	‘you all’	<i>tyqwi</i>	‘will exist’	<i>wqya^H</i>	‘party’
<i>qwe^L</i>	‘you’	<i>tyqwe^{M0}</i>	‘I will exist’	<i>wqne^L</i>	‘animal’
<i>qya^L</i>	‘down there’	<i>tyqyu^M</i>	‘lighting’	<i>ntqwa^H</i>	‘ache’
<i>qyu^M</i>	‘flea’	<i>xqa^{M0}</i>	‘adornment’	<i>ntqwe^H</i>	‘cutting’
<i>qnya^L</i>	‘mine’	<i>xqe^{M0}</i>	‘rooster’	<i>ntqwe^{M0}</i>	‘I am’
<i>qnyi^L</i>	‘deep’	<i>xqi^M</i>	‘a short while’	<i>ntyqo^{M0}</i>	‘s/he leaves’
<i>qnyo^{ML}</i>	‘fifteen’	<i>xqo^{MH}</i>	‘forest’	<i>ntyqq^{M0}</i>	‘I walk’
<i>nqne^{ML+H}</i>	‘s/he makes’	<i>xqq^H</i>	‘s/he is mean’	<i>ntyqi^{M0}</i>	‘I stay’
<i>tqa^L</i>	‘party’	<i>xqwa^H</i>	‘s/he will pay’	<i>ntyqq^{M0}</i>	‘I leave’
<i>tqi^L</i>	‘s/he is sick’	<i>xqwe^{MH}</i>	‘leftovers of’	<i>ntyqwi</i>	‘s/he exist’
<i>ntqa^{+H}</i>	‘s/he is breaking’	<i>xqwa^{L+0}</i>	‘I will pay’	<i>ntyqwe^{M0}</i>	‘I exist’
<i>ntqi^{+H}</i>	‘complaining’	<i>xqwe^{L+0}</i>	‘my leftovers’	<i>ntyqya^{ML}</i>	‘beautiful’
<i>ntqo^H</i>	‘s/he left’	<i>xqya^{M0M0}</i>	‘s/he will cry’	<i>nxqi^{HL+0}</i>	‘s/he buys’
<i>ntqu^{HL+0}</i>	‘looks’	<i>xqya</i>	‘I will cry’	<i>nxqi^{L+0}</i>	‘I buy’
<i>ntqq^{+H}</i>	‘s/he is walking’	<i>xqny^L</i>	‘lips of’	<i>nxqwa^{H+0}</i>	‘paying’
<i>ntqe</i>	‘s/he is here’	<i>xqnyi^L</i>	‘scary’	<i>nxqwa^{L+0}</i>	‘I pay back’
<i>tqwa^L</i>	‘mouth of’	<i>xqna^H</i>	‘boss of’	<i>nxqya^{M0}</i>	‘s/he cries’
<i>tqwa^L</i>	‘my mouth’	<i>xqne^{+H}</i>	‘long’	<i>nxqyu^{M0}</i>	‘s/he cuts’
<i>sqa^H</i>	‘lover of’	<i>yaq^M</i>	‘hand of’	<i>nxqya^{L+0}</i>	‘I cry’
<i>sqi^H</i>	‘is not’	<i>yuq^M</i>	‘hummingbird’	<i>nxqyq / nsqyq</i>	‘I cut’
<i>sqa^H</i>	‘pot’	<i>yqq^{L+0}</i>	‘my hand’	<i>nsqya^H</i>	‘calling’
<i>sqe^M</i>	‘excrement of’	<i>yqa^{LM}</i>	‘green’	<i>nsqyu^H</i>	‘cutting’
<i>sqwa^{MH}</i>	‘luggage of’	<i>yqo^M</i>	‘drank’	<i>nsqyq</i>	‘I cried’
<i>sqwe^{MH}</i>	‘good’	<i>yqu^{M0}</i>	‘embarrassed’	<i>nsqyq</i>	‘I cut’

<i>sqwi</i>	‘s/he exist’	<i>yq̣q^H</i>	‘mother of’	<i>sqwq^{L+0}</i>	‘I put’
<i>yq̣i^L</i>	‘tale of’	<i>sqwq̣^{L+0}</i>	‘I slice’	<i>yq̣q^{MH}</i>	‘punch’
<i>qya^H</i>	‘s/he cried’	<i>yq̣wa^{MH}</i>	‘luggage’	<i>sqyu^{LM}</i>	‘you cut’
<i>yq̣wi</i>	‘existed’	<i>syaq^M</i>	‘salary of’	<i>jyq̣q^{HL+0}</i>	‘mole’

The oral vowel *a* occurs frequently with *q*, while the vowels *e*, *i*, *o*, and *u* are more restricted.

Phoneme /h/

The phoneme /h/ is a voiceless laryngeal fricative and is represented as *j* in the practical orthography. It can occur as a single consonant in the onset of a word or a syllable; as the first or second consonant in the syllable formula; or as the laryngeal in a LS sequence, but only if the S is a glide *y* or *w* (see Table 2.17). The phoneme *j* before *y*, the phonemes *y* and *j* coalesce into voiceless *y*, just like the voiceless allophone *y*; and before *w*, *j* and *w* coalesce into voiceless *w*, just like the voiceless allophone of *w*. The sequences of /j/ plus any sonorant (laterals, glides, nasals) coalesce into a voiceless version of the sonorant:

<i>jlo^{MH}</i>	[_o hlo ^{MH}]	‘skirt’
<i>jlya^M</i>	[_o hɭa ^M]	‘a lot’
<i>jwi^{M0}</i>	[_o hwi ^{M0}]	‘whistle’
<i>jya^L</i>	[_o hja ^L]	‘sugar cane’
<i>jne^{LM}</i>	[nɛ ^{LM}]	‘blood’
<i>jnyi^{HL+0}</i>	[nɛ ^{LM}]	dinero

These are examples of the phoneme *j*:

<i>ja^L</i>	‘between’	<i>jwq̣q^{ML}</i>	‘suddenly’	<i>tji^L</i>	‘new’
<i>(w)je^L</i>	‘epazote’	<i>jya^L</i>	‘sugar cane’	<i>tjeq^L</i>	‘salt’
<i>(w)ji^{MH}</i>	‘skunk’	<i>jyaq^{MH}</i>	‘sign’	<i>tjeq^{MH}</i>	‘special’
<i>jq̣^{MH}</i>	‘yes’	<i>jyq̣nq^{HL+0}</i>	‘mold’	<i>yja/kyja</i>	‘tortilla’
<i>je^{L+0}</i>	‘I passed by’	<i>jlya^{MH}</i>	‘lunch’	<i>yjq^{LM}</i>	‘squash’
<i>ji^L</i>	‘music’	<i>jlyi^L</i>	‘slippery’	<i>yjq^L</i>	‘year’
<i>jq̣n^{MH}</i>	‘threat’	<i>jlyq^{+H}</i>	‘all over’	<i>yjaq^{MH}</i>	‘s/he sleeps’

<i>jaq^{LM}</i>	‘mat’	<i>jlyu^M</i>	‘big’	<i>yjq^q</i>	‘s/he pinched’
<i>jaq^{LM}</i>	‘that’	<i>jlyqn^M</i>	‘I am big’	<i>yjaq^H</i>	‘I sleep’
<i>jq^{qM}</i>	‘sacred’	<i>ja^L</i>	‘old’	<i>yjqnq^H</i>	‘I pinched’
<i>jny^L</i>	‘spice’	<i>jle^{H+0}</i>	‘Angel’	<i>ja^L</i>	‘free’
<i>jne^{LM}</i>	‘blood’	<i>jq^H</i>	‘face of’	<i>ntyja^M</i>	‘s/he found’
<i>jnyi^{HL+0}</i>	‘money’	<i>kja</i>	‘s/he will die’	<i>ntyji^{M0}</i>	‘missing’
<i>jnq^L</i>	‘big’	<i>kja</i>	‘I will die’	<i>ntyjaq^{HL+0}</i>	‘s/he sleeps’
<i>jnaq^H</i>	‘meat’	<i>kji^L</i>	‘skin’	<i>ntja^H</i>	‘lazy’
<i>jneq^H</i>	‘baby’	<i>kjaq^{M0}</i>	‘I will sleep’	<i>ntjaq^{HL+0}</i>	‘s/he sleeping’
<i>jnq^{qM}</i>	‘worm’	<i>kjqnq^{M0}</i>	‘I will poke’	<i>kjwi^{ML+H}</i>	‘s/he will hit’
<i>jwa^{M0}</i>	‘long’	<i>jwi^{MH}</i>	‘got’	<i>tyja^M</i>	‘s/he will find’
<i>tyjyq^{LM}</i>	‘bone’				

To conclude, I summarize the allophonic rules as follows:

- Non-coronal, non-laryngeal voiceless stops (p, k, kw) are voiced after /n/
- /n/ assimilates its place of articulation to a following consonant
- Sonorant continuants (laterals, glides; not nasals) are devoiced before voiceless stops
- /j/ plus sonorant (laterals, glides, nasals) sequences coalesce into a voiceless version of the sonorant
- /w/ is fronted before voiceless coronal consonants

2.5.8 Consonant Clusters

As was mentioned earlier, the syllable structure posited for SJQ is:

(n)(C₁(i)).{C₂, LS}V(q)

As also was noted, the initial consonant cluster can be thought of as a sequence of an optional nasal segment, plus two further components, the first having the shape C₁(i), and the second having the shape {C₂, LS}V(q) where C is any consonant, L is a laryngeal (j or q), and S is a nasal or glide sonorant. These two components generally correspond to the first syllable and the second consonant, respectively, of disyllabic stems in conservative Chatino varieties.

I first illustrate the C2 portion when it occurs alone (with or without a preceding nasal):

Table 2.12: Consonants Alone (C2)

Phoneme Orthography	Example	Gloss
p	<i>pi^{MO}</i>	‘turkey’
m	<i>ma^{MO}</i>	‘dear’
t	<i>ti^{MH}</i>	‘rope’
d	<i>nda^L</i>	‘beans’
ts	<i>tσα^{ML+H}</i>	‘s/he will go’
s	<i>si^{MH}</i>	‘butterfly’
n	<i>na^L</i>	‘us’
l	<i>la^M</i>	‘fast’
r	<i>re^M</i>	‘here’
ty	<i>tyu^{MH}</i>	‘brick’
dy	<i>ndyi</i>	‘finished’
ch	<i>cha^L</i>	‘sharp’
x	<i>xa^{MH}</i>	‘light’
ny	<i>nya^L</i>	‘griddle (<i>comal</i>)’
ly	<i>lyu^H</i>	‘s/he fell down’
y	<i>ya^{MH}</i>	‘cactus’
k	<i>ke^M</i>	‘flower’
kw	<i>kwa^{MH}</i>	‘broom’
w	<i>wa^{MH}</i>	‘already’
q	<i>qa^{MH}</i>	‘tamarind’
j	<i>jo^{MH}</i>	‘yes’

I next illustrate the consonant phonemes that can occur as C2 in the formula when a preceding C1 is present:

Table 2.13: Consonants (position C2) that can follow another consonant (position C1):

Phoneme Orthography	Example	Gloss
p	-	-
m	-	-
t	<i>sti</i>	‘father of’
d	-	-
ts	<i>ktsq^{HL+0}</i>	‘will warm up’
s	<i>ksi^M</i>	‘yellow’
n	<i>snoq^L</i>	‘eight’
l	<i>sla^H</i>	‘s/he opened’

Table 2.13: Continue

Phoneme Orthography	Example	Gloss
r	<i>wra</i> ^{H+0}	‘hour’
ty	<i>kyi</i> ^M	‘paper’
dy	-	-
ch	<i>kchq</i> ^{LM}	‘hair’
x	<i>wxi</i> ^{HL+0}	‘tomato’
ny	<i>knyaq</i> ^{MH}	‘pepper’
ly	<i>tlyu</i> ^M	‘big’
y	<i>kyaq</i>	‘feet of’
k	<i>xka</i> ^{+H}	‘another’
kw	<i>xkwi</i> ^{LM}	‘only’
w	<i>twe</i> ^{MH}	‘road’

As already noted, the second component of the formula can also consist of a laryngeal consonant (*j*, *q*) plus “S” which can be either a glide or nasal sonorant. The following chart shows the laryngeal-sonorant combinations that occur after a C1:

Table 2.14: Glottal and Sonorant Sequences

Laryngeal	C ₁ L _y	C ₁ L _w	C ₁ L _n	C ₁ L _{ny}
q	C₁qy <i>xqya</i> ^{M0} ‘s/he will cry’	C₁qw <i>kqwi</i> ^{MH} ‘s/he is drunk’	C₁qn <i>kqna</i> ^M ‘plate’	C₁qny <i>kqnya</i> ^{LM} ‘bed’
j	C₁jy <i>wjyu</i> ^{HL+0} ‘horse’	C₁jw <i>yjwi</i> ^{LM} ‘s/he hit’	C₁jn *	C₁jny *

Note that *jn* and *jny* clusters do occur alone, but never with a preceding consonant. They may be treated as normal C1.C2 clusters, alongside a number of others such as *jl*, *jly*, and *jqy*. Therefore in the formula LS, S is restricted to the glides *y*, *w* if L is *j*, but not if L is *q*, the glottal stop.

Consonants in pre-consonantal (C1) position:

Next I illustrate the phonemes which can occur as the first component of an initial cluster—C₁ in the formula with and without prenasalization. This chart shows cases where the first component consonant occurs alone (left-hand columns; C₁ in the formula) and cases where it is followed by the restricted penultimate-syllable /i/ (right-hand columns, C₁i in the formula):

Table 2.15: Pre-consonantal Position

Phoneme	/_C ₂			/_i.C ₂		
p	p	<i>ple^L</i>	‘stupid’	*		
m	*	*	*	*		
t	t	<i>tkq^{MH}</i>	‘stinky’	ti	<i>tiqa^L</i>	‘water’
d	d	<i>ndwa^{HL+0}</i>	‘s/he is standing’	di.	<i>ndika^{ML+H}</i>	‘s/he becomes’
ts	*	*	*	*		
dz	dz	<i>ndzwaq^{HL+0}</i>	‘hierba santa’	*		
s	s	<i>sna^{H+0}</i>	‘apple’	*		
n	*	*	*	*		
l	l	<i>lwi^{MH}</i>	‘clean’	*		
r	*	*	*	*		
ty	ty	<i>tykwiq</i>	‘s/he will speak’	*		
dy	*	*	‘s/he returned’	*		
ch	ch	*	*	*		
x	x	<i>xtyq^{M0}</i>	‘cat’	*		
ny	ny	*	*	*		
ly	ly	<i>ti^{ML} lykwa^{+H}</i>	‘fourteen’	*		
y	y	<i>yka</i>	‘tree’	*		
k	k	<i>kna^H</i>	‘snake’	ki	<i>nkila^{MH}</i>	‘is melted’
kw	kw	<i>(kwqya^L)</i>	‘eagle’	*		
w	w	<i>wtaq^M</i>	‘fox’	*		
q	q	*	*	*		
j	j	<i>jne^{LM}</i>	‘blood’	*		

Notice first that nasal consonants never occur as C1: This is because word-initial nasals are already accounted for by the (n) portion of the formula: for example, in *nte^{HL+0}*

‘person’, the *n* counts as the initial optional (n) in the formula, and the *t* as C2. Likewise certain other coronal consonants do not occur there at all, such as *r*, *ts*, *dy*, and *ch*.

2.5.9 Cluster Assimilation

In the SJQ speech of younger speakers, a voiceless stop /t, k/ plus a sonorant /l, n, ny/ partially assimilate such that the stop becomes a voiceless version of the sonorant (identical to clusters of /j/ plus the sonorant). That is, the stop lends its voicelessness to the result, but its place of articulation disappears. In SJQ younger speakers are more prone to neutralize the differences between consonant clusters of the consonant-sonorant type, pronouncing them as *jnV*, *jnyV*, and *jlV*:

Table 2.16: Cluster Simplification

<i>Older speakers</i>		<i>Younger speakers</i>	
<i>knyi^H</i>	~	<i>jnyi^H</i>	‘bird’
<i>tnya^{MH}</i>	~	<i>jnya^{MH}</i>	‘work’
<i>tla^{+H}</i>	~	<i>jla^{+H}</i>	‘hard’
<i>tlo^H</i>	~	<i>jlo^H</i>	‘face of’
<i>kwla/kla</i>	~	<i>jla</i>	‘old’
<i>kwneq^H/kneq^H</i>	~	<i>jneq^H</i>	‘young’
<i>chaq^{MH} tnya^{ML}</i>	~	<i>chaq^{MH} jnya^{ML}</i>	‘Chatino’
<i>tnyi^{HL+0}</i>	~	<i>jnyi^{HL+0}</i>	‘money’
<i>ri^{MO} tnya^{ML}</i>	~	<i>ri^{MO} jnya^{ML}</i>	‘below’

These changes help explain the occurrence and justify the treatment of /j/ in C1 position by showing their derivation from stops in C1 position. A complete grid showing which clusters occur and which do not occur is shown in Tables 2.17 and 2.18. The horizontal rows correspond to the first components that we have discussed (always just individual phonemes, or else Ci sequences, and excluding those consonants that never occur as C₁). The vertical columns correspond to the second components we have discussed (either individual phonemes or sequences of glottal phonemes plus glides or

nasal sonorants). Individual boxes in the chart will be exemplified in the discussion of each phoneme.

Table 2.17: Consonant Sequences (part 1)

<i>C</i> ₁	<i>C</i> ₂																	
	<i>t</i>	<i>ts</i>	<i>s</i>	<i>n</i>	<i>l</i>	<i>ty</i>	<i>r</i>	<i>ch</i>	<i>x</i>	<i>ny</i>	<i>ly</i>	<i>y</i>	<i>k</i>	<i>kw</i>	<i>w</i>	<i>q</i>	<i>j</i>	
<i>p</i>					<i>pl</i>							<i>py</i>						
<i>t</i>				<i>tn</i>	<i>tl</i>					<i>tny</i>	<i>tly</i>	<i>t'y</i>	<i>tk</i>	<i>tkw</i>	<i>tw</i>	<i>tq</i>	<i>tj</i>	
<i>d</i>					<i>ndl</i>				<i>dx</i>			<i>d'y</i>			<i>dw</i>			
<i>ti</i>																	<i>tiq</i>	
<i>di</i>													<i>dik</i>					
<i>dz</i>															<i>dzw</i>			
<i>s</i>	<i>st</i>			<i>sn</i>	<i>sl</i>	<i>sty</i>				<i>sny</i>	<i>sly</i>	<i>sy</i>	<i>sk</i>	<i>skw</i>	<i>sw</i>	<i>sq</i>		
<i>l</i>												<i>ly</i>		<i>lkw</i>	<i>lw</i>	<i>lq</i>	<i>lj</i>	
<i>ty</i>													<i>tyk</i>	<i>tykw</i>	<i>tyw</i>	<i>tyq</i>	<i>tyj</i>	
<i>x</i>	<i>xt</i>			<i>xn</i>	<i>xl</i>	<i>xty</i>				<i>xny</i>	<i>xly</i>	<i>xy</i>	<i>xk</i>	<i>xkw</i>	<i>xw</i>	<i>xq</i>		
<i>ly</i>														<i>lykw</i>				
<i>y</i>	<i>yt</i>	<i>yts</i>		<i>yn</i>	<i>yl</i>								<i>yk</i>	<i>ykw</i>			<i>yq</i>	<i>yj</i>
<i>k</i>	<i>kt</i>	<i>kts</i>	<i>ks</i>	<i>kn</i>	<i>kl</i>	<i>kty</i>		<i>kch</i>	<i>kx</i>	<i>kny</i>		<i>ky</i>			<i>kw</i>	<i>kq</i>	<i>kj</i>	
<i>ki</i>	<i>kit</i>		<i>kis</i>	<i>kin</i>	<i>kil</i>	<i>kity</i>		<i>kich</i>	<i>kix</i>	<i>kiny</i>						<i>kiq</i>	<i>kij</i>	
<i>kw</i>	<i>kw</i>				<i>kw</i>													
<i>w</i>	<i>wt</i>		<i>ws</i>		<i>wl</i>	<i>wty</i>	<i>wr</i>	<i>wch</i>	<i>wx</i>			<i>wly</i>	<i>wy</i>				<i>wq</i>	<i>wj</i>
<i>j</i>				<i>jn</i>	<i>jl</i>					<i>jny</i>	<i>jly</i>							

Table 2.18: Consonant Sequences (part 2)

C_1	LS				qN	
	<i>qy</i>	<i>qw</i>	<i>jy</i>	<i>jw</i>	<i>qn</i>	<i>qny</i>
<i>p</i>						
<i>t</i>		<i>tw</i>				
<i>d</i>						
<i>ti</i>						
<i>di</i>						
<i>dz</i>						
<i>s</i>	<i>sqy</i>	<i>sqw</i>			<i>sqn</i>	
<i>l</i>	<i>ly</i>					
<i>ty</i>	<i>tyqy</i>	<i>tyqw</i>	<i>tyjy</i>			
<i>x</i>	<i>xqy</i>	<i>xqw</i>			<i>xqn</i>	<i>xqny</i>
<i>ly</i>						
<i>y</i>		<i>yqw</i>		<i>yjw</i>		
<i>k</i>		<i>kqw</i>		<i>kjw</i>	<i>kqn</i>	<i>kqny</i>
<i>ki</i>	<i>kiqy</i>					
<i>kw</i>						
<i>w</i>	<i>wqy</i>		<i>wjy</i>		<i>wqn</i>	
<i>j</i>	<i>jqy</i>					

2.5.10 Consonant Co-occurrence Constraints

The monosyllabification of SJQ has created very interesting consonant clusters. The phonological pattern is (n)(C₁(i)).{C₂, LS}V(q) and the consonant constraints reflect this historical situation. The attested consonant sequences are discussed in each phoneme section.

2.5.11 Conclusion

In this chapter I have described the segmental sound system of SJQ Chatino, as well the practical writing system used to represent it. As was mentioned, the SJQ stem is becoming exclusively monosyllabic. SJQ allows up to three consonants in a cluster, but some of the consonants allow, in addition, an initial nasal /n/, e.g. *nxqya*^{M0} ‘s/he cries’. The vowel *i* occurs as the nucleus of a penultimate syllable in SJQ only under very restricted conditions. The description of the co-occurrence of vowels and consonants is

incomplete; further investigation needs to be done in this subject. The following chapter describes the SJQ tones.

Chapter 3

Tones

We saw in Ch. 2 that simple (non-compound) stems in SJQ have the shape: (n)(C₁(i)).{C₂, LS}V(q). In addition to being a representation for the stem and for basic syllable structure, I claim that this unit is the tone bearing unit (TBU) for San Juan Quiahije. Note that each example given in that chapter shows a tone marking. We can then elaborate the formula as follows (where T stands for the tone):

(n)(C₁(i)).{C₂, LS}V(q)T

Notice that the short penultimate syllables with /i/ are not claimed to have their own tones: the realization of the single assigned tone extends to include them along with the final syllable. Accordingly, tone is also a diagnostic for compounds: a compound shows two simple stems, and each of these will bear its own tone, as we will see.

The orthography presented here marks tones according to the phonemic analysis of the lexical tones that will be presented in this chapter. Its elements are: L ‘low’, M ‘mid’, H ‘high’, and 0 ‘super-high’. These elements can be combined to give rises (e.g., LM) and falls (e.g. ML). As will be shown, this system also marks high and super-high floating tones with a ‘+’ sign, e.g.: +H, +0:¹⁷

<i>ti^L-kchaq^{LM}</i>	cloth-hair	‘blanket’
<i>qq^L-xla^{H+0}</i>	house-Castilian	‘school’
<i>chaq^{MH}-tnya^{ML}</i>	word-lowland	‘Chatino’
<i>qq^L-tykwq^{MH}</i>	house-iron	‘jail’
<i>qq^L-kiq^{+H}</i>	house-fire	‘kitchen’
<i>kq^{ML}-q^{+H}</i>	eat-us	‘we will eat’

¹⁷ Based on Cruz and Woodbury (2006).

<i>neq-pi</i> ^{M0}	people-white	‘Europeans’
<i>tu</i> ^{MH} - <i>kwq</i> ^M	hole-up	‘sky’
<i>ja-ktq</i> ^{+H}	tortilla-pot	‘ <i>tamal</i> ’
<i>ja-xlyd</i> ^{H+0}	tortilla-Castilian	‘break’
<i>ke</i> ^{LM} - <i>xtyiq</i> ^{MH}	head-kneel of	‘knee of’
<i>yne</i> ^{LM} - <i>yaq</i> ^M	neck-hand of	‘wrist of’
<i>yne</i> ^{LM} - <i>kyaq</i>	neck-feet of	‘ankle of’
<i>tyqa</i> ^L - <i>tseq</i>	water-tongue of	‘saliva of’
<i>sqyu</i> ^M - <i>tlo</i> ^H	seed-face of	‘eye of’

I will show that when sandhi contexts are considered, SJQ Chatino has 14 lexical tones that are built up out of the elements just mentioned. In isolation, however, there are only 11 contrasts because several of the lexical categories merge phonetically in that context. As phonemic categories, the tones serve to distinguish words from each other:

<i>cta</i> ^M	‘flour’
<i>cta</i> ^{MH}	‘chepil (edible herb)’
<i>cta</i> ^L	‘tobacco’

Tones also uniquely mark certain inflectional and derivational categories, e.g., person and number of subjects, as well as certain aspect distinctions:

<i>kwa</i> ^{MH}	‘s/he swept’
<i>kwa</i> ^H	‘you swept’
<i>kwa</i> ^{HL+0}	‘s/he will sweep’
<i>kwa</i> ^{M0}	‘you will sweep’

The system in SJQ shows some tones that are level or nearly level, some that rise, and some that fall. Some of the level and falling tones have a high floating tone that surfaces on following words when sandhi processes are realized (discussed in 3.6). I will also discuss tone-bearing vocalic clitics that add a mora and create a complex tone realized over a dimoraic sequence.

In what follows, I will represent the examples in regular orthography with the letter system just described, corresponding to the (eventual) lexical phonemic analysis. I

will also use letters as terms for phonetic transcription. Whenever I do this, I will give the letters in square brackets, to indicate their use as phonetic transcriptions. I begin by considering the tonal contrasts that can be established in isolation; provide a phonemic analysis; and then augment the analysis by considering lexical tonal contrasts only evident in certain sandhi context. This will allow me to build a full systematic phonological representation of the lexical tone system. When one of the tones has no marking this tone is “toneless”, that is, it has no specification for note, as discussed by Pulleyblank (1986). For example, *yja* ‘tortilla’ or *ja* in a compound, e.g. *ja-ktq^{+H}*, are both unspecified for tone. This still has a distinct phonetic tone, however, since unspecified tone bearing units may receive tone via sandhi, or else receive a default tone (which in SJQ is low [L]).

3.1 TONES IN ISOLATION

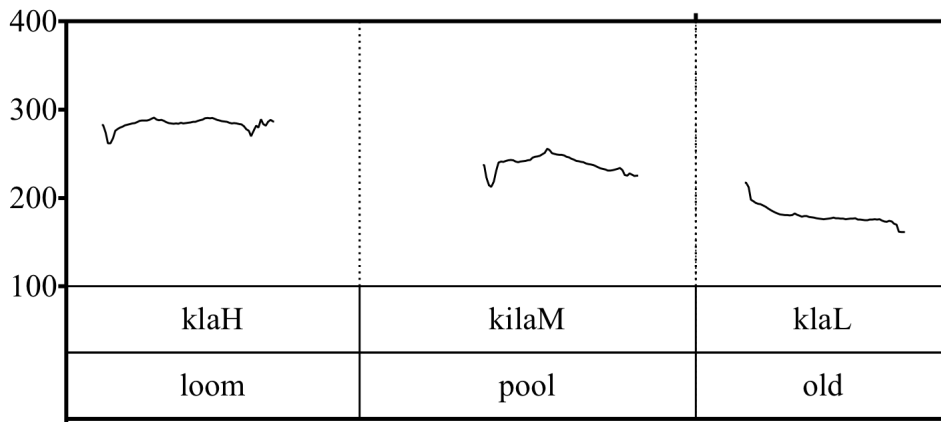
I now consider each of 11 tone classes that are distinct in isolated surface forms.

3.1.1 Level Tones

I will first consider three basic level tones evident in isolation in SJQ—phonetically transcribed here using [H], [M], and [L] and placed in square brackets. These are in most cases identical to the phonemic representations, but not always. At this point, our interest is in establishing contrastive phonetic distinctions I will give basic characterizations of each set of level tone words that sound different in isolation. The following are (near) minimal sets contrasting level tones:

<i>kla^H</i>	[H]	‘loom’
<i>kila^M</i>	[M]	‘pool’
<i>kla^L</i>	[L]	‘old’

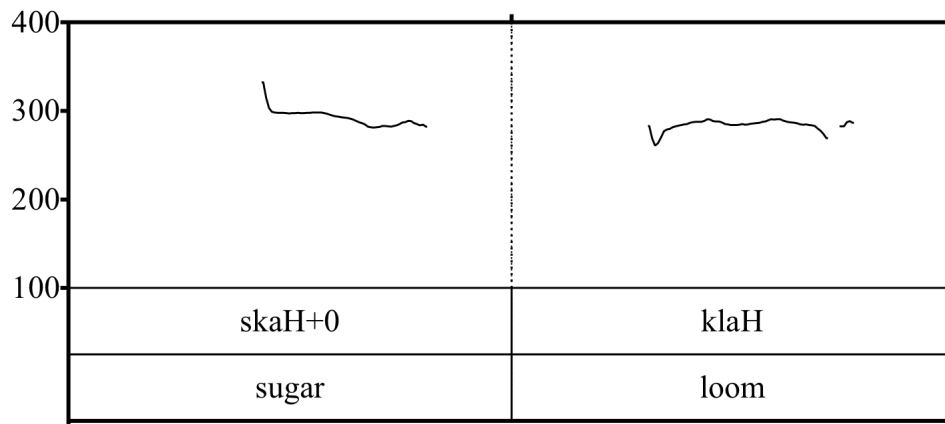
Figure 3.1: Level Tones



High level [H] in isolation

This category sounds like a high level tone with a slight decline from onset to offset. It is transcribed as [H]. In the orthography, this category is marked as either /H/ or as /H+0/. These sound identical in the isolation context, although in section 3.3, we will find reasons to distinguish them lexically and represent them differently as first reported in Cruz and Woodbury (2006).

Figure 3.2: Tone /H+0/ vs. Tone /H/: Both [H] in Isolation



[H] words from the /H+0/ subgroup

<i>ja</i> ^{H+0}	‘nun’
<i>jwe-sa</i> ^{H+0}	‘force’
<i>ka</i> ^{H+0}	‘cow’
<i>kla</i> ^{ML+H} <i>qnyo</i> ^{H+0}	‘thirty-five’
<i>kla</i> ^{ML+H} <i>qyu</i> ^{H+0}	‘twenty-five’
<i>kle</i> ^{H+0}	‘mayor’
<i>ksi</i> ^{H+0}	‘cross’
<i>kwe</i> ^{M-nta} ^{H+0}	‘account/fortune telling’
<i>kwe</i> ^{M-ntu} ^{H+0}	‘gossip/story’
<i>kxa</i> ^{H+0}	‘needle’
<i>kxu</i> ^{H+0}	‘cheese’
<i>lya</i> ^{H+0}	‘mule’
<i>ndle</i> ^{H+0}	‘napkin’
<i>neq</i> ^{L-xqq} ^{H+0}	‘mean person’
<i>ntsi</i> ^{H+0}	‘ <i>nanche</i> (fruit)’
<i>nya</i> ^{H+0}	‘mine’
<i>nyo</i> ^{H+0}	‘wine’
<i>pya</i> ^{H+0}	‘papaya’
<i>pyq</i> ^{H+0}	‘shawl’
<i>sa</i> ^{H+0}	‘cup’
<i>sa</i> ^{L-la} ^{H+0}	‘clay plate’
<i>sa</i> ^{L-lu} ^{H+0}	‘hat’
<i>se</i> ^{H+0}	‘judge’
<i>ska</i> ^{H+0}	‘sugar’
<i>skwa</i> ^{H+0}	‘Easter week’
<i>slyi</i> ^{H+0}	‘pants’
<i>sna</i> ^{H+0}	‘apple’
<i>sa</i> ^{L-na} ^{H+0}	‘week’
<i>stu</i> ^{H+0}	‘gusto’
<i>styq</i> ^{H+0}	‘dove/pigeon’

[H] words from the /H/ subgroup

<i>sqq</i> ^H	‘full’
<i>sqa</i> ^H	‘bowl’
<i>squ</i> ^H	‘gourd tortilla dish’
<i>squ</i> ^{M-tlo} ^H	‘eye socket of’
<i>squ</i> ^{M-tya} ^H	‘amaranth’

<i>se^H</i>	‘moss (<i>Tillandsia usneoides</i>)’
<i>siq^Htyku^H</i>	‘bank of the river’
<i>skwa^H</i>	‘prepared meal’
<i>slyaq^H</i>	‘cotton’
<i>sna^{ML}yla^Mndwa^{HL+0}ska^{M0}</i>	‘sixty-one’
<i>sna^{ML}yla^Msqwi^Hqnyo^H</i>	‘seventy-five’
<i>sna^{ML}yla^Msqwi^Hqyu^H</i>	‘sixty-five’
<i>sna^{ML}yla^Msqwi^Hti^H</i>	‘seventy’
<i>sne^H</i>	‘toad’
<i>t’yq^H</i>	‘steam bath’
<i>tqa^L-yqo^H</i>	‘day of the dead’
<i>te^H</i>	‘sprout’
<i>tjo^H</i>	‘squash vine’
<i>tkq^H</i>	‘greedy’
<i>tkwi^H</i>	‘difficult’
<i>tlo^H</i>	‘face of’
<i>tlyu^Msiq^H</i>	‘pregnant (<i>lit.</i> big waist)’
<i>tyqa^L-qo^H</i>	‘sea’ (<i>lit.</i> holy water)
<i>tya^H</i>	‘squirrel’
<i>tyi^H-kaq^H</i>	‘carpenter’
<i>tykaq^H</i>	‘necklace’
<i>tyku^H</i>	‘well, river’
<i>tykwe^H</i>	‘bed bug’
<i>wqya^H</i>	‘party’
<i>wje^H</i>	‘hives’
<i>xi^H</i>	‘bad’
<i>xqna^H</i>	‘boss’
<i>xno^H</i>	‘grapefruit’
<i>lyqa^H</i>	‘bean stalk’
<i>yqq^H</i>	‘mother of’
<i>yja-xqa^H</i>	‘corn tamales’
<i>yna^H</i>	‘copal’

Mid level [M] in isolation

This is a mid tone that slightly falls, transcribed as [M]. In the orthography these are marked as /M/.

These are examples for [M]:

<i>nde^M</i>	‘here’
<i>ndi^{M0}-tiq^M</i>	‘sober’
<i>ndq^{LM}riq^M</i>	‘happy’
<i>ne^M</i>	‘today’
<i>neq^M</i>	‘stomach of’
<i>nkqa^{LM}-ktsi^M</i>	‘green’
<i>no^L-nde^M</i>	‘this’
<i>nteq^{+H}-tiq^M</i>	‘hungry’
<i>pi^{M0}-ksuq^M</i>	‘male turkey’
<i>pi^{M0}-kteq^M</i>	‘female turkey’
<i>re^M</i>	‘this’
<i>riq^M</i>	‘essence of’
<i>sqe^M</i>	‘excrement of’
<i>sqyu^M</i>	‘seed’
<i>seq^M</i>	‘theater’
<i>skq^M</i>	‘arm of’
<i>sna^{ML}yla^M</i>	‘sixty’
<i>sni^M</i>	‘penis of’
<i>sti-qo^M</i>	‘priest’
<i>sti-lya^M</i>	‘father in law of’
<i>swe-ktyiq^M</i>	‘frog egg’
<i>tkaq^M</i>	‘overrun’
<i>tlyu^M</i>	‘big’
<i>tsa^{MH}-riq^M</i>	‘charm’
<i>tu^{MH}-kwa^M</i>	‘sky’
<i>tu^M-xqi^M</i>	‘intestines of’
<i>tykwaq^M</i>	‘male ant’

Low level [L] in isolation

This tone is low and the vowel tends to be long, especially if there is just a single consonant onset. It contains a soft breathiness in the voice quality. It is transcribed as [L]. In the orthography these are marked as /L/ or as /_/ (no tone marking), depending on sandhi behavior: We shall see that the ones marked /_/ are subject to many sandhi effects where as the ones marked /L/ almost always remain stable as a phonetic low tone. These two groups sound exactly the same in isolation. Tone /L/ is widely used in the language.

These are examples for /L/:

qya^L ‘eagle’

<i>cha^L-jlyuq^L</i>	‘cricket’
<i>jno^L/tno^L</i>	‘big’
<i>kyqya^L</i>	‘guilt’
<i>knyaq^L</i>	‘ear wax’
<i>cha^L</i>	‘the day after tomorrow’
<i>tjeq^L</i>	‘salt’

These are examples for /_/:

<i>qe</i>	‘wind’
<i>qi</i>	‘to’
<i>qne</i>	‘animal’
<i>qnya</i>	‘to me’
<i>qo</i>	‘spouse’
<i>ja</i>	‘between’
<i>kcha</i>	‘crazy’
<i>kla</i>	‘star’
<i>kyqo</i>	‘lime’
<i>kyaq</i>	‘feet of’

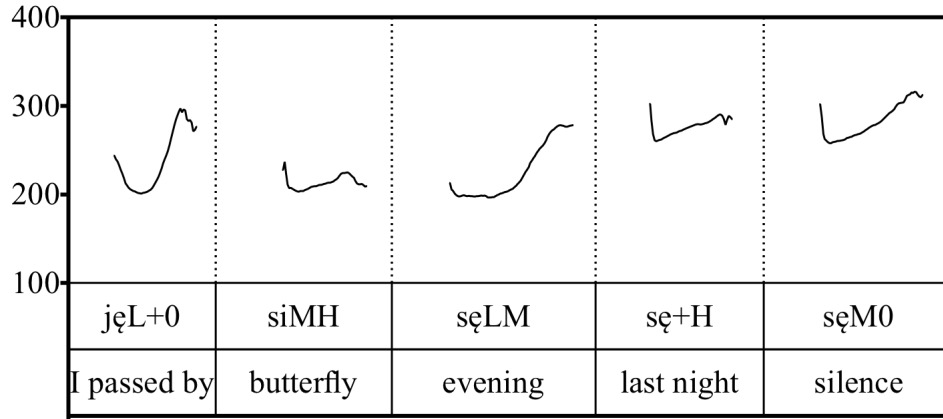
3.1.2 Rising Tones

In this analysis I identify five rising tones in SJQ in isolation. The analysis starts from sound groups I will transcribe phonetically as [L0], [M[^]], [LM], [MH] and [M0], where, as we will see, [M[^]] indicates a very slightly rising mid-tone. These correspond to /L+0, MH, LM, +H, and M0/ in the practical orthography. All five rising tone categories are common in the language except the [L0] category, which is only found in some first person singular-inflected forms of verbs and inalienably possessed nouns (described in Chapter 6). This is a near minimal set for rising tones, with pitch tracks shown in Figure 3.3:

<i>je^{L+0}</i>	[L0]	‘I passed’
<i>si^{MH}</i>	[M [^]]	‘butterfly’
<i>se^{LM}</i>	[LM]	‘evening’
<i>se^{+H}</i>	[MH]	‘last night’

sɛ^{M0} [M0] ‘silence’

Figure 3.3: Rising Tones



Mid rise [M0] in isolation

This tone starts mid, and rises even higher, to a super-high. In the orthography this tone is represented as /M0/. One interesting feature of the [M0] set is that it is commonly found in the names of small things and animals where cognate forms in other Chatino varieties would predict some other tone. These are examples for /M0/:

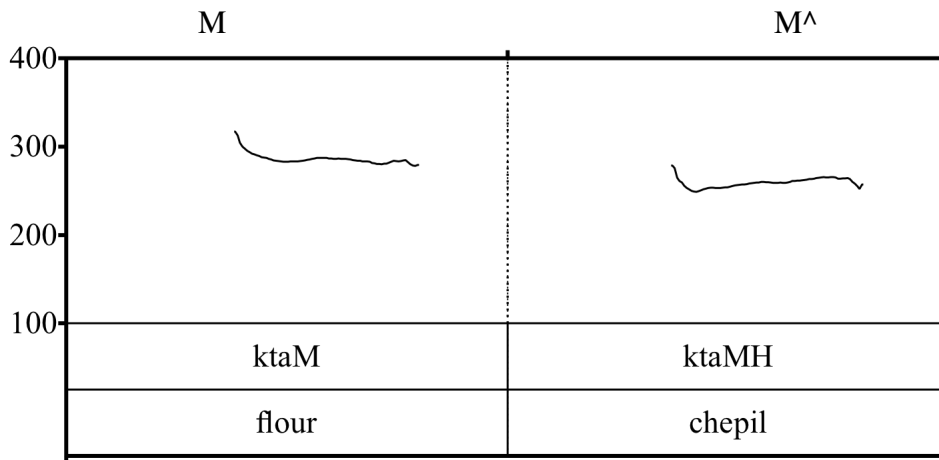
<i>qɛ^{M0}</i>	‘fan’
<i>qne-joq^{M0}</i>	‘owl’
<i>qnyo^{ML}-xna^{M0}</i>	‘eighteen’
<i>cha^{MH}-qi^{M0}</i>	‘a type of insect’
<i>chi^{MH}-kliq^{M0}</i>	‘rabbit’
<i>chi^{MH}-tykaq^{M0}</i>	‘blister’
<i>chiq^{M0}</i>	‘little bit’
<i>jwa^{M0}</i>	‘long’
<i>jwi^{M0}</i>	‘whistle sound’
<i>kcha^L-kjoq^{M0}</i>	‘mumps’
<i>kche^{M0}</i>	‘unkempt’
<i>kcheq^{M0}</i>	‘small’
<i>knyaq^{M0}</i>	‘dirty’
<i>styuaq^{M0}</i>	‘lump’
<i>sya^{M0}</i>	‘even though’
<i>tiya^{M0}</i>	‘idea’

<i>tjyq^{MO}</i>	‘slender’
<i>tu^{MH}-xkaq^{MO}</i>	‘recess’
<i>tyqq^{MO}</i>	‘painting’
<i>tyi^{MO}</i>	‘dear’
<i>tyu^{MO}</i>	‘pretty’
<i>xqa^{MO}</i>	‘adornment’
<i>xqe^{MO}</i>	‘rooster’
<i>xa^{MH}-lwi^{MO}</i>	‘lightning’
<i>xkeq^{MO}</i>	‘imaginary’
<i>xtyq^{MO}</i>	‘cat’
<i>yqu^{MO}</i>	‘embarrassment’
<i>yweq^{MO}</i>	‘curse’

Mid mild rise [M[^]] in Isolation

This tone category sounds like a mid tone with a very slight rise through the offset. I will transcribe it as [M[^]], where the mark “^” indicates its slightly rising quality. Tone [M[^]] is represented as /MH/ in the orthography, reflecting an analysis as a mid rising tone that will be presented later. [M[^]] is phonetically very close to the [M] category already discussed (orthographic /M/), which usually starts a bit higher, and declines rather than rises over the syllable. Tone [M[^]] is different in that it begins slightly lower and rises instead of falls. The pitch tracks in figure 3.4 show the distinction between M and M[^].

Figure 3.4: Tone [M^] vs. [M]



These are examples for tone [M[^]]:

- qa^{MH}* 'tamarind'
- qo^{MH}* 'corral'
- qwe^{MH}* 'bottle'
- qya^{MH}-si^{MH}* 'moth'
- cha^{MH}-jyaq^{MH}* 'permit'
- chaq^{MH}-jyaq^{MH}* 'permission'
- chi^L-chaq^{MH}* 'maybe'
- chuq^{MH}* 'badger'
- wji^{MH}* 'skunk'
- jla^{MH}* 'mean person'
- jnya^{MH}/tnya^{MH}* 'work'
- jyaq^{MH}* 'measure'
- jya^{MH}* 'corn field'
- kqwi^{MH}* 'drunk'
- kq^{LM}-chaq^{MH}* 'this is why'
- keq^{MH}* 'trap/test'
- koq^{MH}* 'moon'
- kta^{MH}* 'hunt/pick'
- kti^{MH}* 'delicate'
- ktq^{MH}* 'weapon'
- ktseq^{MH}* 'pus'
- ktsiq^{MH}* 'iguana'
- ktsuq^{MH}* 'boil'

<i>ktɣiq^{MH}</i>	‘blind’
<i>kuq^{MH}</i>	‘piece’
<i>kwa^{MH}</i>	‘purple’
<i>kynyaq^{MH}</i>	‘pepper’
<i>kyo^L-jla^{MH}</i>	‘storm’
<i>lo-jyq^{MH}</i>	‘on the field’
<i>lwi^{MH}</i>	‘clean’
<i>ma^{M0}-xuq^{MH}</i>	‘old lady’

Mid rise [MH] in isolation

Phonetically, this tone is a rising tone that begins at mid level and rises sharply to an endpoint about at level H. I transcribe it phonetically as [MH]. This tone is represented as /+H/ (floating high tone, that is pre-linked) in the orthography, an analysis I will present and justify later on. This tone is rare in nouns. It occurs frequently in compounds in second position. In addition, [MH] is found in many progressive aspect verb bases (i.e., the third and first person singular form). These are examples for /+H/:

<i>ja-ktq^{+H}</i>	‘tamale’
<i>ja-la^{+H}</i>	‘no’
<i>ja^L-nd'ya^{+H}</i>	‘not available’
<i>ja^L-ne^{+H}</i>	‘yes’
<i>ja^L-yu^{+H}</i>	‘gully’
<i>jla^{+H}/tla^{+H}</i>	‘hard’
<i>jlyo^{+H}</i>	‘covered up’
<i>kyo^L-ke^{+H}</i>	‘hail’
<i>l'yu^{+H}</i>	‘on the earth’
<i>lo-ke^{+H}</i>	‘on the rock’
<i>lo-ke^{+H}</i>	‘on the rock’
<i>lo-kiq^{+H}</i>	‘on the fire’
<i>lo-ntɛ^{+H}</i>	‘hill’
<i>lo-ykwaq^{+H}</i>	‘at the swamp’
<i>lo-yu^{+H}</i>	‘on the ground’
<i>qa-kiq^{+H}</i>	‘kitchen’
<i>na^{+H}</i>	‘pain’
<i>nd'ya^{+H}</i>	‘have’
<i>neq^M-t'yu^{+H}</i>	‘hole in the ground’

<i>neq^L-tq^{+H}</i>	‘pilgrim’
<i>nkqa^H-kiq^{+H}</i>	‘burgundy’
<i>no-xwe^{+H}</i>	‘children’
<i>nsqya^{+H}</i>	‘your fault’
<i>sqe^{+H}</i>	‘scorpion’
<i>sqwa^{+H}</i>	‘the same’
<i>ska-sqe^{+H}</i>	‘somewhere’
<i>sna^{ML} yla^M sqwi^H qnyo^{ML} xka^{+H}</i>	‘seventy-six’
<i>sna^{ML} yla^M sqwi^H qnyo^{ML} ykwa^{+H}</i>	‘seventy-nine’
<i>sna^{ML} yla^M sqwi^H ti^{ML} ykwa^{+H}</i>	‘seventy-four’
<i>sna^{ML} yla^M sqwi^H ti^{ML} xka^{+H}</i>	‘seventy-one’
<i>t'ye^{+H}</i>	‘essence of’
<i>teq-qa^{+H}</i>	‘slip (clothing)’
<i>ti^{ML} lykwa^{+H}</i>	‘fourteen’
<i>ti^{ML} xka^{+H}</i>	‘eleven’
<i>tjo^H-tykaq^{+H}</i>	‘gourd vine’
<i>tyqa^L-sneq^{+H}</i>	‘saliva’
<i>xa^{MH}-l'yu^{+H}</i>	‘world’
<i>xka^{+H}</i>	‘other’
<i>yja-ntqq^{+H}</i>	‘sweet corn tortilla’
<i>yja-tla^{+H}</i>	‘bake tortilla’
<i>yka-ntya^{+H}</i>	‘type of tree’
<i>yka-staq^{+H}</i>	‘hook’
<i>yka-tqwa^{+H}</i>	‘horizontal roof beam’
<i>ntyku^{+H}</i>	‘s/he is eating’
<i>ntjwi^{+H}</i>	‘s/he is hitting’
<i>nsnyi^{+H}</i>	‘s/he is grabbing’
<i>nde^{+H}</i>	‘s/he is carrying’

Low rise [LM] in isolation

This tone goes from low to mid. The L portion is relatively long, especially when there is just a single initial consonant. It is followed by an "elbow"-transition to a mid-level endpoint. It is transcribed phonetically as [LM]. In the orthography this tone is marked as /LM/:

<i>ka^{LM}</i>	‘left’
<i>qi^{LM}</i>	‘to you’
<i>qna^{LM}</i>	‘to us 1plin’

<i>qnya^{LM}</i>	‘famine’
<i>chq^{LM}</i>	‘back of’
<i>jaq^{LM}</i>	‘mat’
<i>je^{LM}</i>	‘bag’
<i>ji^{LM}</i>	‘ash’
<i>jlo^{LM}</i>	‘first’
<i>jlyaq^{LM}/tlyaq^{LM}</i>	‘bitter’
<i>jne^{LM}/tne^{LM}</i>	‘blood’
<i>jno^{LM}/tno^{LM}</i>	‘lobster’
<i>jnoq^M-tywiq^{LM}</i>	‘worm’
<i>kiqnya^{LM}</i>	‘bed’
<i>ka^{LM}</i>	‘pest that attacks beans’
<i>kq^{LM}</i>	‘the mentioned’
<i>kcha^{LM}</i>	‘sun’
<i>kchq^{LM}-ke^{LM}</i>	‘hair of’
<i>ke^{LM}</i>	‘head of’
<i>ki^{LM}</i>	‘bamboo’
<i>kna^{LM}</i>	‘crocodile’
<i>kynyaq^{LM}</i>	‘honey’
<i>ko^{LM}</i>	‘clouds’
<i>kq^{LM}</i>	‘tuber’
<i>кта^{LM}</i>	‘shrimp’
<i>ktsq^{LM}</i>	‘newly formed corn ear (<i>jilote</i>)’
<i>ktu^{LM}</i>	‘chicken’
<i>ktuq^{LM}</i>	‘hives’
<i>kyiq^M-ki^{LM}</i>	‘grey frog’
<i>kuq^{LM}</i>	‘dirty’
<i>kweq^{LM}</i>	‘pig’
<i>kwε^{LM}</i>	‘loud’
<i>kweq^{LM}</i>	‘armadillo’

Low super-rise [L0] in isolation

This tone in isolation has the same general shape as the [LM] just discussed—a long low portion followed by a rise. However the rise in the case of this tone extends to super-high level (0). It is transcribed phonetically as [L0]. It is represented in the orthography as /L+0/, based on a claim that I will make that the [0] portion is a super-

high floating tone. This tone is only found in person-marked verbs and inalienably possessed nouns. These are examples for tone [L0]:

<i>skq̣q̣^{L+0}</i>	‘I tied’
<i>sẉẹq̣^{L+0}</i>	‘I turn ‘
<i>kẉq̣^{L+0}</i>	‘I swept’
<i>xkẉq̣^{L+0}</i>	‘I seamed’
<i>sq̣ẹ^{L+0}</i>	‘I bought’
<i>nẹ^{L+0}</i>	‘I confessed’
<i>ntykẉq̣^{L+0}</i>	‘I put away’
<i>q̣q̣^{L+0}</i>	‘I raised’
<i>tṣq̣^{L+0}</i>	‘I heated up’
<i>sṇq̣^{L+0}</i>	‘I escaped’
<i>ṇq̣^{L+0}</i>	‘I cried’
<i>ndywẉq̣^{L+0}</i>	‘I jumped’
<i>ṣq̣^{L+0}</i>	‘my arm’
<i>sq̣ẹ^{L+0}</i>	‘my excrement’

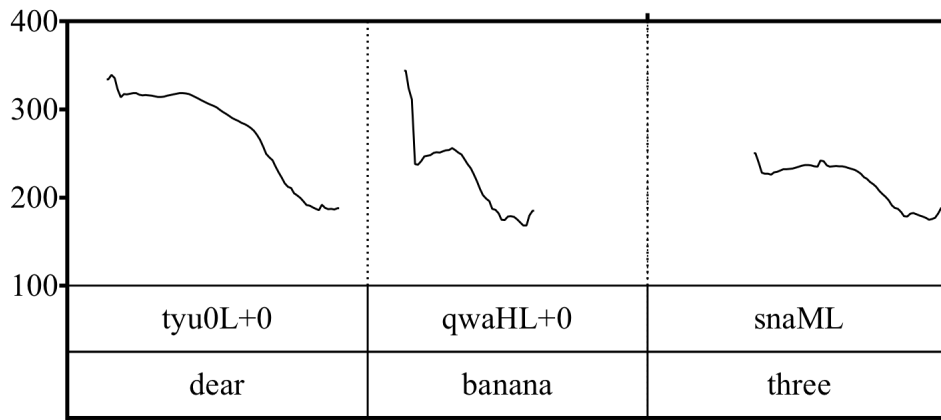
3.1.3 Falling Tones

In this analysis I identify three falling tones in SJQ in isolation. The analysis starts from sound groups I will transcribe as [0L], [HL], and [ML]. The first two correspond to /0L+0/ and /HL+0/ in the practical orthography. The last corresponds to /ML+H/ or /ML/ in the practical orthography, reflecting a sandhi distinction I will take up later in 3.4.2. These two groups generally sound exactly the same in isolation (with one qualification mentioned below). Furthermore, some speakers appeared to merge tone [ML] with [HL] in some cases, which will be discussed in 3.4.1.

These are examples of falling tones:

<i>tyu^{0L+0}</i>	‘cute’
<i>qwa^{HL+0}</i>	‘banana’
<i>sṇa^{ML}</i>	‘three’

Figure 3.5: Falling Tones



Super-high fall [0L] in isolation

Tone This tone falls very sharply from super-high (0) to low. It is transcribed phonetically as [0L]. In the practical orthography it is represented as /0L+0/, reflecting a floating tone analysis that will be presented. This is a very marginal tone, and it only occurs in isolation in a few expressive words. These are examples for /0L+0/:

tyu^{0L+0} 'cute'
tyi^{0L+0} 'dear'

High fall [HL] in isolation

In isolation, the tone in this set falls very sharply from H to L and is transcribed here as [HL]. This tone is represented as /HL+0/ in the practical orthography, reflecting a high floating tone analysis based on sandhi that will be presented later. This tone is widespread in all parts of speech; it also is found in some Spanish borrowings.

qu^{HL+0} 'alive'
qwa^{HL+0} 'banana'
chuq^{HL+0} 'pineapple'
jnyi^{HL+0}/*tnyi*^{HL+0} 'money'

<i>jnyi^{HL+0}/knyi^{HL+0}</i>	‘lying, mendacious’
<i>jyaq^{HL+0}</i>	‘mushroom’
<i>jyq^{HL+0}</i>	‘mole’
<i>jyu^{HL+0}</i>	‘horse’
<i>ka-jwe^{HL+0}</i>	‘brown’
<i>klaq^{HL+0}</i>	‘ <i>Pouteria sapota</i> ’
<i>ksq^{HL+0}</i>	‘old (of things)’
<i>кта^{HL+0}</i>	‘cattle’
<i>yu^L-ktsuq^{HL+0}</i>	‘mud’
<i>ktyiq^{HL+0}</i>	‘louse’
<i>kwi^{HL+0}</i>	‘new’
<i>kwiq^{HL+0}</i>	‘ring’
<i>kwiq^{HL+0}</i>	‘hiccup’
<i>kycheq^{HL+0}</i>	‘thorn’
<i>l’ya^{HL+0}</i>	‘María’
<i>la^L-nse^{HL+0}</i>	‘elephant’
<i>lo^L-qo^{HL+0}</i>	‘Tataltepec de Valdés’
<i>mba^{HL+0}</i>	‘co-parent’
<i>nchi^{HL+0}</i>	‘monkey’
<i>neq-tqi^{HL+0}</i>	‘poor person’
<i>nkq^{HL+0}</i>	‘turtle’
<i>nte^{HL+0}</i>	‘people’
<i>nti^{HL+0}</i>	‘garbage’
<i>ntskwaq^{HL+0}</i>	‘corn’
<i>ntswaq^{HL+0}</i>	‘ <i>Piper auritum</i> ’
<i>ntswē^{HL+0}</i>	‘orange’
<i>re^{HL+0}</i>	‘king’

Mid-fall [ML] in isolation

This is a falling tone that falls sharply from M to L and is transcribed phonetically as [ML]. In the orthography, this tone also is divided into two groups /ML/ and /ML+H/, as can be seen below. The distinction is based on sandhi effects and is discussed more in 3.4.2. In isolation, both versions sound exactly the same, except that when there is a single initial consonant, the /ML/ words are longer in duration than the /ML+H/ words, e.g.:

<i>ka</i> ^{ML}	[ka:]	nine
<i>ka</i> ^{ML+H}	[ka]	will be'
<i>ti</i> ^{ML}	[ti:]	ten
<i>ti</i> ^{ML+H}	[ti]	only

The distinction is much less clear in isolated forms that involve initial consonant clusters; so we will reserve discussion of the distinction for when we take up sandhi.

This tone occurs only on numbers, certain potential mood verbs, and adjectives. It occurs as the second part of some noun compounds, but this is either the result of a sandhi change, or of the second compound element being itself not a noun. These are examples for [ML]:

<i>ka</i> ^{ML}	nine
<i>qyu</i> ^{ML}	'five'
<i>jnya</i> ^{ML} ~ <i>tnya</i> ^{ML}	'down'
<i>kla</i> ^{ML+H}	'twenty; will arrive
<i>kti</i> ^H - <i>ndywiq</i> ^{ML}	'soft spoken person'
<i>kti</i> ^{ML}	'seven'
<i>kwiq</i> ^{ML}	'same'
<i>mi</i> ^{MO} - <i>nyiq</i> ^{ML}	'puppy'
<i>kwq</i> ^{MO} - <i>n'ya</i> ^{ML}	'appearance'
<i>neq</i> ^L - <i>ja</i> ^{ML}	'devil'
<i>ntyqya</i> ^{ML}	'beautiful'
<i>sqwe</i> ^{MH} - <i>la</i> ^{ML} - <i>ti</i> ^{ML}	'better'
<i>skwa</i> ^{ML}	'six'
<i>sna</i> ^{ML}	'three'
<i>tqa</i> ^{ML}	'complete'
<i>tqwa</i> ^{ML}	'forty'
<i>tqwa</i> ^{ML} <i>tyi</i> ^{MO}	'fifty'
<i>ti</i> ^{ML}	'ten'
<i>tkwa</i> ^{ML}	'two'
<i>tu</i> ^{MH} - <i>sqq</i> ^{ML}	'water pool'
<i>wa</i> ^M - <i>nga</i> ^{ML}	'already'
<i>xlya</i> ^{ML}	'jealous'
<i>ndla</i> ^{ML+H}	's/he arrives'
<i>ndyq</i> ^{ML+H}	's/he stands'

In this section, I demonstrated eleven contrasting tones in isolation. The following table summarizes what we saw; as well, for reference, the table shows the practical orthography (and lexical phonemic) representation.

Table 3.1: Summary of the Tone Contrasts in Isolation

	Phonetic	Comments	Orthography
Level	[H]	Slight decline	/H/, /H+0/
	[M]	Slight decline	/M/
	[L]	Breathy	/__/, /L/
Rising	[M0]	Steep rise	/M0/
	[MH]	Steep rise	/+H/
	[M^]	Slight rise	/MH/
	[LM]	Long, with “elbow”	/LM/
	[L0]	Long, with “elbow”	/L+0/
Falling	[0L]	Sharp fall	/0L+0/
	[HL]	Sharp fall	/HL+0/
	[ML]	Sharp fall	/ML/, /ML+H/

As an extended demonstration of the contrastiveness of these sets, I present a matrix of partial minimal sets, shown in Table 3.2.

Table 3.2: Tone Minimal Sets

Set	SKWA		SKWA̋	
[L]	skwaL	‘alligator pear’	skwa̋	‘to pluck’
[HL]			skwa̋HL+0	‘to pilled corn’
[ML]	skwaML	‘six’		
[M]			skwa̋M	‘s/he threw’
[H] (/H+0/)	skwaH+0	‘Easter’		
[H]/(H/)	skwaH	‘food’	skwa̋H	‘you threw’
[M^]	skwaMH	‘s/he is swimming’		
[LM]			skwa̋LM	‘corn dough’
[L0]			skwa̋L+0	‘I threw’
[M0]				
[MH]				

Set	NSKWA		NSKWA̋	
[L]				
[HL]				
[ML]				
[M]				
[H] (/H+0/)				
[H]/(H/)	nskwaH	‘you are lying’		
[M^]	nskwaMH	‘s/he is lying’		
[LM]			nskwa̋LM	‘you are plucking’
[L0]			nskwa̋L+0	‘I am lying’
[M0]				
[MH]			nskwa̋+H	‘s/he is plucking’

Set	KWA		KLA	
[L]			klaL	‘fish’
[HL]	kwaHL+0	‘s/he will sweep’	klaHL+0	‘s/he will sing’
[ML]			klaML	‘twenty’
[M]	kwaM	tiquitlato	kilaM	‘pool’
[H] (/H+0/)				
[H]/(H/)	kwaH	‘you swept’	klaH	‘loom’
[M^]	kwaMH	‘that’	kilaMH	‘melt’
[LM]			klaLM+H	‘you will arrive’
[L0]			—	—
[M0]	kwaM0	‘you will sweep’	klaM0	‘you will sing’
[MH]				

Table 3.2: Continue

Set	SNE		KLAq	
[L]			klaq	‘s/he will touch’
[HL]	sneHL+0	‘he will spread it’	klaqHL+0	‘mamey’
[ML]				
[M]				
[H] (/H+0/)				
[H]/(H/)	sneH	‘frog’		
[M^]	sneMH	‘guitar’		
[LM]			klaqLM	‘you will touch’
[L0]				
[M0]	sneM0	‘you will throw’		
[MH]				

Set	XLYA		KLU	
[L]				
[HL]	xlyaHL+0	‘jealous’	kluHL+0	‘s/he grow’
[ML]				
[M]				
[H] (/H+0/)	xlyaH+0	‘saddle’		
[H]/(H/)			kluH	‘soup’
[M^]				
[LM]	xlyaLM	‘worm’		
[L0]				
[M0]			kluM0	‘you will grow’
[MH]				

Set	KO		LWI	
[L]				
[HL]	koHL+0	‘s/he will grind’		
[ML]				
[M]				
[H] (/H+0/)				
[H]/(H/)	koH	‘huge’		
[M^]			lwiMH	‘clean’
[LM]	koLM	‘cloud’		
[L0]				
[M0]	koM0	‘you will grind’	LwiM0	‘Luis’
[MH]				

Table 3.2: Continue

Set	NTE		KiqYA	
[L]				
[HL]	ntɛHL+0	‘people’		
[ML]			kiqyaML	‘s/he will get down’
[M]			kiqyaM	‘sin’
[H] (/H+0/)				
[H] (/H/)	ntɛH	‘mosquito’		
[M^]	ntɛMH	‘white’		
[LM]			kiqyaLM	‘dry corn plant’
[L0]	ntɛL+0	‘I entered’		
[M0]	ntɛM0	‘you enter’		
[MH]				

Set	XKWA		XKWA	
[L]			xkwaL	‘s/he pulled’
[HL]	xkwaHL+0	‘s/he will lie’	xkwaHL+0	‘s/he will sews’
[ML]				
[M]				
[H] (/H+0/)				
[H] (/H/)	xkwaH	‘extra six’	xkwaH	‘tropical area’
[M^]				
[LM]	xkwaLM	‘you will pull’	xkwaLM	‘you will pull’
[L0]			xkwaL+0	‘I will sew’
[M0]	xkwaM0	‘you will lie’	xkwaM0	‘you will sew’
[MH]			nxkwa+H	‘s/he is pulling’

Set	NXKWA		NXKWA	
[L]				
[HL]	nxkwaHL+0	‘s/he lies’		
[ML]				
[M]				
[H] (/H+0/)			nxkwaH+0	‘s/he is sewing’
[H] (/H/)				
[M^]				
[LM]				
[L0]			nxkwaL+0	‘I lie’
[M0]	nxkwaM0	‘you lie’	nxkwaM0	‘you are sewing’
[MH]				

Table 3.2: Continue

Set	KTA		KNA	
[L]	ktaL	‘tobacco’	knaL	‘sandal’
[HL]	ktaHL+0	‘cattle’	knaHL+0	‘s/he will cry’
[ML]				
[M]	ktaM	‘flour’	knaM	‘thief’
[H] (/H+0/)				
[H] (/H/)	ktaH	‘outsider’	knaH	‘snake’
[M^]	ktaMH	‘chepil’		
[LM]	ktaLM	‘shrimp’		
[L0]			knaL+0	‘I will cry’
[M0]			knaM0	‘you will cry’
[MH]				

Set	TLA		TLYA	
[L]				
[HL]	tlaHL+0	‘night’	tlyahL+0	‘morning’
[ML]				
[M]			tlyam	‘brother in law of’
[H] (/H+0/)				
[H] (/H/)	tlaH	‘you are mean’	tlyah	‘your brother in law’
[M^]	tlaMH	‘mean person’	tlyamH	‘its food’
[LM]				
[L0]				
[M0]			tlyam0	‘you are morning person’
[MH]	tla+H	‘hard’		

Set	NTqA		KE	
[L]	ntqAL	‘cob’	keL	‘rock’
[HL]				
[ML]	ntqAML	‘I massage’	keML	‘s/he will take it’
[M]				
[H] (/H+0/)				
[H] (/H/)	ntqAH	‘s/he smeared’		
[M^]				
[LM]	ntqALM	‘s/he saw’	keLM	‘you will take it’
[L0]				
[M0]	ntqAM0	‘s/he smears’	keM0	‘Miguel’
[MH]	ntqA+H	‘s/he is walking’		

Table 3.2: Continue

Set	YKWlq		NDWI	
[L]	ykwlq	'she spoke'		
[HL]				
[ML]				
[M]				
[H] (/H+0/)				
[H] (/H/)			ndwiH	's/he is hanging'
[M^]				
[LM]	ykwlqLM	'you'		
[L0]				
[M0]			ndwiM0	'debt'
[MH]				

Set	YKWA		SNYI	
[L]	ykwaL	'level'	snylL	'smoke'
[HL]				
[ML]				
[M]			snylM	'penis of'
[H] (/H+0/)				
[H] (/H/)			snylH	'your penis'
[M^]	ykwaMH	'corn drink'		
[LM]			snylLM	'you grabbed'
[L0]			snylL+0	'my penis'
[M0]			snylM0	'I grabbed it'
[MH]			snyl+H	'he is grabbing it'

Set	NYI		NKqA	
[L]	nylL	'strait'		
[HL]				
[ML]				
[M]				
[H] (/H+0/)				
[H] (/H/)	nylH	'liar'	nkqaH	'red'
[M^]				
[LM]			nkqaLM	'green'
[L0]				
[M0]	nylM0	's/he lies'		
[MH]				

As a first pass, on the basis of such isolation contrasts, we can posit a phonemic tonal system as follows:

Table 3.3 Phonemes, Based on the Tone Contrasts in Isolation

	Phonetic	Phonemic	Orthography
Level	[H]	/H/	H, H+0
	[M]	/M/	M
	[L]	/L/	L, __
Rising	[M0]	/M0/	M0
	[MH]	/MH/	+H
	[M^]	/M^/	MH
	[LM]	/LM/	LM
Falling	[L0]	/L0/	L+0
	[0L]	/0L/	0L+0
	[HL]	/HL/	HL+0
	[ML]	/ML/	ML, ML+H

3.2 THE LEXICAL TONES REVEALED BY SANDHI CONTRASTS

SJQ Chatino has a complex tone sandhi system. This section will describe several sandhi processes that serve to test tonal distinctions, some of which are not evident in the isolation context already considered. We first discovered sandhi in the context of putting the function word (FW) *qi* (phonetically [L]) ‘his/hers’ after nouns, and had the following results (limited, however, to the tones that could occur on nouns).

Table 3.4: Sandhi Process with the Function Word *qi* ‘his/her, ‘him/her’

Isolation	T	(his/her) N or ‘to V him/her’	T	FW	T	Gloss
<i>nkq^H</i>	[H]	<i>nkq^H</i>	[H]	<i>qi</i>	[ML]	‘her/his coconut’
<i>nte^H</i>	[H]	<i>nte^H</i>	[H]	<i>qi</i>	[ML]	‘her/his mosquito’
<i>kna^H</i>	[H]	<i>kna^H</i>	[H]	<i>qi</i>	[ML]	‘her/his snake’
<i>кта^M</i>	[M]	<i>кта^M</i>	[M]	<i>qi</i>	[H]	‘her/his flour’
<i>ke^M</i>	[M]	<i>ke^M</i>	[M]	<i>qi</i>	[H]	‘her/his flower’
<i>qo^M</i>	[M]	<i>qo^M</i>	[M]	<i>qi</i>	[H]	‘her/his sacred thing’

Table 3.4: Continue

Isolation	T	(his/her) N or 'to V him/her'	T	FW	T	Gloss
<i>kna^M</i>	[M]	<i>kna^M</i>	[M]	<i>qi</i>	[H]	'her/his thief'
<i>tyu^{MH}</i>	[M^]	<i>tyu^{MH}</i>	[M^]	<i>qi</i>	[ML]	'her/his brick'
<i>kta^{MH}</i>	[M^]	<i>kta^{MH}</i>	[M^]	<i>qi</i>	[ML]	'her/his chepil (herb)'
<i>na^{MH}</i>	[M^]	<i>na^{MH}</i>	[M^]	<i>qi</i>	[ML]	'her/his thing'
<i>nda^L</i>	[L]	<i>nda^L</i>	[L]	<i>qi</i>	[L]	'her/his bean'
<i>snoq</i>	[L]	<i>snoq</i>	[L]	<i>qi</i>	[L]	'her/his eight'
<i>qo</i>	[L]	<i>qo</i>	[L]	<i>qi</i>	[L]	'her/his spouse'
<i>kta^L</i>	[L]	<i>kta^L</i>	[L]	<i>qi</i>	[L]	'her/his tobacco'
<i>yja</i>	[L]	<i>yja</i>	[L]	<i>qi</i>	[L]	'her/his tortilla'
<i>ksi^{H+0}</i>	[H]	<i>ksi^{H+0}</i>	[H]	<i>qi</i>	[0]	'her/his cross'
<i>styq^{H+0}</i>	[H]	<i>styq^{H+0}</i>	[H]	<i>qi</i>	[0]	'her/his dove'
<i>lya^{H+0}</i>	[H]	<i>lya^{H+0}</i>	[H]	<i>qi</i>	[0]	'her/his mule'
<i>sna^{H+0}</i>	[H]	<i>sna^{H+0}</i>	[H]	<i>qi</i>	[0]	'her/his apple'
<i>qwa^{HL+0}</i>	[HL]	<i>qwa^{HL+0}</i>	[HL]	<i>qi</i>	[0]	'her/his banana'
<i>ntswε^{HL+0}</i>	[HL]	<i>ntswε^{HL+0}</i>	[HL]	<i>qi</i>	[0]	'her/his orange'
<i>xi^{HL+0}</i>	[HL]	<i>xi^{HL+0}</i>	[HL]	<i>qi</i>	[0]	'her/his tomato'
<i>nkq^{HL+0}</i>	[HL]	<i>nkq^{HL+0}</i>	[HL]	<i>qi</i>	[0]	'her/his turtle'
<i>xtyq^{MO}</i>	[MO]	<i>xtyq^{MO}</i>	[MO]	<i>qi</i>	[ML]	'her/his cat'
<i>kweq^{MO}</i>	[MO]	<i>kweq^{MO}</i>	[MO]	<i>qi</i>	[ML]	'her/his crab'
<i>pi^{MO}</i>	[MO]	<i>pi^{MO}</i>	[MO]	<i>qi</i>	[ML]	'her/his turkey'
<i>sa^{MO}</i>	[MO]	<i>sa^{MO}</i>	[MO]	<i>qi</i>	[ML]	'her/his weevil'
<i>ka^{ML}</i>	[ML]	<i>ka^{ML}</i>	[ML]	<i>qi</i>	[ML]	'her/his nine'
<i>tkwa^{ML}</i>	[ML]	<i>tkwa^{ML}</i>	[ML]	<i>qi</i>	[ML]	'her/his two'
<i>kla^{ML+H}</i>	[ML]	<i>kla^{ML+H}</i>	[ML]	<i>qi⁺</i>	[+H]	'her/his twenty'
<i>stq^{+H}</i>	[MH]	<i>stq^{+H}</i>	[MH]	<i>qi</i>	[L]	'her/his grapefruit'
<i>tiyu^{+H}</i>	[MH]	<i>tiyu^{+H}</i>	[MH]	<i>qi</i>	[L]	'her/his hole'
<i>sqε^{+H}</i>	[MH]	<i>sqε^{+H}</i>	[MH]	<i>qi</i>	[L]	'her/his scorpion'
<i>kwtıyeq^{LM}</i>	[LM]	<i>kwtıyeq^{LM}</i>	[LM]	<i>qi</i>	[L]	'her/his ant'
<i>ktu^{LM}</i>	[LM]	<i>ktu^{LM}</i>	[LM]	<i>qi</i>	[L]	'her/his hen'
<i>kq^{LM}</i>	[LM]	<i>kq^{LM}</i>	[LM]	<i>qi</i>	[L]	'her/his tuber'
<i>tyu^{OL+0}</i>	[OL]	<i>tyu^{OL}</i>	[OL]	<i>qi</i>	[ML]	'her/his dear'
<i>tyi^{OL+0}</i>	[OL]	<i>tyi^{OL}</i>	[OL]	<i>qi</i>	[ML]	'her/his dear boy'
<i>skwq^{L+0}</i>	[L0]	<i>skwq^L</i>	[L]	<i>qi</i>	[0]	I threw him/her
<i>sna^{L+0}</i>	[L0]	<i>sna^L</i>	[L]	<i>qi</i>	[0]	I ran from him/her
<i>skwε^{L+0}</i>	[L0]	<i>skwε^L</i>	[L]	<i>qi</i>	[0]	I lifted him/her

This showed us that three of the tones had “hidden” floating tones. In the case of the two kinds of [H] tone (orthographic /H/ vs. /H+0/), we could see that words similar in isolation produced different effects on following *qi*. We reasoned that that effect as a lexical property of the noun stems that was transferred to the following *qi* and accordingly, we said that the [H] words of the /H+0/ set had a super-high floating tone that did not appear in isolation but that was transferred to [L] words like *qi* when they immediately followed. This brought the number of distinct tone categories to 10.

This environment also taught us that the ‘0’ in [L0] (orthographic 'L+0') was similarly a floating tone, since the [0] portion—in this case also available in isolation—transfers to [L] words like *qi* when they immediately follow.

We also learned that [HL] and [ML] (orthographic /HL+0/ vs. /ML/) were different because only [HL] revealed a super-high floating tone. It also revealed other changes in *qi*, which we will attend to later: for now, I point them out because they serve as a further test or technique for testing whether you have heard a tone correctly. Some of the noun tones left *qi* with its original low tone ([L], [LM], [MH]); others changed it to ML ([M0], [H], [ML], [M^], [0L]); one changed it to [MH] (one of the versions of [ML], treated later as /ML+H/); and one ([M]) converted it to [H]. This allowed us redundancy as we identified different tone categories, meaning that we did not have to listen only to the word in isolation; we could check ourselves by listening carefully for the right effect on *qi*. We confirmed our floating tone analysis when we considered these same nouns preceding *kq^{LM}* [LM] ‘that already-mentioned’ (DEM):

Table 3.5: Sandhi Process with DEM $kq̣q^{LM}$ ‘That Already Mentioned One’

Isolation	T	(That N or to V that one’	T	DEM	T	Gloss
nkq^H	[H]	nkq^H	[H]	$kq̣q^{LM}$	[LM]	‘that coconut’
nte^H	[H]	nte^H	[H]	$kq̣q^{LM}$	[LM]	‘that mosquito’
kna^H	[H]	kna^H	[M]	$kq̣q^{LM}$	[LM]	‘that snake’
kta^M	[M]	kta^M	[M]	$kq̣q^{LM}$	[LM]	‘that flour’
ke^M	[M]	ke^M	[M]	$kq̣q^{LM}$	[LM]	‘that flower’
qo^M	[M]	qo^M	[M]	$kq̣q^{LM}$	[LM]	‘that sacred thing’
kna^M	[M]	kna^M	[M]	$kq̣q^{LM}$	[LM]	‘that thief’
tyu^{MH}	[M^]	tyu^{MH}	[M^]	$kq̣q^{LM}$	[LM]	‘that brick’
kta^{MH}	[M^]	kta^{MH}	[M^]	$kq̣q^{LM}$	[LM]	‘that chepil (herb)’
na^{MH}	[M^]	na^{MH}	[M^]	$kq̣q^{LM}$	[LM]	‘that thing’
nda^L	[L]	nda^L	[L]	$kq̣q^{LM}$	[LM]	‘that bean’
$snoq^L$	[L]	$snoq^L$	[L]	$kq̣q^{LM}$	[LM]	‘that eight’
qo	[L]	qo	[L]	$kq̣q^{LM}$	[LM]	‘that spouse’
kta	[L]	kta	[L]	$kq̣q^{LM}$	[LM]	‘that tobacco’
yja	[L]	yja	[L]	$kq̣q^{LM}$	[LM]	‘that tortilla’
ksi^{H+0}	[H]	ksi^{H+0}	[H0]	$kq̣q^{LM}$	[LM]	‘that cross’
$styq^{H+0}$	[H]	$styq^{H+0}$	[H0]	$kq̣q^{LM}$	[LM]	‘that dove’
lya^{H+0}	[H]	lya^{H+0}	[H0]	$kq̣q^{LM}$	[LM]	‘that mule’
sna^{H+0}	[H]	sna^{H+0}	[H0]	$kq̣q^{LM}$	[LM]	‘that apple’
qwa^{HL+0}	[HL]	qwa^{HL+0}	[HL0]	$kq̣q^{LM}$	[LM]	‘that banana’
$ntswe^{HL+0}$	[HL]	$ntswe^{HL+0}$	[HL0]	$kq̣q^{LM}$	[LM]	‘that orange’
xi^{HL+0}	[HL]	xi^{HL+0}	[HL0]	$kq̣q^{LM}$	[LM]	‘that tomato’
nkq^{HL+0}	[HL]	nkq^{HL+0}	[HL0]	$kq̣q^{LM}$	[LM]	‘that turtle’
$xtyq^{M0}$	[M0]	$xtyq^{M0}$	[M0]	$kq̣q^{LM}$	[LM]	‘that cat’
$kweq^{M0}$	[M0]	$kweq^{M0}$	[M0]	$kq̣q^{LM}$	[LM]	‘that crab’
pi^{M0}	[M0]	pi^{M0}	[M0]	$kq̣q^{LM}$	[LM]	‘that turkey’
sa^{M0}	[M0]	sa^{M0}	[M0]	$kq̣q^{LM}$	[LM]	‘that weevil’
ka^{ML}	[ML]	ka^{ML}	[ML]	$kq̣q^{LM}$	[LM]	‘that nine’
$tkwa^{ML}$	[ML]	$tkwa^{ML}$	[ML]	$kq̣q^{LM}$	[LM]	‘that two’
stq^{+H}	[MH]	stq^{+H}	[MH]	$kq̣q^{LM}$	[LM]	‘that grapefruit’

Table 3.5: Continue

Isolation	T	(That N or to V that one'	T	DEM	T	Gloss
<i>t'yu</i> ^{+H}	[MH]	<i>t'yu</i> ^{+H}	[MH]	<i>kq̣q</i> ^{LM}	[LM]	'that hole'
<i>sq̣e</i> ^{+H}	[MH]	<i>sq̣e</i> ^{+H}	[MH]	<i>kq̣q</i> ^{LM}	[LM]	'that scorpion'
<i>kwtyeq</i> ^{LM}	[LM]	<i>kwtyeq</i> ^{LM}	[LM]	<i>kq̣q</i> ^{LM}	[LM]	'that ant'
<i>ktu</i> ^{LM}	[LM]	<i>ktu</i> ^{LM}	[LM]	<i>kq̣q</i> ^{LM}	[LM]	'that hen'
<i>kq̣</i> ^{LM}	[LM]	<i>kq̣</i> ^{LM}	[LM]	<i>kq̣q</i> ^{LM}	[LM]	'that tuber'
<i>tyu</i> ^{OL+0}	[OL]	<i>tyu</i> ^{OL+0}	[OL+0]	<i>kq̣q</i> ^{LM}	[LM]	'that dear'
<i>tyi</i> ^{OL+0}	[OL]	<i>tyi</i> ^{OL+0}	[OL+0]	<i>kq̣q</i> ^{LM}	[LM]	'that dear boy'
<i>skwq̣</i> ^{L+0}	[L0]	<i>skwq̣</i> ^{L0}	[L0]	<i>kq̣q</i> ^{LM}	[LM]	I threw him/her
<i>sna</i> ^{L+0}	[L0]	<i>sna</i> ^{L0}	[L0]	<i>kq̣q</i> ^{LM}	[LM]	I ran from him/her
<i>skwe</i> ^{L+0}	[L0]	<i>skwe</i> ^{L0}	[L0]	<i>kq̣q</i> ^{LM}	[LM]	I lifted him/her

This showed us that tone /LM/ does not undergo any sandhi change due to the tone of the previous word; instead it simply remains as [LM]. Nevertheless, in some cases it causes the “hidden” super-high floating tones discovered by the *qi* test to surface in the preceding noun itself. In the case of some [H] tone nouns (orthographic /H+0/) and all [HL] and [OL] tones (orthographic /HL+0/, /OL+0/), we could see that this tone is not able to donate its floating tone and as a result, it will surface in situ.

To summarize our observations about super-high [0] appearing on *qi* ‘his/her’, it was shown that words with phonetic [H] in isolation really break up into two groups, which we may phonemically distinguish as an /H+0/ group with a floating tone, and a plain /H/ group with no floating tone. Likewise, as Table 3.6 below shows, the [HL], [OL], and [L0] groups also show evidence of a +0 floating tone. In all cases the floating tone is evident in the *kq̣q*^{LM} context; for [HL], it also shows up on following *qi*; and for [L0] it moves from the host noun that is [L0] in isolation, to land exclusively on *qi* (so that the host noun is heard simply as [L]). I represent this floating tone as /+0/ adjoined to

the main phonemic tone of the host word. In summary then, we now have 12 distinct categories:

Table 3.6 Phonemes, Based on the Tone Contrasts in Isolation

	Phonetic (Isolation ~ $k\alpha q^{LM}$ context)	0 Floating tone on qi ?	Phonemic (so far)	Orthography
Level	[H]	no	/H/	/H/
	[H]~[H0]	yes	/H+0/	/H+0/
	[M]	no	/M/	M
	[L]	no	/L/	L, __
Rising	[M0]	no	/M0/	M0
	[MH]	no	/MH/	+H
	[M^]	no	/M^/	MH
	[LM]	no	/LM/	LM
Falling	[L0] ~ [L]	yes	/L+0/	L+0
	[OL] ~ [OL0]	yes	/OL+0/	OL+0
	[HL] ~ [HL0]	no	/HL+0/	HL+0
	[ML]	no	/ML/	ML, ML+H

We now turn to some distinctions within the /ML/ and /L/ groups identified above. These distinctions are partly demonstrated by the qi and $k\alpha q^{LM}$ tests, but also by other tests. The first distinction, for the /ML/ group, is between words with tone /ML/ that influence qi by converting it to phonetic [ML]; and words with tone /ML/ that influence qi by converting it to [MH]. This can be seen in qi data for ‘his two’ and ‘his nine’ for the first pattern, and ‘his twenty’ for the second (there are no true nouns with either /ML/ tone). It can better be shown in constructions ending in a noun such as *yja* ‘tortilla’, which works tonally just like qi —that is, it surfaces as [L] in isolation but goes through the same array of sandhi changes that qi does. Thus, the following are examples with ‘tortilla’ showing the two ML types, orthographically /ML/ and /ML+H/, again using the contrasting numbers ‘two’ and ‘twenty’. These examples each show the

Orthographic representation; the phonemic analysis so far, based on Table 3.6, in slashes; and the phonetic outcome, in square brackets:

a. $tkwa^{ML} yja$
 $/tkwa^{ML}/ + /yja^L/$
 $\rightarrow [tkwa^{ML} yja^{ML}]$
'two tortillas'

b. $kla^{ML+H} yja$
 $/kla^{ML}/ + /yja^L/$
 $\rightarrow [kla^{ML} yja^{MH}]$
'twenty tortillas'

The following are further examples of the second type:

c. $ntyq\grave{a}^{ML+H} yja$
 $/ntyq\grave{a}^{ML}/ + /yja^L/$
 $\rightarrow [ntyq\grave{a}^{ML} yja^{MH}]$
's/he washes tortillas'

d. $kla^{ML+H} yja$
 $/kla^{ML+H}/ + /yja^L/$
 $\rightarrow [kla^{ML} yja^{MH}]$
'tortillas will arrive'

At this point, my analysis will be that the first /ML/ set (as in (a)) seems to involve a /ML/ tone on the host word, plus a [ML] effect on the following word which I

will for now represent as plain /ML/ (we will later have a rule that will assign [ML] by default to qi since this is an effect that many tones have, whether or not it may, at some abstract level, be a ‘floating tone’ of another kind). In the case of the second /ML/ set (as in (b-d)), I will say that it seems to involve a /ML/ tone on the host word, plus a transferrable or ‘floating’ [MH] entity. I will tentatively represent this version of the /ML/ tone as /ML+H/.

Finally, there is a distinction among words in the [L] class according to which some undergo the wide range of sandhi changes shown in the table for qi but some do not. These are represented orthographically with no tone, or L, (respectively). We can best see this in Verb + Noun constructions, where the noun can be of the qi -type, such as *yja* ‘tortilla’, as seen in Table 3.7; or it can be of a second type which almost always retains its [L] tone realization regardless of the preceding word:

Table 3.7: Tone [L] / _ / with Verb Construction

Verb in isolation		Verb plus <i>yja</i> ‘tortilla’				Gloss
V	T	V	T	‘tortilla’		Gloss
nya^{H+0}	[H]	nya^H	[H]	<i>yja</i>	[H]	‘making tortilla’
yo^H	[H]	yo^H	[H]	<i>yja</i>	[ML]	‘you ground tortilla’
yo^M	[M]	yo^M	[M]	<i>yja</i>	[H]	‘she/he ground tortilla’
kwa^{MH}	[M^]	kwa^{MH}	[M^]	<i>yja</i>	[ML]	‘she/he swept tortilla’
stq	[L]	stq	[L]	<i>yja</i>	[L]	‘I picked tortilla’
ko^{M0}	[M0]	ko^{M0}	[M0]	<i>yja</i>	[ML]	‘you will grind tortilla’
stq^{+H}	[MH]	stq^{+H}	[MH]	<i>yja</i>	[L]	‘you picked tortilla’
stq^{LM}	[LM]	stq^{LM}	[LM]	<i>yja</i>	[L]	‘she/he picked tortilla’
yq^{L+0}	[L0]	yq^L	[L]	<i>yja</i>	[0]	‘I ground tortilla’
stq^{HL+0}	[HL]	stq^{HL+0}	[LH]??	<i>yja</i>	[0]	‘we will pick tortilla’
stq^M	[M]	stq^M	[M]	<i>yja</i>	[MH]	‘she/he will pick tortilla’

but others failed to accept them see the following examples:

Table 3.8: Tone [L]

Verb in isolation		Verb plus wje ^L epazote				Gloss
V	T	V	T	'epazote'	T	Gloss
<i>nya</i> ^{H+0}	[H]	<i>nya</i> ^{H+0}	[H0]	wje ^L	[L]	'making <i>epazote</i> '
<i>yo</i> ^H	[H]	<i>yo</i> ^H	[H]	wje ^L	[L]	'you ground <i>epazote</i> '
<i>yo</i> ^M	[M]	<i>yo</i> ^M	[M]	wje ^L	[L]	'she/he ground <i>epazote</i> '
<i>kwa</i> ^{MH}	[M^]	<i>kwa</i> ^{MH}	[M^]	wje ^L	[L]	'she/he swept <i>epazote</i> '
<i>stq</i>	[L]	<i>stq</i>	[L]	wje ^L	[L]	'I picked <i>epazote</i> '
<i>ko</i> ^{MO}	[M0]	<i>ko</i> ^{MO}	[M0]	wje ^L	[L]	'you will grind <i>epazote</i> '
<i>stq</i> ^{+H}	[MH]	<i>stq</i> ^{+H}	[MH]	wje ^L	[L]	'you picked <i>epazote</i> '
<i>stq</i> ^{LM}	[LM]	<i>stq</i> ^{LM}	[LM]	wje ^L	[L]	'she/he picked <i>epazote</i> '
<i>yq</i> ^{L+0}	[L0]	<i>yq</i> ^{L+0}	[L0]	wje ^L	[L]	'I ground <i>epazote</i> '
<i>stq</i> ^{HL+0}	[HL]	<i>stq</i> ^{HL+0}	[LH0]	wje ^L	[L]	'we will pick <i>epazote</i> '
<i>stq</i> ^{ML+H}	[ML]	<i>stq</i> ^M	[ML]	wje ^L	[L]	'she/he will pick <i>epazote</i> '

I will distinguish these two classes of [L] by mentioning the phonemic solution I will give: that those that accept sandhi changes are underlyingly toneless (but default to [L] in isolation); whereas those that do not accept sandhi changes are underlyingly /L/.

This concludes our discussion of lexical tones revealed by sandhi. The following is a final summary of the phonemic analysis so far, bringing the inventory to 14:

Table 3.9: Fourteen Lexical Tones

	Phonetic (Isolation ~ <i>kq</i> ^{LM} context)	Floating tone on <i>qi</i>	Comments	Phonemic (so far)	Orthography
Level	[H]	no	Slight decline	/H/	H
	[H]~[H0]	[0]	Slight decline	/H+0/	H+0
	[M]	no	Slight decline	/M/	M
	[L]	no	Breathy; sandhi-affected	/_/	—
	[L]	no	Breathy; not sandhi affected	/L/	L
Rising	[M0]	no	Steep rise	/M0/	M0
	[MH]	no	Steep rise	/MH/	+H
	[M^]	no	Slight rise	/M^/	MH

Table 3.9: Continue

	Phonetic (Isolation ~ <i>kq^{LM}</i> context)	Floating tone on <i>qi</i>	Comments	Phonemic (so far)	Orthography
	[LM]	no	Long, with "elbow"	/LM/	LM
	[L0] ~ [L]	[0]	Long, with "elbow"	/L+0/	L+0
Falling	[0L] ~ [0L0]	[0]	Sharp fall	/0L+0/	0L+0
	[HL] ~ [HL0]	[0]	Sharp fall	/HL+0/	HL+0
	[ML]	no	Sharp fall,	/ML/	ML
	[ML]	[MH]	Sharp fall	/ML+MH/	ML+H

I now turn to some further issues in the phonemic representation of these categories (3.3); and then a systematic treatment of the sandhi combinations among the categories (3.4).

3.3 FURTHER PHONEMIC INTERPRETATION OF THE TONE SYSTEM

The phonemic representations that have been proposed have accomplished almost everything using just the building blocks 0, H, M, L, no tone, and +T (for floating tones), but with one exception: the notion of a “slight rise” /M[^]/, which is distinct on the one hand from /M/, a mid tone with no rise, and /MH/ a mid-tone with a sharp rise.

The tone indicated as MH sounds like a mid tone that rises to a high tone. I will now argue that this tone is an /H/ tone that phonetically links—and hence is heard as a tonal target- at the right edge of its associated stem; and that in particular it is phonemically a lexically associated floating tone (/+H/). First, it consistently ends with a high target, and later, we will see that this H target is all that survives of the phonetic mid-to-high rise when a vowel-only pronominal clitic with which it is associated, marking first person inclusives, is added to verbs of varying different tones (see Sec. 3.5)

Second; its sandhi behavior is consistent with that of an already-linked floating tone, that is, it has no consequences at all for the tone of the next word (e.g., in the *qi* ‘his/her’ context discussed above, *qi* retains its low tone, see Sec. 3.4); third, it operates like a floating tone in the tone category I represented as /ML+H/, suggesting, then, +H may simply be a case where the putative +H floating tone actually functions as a floating tone; fourth, in Zacatepec Chatino the tone in cognate words appears as a floating H tone that is linked to the penultimate syllable, e.g., *ngya^Hko* ‘he is eating’, cf. SJQ *ntyku^{+H}* ‘he is eating’. This can be formulated as the following:

Interpretation of linked /+H/:

Linked /+H/ is interpreted phonetically as [MH]. If what we had been calling /MH/ is in fact a preassociated floating tone /+H/, then the phonemic /MH/ category is “freed up” for another use. I propose that /M[^]/, which resorts to a special notational device, is in fact SJQ's /MH/ category. As noted, the tone designated as /M[^]/ is heard as a mid-tone onset [M] with a very slight rise through the offset. This miniscule difference from our /M/ set is nevertheless salient enough to be detected easily by native speakers and to be distinguished in minimal pairs such as *cta^{M[^]}* ‘chepil’ vs. *cta^M* ‘flour’ and many others shown in Figure 3.4. If we represent [M[^]] as phonemic /MH/, then we require a phonetic rule:

Progressive H-assimilation:

H decrements to a pitch slightly above the M level when following M in a binary sequence. It is notable that both Zacatepec Chatino and Yaitepec Chatino have this tone as a rise: e.g. SJQ *kwa^{MH}* ‘this’ corresponds to Zacatepec Chatino *kwa^R*, Yaitepec Chatino *kwa³²* Farther afield, Campbell (p.c.) writes this tone as MH or LH for Zenzontepec Chatino. In summary, we now can summarize our phonemic representations as follows:

Table 3.10: Final Phonemic Representation for the Lexical Tones of SJQ Chatino

	Phonetic (Isolation ~ kaq ^{LM} context)	Floating tone on qj	Comments	Phonemic	Orthography
Level	[H]	no	Slight decline	/H/	H
	[H]~[H0]	[0]	Slight decline	/H+0/	H+0
	[M]	no	Slight decline	/M/	M
	[L]	no	Breathy; sandhi- affected	/ _/	—
	[L]	no	Breathy; not sandhi affected	/L/	L
Rising	[M0]	no	Steep rise	/M0/	M0
	[MH]	no	Steep rise	/+H/, prelinked	+H
	[M^]	no	Slight rise	/MH/	MH
	[LM]	no	Long, with "elbow"	/LM/	LM
	[L0] ~ [L]	[0]	Long, with "elbow"	/L+0/	L+0
Falling	[0L] ~ [0L0]	[0]	Sharp fall	/0L+0/	0L+0
	[HL] ~ [HL0]	[0]	Sharp fall	/HL+0/	HL+0
	[ML]	no	Sharp fall,	/ML/	ML
	[ML]	[MH]	Sharp fall	/ML+H/	ML+H

With respect to orthography, it will be observed that the phonemic representations of the tones, and their orthographic representation, are now identical.

One final point must be made explicit: namely, that two special rules must be applied in order to derive the correct isolation forms, in addition to *Progressive H-Assimilation*. One rule can be expressed as follows:

Rule for floating tones in isolation forms

Except in the case of tone /L+0/, unassociated floating tones are unexpressed in isolation forms. This applies, then, to /0L+0/, /HL+0/, and /ML+H/. It does not apply to /+H/, because that tone, as noted, is prelinked.

The other rule will ensure that the toneless tone will be pronounced as a low tone in isolation. We will return to this rule, but for now, it can be expressed as:

Rule for /_/ in isolation

/_/ is expressed as [L] in isolation contexts. The analysis in Table 3.10 is substantially the same as that of E. Cruz and Woodbury (2006), but differs in several respects. That analysis did not recognize a tone category /0L+0/. It also used numbers (0, super-high; 1, high; 2, high-mid; 3, low-mid; and 4, low) to indicate levels, and assumed that the /M/ vs. /MH/ distinction was one of level (a higher mid-tone vs. a lower mid-tone). That analysis also did not handle certain sandhi-evident distinctions in the same way: for example, it distinguished two such pairs as ‘weak’ vs. ‘strong’. The following shows the correspondences:

Table 3.11: Previous Analysis, Cruz & Woodbury 2006, and Subsequent CLDP Work

	Present Phonemic Analysis	Cruz & Woodbury 2006
Level	/H/	1
	/H+0/	1+0
	/M/	2
	/_/	4-weak
	/L/	4-strong
Rising	/M0/	20
	/MH/	3
	/+H/	32
	/LM/	42
	/L+0/	4+0
Falling	/0L+0/	Not recognized
	/HL+0/	14+0
	/ML/	24-strong
	/ML+H/	24-weak

The present analysis still makes a number of unstated assumptions as to its interpretation. It does not clearly indicate what sandhi effects occur when pairs of phonemic tones get together (although by now it is fairly clear that a +0 or +H floating tone will be passed to a following toneless-class word). For example, I have not explained other changes in *qi* in Table 3.4, e.g., its realization as [ML] after words of many but not all tones and its realization as [L] after others. These issues are taken up next, in Sec. 3.4, where we consider all sandhi combinations.

3.4 THE SANDHI SYSTEM

In this section I will discuss with detail the sandhi rules that are necessary to understand the way the tones actually sound in connected speech. In SJQ some tones donate sandhi and others do not; some tones accept sandhi and others do not; some do both; and some do neither. The following table systematically shows most of the possible sandhi processes in the language using verb + direct object phrases. It is limited only by the fact that certain tones do not occur on verbs (/L/, /ML/, and /0L+0/) and one tone /0L+0/ never begins a noun phrase. In this series of tables A-L, a set of verbs representing each tone is paired with a direct object, one for each table, that represents each tone. The resulting combinations, and the phonetic sandhi changes that come about, are shown for each word in the column labeled ‘tone’.

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (A)

Verb				Verb + le^{H+0} ‘napkin’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘napkin’	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{+0}	[H0]	le^{H+0}	[H]
/H/	yo^H	[H]	you ground	yo^H	[H]	le^{H+0}	[H]
/M/	yo^M	[M]	he ground	yo^M	[M]	le^{H+0}	[H]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	le^{H+0}	[H]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	le^{H+0}	[H]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL]	le^{H+0}	[H]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML+H}$	[ML]	le^{H+0}	[H]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	le^{H+0}	[H]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	le^{H+0}	[H]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing$	[L]	le^{H+0}	[H]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	le^{H+0}	[H]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (B)

Verb				Verb + tya^H ‘amaranth’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	amaranth	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^H	[H]	tya^0	[0]
/H/	yo^H	[H]	you ground	yo^H	[H]	tya^H	[H]
/M/	yo^M	[M]	he ground	yo^M	[M]	tya^H	[H]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	tya^H	[H]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	tya^H	[H]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL]	tya^H	[0]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML}$	[ML]	tya^H	[H]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	tya^H	[H]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	tya^H	[H]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing$	[L]	tya^0	[0]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	tya^H	[H]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (C)

Verb				Verb + ke^M ‘flower’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘flower’	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^H	[H]	ke^0	[0]
/H/	yo^H	[H]	you ground	yo^H	[H]	ke^M	[M]
/M/	yo^M	[M]	he ground	yo^M	[M]	ke^M	[M]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	ke^M	[M]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	ke^M	[M]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL]	ke^0	[0]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML}$	[ML]	ke^M	[M]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	ke^M	[M]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	ke^M	[M]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing$	[L]	ke^0	[0]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	ke^M	[M]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (D)

Verb				Verb + ti^{MH} ‘rope’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘rope’	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{H+0}	[H0]	ti^{MH}	[M^]
/H/	yo^H	[H]	you ground	yo^H	[H]	ti^{MH}	[M^]
/M/	yo^M	[M]	he ground	yo^M	[M]	ti^{MH}	[M^]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	ti^{MH}	[M^]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	ti^{MH}	[M^]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL0]	ti^{MH}	[M^]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML}$	[ML]	ti^{MH}	[M^]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	ti^{MH}	[M^]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	ti^{MH}	[M^]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing^{L+0}$	[L0]	ti^{MH}	[M^]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	ti^{MH}	[M^]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (E)

Verb				Verb + <i>yja</i> ‘tortilla’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘tortilla’	Tone
/H+0/	<i>nya</i> ^{H+0}	[H]	is making	<i>nya</i> ^{H+0}	[H0]	<i>yja</i> ⁰	[0]
/H/	<i>yo</i> ^H	[H]	you ground	<i>yo</i> ^H	[H]	<i>yja</i> ^{ML}	[LM]
/M/	<i>yo</i> ^M	[M]	he ground	<i>yo</i> ^M	[M]	<i>yja</i> ^H	[H]
/MH/	<i>kwa</i> ^{MH}	[M^]	he swept	<i>kwa</i> ^{MH}	[M^]	<i>yja</i> ^{ML}	[LM]
/_/	<i>stɔ</i>	[L]	I cut	<i>stɔ</i>	[L]	<i>yja</i>	[L]
/HL+0/	<i>stɔ</i> ^{HL+0}	[HL]	we will cut	<i>stɔ</i> ^{HL+0}	[HL]	<i>yja</i> ⁰	[0]
/ML+H/	<i>stɔ</i> ^{ML+H}	[ML]	he will cut	<i>stɔ</i> ^{ML}	[ML]	<i>yja</i> ^{+H}	[MH]
/M0/	<i>ko</i> ^{M0}	[M0]	you will grind	<i>ko</i> ^{M0}	[M0]	<i>yja</i> ^{ML}	[LM]
/+H/	<i>stɔ</i> ^{+H}	[MH]	you cut	<i>stɔ</i> ^{+H}	[MH]	<i>yja</i>	[L]
/L+0/	<i>yɔ</i> ^{L+0}	[L0]	I ground	<i>yɔ</i>	[L]	<i>yja</i> ⁰	[0]
/LM/	<i>stɔ</i> ^{LM}	[LM]	he cut	<i>stɔ</i> ^{LM}	[LM]	<i>yja</i>	[L]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (E)

Verb				Verb + <i>yu</i> ^L ‘earth’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘earth’	Tone
/H+0/	<i>nya</i> ^{H+0}	[H]	is making	<i>nya</i> ^{H+0}	[M0]	<i>yu</i> ^L	[L]
/H/	<i>yo</i> ^H	[H]	you ground	<i>yo</i> ^H	[H]	<i>yu</i> ^L	[L]
/M/	<i>yo</i> ^M	[M]	he ground	<i>yo</i> ^M	[M]	<i>yu</i> ^L	[L]
/MH/	<i>kwa</i> ^{MH}	[M^]	he swept	<i>kwa</i> ^{MH}	[M^]	<i>yu</i> ^L	[L]
/_/	<i>stɔ</i>	[L]	I cut	<i>stɔ</i>	[L]	<i>yu</i> ^L	[L]
/HL+0/	<i>stɔ</i> ^{HL+0}	[HL]	we will cut	<i>stɔ</i> ^{HL+0}	[HL0]	<i>yu</i> ^L	[L]
/ML+H/	<i>stɔ</i> ^{ML+H}	[ML]	he will cut	<i>stɔ</i> ^{ML}	[ML]	<i>yu</i> ^L	[L]
/M0/	<i>ko</i> ^{M0}	[M0]	you will grind	<i>ko</i> ^{M0}	[M0]	<i>yu</i> ^L	[L]
/+H/	<i>stɔ</i> ^{+H}	[MH]	you cut	<i>stɔ</i> ^{+H}	[MH]	<i>yu</i> ^L	[L]
/L+0/	<i>yɔ</i> ^{L+0}	[L0]	I ground	<i>yɔ</i> ^{L+0}	[L0]	<i>yu</i> ^L	[L]
/LM/	<i>stɔ</i> ^{LM}	[LM]	he cut	<i>stɔ</i> ^{LM}	[LM]	<i>yu</i> ^L	[L]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (G)

Verb				Verb + <i>qwa</i> ^{HL+0} ‘banana’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘banana’	Tone
/H+0/	<i>nya</i> ^{H+0}	[H]	is making	<i>nya</i> ^H	[H]	<i>qwa</i> ^{0L}	[0L]
/H/	<i>yo</i> ^H	[H]	you ground	<i>yo</i> ^H	[H]	<i>qwa</i> ^{HL+0}	[HL]
/M/	<i>yo</i> ^M	[M]	he ground	<i>yo</i> ^M	[M]	<i>qwa</i> ^{HL+0}	[HL]
/MH/	<i>kwa</i> ^{MH}	[M^]	he swept	<i>kwa</i> ^{MH}	[M^]	<i>qwa</i> ^{HL+0}	[HL]
/_/	<i>stɔ</i>	[L]	I cut	<i>stɔ</i>	[L]	<i>qwa</i> ^{HL+0}	[HL]
/HL+0/	<i>stɔ</i> ^{HL+0}	[HL]	we will cut	<i>stɔ</i> ^{ML}	[ML]	<i>qwa</i> ^H	[H]
/ML+H/	<i>stɔ</i> ^{ML+H}	[ML]	he will cut	<i>stɔ</i> ^{ML}	[ML]	<i>qwa</i> ^H	[H]
/M0/	<i>ko</i> ^{M0}	[M0]	you will grind	<i>ko</i> ^{M0}	[M0]	<i>qwa</i> ^{HL+0}	[HL]
/+H/	<i>stɔ</i> ^{+H}	[MH]	you cut	<i>stɔ</i> ^{+H}	[MH]	<i>qwa</i> ^{HL+0}	[HL]
/L+0/	<i>yɔ</i> ^{L+0}	[L0]	I ground	<i>yɔ</i>	[L]	<i>qwa</i> ^{0L}	[0L]
/LM/	<i>stɔ</i> ^{LM}	[LM]	he cut	<i>stɔ</i> ^{LM}	[LM]	<i>qwa</i> ^{HL+0}	[HL]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (H)

Verb				Verb + <i>kla</i> ^{ML} <i>ti</i> ^{MH} ‘20 rope’			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	‘20 rope’	Tone
/H+0/	<i>nya</i> ^{H+0}	[H]	is making	<i>nya</i> ^{H+0}	[H0]	<i>kla</i> ^{0L} <i>ti</i> ^{MH}	[0L M^]
/H/	<i>yo</i> ^H	[H]	you ground	<i>yo</i> ^H	[H]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/M/	<i>yo</i> ^M	[M]	he ground	<i>yo</i> ^M	[M]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/MH/	<i>kwa</i> ^{MH}	[M^]	he swept	<i>kwa</i> ^{MH}	[M^]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/_/	<i>stɔ</i>	[L]	I cut	<i>stɔ</i>	[L]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/HL+0/	<i>stɔ</i> ^{HL+0}	[HL]	we will cut	<i>stɔ</i> ^{HL+0}	[HL]	<i>kla</i> ^{0L} / <i>kla</i> ^H <i>ti</i> ^{MH}	[0L/H M^]
/ML+H/	<i>stɔ</i> ^M _{L+H}	[ML]	he will cut	<i>stɔ</i> ^{ML}	[ML]	<i>kla</i> ^{ML/H} <i>ti</i> ^{MH}	[ML/H M^]
/M0/	<i>ko</i> ^{M0}	[M0]	you will grind	<i>ko</i> ^{M0}	[M0]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/+H/	<i>stɔ</i> ^{+H}	[MH]	you cut	<i>stɔ</i> ^{+H}	[MH]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]
/L+0/	<i>yɔ</i> ^{L+0}	[L0]	I ground	<i>yɔ</i> ^{L+0}	[L0]	<i>kla</i> ^{0L} <i>ti</i> ^{MH}	[ML M^]
/LM/	<i>stɔ</i> ^{LM}	[LM]	he cut	<i>stɔ</i> ^{LM}	[LM]	<i>kla</i> ^{ML} <i>ti</i> ^{MH}	[ML M^]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (I)

Verb				Verb + $ti^{ML} ti^{MH}$ '10 rope'			
Phonemic Tones	Verb	Isolation Tones	Gloss	Verb	Tone	'10 rope'	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{H+0}	[H0]	$ti^{ML} ti^{MH}$	[LM M^]
/H/	yo^H	[H]	you ground	yo^H	[H]	$ti^{ML} ti^{MH}$	[LM M^]
/M/	yo^M	[M]	he ground	yo^M	[M]	$ti^{ML} ti^{MH}$	[LM M^]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	$ti^{ML} ti^{MH}$	[LM M^]
/_/	$st\phi$	[L]	I cut	$st\phi$	[L]	$ti^{ML} ti^{MH}$	[LM M^]
/HL+0/	$st\phi^{HL+0}$	[HL]	we will cut	$st\phi^{HL+0}$	[HL]	ti^{ML}/ti^H	[LM/H M^]
/ML+H/	$st\phi^{ML+H}$	[ML]	he will cut	$st\phi^{ML}$	[ML]	$ti^{ML} ti^{MH}$	[ML M^]
/M0/	ko^{M0}	[M0]	grind	ko^{M0}	[M0]	$ti^{ML} ti^{MH}$	[LM M^]
/+H/	$st\phi^{+H}$	[MH]	you cut	$st\phi^{+H}$	[MH]	$ti^{ML} ti^{MH}$	[LM M^]
/L+0/	$y\phi^{L+0}$	[L0]	I ground	$y\phi^{L+0}$	[L0]	$ti^{ML} ti^{MH}$	[LM M^]
/LM/	$st\phi^{LM}$	[LM]	he cut	$st\phi^{LM}$	[LM]	$ti^{ML} ti^{MH}$	[LM M^]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (J)

Verb				Verb + liq^{M0} parrot'			
Phonemic Tone	Verb	Isolation Ton	Gloss	Verb	Tone	'parrot'	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{H+0}	[H0]	liq^{M0}	[M0]
/H/	yo^H	[H]	you ground	yo^H	[H]	liq^{M0}	[M0]
/M/	yo^M	[M]	he ground	yo^M	[M]	liq^{M0}	[M0]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	liq^{M0}	[M0]
/_/	$st\phi$	[L]	I cut	$st\phi$	[L]	liq^{M0}	[M0]
/HL+0/	$st\phi^{HL+0}$	[HL]	we will cut	$st\phi^{ML}$	[ML]	liq^{M0}	[M0]
/ML+H/	$st\phi^{ML+H}$	[ML]	he will cut	$st\phi^{ML}$	[ML]	liq^{M0}	[M0]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	liq^{M0}	[M0]
/+H/	$st\phi^{+H}$	[MH]	you cut	$st\phi^{+H}$	[MH]	liq^{M0}	[M0]
/L+0/	$y\phi^{L+0}$	[L0]	I ground	$y\phi$	[L]	liq^{M0}	[M0]
/LM/	$st\phi^{LM}$	[LM]	he cut	$st\phi^{LM}$	[LM]	liq^{M0}	[M0]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (K)

				Verb + sqe^{+H} ‘scorpion’			
Phonemic Tone	Verb	Isolation Ton	Gloss	Verb	Tone	‘scorpion’	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{H+0}	[H0]	sqe^{+H}	[MH]
/H/	yo^H	[H]	you ground	yo^H	[H]	sqe^{+H}	[MH]
/M/	yo^M	[M]	he ground	yo^M	[M]	sqe^{+H}	[MH]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	sqe^{+H}	[MH]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	sqe^{+H}	[MH]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL0]	sqe^{+H}	[MH]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML}$	[ML]	sqe^{+H}	[MH]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	sqe^{+H}	[MH]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	sqe^{+H}	[MH]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing^{L+0}$	[L0]	sqe^{+H}	[MH]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	sqe^{+H}	[MH]

Table 3.12: Tone Sandhi in Verb + Direct Object phrases (L)

				Verb + cta^{LM} ‘shrimp’			
Phonemic Tone	Verb	Isolation Tone	Gloss	Verb	Tone	‘shrimp’	Tone
/H+0/	nya^{H+0}	[H]	is making	nya^{H+0}	[H0]	cta^{LM}	[LM]
/H/	yo^H	[H]	you ground	yo^H	[H]	cta^{LM}	[LM]
/M/	yo^M	[M]	he ground	yo^M	[M]	cta^{LM}	[LM]
/MH/	kwa^{MH}	[M^]	he swept	kwa^{MH}	[M^]	cta^{LM}	[LM]
/_/_/	$st\varnothing$	[L]	I cut	$st\varnothing$	[L]	cta^{LM}	[LM]
/HL+0/	$st\varnothing^{HL+0}$	[HL]	we will cut	$st\varnothing^{HL+0}$	[HL0]	cta^{LM}	[LM]
/ML+H/	$st\varnothing^{ML+H}$	[ML]	he will cut	$st\varnothing^{ML}$	[ML]	cta^{LM}	[LM]
/M0/	ko^{M0}	[M0]	you will grind	ko^{M0}	[M0]	cta^{LM}	[LM]
/+H/	$st\varnothing^{+H}$	[MH]	you cut	$st\varnothing^{+H}$	[MH]	cta^{LM}	[LM]
/L+0/	$y\varnothing^{L+0}$	[L0]	I ground	$y\varnothing^{L+0}$	[L0]	cta^{LM}	[LM]
/LM/	$st\varnothing^{LM}$	[LM]	he cut	$st\varnothing^{LM}$	[LM]	cta^{LM}	[LM]

3.4.1 Tones that Contain and Donate a Super-high Floating Tone /+0/

We now consider the four tones which donate floating +0 tones in more detail, in order to examine the effect of the floating tone on each subsequent tone.

In this group there are four tones that donate floating tone: /H+0/, /HL+0/, /L+0/, and 0L+0. Note that tone /M0/ is not included in this group of tones because it never donates a floating tone.

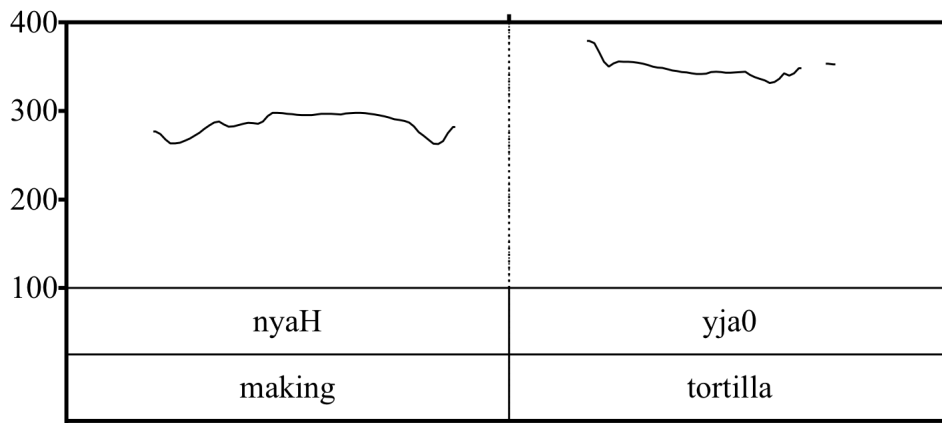
The pattern is summarized below. It is also shown in the rows representing verbs of the first three categories in Table 12—as noted, there are no verbs bearing tone /0L+0/

Table 3.13: Floating Tones that Donate [0]

<i>ksi</i> ^{H+0}	[H]	<i>ksi</i> ^{H+0}	[H]	<i>qi</i>	[0]	‘her/his cross’
<i>xi</i> ^{HL+0}	[HL]	<i>xi</i> ^{HL+0}	[HL]	<i>qi</i>	[0]	‘her/his tomato’
<i>sna</i> ^{L+0}	[L0]	<i>sna</i> ^{L+0}	[L]	<i>qi</i>	[0]	‘I ran from him/her’
<i>tyi</i> ^{0L+0}	[0L]	<i>tyi</i> ^{0L+0}	[0L]	<i>qi</i>	[ML]	‘her/his dear boy’

Based on Table 3.13 the orthography shows the phonemic lexical tone for each word while the phonetic results of sandhi are shown in square brackets. Figure 3.6 shows an example of the word *nya*^{H+0} ‘s/he is making’ followed by *yja* ‘tortilla’.

Figure 3.6: Tone H+0 and L



The floating tone of H+0 is transferred to the following word *yja* ‘tortilla’ changing it to *yja*⁰ ‘tortilla’; this is due to the floating tone from tone H+0. The following are examples where this same H+0 verb is followed by direct objects bearing different tones:

Table 3.14: Tone H+0 and its Sandhi Consequences

nya /H+0/ ‘making’ ⇒						
Lexical (phonemic)		Sandhi (phonetic) results				GLOSS
Object	Tone	Verb	Tone	Object	Tone	
le	/H+0/	nya	[H]	le	[H]	‘making a tortilla cloth’
ktyu	/H/	nya	[H]	ktyu	[0]	‘making a hole’
ke	/M/	nya	[H]	ke	[0]	‘making flowers’
ti	/MH/	nya	[H0]	ti	[M^]	‘making rope’
nda	/L/	nya	[H0]	nda	[L]	‘making beans’
yja	/_/	nya	[H]	yja	[0]	‘making tortillas’
liq	/M0/	nya	[H]	liq	[M0]	‘making parrots’
sqe	/+H/	nya	[H0]	sqe	[MH]	‘making scorpions’
jaq	/LM/	nya	[H0]	jaq	[LM]	‘making rope’
qwa	/HL+H/	nya	[H]	qwa	[0L]	‘making bananas’
ti	/ML/	nya	[H0]	ti	[ML]	‘making ten’
kla	/ML+H/	nya	[H]	kla	[0L]	‘making twenty’

In Table 3.14 sandhi consequences are illustrated for *nya*^{H+0} ‘making’ plus direct objects from different tone categories. Objects are first in their lexical (phonemic) form, and then with the phonetic tonal changes brought about by sandhi.

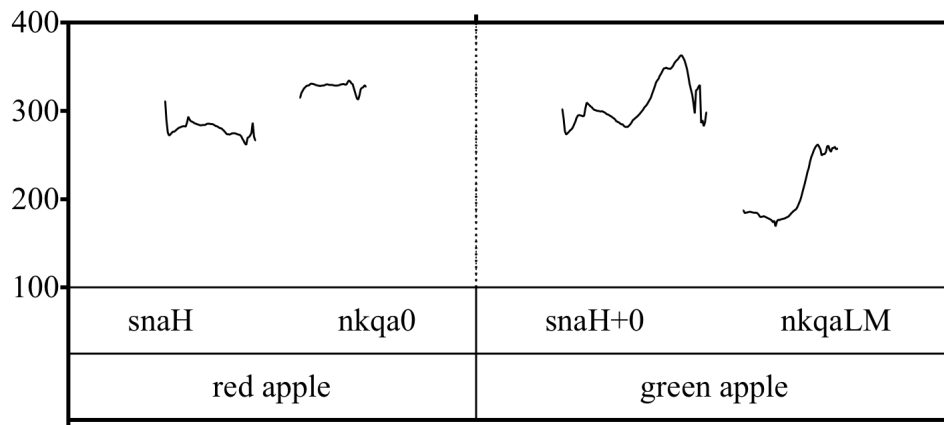
Tone /H+0/ is found in Spanish loan words and progressive verbs. In all varieties of Chatino except SJQ, loan words transparently show up with a mid tone. In Yaitepec it is 2+0 (Rasch, to appear) and in Zacatepec LM+H (Villard and Woodbury, to appear); in both those varieties, a floating tone is present (see Table 3.20). Only in SJQ does the linked tone surface as [H] rather than [M]. We might take this as evidence of a historical effect of regressive M-assimilation, where the */M/ of Pre-SJQ */M+0/ is raised to /H/ under the influence of the following floating tone /+0/. Even synchronically, for some speakers the /H/ portion of /H+0/ is realized a little higher than the /H/ of plain /H/.

Furthermore, when two instances of /H+0/ occur in succession—as in ‘making tortilla cloth’, below—both simply surface as [H] (although here it is unclear if some speakers raise this [H] a bit higher than an [H] deriving from plain /H/):

- f. *nya^H* *le^H*
 make.3S.PROG tortilla cloth
 ‘S/he is making a tortilla cloth’

Certain tones do not allow the floating tone of H+0. The tones MH, L, +H, LM, and ML do not take the floating tone of the preceding word and the floating tone surfaces *in situ* on the first word (see 3.7)

Figure 3.7: Floating Tone H+0 in Situ



In the example of figure 3.7, the floating tone travels to the word 'red' which in isolation is *nkqa^H*. In 'green apple', however, the tone in the word green is *nkqa^{LM}* and this tone does not take the floating tone, so it surfaces *in situ* on 'apple'. The general rule of tone H+0 in first position can be summarized as follows:

Sandhi from /H+0/ to a following word:

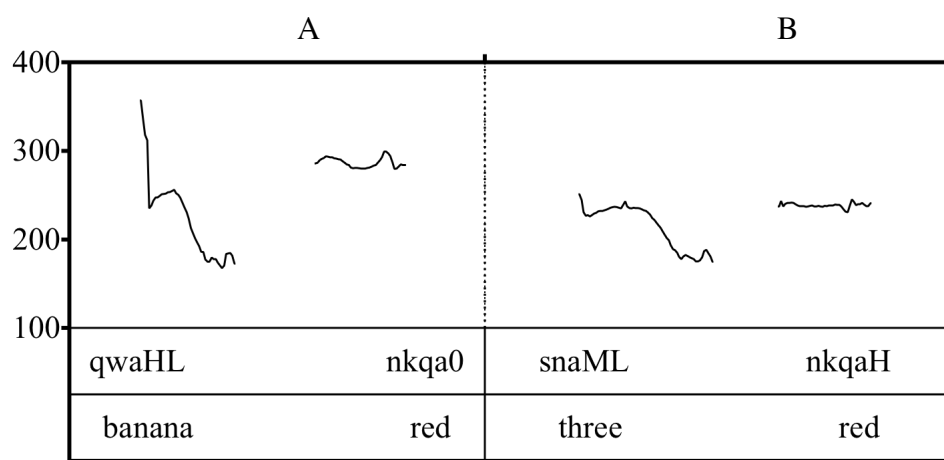
- There is tone assimilation when two H+0 tones are next to each other. The floating tone disappears and becomes tone H.
- The tones (MH, L, +H, LM, and ML) do not allow any floating tone.
- Tones ML and HL+0 changes to tone 0L+0 (see Table 3.14) when they occur

after tone H+0.

Floating tone of /HL+0/

The tone /HL+0/ is a falling rising tone. In isolation the floating tone does not surface, but in context the floating tone is conveyed to the next word. In isolation, tones HL and ML sound similar but the following examples show their differences. In figure 3.8 there are examples of tone HL+0 and ML. Tone HL has a floating tone and affects the word that follows it (see A) and tone ML does not affect the next word (see B).

Figure 3.8: Floating Tone HL+0 and ML



The following are examples of tone HL+0 and its sandhi context.

Table 3.15: Tone HL+0

stq^{HL+0} 'we will cut' ⇒	Object phonemic Tones		V phonetic tone	Obj phonetic tone	
a.	/H+0/	stq^{HL+0} sna^{H+0}	[HL]	[H]	'we will pick apples'
b.	/H/	stq^{HL+0} $slyaq^H$	[HL]	[0]	'we will pick cotton'
c.	/M/	stq^{HL+0} ke^M	[HL]	[0]	'we will pick flower'

Table 3.15: Continue

stq^{HL+0} 'we will cut' ⇒	Object phonemic Tones		V phonetic tone	Obj phonetic tone	
d.	/MH/	$stq^{HL+0} ti^{MH}$	[HL]	[MH]	'we will cut rope'
e.	/L/	$stq^{HL+0} nda^L$	[HL]	[L]	'we will pick beans'
f.	/_/	$stq^{HL+0} yka$	[HL]	[L]	'we will cut tree'
g.	/M0/	$stq^{HL+0} nchqg^{M0}$	[HL]	[M0]	'we will pick pine cones'
h.	/+H/	$stq^{HL+0} sqe^{+H}$	[HL]	[M^]	'we will pick scorpions'
i.	/LM/	$stq^{HL+0} ki^{LM}$	[HL]	[LM]	'we will cut bamboo'
j.	/HL+0/	$stq^{HL+0} qwa^H$	[HL]	[H]	'we will pick bananas'
k.	/ML/	$stq^{HL+0} ti^{ML}$	[HL]	[ML]	'we will cut ten'
l.	/ML+H/	$stq^{HL+0} kla^{ML}$	[HL]	[ML]	'we will cut twenty'

The general rule of HL+0 in first position can be summarized as follows:

Sandhi from /HL+0/ to a following word

- In a. Tone H+0 changes to tone H when it occurs after a /HL+0/ tone
- In j. There is tone dissimilation when two [HL] tones are next to each, the second tone /HL+0/ becomes [H]
- In b., c., f., l. Tones that accept the floating tone from [HL] are: /H/, /M/, /_/, /HL+0/ and /ML+H/
- In a., d., e., h., i., k. The tones that do not accept the floating of [HL] are: /H+0/, /MH/, /L/, /+H/, /LM/ and /ML/

Floating tone of /L+0/

The tone L+0 is a rising tone. This is only found in verbs and in inalienable noun inflection. In isolation it is hard to hear the floating tone, but in context the floating tone is conveyed to the next word. The following are examples for tone L0 preceding object tones:

Table 3.16: Tone L+0

$skwq^{L+0}$ 'I threw'	Object phonemic tones		Verb phonemic tones	Object phonemic tones	
a.	H+0	$skwq$ sna^H	[HL]	[H]	'I threw apples'
b.	H	$skwq$ kna^0	[HL]	[0]	'I threw snake'
c.	M	$skwq$ ke^0	[HL]	[0]	'I threw flower'
d.	MH	$skwq^{L+0}$ ya^{MH}	[HL]	[MH]	'I threw cactus'
e.	L	$skwq^{L+0}$ wje^L	[HL]	[L]	'I threw epazote'
f.	–	$skwq$ yja^0	[HL]	[L]	'I threw tortilla'
g.	M0	$skwq$ xqe^{M0}	[HL]	[M0]	'I threw rooster'
h.	+H	$skwq^{L+0}$ sqe^{+H}	[HL]	[M^]	'I threw scorpion'
i.	LM	$skwq^{L+0}$ xeq^{LM}	[HL]	[LM]	'I threw raccoon'
j.	HL+0	$skwq$ qwa^{0L+0}	[HL]	[H]	'I threw bananas'
k.	ML	$skwq^{L+0}$ ti^{ML}	[HL]	[ML]	'I threw ten'
l.	ML+H	$skwq^{L+0}$ kla^0	[HL]	[ML]	'I threw twenty'

The general rule of sandhi from /L+0/ in first position can be summarized as follows:

Sandhi from /L+0/ to a following word:

- In a. When Tone L+0 precedes H+0 both floating tones disappear.
- In b., c., e., g., j., l. The tones that take the floating tone of L+0 are: H, M, L, M0, HL+0, ML+H. The rise no longer occurs on the L+0 word—it becomes an [L]
- The tones that do not take the floating tone of L+0 are: MH, L, +H, LM, ML.

Table 3.17: Sandhi Effect of Floating Tone 0 from one word (word 1) on an adjacent word (word two) of different tone categories (The marginal tone /0L+0/ is excluded from consideration due to a lack of comparable examples).

Table 3.17: Floating Tones

Word 1	Word 2											
	H+0	H	M	MH	L	_	M0	+H	LM	HL+0	ML	ML+H
H+0	[H]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[L]	[ML]	[L]
HL+0	[0]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[H]	[ML]	[L]
L+0	[0]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[L]	[ML]	[L]

Notice that many of the changes correspond to normal tones in the system. In our transcription practices, we have called these “post-sandhi” versions of the tones. The only new post-sandhi tone is that which phonetically appears as [0]. I will continue to write post-sandhi tones in phonetic brackets, but it should be clear that the “post-sandhi” makes use of a finite set of clearly distinct tones almost identical to those in the phonemic system. When we consider compounds, we will find that some elements within compounds must be given phonemic representations that include a phonemic unit /0/.

3.4.2 Tones Involving Floating +H

We now consider tones involving the +H floating tone. The tones in this group are /ML+H/, a contrasting tone without the floating tone that is simply /ML/, and a tone we represent (perhaps abstractly) as the floating tone alone /+H/, the lexical tone that rises to a high target at the end of the word.

Tone /ML+H/

This tone is confined to potentials of verbs whose stems (as revealed by the corresponding completive form) are underlyingly /LM/ (for tonal correspondences between completives and potentials, see Ch. 5.4). We call this ML+H. Based on our early analysis (Cruz and Woodbury 2006) I summarize LM+H environment as follows:

- Changes to tone H after tone HL+0, ML:

tkwa^{ML} ka^H

/tkwa^{ML/} + /ka^{ML+H/}

[tkwa^{ML} ka^{ML}]

‘will become two’

- Changes to tone 0L+0 after a floating tone:

qwa^{HL} ka^{0L+0}

/qwa^{HL+0/} + /ka^{ML+H/}

[qwa^{HL} ka^{ML}]

‘will become banana’

- Tone ML in other environments

Sandhi from /ML+H/ to a following word (Cruz and Woodbury 2006):

- a. Tone Tone 1 after a /HL+0/
- b. Tone /ML+H/ after /ML/
- c. Tone /OL+0/ after a floating tone
- d. Tone /ML+H/ in other environments

Tone /ML/

Tone /ML/ is found mainly in numbers. Based on our early analysis (Cruz and Woodbury 2006) I summarize ML environment as follows:

- Changes to tone H alter tone HL+0:

nya^{HL} tkwa^H yka^{ML}

/ nya^{HL+0} tkwa^{ML} yka/

[nya^{HL} tkwa^{ML} yka^{ML}]

‘making two woods’

- Tone ML in other environments

Sandhi from /ML/ to a following word

- a. Tone /H/ after a /HL+0/
- b. Tone /ML/ in other environments

Tone /+H /

This tone sounds like a rise from M all the way to the level of H (without Progressive H assimilation). It is analyzed as a high tone that is linked to the end of the word, a characteristic I found independently in floating high tones.

Figure 3.9: Tone /+H/

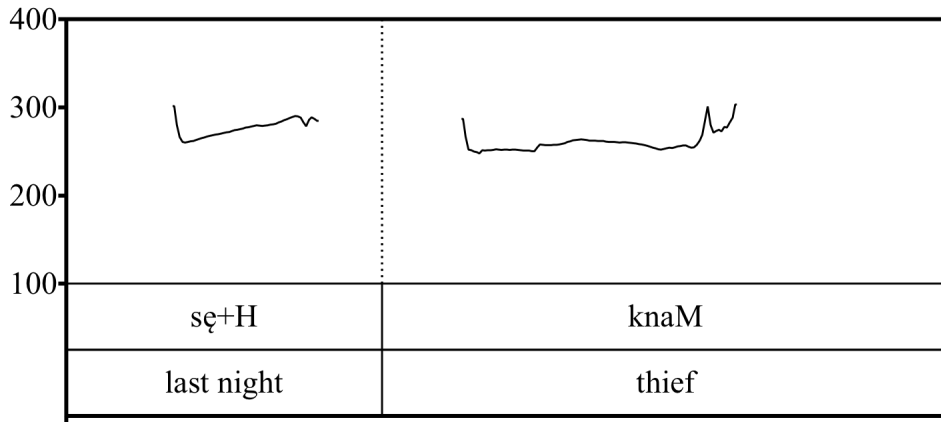


Table 3.18: Tone +H

xka/+H/ 'another' ⇒						
Lexical (phonemic)		Sandhi (phonetic) results				Gloss
Object	Tone	Num	Tone	Object	Tone	
le	/H+0/	xka	[M [^]]	le	[H]	'another tortilla cloth'
ktu	/H/	xka	[M [^]]	ktu	[H]	'another hole'
ke	/M/	xka	[M [^]]	ke	[M]	'another flowers'
ti	/MH/	xka	[M [^]]	ti	[MH]	'another rope'
nda	/L/	xka	[M [^]]	nda	[L]	'another beans'
yja	/ _ /	xka	[M [^]]	yja	[L]	'another tortillas'
liq	/M0/	xka	[M [^]]	liq	[M0]	'another parrots'
sɛɛ	/+H/	xka	[M [^]]	sɛɛ	[M [^]]	'another scorpions'
jaq	/LM/	xka	[M [^]]	jaq	[LM]	'another rope'

Table 3.18: Continue

xka/+H/ ‘another’ ⇒						
Lexical (phonemic)		Sandhi (phonetic) results				Gloss
qwa	/HL+H/	xka	[M^]	qwa	[HL]	‘another bananas’
ti	/ML/	xka	[M^]	ti	[ML]	‘another ten’
kla	/ML+H/	xka	[M^]	kla	[ML]	‘another twenty’

The tone +H does not really cause sandhi change in following tones. The tones H, M, MH rise a little when they are preceded by tone MH.

3.4.3 Tones [L]

As noted, /L/ and /_/ are two tones sounding like [L] in isolation. They are distinguished by sandhi. We suggested that one [L] is underlyingly toneless /_/, whereas the other [L] is a real low tone phonemically /L/. If the toneless /_/ does not receive a sandhi tone from its predecessor, by default it is pronounced as [L].

Toneless /_/

An example of toneless /_/ is *yja* ‘tortilla’. In the following examples, tone /_/ preceding tone [L] stays the same (e.). Tone /ML/ preceding tone /_/ changes to /+H/ (k.). The following are examples of /_/:

- | | | | | | |
|----|---------------------------|------|------------|------|---------------------------|
| a. | <i>nya</i> ^{H+0} | [H] | <i>yja</i> | [0] | ‘making tortilla’ |
| b. | <i>yo</i> ^H | [H] | <i>yja</i> | [ML] | ‘you ground tortilla’ |
| c. | <i>yo</i> ^M | [M] | <i>yja</i> | [H] | ‘she/he ground tortilla’ |
| d. | <i>kwa</i> ^{MH} | [M^] | <i>yja</i> | [ML] | ‘she/he swept tortilla’ |
| e. | <i>stq</i> | [L] | <i>yja</i> | [L] | ‘I picked tortilla’ |
| f. | <i>ko</i> ^{M0} | [M0] | <i>yja</i> | [ML] | ‘you will grind tortilla’ |
| g. | <i>stq</i> ^{+H} | [MH] | <i>yja</i> | [L] | ‘you picked tortilla’ |
| h. | <i>stq</i> ^{LM} | [LM] | <i>yja</i> | [L] | ‘she/he picked tortilla’ |
| i. | <i>yq</i> ^{L+0} | [L0] | <i>yja</i> | [0] | ‘I ground tortilla’ |

<i>j.</i>	<i>stq^{HL+0}</i>	[HL]	<i>yja</i>	[0]	‘we will pick tortilla’
<i>k.</i>	<i>stq^M</i>	[M]	<i>yja</i>	[MH]	‘she/he will pick tortilla’
<i>l.</i>	<i>nda^L</i>	[L]	<i>yja</i>	[L]	‘bean tortilla’
<i>m.</i>	<i>sna^{ML}</i>	[ML]	<i>yja</i>	[ML]	‘three tortillas’

The following examples show tone /_/_/ preceding another tone /_/_/. In the following phrases, the second word always surfaces as /_/_/, never as /+H/:

<i>yku</i>	/_/_/	<i>qne</i>	/_/_/	[L L]	‘s/he ate an animal’
<i>yku</i>	/_/_/	<i>kche</i>	/_/_/	[L L]	‘s/he ate an <i>ixtle</i> ’
<i>yku</i>	/_/_/	<i>kyqo</i>	/_/_/	[L L]	‘s/he ate lime’
<i>yku</i>	/_/_/	<i>kychi</i>	/_/_/	[L L]	‘s/he ate a <i>metate</i> ’
<i>yku</i>	/_/_/	<i>tjeq</i>	/_/_/	[L L]	‘s/he ate salt’
<i>yku</i>	/_/_/	<i>tyku</i>	/_/_/	[L L]	‘s/he ate a comb’
<i>yku</i>	/_/_/	<i>yja</i>	/_/_/	[L L]	‘s/he ate a tortilla’
<i>yku</i>	/_/_/	<i>yka</i>	/_/_/	[L L]	‘s/he ate a tree’
<i>yku</i>	/_/_/	<i>nkaq</i>	/_/_/	[L L]	‘s/he ate a leaf’

The following examples show tone /_/_/ preceding tone /L/. Notice that tone /L/ has the option of staying with tone [L] or /+H/, but [ML] it is not allowed. I am treating these options as a phonemic difference (hence the slashes) since there seems to be variation in the choice of strategies; that is, it is not entirely automatic:

<i>yku</i>	/_/_/	<i>wqya^L/wqya^{+H}</i>	/L/, /+H/	‘s/he ate an eagle’
<i>yku</i>	/_/_/	<i>jya^L/jya^{+H}</i>	/L/, /+H/	‘s/he ate a sugar cane’
<i>yku</i>	/_/_/	<i>wjyaq^L/wjyaq^{+H}</i>	/L/, /+H/	‘s/he ate a mosquito’
<i>yku</i>	/_/_/	<i>ke^L/ke^{+H}</i>	/L/, /+H/	‘s/he ate a rock’
<i>yku</i>	/_/_/	<i>kji^L/kji^{+H}</i>	/L/, /+H/	‘s/he ate a skin’
<i>yku</i>	/_/_/	<i>ksu^L/ksu^{+H}</i>	/L/, /+H/	‘s/he ate a bag’
<i>yku</i>	/_/_/	<i>lya^L/lya^{+H}</i>	/L/, /+H/	‘s/he ate a raccoon’
<i>yku</i>	/_/_/	<i>nda^L/nda^{+H}</i>	/L/, /+H/	‘s/he ate beans’
<i>yku</i>	/_/_/	<i>ndiyaq^L/ndiyaq^{+H}</i>	/L/, /+H/	‘s/he ate cacao’
<i>yku</i>	/_/_/	<i>ntqa^L/ntqa^{+H}</i>	/L/, /+H/	‘s/he ate corn’
<i>yku</i>	/_/_/	<i>tykaq^L/tykaq^{+H}</i>	/L/, /+H/	‘s/he ate a container’
<i>yku</i>	/_/_/	<i>yu^L/yu^{+H}</i>	/L/, /+H/	‘s/he ate dirt’
<i>yku</i>	/_/_/	<i>kla^L/kla^{+H}</i>	/L/, /+H/	‘s/he ate fish’

The following examples shows demonstratives (DEM) with tone /MH/ preceding tone /_/. Note that the speakers can choose tone /_/ or /ML/ but not tone /+H/.

Verb	Subject	Direct object		Gloss
yku	/_/	kwa ^{MH} qne/qne ^{ML}	/_/, /ML/	'that ate an animal'
yku	/_/	kwa ^{MH} kche kche ^{ML}	/_/, /ML/	'that ate an <i>ixtle</i> '
yku	/_/	kwa ^{MH} kyqo/kiqo ^{ML}	/_/, /ML/	'that ate a lime'
yku	/_/	kwa ^{MH} kychi/kichi ^{ML}	/_/, /ML/	'that ate a <i>metate</i> '
yku	/_/	kwa ^{MH} tjeq/tjeq ^{ML}	/_/, /ML/	'that ate salt'
yku	/_/	kwa ^{MH} tyku/tyku ^{ML}	/_/, /ML/	'that ate a comb'
yku	/_/	kwa ^{MH} yja/yja ^{ML}	/_/, /ML/	'that ate a tortilla'
yku	/_/	kwa ^{MH} yka/yka ^{ML}	/_/, /ML/	'that ate a tree'
yku	/_/	kwa ^{MH} nkaq/nkaq ^{ML}	/_/, /ML/	'that ate a leaf'

We can conclude that tone /_/ is toneless because it reacts to certain tones in the preceding word. When /_/ precedes a /_/, the second tone /_/ does not change and also does not accept tones /ML/ and /+H/. When tone /_/ precedes a tone /L/, the tone /L/ can stay as tone /L/ or it also allows /+H/ but does not take tone /ML/. When a DEM (tone MH) precedes tone /_/, tone /_/ can stay tone /L/ or it can change to tone /ML/ but not /+H/. The following are the tones that /_/ can take from the preceding word:

Table 3.19: Sandhi Process of Tone /_/

Preceding tone ⇒	Tone /_/
/H+0/	0
/H/	/ML/
/M/	/H/
/MH/	/ML/
/_/	/_/
/M0/	/ML/
/+H	/_/
/LM/	/LM/
/L+0/	0
/HL+0/	0
/OL+0/	/ML/
/ML+H/	/+H/
/ML/	/ML/
/L/	/L/

Based on table 3.19 and based of our previous analysis (Cruz and Woodbury 2006) I summarize the environment of tone // as follows:

- a. Sandhi to // from a preceding word
- b. Changes to tone 0 by receiving a /+0/ floating tone
- c. Changes to tone H after tone M
- d. Changes to tone ML after tones H, MH, M0, ML+H
- e. Changes to tone +H after tone ML
- f. And tone /

Tone /L/

Tone /L/ goes through fewer changes than tone /

<i>Verb</i>	<i>object</i>	Tone	Tone	Gloss
<i>nya</i> ^{H+0}	<i>wje</i> ^L	/L/	[L]	‘making <i>epazote</i> ’
<i>yo</i> ^H	<i>wje</i> ^L	/L/	[L]	‘you grounded <i>epazote</i> ’
<i>yo</i> ^M	<i>wje</i> ^L	/L/	[L]	‘she/he grounded <i>epazote</i> ’
<i>kwa</i> ^{MH}	<i>wje</i> ^L	/L/	[L]	‘she/he swept <i>epazote</i> ’
<i>stq</i> ^{L+0}	<i>wje</i> ^L	/L/	[L]	‘I picked <i>epazote</i> ’
<i>ko</i> ^{M0}	<i>wje</i> ^L	/L/	[L]	‘you will grind <i>epazote</i> ’
<i>stq</i> ^{+H}	<i>wje</i> ^L	/L/	[L]	‘you picked <i>epazote</i> ’
<i>stq</i> ^{LM}	<i>wje</i> ^L	/L/	[L]	‘she/he picked <i>epazote</i> ’
<i>yq</i> ^{L+0}	<i>wje</i> ^L	/L/	[L]	‘I grinded <i>epazote</i> ’
<i>stq</i> ^{HL+0}	<i>wje</i> ^L	/L/	[L]	‘we will pick <i>epazote</i> ’
<i>stq</i> ^{ML}	<i>wje</i> ^L	/L/	[L]	‘she/he will pick <i>epazote</i> ’

The following examples show tone /L/ preceding tone /L/. The following tone /L/ can stay as tone /L/ or it can change to tone /+H/ but it does not take tone /ML/:

<i>ska</i> ^L	<i>wqya</i> ^L / <i>wqya</i> ^{+H}	/L/, /+H/	‘one eagle’
<i>ska</i> ^L	<i>jya</i> ^L / <i>jya</i> ^{+H}	/L/, /+H/	‘one cane’
<i>ska</i> ^L	<i>wjyaq</i> ^L / <i>jyaq</i> ^{+H}	/L/, /+H/	‘one mosquito’

<i>ska^L</i>	<i>ke^L/ke^{+H}</i>	/L/, /+H/	‘one rock’
<i>ska^L</i>	<i>kji^L/kji^{+H}</i>	/L/, /+H/	‘one skin’
<i>ska^L</i>	<i>ksu^L/ksu^{+H}</i>	/L/, /+H/	‘one bag’
<i>ska^L</i>	<i>lya^L/lya^{+H}</i>	/L/, /+H/	‘one raccoon’
<i>ska^L</i>	<i>nda^L/nda^{+H}</i>	/L/, /+H/	‘one beans’
<i>ska^L</i>	<i>nd’yaq^L/nd’yaq^{+H}</i>	/L/, /+H/	‘one cacao’
<i>ska^L</i>	<i>ntqq^L/ntqq^{+H}</i>	/L/, /+H/	‘one corn’
<i>ska^L</i>	<i>tykaq^L/tykaq^{+H}</i>	/L/, /+H/	‘one container’
<i>ska^L</i>	<i>yu^L/yu^{+H}</i>	/L/, /+H/	‘one dirt’
<i>ska^L</i>	<i>kla^L/kla^{+H}</i>	/L/, /+H/	‘one fish’

The following are examples of DEM (/MH/) preceding tone /L/. The tone /L/ stays tone /L/ and does not allow tone /+H/ and tone /ML/:

<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>wqya^L</i>	/L/	‘that ate an eagle’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>jya^L</i>	/L/	‘that ate a sugar cane’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>jyaq^L</i>	/L/	‘that ate a mosquito’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>ke^L</i>	/L/	‘that ate a rock’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>kji^L</i>	/L/	‘that ate a skin’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>knyaq^L</i>	/L/	‘that ate a mouse’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>ksu^L</i>	/L/	‘that ate a bag’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>lya^L</i>	/L/	‘that ate a raccoon’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>nda^L</i>	/L/	‘that ate beans’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>nd’yaq^L</i>	/L/	‘that ate cacao’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>ntqq^L</i>	/L/	‘that ate corn’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>tykaq^L</i>	/L/	‘that ate a container’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>yu^L</i>	/L/	‘that ate dirt’
<i>yku</i>	/_	<i>kwa^{MH}</i>	/MH/	<i>kla^L</i>	/L/	‘that ate fish’

Sandhi to /L/ from a preceding word.

I summarized the environment of tone /L/ as follows:

- Changes to tone +H after tone /_ /
- Stays tone /L/ in other environments

3.4.4 Further Illustration of Sandhi Using Noun + Adjective Phrases

Here I am showing the sandhi processes using noun plus adjective phrases. This has two benefits. First, it shows that the same system operates here as in the verb plus

direct object contexts used earlier. Second, because nouns can have tone /L/ whereas verbs cannot, we see combinations of that tone with other following tones.

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (A)

NOUN			ADJ					
			None Isolation	H <i>nkqa^H</i> 'red'				
Tone	Noun							
/H+0/	<i>ka^{H+0}</i>	cow	<i>ka^H</i>	[H]	<i>ka^H</i>	[H]	<i>nkqa⁰</i>	[0]
/H/	<i>kna^H</i>	snake	<i>kna^H</i>	[H]	<i>kna^H</i>	[H]	<i>nkqa^H</i>	[H]
/M/	<i>ke^M</i>	flower	<i>ke^M</i>	[M]	<i>ke^M</i>	[M]	<i>nkqa^H</i>	[H]
/MH/	<i>kchi^{MH}</i>	tiger	<i>kchi^{MH}</i>	[M^]	<i>kchi^{MH}</i>	[M^]	<i>nkqa^H</i>	[H]
/ /	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>nkqa^H</i>	[H]
/L/	<i>nda^L</i>	bean	<i>nda^L</i>	[L]	<i>nda^L</i>	[L]	<i>nkqa^H</i>	[H]
/HL+0/	<i>qwa^{HL+0}</i>	banana	<i>qwa^{HL+0}</i>	[HL]	<i>qwa^{HL+0}</i>	[HL]	<i>nkqa⁰</i>	[0]
/ML/	<i>ti^{ML}</i>	10	<i>ti^{ML}</i>	[ML]	<i>ti^{ML}</i>	[ML]	<i>nkqa^H</i>	[H]
	<i>yja^{ML}</i>	tortillas	<i>yja^{ML}</i>	[ML]	<i>yja^{ML}</i>	[ML]		
/M0/	<i>xty^{M0}</i>	cat	<i>xty^{M0}</i>	[M0]	<i>xty^{M0}</i>	[M0]	<i>nkqa^H</i>	[H]
/+H/	<i>sqe^{+H}</i>	scorpion	<i>sqe^{+H}</i>	[MH]	<i>sqe^{+H}</i>	[MH]	<i>nkqa^H</i>	[H]
/LM/	<i>cta^{LM}</i>	shrimp	<i>cta^{LM}</i>	[LM]	<i>cta^{LM}</i>	[LM]	<i>nkqa^H</i>	[H]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (B)

NOUN			ADJ					
			None Isolation	M <i>la^M</i> 'fast'				
Tone	Noun							
/H+0/	<i>ka^{H+0}</i>	cow	<i>ka^H</i>	[H]	<i>ka^H</i>	[H]	<i>la⁰</i>	[0]
/H/	<i>kna^H</i>	snake	<i>kna^H</i>	[H]	<i>kna^H</i>	[H]	<i>la^M</i>	[M]
/M/	<i>ke^M</i>	flower	<i>ke^M</i>	[M]	<i>ke^M</i>	[M]	<i>la^M</i>	[M]
/MH/	<i>kchi^{MH}</i>	tiger	<i>kchi^{MH}</i>	[M^]	<i>kchi^{MH}</i>	[M^]	<i>la^M</i>	[M]
/ /	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>la^M</i>	[M]
/L/	<i>nda^L</i>	bean	<i>nda^L</i>	[L]	<i>nda^L</i>	[L]	<i>la^M</i>	[M]
/HL+0/	<i>qwa^{HL+0}</i>	banana	<i>qwa^{HL+0}</i>	[HL]	<i>qwa^{HL+0}</i>	[HL]	<i>la⁰</i>	[0]
	<i>ti^{ML}</i>	10	<i>ti^{ML}</i>	[ML]	<i>ti^{ML}</i>	[ML]		
/ML/	<i>yja^{ML}</i>	tortillas	<i>yja^{ML}</i>	[ML]	<i>yja^{ML}</i>	[ML]	<i>la^M</i>	[M]
/M0/	<i>xty^{M0}</i>	cat	<i>xty^{M0}</i>	[M0]	<i>xty^{M0}</i>	[M0]	<i>la^M</i>	[M]
/+H/	<i>sqe^{+H}</i>	scorpion	<i>sqe^{+H}</i>	[MH]	<i>sqe^{+H}</i>	[MH]	<i>la^M</i>	[M]
/LM/	<i>cta^{LM}</i>	shrimp	<i>cta^{LM}</i>	[LM]	<i>cta^{LM}</i>	[LM]	<i>la^M</i>	[M]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (C)

			ADJ					
NOUN			None			/MH/		
Tone	Noun		Isolation			<i>nta</i> ^{MH} 'black'		
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^{H+0}	[H0]	<i>nta</i> ^{MH}	[M^]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>nta</i> ^{MH}	[M^]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>nta</i> ^{MH}	[M^]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>nta</i> ^{MH}	[M^]
/_/	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>nta</i> ^{MH}	[M^]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>nta</i> ^{MH}	[M^]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL+0}	[HL0]	<i>nta</i> ^{MH}	[M^]
	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]		
/ML/	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>nta</i> ^{MH}	[M^]
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>nta</i> ^{MH}	[M^]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>nta</i> ^{MH}	[M^]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>nta</i> ^{MH}	[M^]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (D)

			ADJ					
NOUN			None			/_/		
Tone	Noun		Isolation			<i>kla</i> 'old'		
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^H	[H]	<i>kla</i> ⁰	[0]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>kla</i> ^{ML}	[ML]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>kla</i> ^H	[H]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>kla</i> ^{ML}	[ML]
/_/	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>kla</i>	[L]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>kla</i>	[L]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL}	[HL]	<i>kla</i> ⁰	[0]
	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]		
/ML/	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>kla</i> ^{ML}	[ML]
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>kla</i> ^{ML}	[ML]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>kla</i>	[L]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>kla</i>	[L]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (E)

			ADJ					
NOUN			None		/L/			
Tone	Noun		Isolation		<i>ti</i> ^L 'thin'			
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^{H+0}	[H0]	<i>ti</i> ^L	[L]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>ti</i> ^L	[L]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>ti</i> ^L	[L]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>ti</i> ^L	[L]
/ /	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>ti</i> ^L	[L]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>ti</i> ^L	[L]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL+0}	[HL0]	<i>ti</i> ^L	[L]
	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]		
/ML/	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>ti</i> ^L	[L]
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>ti</i> ^L	[L]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>ti</i> ^L	[L]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>ti</i> ^L	[L]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (F)

			ADJ					
NOUN			None		/HL+0/			
Tone	Noun		Isolation		<i>tqwa</i> ^{HL+0} 'cold'			
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^H	[H]	<i>tqwa</i> ^{0L+0}	[0L]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>tqwa</i> ^{HL+0}	[HL]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>tqwa</i> ^{HL+0}	[HL]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>tqwa</i> ^{HL+0}	[HL]
/ /	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>tqwa</i> ^{HL+0}	[HL]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>tqwa</i> ^{HL+0}	[HL]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL}	[HL]	<i>tqwa</i> ⁰	[H]
	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]		
/ML/	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>tqwa</i> ^{HL+0}	[HL]
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>tqwa</i> ^{HL+0}	[HL]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>tqwa</i> ^{HL+0}	[HL]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>tqwa</i> ^{HL+0}	[HL]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (G)

			ADJ				
NOUN			None		/M0/		
Tone	Noun		Isolation		<i>knyaq</i> ^{M0} 'dark'		
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^H	[H]	<i>knyaq</i> ^{M0} [M0]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>knyaq</i> ^{M0} [M0]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>knyaq</i> ^{M0} [M0]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>knyaq</i> ^{M0} [M0]
/_/	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>knyaq</i> ^{M0} [M0]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>knyaq</i> ^{M0} [M0]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL+0}	[HL]	<i>knyaq</i> ^{M0} [M0]
/ML/	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]	<i>knyaq</i> ^{M0} [M0]
	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>knyaq</i> ^{M0} [M0]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>knyaq</i> ^{M0} [M0]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>knyaq</i> ^{M0} [M0]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (H)

			ADJ				
NOUN			None		/+H/		
Tone	Noun		Isolation		<i>tla</i> ^{+H}	'hard'	
/H+0/	<i>ka</i> ^{H+0}	cow	<i>ka</i> ^H	[H]	<i>ka</i> ^H	[H0]	<i>tla</i> ^{+H} [MH]
/H/	<i>kna</i> ^H	snake	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>tla</i> ^{+H} [MH]
/M/	<i>ke</i> ^M	flower	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>tla</i> ^{+H} [MH]
/MH/	<i>kchi</i> ^{MH}	tiger	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>tla</i> ^{+H} [MH]
/_/	<i>yka</i>	tree	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>tla</i> ^{+H} [MH]
/L/	<i>nda</i> ^L	bean	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>tla</i> ^{+H} [MH]
/HL+0/	<i>qwa</i> ^{HL+0}	banana	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL+0}	[HL0]	<i>tla</i> ^{+H} [MH]
	<i>ti</i> ^{ML}	10	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]	
/ML/	<i>yja</i> ^{ML}	tortillas	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>tla</i> ^{+H} [MH]
/M0/	<i>xty</i> ^{M0}	cat	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>tla</i> ^{+H} [MH]
/+H/	<i>sqe</i> ^{+H}	scorpion	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>tla</i> ^{+H} [MH]
/LM/	<i>cta</i> ^{LM}	shrimp	<i>cta</i> ^{LM}	[LM]	<i>cta</i> ^{LM}	[LM]	<i>tla</i> ^{+H} [MH]

Table 3.20: Tone Sandhi in Noun Plus Adjective Phrases (I)

			ADJ					
NOUN			None			/LM/		
Tone	Noun		Isolation			<i>nkqa</i> ^{LM}		
/H+0/	<i>ka</i> ^{H+0}	<i>cow</i>	<i>ka</i> ^H	[H]	<i>ka</i> ^{H+0}	[H0]	<i>nkqa</i> ^{LM}	[LM]
/H/	<i>kna</i> ^H	<i>snake</i>	<i>kna</i> ^H	[H]	<i>kna</i> ^H	[H]	<i>nkqa</i> ^{LM}	[LM]
/M/	<i>ke</i> ^M	<i>flower</i>	<i>ke</i> ^M	[M]	<i>ke</i> ^M	[M]	<i>nkqa</i> ^{LM}	[LM]
/MH/	<i>kchi</i> ^{MH}	<i>tiger</i>	<i>kchi</i> ^{MH}	[M^]	<i>kchi</i> ^{MH}	[M^]	<i>nkqa</i> ^{LM}	[LM]
/_/	<i>yka</i>	<i>tree</i>	<i>yka</i>	[L]	<i>yka</i>	[L]	<i>nkqa</i> ^{LM}	[LM]
/L/	<i>nda</i> ^L	<i>bean</i>	<i>nda</i> ^L	[L]	<i>nda</i> ^L	[L]	<i>nkqa</i> ^{LM}	[LM]
/HL+0/	<i>qwa</i> ^{HL+0}	<i>banana</i>	<i>qwa</i> ^{HL+0}	[HL]	<i>qwa</i> ^{HL+0}	[HL0]	<i>nkqa</i> ^{LM}	[LM]
	<i>ti</i> ^{ML}	<i>10</i>	<i>ti</i> ^{ML}	[ML]	<i>ti</i> ^{ML}	[ML]		
/ML/	<i>yja</i> ^{ML}	<i>tortillas</i>	<i>yja</i> ^{ML}	[ML]	<i>yja</i> ^{ML}	[ML]	<i>nkqa</i> ^{LM}	[LM]
/M0/	<i>xty</i> ^{M0}	<i>cat</i>	<i>xty</i> ^{M0}	[M0]	<i>xty</i> ^{M0}	[M0]	<i>nkqa</i> ^{LM}	[LM]
/+H/	<i>sqe</i> ^{+H}	<i>scorpion</i>	<i>sqe</i> ^{+H}	[MH]	<i>sqe</i> ^{+H}	[MH]	<i>nkqa</i> ^{LM}	[LM]
/LM/	<i>kta</i> ^{LM}	<i>shrimp</i>	<i>kta</i> ^{LM}	[LM]	<i>kta</i> ^{LM}	[LM]	<i>nkqa</i> ^{LM}	[LM]

based on these tables 3.20 we can see the following pattern using noun plus adjective phrases:

- The tones /H/ and /M/ (3.20.B) take the floating tone and they take the floating tone of /H+0/ and /HL+0/.
- The tones /MH/, /L/, /M0/ and /+H/ do not get any sandhi process.
- Tone /_/ changes as follows:

/_/ changes to 0 when is after tones /HL+0/ and /H+0/

/_/ changes to /ML/ when is after tones /H/, /MH/, /ML/ and /M/

/_/ changes to /_/ when is after tones /+H/, /LM/ and /L/

/_/ changes to /H/ when is after tone /M/

3.5 SANDHI SUMMARY

Table 3.21: Final Phonemic Representation for the Lexical Tones of SJQ Chatino

	Phonetic (Isolation ~ $kq\dot{q}^{LM}$ context)	Floating tone on q_i	Comments	Phonemic	Orthography
Level	[H]	no	Slight decline	/H/	H
	[H]~[H0]	[0]	Slight decline	/H+0/	H+0
	[M]	no	Slight decline	/M/	M
		no	Breathy;		
	[L]		sandhi-affected	/ _/	—
		no	Breathy; not	/L/	
	[L]		sandhi affected		L
Rising	[M0]	no	Steep rise	/M0/	M0
		no		/+H/,	
	[MH]		Steep rise	prelinked	+H
	[M^]	no	Slight rise	/MH/	MH
		no	Long, with		
	[LM]		"elbow"	/LM/	LM
		[0]	Long, with		
	[L0] ~ [L]		"elbow"	/L+0/	L+0
Falling	[0L] ~ [0L0]	[0]	Sharp fall	/0L+0/	0L+0
	[HL] ~ [HL0]	[0]	Sharp fall	/HL+0/	HL+0
	[ML]	no	Sharp fall,	/ML/	ML
	[ML]	[MH]	Sharp fall	/ML+H/	ML+H

3.5.1 Summary of Rules of Phonetic Interpretation

Interpretation of linked /+H/: Linked /+H/ is interpreted phonetically as [MH].

Progressive H-assimilation: H decrements to a pitch slightly above the M level when following M in a binary sequence.

Rule for floating tones in isolation forms

Except in the case of tone /L+0/, unassociated floating tones are unexpressed in isolation forms. This applies, then, to /0L+0/, /HL+0/, and /ML+H/. It does not apply to /+H/, because that tone, as noted, is prelinked.

Rule for /_/ in isolation

/_/ is expressed as [L] in isolation contexts.

3.5.2 Summary of Sandhi Rules

Sandhi from /H+0/ to a following word:

- a. Tone H+0 changes to tone H when it occurs after a /HL+0/ tone
- b. There is tone dissimilation when two [HL+0] tones are next to each, the second tone /HL+0/ becomes [H]
- c. Tones that accept the floating tone from /HL+0/ are: /H/, /M/, /_/, /HL+0/ and /ML+H/
- d. The tones that do not accept the floating of /HL/ are: /H+0/, /MH/, /L/, /+H/, /LM/ and /ML/

Sandhi from /HL+0/ to a following word:

- a. Tone H+0 changes to tone H when it occurs after a /HL+0/ tone
- b. There is tone dissimilation when two [HL] tones are next to each, the second tone /HL+0/ becomes [H]
- c. Tones that accept the floating tone from [HL] are: /H/, /M/, /_/, /HL+0/ and /ML+H/
- d. In a., d., e., h., i., k. The tones that do not accept the floating of [HL] are: /H+0/,

/MH/, /L/, /+H/, /LM/ and /ML/

Sandhi from /L+0/ to a following word:

- When Tone /L+0/ precedes /H+0/ both floating tones disappear.
- The tones that take the floating tone of /L+0/ are: /H/, /M/, /L/, /M0/, /HL+0/, /ML+H/. The rise no longer occurs on the /L+0/ word—it becomes an [L]
- The tones that do not take the floating tone of /L+0/ are: /MH/, /L/, /+H/, /LM/, /ML/

Table 3.22: Summarizing Effects of Tones Containing /+0/ on Following Words

Word 1	Word 2											
	H+0	H	M	MH	L	_	M0	+H	LM	HL+0	ML	ML+H
H+0	[H]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[L]	[ML]	[L]
HL+0	[0]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[H]	[ML]	[L]
L+0	[0]	[0]	[0]	[M^]	[L]	[0]	[M0]	[MH]	[LM]	[L]	[ML]	[L]

Sandhi from /ML+H/ to a following word:

- Tone Tone 1 after a /HL+0/
- Tone /ML+H/ after /ML/
- Tone /0L+0/ after a floating tone
- Tone /ML+H/ in other environments

Sandhi from /ML/ to a following word:

- Tone Tone 1 after a /HL+0/
- Tone /ML/ in other environments

Sandhi to /__/ from a preceding word:

- Sandhi to /__/ from a preceding word
- Changes to tone 0 by receiving a /+0/ floating tone
- Changes to tone H after tone M
- Changes to tone ML after tones H, MH, M0, ML+H

- e. Changes to tone +H after tone ML
- f. And tone /_/ in other environments

Sandhi to /L/ from a preceding word:

- a. Changes to tone +H after tone /_/
- b. And tone /L/ in other environments

3.5.3 Conclusion About Sandhi

The key triggers of sandhi are a floating tone of a first word influencing a second word; a toneless word receiving an effect from a preceding word; and (less commonly), certain dissimilations, as in case where /_/ and /L/ tones get together, or where two words bearing floating tones get together.

3.6 COMPARISON OF THE TONES TO OTHER VARIETIES

The correspondence and cognates among the varieties of Chatino (ZEN, TAT and other forms of Eastern Chatino) fit well with SJQ, as is shown in table 3.20.

Table 3.23: Chatino Cognate Set and Sub-grouping (Campbell and Woodbury 2010), Using Their Notation for Tone in the Various Varieties (Part A)

Gloss	POS	ZEN	ZEN T	TAT	TAT T	SET
rock	N	kee	X ¹⁸	kee	X	A
ate (it)	V	y-aku	X	ndyaku	X	A
plucked (it)	V	nka-xikwə	X	—	—	A
you.sg	Pro	nu7u	X	nu7u	X	A
one	Num	tzaka	X	tzaka	X	A
is.eating (it)	V	nch-aku	X	ndyakũ	HH	I
is.plucking (it)	V	nte-xikwə	X	—	—	I
eleven	Num	tí tzaka	X	^H ti chakă	HH	I
scorpion	N	jne7e	X	chuni7i	X	I
surface.of rock	NP	ntoo kee	X	—	—	I

¹⁸ ‘X’ marks the position of a non-tone specified mora, thus XM = ‘M preceded by non-tone specified mora’; and X alone marks a non-tone specified final mora, and implies all other moras are also non-tone specified.

Table 3.23 (A): Continue

Gloss	POS	ZEN	ZEN T	TAT	TAT T	SET
ant	N	kwitye7	X	kwtyè7	L	G
tuber	N	kq̣q̣	X	kq̣q̣	L	G
killed (it)	V	y-ujwi	X	ndyujwì	L	G
saw (it)	V	nkā-na7ạ	X	na7ạ	L	G
ripe	A	nkume	X	ngumì	L	G
flour	N	ketā	XM	katyā	L	C
flower	N	keē	XM	keè	L	C
sacred	A	jo7ō	XM	jo7ò	L	C
ground (it)	V	y-oō	XM	ndyoò	L	C
was	V	nku-kā	XM	—	—	C
high	A	kwaā	XM	kwaà	L	C
corral	N	lō7ó	MH	lo7ó	H	F
chepil (herb)	N	kētá	MH	katyá	H	F
butterfly	N	kwilíí	MH	kwlií	H	F
cried	V	y-ūná	MH	ndyuná	H	F
white	A	nkāté	MH	ngaté	H	F
yesterday	Adv	lāká	MH	laká	H	F
moon	N	koō7	M	koò7	L	F
light	N	íí	HM	eé	H	F
gave.(it).to	V	nka-tāá	MH	ndaá	H	F
five	Num	kā7yú	MH	ka7yú	H	J
nine	Num	kāá	MH	kaá	H	J
twenty	Num	kālá	MH	kalá	H	J
forty	Num	tú7wa	H	tu7wá	H	J
fifteen	Num	tí7nyu	H	ti7yó	H	J
two	Num	túkwa	H	tkwá	H	J
three	Num	tzúna	H	sná	H	J
si	Num	súkwa	H	skwá	H	J
seven	Num	ká = tī	HM	katí	H	J
snake	N	kwénā	HM	kwanyá	H	E
coconut	N	nkāá	MH	ngaá	H	E
it remained	V	nk-yánō	HM	ndyanú	H	E
laughed	V	nka-xityi	X	nkwstí	H	E
red	A	nká7ā	HM	nga7á	H	E
will laugh	V	ki-xityi	X	xtyì	L	H
will.give.to	V	tāá	MH	taà	L	H

Table 3.23 (A): Continue

Gloss	POS	ZEN	ZEN T	TAT	TAT T	SET
twelve	Num	tí túkwa	HX	^H ti tykwâ	HL	H
crab	N	kwee7	X	kweè7	L	H
grasshopper	N	tzuku7	X	mskù7	L	H
weevil	N	nkwesa	X	lasà	L	H
tomorrow	Adv	kii	X	keè	L	H
embarrassing	A	ju7u	X	chju7u ti7	X	H
will.see (it)	V	nya7a	X	nya7a	X	B
will.carry (it)	V	k-uteḗ	X	k(u)teḗ	X	B
will.kill (one)	V	k-ujwi	X	kjwí	H	B
will.be	V	k-aka	X	kaka	HX	B
turtle	N	nkq̄	X	^H nkq̄	HX	B'
citrus fruit	N	ntzḗḗ	X	^H nsmii xnyà	HX	B'
Piper sp.	N	yuwa7	X	—	—	B'
corn (dried)	N	ndzukwā7	XM	^H nskwa7	HX	B'
tomato	N	nkwxí	MH	^H nguxi	HX	B'
cow	N	wātá	MH	^H wata	HX	B'
person	N	nyatḗ	XM	^H nyatḗ	HL	B'
will.cry	V	k-unā	XM	kunà	L	B'
will burn (it)	V	k-utakḗ	XM	—	—	B'
night	N	telā	XM	—	—	B'
will.tie.(it).up	V	k-uxikā7	XM	—	—	B'
will.run/escape	V	ki-jnā	XM	—	—	B'
will.grind (it)	V	k-ōó	MH	^H koò	HL	B'
snot of	N	xīnká7	MH	—	—	B'
is.heating (it)	V	n-te-katzḗ	XM	nxatzḗ	L	D
is.putting (it)	V	n-te-su7ū	XM	^H nxu7wà	HL	D
is.sprinkling	V	n-te-senē	XM	—	—	D
is.licking (it)	V	n-te-lyē7é	MH	nglye7é	H	D
sugar	N	sukā	XM	^H skà	HL	K
mule	N	mulā	XM	^H mwlà	HL	K
knife	N	kuchilyū	XM	^H xlyù	HL	K
mayor	N	kalē	XM	^H lkalè	HL	K
shawl	N	panyḗ	XM	^H panyḗ	HL	K

Table 3.23: Chatino Cognate Set and Sub-grouping (Campbell and Woodbury 2010) (Part B)

Gloss	ZAC	ZAC T	SJQ	SJQ T	YAI	YAI T	SET
rock	kee	X	ke ^L	L	ke ³	3	A
ate (it)	y-ako	X	yku ^L	L	yku ³	3	A
plucked (it)	nga-sikwə	X	skwə ^L	L	nwskwə ³	3	A
you.sg	no7wɨ	X	qwɛ ^L	L	7wɨ ³	3	A
one	tzaka	X	ska ^L	L	ska ³	3	A
is.eating (it)	ngy-áko	^H X	ntyku ^{+H}	+ H	ntyku ²	2	I
is.plucking (it)	ndā-síkwa	M ^H X	nskwa ^{+H}	+ H	nskwa ²	2	I
eleven	ti cháka	^H X	ti ^{ML} xka ^{+H}	+ H	ti ³ xka ²	2	I
scorpion	xōné7ɛ	M ^H X	sqɛ ^{+H}	+ H	nwx7ɛ ²	2	I
surface.of rock	loo kée	^H X	lo ^L -ke ^{+H}	+ H	lo ³ ke ²	2	I
ant	kwityēē7	MM	kwtyeq ^{LM}	LM	kwtye7 ¹²	12	G
tuber	kq̄q̄	MM	kq̄ ^{LM}	LM	kq̄ ¹²	12	G
killed (it)	y-ōjwī	MM	yjwi ^{LM}	LM	yjwi ¹²	12	G
saw (it)	nā7ā	MM	nqā ^{LM}	LM	l7ā ¹²	12	G
ripe	ngōwɛ	MM	ngwɛ ^{LM}	LM	ngwɛ ¹²	12	G
flour	kita ^H	M ^H	kta ^M	M	kita ²³	23	C
flower	keē ^H	M ^H	ke ^M	M	ke ²³	23	C
sacred	jò7ō ^H	M ^H	qo ^M	M	j7o ²³	23	C
ground (it)	y-oō ^H	M ^H	yo ^M	M	yo ²³	23	C
was	ngwā ^H	M ^H	ngwa ^M	M	nkwa ²³	23	C
high	kwaā ^H	M ^H	kwā ^M	M	kwā ²³	23	C
corral	lo7ō	R	qo ^{MH}	MH	l7o ³²	32	F
chepil (herb)	kită	R	kta ^{MH}	MH	kyta ³²	32	F
butterfly	losĩ	R	si ^{MH}	MH	wsi ³²	32	F
cried	y-onă	R	yna ^{MH}	MH	yna ³²	32	F
white	ngatɛ	R	ntɛ ^{MH}	MH	ngtɛ ³²	32	F
yesterday	lakă	R	nka ^{MH}	MH	ka ³²	32	F
moon	koõ7	R	koq ^{MH}	MH	ko7 ¹	1	F
light	aă	R	a ^{MH}	MH	a ¹	1	F

Table 3.23 (B): Continue

Gloss	ZAC	ZAC T	SJQ	SJQ T	YAI	YAI T	SET
gave.(it).to	nga-tāá	MH	nda ^{MH}	MH	nda ¹	1	F
five	ka7yo	X	qyu ^{ML}	ML	ka ³ = 7yu ¹	3 1	J
nine	kaa	X	ka ^{ML}	ML	ka ¹	1	J
twenty	kalà ^H	L ^H	kla ^{ML+H}	ML	ka ³ = la ²⁴	3 24	J
forty	to7wa	X	tqwa ^{ML}	ML	t7wa ¹	1	J
fifteen	ti7nyq	X	qnyo ^{ML}	ML	ti ³ = 7yu ¹	3 1	J
two	tokwa	X	tkwa ^{ML}	ML	tkwa ¹	1	J
three	tzona	X	sna ^{ML}	ML	sna ¹	1	J
si	sokwa	X	skwa ^{ML}	ML	skwa ¹	1	J
seven	kati	X	kti ^{ML}	ML	ka ³ = ti ¹	3 1	J
snake	kwíná	MH	kna ^H	H	kwna ¹	1	E
coconut	nkāá	MH	ngá ^H	H	ngá ¹	1	E
it remained	nk-yānq	MH	yno ^H	H	nkynu ¹	1	E
laughed	nka-sityí	MH	styí ^H	H	nwstyí ¹	1	E
red	nkā7á	MH	nkqa ^H	H	nk7a ¹	1	E
will laugh	xityí°	LR°	xtyí ^{M0}	M0	xtyí ²¹	21	H
will.give.to	k-otāá°	LR°	ta ^{M0}	M0	ta ⁴³	43	H
twelve	ti tyòkwǎ°	LR°	ti ^{ML} tykwa ^{M0}	M0	ti ³ tykwa ²¹	21	H
crab	kwee7	X	kweq ^{M0}	M0	kwee7 ³	3	H
grasshopper	tzòkǒ7°	LR°	skuq ^{M0}	M0	sku7 ³²	32	H
weevil	kwisǎ°	LR°	sa ^{M0}	M0	kwsa ⁴³	43	H
tomorrow	kyàá°	LR°	kya ^{M0}	M0	kya ⁴³	43	H
embarrassing	jì7ǒ°	LR°	yqu ^{M0}	M0	y7u ²¹	21	H
will.see (it)	nya7ǎ ^H	L ^H	tyqǎ ^{ML+H}	ML + H	ny7ǎ ²⁴	24	B
will.carry (it)	k-otǎ ^H	L ^H	tǎ ^{ML+H}	ML + H	tǎ ²⁴	24	B
will.kill (one)	k-ojwì ^H	L ^H	kjwì ^{ML+H}	ML + H	kjwì ²⁴	24	B
will.be	k-akǎ ^H	L ^H	ka ^{ML+H}	ML + H	ka ²⁴	24	B
turtle	nkoq ^H	L ^H	kon ^{HL+0}	HL + 0	kq ²⁴	24	B'
citrus fruit	—	—	ndzwe ^{HL+0}	HL + 0	nzwǐ ²⁴	24	B'
Piper sp.	ntzowǎ ^{7H}	L ^H	ndzwaq ^{HL+0}	HL + 0	ndzwa ⁷²⁴	24	B'
corn (dried)	ntzokwǎ ^{7H}	L ^H	skwaq ^{HL+0}	HL + 0	nskwa ⁷²⁴	24	B'
tomato	nkwi°xi ^H	^H L ^H	xi ^{HL+0}	HL + 0	mxi ²⁴	24	B'

Table 3.23 (B): Continue

Gloss	ZAC	ZAC T	SJQ	SJQ T	YAI	YAI T	SET
cow	watà ^H	L ^H	kta ^{HL+0}	HL + 0	kwta ²⁴	24	B'
person	natɛ̃ ^H	L ^H	ntɛ̃ ^{HL+0}	HL + 0	ntɛ̃ ²⁴	24	B'
will.cry	k-onà ^H	L ^H	kna ^{HL+0}	HL + 0	kwna ²⁴	24	B'
will burn (it)	k-otakì ^H	L ^H	skì ^{HL+0}	HL + 0	takì ²⁴	24	B'
night	tilà ^H	L ^H	tla ^{HL+0}	HL + 0	tla ²⁴	24	B'
will.tie.(it).up	k-osakà ^{7H}	L ^H	skaq ^{HL+0}	HL + 0	skaq ⁷²⁴	24	B'
will.run/escape	xonà ^H	L ^H	xna ^{HL+0}	HL + 0	xna ²⁴	24	B'
will.grind (it)	k-oð ^H	L ^H	ko ^{HL+0}	HL + 0	ko ²⁴	24	B'
snot of	skà ^{7H}	L ^H	skaq ^{HL+0}	HL + 0	skaq ⁷²⁴	24	B'
is.heating (it)	ntā-kátzq̃ ^H	M ^H L ^H	ntzq̃ ^{H+0}	H + 0	ntzq̃ ¹⁴	14	D
is.putting (it)	—	—	nsqwa ^{H+0}	H + 0	ns7wa ¹⁴	14	D
is.sprinkling	ntā-sánɛ̃ ^H	M ^H L ^H	nsne ^{H+0}	H + 0	nsne ¹⁴	14	D
is.licking (it)	ntā-lé7è ^H	M ^H L ^H	ntqe ^{H+0}	H + 0	ly7e ¹⁴	14	D
sugar	sòkā ^H	LM ^H	ska ^{H+0}	H + 0	ska ²³⁺⁰	23 ⁺⁰	K
mule	mòlyā ^H	LM ^H	lya ^{H+0}	H + 0	wlya ²³⁺⁰	23 ⁺⁰	K
knife	chilyō ^H	LM ^H	xlyu ^{H+0}	H + 0	xlyu ²³⁺⁰	23 ⁺⁰	K
mayor	rkālē ^H	LM ^H	jle ^{H+0}	H + 0	kle ²³⁺⁰	23 ⁺⁰	K
shawl	pànyō ^H	LM ^H	pyō ^{H+0}	H + 0	pyū ²³⁺⁰	23 ⁺⁰	K

In table 3.23 (A and B) we can see the cognates of SJQ with other varieties. There is a clear correspondence among the Eastern Chatino (EC) languages (Campbell and Woodbury 2010). Based on Table 3.23 (B) we can see that SJQ is more similar to the other Eastern Chatino varieties than it is to Zenzontepec or Tataltepec. Another thing to note is that the floating tones correspond with SJQ. Last, one interesting thing is to note that (usually with ZEN) SJQ preserves set J as distinct; it divides set A into two tones, /_/_/ and /L/; and it seems to have a unique subclass within set B—which normally is /HL+0/ when the word is a habitual or potential verb form (/ML+H/).

3.7 THE COMPLEX TONES

SJQ has a set of complex tones in first person inclusive (1PLEX) and possessed noun first person plural exclusive (N.1PLEX). Complex tones are tones that arise when a monosyllabic enclitic fuses with a stem to create a special dimoraic syllable. We find that when this happens, the enclitic still carries a tone, but the tone is altered in a way different from what we ordinarily expect in sandhi contexts. So far, the only enclitics we know are person markers: \check{V}^{+H} '1st person singular' and \check{V}^{+H} 'first person inclusive': both have tone /+H/. These markers extend the existing vowel of the base to two moras, nasalize the resulting dimoraic vowel, and in the case of the first person singular, add a final glottal stop.

With respect to tone, these constructions are interesting because the stem tone and the /+H/ tone of the enclitic combine or fuse to yield what I will call a *complex tone* that in some cases is different from the normally expected combination (with or without sandhi) of the component tones. Therefore, these special combinations need to be spelled out separately.

3.7.1 Complex Tones in 1 Person Singular

In SJQ some speakers have complex tone in first person singular possessed forms of inalienably possessed nouns, and first person singular subject forms of verbs. Mainly older speakers would use these forms; young people use the simple form (e.g., ykq^H-qq^H 'I ate' vs. ykq^H 'I ate', without the glottal stop or extra mora). Also, in first person inclusive there are complex tones in exclamation like in $naq^{LM} ykq^H-qq^H$ 'I ate it!'. The first person plural inclusive is more widespread because the pronominal enclitic from more conservative varieties, such as *nan3* 'us' in ZAC (Villard 2009) was entirely lost in SJQ, this is only marked with tone, e.g. SJQ ykq^{ML+H} 'we inclusive ate' and ZAC $yako3 nan3$ 'we ate' (Villard, 2009). For the following examples, the first person singular (1S)

is going to be the base to show complex tones. The following are examples for complex tones in 1s:

HS.C	Tone	With $\check{V}q^{+H}$	Phonemic T	Phonetic T	Gloss
<i>ykq</i>	/H/	<i>ykq^H-qq^H</i>	/H-H/	[H-H]	'I ate'
<i>ytsaq</i>	/H/	<i>ytsaq^H-qq^H</i>	/H-H/	[H-H]	'I told'
<i>ndyq</i>	/MH/	<i>ndyq^M-qq^{+H}</i>	/M-+H/	[M-H]	'I returned'
<i>ntqq</i>	/ML+H/	<i>ntqq^{ML}</i>	/HL+0/	[HL]	'I saw'
<i>yqq</i>	/+H/	<i>yqq^H-qq^{+H}</i>	/H-+H/	[H-H]	'to pilled'
<i>stq</i>	/_/	<i>stq^{ML}-qq^{+H}</i>	/ML-+H/	[ML-MH]	'to cut'
<i>slq</i>	/_/	<i>slq^{ML}-qq^{+H}</i>	/ML-+H/	[ML-MH]	'to open'
<i>xyq</i>	/M0/	<i>xyq^{M0}-qq^{+H}</i>	/M0-+H/	[0-H]	'to put'
<i>ndiyq</i>	/M0/	<i>ndiyq⁰-qq^{+H}</i>	/M0-+H/	[0-H]	'to arrive'
<i>yq</i>	/L+0/	<i>yq^{L+0}-qq^{L+0}</i>	/L+0-L+0/	[L0-L0]	'to grind'
<i>nkjq</i>	/L+0/	<i>nkjq^{L+0}-iq^{L+0}</i>	/L+0-L+0/	[L0-L0]	'to cook'
<i>nlq</i>	/L+0/	<i>nlq^{L+0}-qq^{L+0}</i>	/L+0-L+0/	[L0-L]	'to take out'

Also notice that the $\check{V}q$ form is always based on the tone of the corresponding simple 1S form, not the 3S form. e.g. *yq^H-qq^H* 'I ground', not **yq^M-qq^H*, because it comes from *yq^H* 'I ground'.

We now turn to the 1S person plural inclusive, after which we will formulate general rules for the tone changes just observed.

3.7.2 Complex Tones in First Person Inclusive

The agreement marker for 1PLIN in SJQ is marked with tone. The tone depends on the 3s of whatever the aspect is of the 1PLIN verb. The 1PLIN has a nasalization feature. The following are examples for completive forms of complex tones. The inalienably possessed nouns also have complex tones but that is going to be discussed in Chapter 6. Here are some examples:

<i>skq^M-q^H</i>	'our arm'
<i>ki^{LM}-i^{+H}</i>	'our head'
<i>sq^H-q^H</i>	'our lover'

$sq\acute{e}^M-q^H$ ‘our excrement’
 $snq-q^{ML}$ ‘our sandals’

Note that in these examples the majority of the tones have an extra long vowel, except that first person inclusive forms based on tones /H+0/, /HL+0/, and /ML+H/ do not have a long vowel, although they do have nasalization.

Table 3.24: Complex Tones

Verb stem	Phonemic Tone	With \check{V}^{+H}	Phonemic Tone	Phonetic Tone	Gloss
<i>sla</i>	/H/	slq^H-q^H	/H-H/	[H-H]	‘opened’
<i>yo</i>	/M/	yq^M-q^H	/M-H/	[M-H]	‘ground’
<i>nkeq</i>	/M/	$nk\acute{e}^M-iq^{L+0}$	/M-H/	[M-H]	‘cooked’
<i>yku</i>	/_/	$ykq^{ML}-q^{+H}$	/ML-LM/	[ML-LM]	‘we ate’
<i>xtya</i>	/M0/	$xtya^0-q^{+H}$	/0-+H/	[0-H]	‘to put’
<i>nd'yq</i>	/+H/	$ndiyq^H-q^H$	/H-H/	[H-H]	‘to arrive’
<i>stq</i>	/LM/	$stq^{LM}-q^{+H}$	/LM-+H/	[LM-MH]	‘to cut’
<i>nlo</i>	/ML+H/	nlq^{HL+0}	/HL+0/	[HL]	‘to take out’
<i>nlya</i>	/HL+0/	$nlyq^{HL+0}$	/HL+0/	[HL]	‘to pilled’
<i>nya</i>	/H+0/	nyq^{H+0}	/H+0/	[H]	‘making’
<i>sla</i>	/H/	slq^H-q^H	/H-H/	[H-H]	‘opened’
<i>yo</i>	/M/	yq^M-q^H	/M-H/	[M-H]	‘ground’

In the above data, the following tone changes were found in complex tones:

- Tone base /H/ changes to H+H in 1PLIN.C and has an extra mora.
- Tone base /M/ and MH changes to tone /M/+H/ and has an extra mora. Tone base /_/ falls and rises /ML/+M/ and has a long vowel.
- Tone base /M0/ changes to floating tone /0/+M/ and falls to mid tone and an extra mora
- Tone base /+H/ rises to tone /H/ and has an extra mora.
- Tone base /LM/ rises and changes to /LM/+M/.
- Tone base /ML/ and /HL+0/ changes to /HL+0/ and has no extra mora.

- Tone /H+0/ rises to even higher tone.

Some speculation about complex tones leads us to the following. The clitic's underlying tone is /+H/. It mostly surfaces as +H or as H; it preempts all subsequent sandhi; it fails to occur on HL+0, ML+H, and H+0 and this is probably because they already have floating tones and strong L that it turns into +H. As a speculation I think that the clitic tone +H comes from a tone L.

3.8 CONCLUSION

In this chapter I have described the 14 lexical tones of SJQ Chatino. These include level, rising and falling tones, as well as floating tones. I will continue working on some of these topics involving pauses and sandhi, and whether speakers take the sandhi of another speaker in natural conversation. The following chapter provides a description of the 'lexical characteristics of tones'.

Chapter 4

Tone In The Lexicon

This chapter is about tones in the lexicon, including single stem words and compounds. In chapter 3, we saw that SJQ has 14 lexical tones in connected speech, while there are only 11 contrasts in isolation. To continue with the tone discussion, in this chapter I lay out the use of tones in different parts of speech and some of their sub-classes. Each part of speech has interesting tone information, since some tones appear in one part of speech and some do not appear. This striking inequality of distribution of tones across the parts of speech is one of the typological hallmarks of Chatino tone. In addition, here we are going to see in detail how sandhi works in compound words.

The following is the inventory of the total tones in SJQ which will be discussed in relation to the different parts of speech.

Table 4.1: The Lexical Tones of SJQ Chatino

	Phonemic	Phonetic
Level	/H/	[H]
	/H+0/	[H]
	/M/	[M]
	/_ /	[L]
	/L/	[L]
Rising	/M0/	[M0]
	/MH/	[M^]
	/+H/	[MH]
	/LM/	[LM]
	/L+0/	[L0]
Falling	/0L+0/	[0L]
	/HL+0/	[HL]
	/ML/	[ML]
	/ML+H/	[ML]

4.1 NOUNS

There two types of lexical nouns, alienable and inalienable. These categories are named for the kind of possession they take. Alienable nouns have a possessive marker *qi* ‘of...’ that associates with the possessor, while inalienable nouns are inflected directly for the person and number of the possessor.

In this chapter alienable nouns will be described in more detail. The tones of the stems of inalienable nouns will be discussed here as well, but the tone changes introduced by their inflection will be analyzed in Chapter 5. This section (4.1) is divided into two semantic categories: First I discuss alienable nouns, and then I go into inalienable, where only the third person basic forms will be discussed.

4.1.1 Alienable Non-compound Nouns

Human nouns include names of people, e.g. *ke*^{MO} ‘Michael’, *Lwi*^{MO} ‘Luis’; nouns that refer to people and types of humans, e.g. *no-qa*^H ‘woman’, *no-kiqyu*^H ‘man’; and animal names, e.g. *xtyq*^{MO} ‘cat’, *kwnyi*^M ‘bird’. Alienable noun constructions have a structure in which the possessed element appears before the possessor; furthermore, the construction has the marker *qi* ‘of..; of him/her; his/her’. Note that some personal objects and human terms are coded with alienable possession; however, a few nouns that refer to an exterior body part or to bodily excretions enter into this construction type, e.g. *ksya*^{H+0} *qi* ‘his heart’, *lu*^L *qi* ‘his liver’. A few kinship terms can be alienable, e.g. *tyi*^{MO} *qi* ‘his/her father’, *ma*^{MO}-*steq* *qi* ‘his/her grandmother’. Below are examples of alienable non-compound noun constructions:

- a. *ka*^{H+0} *qi* *no-kiqyu*^H *kwa*^{MH}
 cow of.3S man that
 ‘The man’s cow’

- b. *skwa^H qi nten^{HL+0} kwa^{MH}*
 food of.3S people those
 ‘Those people’s food’

The following are some examples of alienable nouns illustrating all the possible tones. Tones /0L+0/, /ML/, /ML+H/ and /L+0/ are not found in nouns.

The words that have tones H+0 and some HL from Table 4.2 are loan words from Spanish.

Table 4.2: Analienable Non-compound Nouns

Isolation	Ali T	FW	FW T	Gloss
<i>nkq</i>	/H/	<i>qi</i>	[ML]	‘her/his coconut’
<i>nte</i>	/H/	<i>qi</i>	[ML]	‘her/his mosquito’
<i>kna</i>	/M/	<i>qi</i>	[ML]	‘her/his snake’
<i>kta</i>	/M/	<i>qi</i>	[H]	‘her/his flour’
<i>ke</i>	/M/	<i>qi</i>	[H]	‘her/his flower’
<i>qo</i>	/M/	<i>qi</i>	[H]	‘her/his sacred thing’
<i>kna</i>	/M/	<i>qi</i>	[H]	‘her/his thief’
<i>tyu</i>	/MH/	<i>qi</i>	[ML]	‘her/his brick’
<i>kta</i>	/MH/	<i>qi</i>	[ML]	‘her/his chepil (herb)’
<i>na</i>	/MH/	<i>qi</i>	[ML]	‘her/his thing’
<i>nda</i>	/L/	<i>qi</i>	[L]	‘her/his bean’
<i>qo</i>	/_/	<i>qi</i>	[L]	‘her/his spouse’
<i>kta</i>	/L/	<i>qi</i>	[L]	‘her/his tobacco’
<i>yja</i>	/_/	<i>qi</i>	[L]	‘her/his tortilla’
<i>ksi</i>	/H+0/	<i>qi</i>	[0]	‘her/his cross’
<i>styq</i>	/H+0/	<i>qi</i>	[0]	‘her/his dove’
<i>lya</i>	/H+0/	<i>qi</i>	[0]	‘her/his mule’
<i>sna</i>	/H+0/	<i>qi</i>	[0]	‘her/his apple’
<i>qwa</i>	/HL+0/	<i>qi</i>	[0]	‘her/his banana’
<i>ntswę</i>	/HL+0/	<i>qi</i>	[0]	‘her/his orange’
<i>xi</i>	/HL+0/	<i>qi</i>	[0]	‘her/his tomato’
<i>nkq</i>	/HL+0/	<i>qi</i>	[0]	‘her/his turtle’
<i>xtyq</i>	/M0/	<i>qi</i>	[ML]	‘her/his cat’
<i>kweq</i>	/M0/	<i>qi</i>	[ML]	‘her/his crab’

Table 4.2: Continue

Isolation	Ali T	FW	FW T	Gloss
<i>pi</i>	/M0/	<i>qi</i>	[ML]	‘her/his turkey’
<i>sa</i>	/M0/	<i>qi</i>	[ML]	‘her/his weevil’
<i>stq</i>	/MH/	<i>qi</i>	[ML]	‘her/his grapefruit’
<i>t'yu</i>	/MH/	<i>qi</i>	[ML]	‘her/his hole’
<i>sqe</i>	/MH/	<i>qi</i>	[L]	‘her/his scorpion’
<i>kwtyeq</i>	/LM/	<i>qi</i>	[L]	‘her/his ant’
<i>ktu</i>	/LM/	<i>qi</i>	[L]	‘her/his hen’
<i>kq</i>	/LM/	<i>qi</i>	[L]	‘her/his tuber’

4.1.2 Alienable Compound Words

The tones in noun compounds in SJQ are transparent. The alienable compounds behave with normal sandhi rules (rules that we saw in chapter 3). There are a few cases where it is difficult to know the origin of one of the words in the compound and here is where it becomes difficult to predict the underlying form of the tone. In the following examples, sometimes the segments or the tones or both are altered in the context of compounds. In writing we assume all the regular sandhi rules apply, but in the cases where the tones have been altered, the alteration is applied to the underlying form: e.g. *tiyeq^{LM}* comes out as *tiyeq^{H+0}* in ‘lemon’ (example 5). The distributions of tones in compounds are as follows:

Table 4.3: Alienable Compound Nouns

	Compounds	Phonemic	stem glosses	gloss
1	<i>kwna-kwno</i>	/H-H/	snake-?	‘type of worm’
2	<i>nkaq'ta'tyku</i>	/_ _ -H/	leave-grown-river	‘type of plant’
3	<i>ja-xlya</i>	/_ -H+0/	tortilla-Castilian	‘bread’
4	<i>qq-xla</i>	/L-H+0/	house-Castilian	‘school’
5	<i>su-tiyeq</i>	/L-H+0/	?-sour	‘lemon’
6	<i>knoq-nla-yaq</i>	/M-H0-M/	worm-open-hand of	‘centipedes’
7	<i>ka-kia-ki</i>	/MH-M-M/	chepil-hills-bamboo	‘type of plant’

Table 4.3: Continue

	Compounds	Phonemic	stem glosses	gloss
8	<i>neq-kla</i>	/_ _/	person-old	‘old person’
9	<i>chaq-tnya</i>	/MH-_/	word-work	‘Chatino’
10	<i>nkq-ke</i>	/HL+0-_/	turtle-flower?	‘type of turtle’
11	<i>nkq-xu</i>	/HL+0-_/	turtle-?	‘type of turtle’
12	<i>nkq-si</i>	/HL+0-_/	turtle-sand?	‘ocean turtle’
13	<i>ntswę-xi</i>	/HL+0-_/	orange-sweet	‘orange’
14	<i>kna-styiq</i>	/H-L/	snake-milk	‘type of snake’
15	<i>tu-ke</i>	/M-L/	hole-rock	‘cave’
16	<i>neq-skq</i>	/_ -L/	person-corner	‘ <i>topil</i> ’
17	<i>tyqa-sneq</i>	/L-L/	water-sticky	‘saliva’
18	<i>pi-kteq</i>	/M0-L/	turkey-?	‘male turkey’
19	<i>qne-joq</i>	/_ -M0/	animal-?	‘awl’
20	<i>neq-pi</i>	/_ -M0/	people-turkey	‘Europeans’
21	<i>tqwa-tqq</i>	/L-M0/	mouth-?	‘border’
22	<i>ksiq-lwa</i>	/MH-M0/	iguana-?	‘iguana’
23	<i>ja-ktq</i>	/_ -+H/	tortilla-pot	‘tamale’
24	<i>yka-skq</i>	/_ -+H/	wood-corner	‘cane’
25	<i>qq-kiq</i>	/L-+H/	house-fire	‘kitchen’
26	<i>qq-tykwq</i>	/L-MH/	house-iron	‘jail’
27	<i>ti-kna</i>	/MH-MH/	rope-?	‘rope’
28	<i>ti-kchqq</i>	/L-LM/	thin-hair	‘blanket’

Based on Table 4.3 there are a few cases where the tone of a word in a compound is different than its tone in independent contexts. In some cases, this reflects differences in the expected sandhi changes (or, in historical perspective, relics of earlier sandhi processes):

- Example 8. Does not followed the common sandhi that mentioned in Chapter 3 (usually tone /_ / changes to /ML/ when is after /_ /)
- Example 9. Normal sandhi (usually tone /_ / becomes /ML/ when is after a /MH/)
- Example 10, 11 and 12 0 is aligned-cannot tell what is underneath
- Example 13 *xi*^l ‘sweet’ changes to *xi*

- Example 16 *skq* ‘*topil*’ → *skq*^L
- Example 17 No old sandhi rule and t must be laminal
- Example 23, 24 and 25 does not followed the common sandhi that mentioned in Chapter 3 (usually tone /_/_/ changes to /ML/ when is after /_/_/)

Based on Table 4.3 I made the following observations. Table 4.4 shows the tones that are found in the first word and the second word of some compounds.

Table 4.4: Tones in First and Second Word in an Alienable Compound

Tone	First word	Second word
/H/	√	√
/H+0/	—	√
/M/	√	√
/_/_/	√	√
/L/	√	√
/M0/	√	√
/+H/	--	√
/MH/	√	√
/LM/	—	√
/L+0/	—	—
/0L+0/	—	—
/HL+0/	√	—
/ML+H/	—	—
/ML/	—	—

Based on Table 4.4 in these examples tone /H+0/, /+H/ and /LM/ was not found as word initial in compounds; they were only found in the second part of the compound. Tone /HL+0/ was only found in the first word of a compound.

In the compound word *chaq*^{MH}-*tnya* ‘Chatino language’ (example 9 of table 4.3), whose phonetic tones are [M^[^]- ML], following the expected sandhi rules, it is possible that the first word triggers sandhi changes on the second word if the second word were of tone category /_/_/, but the problem here is that I am not sure what the second word in the

compound means. Accordingly, it is hard to predict if this is a true sandhi process, or perhaps some very rare instance of tone /ML/ occurring on a part of a compound noun.

Further research needs to be done in compounds that contain animals, places and plant names. I found that many of these words would probably offer additional sandhi processes that I was not able to show with the common words in SJQ.

4.1.3 Inalienably Possessed Nouns

In an inalienably possessed construction, the possessed noun is inflected for the person and the number of the possessor. In chapter 5 we are going to see the full description of the tone changes in inalienable nouns when they are inflected for 2s and 1s pronominal possessors. In the examples in Table 4.5 the third person form is used, which reflects the form of the basic word itself. Some examples (a full list is in chapter 5) of tone distribution in inalienably possessed non-compound nouns are as follows:

Table 4.5: Inalienably Possessed Nouns

Nouns	Tones	Gloss
<i>su</i>	/_/_/	‘beard of’
<i>swe</i>	/_/_/	‘vagina of’
<i>styiq</i>	/_/_/	‘milk of’
<i>ske</i>	/_/_/	‘vagina of’
<i>yq̣</i>	/H/	‘mother of’
<i>xqna</i>	/H/	‘boss of’
<i>skq̣</i>	/HL+0/	‘mucus of’
<i>chq̣</i>	/LM/	‘back of’
<i>yqwe</i>	/LM/	‘wing of’
<i>yaq</i>	/M/	‘hand of’
<i>skq</i>	/M/	‘arm of’
<i>tyqi</i>	/M/	‘odor of’
<i>xtyiq</i>	/MH/	‘knee of’
<i>chaq</i>	/MH/	‘word of’
<i>snyiq</i>	/_/_/	‘children of’
<i>chq̣</i>	/LM/	‘behind of’

It is interesting that inalienable nouns are found only with the following tones in the base form 3 person singular: /_/, /H/, /HL+0/, /LM/, /M/ and /MH/. Therefore, all phonetically low tone words in this category are /__/ and not /L/.

4.1.4 Inalienable Compound Nouns

Inalienable compound words are very widespread in SJQ. The following list shows the tone environment where these words are found. The distribution of tones in compounds is as follows:

Table 4.6: Inalienable Compounds

	Noun	Tone	Gloss
1	<i>ktyi-kwe</i>	/M-_/	'photo of'
2	<i>knaq-ktyiq-kyaq</i>	/H-M-_/	'calf (leg) of'
3	<i>tu-kyaq</i>	/MH-_/	'instep of'
4	<i>sluq-kyaq</i>	/L-_/	'knuckles of'
5	<i>tykwe-kyaq</i>	/L-_/	'ankle of'
6	<i>chqk-kyaq</i>	/LM-_/	'instep of'
7	<i>swe-kyaq</i>	/LM-_/	'heel of'
8	<i>tyjya-nte-kyaq</i>	/LM-_-_/	'shin of'
9	<i>yne-kyaq</i>	/LM-_/	'ankle of'
10	<i>teq-wi-lo</i>	/_-H0-_/	'apron of'
11	<i>ke-lqya</i>	/L-_/	'tooth of'
12	<i>ke-ndikq</i>	/LM-_/	'testicles of'
13	<i>tqa-sti</i>	/LM-_/	'uncle of'
14	<i>je-swe</i>	/LM-_/	scrotum of'
15	<i>tqwa-tykq</i>	/L-_/	'forehead of'
16	<i>kji-xkq</i>	/L-_/	'ear of'
17	<i>tye-kyaq</i>	/+H-_/	'foot arch
18	<i>tyqa-jwtq</i>	/L-+H/	'sweat of'
19	<i>kwtseq-tlo</i>	/_-H/	' <i>chinguiña</i>
20	<i>tyqa-xiq-tlo</i>	/L-H0-H/	'tears of'
21	<i>sqyu-tlo</i>	/M-H/	'eye (eye ball) of'
22	<i>tyqa-xeq</i>	/L-HL+0/	'urine of'
23	<i>yka-nda</i>	/L-L/	'upper leg of'
24	<i>tyqa-sneq</i>	/L-L/	'saliva of'
25	<i>tu-tqwa</i>	/MH-L/	'mouth of'
26	<i>ntqq-tyi</i>	/L-L/	'house of'

Table 4.6: Continue

	Noun	Tone	Gloss
27	<i>xi-tyi</i>	/L-L/	‘town of’
28	<i>tyqa-yeq</i>	/L-L/	‘drool of’
29	<i>knaq-skq</i>	/H-LM/	‘cheek of’
30	<i>tu-yne</i>	/MH-LM/	‘throat of’
31	<i>sti-lya</i>	/_-M/	‘father-in-law of’
32	<i>tyjq-skq</i>	/LM-M/	‘shoulder (arm bone) of’
33	<i>tu-sq</i>	/MH-M/	‘bum of’
34	<i>tu-xqi</i>	/MH-M/	‘guts of’
35	<i>li-yaq</i>	/L-M/	‘lower arm of’
36	<i>skuq-yaq</i>	/L-M/	‘elbow of’
37	<i>sluq-yaq</i>	/L-M/	‘knuckle (fingers) of’
38	<i>xnyi-yaq</i>	/L-M/	‘fingers of’
39	<i>xta-yaq</i>	/L-M/	‘lines of hand of’
40	<i>yne-yaq</i>	/LM-M/	‘wrist of’
41	<i>tu-yaq</i>	/MH-M/	‘palm hand of’
42	<i>syu-snyaq</i>	/M-MH/	‘testicles of’
43	<i>tqwa-kji-xqnya</i>	/L-L-MH/	‘lip of’
44	<i>ke-xtyiq</i>	/LM-MH/	‘kneecap of’

Based on Table 4.3 I made the following observations:

- In example 3 /MH/ can sound like /M/; but sandhi suggests it's /MH/, /_-/ changes to /ML/ after a /MH/
- In example 18 t is laminal
- In examples 23, 24, 27 and 28 the second word normally should change to /+H/, but it is not in these examples.
- In examples 25, 30, 33, 34 and 41 /MH/ does not sound like /M/
- In example 43 *kji^l* inferred from other uses

Table 4.7 shows the tones that are found in the first word and the second word of a compound.

Table 4.7: Tones in First and Second Word in an Inalienable Compound

Tone	First word	Second word
/H/	√	√
/H+0/	—	—
/M/	√	√
/_/	√	√
/L/	√	√
/M0/	—	—
/+H/	√	√
/MH/	√	√
/LM/	√	√
/L+0/	—	—
/OL+0/	—	—
/HL+0/	—	√
/ML+H/	—	—
/ML/	—	—

Tones that are found in the first part of a compound are: /H/, /M/, /_/ , /L/, /+H/, /MH/, /LM/. The tones found in the second word of a compound are just like the first words, but there is one word with /HL+0/. Table 4.8 shows the possible tones in alienable and inalienable non-compound words.

Table 4.8: Tones Found in Non-compound Nouns

Tones	Alienable N	Inalienable N
/H/	√	√
/H+0/	√	—
/M/	√	√
/_/	√	√
/L/	√	—
/M0/	√	—
/+H/	√	—
/MH/	√	√
/LM/	√	√
/L+0/	—	—
/OL+0/	—	—
/HL+0/	√	√
/ML+H/	—	—

Table 4.8: Continue

Tones	Alienable N	Inalienable N
/ML/	—	—

Based on Table 4.8, the tones that are not found in alienable possessions are: L+0, 0L+0 and /ML/. The tones not found in inalienable words are: /H+0/, /L/, /M0/, /+H/, /L+0/, /0L+0/, /ML/.

4.2 PRONOUNS

Pronouns in SJQ Chatino specify person and number, but they do not specify gender. There are two types of personal pronouns in SJQ, following what Rasch (2002) found in YAI Chatino. They are: 1) independent pronouns that can appear at the beginning of a sentence, and 2) clitics that can occur following the word or phrase and free forms corresponding to the clitics. The following section illustrates how tone functions in the independent pronouns, and in the simple syllabic clitics, the combining forms of the pronouns.

Table 4.9: Clitics and Pronouns (= marks a clitic boundary)

	Independent Pronouns	Clitics
Pronouns:		
3rd inanimate	ra ^{MH}	∅; =ra ^{MH}
3rd person indefinite human	reɕ	∅; =reɕ
3rd person definite human	∅	∅; =yu (“he”)
2S person	qwe	= [Tone]
1S person	naq ^{LM}	= [+Nasal] + [tone]; = ɿVq ^{+H}
1PL person inclusive	na ^L	= ɿV ^{+H}
1PL person exclusive	wa ^{LM} -re ^M	= wa ^{LM}
2PL person	qwa	= wa

4.2.1 Tones in Pronouns

I will not discuss here the tonal changes that form the singular second and first persons—these will be discussed in Ch. 5 as inflection. Nor will I discuss here the special vowel-initial first person clitics: they were already discussed in Ch. 3 in the context of complex tones. Here I will only concentrate on clitics that constitute full syllables. Table 4.10 shows the tones with these clitics. Most of what we see is not surprising. The sandhi process is just like any other word in SJQ Chatino. However, there is one anomaly: tone /MH/-which normally never changes- receives a floating tone when the following tones precede: /H+0/ and /HL+0/. Because this is an anomaly, we will consider this a phonemic change in the /MH/ tone word, and represent its tone as /0/. The following table illustrates how tone functions in each of the clitics in SJQ.

Table 4.10: Full-syllable Clitics and Tones as Markers of Subject Person and Number

Person	Verb	Phonemic	Clitic	Phonemic	Phonetic, after sandhi	Gloss
1PLEX	yta	/_/_	wa ^{LM}	/LM/	[LM]	‘we bathe’
2PL	yta	/_/_	wq	/_/_	[L]	‘you (PL) bathe’
3PL	yta	/_/_	rɛq	/_/_	[L]	‘They bathe’
3S	yta	/_/_	yu	/_/_	[L]	‘he bathes’
INAN	yta	/_/_	rɛ ^{MH}	/MH/	[M^]	‘bathes it’
1PLEX	ntkwa ^{H+0}	/H+0/	wa ^{LM}	/LM/	[LM]	‘we are counting’
2PL	ntkwa ^{H+0}	/H+0/	wq	/_/_	[0]	‘you (PL) are counting’
3PL	ntkwa ^{H+0}	/H+0/	rɛq	/_/_	[0]	‘they are counting’
3S	ntkwa ^{H+0}	/H+0/	yu	/_/_	[0]	‘he is counting’
INAN	ntkwa ^{H+0}	/H+0/	rɛ ⁰	/0/	[0]	‘is counting it’
1PLEX	sqi ^M	/M/	wa ^{LM}	/LM/	[LM]	‘we bought’
2PL	sqi ^M	/M/	wq	/_/_	[H]	‘you (PL) bought’
3PL	sqi ^M	/M/	rɛq	/_/_	[H]	‘they bought’
3S	sqi ^M	/M/	yu	/_/_	[H]	‘he bought’
INAN	sqi ^M	/M/	rɛ ^{MH}	/MH/	[M^]	‘bought it’

Table 4.10: Continue

Person	Verb	Phonemic	Clitic	Phonemic	Phonetic, after sandhi	Gloss
1PLEX	nxqi ^{HL+0}	/HL+0/	wa ^{LM}	/LM/	[LM]	‘we buy’
2PL	nxqi ^{HL+0}	/HL+0/	wq	/_/	[0]	‘you (PL) buy’
3PL	nxqi ^{HL+0}	/HL+0/	reŋ	/_/	[0]	‘they buy’
3S	nxqi ^{HL+0}	/HL+0/	yu	/_/	[0]	‘he buys’
INAN	nxqi ^{HL+0}	/HL+0/	ra ⁰	/0/	[0]	‘buys it’
1PLEX	na ^H	/H/	wa ^{LM}	/LM/	[LM]	‘we are looking’
2PL	na ^H	/H/	wq	/_/	[ML]	‘you (PL) are looking’
3PL	na ^H	/H/	reŋ	/_/	[ML]	‘they are looking’
3S	na ^H	/H/	yu	/_/	[ML]	‘he is looking’
INAN	na ^H	/H/	ra ^{MH}	/MH/	[M^]	‘looking for it’
1PLEX	na ^{M0}	/M0/	wa ^{LM}	/LM/	[LM]	‘we look
2PL	na ^{M0}	/M0/	wq	/_/	[ML]	‘you (PL) look
3PL	na ^{M0}	/M0/	reŋ	/_/	[ML]	‘they look
3S	na ^{M0}	/M0/	yu	/_/	[ML]	‘he looks
INAN	na ^{M0}	/M0/	ra ^{MH}	/MH/	[M^]	‘looks for it
1PLEX	ytsaq ^{MH}	/MH/	wa ^{LM}	/LM/	[LM]	‘we told’
2PL	ytsaq ^{MH}	/MH/	wq	/_/	[ML]	‘you (PL) told’
3PL	ytsaq ^{MH}	/MH/	reŋ	/_/	[ML]	‘they told’
3S	ytsaq ^{MH}	/MH/	yu	/_/	[ML]	‘he told’
INAN	ytsaq ^{MH}	/MH/	ra ^{MH}	/MH/	[M^]	‘told it’
1PLEX	yjwi ^{LM}	/LM/	wa ^{LM}	/LM/	[LM]	‘we hit
2PL	yjwi ^{LM}	/LM/	wq	/_/	[L]	‘you (PL) hit’
3PL	yjwi ^{LM}	/LM/	reŋ	/_/	[L]	‘they hit’
3S	yjwi ^{LM}	/LM/	yu	/_/	[L]	‘he hit’
INAN	yjwi ^{LM}	/LM/	ra ^{MH}	/MH/	[M^]	‘hits it’
1PLEX	kjwi ^{ML}	/ML+H/	wa ^{LM}	/LM/	[LM]	‘we will hit’
2PL	kjwi ^{ML}	/ML+H/	wq	/_/	[MH]	‘you (PL) will hit’
3PL	kjwi ^{ML}	/ML+H/	reŋ	/_/	[MH]	‘they will hit’
3S	kjwi ^{ML}	/ML+H/	yu	/_/	[MH]	‘he will hit’
INAN	kjwi ^{ML}	/ML+H/	ra ^{MH}	/MH/	[M^]	‘will hit it’

Table 4.10: Continue

Person	Verb	Phonemic	Clitic	Phonemic	Phonetic, after sandhi	Gloss
1PLEX	ntjwi ^{+H}	/+H/	wa ^{LM}	/LM/	[LM]	‘we are hitting’
2PL	ntjwi ^{+H}	/+H/	wə	/_/	[L]	‘you (PL) are hitting’
3PL	ntjwi ^{+H}	/+H/	rɛq	/_/	[L]	‘they are hitting’
3S	ntjwi ^{+H}	/+H/	yu	/_/	[L]	‘he is hitting’
INAN	ntjwi ^{+H}	/+H/	rə ^{MH}	/MH/	[M^]	‘is hitting it’

Based on Table 4.10, we can see that the tone of the verb affects the tone of the clitics.

Table 4.11: Clitic Tones

Tones	wa ^{LM}	wə	rɛq	yu	rə ^{MH}
0		√	√	√	√
/H/	—	√	√	√	—
/H+0/	—	—	—	—	—
/M/	—	—	—	—	—
/_/	—	√	√	√	—
/L/	—	—	—	—	—
/M0/	—	—	—	—	—
/+H/	—	√	√	√	√
/MH/	—	—	—	—	—
/LM/	√	—	—	—	—
/L+0/	—	—	—	—	—
/0L+0/	—	—	—	—	—
/HL+0/	—	—	—	—	—
/ML+H/	—	—	—	—	—
/ML/	—	√	√	√	—

The majority of the tones that are found in the independent clitics have tone /_/ and these tones change depending on the tone that precedes it, in the normal way. Tone for first person plural exclusive wa^{LM} is /LM/ and this tone does not undergo any sandhi effects from the previous word. The sole true anomaly is the third person inanimate clitic

ra^{MH} , which is expected to be invariant, but which does take the floating tone of tones /HL+0/ and /H+0/. For that reason, I represent it as ra^0 with tone /0/, only when preceded by those two tones. This is a solution very similar to the English orthographic solution to the variation in the phonemic spelling of the English indefinite article $a \sim an$ depending on external sandhi conditions, e.g., a pear but an apple.

4.3 DEMONSTRATIVES

There are four demonstrative pronouns (see Table 4.11) that are usually mentioned in Eastern Chatino (Rasch 2002; Pride and Pride 2004). In SJQ these demonstratives are also used as deictic determiners to show spatial reference in relation to the speaker and the receiver, e.g. kwa^H/kwa^{ML} near the addressee listener and the speaker, kwa^{MH} far from speaker and listener (see Table 4.12).

These demonstratives can function as deictic determiners, locative expressions, and demonstratives; and they are very common in traditional stories. The demonstratives can appear with the nominalizer no ‘who’ and ri^{M0} ‘demonstrative’. The following examples show the use of demonstratives with no .

Table 4.12: Demonstrative Pronouns/adjectives

	Meaning	DEM PRO/ADJ	DEM ADV
a	at speaker	nde^M/re^M	nde^M/re^M
b	at addressee	kwa^{MH}	kwa^{MH}
c	close to addressee	kwa^H/kwa^{ML}	kwa^H/kwa^{ML}
d	absent	kq^L/jq^L	kq^L/jq^L
e	further absent	kq^{M0}	kq^{M0}/jq^{M0}

In examples ‘a’ and ‘b’ the demonstratives have the same tone but different segments. In example ‘c’ we see the same segment and different tones, however this is only an alternation, speakers can use either one. Example ‘e’, which has the same

segments as ‘d’ but a different tone, is found when speakers refer to distant past. The following table shows the tones that were found in demonstratives.

Table 4.13: Tones in Demonstratives

Phonemic	Demonstratives T
/H/	√
/H+0/	—
/M/	√
/_/_/	—

Table 4.13: Continue

Phonemic	Demonstratives T
/L/	—
/M0/	√
/+H/	—
/MH/	√
/LM/	√
/L+0/	—
/0L+0/	—
/HL+0/	—
/ML+H/	—
/ML/	√

The tones that are not found are: /H+0/, /L/, /_/_/, /+H/, /L+0/, /0L+0/, /HL+0/ and /ML+H/.

4.4 ADJECTIVES

The adjectives modify nouns in SJQ; they also can function as predicates, with or—just in the progressive aspect—without a copula. When they function as predicates with no copula, they directly receive person inflection. These inflectional changes will be handled in Ch. 5. In this section I will show the marking of tone in adjectives. In Chapter 3, I showed adjectives in a sandhi context when following nouns. In this section, I will

show the tones found in single stem adjectives and compounds involving adjectives. The examples in the following table are examples of non-compound adjectives.

Table 4.14: Non-compound Adjectives

Adjective	Tone	Gloss
<i>tji</i>	/_/_/	‘new’
<i>tkwe</i>	/_/_/	‘tall’
<i>tno</i>	/_/_/	‘big’
<i>xwe</i>	/L/	‘wide’
<i>ti</i>	/L/	‘thin’
<i>tji</i>	/_/_/	‘stingy’
<i>wxi</i>	/H/	‘mean’
<i>tkwi</i>	/H/	‘difficult’
<i>qnya</i>	/H/	‘fancy’
<i>kyqyu</i>	/H/	‘macho’
<i>nta</i>	/H/	‘smashed’
<i>ko</i>	/H/	‘huge’
<i>nkqa</i>	/H/	‘red’
<i>ntkq</i>	/H/	‘ambitious’
<i>xqq</i>	/H+0/	‘mean’
<i>kche</i>	/M0/	‘messy hair’
<i>tjyq</i>	/M0/	‘skinny’
<i>knyaq</i>	/M0/	‘black person’
<i>lyuq</i>	/M0/	‘small (person)’
<i>kcheq</i>	/M0/	‘small (things)’
<i>jwa</i>	/M0/	‘long’
<i>qu</i>	/HL+0/	‘alive’
<i>nta</i>	/HL+0/	‘brown person’
<i>kwi</i>	/HL+0/	‘new (just open)’
<i>ksq</i>	/HL+0/	‘old things’
<i>kwsq</i>	/HL+0/	‘got old’
<i>tnyaq</i>	/L/	‘tired’
<i>liye</i>	/LM/	‘healthy’
<i>kwla</i>	/LM/	‘old person’
<i>nkqa</i>	/LM/	‘green’
<i>tlyu</i>	/M/	‘big’
<i>nktsi</i>	/M/	‘yellow’
<i>kqwi</i>	/MH/	‘drunk’
<i>kyiq</i>	/MH/	‘blind’

Table 4.14: Continue

Adjective	Tone	Gloss
<i>k̄ti</i>	/MH/	‘delicate’
<i>sq̄we</i>	/MH/	‘good’
<i>nt̄eq</i>	/MH/	‘flat’
<i>nt̄ē</i>	/MH/	‘white’
<i>k̄wa</i>	/MH/	‘purple’
<i>nt̄a</i>	/MH/	‘black (thing)’
<i>ntyq̄ya</i>	/ML/	‘cute’
<i>ntyq̄ya</i>	/ML/	‘bonito’

In the examples of Table 4.14 we do not find any adjectives with the tones: /L+0/, /0L+0/, /ML+H/ and /+H/ (see Table 4.15).

Table 4.15: Tones Found in Adjectives

/H/	√
/H+0/	√
/M/	√
/_/	√
/L/	√
/M0/	√
/+H/	—
/MH/	√
/LM/	√
/L+0/	—
/0L+0/	—
/HL+0/	√
/ML+H/	—
/ML/	√

4.4.1 Compound Adjectives with *tiq^M/riq^M*

The word *tiq^M/riq^M* ‘essense’ as expected, does not get affected by the preceding word, with one exception. The only tone that causes *tiq^M/riq^M* to change is tone /HL/. The following table shows examples with *tiq^M/riq^M*.

Table 4.16: Compound Adjectives with *tiq^M/riq^M*

ADJ+ <i>tiq^M/riq^M</i>	Phonemic	Gloss
<i>ntkoq-riq</i>	/H-M/	‘ambitious’
<i>tsa-riq</i>	/MH-M/	‘charming’
<i>xyaq-riq</i>	/M-M/	‘feed up’
<i>jnya-riq</i>	/M0-M/	‘funny’
<i>syeq-riq</i>	/MH-M/	‘happy’
<i>tnya-riq</i>	/+H-M/	‘hard worker’
<i>nteq-riq</i>	/+H-M/	‘hungry’
<i>jnya-riq</i>	/M0-M/	‘playful’
<i>yqu-riq</i>	/M0-M/	‘shy’
<i>ndi-riq</i>	/M0-M/	‘sober’
<i>tji-riq</i>	/L-M/	‘stingy’
<i>yqu-riq</i>	/M0-M/	‘timid’
<i>jnyaq-riq</i>	/L-M/	‘tired’
<i>seq-riq</i>	/HL+0-M/	‘upset’
<i>ntq̣-riq</i>	/H-M/	‘weak’

The following are examples of compound adjectives without *tiq^M/riq^M*. One observation is that the tone of each word of the compound changes as we expect. The following are examples of compound adjectives.

Table 4.17: Compound Adjectives without *tiq^M/riq^M*

Compound ADJ	Phonemic	Gloss
<i>ntq̣-riq</i>	/H-M/	‘weak’
<i>chị-qa</i>	/_- H/	‘danger’
<i>nkqa-jneq</i>	/H-H/	‘pink’
<i>chị-niya</i>	/L- ML+H/	‘ugly’
<i>ka-jwe</i>	/_-HL+0/	‘brown’
<i>nkqa-yq</i>	/LM-LM/	‘olive green’
<i>nkqa-yq</i>	/LM-LM/	‘avocado green’
<i>kxiq-tu-kwq</i>	/LM-M-M/	‘light blue’
<i>nkqa-ksi</i>	/LM-M/	‘yellow’
<i>kyxiq-nta</i>	/LM-MH/	‘dark blue’
<i>tlyu-siq</i>	/M-H/	‘pregnant’
<i>ksi-ye</i>	/M-HL+0/	‘orange’
<i>ksi-jya</i>	/M-L/	‘sugar cane green’
<i>nta-ji</i>	/MH-LM/	‘gray’

Table 4.17: Continue

Compound ADJ	Phonemic	Gloss
<i>sqwe-qa</i>	/MH-ML/	‘very good’

The following is a table with possible tones found in adjectives.

Table 4.18: Tones Found in Compound Adjectives

Tone	First word	Second word
/H/	√	√
/H+0/	—	—
/M/	√	√
/_/	√	—
/L/	√	√
/M0/	—	—
/+H/	—	—
/MH/	√	√
/LM/	√	√
/L+0/	—	—
/0L+0/	—	—
/HL+0/	—	√
/ML+H/	—	√
/ML/	—	—

4.5 VERBS

The full description of verbs will be discussed in chapter 5, which takes up the tone changes that mark certain aspects, as well as 2s and 1s subjects. The 3S completive will be used as a citation form to discuss the tones of the verbal system. As will be argued later on, it reveals the basic, unaltered tone of the verb stem.

Table 4.19: Third Person Completive Verbs

Completive 3S		Gloss
<i>ndyi</i>	/_/_/	's/he finished'
<i>sti</i>	/_/_/	's/he laid'
<i>ntykwa</i>	/_/_/	's/he met'
<i>qqa</i>	/_/_/	's/he walked around'
<i>yta</i>	/_/_/	's/he bathed'
<i>ytiq</i>	/_/_/	's/he nursed'
<i>yku</i>	/_/_/	's/he ate'
<i>jykwiq</i>	/_/_/	's/he spoke'
<i>qqa</i>	/_/_/	's/he sat'
<i>yjoq</i>	/_/_/	's/he poked'
<i>ylaq</i>	/_/_/	's/he touched'
<i>swiq</i>	/HL+0/	's/he turn off'
<i>sta</i>	/HL+0/	's/he scragged'
<i>nne</i>	/HL+0/	's/he confessed'
<i>kwa</i>	/HL+0/	's/he counted'
<i>xkwa</i>	/HL+0/	's/he sewed'
<i>kwa</i>	/HL+0/	's/he sat'
<i>nd'yu</i>	/M/	's/he felt down'
<i>sqi</i>	/M/	's/he bought'
<i>ngwa</i>	/M/	's/he converted'
<i>yqu</i>	/M/	's/he grew'
<i>ntyja</i>	/M/	's/he found'
<i>yo</i>	/M/	's/he grinded'
<i>ndywa</i>	/M/	's/he jumped'
<i>yqo</i>	/M/	's/he drank'
<i>ykwę</i>	/M/	's/he vomited'
<i>xtyi</i>	/H/	's/he dried'
<i>sla</i>	/H/	's/he opened'
<i>yla</i>	/H/	's/he got open'
<i>jyu</i>	/H/	's/he made a hole'
<i>jnyi</i>	/H/	's/he made a deal'
<i>nkqi</i>	/H/	's/he roasted'
<i>ntyqya</i>	/H/	's/he got it down'
<i>na</i>	/H/	's/he looked'
<i>xqqa</i>	/H/	's/he changed'
<i>ntqę</i>	/H/	's/he married'
<i>kwi</i>	/H/	's/he hanged'
<i>sqyu</i>	/H/	's/he cut'
<i>ji</i>	/H/	's/he spent'

Table 4.19: Continue

sqya	/H/	's/he screamed'
ykwı	/H/	's/he boiled'
snyaq	/H/	's/he pinched'
yno	/H/	's/he got captured'
styı	/H/	's/he laughed'
skwę	/H/	's/he shake'
ntqo	/H/	's/he left'
ntqą	/H/	's/he stained'
ykwęq	/H/	's/he swallowed'
skwa	/MH/	's/he lay down'
skąq	/MH/	's/he tied'
ndywiq	/MH/	's/he said'
ytsaq	/MH/	's/he told'
kwa	/MH/	's/he sweep'
skq̄q	/MH/	's/he closed'
nkeq	/MH/	's/he cooked'
ylu	/MH/	's/he grew'
nda	/MH/	's/he gave'
nkila	/MH/	's/he melted'
ntę	/MH/	's/he entered'
sna	/MH/	's/he escaped'
yna	/MH/	's/he cried'
skwa	/MH/	's/he swam'
ntsug	/MH/	's/he ratted'
ntq̄	/LM/	's/he was cut'
stq̄	/LM/	's/he cut'
yla	/LM/	's/he arrived' (base)
ytsę	/LM/	's/he got scare'
qya	/LM/	's/he got down'
ntsu	/LM/	's/he sprouted'
jlya	/LM/	's/he farted'
ndq̄	/LM/	's/he stood'
jywi	/LM/	's/he hit'
qne	/LM/	's/he did'
yna	/LM/	's/he herd'
jyq̄q	/LM/	's/he washed'
nkjwi	/LM/	's/he died'
xku	/M0/	's/he fed'
xno	/M0/	's/he left'
ndiyq	/+H/	's/he arrived' (here)

Table 4.19: Continue

<i>ndiya</i>	/+H/	's/he arrived' (there)
<i>yno</i>	/+H/	's/he was captured'

Notice that there is no specified low tone /L/: with verbs, only /_/ occurs, meaning that these verbs undergo significant sandhi. The following are the tones found in 3S completive (3S) form in SJQ.

Table 4.20: Third Person Completive Verbs

Phonemic	3S Completive
/H/	✓
/H+0/	—
/M/	✓
/_/	✓
/L/	—
/M0/	✓
/+H/	✓
/MH/	✓
/LM/	✓
/L+0/	—
/0L+0/	—
/HL+0/	✓
/ML+H/	—
/ML/	—

4.6 NON-COMPOUND ADVERBS

The adverbs included here are: time, quantity, affirmation, space, interrogatives and compounds.

Table 4.21: Non-compound Adverbs

ADV	Phonemic	Gloss
<i>sqne</i>	/L/	'long ago'
<i>sqwa</i>	/+H/	'the same'
<i>qne^H</i>	/H/	'over there'
<i>qi</i>	/H+0/	'close'
<i>kq̄q</i>	/M0/	'then' (temporal deictic)

Table 4.21: Continue

<i>kya</i>	/M0/	‘tomorrow’
<i>chɨq</i>	/M0/	‘little’
<i>sya</i>	/M0/	‘even though’
<i>na</i>	/M0/	‘where’
<i>tla</i>	/HL+0/	‘night’
<i>tlya</i>	/HL+0/	‘early’
<i>cha</i>	/L/	‘day after tomorrow’
<i>jlo</i>	/_/	‘first’
<i>qya</i>	/L/	‘down there’
<i>tyjyuq</i>	/L/	‘far’
<i>tɔ</i>	/LM/	‘who’
<i>ni</i>	/L/	‘interrogative marker’
<i>sɛ</i>	/LM/	‘evening’
<i>ti</i>	/LM/	‘day before yesterday’
<i>sqɛ</i>	/LM/	‘absolute’
<i>liyaq</i>	/LM/	‘outside’
<i>tɔ</i>	/LM/	‘who’
<i>ne</i>	/M/	‘today’
<i>kwɔ</i>	/M/	‘up’
<i>nka</i>	/MH/	‘yesterday’
<i>chaq</i>	/MH/	‘why’
<i>kwɨq</i>	/ML/	‘him/her’
<i>tka</i>	/ML+H/	‘recently’
<i>a</i>	/ML+H/	‘interrogation marker’

These are the tones found in non-compound adverbs

Table 4.22: Tones in Non-compound Adverbs

/H/	√
/H+0/	√
/M/	√
/_/	√
/L/	√
/M0/	√
/+H/	√
/MH/	√
/LM/	√
/L+0/	—
/OL+0/	—
/HL+0/	√

Table 4.22: Continue

/ML+H/	√
/ML/	√

It is interesting that adverbs have majority of the tones except for two: /L+0/ and /0L+0/.

4.6.1 Compound Adverbs

There are many parts of the adverbs that are not found in isolation and due to that it is difficult to know what their underlying tone is. In compound nouns and adjectives, in many cases, their sandhi is normal. In the case of adverbs, it looks like they are more active with sandhi processes. In Table 4.20 we can see that tone one donates its high tone to the following word, e.g, la^M-ti^H ‘faster’, ja^L-la^{+H} ‘no’. The following are examples of compound adverbs in SJQ.

Table 4.23: Compound Adverbs

	Adverbs	Tone	Gloss
1	<i>ndiya-wra</i>	/+H-H+0/	‘sometimes’
2	<i>ja-sqne-chaq</i>	/L-H-H/	‘certainly’
3	<i>la-ti</i>	/M-H/	faster
4	<i>ti-qa</i>	/M-H/	‘later’
5	<i>ji-ta-qa</i>	/M-H-H/	‘to much’
6	<i>no-wa</i>	/M0-M/	‘when’
7	<i>ndiya-chaq</i>	/L-MH/	‘all the things’
8	<i>ntygo-chaq</i>	/M0-MH/	‘emphatic affirmation’
9	<i>chi-chaq</i>	/L-MH/	‘maybe’
10	<i>ri-kwa</i>	/M0-MH/	‘over there’
11	<i>cha-jyaq</i>	/MH-MH/	‘permit’
12	<i>kq-q-chaq</i>	/LM-MH/	‘this is why’
13	<i>ntq-q-chaq</i>	/_-MH/	‘you have to’
14	<i>la-qa</i>	/M-H/	‘fast’
15	<i>ska-yaq</i>	/L-L/	‘one time’
16	<i>xa-ta</i>	/_-_/	‘others’
17	<i>sa-qwi</i>	/_-_/	‘suddenly’
18	<i>sq-q-no</i>	/L-L/	‘where’
19	<i>qa-ne</i>	/H-0/	‘right now’

Table 4.23: Continue

20	kaq-kaq	/LM-M0/	'that then'; 'and then' (temporal)
21	wa-nga	/M-ML+H/	'already'
22	sqwe-la-ti	/MH-ML-ML/	'better'
23	jnya /tnya	/ML/	'down'
24	chaq-qi	/MH-ML/	'his problem'
25	chaq-no	/MH-ML/	'so that'
26	kaq-no	/M0-ML/	'then' (temporal deictic)
27	kwq-niya	/M0-ML/	'thus'
28	chi-nyi	/MH-ML/	'true'
29	ja-tyi	/L-+H/	'don't stop'
30	ja-la	/L-+H/	'no'
31	ja-ndiya	/L-+H/	'not to have something'
32	ja-ne	/L-+H/	'yes'
33	ra-jlo	/H+0-LM/	'at the beginning'
34	ndiya-sqe	/L-LM/	'everything'
35	sqi-qa	/H-H/	'very wrongly'
36	la-qya	/L-L/	'all the way down there'
37	xka-yaq	/+H/	'another time'
38	twe-ti	/L-L/	'slowly'
39	ni-qya	/L-L/	'strait down'
40	kaq-no	/LM-L/	'then'

Based on Table 4.3 we can see that all the sandhi in adverbs follow the normal sandhi.

- In examples 15, 18, 36, 38 and 39 have no old sandhi. The second word normally should change to /+H/, but it is not in these examples.
- In examples 29, 30, 31 and 32 they have an old sandhi. When two /L/ are next to each other the second tone changes into /+H/

4.7 INTERJECTIONS

In natural speech, I found that interjections occur frequently in the language. The following is a list of interjections found in natural speech.

Table 4.24: Interjections

<i>i</i>	/M0/	‘hmm’
<i>jq-jq</i>	/MH/	‘affirmation’
<i>kweq-qa</i>	/M0-ML/	‘exclamation’
<i>ma</i>	/M0/	‘dear’
<i>na-ji</i>	/M/	‘hmm’
<i>tyi</i>	/M0/	‘dear!’

The following table shows the tones found in different parts of speech.

Table 4.25: Tones in Parts of Speech Non-compounds Words

	Tone	INA	ALI	PRO	DEM	ADJ	V	ADV	INTJ
1	/H/	√	√	—	√	√	√	√	—
10	/H+0/	√	—	—	—	√	—	√	—
2	/M/	√	√	√	√	√	√	√	√
4W	/_/_/	√	√	√	—√	√	√	√	—
4S	/L/	√	—	—	—	√	—	√	√
20	/M0/	√	—	—	—	√	√	√	√
32	/+H/	√	—	—	—	√	√	√	—
3	/MH/	√	√	√	√	√	√	√	—
42	/LM/	√	√	√	√	√	√	√	—
40	/L+0/	—	—	—	—	—	—	—	—
04	/0L+0/	—	—	—	—	—	—	—	√
14	/HL+0/	√	√	—	—	√	√	√	—
24W	/ML+H/	—	—	—	—	√	—	√	—
24S	/ML/	—	√	—	√	√	—	√	—

4.8 CONCLUSION

Here are some interesting features in found in this chapter:

- It is expected that sounds (like consonants and vowels) will not prefer some parts of speech over others; yet here, there are preferential distributions of tones according to the part of speech

- The verb stems show a restricted set of tones that seems to correspond to the most conservative tone categories from Campbell & Woodbury 2010;
- The tones lacking or almost lacking in nouns, such as /+H/, seem to arise in nouns that go back to compounds;
- Certain tones seem to arise only in morphologically specialized environments, as we will see for /L+0/, which only occurs in first person singular inflected forms: this suggests some restricted tones may have their origin as tone combinations at an earlier stage of the language

In this section I have outlined the use of tone in the different parts of speech. /L+0/ and tone /0L+0/ are not found in some parts of speech described here. In all the examples; tone /L+0/ is not found at all. Other word classes, such as inflected forms of inalienably possessed nouns, of predicate adjectives, and of verbs, numerals, and loan words, will be explained in subsequent chapters.

Chapter 5

Tone In Inflectional Morphology

This chapter describes tone in inflectional morphology. The sections describe the tones that are found in inalienably possessed nouns, certain predicate adjectives, relational nouns, and verbs. The chapter is structured as follows: Tones in single stem and compound inalienably possessed nouns are described in 5.1, Tones in single and compound adjectives in 5.2, Tones in single stem and compounds of relational nouns in 5.3 and Tones in single and compound verb inflection is described in section 5.4.

5.1 INALIENABLY POSSESSED NOUN INFLECTION

Possessed nouns in this category of possession are the nouns that denote body parts some kinship terms, and terms for bodily excretions. The nouns that refer to personal objects that generally are associated with the possessor, like *ykq^{MH}* ‘blouse’ and more nouns also fall in this category.

The tones on inalienable nouns are important given that they play an important role in the expression of inalienable possessors. The pronominal expressions of the possessors depend on various mechanisms for their formation: nasalization, tone change, and various combinations. This section shows the tones that appear in inalienable non-compounds. In Table 5.1 shows the full paradigm of non-compound inalienable noun inflection in SJQ.

Table 5.1: Inalienably Possessed Noun

Possessor	Noun	Lexical tone	Enclitic	Gloss
1S	<i>sqa</i>	/M0/		‘my lover’
2S	<i>sqa</i>	/LM/		‘your lover’
3S	<i>sqa</i>	/H/		‘h/her lover’
1PLIN	<i>sqaq</i>	/H-H/		‘our lover’
1PLEX	<i>sqa</i>	/H/	<i>wa^{LM}</i>	‘our lovers’
2PL	<i>sqa</i>	/H/	<i>wa^{ML}</i>	‘your (PL) lover’
3PL	<i>sqa</i>	/H/	<i>req^{ML}</i>	‘their lover’

In this section I am using the stem form (3S and 3PL) to predict the tones of inalienable noun possession for other persons. The basic form of ‘lover’ is *sqa^H*, which occurs with a third person possessor with a zero marker and with a first person plural exclusive (1PLEX), and second person plural (2PL) where the dependent enclitics clearly mark the possessor. In the first person plural inclusive (1PLIN), the person is marked by the addition of a mora, a change in tone, and by nasalization (as discussed in Ch. 3). In the first (1S) and second person (2S) singular, neither a mora nor an enclitic is added, but the tone can change completely, and nasalization occurs in first person (1S) singular if it is not present already. Based on Table 5.1 (and as noted in Ch. 4) there are only seven tones that appear on the stem of inalienable possessed nouns, /L/, /_/, /H/, /HL+0/, /LM/, /M/ and /MH/. The following sections will show differences and similarities between stem and second and third person.

5.1.1 Deriving Non-compound 2S Possessor from Stem Forms

The following are examples (Table 5.2) of distribution of inalienable nouns: The 2S possessed inalienable noun form can be predicted from the stem form. There are only four tones that appear with 2S: /LM/, /M0/, /+H/ and /H/.

Table 5.2: 2S Possessor Forms from Stem Forms

	Stem	Stem T	2S	2S T	2S Gloss
1	<i>stq̄q</i>	/_/_/	<i>stq̄q</i>	/LM/	‘your finger nail’
2	<i>siq̄</i>	/_/_/	<i>siq̄</i>	/LM/	‘your nose’
3	<i>kyaq̄</i>	/_/_/	<i>kyaq̄</i>	/LM/	‘your foot’
4	<i>tseq̄</i>	/_/_/	<i>tseq̄</i>	/LM/	‘your tongue’
5	<i>siq̄</i>	/_/_/	<i>siq̄</i>	/LM/	‘your waist’
6	<i>sti</i>	/_/_/	<i>sti</i>	/LM/	‘your father’
7	<i>qo</i>	/_/_/	<i>qo</i>	/LM/	‘your spouse’
8	<i>su</i>	/_/_/	<i>su</i>	/LM/	‘your beard’
9	<i>swe</i>	/_/_/	<i>swe</i>	/LM/	‘your vagina’
10	<i>snyiq̄</i>	/_/_/	<i>snyiq̄</i>	/LM/	‘your child’
11	<i>styiq̄</i>	/L/	<i>styiq̄</i>	/LM/	‘your milk’
12	<i>sqa</i>	/H/	<i>sqa</i>	/LM/	‘your lover’
13	<i>yq̄q</i>	/H/	<i>yq̄q</i>	/LM/	‘your mother’
14	<i>xq̄na</i>	/H/	<i>xq̄na</i>	/LM/	‘your boss’
15	<i>skq̄q</i>	/HL+0/	<i>skq̄q</i>	/M0/	‘your mucus’
16	<i>ske</i>	/LM/	<i>ske</i>	/+H/	‘your vagina’
17	<i>swe</i>	/LM/	<i>swe</i>	/+H/	‘your chin’
18	<i>cq̄q</i>	/LM/	<i>cq̄q</i>	/+H/	‘your back’
19	<i>ke</i>	/LM/	<i>ke</i>	/+H/	‘your head’
20	<i>yne</i>	/LM/	<i>yne</i>	/+H/	‘your neck’
21	<i>tqa</i>	/LM/	<i>tqa</i>	/+H/	‘your relative’
22	<i>sna</i>	/LM/	<i>sna</i>	/+H/	‘your shoe’
23	<i>yq̄we</i>	/LM/	<i>yq̄we</i>	/+H/	‘your wing’
24	<i>yaq̄</i>	/M/	<i>yaq̄</i>	/H/	‘your hand’
25	<i>skq̄</i>	/M/	<i>skq̄</i>	/H/	‘your arm’
26	<i>sq̄e</i>	/M/	<i>sq̄e</i>	/H/	‘your excrement’
27	<i>sq̄na</i>	/M/	<i>sq̄na</i>	/H/	‘your plate’
28	<i>syaq̄</i>	/M/	<i>syaq̄</i>	/H/	‘your salary’

Table 5.2: Continue

	Stem	Stem T	2S	2S T	2S Gloss
29	<i>tyqi</i>	/M/	<i>tyqi</i>	/H/	‘your voice’
30	<i>snyi</i>	/M/	<i>snyi</i>	/H/	‘your penis’
31	<i>tyqi</i>	/M/	<i>tyqi</i>	/H/	‘your odor’
32	<i>xyiq</i>	/MH/	<i>xyiq</i>	/H/	‘your knee’
33	<i>caq</i>	/MH/	<i>caq</i>	/H/	‘your word’
34	<i>xkq</i>	/MH/	<i>xkq</i>	/H/	‘your shirt’
35	<i>sqwa</i>	/MH/	<i>sqwa</i>	/H/	‘your load’
36	<i>sla</i>	/MH/	<i>sla</i>	/H/	‘your dream’

Base of Table 5.2. The tones in 2S can be predicted from stem tones as follows:

- If the stem is /M/ or /MH/ then 2s is /H/
- If the stem is /LM/ then 2s is /+H/
- If the stem has a +0 floating tone (i.e., HL+0 or H+0) then 2s is /M0/
- For all other stem tones, 2s is /LM/

5.1.2 Non-compound 1S Possessor Forms from Stem Forms

In this section, I will use the third person as a base to predict the tones of inalienable nouns in 1S person. The 1S inalienable noun is always nasalized. There are four tones in 1S: /_/, /M0/, /L+0/ and /ML/.

Table 5.3: Formation of 1S Possessor from Stem Forms

Nouns	Base Tones	Gloss	1S forms	1S Tones	Gloss
<i>staq</i>	/_/_/	‘finger nail of’	<i>staq</i>	/_/_/	‘my finger nail’
<i>siq</i>	/_/_/	‘nose of’	<i>siq</i>	/_/_/	‘my nose’
<i>kyaq</i>	/_/_/	‘foot of’	<i>kyaq</i>	/_/_/	‘my foot’
<i>tseq</i>	/_/_/	‘tongue of’	<i>tseq</i>	/_/_/	‘my tongue’
<i>siq</i>	/_/_/	‘waist of’	<i>seq</i>	/_/_/	‘my waist’
<i>sti</i>	/_/_/	‘father of’	<i>ste</i>	/_/_/	‘my father’
<i>qo</i>	/_/_/	‘spouse of’	<i>qq</i>	/_/_/	‘my spouse’
<i>su</i>	/_/_/	‘beard of’	<i>sq</i>	/_/_/	‘my beard’
<i>swe</i>	/_/_/	‘her vagina of’	<i>swe</i>	/_/_/	‘my vagina’

Table 5.3: Continue

Nouns	Base Tones	Gloss	1S forms	1S Tones	Gloss
<i>snyiq</i>	/ /	‘child of’	<i>snyiq</i>	/ /	‘my child’
<i>styiq</i>	/L/	‘milk of’	<i>styiq</i>	/M0/	‘my milk’
<i>tqwa</i>	/L/	‘mouth of’	<i>tqwa</i>	/M0/	‘my mouth’
<i>sqqa</i>	/H/	‘lover of’	<i>sqqa</i>	/M0/	‘my lover’
<i>yqqa</i>	/H/	‘mother of’	<i>yqqa</i>	/M0/	‘my mother’
<i>xqna</i>	/H/	‘boss of’	<i>xqna</i>	/M0/	‘my boss’
<i>ske</i>	/LM/	‘vagina of’	<i>skj</i>	/ML/	‘my vagina’
<i>chqq</i>	/LM/	‘back of’	<i>chqq</i>	/ML/	‘my back’
<i>ke</i>	/LM/	‘head of’	<i>kj</i>	/ML/	‘my head’
<i>yne</i>	/LM/	‘neck of’	<i>yne</i>	/ML/	‘my neck’
<i>tqa</i>	/LM/	‘relative of’	<i>tqa</i>	/ML/	‘my relative’
<i>sna</i>	/LM/	‘shoe of’	<i>sna</i>	/ML/	‘my shoe’
<i>yqwe</i>	/LM/	‘wing of’	<i>yqwe</i>	/ML/	‘my wing’
<i>skqq</i>	/HL+0/	‘mucus of’	<i>skqq</i>	/L+0/	‘my mucus’
<i>yaq</i>	/M/	‘hand of’	<i>yaq</i>	/L+0/	‘my hand’
<i>skq</i>	/M/	‘arm of’	<i>skq</i>	/L+0/	‘my arm’
<i>sqe</i>	/M/	‘excrement of’	<i>sqe</i>	/L+0/	‘my excrement’
<i>sqna</i>	/M/	‘plate of’	<i>sqna</i>	/L+0/	‘my plate’
<i>syaq</i>	/M/	‘salary of’	<i>syaq</i>	/L+0/	‘my salary’
<i>tyqi</i>	/M/	‘voice of’	<i>tyqi</i>	/L+0/	‘my voice’
<i>snyi</i>	/M/	‘penis of’	<i>snyi</i>	/L+0/	‘my penis’
<i>tyqi</i>	/M/	‘odor of’	<i>tyqi</i>	/L+0/	‘my odor’
<i>xtyiq</i>	/MH/	‘knee of’	<i>xtyiq</i>	/L+0/	‘my knee’
<i>chaq</i>	/MH/	‘word of’	<i>chaq</i>	/L+0/	‘my word’
<i>xkqq</i>	/MH/	‘shirt of’	<i>xkqq</i>	/L+0/	‘my shirt’
<i>sqwa</i>	/MH/	‘load of’	<i>sqwa</i>	/L+0/	‘my load’
<i>sla</i>	/MH/	‘dream of’	<i>sla</i>	/L+0/	‘my dream’

Based on Table 5:3 the tones for 1S can be predict base on the stem form:

- Stem tone / / remains / / in 1S
- Stem tones /L/, /H/ become /M0/ in 1S
- Stem tone /LM/ becomes /ML/ in 1S
- Stem tones /HL+0/, /M/, and /MH/ become /L+0/ in 1S

5.1.3 Compound 2S Possessor from Stem Forms

This section shows tones in compounds of 2S from the stem forms. The first word of the compound can be an inalienable or alienable noun, but the second part of the compound is always inalienable noun. When the first word of the compound is an inalienable noun, this is the stem form and the second word of the compound bears the tonal change of the 2S. The following are examples of inalienable compounds of 2S and stem forms.

Table 5.4: Compound 2S Possessor from Stem Forms

	Stem	Stem T	Stem gloss	2S	2S T	Literal gloss	2s Gloss
1	<i>ke-lqya</i>	/L-L/	'her/his tooth'	<i>ke-lqya</i>	/L-+H/	rock-?	'your tooth'
2	<i>kji-xkq</i>	/L-L/	'her/his ear'	<i>kji-xkq</i>	/L-+H/	skin-your corner	'your ear'
3	<i>tyqa-sneq</i>	/L-L/	'her/his saliva'	<i>tyqa-sneq</i>	/L-+H/	water-your slime	'your saliva'
4	<i>tyqa-yeq</i>	/L-L/	'her/his drool'	<i>tyqa-yeq</i>	/L-+H/	water-your drool	'your drool'
5	<i>tqwa-tykq</i>	/L-L/	'her/his forehead'	<i>tqwa-tykq</i>	/L-+H/	edge-your ?	'your forehead'
6	<i>tyqa-wtq</i>	/L-L/	'her/his sweat'	<i>tyqa-wtq</i>	/L-+H/	water-your?	'your sweat'
7	<i>tu-tqwa</i>	/M-L/	'her/his mouth'	<i>tu-tqwa</i>	/MH-+H/	hole-your mouth	'your mouth'
8	<i>jɛ-tqwa</i>	/LM-L/	'her/his mouth'	<i>jen-tqwa</i>	/LM-+H/	bag-your face	'your mouth'
9	<i>tqwa-kji-xqnya</i>	/L-L-L/	'her/his lip'	<i>tqwa-kji-xqnya</i>	/L-L-+H/	mouth – skin-your?	'your lip'
10	<i>tyqa-stya</i>	/L-M/	'amniotic fluid'	<i>tyqa-stya</i>	/L-H/	water-?	'amniotic fluid'
11	<i>li-yaq</i>	/L-M/	'her/his lower arm'	<i>li-yaq</i>	/L-H/	?-your arm	'your lower arm'
12	<i>skuq-yaq</i>	/L-M/	'her/his elbow'	<i>skuq-yaq</i>	/L-H/	?-your arm	'your elbow'
13	<i>xnyi-yaq</i>	/L-M/	'her/his fingers'	<i>xnyi-yaq</i>	/L-H/	take-your arm	'your fingers'

Table 5.4: Continue

	Stem	Stem T	Stem gloss	2S	2S T	Literal gloss	2s Gloss
14	<i>sluq-yaq</i>	/L-M/	‘her/his knuckle’	<i>sluq-yaq</i>	/L-H/	?-your arm	‘your knuckle’
15	<i>xta-yaq</i>	/L-M/	‘her/his lines of hand’	<i>xta-yaq</i>	/L-H/	line-your arm	‘your lines of hand’
16	<i>sti-lya</i>	/L-M/	‘her/his father-in-law’	<i>sti-lya</i>	/L-H/	father of-?	‘your father-in-law’
17	<i>tu-sqε</i>	/MH-M/	‘her/his bum’	<i>tu-sqε</i>	/MH-H/	hole-your tale	‘your bum’
18	<i>tu-yaq</i>	/MH-M/	‘the palm of my hand’	<i>tu-yaq</i>	/MH-H/	hole-your arm	‘the palm of my hand’
19	<i>tu-xq̄i</i>	/MH-M/	‘her/his guts’	<i>tu-xq̄i</i>	/MH-H/	hole-?	‘your guts’
20	<i>tyjyq-skq</i>	/LM-M/	‘her/his shoulder’	<i>tyjyq-skq</i>	/LM-H/	bone of-you arm	‘your shoulder’
21	<i>yne-yaq</i>	/LM-M/	‘her/his wrist’	<i>yne-yaq</i>	/LM-H/	neck of-your arm	‘your wrist’
22	<i>yne-kyaq</i>	/LM-_/	‘her/his ankle’	<i>yne-kyaq</i>	/LM-LM/	neck-your foot	‘your ankle’
23	<i>chqq-kyaq</i>	/LM-_/	‘her/his instep’	<i>chqq-kyaq</i>	/LM-LM/	back-your foot	‘your instep’
24	<i>swe-kyaq</i>	/LM-_/	‘her/his heel’	<i>swe-kyaq</i>	/LM-LM/	?-your foot	‘your heel’
25	<i>tqa-sti</i>	/LM-_/	‘her/his uncle’	<i>tqa-sti</i>	/LM-LM/	relative of-your father	‘your uncle’
26	<i>jε-swe</i>	/LM-_/	‘her/his testicular sack’	<i>jε-swe</i>	/LM-LM/	bag-your egg	‘your testicular sack’
27	<i>ke-ndikq</i>	/LM-_/	‘her/his testicles’	<i>ke-ndikq</i>	/LM-LM/	head of-you?	‘your testicles’
28	<i>teq-ndywi-lo</i>	/_-M0-ML/	‘her/his her apron’	<i>teq-wi-lo</i>	/_-M0-LM/	cloth-hang-your face	‘your her apron’
29	<i>tu-kyaq</i>	/MH-ML/	‘her/his below instep’	<i>tu-kyaq</i>	/M-LM/	hole-your foot	‘your below instep’
30	<i>t̄iye-kyaq</i>	/+H-_/	‘her/his foot arch’	<i>t̄iye-kyaq</i>	/+H-LM/	center-your foot	‘your foot arch’

Table 5.4: Continue

	Stem	Stem T	Stem gloss	2S	2S T	Literal gloss	2s Gloss
31	<i>knaq- ktyiq- kyaq</i>	/H-M- ML/	‘her/his calf’ (leg)	<i>knaq- ktyiq- kyaq</i>	/H-M- LM/	meat- iguana- your foot	‘your calf’ (leg)
32	<i>tykwę- kyaq</i>	/L-_/	‘her/his ankle’	<i>tykwę- kyaq</i>	/L-LM/	?-your foot	‘your ankle’
33	<i>sluq- kyaq</i>	/L-_/	‘her/his knuckles’	<i>sluq- kyaq</i>	/L-LM/	?- your foot	‘your knuckles’
34	<i>qq-tyi</i>	/L-_/	‘her/his house’	<i>qq-tyi</i>	/L-LM/	house- your?	‘your house’
35	<i>xi-tyi</i>	/L-_/	‘her/his town’	<i>xi-tyi</i>	/L-LM/	sweet- your?	‘your town’
36	<i>lo-tyuq</i>	/L-_/	‘her/his naval’	<i>lo-tyuq</i>	/L-LM/	on-your?	‘your naval’
37	<i>yka-ndq</i>	/_-_/	‘her/his upper leg’	<i>yka-ndq</i>	/_-LM/	wood- your?	‘your upper leg’
38	<i>tyjyq- nte-kyaq</i>	/LM- L-_/	‘her/his shin’	<i>tyjyq- nte-kyaq</i>	/LM-L- LM/	bone-?- your foot	‘your shin’
39	<i>tu-yne</i>	/MH- LM/	‘her/his throat’	<i>tu-yne</i>	/M-+H/	hole-your neck	‘your throat’
40	<i>tyqa-xeq</i>	/_-HL/	‘her/his urine’	<i>tyqa-xeq</i>	/_-M0/	water-?	‘your urine’
41	<i>sqyu- snyaq</i>	/M- MH/	‘her/his testicles’	<i>sqyu- snyaq</i>	/M- H,LM/	seed-?	‘your testicles’
42	<i>ke-xtyiq</i>	/LM- MH/	‘her/his kneecap’	<i>ke-xtyiq</i>	/LM-H/	head of- your knee	‘your kneecap’
43	<i>lo-tiye</i>	/_-+H/	‘her/his chest’	<i>lo-tiye</i>	/_-+H/	on-your chest	‘your chest’

As was mentioned earlier, when the first word of the compound is an inalienable noun, it always appears in its stem form, and the second word of the compound shows the tone change of the 2S person. Based on Table 5:4 the tones for 2S can be predict base on the stem form:

- If the stem is /M/ or /MH/ then 2s is /H/
- If the stem is /L/, /+H/, /LM/ then 2s is /+H/
- If the stem has a +0 floating tone (i.e., HL+0 or H+0) then 2s is /M0/
- For all other stem tones, 2s is /LM/

Note that the tones in compounds in 2S work similar to the 2S stem.

5.1.4 Compound 1S Possessor Forms from Base Forms

The tones in compounds of inalienable 1S nouns are similar to the compounds of stem (3S). Only the second word of the compound is the one that is inflected by first person. The tones in compounds are predictable base on the third person (see Table 5.5).

Table 5.5: Compound 1S Possessor from Stem Forms

	Stem	Stem tones	Stem gloss	1S	Forms	Tones 1S	Gloss
1	<i>tqwa-kji-xqnya</i>	/L-L-L/	‘her/his lip’	<i>tqwa-kji-xqnya</i>	mouth – skin of-?	/_-_-M0/	‘my lip’
2	<i>yka-ndq</i>	/_-_/	‘her/his upper leg’	<i>yka-ndq</i>	wood-?	/_-_/	‘my upper leg’
3	<i>tyjyq-ntę-kyaq</i>	/LM-_L_ML/	‘her/his shin’	<i>tyjyq-ntę-kyaq</i>	bone -?-foot of	/LM-L-ML/	‘my shin’
4	<i>tykwę-kyaq</i>	/L-_ /	‘her/his ankle’	<i>tykwę-kyaq</i>	?-foot of	/L-_ /	‘my ankle’
5	<i>sluq-kyaq</i>	/L-_ /	‘her/his knuckles’	<i>sluq-kyaq</i>	?-foot of	/_-_/	‘my knuckles’
6	<i>qq-tyi</i>	/_-_/	‘her/his house’	<i>qq-tyi</i>	house-?	/_-_/	‘my house’
7	<i>xi-tyi</i>	/_-_/	‘her/his home town’	<i>xi-tyi</i>	sweet-?	/_-_/	‘my home town’
8	<i>lo-tyuq</i>	/_-_/	‘her/his naval’	<i>lo-tyuq</i>	on-?	/_-_/	‘my naval’
9	<i>ke-lqya</i>	/L-L/	‘her/his tooth’	<i>ke-lqya</i>	rock-?	/L-M0/	‘my tooth’
10	<i>kji-xkq</i>	/L-L/	‘her/his ear’	<i>kji-xkq</i>	skin-corner of	/L-M0/	‘my ear’
11	<i>tyqa-sneq</i>	/L-L/	‘her/his saliva’	<i>tyqa-sneq</i>	water-slime of	/L-M0/	‘my saliva’

Table 5.5: Continue

	Stem	Stem tones	Stem gloss	1S	Forms	Tones 1S	Gloss
12	<i>tyqa-yeq</i>	/L-L/	‘her/his drool’	<i>tyqa-yeq</i>	water-drool of	/L-M0/	‘my drool’
13	<i>tqwa-tykq</i>	/L-L/	‘her/his forehead’	<i>tqwa-tykq</i>	edge-forehead of	/L-M0/	‘my forehead’
14	<i>tyqa-wtq</i>	/L-L/	‘her/his sweat’	<i>tyqa-wtq</i>	water-sweat of	/L-M0/	‘my sweat’
15	<i>lo-tlye</i>	/L-+H/	‘her/his chest’	<i>lo-tyi</i>	on-chest of	/L-M0/	‘my chest’
16	<i>tyqa-xiq-tlo</i>	/_- ^{M0} -H/	‘her/his tears’	<i>tyqa-xiq-tlq</i>	water-?-face of	/_-M0-M0/	‘my tears’
17	<i>teq-wi-lo</i>	/_- ^{M0} -ML/	‘her/his her apron’	<i>teq-wi-lq</i>	cloth-hang-face of	/_-M0-ML+H/	‘my her apron’
18	<i>tyqa-xeq</i>	/L-HL/	‘her/his urine’	<i>tyqa-xiq</i>	water-?	/L-M0/	‘my urine’
19	<i>kwtseq-tlo</i>	/MH-H/	‘her/his chinguiña’	<i>kwtseq-tlq</i>	pus-face of	/MH-M0/	‘my chinguiña’
20	<i>li-yaq</i>	/L-M/	‘her/his lower arm’	<i>li-yaq</i>	?-arm of	/L-L+0/	‘my lower arm’
21	<i>skuq-yaq</i>	/L-M/	‘her/his elbow’	<i>skuq-yaq</i>	?-arm of	/L-L+0/	‘my elbow’
22	<i>xnyi-yaq</i>	/L-M/	‘her/his fingers’	<i>xnyi-yaq</i>	take-arm of	/L-L+0/	‘my fingers’
23	<i>sluq-yaq</i>	/L-M/	‘her/his knuckle’	<i>sluq-yaq</i>	?-arm of	/L-L+0/	‘my knuckle’
24	<i>xta-yaq</i>	/_-M/	‘her/his lines of hand’	<i>xta-yaq</i>	line-arm of	/_-L+0/	‘my lines of hand’
25	<i>sti-lya</i>	/_-M/	‘her/his father-in-law’	<i>sti-lyq</i>	father of-?	/_-L+0/	‘my father-in-law’
26	<i>tiye-kyaq</i>	/+H-_/	‘her/his foot arch’	<i>t’ye-kyaq</i>	center-foot of	/+H-_/	‘my foot arch’
27	<i>knaq-ktyiq-kyaq</i>	/H-M-H/	‘her/his calf’ (leg)	<i>knaq-ktyiq-kyaq</i>	meat-iguana-foot of	/H-M-H/	‘my calf’ (leg)
28	<i>yne-kyaq</i>	/LM-_/	‘her/his ankle’	<i>yne-kyaq</i>	neck-foot of	/LM-_/	‘my ankle’

Table 5.5: Continue

	Stem	Stem tones	Stem gloss	1S	Forms	Tones 1S	Gloss
29	<i>chqq-kyaq</i>	/LM-_/	‘her/his instep’	<i>chqq-kyaq</i>	back-foot of	/LM-_/	‘my instep’
30	<i>swe-kyaq</i>	/LM-_/	‘her/his heel’	<i>swe-kyaq</i>	?-foot of	/LM-_/	‘my heel’
31	<i>tqa-sti</i>	/LM-_/	‘her/his uncle’	<i>tqa-stɛ</i>	relative of-your father	/LM-_/	‘my uncle’
32	<i>jɛ-swe</i>	/LM-_/	‘his scrotum’	<i>jɛ-swɛ</i>	bag-your egg	/LM-_/	‘my testicular sack’
33	<i>ke-ndikq</i>	/LM-_/	‘his testicles’	<i>ke-ndikq</i>	head of-?	/LM-_/	‘my testicles’
34	<i>tyjyq-skq</i>	/LM-M/	‘her/his shoulder’	<i>tyjyq-skq</i>	bone of-arm	/LM-L+0/	‘my shoulder’
35	<i>yne-yaq</i>	/LM-M/	‘her/his wrist’	<i>yne-yaq</i>	neck of-arm	/LM-L+0/	‘my wrist’
36	<i>ke-xtyiq</i>	/LM-MH/	‘her/his kneecap’	<i>ke-xtyiq</i>	head of-knee	/LM-L+0/	‘my kneecap’
37	<i>tu-tqwa</i>	/M-_/	‘her/his mouth’	<i>tu-tqwa</i>	hole-your mouth	/MH-M0/	‘my mouth’
38	<i>sqyu-tlo</i>	/M-H/	‘her/his eye’ (eye ball)	<i>sqyu-tlq</i>	seed-your face	/MH-M0/	‘my eye’ (eye ball)
39	<i>ktyi-kwɛ</i>	/M-H/	‘her/his photo’	<i>ktyi-kwɛ</i>	paper-your shadow	/MH-M0/	‘my photo’
40	<i>tu-xqi</i>	/M-M/	‘her/his guts’	<i>tu-xqi</i>	hole-?	/MH-L+0/	‘my guts’
41	<i>tu-sqɛ</i>	/M-M/	‘her/his bum’	<i>tu-sqɛ</i>	hole-your tale	/MH-L+0/	‘my bum’
42	<i>tu-yaq</i>	/M-M/	‘the palm of my hand’	<i>tu-yaq</i>	hole-your arm	/MH-L+0/	‘the palm of my hand’
43	<i>sqyu-snyaq</i>	/M-MH/	‘her/his testicles’	<i>sqyu-snyaq</i>	see-?	/M-L+0/	‘my testicles’

Table 5.5: Continue

	Stem	Stem tones	Stem gloss	1S	Forms	Tones 1S	Gloss
44	<i>tu-yne</i>	/MH-LM/	‘her/his throat’	<i>tu-yne</i>	hole-your-neck	/MH-ML/	‘my throat’
45	<i>tu-kyaq</i>	/MH-ML/	‘her/his below instep’	<i>tu-kyaq</i>	hole-your foot	/MH-ML/	‘my below instep’

We can notice that the tones in compound inalienable nouns, only the second word of the compound is the one that is inflected by first person. The last word of the compound is inflected by 1S, and this tone is similar to the tone of the non-compound 1S. Only four tones are found in the inflected word of the compound:

- a. Stem tone // remains // in 1S
- b. Stem tones /L/, /H/, /+H/ and /HL+0/ become /M0/ in 1S
- c. Stem tone /LM/ and /ML/ becomes /ML/ in 1S
- d. Stem tones /M/, and /MH/ become /L+0/ in 1S

There are some tones that take sandhi (see example 28 Table 5.5) *knaq^H-ktyiq^M-kyaq^H* ‘my tibia’ and (see example 46 Table 5.5) *tu^{MH}-kyaq^{ML}* ‘my feet’. These two words have sandhi, tone /M/ makes the following word /H/ and tone /MH/ changes tone // into /ML/; however in the most part inalienable noun compounds do not create sandhi because these tones usually do not allow sandhi.

5.1.5 Non-compound Inalienable Nouns: 1 Person Plural Inclusive (1PLIN)

As mentioned in Chapter 3, the agreement marker for 1PLIN in SJQ is marked with tone and has a nasalization feature. The tones in 1PLIN can be predicted from the stem forms (see Table 5.6).

Table 5.6: Formation of 1PLIN Possessor from Stem Forms

Ste	Stem T	1PLIN	1PLIN T	Gloss
<i>staq</i>	/ /	<i>stq-aq</i>	/ML-LM/	‘our PLIN finger nail’
<i>siq</i>	/ /	<i>si-iq</i>	/ML-LM/	‘our PLIN nose’
<i>kyaq</i>	/ /	<i>kyq-aq</i>	/ML-LM/	‘our PLIN foot’
<i>tseq</i>	/ /	<i>tsɛ-ɛq</i>	/ML-LM/	‘our PLIN tongue’
<i>siq</i>	/ /	<i>si-iq</i>	/ML-LM/	‘our PLIN waist’
<i>sti</i>	/ /	<i>stɛ-ɛ</i>	/ML-LM/	‘our PLIN father’
<i>qo</i>	/ /	<i>qɔ-q</i>	/ML-LM/	‘our PLIN spouse’
<i>su</i>	/ /	<i>sɔ-q</i>	/ML-LM/	‘our PLIN beard’
<i>swe</i>	/ /	<i>swɛ-ɛ</i>	/ML-LM/	‘our PLIN vagina’
<i>styiq</i>	/L/	<i>sty-iq</i>	/ML-LM/	‘our PLIN milk’
<i>tqwa</i>	/L/	<i>tqwɔ-q</i>	/ML-LM/	‘our PLIN mouth’
<i>ske</i>	/ /	<i>skɛ-ɛ</i>	/ML-LM/	‘our PLIN vagina’
<i>snyiq</i>	/ /	<i>snyi-iq</i>	/ML-LM/	‘our PLIN child of
<i>sqa</i>	/H/	<i>sqa-a</i>	/H-H/	‘our PLIN lover’
<i>yqa</i>	/H/	<i>yqa-a</i>	/H-H/	‘our PLIN mother’
<i>xqna</i>	/H/	<i>xqna-a</i>	/H-H/	‘our PLIN boss’
<i>skaq</i>	/HL/	<i>skaq-aq</i>	/HL+H/	‘our PLIN mucus’
<i>cqq</i>	/LM/	<i>kɪ-i</i>	/LM-+H/	‘our PLIN head’
<i>ke</i>	/LM/	<i>yne-e</i>	/LM-+H/	‘our PLIN neck’
<i>yne</i>	/LM/	<i>tqa-q</i>	/LM-+H/	‘our PLIN relative’
<i>tqa</i>	/LM/	<i>sna-a</i>	/LM-+H/	‘our PLIN shoe’
<i>sna</i>	/LM/	<i>yqwɛ-ɛ</i>	/LM-+H/	‘our PLIN wing’
<i>yqwe</i>	/LM/	<i>cɔ-qɔ</i>	/LM-+H/	‘our PLIN back’
<i>yaq</i>	/M/	<i>ya-aq</i>	/M-H/	‘our PLIN hand’
<i>skq</i>	/M/	<i>skq-q</i>	/M-H/	‘our PLIN arm’
<i>sqɛ</i>	/M/	<i>sqɛ-ɛ</i>	/M-H/	‘our PLIN excrement’
<i>sqna</i>	/M/	<i>sqna-a</i>	/M-H/	‘our PLIN plate’
<i>syaq</i>	/M/	<i>sq-aq</i>	/M-H/	‘our PLIN salary’
<i>tyqi</i>	/M/	<i>tyqi-i</i>	/M-H/	‘our PLIN voice’
<i>snyi</i>	/M/	<i>snyi-i</i>	/M-H/	‘our PLIN penis’
<i>tyqi</i>	/M/	<i>tyqi-i</i>	/M-H/	‘our PLIN odor’
<i>xtyiq</i>	/MH/	<i>xtyi-iq</i>	/M-H/	‘our PLIN knee’
<i>caq</i>	/MH/	<i>cq-aq</i>	/M-H/	‘our PLIN word’
<i>xkq</i>	/MH/	<i>xkq-aq</i>	/M-H/	‘our PLIN shirt’
<i>sqwa</i>	/MH/	<i>sqwɔ-q</i>	/M-H/	‘our PLIN load’
<i>sa</i>	/MH/	<i>slq-q</i>	/M-H/	‘our PLIN dream’

The tones in the inalienable noun expressions are largely predictable from the tone carried by the third person, which is the basic form. Nevertheless, the tones that are employed to mark person for each basic tone do not appear to be reducible to a single general rule. Furthermore, there are some irregular nouns. The complete data for the inalienable nouns that have been found are presented in previous tables, they are summarized in Table 5.7.

Table 5.7: Tone Prediction for Non-compound Inalienable Nouns

Stem T		1S T	2S T	1PLIN
/H/	→	/M0/	/LM/	/H-H/
/M/	→	/L+0/	/H/	/M-H/
/MH/	→	/L+0/	/H/	/M-H/
/ /	→	/ /	/LM/	/ML-+H/
/LM/	→	/ML/	/+H/	/LM-+H/
/HL+0/	→	/L+0/	/M0/	
/L/	→	/M0/	/+H/	/ML-+H/

Based on Table 5.7 we can see the following:

- a. The tones /L/ and / / in 1PLIN do not change. The differences between these tones happen in 1S and 2S.
- b. Tone /LM/ does not appear in word final in compound stem forms.
- c. Tone /ML/ only appears in second position and only found in compounds.

5.2 RELATIONAL NOUN INFLECTION

In Chatino like other Meso-American languages, spatial location relative to the object and are inalienably possessed nouns and therefore take person marking. These nouns derive mostly from body part terms which refer to space or location. The 3S is the stem form to predict the tones of the 2S and 1S. The tones found in the following relational nouns are similar to the inalienable nouns. Below are examples of relational nouns inflected by person.

Table 5.8: 2S possessor Relational Nouns

Stem	Stem T	2S	2S T	As body parts	As relational nouns
<i>tqwa</i>	/L/	<i>tqwa</i>	/+H/	‘mouth of’	‘edge’
<i>siq</i>	/ /	<i>siq</i>	/LM/	‘side of’	‘side’
<i>lqi</i>	/ /	<i>lqi</i>	/LM/	‘his/hers’	‘to’
<i>lo</i>	/ /	<i>lo</i>	/LM/	‘on him’	‘on’
<i>ja</i>	/ /	<i>ja</i>	/LM/	‘between’	‘between’
<i>qo</i>	/H/	<i>qo</i>	/LM/	‘himself’	‘with’
<i>chqq</i>	/LM/	<i>chqq</i>	/+H/	‘back of’	‘back’
<i>ke</i>	/LM/	<i>ke</i>	/+H/	‘head of’	‘above’
<i>neq</i>	/M/	<i>neq</i>	/H/	‘intestines of’	‘inside’

Based on Table 5.8 we can make the following tone predictions:

- Stem tones /L/ and /LM/ change to /+H/ in 2S
- Stem tones / / and /H/ changes to /LM/ in 2S
- Stem tone /M/ changes to /H/ in 2S

Table 5.9: 1S Possessor Relational Nouns

Stem	Stem T	1S	1S	As body parts	As relational nouns
<i>tqwa</i>	/L/	<i>tqwq</i>	/M0/	‘mouth of’	‘edge’
<i>siq</i>	/ /	<i>si</i>	/ /	‘side of’	‘side’
<i>qi</i>	/ /	<i>qi</i>	/ /	‘his/hers’	‘to’
<i>lo</i>	/ /	<i>lq</i>	/ /	‘on him’	‘on’
<i>ja</i>	/ /	<i>jq</i>	/ /	‘between fingers of’	‘between’
<i>qo</i>	/H/	<i>qq</i>	/H/	‘himself’	‘with’
<i>chqq</i>	/LM/	<i>chqq</i>	/ML/	‘back of’	‘back’
<i>ke</i>	/LM/	<i>kj</i>	/ML/	‘head of’	‘above’
<i>neq</i>	/M/	<i>neq</i>	/L+0/	‘intestines of’	‘inside’

Based on Table 5.9 we can make the following tone predictions:

- Stem tone /L/ changes to /M0/ in 1S
- Stem tone / / changes to / / in 1S
- Stem tone /H/ changes to /H/ in 1S
- Stem tone /LM/ changes to /ML/ in 1S
- Stem tone /M/ changes to /L+0/ in 1S

5.3 ADJECTIVAL INFLECTION

In SJQ Chatino predicate adjectives are inflected for the person and number of their subjects when they are not accompanied by an overt copula. (When a copula is present, the copula is inflected like a regular verb for the person and number of the subject.) The copula is absent only in the progressive aspect.

Like the inalienable nouns, there are single stem adjectives and compound adjectives.

5.3.1 2S Adjectival Inflection from Stem Form

The stem adjectives forms can be the base to predict the 2S and 1S subject adjectives. There are ten tones in the stem adjectives: /_/, /H/, /H+0/, /M0/, /HL+0/, /L/, /LM/, /ML/, /M/ and /MH/. In Table 5.10 are single stem adjectives.

Table 5.10: Adjectival Inflection Non-compound 2S Possessor Forms from Base Forms

Stem	Stem T	2S	2S T	Gloss
<i>tji</i>	/ /	<i>tji</i>	/LM/	‘new’
<i>tkwɛ</i>	/ /	<i>tkwɛ</i>	/LM/	‘tall’
<i>xwe</i>	/ /	<i>xwe</i>	/LM/	‘small’
<i>ti</i>	/ /	<i>ti</i>	/LM/	‘thin’
<i>wxi</i>	/H/	<i>xi</i>	/LM/	‘mean’
<i>tkwi</i>	/H/	<i>tkwi</i>	/LM/	‘difficult’
<i>qnya</i>	/H/	<i>qnya</i>	/LM/	‘cute’
<i>kyqyu</i>	/H/	<i>kqyu</i>	/LM/	‘macho’
<i>nta</i>	/H/	<i>nta</i>	/LM/	‘smashed’
<i>ko</i>	/H/	<i>ko</i>	/LM/	‘huge’
<i>nkqa</i>	/H/	<i>nkqa</i>	/LM/	‘red’
<i>ntkɔq</i>	/H/	<i>tkɔq</i>	/LM/	‘ambitious’
<i>xqɔ</i>	/H+0/	<i>xqɔ</i>	/+H/	‘mean’
<i>tjyɔ</i>	/M0/	<i>tyjyɔ</i>	/LM/	‘skinny’
<i>knyaq</i>	/M0/	<i>knyaq</i>	/LM/	‘black person’
<i>lyuq</i>	/M0/	<i>lyuq</i>	/LM/	‘small (person)’
<i>kcheq</i>	/M0/	<i>kcheq</i>	/LM/	‘small (things)’
<i>jwa</i>	/M0/	<i>jwa</i>	/LM/	‘long’
<i>lqu</i>	/HL+0/	<i>lqu</i>	/M0/	‘alive’
<i>nta</i>	/HL+0/	<i>neq-nta</i>	/M0/	‘brown person’
<i>kwi</i>	/HL+0/	<i>kwi</i>	/M0/	‘new (just open)’

Table 5.10: Continue

Stem	Stem T	2S	2S T	Gloss
<i>kwsq</i>	/HL+0/	<i>ksq</i>	/M0/	‘old things’
<i>tji</i>	/L/	<i>tji</i>	/LM/	‘big’
<i>tnyaq</i>	/L/	<i>tnyaq</i>	/LM/	‘tire’
<i>kwla</i>	/L/	<i>kwla</i>	/LM/	‘old person’
<i>liye</i>	/LM/	<i>liye</i>	/+H/	‘healthy’
<i>nkqa</i>	/LM/	<i>nkqa</i>	/+H/	‘green’
<i>ntyqya</i>	/ML/	<i>ntyqya</i>	/LM/	‘cute’
<i>tlyu</i>	/M/	<i>tlyu</i>	/H/	‘big’
<i>nktsi</i>	/M/	<i>ktsi</i>	/H/	‘yellow’
<i>kqwi</i>	/MH/	<i>kqwi</i>	/H/	‘drunk’
<i>ktyiq</i>	/MH/	<i>ktyiq</i>	/H/	‘blind’
<i>kti</i>	/MH/	<i>kti</i>	/H/	‘delicate’
<i>sqwe</i>	/MH/	<i>sqwe</i>	/H/	‘good’
<i>nteq</i>	/MH/	<i>nteq</i>	/H/	‘flat’
<i>ntɛ</i>	/MH/	<i>ntɛ</i>	/H/	‘white’
<i>kwa</i>	/MH/	<i>kwa</i>	/H/	‘purple’
<i>nta</i>	/MH/	<i>nta</i>	/H/	‘black (thing)’

The tones found in 2S adjectives are as follows:

- a. Stem tone /_/, /H/, /L/, /ML/ and /M0/ changes to /LM/ in 2S
- b. Stem tones /H+0/, /LM/ changes to /+H/ in 2S
- c. Stem tone /HL+0/ changes to /M0/ in 2S
- d. Stem tones /M/ and /MH/ changes to /H/ in 2S

The previous is just the normal 2s rule, except:

/L/-->/LM/ and /ML/-->/+H/

5.3.2 1S Adjectival Inflection from Stem Form

The 1S adjectival inflection are nasalized and their tones change (see Table 5.11)

Table 5.11 Adjectival inflection Non-compound 1S possessor forms from base forms

Stem	Stem T	1S	1S T	Gloss
<i>tji</i>	/ /	<i>tjɛ</i>	/ /	‘new’
<i>tkwɛ</i>	/ /	<i>tkwɛ</i>	/ /	‘tall’
<i>xwe</i>	/ /	<i>xwɛ</i>	/ /	‘wide’
<i>ti</i>	/ /	<i>tɛ</i>	/ /	‘thin’
<i>kwlɑ</i>	/ /	<i>kwlɑ</i>	/ /	‘old person’
<i>tji</i>	/ /	<i>tjɛ</i>	/ /	‘stingy’
<i>tnyaq</i>	/ /	<i>tnyaq</i>	/ /	‘tired’
<i>wxi</i>	/H/	<i>wxin</i>	/M0/	‘mean’
<i>tkwi</i>	/H/	<i>tkwen</i>	/M0/	‘difficult’
<i>qnya</i>	/H/	<i>qnya</i>	/M0/	‘fancy’
<i>kyqyu</i>	/H/	<i>kyqyɔ</i>	/M0/	‘macho’
<i>ntɑ</i>	/H/	<i>ntɑ</i>	/M0/	‘smashed’
<i>ko</i>	/H/	<i>kɔ</i>	/M0/	‘huge’
<i>nkqɑ</i>	/H/	<i>nkqɑ</i>	/M0/	‘red’
<i>ntkɔq</i>	/H/	<i>tkɔq</i>	/M0/	‘ambitious’
<i>xqq</i>	/M0/	<i>xqq</i>	/M0/	‘mean’
<i>kche</i>	/M0/	<i>kchɛ</i>	/M0/	‘messy hair’
<i>tjyɑ</i>	/M0/	<i>tyjyɑ</i>	/M0/	‘skinny’
<i>knyaq</i>	/M0/	<i>knyaq</i>	/M0/	‘black person’
<i>lyuɑ</i>	/M0/	<i>lyɔɑ</i>	/M0/	‘small (person)’
<i>kchɛq</i>	/M0/	<i>kchɛq</i>	/M0/	‘small (things)’
<i>jwɑ</i>	/M0/	<i>jwɑ</i>	/M0/	‘long’
<i>qu</i>	/HL+0/	<i>lɔ</i>	/L+0/	‘alive’
<i>ntɑ</i>	/HL+0/	<i>ntɑ</i>	/L+0/	‘brown person’
<i>kwi</i>	/HL+0/	<i>kwɛ</i>	/L+0/	‘new (just open)’
<i>ksɔ</i>	/HL+0/	<i>ksɔ</i>	/L+0/	‘old things’
<i>liye</i>	/LM/	<i>liyɛ</i>	/LM/	‘healthy’
<i>nkqɑ</i>	/LM/	<i>nkqɑ</i>	/LM/	‘green’
<i>ntyqyɑ</i>	/ML/	<i>ntyqyɑ</i>	/ML/	‘cute’
<i>tlyu</i>	/M/	<i>tlyɔ</i>	/M/	‘big’
<i>nktsi</i>	/M/	<i>ktɛ</i>	/M/	‘yellow’
<i>kqwi</i>	/MH/	<i>kwɛ</i>	/MH/	‘drunk’
<i>kyjɔ</i>	/MH/	<i>kyjɔ</i>	/MH/	‘blind’
<i>kti</i>	/MH/	<i>ktɛ</i>	/MH/	‘delicate’
<i>sqwe</i>	/MH/	<i>sqwɛ</i>	/MH/	‘good’
<i>ntɛq</i>	/MH/	<i>ntɛq</i>	/MH/	‘flat’
<i>ntɛ</i>	/MH/	<i>ntɛ</i>	/MH/	‘white’
<i>kwa</i>	/MH/	<i>kwɑ</i>	/MH/	‘purple’

Table 5.11: Continue

<i>nta</i>	/MH/	<i>ntq</i>	/MH/	‘black (thing)’
<i>syeq</i>	/MH/	<i>syeq</i>	/MH/	‘happy’

Based on Table (above 5.11) the tones in 1S adjectives are similar to the tones of the 3S

with nasalization. The following are the tones found in 1S:

- Stem tones /H/, /M0/ change to /M0/ in 1S
- Stem tone /HL+0/ changes to /L+0/ in 1S
- Stem tones / __/, /M0/ /LM/, /ML/, /M/ and /MH/ do not change in 1S

5.3.3 Adjectival Compounds with the Form ADJ and *riq^M* ‘essence’

The adjectives with *riq^M* ‘essence’ are treated as compounds. These compounds receive person and number inflection in the same way as inalienable nouns. The first word remains uninflected and the second word receives the marking for the 2s or 1s subject; in the latter case, it also is nasalized. Since it is in second position in these compounds, the word for ‘essence’ is the word that receives marking for the 2s and 1s person:

Table 5.12: 2S Adjectival Compounds with the Form ADJ and *riq^M*

ADJ+tiqM/riqM	Phonemic	2S	2S T	Gloss
<i>tsa-riq</i>	/MH-M/	<i>tsa-riq</i>	/MH-H/	‘charming’
<i>xyaq-riq</i>	/M-M/	<i>xyaq-riq</i>	/M-H/	‘feed up’
<i>jnya-riq</i>	/M0-M/	<i>jnya-riq</i>	/M0-H/	‘funny’
<i>tnya-riq</i>	/MH-M/	<i>tnya-riq</i>	/MH-H/	‘hard worker’
<i>nteq-riq</i>	/+H-M/	<i>nteq-riq</i>	/+H-H/	‘hungry’
<i>ndi-riq</i>	/M0-M/	<i>ndi-riq</i>	/M0-H/	‘sober’
<i>yqu-riq</i>	/M0-M/	<i>yqu-riq</i>	/M0-H/	‘timid’
<i>jnyaq-riq</i>	/ -M/	<i>jnyaq-riq</i>	/M0-H/	‘tired’
<i>seq-riq</i>	/HL-0/	<i>seq-riq</i>	/HL-0/	‘upset’
<i>ntqq-riq</i>	/H/	<i>ntqq-riq</i>	/H-H/	‘weak’
<i>tsa-riq</i>	/MH-M/	<i>tsa-riq</i>	/MH-H/	‘charming’
<i>xyaq-riq</i>	/M-M/	<i>xyaq-riq</i>	/M-H/	‘feed up’
<i>jnya-riq</i>	/M0-M/	<i>jnya-riq</i>	/M0-H/	‘funny’

Table 5.13: 1S Adjectival Compounds with the Form ADJ and *riq*^M

ADJ+ <i>tiq</i> ^M / <i>riq</i> ^M	Phonemic	1S	1S T	Gloss
<i>tsa-riq</i>	/MH-M/	<i>tsa-rɛq</i>	/MH-M0/	‘charming’
<i>xyaq-riq</i>	/M-M/	<i>xyaq-rɛq</i>	/M-M0/	‘tired’
<i>jnya-riq</i>	/M0-M/	<i>jnya-rɛq</i>	/M0-M0/	‘funny’
<i>tnya-riq</i>	/MH-M/	<i>tnya-rɛq</i>	/MH-M0/	‘hard worker’
<i>nteq-riq</i>	/+H-M/	<i>nteq-rɛq</i>	/+H-M/	‘hungry’
<i>ndi-riq</i>	/M0-M/	<i>ndi-rɛq</i>	/M0-M/	‘sober’
<i>tji-riq</i>	/ -M/	<i>tji-rɛq</i>	/ -M0/	‘stingy’
<i>yqu-riq</i>	/M0-M/	<i>yqu-rɛq</i>	/M0-M0/	‘timid’
<i>jnyaq-riq</i>	/ -M/	<i>jnyaq-rɛq</i>	/M0-M0/	‘tired’
<i>seq-riq</i>	/HL-0/	<i>seq-rɛq</i>	/HL-0/	‘upset’
<i>ntq-riq</i>	/H/	<i>ntq-rɛq</i>	/H-M/	‘weak’

The adjectives that are inflected by the 2S are similar to the one in first person. The second word is inflected and in this case is not nasalized. To conclude the following are the tone changes that adjectives go through when mark person.

Table 5.14: Tone Prediction in Non-compound Adjectives

Stem		1S	2S
/ /	→	/ /	/LM/
/H/	→	/H/, /M0/	/LM/
/H+0/	→	/M0/	/+H/
/M0/	→	/M0/	/LM/
/HL/	→	/L0/	/M0/
/L/	→	/L/, /M0/	/LM/
/LM/	→	/LM/	/+H/
/ML/	→	/ML/	/LM/
/M/	→	/M/	/H/
/MH/	→	/MH/	/H/

5.4 VERBAL INFLECTION

Tones in Chatino verbs realize four distinct aspects: Completive (C), Potential (P), Habitual (H) and Progressive (PRG). These aspectual categories are distinguished

through prefixes, consonant mutations, and tone changes (Campbell 2011). All Chatino languages show aspect marking on verb stems for four distinct aspect categories: Completive (C), Potential (P), Habitual (H) and Progressive (PRG). Campbell 2011 shows for conservative Zenzontepec Chatino that these aspect categories are marked by prefixes whose choice depends on a complex set of covert verb classes and subclasses. Villard (2009) shows similar findings for aspect prefixation in Zacatepec Eastern Chatino, which is similarly conservative. By the time we reach SJQ Chatino, with its extensive non-final syllable loss, aspect prefixation is reduced to highly irregular patterns of consonantal prefixation and mutation.

At the same time, each verb stem has a tone. I will claim that for SJQ Chatino (as in all Eastern Chatino), that tone is predictable based on the 3S person completive form of the verb. The tone changes according to characteristic patterns as the verb is inflected for the other aspects. It is interesting (as Campbell and Villard both point out) that tone does not correlate with the verb classes and subclasses that drive prefixation in the conservative Chatino varieties.

My focus here is to describe the tones found in verbs and the most important thing is to figure out if the tones for verbs can be predicted in SJQ on the basis of the bare stem tone found in completive form of the verb . This comes in two natural stages—first, using the stem tone to predict the basic tones for the other aspects (sec. 5.4.2); and then, using the basic tones of all aspects to predict the tones for verb forms marked for the person and number of the subject (Sec. 5.4.3). First, however, we need to look at a full paradigm for one verb, showing all four aspects, and for each, the marking of subject person and number (Sec. 5.4.1). In so doing, we can see how tone is involved.

5.4.1 A Verb Paradigm

I now will show how aspect and subject person and number are marked, and how tone is involved in such marking¹⁹. The following is an example of a paradigm in SJQ, using the verb ‘to bathe’.

Table 5.15: Verb Paradigm ‘to bathe’

	C	Clitic	P	Clitic	H	Clitic	PRG	Clitic
1S	<i>yta</i> ^H		<i>ktá</i> ^{MO}		<i>ntyá</i> ^{MO}		<i>ntyá</i> ^H	
2S	<i>yta</i> ^{LM}		<i>ktá</i> ^{LM}		<i>ntyá</i> ^{LM}		<i>ntyá</i> ^{LM}	
3S	<i>yta</i>		<i>ktá</i>		<i>ntyá</i>		<i>ntyá</i> ^{+H}	
1PLIN	<i>yta</i> ^{ML} <i>q</i> ^{LM}		<i>ktá</i> ^{ML} <i>q</i> ^{LM}		<i>ntyá</i> ^{ML} <i>q</i> ^{LM}		<i>ntyá</i> ^H <i>q</i> ^H	
1PLEX	<i>yta</i>	<i>wa</i> ^{LM}	<i>ktá</i>	<i>wa</i> ^{LM}	<i>ntyá</i>	<i>wa</i> ^{LM}	<i>ntyá</i> ^{+H}	<i>wa</i> ^{LM}
2PL	<i>yta</i>	<i>wá</i>	<i>ktá</i>	<i>wá</i>	<i>ntyá</i>	<i>wá</i> ^L	<i>ntyá</i> ^{+H}	<i>wá</i> ^L
3PL	<i>yta</i>	<i>reḡ</i> ^L	<i>ktá</i>	<i>reḡ</i> ^L	<i>ntyá</i>	<i>reḡ</i> ^L	<i>ntyá</i> ^{+H}	<i>reḡ</i> ^L

The subject person and number marking in Chatino verbs is similar to inalienable possessor marking in nouns and subject marking in predicate adjectives. The 2S is marked by a change of tone only; the 1S by a change of tone and nasalization; the 1PLIN by the addition of a tone-bearing clitic and some tone shifts, first discussed as sandhi in Chapter 3; and the other plurals by a clitic added to the stem with its original (third person) stem tone.

5.4.2 Tone and Aspect

The completive aspect has the least amount of tonal neutralization and serves well as the citation form. The potential aspect is most commonly the default given when one elicits infinitives in Spanish (McIntosh 2011). The habitual and potential aspects share the same tones—depending of course on the tone of the completive—but in their segmental shape they are different. The tone of the progressive aspect also depends on

¹⁹ The abbreviations in Table 5.9 are as follows: Completive (C), Potential (P), Habitual (H), Progressive (PRG) and Tone (T).

the tone of the completive stem form. In the following are examples of the four aspects in Chatino (see Table 5.16), using a selection of completive verb stems showing all of the tones noted for verb stems in Ch. 4.

Table 5.16: Tones of aspects in third person (stem) forms

	Gloss	C	C T	P	P T	H	H T	PRG	PRG T
1	‘finish’	ndyi	/_/_	tyi	/_/_	ndyi	/_/_	ndyi	/+ H/
2	‘lay’	sti	/_/_	xtyi	/_/_	nxyi	/_/_	su	/LM/
3	‘meet’	ntykwa	/_/_	tykwa	/_/_	ntykwa	/_/_	ntykwa	/+ H/
4	‘walk around’	qą	/_/_	tyqą	/_/_	ntyqą	/_/_	ntqą	/+ H/
5	‘bathed’	yta	/_/_	kta	/_/_	ntyta	/_/_	nta	/+ H/
6	‘nurse’	ytiq	/_/_	kti q	/_/_	ntyiq	/_/_	ntyiq	/+ H/
7	‘eat’	yku	/_/_	ku	/_/_	ntyku	/_/_	ntyku	/+ H/
8	‘speak’	ykwıq	/_/_	tykwıq	/_/_	ntykwıq	/_/_	ntykwıq	/+ H/
9	‘sit’	qą	/_/_	tyqą	/_/_	ntyqą	/_/_	ntqą	/+ H/
10	‘poke’	yjoq	/_/_	kjoq	/_/_	ntyjoq	/_/_	ntyjoq	/+ H/
11	‘touch’	yla q	/_/_	kla q	/_/_	nlyaq	/_/_	nlyaq	/+ H/
12	‘turn off’	swıq	/HL + 0/	swıq	/HL + 0/	nswıq	/HL + 0/	nswıq	/H + 0/
13	‘peel’	stą	/HL + 0/	x tą	/HL + 0/	nxtą	/HL + 0/	nstą	/H + 0/
14	‘confess’	nne	/HL + 0/	nyi	/HL + 0/	nnyi	/HL + 0/	nnyi	/H + 0/
15	‘count’	kwa	/HL + 0/	kwa	/HL + 0/	ntkwa	/HL + 0/	ntkwa	/H + 0/
16	‘sew’	xkwą	/HL + 0/	xkwą	/HL + 0/	n xkwą	/HL + 0/	n xkwą	/H + 0/
17	‘sit’	kwa	/HL + 0/	tykwa	/HL + 0/	ntykwa	/HL + 0/	ntkwa	/H + 0/
18	‘fall’	nd’yu	/M/	t’yu	/M/	nd’yu	/M/	nd’yu	/M/
19	‘buy’	sqi	/M/	xqi	/HL + 0/	n xqi	/HL + 0/	nsqi	/M/

Table 5.16: Continue

	Gloss	C	C T	P	P T	H	H T	PRG	PRG T
20	'be'	nkwa	/M/	ka	/ML + H/	nka	/ML + H/	ndika	/M/
21	'grow'	yqu	/M/	kqu	/HL + 0/	nkqu	/HL + 0/	nkqu	/M/
22	'find'	ntyja	/M/	tyja	/M/	ntyja	/M/	ntyja	/M/
23	'grind'	yo	/M/	ko	/HL + 0/	ndiyo	/HL + 0/	ndiyo	/M/
24	'jump'	ndywa	/M/	tywa	/M/	ndywa	/M/	ndywa	/M/
25	'drink'	yqo	/M/	kqo	/HL + 0/	ntyqo	/HL + 0/	ntyqo	/M/
26	'vomit'	ykwę	/M/	kwę	/HL + 0/	ntykwę	/HL + 0/	ntykwę	/M/
27	'open'	sla	/H/	sla	/M0/	nsla	/M0/	nsla	/H/
28	'open up'	nla	/H/	kla	/M0/	nla	/M0/	nla	/H/
29	'make hole'	jyuq	/H/	jyuq	/M0/	ntyjyuq	/M0/	ntyjyuq	/H/
30	'deal'	jnyi	/H/	jnyi	/M0/	jnyi	/M0/	jnyi	/H/
31	'roast'	nkqi	/H/	kqi	/M0/	nkqi	/M0/	nkqi	/H/
32	'look'	na	/H/	jna	/M0/	na	/M0/	na	/H/
33	'change'	xqą	/H/	xqą	/M0/	nxqą	/M0/	nxqą	/H/
34	'marry'	ntqę	/H/	tyqi	/M0/	ntyqi	/M0/	ntqę	/H/
35	'hang'	kwi	/H/	tykwi	/M0/	ntykwi	/M0/	ndwi	/H/
36	'cut'	sqyu	/H/	sqyu	/M0/	nxqyu	/M0/	nsqyu	/H/
37	'spend'	ji	/H/	ji	/M0/	ntyji	/M0/	ntji	/H/
38	'scream'	sqya	/H/	xqya	/M0/	nsqya	/M0/	nsqya	/H/
39	'boil'	kwi	/H/	kwi	/M0/	ntkwi	/M0/	ntykwi	/H/
40	'pinch'	snyaq	/H/	snyaq	/M0/	nsnyaq	/M0/	nsnyaq	/H/
41	'left over'	yno	/H/	kno	/M0/	nno	/M0/	nno	/H/
42	'laugh'	sty	/H/	xty	/M0/	nxy	/M0/	nsty	/H/
43	'shake'	skwę	/H/	skwę	/M0/	nskwę	/M0/	nskwę	/H/

Table 5.16: Continue

	Gloss	C	C T	P	P T	H	H T	PRG	PRG T
44	'leave'	ntqo	/H/	tyqo	/M0/	ntyqo	/M0/	ntqo	/H/
45	'stain'	ntqą	/H/	tyqą	/M0/	ntyqą	/M0/	ntqą	/H/
46	'swallow'	ykwęq	/H/	tykwęq	/M0/	ntykwęq	/M0/	ntykwęq	/H/
47	'lay down'	skwa	/MH/	xkwa	/HL + 0/	nzkwa	/HL + 0/	nskwa	/MH/
48	'tie'	skąq	/MH/	skąq	/HL + 0/	nskąq	/HL + 0/	nskąq	/MH/
49	'tell'	ytsaq	/MH/	ktsaq	/HL + 0/	ntsaq	/HL + 0/	ntsaq	/MH/
50	'sweep'	kwa	/MH/	kwa	/HL + 0/	ntykwa	/HL + 0/	ntkwa	/MH/
51	'close'	skq̄q	/MH/	skq̄q	/HL + 0/	nskq̄q	/HL + 0/	nskq̄q	/MH/
52	'cook'	nkeq	/MH/	keq	/HL + 0/	ntykeq	/HL + 0/	ntykeq	/MH/
53	'grow'	ylu	/MH/	klu	/HL + 0/	nlu	/HL + 0/	nlu	/MH/
54	'give'	nda	/MH/	ta	/M0/	nda	/M0/	nda	/H/
55	'melt'	nkila	/MH/	kla	/MH/	nla	/MH/	nla	/MH/
56	'enter'	ntę	/MH/	stę	/HL + 0/	ntę	/HL + 0/	ntę	/MH/
57	'escape'	sna	/MH/	sna	/HL + 0/	nsna	/HL + 0/	nsna	/MH/
58	'cry'	yna	/MH/	kna	/HL + 0/	na	/HL + 0/	na	/MH/
59	'swim'	skwa	/MH/	xkwa	/HL + 0/	nskwa	/HL + 0/	nskwa	/MH/
60	'decompose'	ntsūq	/MH/	ktsūq	/HL + 0/	ntsūq	/HL + 0/	ntsūq	/MH/
61	'get down'	qya	/LM/	tyqya	/ML + H/	ntyqya	/ML + H/	ntyqya	/ + H/
62	'get cut'	ntq̄	/LM/	ktq̄	/ML + H/	ktq̄	/ML + H/	ntq̄	/ + H/
63	'cut'	stq̄	/LM/	stq̄	/ML + H/	ntq̄	/ML + H/	nstq̄	/ + H/
64	'arrive' (base)	yla	/LM/	kla	/ML + H/	nla	/ML + H/	nla	/ + H/
65	'scare'	ytsę	/LM/	ktse	/ML + H/	ntse	/ML + H/	ntse	/ + H/
66	'get down'	qya	/LM/	kyqya	/ML + H/	ntyqya	/ML + H/	ntyqya	/ + H/
67	'sprout'	ntsu	/LM/	ktsu	/ML + H/	ntsu	/ML + H/	ntsu	/ + H/

Table 5.16: Continue

	Gloss	C	C T	P	P T	H	H T	PRG	PRG T
68	'fart'	jlyɑ	/LM/	jlyɑ	/ML + H/	jlyɑ	/ML + H/	jlyɑ	/+ H/
69	'stand'	ndɔ	/LM/	tyɔ	/ML + H/	ndyɔ	/ML + H/	nd	/+ H/
70	'hit'	ywi	/LM/	kjwi	/ML + H/	ntjwi	/ML + H/	ntjwi	/+ H/
71	'do'	qne	/LM/	qne	/ML + H/	nqne	/ML + H/	nqne	/+ H/
72	'hear'	yna	/LM/	kna	/ML + H/	nna	/ML + H/	nna	/+ H/
73	'wash'	yqɑ	/LM/	yqɑ	/ML + H/	ntyqɑ	/ML + H/	ntyqɑ	/+ H/
74	'die'	nkjwi	/LM/	kja	/_/	ntyji	/_/	ntyji	/+ H/
75	'feed'	xku	/M0/	xku	/M0/	nxku	/M0/	nxku	/H/
76	'leave'	xno	/M0/	xno	/M0/	nxno	/M0/	nxno	/M0/
77	'arrive' (here)	ndiyɑ	/+ H/	tiyɑ	/ML + H/	ndiyɑ	/ML + H/	ndiyɑ	/+ H/
78	'capture'	yno	/+ H/	kno	/+ H/	nno	/+ H/	nno	/+ H/

Based on Table 5.16 we can make the some generalizations for tone and aspect in SJQ, shown in Tables 5.17 and 5.18). In table 5.17 are the most frequent tones found in the four aspects:

Table 5.17: Major Patterns

Stem (COMP)	P and H	PRG
/_/	/_/	/+H/
/HL+0/	/HL+0/	/H+0/
/M/	/HL+0/	/M/
/H/	/M0/	/H/
/MH/	/HL+0/	/MH/
/LM/	/ML+H/	/+H/

This can be summarized as follows:

- a. Stem tone /_/ changes /_/ in H and P; and /+H/ in progressive

- b. Stem tone /HL+0/ is the same in all aspects
- c. Stem tone /M/ changes to tone /HL+0/ in P and H; and /M/ in progressive
- d. Stem tone /H/ changes to tone /M0/ in P and H; and /H/ in progressive
- e. Stem /LM/ changes to tone /ML+H/ in P and H; and /+H/ in progressive

As was mentioned earlier, the completive aspect has the least amount of tonal neutralization and this allows to predict the potential and habitual tone aspects. For example, what is distinct in the completive stem as /HL+0/ vs. /M/ vs. /MH/ is merged in the corresponding Potential and Habitual as /HL+0/. In Table 5.18, we find a significant minor pattern that is evident in the Table 5.16 data:

Table 5.18: Across the Board (minor pattern)

Stem (COMP)	P and H	PRG
/_/_/	/_/_/	/_/_/
/HL+0/	/HL+0/	/HL+0/
/M/	/M/	/M/
/H/	/H/	/H/
/MH/	/MH/	/MH/
/LM/	/LM/	/LM/
/M0/	/M0/	/M0/
/+H/	/+H/	/+H/

The tones in Table 5.18 are tones that have the same tone in all the aspects. It is notable that it is only in the across-the-board minor pattern that two tones show up in the Completive: /M0/ and /+H/. These do not occur in the completive in the “major pattern”. (Likewise, /+H/ does not otherwise occur in the Potential or Habitual in the “major pattern.”) We may guess, then, that the across-the-board patterns in 5.18 arose via morphological leveling, and that the anomalous patterns just mention did not arise, respectively, in the Completive and the Potential/Habitual.

5.4.3 Subject Person and Number Marking and Tones

Subject person and number marking in the verbs in SJQ are done by different combinations of tone changes, nasalization, and the addition of clitics. The first and second person singular the subject is marked on the verb with changes in tone and (in the case of the 1S) nasalization. The 3S person and plural forms transparently show the basic form for the given aspect, as described in the previous section. Here, therefore, only 2S, 1S, and stem form are considered to show the tones involve in verbs; for a full person, number, and aspect paradigm for a verb, see Table 5.17.

5.4.3.1 Stem Form and 2S

The second person singular is marked with a tone change which is most easily understood as a (nearly) totally regular change of the corresponding third person form for the same aspect.

Table 5.19: Derivation of 2S Person Subject Verb Forms from Corresponding 3S Verb Forms in the Same Aspect

	Gloss	Aspect	3S	3S T	2S	2S T
1	'finish'	C	<i>ndyi</i>	/_/_/	<i>ndyi</i>	/LM/
2	'lay'	C	<i>sti</i>	/_/_/	<i>sti</i>	/LM/
3	'meet'	C	<i>ntykwa</i>	/_/_/	<i>kwa</i>	/LM/
4	'walk around'	C	<i>q̣q̣</i>	/_/_/	<i>q̣q̣</i>	/LM/
5	'bathed'	C	<i>yta</i>	/_/_/	<i>yta</i>	/LM/
6	'nurse'	C	<i>ytiq</i>	/_/_/	<i>ytiq</i>	/LM/
7	'eat'	C	<i>yku</i>	/_/_/	<i>yku</i>	/LM/
8	'speak'	C	<i>ykwiq</i>	/_/_/	<i>ykwiq</i>	/LM/
9	'sit'	C	<i>q̣q̣</i>	/_/_/	<i>q̣q̣</i>	/LM/
10	'poke'	C	<i>yjoq</i>	/_/_/	<i>yjoq</i>	/LM/
11	'touch'	C	<i>ylaq</i>	/_/_/	<i>ylaq</i>	/LM/
12	'turn off'	C	<i>swiq</i>	/HL+0/	<i>swiq</i>	/M0/
13	'peel'	C	<i>stq̣</i>	/HL+0/	<i>stq̣</i>	/M0/
14	'confess'	C	<i>nne</i>	/HL+0/	<i>nne</i>	/M0/
15	'count'	C	<i>kwa</i>	/HL+0/	<i>kwa</i>	/M0/
16	'sew'	C	<i>xkwq̣</i>	/HL+0/	<i>xkwq̣</i>	/M0/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
17	'sit'	C	<i>kwa</i>	/HL+0/	<i>kwa</i>	/M0/
18	'fall'	C	<i>ndiyu</i>	/M/	<i>ndiyu</i>	/H/
19	'buy'	C	<i>sqi</i>	/M/	<i>sqi</i>	/H/
20	'convert'	C	<i>nkwa</i>	/M/	<i>nkwa</i>	/H/
21	'grow'	C	<i>yqu</i>	/M/	<i>yqu</i>	/H/
22	'find'	C	<i>ntyja</i>	/M/	<i>ntyja</i>	/H/
23	'grind'	C	<i>yo</i>	/M/	<i>yo</i>	/H/
24	'jump'	C	<i>ndywuq</i>	/M/	<i>ndywuq</i>	/H/
25	'drink'	C	<i>yqo</i>	/M/	<i>yqo</i>	/H/
26	'vomit'	C	<i>ykwę</i>	/M/	<i>ykwę</i>	/H/
27	'open'	C	<i>sla</i>	/H/	<i>sla</i>	/LM/
28	'open up'	C	<i>nla</i>	/H/	<i>nla</i>	/LM/
29	'make hole'	C	<i>jyuq</i>	/H/	<i>jyuq</i>	/LM/
30	'deal'	C	<i>jnyi</i>	/H/	<i>jnyi</i>	/LM/
31	'roast'	C	<i>nkqi</i>	/H/	<i>nkqi</i>	/LM/
32	'look'	C	<i>na</i>	/H/	<i>na</i>	/LM/
33	'change'	C	<i>xqę</i>	/H/	<i>xqę</i>	/LM/
34	'marry'	C	<i>ntqę</i>	/H/	<i>ntqę</i>	/LM/
35	'hang'	C	<i>kwi</i>	/H/	<i>kwi</i>	/LM/
36	'cut'	C	<i>sqyu</i>	/H/	<i>sqyu</i>	/LM/
37	'spend'	C	<i>ji</i>	/H/	<i>ji</i>	/LM/
38	'scream'	C	<i>sqya</i>	/H/	<i>sqya</i>	/LM/
39	'boil'	C	<i>kwi</i>	/H/	<i>kwi</i>	/LM/
40	'pinch'	C	<i>snyaq</i>	/H/	<i>snyaq</i>	/LM/
41	'laugh'	C	<i>sty</i>	/H/	<i>sty</i>	/LM/
42	'shake'	C	<i>skwę</i>	/H/	<i>skwę</i>	/LM/
43	'leave'	C	<i>ntqo</i>	/H/	<i>ntqo</i>	/LM/
44	'stain'	C	<i>ntqę</i>	/H/	<i>ntqę</i>	/LM/
45	'swallow'	C	<i>ykwęq</i>	/H/	<i>ykwęq</i>	/LM/
46	'lay down'	C	<i>skwa</i>	/MH/	<i>skwa</i>	/H/
47	'tie'	C	<i>skqę</i>	/MH/	<i>skqę</i>	/H/
48	'tell'	C	<i>ytsaq</i>	/MH/	<i>ytsaq</i>	/H/
49	'sweep'	C	<i>kwa</i>	/MH/	<i>kwa</i>	/H/
50	'close'	C	<i>skqę</i>	/MH/	<i>skqę</i>	/H/
51	'cook'	C	<i>nkeq</i>	/MH/	<i>nkeq</i>	/H/
52	'grow'	C	<i>ylu</i>	/MH/	<i>ylu</i>	/H/
53	'give'	C	<i>nda</i>	/MH/	<i>nda</i>	/H/
54	'melt'	C	<i>nkila</i>	/MH/	<i>nkila</i>	/H/
55	'enter'	C	<i>ntę</i>	/MH/	<i>ntę</i>	/H/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
56	'escape'	C	<i>sna</i>	/MH/	<i>sna</i>	/H/
57	'cry'	C	<i>yna</i>	/MH/	<i>yna</i>	/H/
58	'swim'	C	<i>skwa</i>	/MH/	<i>skwa</i>	/H/
59	'decompose'	C	<i>ntsug</i>	/MH/	<i>ntsug</i>	/H/
60	'get down'	C	<i>qya</i>	/LM/	<i>qya</i>	/+H/
61	'get cut'	C	<i>ntq</i>	/LM/	<i>ntq</i>	/+H/
62	'cut'	C	<i>stq</i>	/LM/	<i>stq</i>	/+H/
63	'arrive' (base)	C	<i>yla</i>	/LM/	<i>yla</i>	/+H/
64	'scare'	C	<i>ytse</i>	/LM/	<i>ytse</i>	/+H/
65	'get down'	C	<i>qya</i>	/LM/	<i>qya</i>	/+H/
66	'sprout'	C	<i>ntsu</i>	/LM/	<i>ntsu</i>	/+H/
67	'fart'	C	<i>jlya</i>	/LM/	<i>jlya</i>	/+H/
68	'stand'	C	<i>ndq</i>	/LM/	<i>ndq</i>	/+H/
69	'hit'	C	<i>ywi</i>	/LM/	<i>ywi</i>	/+H/
70	'do'	C	<i>qne</i>	/LM/	<i>qne</i>	/+H/
71	'hear'	C	<i>yna</i>	/LM/	<i>yna</i>	/+H/
72	'wash'	C	<i>yqq</i>	/LM/	<i>yqq</i>	/+H/
73	'die'	C	<i>nkjwi</i>	/LM/	<i>nkjwi</i>	/+H/
74	'feed'	C	<i>xku</i>	/M0/	<i>xku</i>	/LM/
75	'leave'	C	<i>xno</i>	/M0/	<i>xno</i>	/LM/
76	'arrive' (here)	C	<i>ndiyq</i>	/+H/	<i>ndiyq</i>	/+H/
77	'capture'	C	<i>yno</i>	/+H/	<i>yno</i>	/+H/
78	'finish'	P	<i>tyi</i>	/_/_/	<i>tyi</i>	/LM/
79	'lay'	P	<i>xyi</i>	/_/_/	<i>xyi</i>	/LM/
80	'meet'	P	<i>tykwa</i>	/_/_/	<i>tykwa</i>	/LM/
81	'walk around'	P	<i>tyqq</i>	/_/_/	<i>tyqq</i>	/LM/
82	'bathed'	P	<i>kta</i>	/_/_/	<i>kta</i>	/LM/
83	'nurse'	P	<i>ktiq</i>	/_/_/	<i>ktiq</i>	/LM/
84	'eat'	P	<i>ku</i>	/_/_/	<i>ku</i>	/LM/
85	'speak'	P	<i>tykwiq</i>	/_/_/	<i>tykwiq</i>	/LM/
86	'sit'	P	<i>tyqq</i>	/_/_/	<i>tyqq</i>	/LM/
87	'poke'	P	<i>kjoq</i>	/_/_/	<i>kjoq</i>	/LM/
88	'touch'	P	<i>klaq</i>	/_/_/	<i>klaq</i>	/LM/
89	'turn off'	P	<i>swiq</i>	/HL+0/	<i>swiq</i>	/M0/
90	'peel'	P	<i>xtq</i>	/HL+0/	<i>xtq</i>	/M0/
91	'confess'	P	<i>nyi</i>	/HL+0/	<i>nyi</i>	/M0/
92	'count'	P	<i>kwa</i>	/HL+0/	<i>kwa</i>	/M0/
93	'sew'	P	<i>xkwq</i>	/HL+0/	<i>xkwq</i>	/M0/
94	'sit'	P	<i>tykwa</i>	/HL+0/	<i>tykwa</i>	/M0/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
95	'fall'	P	<i>tiyu</i>	/M/	<i>tiyu</i>	/H/
96	'buy'	P	<i>xqi</i>	/HL+0/	<i>xqi</i>	/M0/
97	'convert'	P	<i>ka</i>	/ML+H/	<i>ka</i>	/LM/
98	'grow'	P	<i>kqu</i>	/HL+0/	<i>kqu</i>	/M0/
99	'find'	P	<i>tyja</i>	/M/	<i>tyja</i>	/H/
100	'grind'	P	<i>ko</i>	/HL+0/	<i>ko</i>	/M0/
101	'jump'	P	<i>tywq</i>	/M/	<i>tywq</i>	/H/
102	'drink'	P	<i>kqo</i>	/HL+0/	<i>kqo</i>	/M0/
103	'vomit'	P	<i>kweq</i>	/HL+0/	<i>kweq</i>	/M0/
104	'open'	P	<i>sla</i>	/M0/	<i>sla</i>	/LM/
105	'open up'	P	<i>kla</i>	/M0/	<i>kla</i>	/LM/
106	'make hole'	P	<i>jyuq</i>	/M0/	<i>jyuq</i>	/LM/
107	'deal'	P	<i>jnyi</i>	/M0/	<i>jnyi</i>	/LM/
108	'roast'	P	<i>kqi</i>	/M0/	<i>kqi</i>	/LM/
109	'look'	P	<i>jna</i>	/M0/	<i>jna</i>	/LM/
110	'change'	P	<i>xqq</i>	/M0/	<i>xqq</i>	/LM/
111	'marry'	P	<i>tyqi</i>	/M0/	<i>tyqi</i>	/LM/
112	'hang'	P	<i>tykwi</i>	/M0/	<i>tykwi</i>	/LM/
113	'cut'	P	<i>sqyu</i>	/M0/	<i>sqyu</i>	/LM/
114	'spend'	P	<i>ji</i>	/M0/	<i>ji</i>	/LM/
115	'scream'	P	<i>xqya</i>	/M0/	<i>xqya</i>	/LM/
116	'boil'	P	<i>kwi</i>	/M0/	<i>kwi</i>	/LM/
117	'pinch'	P	<i>snyaq</i>	/M0/	<i>snyaq</i>	/LM/
118	'laugh'	P	<i>xyi</i>	/M0/	<i>xyi</i>	/LM/
119	'shake'	P	<i>skweq</i>	/M0/	<i>skweq</i>	/LM/
120	'leave'	P	<i>tyqo</i>	/M0/	<i>tyqo</i>	/LM/
121	'stain'	P	<i>tyqq</i>	/M0/	<i>tyqq</i>	/LM/
122	'swallow'	P	<i>tykweq</i>	/M0/	<i>tykweq</i>	/LM/
123	'lay down'	P	<i>xkwa</i>	/HL+0/	<i>xkwa</i>	/M0/
124	'tie'	P	<i>skqq</i>	/HL+0/	<i>skqq</i>	/M0/
125	'tell'	P	<i>ktsaq</i>	/HL+0/	<i>ktsaq</i>	/M0/
126	'sweep'	P	<i>kwa</i>	/HL+0/	<i>kwa</i>	/M0/
127	'close'	P	<i>skqq</i>	/HL+0/	<i>skqq</i>	/M0/
128	'cook'	P	<i>keq</i>	/HL+0/	<i>keq</i>	/M0/
129	'grow'	P	<i>klu</i>	/HL+0/	<i>klu</i>	/M0/
130	'give'	P	<i>ta</i>	/M0/	<i>ta</i>	/LM/
131	'melt'	P	<i>kla</i>	/MH/	<i>kla</i>	/H/
132	'enter'	P	<i>steq</i>	/HL+0/	<i>steq</i>	/M0/
133	'escape'	P	<i>sna</i>	/HL+0/	<i>xna</i>	/M0/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
134	‘cry’	P	<i>kna</i>	/HL+0/	<i>kna</i>	/M0/
135	‘swim’	P	<i>xkwa</i>	/HL+0/	<i>xkwa</i>	/M0/
136	‘decompose’	P	<i>ktsuq</i>	/HL+0/	<i>ktsuq</i>	/M0/
137	‘get down’	P	<i>tyqya</i>	/ML+H/	<i>tyqya</i>	/LM/
138	‘get cut’	P	<i>ktq</i>	/ML+H/	<i>ktq</i>	/LM/
139	‘cut’	P	<i>stq</i>	/LM/	<i>stq</i>	/LM/
140	‘arrive’ (base)	P	<i>kla</i>	/ML+H/	<i>kla</i>	/LM/
141	‘scare’	P	<i>ktse</i>	/ML+H/	<i>ktse</i>	/LM/
142	‘get down’	P	<i>kyqya</i>	/ML+H/	<i>kyqya</i>	/LM/
143	‘sprout’	P	<i>ktsu</i>	/ML+H/	<i>ktsu</i>	/LM/
144	‘fart’	P	<i>jlya</i>	/ML+H/	<i>jlya</i>	/LM/
145	‘stand’	P	<i>tyq</i>	/ML+H/	<i>tyq</i>	/LM/
146	‘hit’	P	<i>kjwi</i>	/ML+H/	<i>kjwi</i>	/LM/
147	‘do’	P	<i>qne</i>	/ML+H/	<i>qne</i>	/LM/
148	‘hear’	P	<i>kna</i>	/ML+H/	<i>kna</i>	/LM/
149	‘wash’	P	<i>yqq</i>	/ML+H/	<i>yqq</i>	/LM/
150	‘die’	P	<i>kja</i>	/_/_/	<i>kja</i>	/LM/
151	‘feed’	P	<i>xku</i>	/M0/	<i>xku</i>	/LM/
152	‘leave’	P	<i>xno</i>	/M0/	<i>xno</i>	/LM/
153	‘arrive’ (here)	P	<i>tiyq</i>	/ML+H/	<i>tiyq</i>	/LM/
154	‘capture’	P	<i>kno</i>	/+H/	<i>kno</i>	/LM/
155	‘finish’	H	<i>ndyi</i>	/_/_/	<i>ndyi</i>	/LM/
156	‘lay’	H	<i>nxyti</i>	/_/_/	<i>nxyti</i>	/LM/
157	‘meet’	H	<i>ntykwa</i>	/_/_/	<i>ntykwa</i>	/LM/
158	‘walk around’	H	<i>ntyqq</i>	/_/_/	<i>ntyqq</i>	/LM/
159	‘bathed’	H	<i>ntya</i>	/_/_/	<i>ntya</i>	/LM/
160	‘nurse’	H	<i>ntyiq</i>	/_/_/	<i>ntyiq</i>	/LM/
161	‘eat’	H	<i>ntyku</i>	/_/_/	<i>ntyku</i>	/LM/
162	‘speak’	H	<i>ntykwiq</i>	/_/_/	<i>ntykwiq</i>	/LM/
163	‘sit’	H	<i>ntyqq</i>	/_/_/	<i>ntyqq</i>	/LM/
164	‘poke’	H	<i>ntyjoq</i>	/_/_/	<i>ntyjoq</i>	/LM/
165	‘touch’	H	<i>nlyaq</i>	/_/_/	<i>nlyaq</i>	/LM/
166	‘turn off’	H	<i>nswiq</i>	/HL+0/	<i>nswiq</i>	/M0/
167	‘peel’	H	<i>nxtq</i>	/HL+0/	<i>nxtq</i>	/M0/
168	‘confess’	H	<i>nnyi</i>	/HL+0/	<i>nnyi</i>	/M0/
169	‘count’	H	<i>ntkwa</i>	/HL+0/	<i>ntkwa</i>	/M0/
170	‘sew’	H	<i>nxkwq</i>	/HL+0/	<i>nxkwq</i>	/M0/
171	‘sit’	H	<i>ntykwa</i>	/HL+0/	<i>ntykwa</i>	/M0/
172	‘fall’	H	<i>ndiyu</i>	/M/	<i>ndiyu</i>	/H/

Tabla 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
173	'buy'	H	<i>nxqi</i>	/HL+0/	<i>nxqi</i>	/M0/
174	'convert'	H	<i>nka</i>	/ML+H/	<i>nka</i>	/LM/
175	'grow'	H	<i>nkqu</i>	/HL+0/	<i>nkqu</i>	/M0/
176	'find'	H	<i>ntyja</i>	/M/	<i>ntyja</i>	/H/
177	'grind'	H	<i>ndiyo</i>	/HL+0/	<i>ndiyo</i>	/M0/
178	'jump'	H	<i>ndywu</i>	/M/	<i>ndywu</i>	/H/
179	'drink'	H	<i>ntygo</i>	/HL+0/	<i>ntygo</i>	/M0/
180	'vomit'	H	<i>ntykwe</i>	/HL+0/	<i>ntykwe</i>	/M0/
181	'open'	H	<i>nsla</i>	/M0/	<i>nsla</i>	/LM/
182	'open up'	H	<i>nla</i>	/M0/	<i>nla</i>	/LM/
183	'make hole'	H	<i>ntyjyuq</i>	/M0/	<i>ntyjyuq</i>	/LM/
184	'deal'	H	<i>jnyi</i>	/M0/	<i>jnyi</i>	/LM/
185	'roast'	H	<i>nkqi</i>	/M0/	<i>nkqi</i>	/LM/
186	'look'	H	<i>na</i>	/M0/	<i>na</i>	/LM/
187	'change'	H	<i>nxq</i>	/M0/	<i>nxq</i>	/LM/
188	'marry'	H	<i>ntyqi</i>	/M0/	<i>ntyqi</i>	/LM/
189	'hang'	H	<i>ntykwi</i>	/M0/	<i>ntykwi</i>	/LM/
190	'cut'	H	<i>nxqyu</i>	/M0/	<i>nxqyu</i>	/LM/
191	'spend'	H	<i>ntyji</i>	/M0/	<i>ntyji</i>	/LM/
192	'scream'	H	<i>nsqya</i>	/M0/	<i>nsqya</i>	/LM/
193	'boil'	H	<i>ntkwi</i>	/M0/	<i>ntkwi</i>	/LM/
194	'pinch'	H	<i>nsnyaq</i>	/M0/	<i>nsnyaq</i>	/LM/
195	'laugh'	H	<i>nxyti</i>	/M0/	<i>nxyti</i>	/LM/
196	'shake'	H	<i>nskwe</i>	/M0/	<i>nskwe</i>	/LM/
197	'leave'	H	<i>ntygo</i>	/M0/	<i>ntygo</i>	/LM/
198	'stain'	H	<i>ntyq</i>	/M0/	<i>ntyq</i>	/LM/
199	'swallow'	H	<i>ntykweq</i>	/M0/	<i>ntykweq</i>	/LM/
200	'lay down'	H	<i>nxkwa</i>	/HL+0/	<i>nxkwa</i>	/M0/
201	'tie'	H	<i>nskq</i>	/HL+0/	<i>nskq</i>	/M0/
202	'tell'	H	<i>ntsaq</i>	/HL+0/	<i>ntsaq</i>	/M0/
203	'sweep'	H	<i>ntykwa</i>	/HL+0/	<i>ntykwa</i>	/M0/
204	'close'	H	<i>nskq</i>	/HL+0/	<i>nskq</i>	/M0/
205	'cook'	H	<i>ntykeq</i>	/HL+0/	<i>ntykeq</i>	/M0/
206	'grow'	H	<i>nlu</i>	/HL+0/	<i>nlu</i>	/M0/
207	'give'	H	<i>nda</i>	/M0/	<i>nda</i>	/LM/
208	'melt'	H	<i>nla</i>	/MH/	<i>nla</i>	/H/
209	'enter'	H	<i>nte</i>	/HL+0/	<i>nte</i>	/M0/
210	'escape'	H	<i>nsna</i>	/HL+0/	<i>nxna</i>	/M0/
211	'cry'	H	<i>na</i>	/HL+0/	<i>na</i>	/M0/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
212	‘swim’	H	<i>nskwa</i>	/HL+0/	<i>nxkwa</i>	/M0/
213	‘decompose’	H	<i>ntsuq</i>	/HL+0/	<i>ntsuq</i>	/M0/
214	‘get down’	H	<i>ntyqya</i>	/ML+H/	<i>ntyqya</i>	/LM/
215	‘get cut’	H	<i>ktq</i>	/ML+H/	<i>ktq</i>	/LM/
216	‘cut’	H	<i>ntq</i>	/LM/	<i>ntq</i>	/LM/
217	‘arrive’ (base)	H	<i>nla</i>	/ML+H/	<i>nla</i>	/LM/
218	‘scare’	H	<i>ntse</i>	/ML+H/	<i>ntse</i>	/LM/
219	‘get down’	H	<i>ntyqya</i>	/ML+H/	<i>ntyqya</i>	/LM/
220	‘sprout’	H	<i>ntsu</i>	/ML+H/	<i>ntsu</i>	/LM/
221	‘fart’	H	<i>jlya</i>	/ML+H/	<i>jlya</i>	/LM/
222	‘stand’	H	<i>ndyq</i>	/ML+H/	<i>ndyq</i>	/LM/
223	‘hit’	H	<i>ntjwi</i>	/ML+H/	<i>ntjwi</i>	/LM/
224	‘do’	H	<i>nqne</i>	/ML+H/	<i>nqne</i>	/LM/
225	‘hear’	H	<i>nna</i>	/ML+H/	<i>nna</i>	/LM/
226	‘wash’	H	<i>ntyqq</i>	/ML+H/	<i>ntyqq</i>	/LM/
227	‘die’	H	<i>ntyji</i>	/__/	<i>ntyji</i>	/LM/
228	‘feed’	H	<i>nxku</i>	/M0/	<i>nxku</i>	/LM/
229	‘leave’	H	<i>nxno</i>	/M0/	<i>nxno</i>	/LM/
230	‘arrive’ (here)	H	<i>ndiyq</i>	/ML+H/	<i>ndiyq</i>	/LM/
231	‘capture’	H	<i>nno</i>	/+H/	<i>nno</i>	/LM/
232	‘finish’	PRG	<i>ndyi</i>	/+H/	<i>ndyi</i>	/+H/
233	‘lay’	PRG	<i>su</i>	/LM/	<i>su</i>	/+H/
234	‘meet’	PRG	<i>ntykwa</i>	/+H/	<i>ntykwa</i>	/+H/
235	‘walk around’	PRG	<i>ntqq</i>	/+H/	<i>ntqq</i>	/+H/
236	‘bathed’	PRG	<i>nta</i>	/+H/	<i>nta</i>	/+H/
237	‘nurse’	PRG	<i>ntyiq</i>	/+H/	<i>ntyiq</i>	/+H/
238	‘eat’	PRG	<i>ntyku</i>	/+H/	<i>ntyku</i>	/+H/
239	‘speak’	PRG	<i>ntykwiq</i>	/+H/	<i>ntykwiq</i>	/+H/
240	‘sit’	PRG	<i>ntqq</i>	/+H/	<i>ntqq</i>	/+H/
241	‘poke’	PRG	<i>ntyjoq</i>	/+H/	<i>ntyjoq</i>	/+H/
242	‘touch’	PRG	<i>nlyaq</i>	/+H/	<i>nlyaq</i>	/+H/
243	‘turn off’	PRG	<i>nswiq</i>	/H+0/	<i>nswiq</i>	/M0/
244	‘peel’	PRG	<i>nsta</i>	/H+0/	<i>nsta</i>	/M0/
245	‘confess’	PRG	<i>nnyi</i>	/H+0/	<i>nnyi</i>	/M0/
246	‘count’	PRG	<i>ntkwa</i>	/H+0/	<i>ntkwa</i>	/M0/
247	‘sew’	PRG	<i>nxkwq</i>	/H+0/	<i>nxkwq</i>	/M0/
248	‘sit’	PRG	<i>ntkwa</i>	/H+0/	<i>ntkwa</i>	/M0/
249	‘fall’	PRG	<i>ndiyu</i>	/M/	<i>ndiyu</i>	/H/
250	‘buy’	PRG	<i>nsqi</i>	/M/	<i>nsqi</i>	/H/

Table 5.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
251	‘convert’	PRG	<i>ndiga</i>	/M/	<i>ndiga</i>	/H/
252	‘grow’	PRG	<i>nkqu</i>	/M/	<i>nkqu</i>	/H/
253	‘find’	PRG	<i>ntyja</i>	/M/	<i>ntyja</i>	/H/
254	‘grind’	PRG	<i>ndiyo</i>	/M/	<i>ndiyo</i>	/H/
255	‘jump’	PRG	<i>ndywa</i>	/M/	<i>ndywa</i>	/H/
256	‘drink’	PRG	<i>ntygo</i>	/M/	<i>ntygo</i>	/H/
257	‘vomit’	PRG	<i>ntykwę</i>	/M/	<i>ntykwę</i>	/H/
258	‘open’	PRG	<i>nsla</i>	/H/	<i>nsla</i>	/LM/
259	‘open up’	PRG	<i>nla</i>	/H/	<i>nla</i>	/LM/
260	‘make hole’	PRG	<i>ntyjyuq</i>	/H/	<i>ntyjyuq</i>	/LM/
261	‘deal’	PRG	<i>jnyi</i>	/H/	<i>jnyi</i>	/LM/
262	‘roast’	PRG	<i>nkqi</i>	/H/	<i>nkqi</i>	/LM/
263	‘look’	PRG	<i>na</i>	/H/	<i>na</i>	/LM/
264	‘change’	PRG	<i>nxqą</i>	/H/	<i>nxqą</i>	/LM/
265	‘marry’	PRG	<i>ntqę</i>	/H/	<i>ntqę</i>	/LM/
266	‘hang’	PRG	<i>ndwi</i>	/H/	<i>ndwi</i>	/LM/
267	‘cut’	PRG	<i>nsqyu</i>	/H/	<i>nsqyu</i>	/LM/
268	‘spend’	PRG	<i>ntji</i>	/H/	<i>ntji</i>	/LM/
269	‘scream’	PRG	<i>nsqya</i>	/H/	<i>nsqya</i>	/LM/
270	‘boil’	PRG	<i>ntykwi</i>	/H/	<i>ntykwi</i>	/LM/
271	‘pinch’	PRG	<i>nsnyaq</i>	/H/	<i>nsnyaq</i>	/LM/
272	‘laugh’	PRG	<i>nsty</i>	/H/	<i>nsty</i>	/LM/
273	‘shake’	PRG	<i>nskwe</i>	/H/	<i>nskwe</i>	/LM/
274	‘leave’	PRG	<i>ntqo</i>	/H/	<i>ntqo</i>	/LM/
275	‘stain’	PRG	<i>ntyqą</i>	/H/	<i>ntyqą</i>	/LM/
276	‘swallow’	PRG	<i>ntykwęq</i>	/H/	<i>ntykwęq</i>	/LM/
277	‘lay down’	PRG	<i>nskwa</i>	/MH/	<i>nskwa</i>	/H/
278	‘tie’	PRG	<i>nskąq</i>	/MH/	<i>nskąq</i>	/H/
279	‘tell’	PRG	<i>ntsaq</i>	/MH/	<i>ntsaq</i>	/H/
280	‘sweep’	PRG	<i>ntkwa</i>	/MH/	<i>ntkwa</i>	/H/
281	‘close’	PRG	<i>nskqą</i>	/MH/	<i>nskqą</i>	/H/
282	‘cook’	PRG	<i>ntykeq</i>	/MH/	<i>ntykeq</i>	/H/
283	‘grow’	PRG	<i>nlu</i>	/MH/	<i>nlu</i>	/H/
284	‘give’	PRG	<i>nda</i>	/H/	<i>nda</i>	/LM/
285	‘melt’	PRG	<i>nla</i>	/MH/	<i>nla</i>	/H/
286	‘enter’	PRG	<i>nte</i>	/MH/	<i>nte</i>	/H/
287	‘escape’	PRG	<i>nsna</i>	/MH/	<i>nsna</i>	/H/
288	‘cry’	PRG	<i>na</i>	/MH/	<i>na</i>	/H/
289	‘swim’	PRG	<i>nskwa</i>	/MH/	<i>nskwa</i>	/H/

Table 2.19: Continue

	Gloss	Aspect	3S	3S T	2S	2S T
290	‘decompose’	PRG	<i>ntsug</i>	/MH/	<i>ntsug</i>	/H/
291	‘get down’	PRG	<i>ntyqya</i>	/+H/	<i>ntyqya</i>	/+H/
292	‘get cut’	PRG	<i>ntq</i>	/+H/	<i>ntq</i>	/+H/
293	‘cut’	PRG	<i>nstq</i>	/+H/	<i>nstq</i>	/+H/
294	‘arrive’ (base)	PRG	<i>nla</i>	/+H/	<i>nla</i>	/+H/
295	‘scare’	PRG	<i>ntse</i>	/+H/	<i>ntse</i>	/+H/
296	‘get down’	PRG	<i>ntyqya</i>	/+H/	<i>ntyqya</i>	/+H/
297	‘sprout’	PRG	<i>ntsu</i>	/+H/	<i>ntsu</i>	/+H/
298	‘fart’	PRG	<i>jlya</i>	/+H/	<i>jlya</i>	/+H/
299	‘stand’	PRG	<i>ndq</i>	/LM/	<i>ndq</i>	/+H/
300	‘hit’	PRG	<i>ntjwi</i>	/+H/	<i>ntjwi</i>	/+H/
301	‘do’	PRG	<i>nqne</i>	/+H/	<i>nqne</i>	/+H/
302	‘hear’	PRG	<i>nna</i>	/+H/	<i>nna</i>	/+H/
303	‘wash’	PRG	<i>ntyqq</i>	/+H/	<i>ntyqq</i>	/+H/
304	‘die’	PRG	<i>ntyji</i>	/+H/	<i>ntyji</i>	/+H/
305	‘feed’	PRG	<i>nxku</i>	/H/	<i>nxku</i>	/LM/
306	‘leave’	PRG	<i>nxno</i>	/M0/	<i>nxno</i>	/LM/
307	‘arrive’ (here)	PRG	<i>ndiyq</i>	/+H/	<i>ndiyq</i>	/+H/
308	‘capture’	PRG	<i>nno</i>	/+H/	<i>nno</i>	/+H/

The second person is just like the inalienable nouns, the following are the patterns found in 2S:

- a. If the stem is /M/ or /MH/ then 2s is /H/
- b. If the stem is /+H/ or /LM/ then 2s is /+H/
- c. If the stem has a +0 floating tone (i.e. HL+0 or H+0) then 2s is /M0/
- d. For all other stem tones, 2s is /LM/.

There appear to be no counterexamples to this pattern.

5.4.3.2 Stem Form and 1S

The first person singular subject verb has a nasalized vowel and a tone change from the corresponding third person stem in the same aspect.

Table 5.20: Stem Form and 1S in Completive Aspect

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
1	'finish'	C	<i>ndyi</i>	/_/_/	<i>ndyi</i>	/_/_/
2	'lay'	C	<i>sti</i>	/_/_/	<i>stɛ</i>	/M0/
3	'meet'	C	<i>ntykwa</i>	/_/_/	<i>ntykwɛ</i>	/_/_/
4	'walk around'	C	<i>qɔ</i>	/_/_/	<i>qɔ</i>	/M0/
5	'bathed'	C	<i>yta</i>	/_/_/	<i>ytɔ</i>	/H/
6	'nurse'	C	<i>ytiq</i>	/_/_/	<i>ytɛq</i>	/H/
7	'eat'	C	<i>yku</i>	/_/_/	<i>ykwɔ</i>	/H/
8	'speak'	C	<i>ykwɪq</i>	/_/_/	<i>ykwɛq</i>	/H/
9	'sit'	C	<i>qɔ</i>	/_/_/	<i>qɔ</i>	/M0/
10	'poke'	C	<i>yjoq</i>	/_/_/	<i>yjqɔ</i>	/H/
11	'touch'	C	<i>ylaq</i>	/_/_/	<i>ylɔq</i>	/H/
12	'turn off'	C	<i>swɪq</i>	/HL+0/	<i>swɛq</i>	/L+0/
13	'peel'	C	<i>stɔ</i>	/HL+0/	<i>stɔ</i>	/L+0/
14	'confess'	C	<i>nne</i>	/HL+0/	<i>nnyɪ</i>	/L+0/
15	'count'	C	<i>kwa</i>	/HL+0/	<i>kwɛ</i>	/L+0/
16	'sew'	C	<i>xkwɛ</i>	/HL+0/	<i>xkwɛ</i>	/L+0/
17	'sit'	C	<i>kwa</i>	/HL+0/	<i>kwɛ</i>	/L+0/
18	'fall'	C	<i>ndiyu</i>	/M/	<i>ndiyɔ</i>	/L+0/
19	'buy'	C	<i>sqi</i>	/M/	<i>qyɔ</i>	/L+0/
20	'convert'	C	<i>nkwa</i>	/M/	<i>nkwɛ</i>	/M/
21	'grow'	C	<i>nkɪqu</i>	/M/	<i>nkɪqɔ</i>	/M/
22	'find'	C	<i>ntyja</i>	/M/	<i>ntyjɔ</i>	/M/
23	'grind'	C	<i>yo</i>	/M/	<i>yɔ</i>	/H/
24	'jump'	C	<i>ndyɔwɛ</i>	/M/	<i>ndyɔwɛ</i>	/L+0/
25	'drink'	C	<i>yqo</i>	/M/	<i>yqɔ</i>	/H/
26	'vomit'	C	<i>ykwɛ</i>	/M/	<i>ykwɛ</i>	/L+0/
27	'open'	C	<i>sla</i>	/H/	<i>slɔ</i>	/_/_/
28	'open up'	C	<i>nla</i>	/H/	<i>lɔ</i>	/H/
29	'make hole'	C	<i>wjyu</i>	/H/	<i>wjyɔ</i>	/_/_/
30	'deal'	C	<i>jnyɪ</i>	/H/	<i>jnyɪ</i>	/_/_/
31	'roast'	C	<i>nkqi</i>	/H/	<i>nkqi</i>	/_/_/
32	'look'	C	<i>na</i>	/H/	<i>na</i>	/_/_/
33	'change'	C	<i>xqɔ</i>	/H/	<i>xqɔ</i>	/_/_/
34	'marry'	C	<i>ntqɛ</i>	/H/	<i>qɛ</i>	/M0/
35	'hang'	C	<i>kwi</i>	/H/	<i>kɛ</i>	/M0/
36	'cut'	C	<i>sqyu</i>	/H/	<i>sqyɔ</i>	/_/_/
37	'spend'	C	<i>ji</i>	/H/	<i>jɛ</i>	/M0/
38	'scream'	C	<i>sqya</i>	/H/	<i>sqyɔ</i>	/_/_/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
39	'boil'	C	<i>kwi</i>	/H/	<i>ke</i>	/M0/
40	'pinch'	C	<i>snyaq</i>	/H/	<i>snyaq</i>	/_/
41	'laugh'	C	<i>sty</i>	/H/	<i>sty</i>	/_/
42	'shake'	C	<i>skwe</i>	/H/	<i>skwe</i>	/_/
43	'leave'	C	<i>ntqo</i>	/H/	<i>ntqq</i>	/M0/
44	'stain'	C	<i>ntqq</i>	/H/	<i>ntqq</i>	/_/
45	'swallow'	C	<i>ykweg</i>	/H/	<i>kweg</i>	/_/
46	'lay down'	C	<i>skwa</i>	/MH/	<i>skwq</i>	/L+0/
47	'tie'	C	<i>skqq</i>	/MH/	<i>skqq</i>	/L+0/
48	'tell'	C	<i>ytsaq</i>	/MH/	<i>ytsq</i>	/H/
49	'sweep'	C	<i>kwa</i>	/MH/	<i>kwq</i>	/L+0/
50	'close'	C	<i>skqq</i>	/MH/	<i>skqq</i>	/L+0/
51	'cook'	C	<i>nkeq</i>	/MH/	<i>nkig</i>	/L+0/
52	'grow'	C	<i>wlu</i>	/MH/	<i>wlq</i>	/MH/
53	'give'	C	<i>nda</i>	/MH/	<i>ndq</i>	/_/
54	'melt'	C	<i>nkila</i>	/MH/	<i>nkilq</i>	/MH/
55	'enter'	C	<i>ntq</i>	/MH/	<i>ntq</i>	/L+0/
56	'escape'	C	<i>sna</i>	/MH/	<i>sna</i>	/L+0/
57	'cry'	C	<i>yna</i>	/MH/	<i>yna</i>	/L+0/
58	'swim'	C	<i>skwa</i>	/MH/	<i>skwq</i>	/L+0/
59	'decompose'	C	<i>ntsug</i>	/MH/	<i>ytsq</i>	/L+0/
60	'get down'	C	<i>qya</i>	/LM/	<i>qya</i>	/+H/
61	'get cut'	C	<i>ntq</i>	/LM/	<i>ntq</i>	/_/
62	'cut'	C	<i>stq</i>	/LM/	<i>stq</i>	/_/
63	'arrive' (base)	C	<i>yla</i>	/LM/	<i>ylq^L</i>	/LM/
64	'scare'	C	<i>ytse</i>	/LM/	<i>ytse</i>	/_/
65	'get down'	C	<i>qya</i>	/LM/	<i>qya^L</i>	/LM/
66	'sprout'	C	<i>ntsu</i>	/LM/	<i>ntsq</i>	/L+0/
67	'fart'	C	<i>jlya</i>	/LM/	<i>jlyq^L</i>	/LM/
68	'stand'	C	<i>ndq</i>	/LM/	<i>ndq</i>	/M0/
69	'hit'	C	<i>yjwi</i>	/LM/	<i>yjwe</i>	/_/
70	'do'	C	<i>qne</i>	/LM/	<i>qne</i>	/H/
71	'hear'	C	<i>yna</i>	/LM/	<i>yna</i>	/ML+H/
72	'wash'	C	<i>yqq</i>	/LM/	<i>yqq</i>	/ML+H/
73	'die'	C	<i>nkjwi</i>	/LM/	<i>nkjwe^L</i>	/LM/
74	'feed'	C	<i>xku</i>	/M0/	<i>xkq</i>	/M0/
75	'leave'	C	<i>xno</i>	/M0/	<i>xno</i>	/M0/
76	'arrive' (here)	C	<i>ndiyq</i>	/+H/	<i>ndiyq</i>	/M0/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
77	'capture'	C	<i>yno</i>	/+H/	<i>yno</i>	/M0/
78	'finish'	P	<i>tyi</i>	/_/	<i>tyi</i>	/_/
79	'lay'	P	<i>xtyi</i>	/_/	<i>xtyi</i>	/M0/
80	'meet'	P	<i>tykwa</i>	/_/	<i>tykwa</i>	/_/
81	'go around'	P	<i>tyqqa</i>	/_/	<i>tyqqa</i>	/M0/
82	'bathed'	P	<i>kta</i>	/_/	<i>ktq</i>	/M0/
83	'nurse'	P	<i>ktiq</i>	/_/	<i>teq</i>	/M0/
84	'eat'	P	<i>ku</i>	/_/	<i>kq</i>	/M0/
85	'speak'	P	<i>tykwiq</i>	/_/	<i>tykweq</i>	/M0/
86	'sit'	P	<i>tyqqa</i>	/_/	<i>tyqqa</i>	/M0/
87	'poke'	P	<i>kjoq</i>	/_/	<i>kjoq</i>	/M0/
88	'touch'	P	<i>klaq</i>	/_/	<i>klqqa</i>	/M0/
89	'turn off'	P	<i>swiq</i>	/HL+0/	<i>sweq</i>	/L+0/
90	'peel'	P	<i>xtq</i>	/HL+0/	<i>stq</i>	/L+0/
91	'confess'	P	<i>nyi</i>	/HL+0/	<i>nnyi</i>	/L+0/
92	'count'	P	<i>kwa</i>	/HL+0/	<i>kwq</i>	/L+0/
93	'sew'	P	<i>xkwq</i>	/HL+0/	<i>xkwq</i>	/L+0/
94	'sit'	P	<i>tykwa</i>	/HL+0/	<i>tykwa</i>	/L+0/
95	'fall'	P	<i>t'yu</i>	/M/	<i>t'yq</i>	/L+0/
96	'buy'	P	<i>xqi</i>	/HL+0/	<i>qyq</i>	/L+0/
97	'convert'	P	<i>ka</i>	/ML+H/	<i>kq</i>	/ML+H/
98	'grow'	P	<i>kqu</i>	/HL+0/	<i>kqq</i>	/L+0/
99	'find'	P	<i>tyja</i>	/M/	<i>tyjq</i>	/L+0/
100	'grind'	P	<i>ko</i>	/HL+0/	<i>kq</i>	/M0/
101	'jump'	P	<i>tywq</i>	/M/	<i>tywq</i>	/L+0/
102	'drink'	P	<i>kqo</i>	/HL+0/	<i>kqq</i>	/M0/
103	'vomit'	P	<i>kwe</i>	/HL+0/	<i>kwe</i>	/L+0/
104	'open'	P	<i>sla</i>	/M0/	<i>slq</i>	/_/
105	'open up'	P	<i>kla</i>	/M0/	<i>klq</i>	/_/
106	'make hole'	P	<i>wjyu</i>	/M0/	<i>wjyq</i>	/_/
107	'deal'	P	<i>xnyi</i>	/M0/	<i>xnyi</i>	/M0/
108	'roast'	P	<i>kqi</i>	/M0/	<i>kqi</i>	/_/
109	'look'	P	<i>kwna</i>	/M0/	<i>kwna</i>	/_/
110	'change'	P	<i>xqq</i>	/M0/	<i>xqq</i>	/M0/
111	'marry'	P	<i>tyqi</i>	/M0/	<i>tyqi</i>	/M0/
112	'hang'	P	<i>tykwi</i>	/M0/	<i>tyke</i>	/M0/
113	'cut'	P	<i>sqyu</i>	/M0/	<i>sqyq</i>	/_/
114	'spend'	P	<i>ji</i>	/M0/	<i>je</i>	/M0/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
115	‘scream’	P	<i>xqya</i>	/M0/	<i>xqya</i>	/_/
116	‘boil’	P	<i>kwi</i>	/M0/	<i>kwe</i>	/M0/
117	‘pinch’	P	<i>snyaq</i>	/M0/	<i>snyaq</i>	/_/
118	‘laugh’	P	<i>xyi</i>	/M0/	<i>xyi</i>	/_/
119	‘shake’	P	<i>skwe</i>	/M0/	<i>skwe</i>	/_/
120	‘leave’	P	<i>tyqo</i>	/M0/	<i>tyqq</i>	/M0/
121	‘stain’	P	<i>tq</i>	/M0/	<i>tq</i>	/M0/
122	‘swallow’	P	<i>ykweq</i>	/M0/	<i>ykweq</i>	/M0/
123	‘lay down’	P	<i>xkwa</i>	/HL+0/	<i>xkwq</i>	/L+0/
124	‘tie’	P	<i>skqq</i>	/HL+0/	<i>skqq</i>	/L+0/
125	‘tell’	P	<i>ktsaq</i>	/HL+0/	<i>ktsq</i>	/M0/
126	‘sweep’	P	<i>kwa</i>	/HL+0/	<i>kwq</i>	/L+0/
127	‘close’	P	<i>skqq</i>	/HL+0/	<i>skqq</i>	/L+0/
128	‘cook’	P	<i>keq</i>	/HL+0/	<i>kiq</i>	/L+0/
129	‘grow’	P	<i>klu</i>	/HL+0/	<i>klq</i>	/L+0/
130	‘give’	P	<i>ta</i>	/M0/	<i>tq</i>	/_/
131	‘melt’	P	<i>kila</i>	/MH/	<i>kilq</i>	/MH/
132	‘enter’	P	<i>ste</i>	/HL+0/	<i>ste</i>	/L+0/
133	‘escape’	P	<i>xna</i>	/HL+0/	<i>xna</i>	/L+0/
134	‘cry’	P	<i>kna</i>	/HL+0/	<i>kna</i>	/L+0/
135	‘swim’	P	<i>xkwa</i>	/HL+0/	<i>xkq</i>	/L+0/
136	‘decompose’	P	<i>ktsuq</i>	/HL+0/	<i>ktsqq</i>	/L+0/
137	‘get down’	P	<i>tyqya</i>	/ML+H/	<i>kqya</i>	/ML+H/
138	‘get cut’	P	<i>ktq</i>	/ML+H/	<i>ktq</i>	/ML+H/
139	‘cut’	P	<i>stq</i>	/ML+H/	<i>stq</i>	/ML+H/
140	‘arrive’ (base)	P	<i>kla</i>	/ML+H/	<i>klq</i>	/ML+H/
141	‘scare’	P	<i>kts</i>	/ML+H/	<i>kts</i>	/_/
142	‘get down’	P	<i>kiqya</i>	/ML+H/	<i>kiqya</i>	/ML+H/
143	‘sprout’	P	<i>ktsu</i>	/ML/	<i>ntsq</i>	/_/
144	‘fart’	P	<i>jlya</i>	/ML+H/	<i>jlyq</i>	/ML+H/
145	‘stand’	P	<i>tyq</i>	/ML+H/	<i>tyq</i>	/M0/
146	‘hit’	P	<i>kjwi</i>	/ML+H/	<i>kjwe</i>	/_/
147	‘do’	P	<i>qne</i>	/ML+H/	<i>qne</i>	/M0/
148	‘hear’	P	<i>kna</i>	/ML+H/	<i>kna</i>	/ML+H/
149	‘wash’	P	<i>yqq</i>	/ML+H/	<i>yqq</i>	/ML+H/
150	‘die’	P	<i>kja</i>	/_/	<i>kjq</i>	/_/
151	‘feed’	P	<i>xku</i>	/M0/	<i>xkq</i>	/M0/
152	‘leave’	P	<i>xno</i>	/M0/	<i>xno</i>	/M0/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
153	‘arrive’ (here)	P	<i>t'ya</i>	/ML+H/	<i>tiya</i>	/M0/
154	‘capture’	P	<i>kno</i>	/+H/	<i>kno</i>	/M0/
155	‘finish’	H	<i>ndyi</i>	/_/_/	<i>ndyi</i>	/_/_/
156	‘lay’	H	<i>nxyi</i>	/_/_/	<i>nxyi</i>	/M0/
157	‘meet’	H	<i>ntykwa</i>	/_/_/	<i>ntykwa</i>	/_/_/
158	‘go around’	H	<i>ntyqa</i>	/_/_/	<i>ntyqa</i>	/M0/
159	‘bathed’	H	<i>ntya</i>	/_/_/	<i>ntya</i>	/M0/
160	‘nurse’	H	<i>ntyiq</i>	/_/_/	<i>ntyiq</i>	/M0/
161	‘eat’	H	<i>ntyku</i>	/_/_/	<i>ntyku</i>	/M0/
162	‘speak’	H	<i>ntykwiq</i>	/_/_/	<i>ntykweq</i>	/M0/
163	‘sit’	H	<i>ntyqa</i>	/_/_/	<i>ntyqa</i>	/M0/
164	‘poke’	H	<i>ntyjoq</i>	/_/_/	<i>ntykjoq</i>	/M0/
165	‘touch’	H	<i>nlyaq</i>	/_/_/	<i>ndlaq</i>	/M0/
166	‘turn off’	H	<i>nswiq</i>	/HL+0/	<i>nswiq</i>	/L+0/
167	‘peel’	H	<i>nxta</i>	/HL+0/	<i>nsta</i>	/L+0/
168	‘confess’	H	<i>nnyi</i>	/HL+0/	<i>nnyi</i>	/L+0/
169	‘count’	H	<i>ntkwa</i>	/HL+0/	<i>ntykwa</i>	/L+0/
170	‘sew’	H	<i>nxkwa</i>	/HL+0/	<i>nxkwa</i>	/L+0/
171	‘sit’	H	<i>ntykwa</i>	/HL+0/	<i>ntykwa</i>	/L+0/
172	‘fall’	H	<i>ndiyu</i>	/M/	<i>ndiyu</i>	/L+0/
173	‘buy’	H	<i>nxqi</i>	/HL+0/	<i>nxqi</i>	/L+0/
174	‘convert’	H	<i>nga</i>	/ML+H/	<i>ndika</i>	/ML+H/
175	‘grow’	H	<i>nkiqu</i>	/HL+0/	<i>nkiqu</i>	/L+0/
176	‘find’	H	<i>ntyja</i>	/M/	<i>ntyja</i>	/L+0/
177	‘grind’	H	<i>ndiyo</i>	/HL+0/	<i>ndiyo</i>	/M0/
178	‘jump’	H	<i>ndywa</i>	/M/	<i>ndywa</i>	/L+0/
179	‘drink’	H	<i>ntyqo</i>	/HL+0/	<i>ntyqo</i>	/M0/
180	‘vomit’	H	<i>ntykwe</i>	/HL+0/	<i>ntykwe</i>	/L+0/
181	‘open’	H	<i>nsla</i>	/M0/	<i>sla</i>	/_/_/
182	‘open up’	H	<i>nla</i>	/M0/	<i>ndla</i>	/_/_/
183	‘make hole’	H	<i>ntyjyu</i>	/M0/	<i>ntyjyu</i>	/_/_/
184	‘deal’	H	<i>nxnyi</i>	/M0/	<i>nxnyi</i>	/M0/
185	‘roast’	H	<i>nkqi</i>	/M0/	<i>nkqi</i>	/_/_/
186	‘look’	H	<i>na</i>	/M0/	<i>na</i>	/_/_/
187	‘change’	H	<i>nxqa</i>	/M0/	<i>nxqa</i>	/M0/
188	‘marry’	H	<i>ntyqin</i>	/M0/	<i>ntyqi</i>	/M0/
189	‘hang’	H	<i>ntykwi</i>	/M0/	<i>ntykwe</i>	/M0/
190	‘cut’	H	<i>nsqyu</i>	/M0/	<i>nxqyu</i>	/_/_/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
191	‘spend’	H	<i>ntyji</i>	/M0/	<i>ntyjı</i>	/M0/
192	‘scream’	H	<i>nsqya</i>	/M0/	<i>nxqya</i>	/_/_/
193	‘boil’	H	<i>xi -kwi</i>	/M0/	<i>nkwe</i>	/M0/
194	‘pinch’	H	<i>nsnyaq</i>	/M0/	<i>snyaq</i>	/_/_/
195	‘laugh’	H	<i>nstyı</i>	/M0/	<i>nstyı</i>	/_/_/
196	‘shake’	H	<i>nskwe</i>	/M0/	<i>nskwe</i>	/_/_/
197	‘leave’	H	<i>ntyqo</i>	/M0/	<i>ntyqq</i>	/M0/
198	‘stain’	H	<i>ntyqq</i>	/M0/	<i>ntqq</i>	/M0/
199	‘swallow’	H	<i>ntykweq</i>	/M0/	<i>ntykweq</i>	/M0/
200	‘lay down’	H	<i>nxkwa</i>	/HL+0/	<i>nxkwa</i>	/L+0/
201	‘tie’	H	<i>nskqq</i>	/HL+0/	<i>nskqq</i>	/L+0/
202	‘tell’	H	<i>ntsaq</i>	/HL+0/	<i>ntsa</i>	/M0/
203	‘sweep’	H	<i>ntykwa</i>	/HL+0/	<i>ntkwa</i>	/L+0/
204	‘close’	H	<i>nskqq</i>	/HL+0/	<i>nskqq</i>	/L+0/
205	‘cook’	H	<i>ntykeq</i>	/HL+0/	<i>ntykiq</i>	/L+0/
206	‘grow’	H	<i>nlu</i>	/HL+0/	<i>ndlq</i>	/L+0/
207	‘give’	H	<i>nda</i>	/M0/	<i>nda</i>	/_/_/
208	‘melt’	H	<i>nla</i>	/MH/	<i>nkilq</i>	/MH/
209	‘enter’	H	<i>nte</i>	/HL+0/	<i>nte</i>	/L+0/
210	‘escape’	H	<i>nxna</i>	/HL+0/	<i>nxna</i>	/L+0/
211	‘cry’	H	<i>na</i>	/HL+0/	<i>nna</i>	/L+0/
212	‘swim’	H	<i>nskwa</i>	/HL+0/	<i>nxkwa</i>	/L+0/
213	‘decompose’	H	<i>ntsua</i>	/HL+0/	<i>ntsq</i>	/L+0/
214	‘get down’	H	<i>ntyqya</i>	/ML+H/	<i>ntyqya</i>	/ML+H/
215	‘get cut’	H	<i>ktq</i>	/ML+H/	<i>ntq</i>	/ML+H/
216	‘cut’	H	<i>ntq</i>	/ML+H/	<i>nstq</i>	/ML+H/
217	‘arrive’ (base)	H	<i>nla</i>	/ML+H/	<i>ndlq</i>	/ML+H/
218	‘scare’	H	<i>ntse</i>	/ML+H/	<i>ntse</i>	/_/_/
219	‘get down’	H	<i>ntyqya</i>	/ML+H/	<i>ntyqya</i>	/ML+H/
220	‘sprout’	H	<i>ntsu</i>	/ML/	<i>ntsq</i>	/_/_/
221	‘fart’	H	<i>jlya</i>	/ML+H/	<i>njlyq</i>	/ML+H/
222	‘stand’	H	<i>ndyq</i>	/ML+H/	<i>ndyq</i>	/M0/
223	‘hit’	H	<i>ntjwi</i>	/ML+H/	<i>ntjwe</i>	/_/_/
224	‘do’	H	<i>nqne</i>	/ML+H/	<i>nqne</i>	/M0/
225	‘hear’	H	<i>nna</i>	/ML+H/	<i>nna</i>	/ML+H/
226	‘wash’	H	<i>ntyqq</i>	/ML+H/	<i>ntyqq</i>	/ML+H/
227	‘die’	H	<i>ntyji</i>	/_/_/	<i>ntyjq</i>	/_/_/
228	‘feed’	H	<i>nxku</i>	/M0/	<i>nxkq</i>	/M0/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
229	'leave'	H	<i>nxno</i>	/M0/	<i>nxno</i>	/M0/
230	'arrive' (here)	H	<i>ndiyq</i>	/ML+H/	<i>ndiyq</i>	/M0/
231	'capture'	H	<i>nno</i>	/+H/	<i>nno</i>	/M0/
232	'finish'	PRG	<i>ndyi</i>	/+H/	<i>ndyḭ</i>	/+H/
233	'lay'	PRG	<i>su</i>	/LM/	<i>sq</i>	/M0/
234	'meet'	PRG	<i>ntykwa</i>	/+H/	<i>ntykwq</i>	/+H/
235	'go around'	PRG	<i>ntqq</i>	/+H/	<i>ntqq</i>	/H/
236	'bathed'	PRG	<i>nta</i>	/+H/	<i>ntyq</i>	/H/
237	'nurse'	PRG	<i>ntyiq</i>	/+H/	<i>nteq</i>	/H/
238	'eat'	PRG	<i>ntyku</i>	/+H/	<i>ntykq</i>	/H/
239	'speak'	PRG	<i>ntykwiq</i>	/+H/	<i>ntykwēq</i>	/H/
240	'sit'	PRG	<i>ntqq</i>	/+H/	<i>ntqq</i>	/M0/
241	'poke'	PRG	<i>ntyjoq</i>	/+H/	<i>ntyjoq</i>	/H/
242	'touch'	PRG	<i>nlyaq</i>	/+H/	<i>ndlqq</i>	/H/
243	'turn off'	PRG	<i>nswiq</i>	/H+0/	<i>nswēq</i>	/L+0/
244	'peel'	PRG	<i>nstq</i>	/H+0/	<i>nstq</i>	/L+0/
245	'confess'	PRG	<i>nnyi</i>	/H+0/	<i>nnyi</i>	/L+0/
246	'count'	PRG	<i>ntkwa</i>	/H+0/	<i>nkwaq</i>	/L+0/
247	'sew'	PRG	<i>nxkwq</i>	/H+0/	<i>nxkwq</i>	/L+0/
248	'sit'	PRG	<i>ntkwa</i>	/H+0/	<i>ntykwq</i>	/L+0/
249	'fall'	PRG	<i>nd'yu</i>	/M/	<i>nd'yq</i>	/L+0/
250	'buy'	PRG	<i>nsqi</i>	/M/	<i>nsqḭ</i>	/L+0/
251	'convert'	PRG	<i>ndiga</i>	/M/	<i>ndikq</i>	/M/
252	'grow'	PRG	<i>ntyqu</i>	/M/	<i>ntyqq</i>	/M/
253	'find'	PRG	<i>ntyja</i>	/M/	<i>ntyjq</i>	/M/
254	'grind'	PRG	<i>nd'yo</i>	/M/	<i>ndiyq</i>	/H/
255	'jump'	PRG	<i>ndiwq</i>	/M/	<i>ndikwq</i>	/L+0/
256	'drink'	PRG	<i>ntyqo</i>	/M/	<i>ntyqq</i>	/H/
257	'vomit'	PRG	<i>ntykwē</i>	/M/	<i>ntykwē</i>	/L+0/
258	'open'	PRG	<i>nsla</i>	/H/	<i>nslq</i>	/+H/
259	'open up'	PRG	<i>nla</i>	/H/	<i>nlq</i>	/+H/
260	'make hole'	PRG	<i>ntyjyuq</i>	/H/	<i>ntyjoq</i>	/+H/
261	'deal'	PRG	<i>xnyi</i>	/H/	<i>xnyi</i>	/M0/
262	'roast'	PRG	<i>ntyqi</i>	/H/	<i>ktyqḭ</i>	/+H/
263	'look'	PRG	<i>na</i>	/H/	<i>nna</i>	/+H/
264	'change'	PRG	<i>nxqq</i>	/H/	<i>nxqq</i>	/H/
265	'marry'	PRG	<i>ntqḭ</i>	/H/	<i>ntyqḭ</i>	/H/
266	'hang'	PRG	<i>ndwi</i>	/H/	<i>ndwē</i>	/H, M0/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
267	'cut'	PRG	<i>nsqyu</i>	/H/	<i>nsqyq</i>	/+H/
268	'spend'	PRG	<i>ntji</i>	/H/	<i>ntjɛ</i>	/H, M0/
269	'scream'	PRG	<i>nsqya</i>	/H/	<i>nsqya</i>	/+H/
270	'boil'	PRG	<i>ntykwi</i>	/H/	<i>kwe</i>	/M0/
271	'pinch'	PRG	<i>nsnyaq</i>	/H/	<i>nsnyaq</i>	/H/
272	'laugh'	PRG	<i>nsty</i>	/H/	<i>nstyɪ</i>	/+H/
273	'shake'	PRG	<i>nskwe</i>	/H/	<i>nskwe</i>	/+H/
274	'leave'	PRG	<i>ntqo</i>	/H/	<i>ntqq</i>	/+H/
275	'stain'	PRG	<i>ntyqq</i>	/H/	<i>ntqq</i>	/+H/
276	'swallow'	PRG	<i>ntykweq</i>	/H/	<i>ntykɛq</i>	/+H/
277	'lay down'	PRG	<i>nskwa</i>	/MH/	<i>nskwa</i>	/L+0/
278	'tie'	PRG	<i>nskqq</i>	/MH/	<i>nskqq</i>	/L+0/
279	'tell'	PRG	<i>ntsaq</i>	/MH/	<i>ntsaq</i>	/H/
280	'sweep'	PRG	<i>ntkwa</i>	/MH/	<i>ntkwa</i>	/L+0/
281	'close'	PRG	<i>nskqq</i>	/MH/	<i>nskqq</i>	/L+0/
282	'cook'	PRG	<i>ntykeq</i>	/MH/	<i>ntykiq</i>	/L+0/
283	'grow'	PRG	<i>nlu</i>	/MH/	<i>nlq</i>	/M/
284	'give'	PRG	<i>nda</i>	/H/	<i>nda</i>	/+H/
285	'melt'	PRG	<i>nla</i>	/MH/	<i>nkilq</i>	/MH/
286	'enter'	PRG	<i>nte</i>	/MH/	<i>nte</i>	/L+0/
287	'escape'	PRG	<i>nsna</i>	/MH/	<i>nsna</i>	/L+0/
288	'cry'	PRG	<i>na</i>	/MH/	<i>nna</i>	/L+0/
289	'swim'	PRG	<i>nskwa</i>	/MH/	<i>nskwa</i>	/L+0/
290	'decompose'	PRG	<i>ntsuq</i>	/MH/	<i>ntsuq</i>	/MH/
291	'get down'	PRG	<i>ntyqya</i>	/+H/	<i>ntyqya</i>	/+H/
292	'get cut'	PRG	<i>ntq</i>	/+H/	<i>ntq</i>	/+H/
293	'cut'	PRG	<i>nstq</i>	/+H/	<i>nstq</i>	/+H/
294	'arrive' (base)	PRG	<i>nla</i>	/+H/	<i>nlq</i>	/+H/
295	'scare'	PRG	<i>ntse</i>	/+H/	<i>ntse</i>	/+H/
296	'get down'	PRG	<i>ntyqya</i>	/+H/	<i>ntyqya</i>	/+H/
297	'sprout'	PRG	<i>ntsu</i>	/+H/	<i>ntsq</i>	/+H/
298	'fart'	PRG	<i>jlya</i>	/+H/	<i>jlyq</i>	/+H/
299	'stand'	PRG	<i>ndq</i>	/+H/	<i>ndq</i>	/M0/
300	'hit'	PRG	<i>ntjwi</i>	/+H/	<i>ntjwe</i>	/+H/
301	'do'	PRG	<i>nqne</i>	/+H/	<i>nqne</i>	/H/
302	'hear'	PRG	<i>nna</i>	/+H/	<i>nna</i>	/+H/
303	'wash'	PRG	<i>ntyqq</i>	/+H/	<i>ntyqq</i>	/+H/
304	'die'	PRG	<i>ntyji</i>	/+H/	<i>ntyji</i>	/+H/

Table 5.20: Continue

	Gloss	Aspect	3Sverb	3S verb T	1S verb	1S T
305	‘feed’	PRG	<i>nxku</i>	/M0/	<i>nxkq</i>	/H, M0/
306	‘leave’	PRG	<i>nxno</i>	/M0/	<i>nxno</i>	/M0/
307	‘arrive’ (here)	PRG	<i>ndiyq</i>	/+H/	<i>tiyq</i>	/M0/
308	‘capture’	PRG	<i>no</i>	/+H/	<i>no</i>	/+H/

The tones found in 1S are irregular, therefore the tones are hard to predict. However, there are some general (but sometimes conflicting) patterns, as shown in the following tables. These use two strategies: charting the 1s tone from the corresponding stem tone for the same aspect; and charting the 1s tone of the completive aspect against the 1s tones of the corresponding noncompletives:

Table 5.21: Patterns Where 1S Tone is Identical to (3rd person) Stem Tone in the Same Aspect

Stem tone (any aspect)	Corresponding 1s stem	Notes
/__/	/__/	C, P, H
/+H/	/+H/	PRG only
/H/	/H/	C or PRG only
/LM/	/LM/	C only
/M/	/M/	C or PRG only
/M0/	/M0/	All aspects
/MH/	/MH/	Mainly in PRG
/ML+H/	/ML+H/	P or H only

Table 5.22: Patterns Where 1S tone is a Transform of the (3rd person) Stem Tone in the Same Aspect

Stem tone (any aspect)	Corresponding 1s stem	Notes
/__/	/H/	C only
/__/	/M0/	Very sporadic
/+H/	/H/	PRG only
/+H/	/M0/	Very sporadic
/H/	/__/	C only
/H/	/+H/	PRG only
/H/	/M0/	C or PRG only

Table 5.22: Continue

Stem tone (any aspect)	Corresponding 1s stem	Notes
/H+0/	/L+0/	PRG only
/HL+0/	/L+0/	Very sporadic
/HL+0/	/M0/	P or H only
/LM/	/_/	C only
/LM/	/H/, /+H/, /L+0/, /M0/, /ML+H/	Very sporadic
/M/	/H/	C or PRG only
/M/	/L+0/	Very sporadic
/M0/	/_/	P or H only
/MH/	/L+0/	C or PRG only

Table 5.23: Major Patterns of Correspondence from 1S Person Singular Completive to 1S Potential/Habitual and 1S Progressive

1S Completive	1S POT/HAB	1S PRG
/_/	/_, /M0/	/+H/
/H/	/M0/	/H/
/L+0/	/L+0/	/L+0/
/LM/	/ML+H/	/+H/
/M0/	/M0/	/M0/, /H/
/ML+H/	/ML+H/	/+H/

Tables 5.21-22 show that there is substantial (but by no means total) predictability from the (3rd person) stem form in a given aspect, to the 1s form, following two common patterns: one of identity (Table 5. 21) or of some kind of transform (Table 5.22) that may reflect historical tonal fusion of some kind. Interestingly, there is also substantial predictability from the 1S completive form to corresponding first persons of the Potential/Habitual and of the progressive (Table 5.23). These should look familiar, since they closely match the completive to potential/habitual and to progressive patterns observed among bare (3rd person) stems in Table 5.16. Perhaps any conflicts among these two strategy could account for the relative tonal variability and irregularity observed among 1s forms.

5.4.4 Tone and Aspect of Compounds

Verb compounds can include adjective+verb, e.g. *sa-ykwiq* (light-spoke) ‘suddenly spoke’; verb+relational noun, e.g. *yla^{MH}-kyaq^{ML}* (danced-feet) ‘danced’; and verb+verb, *ntqq-ykwiq* (walking-taking) ‘spreading gossip’.

The following are examples we are going to see tones and aspect in verb compounds. As was done for noncompounds, in the following examples the completive aspect is used as the base form from which the tone of the others are predicted, because it has the least amount of tonal neutralization and serves well as the citation form. Table 5.24 (A) and Table 5.25 (B) shows the tones of the first word (W1) of the stem compound and the second word (W2) of the stem compound²⁰.

Table 5.24: Tones and Apect in W1 and W2 of Compounds (A)

Stem gloss	COMP	3S W1	3S W2	POT	3S W1	3S W2
speak (accidentally)	ykwiq-cha	/_/_/	/_/_/	tykwiq-cha	/_/_/	/_/_/
speak (suddenly)	sa-ykwiq	/_/_/	/_/_/	sa-tykwiq	/_/_/	/_/_/
shower	yta-tyku	/_/_/	/H/	kta-tyku	/_/_/	/H/
ram	yjoq-ke	/_/_/	/LM/	kjoq-ke	/_/_/	/LM/
eat (hiding)	yku-na	/_/_/	/M/	ku-na	/_/_/	/M/
tell a secret	ykwiq-na	/_/_/	/M/	tykwiq-na	/_/_/	/M/
deal	snyi-chaq	/_/_/	/MH/	xnyi-chaq	/_/_/	/MH/
dream	ykwiq-sla	/_/_/	/MH/	tykwiq-sla	/_/_/	/MH/
test	yku-jyaq	/_/_/	/MH/	ku-jyaq	/_/_/	/MH/
clap	nchu-yaq	/H/	/M/	kchu-yaq	/M0/	/M/
let go	jla-yaq	/H/	/M/	tla-yaq	/M0/	/M/
start	ndyi-sna	/H/	/M/	tyi-sna	/M0/	/M/
fire, expel	kwi-qo	/H/	/M0/	kwi-qo	/M0/	/_/_/
pull	jwa-ki	/H/	/MH/	jwa-ki	/M0/	/MH/
smell	kwa-sjq	/HL+0/	/_/_/	tkwa-sjq	/HL+0/	/_/_/
hold on	tsa-snyi	/L/	/_/_/	tsa-xnyi	/L/	/_/_/
tell	ya-ykwiq	/LM/	/_/_/	tsa-ykwiq	/ML+H/	/_/_/
escape	ya-sna	/LM/	/MH/	tsa-sna	/ML+H/	/MH/
dress	ykuq-steq	/M/	/_/_/	kuq-steq	/HL+0/	/_/_/
slip	jɛ-sna	/M/	/MH/	tyji-sna	/HL+0/	/MH/

²⁰ The data is presented as follows: C, P, H and PRG. From left to right, Table A is the first part of the data and Table B is the continuation of the data.

Table 5.24: Continue

Stem gloss	COMP	3S W1	3S W2	POT	3S W1	3S W2
dance	yla-kyaq	/MH/	/_/	kla-kyaq	/HL+0/	/_/
run	sna-ji	/MH/	/_/	xna-ji	/HL+0/	/_/
sing	yla-tqwa	/MH/	/_/	kla-tqwa	/HL+0/	/_/
cough	kwa-tuq	/MH/	/LM/	tykwa-tuq	/HL+0/	/LM/
speak	nda-chaq	/MH/	/MH/	ta-chaq	/M0/	/MH/

Table 5.25: Tones and Apect in W1 and W2 of Compounds (B)

HAB	3S W1	3S W2	PROG	3S W1	3S W2
ndywiq-cha	/_/	/_/	ndywiq-cha	/+H/	/_/
sa-ntykwiq	/_/	/_/	sa-ndywiq	/_/	/+H/
ntya-tyku	/_/	/H/	nta-tyku	/+H/	/H/
ntyjoq-ke	/_/	/LM/	ntyjoq-ke	/+H/	/LM/
ntyku-na	/_/	/M/	ntyku-na	/+H/	/M/
ndywiq-na	/_/	/M/	ntykwiq-na	/+H/	/M/
nxnyi-chaq	/_/	/MH/	nsnyi-chaq	/+H/	/MH/
ndywiq-sla	/_/	/MH/	ntykwiq-sla	/+H/	/MH/
ntyku-jyaq	/_/	/MH/	ntyku-jyaq	/+H/	/MH/
nchu-ya	/M0/	/M/	nchu-yaq	/H/	/M/
ndla-yaq	/M0/	/M/	ndla-yaq	/H/	/M/
ndyi-sna	/M0/	/M/	ndyi-sna	/H/	/M/
nkwi-qo	/M0/	/_/	ndwi-qo	/H/	/M0/
ntjwa-ki	/M0/	/MH/	njwa-ki	/H/	/MH/
ndywa-sjq	/HL+0/	/_/	ndwa-sjq	/H+0/	/_/
tsa-nxnyi	/L/	/_/	tsa-nsnyi	/L/	/+H/
ntyqa-ykwiq	/_/	/_/	ntqa-ykwiq	/+H/	/_/
ntyqa-sna	/_/	/MH/	ntqa-sna	/+H/	/MH/
ntykuq-steq	/HL+0/	/_/	ntykuq-steq	/M/	/_/
ntyji-sna	/HL+0/	/MH/	ntje-sna	/M/	/LM/
ndla-kya	/HL+0/	/_/	ndla-kyaq	/MH/	/_/
nxna-ji	/HL+0/	/_/	nsna-ji	/MH/	/_/
ndla-tqwa	/MH/	/_/	ndla-tqwa	/MH/	/_/
ndywa-tuq	/HL+0/	/LM/	ndwa-tuq	/MH/	/LM/
nda-chaq	/M0/	/MH/	nda-chaq	/H/	/MH/

In Tables 5.24 and 5.25 we see the normal aspect changes we see in Table 5.17, the tones in the second word (W2) does not show any change.

5.4.5 Verb Compounds 3S and 2S

In this section we are going to see how tones are in person marking in compounds

Table 5.26: Verb Compounds: 3S vs 2S

Stem gloss	Asp	3S	3S W1	3S W2	2S	2S W1	2S W2
speak (accidentally)	C	<i>ykwiq-cha</i>	/_/_	/_/_	<i>ykwiq-cha</i>	/_/_	/LM/
speak (accidentally)	H	<i>ndywiq-cha</i>	/_/_	/_/_	<i>ndywiq-cha</i>	/_/_	/LM/
speak (accidentally)	P	<i>tykwiq-cha</i>	/_/_	/_/_	<i>tykwiq-cha</i>	/_/_	/LM/
speak (suddenly)	C	<i>sa-ykwiq</i>	/_/_	/_/_	<i>sa-ykwiq</i>	/_/_	/LM/
speak (suddenly)	H	<i>sa-ntykwiq</i>	/_/_	/_/_	<i>sa-ntykwiq</i>	/_/_	/LM/
speak (suddenly)	P	<i>sa-tykwiq</i>	/_/_	/_/_	<i>sa-tykwiq</i>	/_/_	/LM/
tell	H	<i>ntyqq-ykwiq</i>	/_/_	/_/_	<i>ntyqq-ykwiq</i>	/_/_	/LM/
dance	H	<i>ndla-kya</i>	/HL+0/	/_/_	<i>ndla-kya</i>	/HL+0/	/LM/
dance	P	<i>kla-kyaq</i>	/HL+0/	/_/_	<i>kla-kyaq</i>	/HL+0/	/LM/
smell	C	<i>kwa-siq</i>	/HL+0/	/_/_	<i>kwa-siq</i>	/HL+0/	/LM/
smell	H	<i>ndywa-siq</i>	/HL+0/	/_/_	<i>ndywa-siq</i>	/HL+0/	/LM/
smell	P	<i>tkwa-siq</i>	/HL+0/	/_/_	<i>kwa-siq</i>	/HL+0/	/LM/
dress	H	<i>ntykuq-steq</i>	/HL+0/	/_/_	<i>ntykuq-steq</i>	/M0/	/LM/
dress	P	<i>kuq-steq</i>	/HL+0/	/_/_	<i>kuq-steq</i>	/M0/	/LM/
dress	C	<i>ykuq-steq</i>	/M/	/_/_	<i>ykuq-steq</i>	/H/	/LM/
dress	PRG	<i>ntykuq-steq</i>	/M/	/_/_	<i>ntykuq-steq</i>	/H/	/LM/
smell	PRG	<i>ndwa-siq</i>	/H+0/	/_/_	<i>ndwa-siq</i>	/MH/	/LM/
dance	C	<i>yla-kyaq</i>	/MH/	/_/_	<i>yla-kyaq</i>	/MH/	/LM/
dance	PRG	<i>ndla-kyaq</i>	/MH/	/_/_	<i>ndla-kyaq</i>	/MH/	/LM/
tell	C	<i>ya-ykwiq</i>	/LM/	/_/_	<i>ya-ykwiq</i>	/+H/	/LM/
fire, expel	H	<i>nkwi-qo</i>	/M0/	/_/_	<i>nkwi-qo</i>	/M0/	/LM/
fire, expel	P	<i>kwi-qo</i>	/M0/	/_/_	<i>kwi-qo</i>	/M0/	/LM/
speak (accidentally)	PRG	<i>ndywiq-cha</i>	/+H/	/_/_	<i>ndywiq-cha</i>	/+H/	/LM/
tell	PRG	<i>ntyqq-ykwiq</i>	/+H/	/_/_	<i>ntyqq-ykwiq</i>	/+H/	/LM/
tell	P	<i>tsa-ykwiq</i>	/ML+H/	/_/_	<i>tsa-ykwiq</i>	/ML+H/	/LM/
sing	C	<i>yla-tqwa</i>	/MH/	/_/_	<i>yla-tqwa</i>	/MH/	/+H/
sing	H	<i>ndla-tqwa</i>	/MH/	/_/_	<i>ndla-tqwa</i>	/HL+0/	/+H/
sing	P	<i>kla-tqwa</i>	/HL+0/	/_/_	<i>kla-tqwa</i>	/M0/	/+H/
sing	PRG	<i>ndla-tqwa</i>	/MH/	/_/_	<i>ndla-tqwa</i>	/MH/	/+H/
run	C	<i>sna-ji</i>	/MH/	/_/_	<i>sna-ji</i>	/MH/	/H/
run	P	<i>xna-ji</i>	/HL+0/	/_/_	<i>xna-ji</i>	/M0/	/+H/
run	PRG	<i>nsna-ji</i>	/MH/	/_/_	<i>nsna-ji</i>	/H/	/+H/
run	H	<i>nxna-ji</i>	/HL+0/	/_/_	<i>nxna-ji</i>	/M0/	/+H/
eat (hiding)	C	<i>yku-na</i>	/_/_	/M/	<i>yku-na</i>	/_/_	/H/
eat (hiding)	H	<i>ntyku-na</i>	/_/_	/M/	<i>ntyku-na</i>	/_/_	/H/
eat (hiding)	P	<i>ku-na</i>	/_/_	/M/	<i>ku-na</i>	/_/_	/H/
tell a secret	C	<i>ykwiq-na</i>	/_/_	/M/	<i>ykwiq-na</i>	/_/_	/H/

Table 5.26: Continue

Stem gloss	Asp	3S	3S W1	3S W2	2S	2S W1	2S W2
tell a secret	H	<i>ndywiq-na</i>	/_/_/	/M/	<i>ndywiq-na</i>	/_/_/	/H/
tell a secret	P	<i>tykwiq-na</i>	/_/_/	/M/	<i>tykwiq-na</i>	/_/_/	/H/
clap	C	<i>nchu-yaq</i>	/H/	/M/	<i>nchu-yaq</i>	/_/_/	/H/
clap	PRG	<i>nchu-yaq</i>	/H/	/M/	<i>nchu-yaq</i>	/+H/	/H/
let go	C	<i>jla-yaq</i>	/H/	/M/	<i>jla-yaq</i>	/+H/	/H/
let go	PRG	<i>ndla-yaq</i>	/H/	/M/	<i>ndla-yaq</i>	/+H/	/H/
start	C	<i>ndyi-sna</i>	/H/	/M/	<i>ndyi-sna</i>	/H/	/H/
start	PRG	<i>ndyi-sna</i>	/H/	/M/	<i>ndyi-sna</i>	/H/	/H/
clap	H	<i>nchu-ya</i>	/M0/	/M/	<i>nchu-ya</i>	/M0/	/H/
clap	P	<i>kchu-yaq</i>	/M0/	/M/	<i>kchu-yaq</i>	/M0/	/H/
let go	H	<i>ndla-yaq</i>	/M0/	/M/	<i>ndla-yaq</i>	/M0/	/H/
let go	P	<i>tla-yaq</i>	/M0/	/M/	<i>tla-yaq</i>	/M0/	/H/
start	H	<i>ndyi-sna</i>	/M0/	/M/	<i>ndyi-sna</i>	/M0/	/H/
start	P	<i>tyi-sna</i>	/M0/	/M/	<i>tyi-sna</i>	/M0/	/H/
eat (hiding)	PRG	<i>ntyku-na</i>	/+H/	/M/	<i>ntyku-na</i>	/+H/	/H/
tell a secret	PRG	<i>ntykwiq-na</i>	/+H/	/M/	<i>ntykwiq-na</i>	/+H/	/H/
shower	C	<i>yta-tyku</i>	/_/_/	/H/	<i>yta-tyku</i>	/LM/	/H/
shower	PRG	<i>nta-tyku</i>	/+H/	/H/	<i>nta-tyku</i>	/LM/	/H/
shower	H	<i>ntya-tyku</i>	/_/_/	/H/	<i>ntya-tyku</i>	/LM/	H
shower	P	<i>kta-tyku</i>	/_/_/	/H/	<i>kta-tyku</i>	/LM/	H
dream	C	<i>ykwiq-sla</i>	/_/_/	/MH/	<i>ykwiq-sla</i>	/_/_/	/H/
dream	H	<i>ndywiq-sla</i>	/_/_/	/MH/	<i>ndywiq-sla</i>	/_/_/	/H/
dream	P	<i>tykwiq-sla</i>	/_/_/	/MH/	<i>tykwiq-sla</i>	/_/_/	/H/
escape	H	<i>ntyqq-sna</i>	/_/_/	/MH/	<i>ntyqq-sna</i>	/_/_/	/H/
test	C	<i>yku-jyaq</i>	/_/_/	/MH/	<i>yku-jyaq</i>	/_/_/	/H/
test	H	<i>ntyku-jyaq</i>	/_/_/	/MH/	<i>ntyku-jyaq</i>	/_/_/	/H/
test	P	<i>ku-jyaq</i>	/_/_/	/MH/	<i>ku-jyaq</i>	/_/_/	/H/
slip	H	<i>ntyji-sna</i>	/HL+0/	/MH/	<i>ntyji-sna</i>	/HL+0/	/MH/
slip	P	<i>tyji-sna</i>	/HL+0/	/MH/	<i>tyji-sna</i>	/HL+0/	/MH/
slip	C	<i>je-sna</i>	/M/	/MH/	<i>je-sna</i>	/M/	/+H/
pull	C	<i>jwa-ki</i>	/H/	/MH/	<i>jwa-ki</i>	/H/	/H/
pull	PRG	<i>njwa-ki</i>	/H/	/MH/	<i>njwa-ki</i>	/H/	/H/
speak	PRG	<i>nda-chaq</i>	/H/	/MH/	<i>nda-chaq</i>	/LM/	/H/
escape	C	<i>ya-sna</i>	/LM/	/MH/	<i>ya-sna</i>	/+H/	/H/
pull	H	<i>ntjwa-ki</i>	/M0/	/MH/	<i>ntjwa-ki</i>	H	/H/
pull	P	<i>jwa-ki</i>	/M0/	/MH/	<i>jwa-ki</i>	H	/H/
dream	PRG	<i>ntykwiq-sla</i>	/+H/	/MH/	<i>ntykwiq-sla</i>	/+H/	/H/
escape	PRG	<i>ntqq-sna</i>	/+H/	/MH/	<i>ntqq-sna</i>	/+H/	/H/
test	PRG	<i>ntyku-jyaq</i>	/+H/	/MH/	<i>ntyku-jyaq</i>	/+H/	/H/
escape	P	<i>tsa-sna</i>	/ML+H/	/MH/	<i>tsa-sna</i>	/ML+H/	/H/
deal	C	<i>snyi-chaq</i>	/_/_/	/MH/	<i>snyi-chaq</i>	/LM/	/MH/
deal	H	<i>nxnyi-chaq</i>	/_/_/	/MH/	<i>nxnyi-chaq</i>	/LM/	/MH/

Table 5.26: Continue

Stem gloss	Asp	3S	3S W1	3S W2	2S	2S W1	2S W2
deal	P	<i>xnyi-chaq</i>	/_/_/	/MH/	<i>xnyi-chaq</i>	/LM/	/MH/
speak	C	<i>nda-chaq</i>	/MH/	/MH/	<i>nda-chaq</i>	/LM/	/MH/
speak	H	<i>nda-chaq</i>	/M0/	/MH/	<i>nda-chaq</i>	/LM/	/MH/
speak	P	<i>ta-chaq</i>	/M0/	/MH/	<i>ta-chaq</i>	/LM/	/MH/
deal	PRG	<i>nsnyi-chaq</i>	/+H/	/MH/	<i>nsnyi-chaq</i>	/LM/	/MH/
ram	C	<i>yjoq-ke</i>	/_/_/	/LM/	<i>yjoq-ke</i>	/_/_/	/+H/
cough	H	<i>ndywa-tuq</i>	/HL+0/	/LM/	<i>ndywa-tuq</i>	/M0/	/LM/
cough	P	<i>tykwa-tuq</i>	/HL+0/	/LM/	<i>tykwa-tuq</i>	/M0/	/LM/
cough	C	<i>kwa-tuq</i>	/MH/	/LM/	<i>kwa-tuq</i>	/M0/	/LM/
cough	PRG	<i>ndwa-tuq</i>	/MH/	/LM/	<i>ndwa-tuq</i>	/M0/	/LM/
ram	H	<i>ntyjoq-ke</i>	/_/_/	/LM/	<i>ntyjoq-ke</i>	/_/_/	/+H/
ram	P	<i>kjoq-ke</i>	/_/_/	/LM/	<i>kjoq-ke</i>	/_/_/	/+H/
slip	PRG	<i>ntjɛ-sna</i>	/M/	/LM/	<i>ntjɛ-sna</i>	/M/	/+H/
ram	PRG	<i>ntyjoq-ke</i>	/+H/	/LM/	<i>ntyjoq-ke</i>	/+H/	/+H/
fire, expel	C	<i>kwi-qo</i>	/H/	/M0/	<i>kwi-qo</i>	/H/	/LM/
fire, expel	PRG	<i>ndwi-qo</i>	/H/	/M0/	<i>ntkwi-qo</i>	/H/	/LM/
speak (suddenly)	PRG	<i>sa-ndywiq</i>	/_/_/	/+H/	<i>sa-ndywiq</i>	/_/_/	/LM/

In table 5.24 the tone in the compounds are divided into first word (W1) and second word (W2) to be able to see the tones from stem tone and 2S. The following patterns are found in W1 with stem and 2S:

- If the stem of W1 has a /_/_/ tone then the W1 of 2S has /_/_/ or /LM/ tones
- If the stem of W1 has a /HL+0/ tone then the W1 of 2S has /HL+0/ or /M0/ tones
- If the stem of W1 has a /M/ tone then the W1 of 2S has /H/ tone
- If the stem of W1 has a /H+0/ tone then the W1 of 2S has /MH/ tone
- If the stem of W1 has a /MH/ tone then W1 of 2S has /MH/, /H/ or /LM/
- If the stem of W1 has a /LM/ tone then the W1 of 2S has /+H/ tone
- If the stem of W1 has a /M0/ tone then W1 of 2S has /M0/, /H/ or /LM/
- If stem of W1 has a /+H/ tone then W1 of 2S has /+H/ or /LM/
- If stem of W1 has a /ML+H/ then the W1 of 2S has /ML+H/ tone

The following patterns are found in W2 with stem and 2S:

- If the stem of W2 has /_/_/ and /LM/ tones then the W2 of 2S has /LM/ or /+H/ tones
- If the stem of W2 has /H/ and /M/ tones then the W2 of 2S has /H/ tone
- If the stem of W2 has a /MH/ tone then the W2 of 2S has /H/ or /MH/ tones

- d. If the stem of W2 has /M0/ and /+H/ tones then the W2 of 2S has a /LM/ tone

To conclude, the tones found in person marking are as we expected:

The stem tone /_/, /LM/, changes to /LM/ or /+H/ in W2

The stem tone /M/ changes into /H/ in W2

The stem tone /MH/ changes into /MH/, /H/ or /LM/ in W2

The stem tone /ML+H/ changes into /ML+H/ in W2

The stem tone /M0/ and /+H/ changes into /LM/, /M0/ or /H/ in W2

5.4.6 Verb Compounds 3S and 1S

The tones for the 2S and 1S compounds behave as follows: The W1 of the 2S stays with stem tones (3S), and the W2 is inflected and marked by the 2S tone. On the other hand, the majority of compounds of the 1S are inflected by the 1S tones in both words (W1 and W2). See Table 5.26 and 5.27.

Table 5.27: Verb Compounds 3S vs 1S

Stem gloss	Asp	3S	3S W1	3S W2	1S	1S W1	1S W2
speak (accidentally)	C	<i>ykwiq-cha</i>	/_/_/	/_/_/	<i>ykwęq-cha</i>	/H/	/ML/
speak (accidentally)	H	<i>ndywiq-cha</i>	/_/_/	/_/_/	<i>ndywęq-cha</i>	/M0/	/ML/
speak (accidentally)	P	<i>tykwiq-cha</i>	/_/_/	/_/_/	<i>tykwęq-cha</i>	/M0/	/ML/
speak (suddenly)	C	<i>sa-ykwiq</i>	/_/_/	/_/_/	<i>sa-qwi-ykwęq</i>	/_/_/	/H/
speak (suddenly)	H	<i>sa-ntykwiq</i>	/_/_/	/_/_/	<i>sa-qwi-ndywęq</i>	/_/_/	/M0/
speak (suddenly)	P	<i>sa-tykwiq</i>	/_/_/	/_/_/	<i>sa-qwi-tykwęq</i>	/_/_/	/M0/
tell	H	<i>ntyqq-ykwiq</i>	/_/_/	/_/_/	<i>ntyqq-ykwęq</i>	/M0/	/M0/
dance	H	<i>ndla-kya</i>	/HL+0/	/_/_/	<i>ndla-kyaq</i>	/L+0/	/_/_/
dance	P	<i>kla-kyaq</i>	/HL+0/	/_/_/	<i>klq-kyaq</i>	/L+0/	/_/_/
smell	C	<i>kwa-siq</i>	/HL+0/	/_/_/	<i>kwq-siq</i>	/L+0/	/H/
smell	H	<i>ndywa-siq</i>	/HL+0/	/_/_/	<i>ndwq-siq</i>	/L+0/	/H/
smell	P	<i>tkwa-siq</i>	/HL+0/	/_/_/	<i>kwq-siq</i>	/L+0/	/H/
dress	H	<i>ntykuq-steq</i>	/HL+0/	/_/_/	<i>ntykq-steq</i>	/M0/	/ML/
dress	P	<i>kuq-steq</i>	/HL+0/	/_/_/	<i>kq-steq</i>	/M0/	/ML/
dress	C	<i>ykuq-steq</i>	/M/	/_/_/	<i>ykq-steq</i>	/H/	/ML/
dress	PRG	<i>ntykuq-steq</i>	/M/	/_/_/	<i>ntykq-steq</i>	/H/	/ML/
smell	PRG	<i>ndwa-siq</i>	/H+0/	/_/_/	<i>ndwq-siq</i>	/L+0/	/H/
dance	C	<i>yla-kyaq</i>	/MH/	/_/_/	<i>ylq-kyaq</i>	/MH/	/H/
dance	PRG	<i>ndla-kyaq</i>	/MH/	/_/_/	<i>ndla-kyaq</i>	/L+0/	/H/

Table 5.27: Continue

Stem gloss	Asp	3S	3S W1	3S W2	1S	1S W1	1S W2
tell	C	<i>ya-ykwiq</i>	/LM/	/_/_	<i>yq̣q̣ -ykweq̣</i>	/+H/	/H/
fire, expel	H	<i>nkwi-qo</i>	/M0/	/_/_	<i>ndweq̣-q̣q̣</i>	/_/_	/M0/
fire, expel	P	<i>kwi-qo</i>	/M0/	/_/_	<i>kẉe-q̣q̣</i>	/_/_	/M0/
speak (accidentally)	PRG	<i>ndywiq̣-cha</i>	/+H/	/_/_	<i>ndyweq̣-cha</i>	/H/	/ML/
tell	PRG	<i>ntq̣q̣-ykwiq̣</i>	/+H/	/_/_	<i>ntq̣q̣-ykweq̣</i>	/H/	/H/
tell	P	<i>tsa-ykwiq̣</i>	/ML+H/	/_/_	<i>sq̣q̣-ykweq̣</i>	/ML+H/	/M0/
sing	C	<i>yla-tqwa</i>	/MH/	/_/_	<i>yḷq̣-tqwa</i>	/L+0/	/M0/
sing	H	<i>ndla-tqwa</i>	/MH/	/_/_	<i>ndḷq̣-tqwa</i>	/L+0/	/M0/
sing	P	<i>kla-tqwa</i>	/HL+0/	/_/_	<i>kḷq̣-tqwa</i>	/L+0/	/M0/
sing	PRG	<i>ndla-tqwa</i>	/MH/	/_/_	<i>nḷq̣-tqwa</i>	/L+0/	/M0/
run	C	<i>sna-ji</i>	/MH/	/_/_	<i>sna-j̣i</i>	/L+0/	/M0/
run	P	<i>xna-ji</i>	/HL+0/	/_/_	<i>xna-j̣i</i>	/L+0/	/M0/
run	PRG	<i>nsna-ji</i>	/MH/	/_/_	<i>xna-j̣i</i>	/L+0/	/M0/
run	H	<i>nxna-ji</i>	/HL+0/	/_/_	<i>nxna-j̣i</i>	/L+0/	/M0/
eat (hiding)	C	<i>yku-na</i>	/_/_	/M/	<i>yḳq̣-na</i>	/H/	/M/
eat (hiding)	H	<i>ntyku-na</i>	/_/_	/M/	<i>ntyḳq̣-na</i>	/M0/	/M/
eat (hiding)	P	<i>ku-na</i>	/_/_	/M/	<i>ḳq̣-na</i>	/M0/	/L+0/
tell a secret	C	<i>ykwiq̣-na</i>	/_/_	/M/	<i>ykweq̣-na</i>	/M/	/M/
tell a secret	H	<i>ndywiq̣-na</i>	/_/_	/M/	<i>ndyweq̣-na</i>	/M0/	/M/
tell a secret	P	<i>tykwiq̣-na</i>	/_/_	/M/	<i>tykweq̣-na</i>	/M0/	/L+0/
clap	C	<i>nchu-yaq̣</i>	/H/	/M/	<i>nchu-yq̣q̣</i>	/H/	/L+0/
clap	PRG	<i>nchu-yaq̣</i>	/H/	/M/	<i>nchu-yq̣q̣</i>	/H/	/L+0/
let go	C	<i>jla-yaq̣</i>	/H/	/M/	<i>la-yq̣q̣</i>	/_/_	/L+0/
let go	PRG	<i>ndla-yaq̣</i>	/H/	/M/	<i>nḷa-yq̣q̣</i>	/_/_	/L+0/
start	C	<i>ndyi-sna</i>	/H/	/M/	<i>ndyi-sna</i>	/_/_	/L+0/
start	PRG	<i>ndyi-sna</i>	/H/	/M/	<i>ndyi-sna</i>	/_/_	/L+0/
clap	H	<i>nchu-ya</i>	/M0/	/M/	<i>nchu-yq̣q̣</i>	/M0/	/L+0/
clap	P	<i>kchu-yaq̣</i>	/M0/	/M/	<i>kchu-yq̣q̣</i>	/M0/	/L+0/
let go	H	<i>ndla-yaq̣</i>	/M0/	/M/	<i>nḷa-yq̣q̣</i>	/L+0/	/L+0/
let go	P	<i>tla-yaq̣</i>	/M0/	/M/	<i>kḷq̣-yq̣q̣</i>	/_/_	/L+0/
start	H	<i>ndyi-sna</i>	/M0/	/M/	<i>ndyi-sna</i>	/M0/	/L+0/
start	P	<i>tyi-sna</i>	/M0/	/M/	<i>tyi-sna</i>	/M0/	/L+0/
eat (hiding)	PRG	<i>ntyku-na</i>	/+H/	/M/	<i>ntyḳq̣-na</i>	/H/	/L+0/
tell a secret	PRG	<i>ntykwiq̣-na</i>	/+H/	/M/	<i>ntykweq̣-na</i>	/H/	/M/
shower	C	<i>yta-tyku</i>	/_/_	/H/	<i>yṭq̣-tyku</i>	/H/	/H/
shower	PRG	<i>nta-tyku</i>	/+H/	/H/	<i>nṭq̣-tyku</i>	/H/	/H/
shower	H	<i>ntya-tyku</i>	/_/_	/H/	<i>ntyq̣-tyku</i>	/M0/	/H/
shower	P	<i>kta-tyku</i>	/_/_	/H/	<i>kṭq̣-tyku</i>	/M0/	/H/
dream	C	<i>ykwiq̣-sla</i>	/_/_	/MH/	<i>ykwiq̣-sḷq̣</i>	/_/_	/L+0/
dream	H	<i>ndywiq̣-sla</i>	/_/_	/MH/	<i>ndywiq̣-sḷq̣</i>	/H/	/L+0/
dream	P	<i>tykwiq̣-sla</i>	/_/_	/MH/	<i>tykwiq̣-sḷq̣</i>	/_/_	/L+0/
escape	H	<i>ntyqq̣-sna</i>	/_/_	/MH/	<i>ntyqq̣-sna</i>	/_/_	/L+0/

Table 5.27: Continue

Stem gloss	Asp	3S	3S W1	3S W2	1S	1S W1	1S W2
test	C	<i>yku-jyaq</i>	/_/_/	/MH/	<i>yq̣-jyq̣q̣</i>	/H/	/MH/
test	H	<i>ntyku-jyaq</i>	/_/_/	/MH/	<i>ntyq̣-jyq̣q̣</i>	/M0/	/MH/
test	P	<i>ku-jyaq</i>	/_/_/	/MH/	<i>kq̣-jyq̣q̣</i>	/M0/	/MH/
slip	H	<i>ntyj̣i-sna</i>	/HL+0/	/MH/	<i>ntyj̣i-sna</i>	/HL+0/	/MH/
slip	P	<i>tyj̣i-sna</i>	/HL+0/	/MH/	<i>tyj̣i-sna</i>	/HL+0/	/MH/
slip	C	<i>j̣e-sna</i>	/M/	/MH/	<i>j̣e-sna</i>	/M/	/MH/
pull	C	<i>jwa-ki</i>	/H/	/MH/	<i>jwa-kị</i>	/L+0/	/MH/
pull	PRG	<i>njwa-ki</i>	/H/	/MH/	<i>ntjwa-kị</i>	/L+0/	/MH/
speak	PRG	<i>nda-chaq</i>	/H/	/MH/	<i>nda-chaq</i>	/+H/	/MH/
escape	C	<i>ya-sna</i>	/LM/	/MH/	<i>yq̣q-sna</i>	/+H/	/L+0/
pull	H	<i>ntjwa-ki</i>	/M0/	/MH/	<i>ntjwa-kị</i>	/M0/	/MH/
pull	P	<i>jwa-ki</i>	/M0/	/MH/	<i>jwa-kị</i>	/M0/	/MH/
dream	PRG	<i>ntykẉiq-sla</i>	/+H/	/MH/	<i>ndykẉiq-sḷa</i>	/+H/	/L+0/
escape	PRG	<i>ntq̣q-sna</i>	/+H/	/MH/	<i>ntq̣q-sna</i>	/H/	/L+0/
test	PRG	<i>ntyku-jyaq</i>	/+H/	/MH/	<i>ntyq̣-jyq̣q̣</i>	/H/	/MH/
escape	P	<i>tsa-sna</i>	/ML+H/	/MH/	<i>sq̣q-sna</i>	/ML+H/	/L+0/
deal	C	<i>snỵi-chaq</i>	/_/_/	/MH/	<i>xnỵi-chaq</i>	/M0/	/MH/
deal	H	<i>nxnỵi-chaq</i>	/_/_/	/MH/	<i>nxnỵi-chaq</i>	/M0/	/MH/
deal	P	<i>xnỵi-chaq</i>	/_/_/	/MH/	<i>xnỵi-chaq</i>	/M0/	/MH/
speak	C	<i>nda-chaq</i>	/MH/	/MH/	<i>nda-chaq</i>	/_/_/	/MH/
speak	H	<i>nda-chaq</i>	/M0/	/MH/	<i>nda-chaq</i>	/H/	/MH/
speak	P	<i>ta-chaq</i>	/M0/	/MH/	<i>tq̣-chaq</i>	/_/_/	/MH/
deal	PRG	<i>nsnỵi-chaq</i>	/+H/	/MH/	<i>nxnỵi-chaq</i>	/H/	/MH/
ram	C	<i>yjoq-ke</i>	/_/_/	/LM/	<i>yjoq-kị</i>	/_/_/	/ML+H/
cough	H	<i>ndywa-tuq</i>	/HL+0/	/LM/	<i>ndwa-tuq</i>	/HL+0/	/LM/
cough	P	<i>tykwa-tuq</i>	/HL+0/	/LM/	<i>tykwa-tuq</i>	/HL+0/	/LM/
cough	C	<i>kwa-tuq</i>	/MH/	/LM/	<i>kẉa-tuq</i>	/L+0/	/LM/
cough	PRG	<i>ndwa-tuq</i>	/MH/	/LM/	<i>ndwa-tuq</i>	/L+0/	/LM/
ram	H	<i>ntyjoq-ke</i>	/_/_/	/LM/	<i>ntyjoq-kị</i>	/M0/	/ML/
ram	P	<i>kjoq-ke</i>	/_/_/	/LM/	<i>kjoq-kị</i>	/M0/	/ML/
slip	PRG	<i>ntj̣e-sna</i>	/M/	/LM/	<i>ntj̣e-sna</i>	/M/	/MH/
ram	PRG	<i>ntyjoq-ke</i>	/+H/	/LM/	<i>ntyjoq-kị</i>	/H/	/ML/
fire, expel	C	<i>kwi-qo</i>	/H/	/M0/	<i>kẉe-qo</i>	/H/	/M0/
fire, expel	PRG	<i>ndwi-qo</i>	/H/	/M0/	<i>ndẉe-qo</i>	/H/	/M0/
speak (suddenly)	PRG	<i>sa-ndywiq</i>	/_/_/	/+H/	<i>sa-ndẉeq</i>	/_/_/	/H/

The following patterns are found in W1 with stem and 1S:

- If the stem of W1 has a /_/_/ tone then the W1 of 1S has /_/_/, /M0/ and /H/ tones
- If the stem of W1 has a /L/ tone then the W1 of 1S has a /L/ tone
- If the stem of W1 has a /ML+H/ tone then the W1 of 1S has a /ML+H/ tone

- d. Stems with floating tones /HL+0/, /H+0/ and /M0/ the 1S W1 has /L+0/, /M0/, /HL+0/; the stem tone /M0/ is the only one that gets /H/ and /_/ tones in the 1S
- e. If the stem of W1 has a /M/ tone then the W1 of 1S has /M/ and /H/ tones
- f. If the stem of W1 has a /MH/ tone then the W1 of 1S has a /MH/, /L+0/ and /_/ tones
- g. If the stem of W1 has a /LM/ tone then the W1 of 1S has a /+H/ tone
- h. If the stem of W1 has a /+H/ tone then the W1 of 1S has /H/ and /+H/ tones
- i. If the stem of W1 has a /H/ tone then the W1 of 1S has /H/, /_/, /L+0/ and /+H/ tones

The following patterns are found in W2 with stem and 1S:

- a. If the stem of W2 has a /_/ tone then the W2 of 1S has /ML/, /H/ and /M0/ tones
- b. If the stem of W2 has a /+H/ tone then the W2 of 1S has a /M0/ and /H/ tones
- c. If the stem of W2 has a /M/ tone then the W2 of 1S has /M/ and /L+0/ tones
- d. If the stem of W2 has a /H/ tone then the W2 of 1S has a /H/ tone
- e. If the stem of W2 has a /MH/ tone then the W2 of 1S has a /MH/ and /L+0/ tones
- f. If the stem of W2 has a /LM/ tone then the W2 of 1S has /ML+H/ and /MH/
- h. If the stem of W2 has a /M0/ tone then the W2 of 1S has a /M0/ tone

5.5 CONCLUSION

This chapter has demonstrated the function of tone in inflection in many parts of speech. I conclude that tone and aspect in non-compound verbs are fairly predictable with a few exceptions (see section 5.4.2). In person marking, tones are predictable based on stem form, except for 1S, which is found to be more complex and hard to predict from the stem form. The aspect in verb compounds are interesting. The changes happen mainly in the first part of the word (W1) and less in word 2 (W2). The tones in person marking in verb compounds behave similarly to the non-compound verbs.

Chapter 6

Tone In Number Words

In this chapter, I describe some important aspects of tones in the numeric system in SJQ. In Chapter 4 we saw different parts of speech in regards to tones but the numbers were not included. The tones in numbers are complex, they show evidence of unusual tone sandhi changes; this is why we are devoting a whole chapter in numbers.

The Chatino number system like many other Meso-American languages is vigesimal (Campbell, et al. 1986). In this system the number twenty and its multiples serve as a base that forms numbers from 20 on. SJQ is more conservative in regard to its numeric system compared to the other varieties (Campbell and Cruz 2010). In this section, we are going to analyze tones in the numeric system.

6.1 NUMBERS 1-20

The numbers from one through ten are monomorphemic (Rasch 2002). Number four is an apparent exception to this rule because it is disyllabic and hence has the form of a compound; further, it has the form of a compound in all Eastern Chatino varieties. Nevertheless, there is no evidence that it was formed by the compounding of two independent elements. The best explanation is that in proto Eastern Chatino it was already reinterpreted as a compound from an original disyllabic stem **jakwa*, and thus resisted monosyllabification (Campbell and Cruz 2009).

Table 6.1: Numbers from 1-20

Numbers	Tones	Form	Gloss
<i>ska</i>	/ _ /	1	‘one’
<i>tkwa</i>	/ML/	2	‘two’
<i>sna</i>	/ML/	3	‘three’
<i>ja-kwa</i>	/ _ _ /	4	‘four’
<i>qyu</i>	/ML/	5	‘five’
<i>skwa</i>	/ML/	6	‘six’
<i>kti</i>	/ML/	7	‘seven’
<i>snoq</i>	/ _ /	8	‘eight’
<i>ka</i>	/ML/	9	‘nine’
<i>ti</i>	/ML/	10	‘ten’
<i>ti xka</i>	/ML-+H/	10+1	‘eleven’
<i>ti tykwa</i>	/ML-M0/	10+2	‘twelve’
<i>ti xna</i>	/ML-M0/	10+3	‘thirteen’
<i>ti lykwa</i>	/ML-+H	10+4	‘fourteen’
<i>qnyo</i>	/ ML/	15	‘fifteen’
<i>qnyo xka</i>	/ML-+H/	15+1	‘sixteen’
<i>qnyo tykwa</i>	/ML-+H	15+2	‘seventeen’
<i>qnyo xna</i>	/ML-M0	15+3	‘eighteen’
<i>qnyo lkwa</i>	/ ML-+H/	15+4	‘nineteen’
<i>kla</i>	/ ML/	20	‘twenty’

As we see in table 6.1, the numbers eleven to fourteen are formed by adding the integers one to four to the base of ten, and the numbers sixteen to nineteen are formed by adding the integers one to four to the base fifteen. Barriga (1998) uses the term ‘productive numerical system’ for languages that resort to sums and to multiplication in order to create larger numbers. This phenomenon is when basic numbers (10, 15, 20...) and a progression of simple integers (1, 2, 3...) are added and/or multiplied together to produce compound terms. This is the case in Chatino, whose productivity is based on the sum or product of its base numbers (10, 15, and 20), combining them with the integers from 1 to 9. Based on Table 6.1 I make the following observation:

The system is straightforward, except that in 11-14 and again in 16-19, we see what we can call laminalized, tone-transformed versions of the digits 1-4: *ska*, *tkwa^{ML}*, *sna^{ML}*, and *ja-kwa* become, respectively, *xka^{+H}*, *tykwa^{M0}*, *xna^{M0}*, and *lykwa^{+H}*. In terms of tone, then, the transformation is that /__/ becomes /+H/ and /ML/ becomes /M0/. Independently, these forms are related to the following quantifiers: *xka^{+H}* ‘one more’, *tykwa^H* ‘two more’, *xna^H* ‘three more’, and *lykwa^{+H}* ‘four more’; as can be seen, yet another etymological tone difference is involved in two of these cases.

6.2 NUMBERS 20-40

The numbers ‘twenty-one’ to ‘thirty-nine’ utilize the existential verb *ndwa^{HL+0}* ‘is seated’ (3S person subject habitual). There are three exceptions: 25, 30, 35 and 40. The numbers 1 to 9 are added to the number twenty to make bigger numbers. The following are numbers from ‘twenty’ to ‘forty’.

Table 6.2: Numbers 20-40

Numbers	Tones	Number Forms	Gloss
<i>kla</i>	/ML/	20	‘twenty’
<i>kla ndwa ska/ska</i>	/ML-HL+0-M0/	20 sitting on one	‘twenty-one’
<i>kla ndwa tkwa</i>	/ML-HL+0-M0/	20 sitting on two	‘twenty-two’
<i>kla ndwa sna</i>	/ML-HL+0-M0/	20 sitting on three	‘twenty-three’
<i>kla ndwa ja-kwa</i>	/ML-H+0-__-__/_/	20 sitting on four	‘twenty-four’
<i>kla qyu</i>	/ML-H+0/	20+five	‘twenty-five’
<i>kla ndwa skwa</i>	/ML-HL+0-M0/	20 sitting on six	‘twenty-six’
<i>kla ndwa kti</i>	/ML-HL+0-M0/	20 sitting on seven	‘twenty-seven’
<i>kla ndwa snoq</i>	/ML-HL+0-M0/	20 sitting on eight	‘twenty-eight’
<i>kla ndwa ka</i>	/ML-HL+0-M0/	20 sitting on nine	‘twenty-nine’
<i>kla tyi</i>	/ML-M0/	20+10	‘thirty’
<i>kla tyi ndwa ska</i>	/ML-M0-HL+0-M0/	20+10 sitting on one	‘thirty-one’
<i>kla tyi ndwa tkwa</i>	/ML-M0-HL+0-M0/	20+10 sitting on two	‘thirty-two’
<i>kla tyi ndwa sna</i>	/ML-M0-HL+0-M0/	20+10 sitting on three	‘thirty-three’
<i>kla tyi ndwa ja kwa</i>	/ML-M0-HL-0-ML/	20+10 sitting on four	‘thirty-four’
<i>kla qnyo</i>	/ML-H+0	20+15	‘thirty-five’

Table 6.2: Continue

Numbers	Tones	Number Forms	Gloss
<i>kla tyi ndwa skwa</i>	/ML-M0-HL+0-M0/	20+10 sitting on six	‘thirty-six’
<i>kla tyi ndwa kti</i>	/ML-M0-HL+0-M0/	20+10 sitting on seven	‘thirty-seven’
<i>kla tyi ndwa snoq</i>	/ML-M0-HL+0-M0/	20+10 sitting on eight	‘thirty-eight’
<i>kla tyi ndwa ka</i>	/ML-M0-HL+0-M0/	20+10 sitting on nine	‘thirty-nine’
<i>tqwa</i>	/ML/	40	‘forty’

In number “21” ska^{M0} is a surprise, since we would expect it to be ska^0 ; similarly for most of the other /M0/ tones in this table that come after $\text{ndwa}^{\text{HL+0}}$. Some of the numbers in these group go through laminalization and palatalization and here also these numbers change to a /M0/:

Laminal/palatal/tonal transform set of basic number:

*li-tsaka	plus one	($\text{xka}^{\text{+H}}$)
*li-tukwa	plus two	(tykwa^{M0})
*li-suna	plus three	(xna^{M0})
*li-(ja)kwa	plus four	($\text{lykwa}^{\text{+H}}$)
*i-tii	plus ten	(tyi^{M0})
*i-(k)la	plus twenty	(yla^{M})

For ‘twenty’ to ‘forty’, all of this sandhi is perfectly regular, according to the rules given. Also, it is important to note that when tone /HL+0/ precedes a tone /M0/, it appears to be the result of an anomalous sandhi process, because single digit words are etymologically /_/ or /ML/, and these should be converted into /0/ or /H/, respectively (see Ch. 3).

6.3 NUMBERS 40-60

The numbers from ‘forty-one’ to ‘fifty-nine’ utilize the existential verb $\text{ndwa}^{\text{HL+0}}$ ‘is seated’ (3S person subject habitual) for numbers from forty to fifty-nine, except for

45, 50, and 55. The tone patterns are identical to those for the numbers from ‘twenty’ to ‘thirty-nine’, including the shift of certain forms after $ndwa^{HL+0}$ to tone /M0/.

Table 6.3: Numbers 40-59

Numbers	Tones	Number Forms	Gloss
<i>tqwa</i>	/ML/	40	‘forty’
<i>tqwa ndwa ska</i>	/ML-HL+0-M0/	40 sitting on one	‘forty-one’
<i>tqwa ndwa tkwa</i>	/ML-HL+0-M0/	40 sitting on two	‘forty-two’
<i>tqwa ndwa sna</i>	/ML-HL+0-M0/	40 sitting on three	‘forty-three’
<i>tqwa ndwa ja-kwa</i>	/ML-HL+0-__-__/	40 sitting on four	‘forty-four’
<i>tqwa qyu</i>	/ML-H+0/	40+five	‘forty-five’
<i>tqwa ndwa skwa</i>	/ML-HL+0-M0/	40 sitting on six	‘forty-six’
<i>tqwa ndwa kti</i>	/ML-HL+0-M0/	40 sitting on seven	‘forty-seven’
<i>tqwa ndwa snoq</i>	/ML-HL+0-M0/	40 sitting on eight	‘forty-eight’
<i>tqwa ndwa ka</i>	/ML-HL+0-M0/	40 sitting on nine	‘forty-nine’
<i>tqwa tyi</i>	/ML-M0/	40+10	‘fifty’
<i>tqwa tyi ndwa ska</i>	/ML-M0-HL+0-M0/	40+10 sitting on one	‘fifty-one’
<i>tqwa tyi ndwa tkwa</i>	/ML-M0-HL+0-M0/	40+10 sitting on two	‘fifty-two’
<i>tqwa tyi ndwa sna</i>	/ML-M0-HL+0-M0/	40+10 sitting on three	‘fifty-three’
<i>tqwa tyi ndwa ja kwa</i>	/ML-M0-HL+0-__-__/	40+10 sitting on four	‘fifty-four’
<i>tqwa qnyo</i>	/ML-H+0	40+15	‘fifty-five’
<i>tqwa tyi ndwa skwa</i>	/ML-M0-HL+0-M0/	40+10 sitting on six	‘fifty-six’
<i>tqwa tyi ndwa kti</i>	/ML-M0-HL+0-M0/	40+10 sitting on seven	‘fifty-seven’
<i>tqwa tyi ndwa snoq</i>	/ML-M0-HL+0-M0/	40+10 sitting on eight	‘fifty-eight’
<i>tqwa tyi ndwa ka</i>	/ML-M0-HL+0-M0/	40+10 sitting on nine	‘fifty-nine’
<i>sna yla</i>	/ML-M/	3x20	‘sixty’

- a. After $ndwa^{HL+0}$, non-compound single digits become M0 instead of their expected value;
- b. Note that after $ndwa^{HL+0}$, the toneless compound single digit *ja-kwa* receives normal sandhi, becoming phonetic [0-ML].
- c. In 31-39 and in 51-59, the laminal version of ti^{ML} ‘ten’ occurs: tyi^{M0} .

- d. In 25, 35, 45, 55, *qyu*^{ML} ‘five’ anomalously becomes *qyu*^{H+0}

6.4 NUMBERS 60-80

In this group there is another existential verb *nsqwi* ‘exists’ (3rd person habitual), but the existential verb *ndwa*^{HL+0} ‘is seated’ also appears. The verb *nsqwi* appears in ‘sixty-five’, and in the set of ‘seventy’. In this group also the word *yla*^M ‘twenty’ is introduced. According to Cruz and Campbell (2009) there are two words for ‘twenty’. There is one that can stay alone like *kla*^{ML} ‘20’ and the other one that cannot appear alone *yla*^M.

Table 6.4: Numbers 60-80

Numbers	Tones	Number Forms	Gloss
<i>sna yla</i>	/ML-M/	3x20	‘sixty’
<i>sna yla ndwa ska</i>	/ML-M-H+0-M0/	3x20 sitting on one	‘sixty-one’
<i>sna yla ndwa tkwa</i>	/ML-M-H+0-M0/	3x20 sitting on two	‘sixty-two’
<i>sna yla ndwa sna</i>	/ML-M-H+0-M0/	3x20 sitting on three	‘sixty-three’
<i>sna yla ndwa ja'kwa</i>	/ML-M-H+0-__-_/	3x20 sitting on four	‘sixty-four’
<i>sna yla nsqwi qyu</i>	/ML-M-H+0-H/	3x20 + exist five	‘sixty-five’
<i>sna yla ndwa skwa</i>	/ML-M-H+0-M0/	3x20 sitting on six	‘sixty-six’
<i>sna yla ndwa kti</i>	/ML-M-H+0-M0/	3x20 sitting on seven	‘sixty-seven’
<i>sna yla ndwa snoq</i>	/ML-M-H+0-M0/	3x20 sitting on eight	‘sixty-eight’
<i>sna yla ndwa ka</i>	/ML-M-H+0-M0/	3x20 sitting on nine	‘sixty-nine’
<i>sna yla nsqwi ti</i>	/ML-M-__-H/	3x20 + exist ten	‘seventy’
<i>sna yla nsqwi ti xka</i>	/ML-M-__-ML-+H/	3x20 + exist eleven	‘seventy-one’
<i>sna yla nsqwi ti tykwa</i>	/ML-M-__-ML-M0/	3x20 + exist twelve	‘seventy-two’
<i>sna yla nsqwi ti xna</i>	/ML-M-__-ML-M0/	3x20 + exist thirteen	‘seventy-three’
<i>sna yla nsqwi ti lkwa</i>	/ML-M-__-ML-+H/	3x20 + exist fourteen	‘seventy-four’
<i>sna yla nsqwi qnyo</i>	/ML-M-__-H/	3x20 + exist fifteen	‘seventy-five’
<i>sna yla nsqwi qnyo xka</i>	/ML-M-__-ML-+H/	3x20 + exist sixteen	‘seventy-six’
<i>sna yla nsqwi qnyo tykwa</i>	/ML-M-__-ML-M0/	3x20 + exist seventeen	‘seventy-seven’
<i>sna yla nsqwi qnyo xna</i>	/ML-M-__-ML-M0/	3x20 + exist eighteen	‘seventy-eight’
<i>sna yla nsqwi qnyo ykwa</i>	/ML-M-__-ML-+H/	3x20 + exist nineteen	‘seventy-nine’
<i>ja'kwa yla</i>	/__-__-M/	4x20	‘eighty’

Based on Table 6.5 we can see the following features:

- a. *ndwa*^{HL+0} is changing to *ndwa*^{H+0} after *yla*^M
- b. After *nsqwi* ‘exists’, *qyu*^{ML} ‘five’, *ti*^{ML} ‘ten’, and *qnyo*^{ML} anomalously change their tone to /H/.
- c. Toneless words *nsqwi* ‘exists’ and *ja-kwa* ‘four’ are filled in by the normal sandhi processes

6.5 NUMBERS 80-100

In this group also there is the same second existential verb *nsqwi* ‘exists’ but the existential verb *ndwa*^{HL+0} ‘is seated’ also appears. In regard to tones, this set of numbers functions just like the numbers ‘sixty’ to ‘eighty’.

Table 6.5: Numbers ‘80 to ‘100’

Numbers	Phonemic	Number Forms	Gloss
<i>ja'kwa yla</i>	/__-_-M/	4x20	‘eighty’
<i>ja'kwa yla ndwa ska</i>	/__-_-M-H+0-M0/	4x20 sitting on one	‘eighty-one’
<i>ja'kwa yla ndwa tkwa</i>	/__-_-M-H+0-M0/	4x20 sitting on two	‘eighty-two’
<i>ja'kwa yla ndwa sna</i>	/__-_-M-H+0-M0/	4x20 sitting on three	‘eighty-three’
<i>ja'kwa yla ndwa ja kwa</i>	/__-_-M-H+0-_-_-_/	4x20 sitting on four	‘eighty-four’
<i>ja'kwa yla nsqwi qyu</i>	/__-_-M-_-_-H/	4x20 exist five	‘eighty-five’
<i>ja'kwa yla ndwa skwa</i>	/__-_-M-H+0-M0/	4x20 sitting on six	‘eighty-six’
<i>ja'kwa yla ndwa kti</i>	/__-_-M-H+0-M0/	4x20 sitting on seven	‘eighty-seven’
<i>ja'kwa yla ndwa snoq</i>	/__-_-M-H+0-M0/	4x20 sitting on eight	‘eighty-eight’
<i>ja'kwa yla ndwa ka</i>	/__-_-M-H+0-M0/	4x20 sitting on nine	‘eighty-nine’
<i>ja'kwa yla nsqwi ti</i>	/__-_-M-_-_-H/	4x20 exist ten	‘ninety’
<i>ja'kwa yla nsqwi ti xka</i>	/__-_-M-_-_-ML-+H/	4x20 exist ten+one	‘ninety-one’
<i>ja'kwa yla nsqwi ti tykwa</i>	/__-_-M-_-_-ML-M0/	4x20 exist ten+two	‘ninety-two’
<i>ja'kwa yla nsqwi ti xna</i>	/__-_-M-_-_-ML-M0/	4x20 exist ten+three	‘ninety-three’
<i>ja'kwa yla nsqwi ti ykwa</i>	/__-_-M-_-_-ML-+H/	4x20 exist ten+four	‘ninety-four’
<i>ja'kwa yla nsqwi qnyo</i>	/__-_-M-_-_-H/	4x20 exist 15	‘ninety-five’
<i>ja'kwa yla nsqwi qnyo xka</i>	/__-_-M-_-_-ML-+H/	4x20 exist 15+one	‘ninety-six’

Table 6.5: Continue

Numbers	Phonemic	Number Forms	Gloss
<i>ja'kwa yla nsqwi qnyo tykwa</i>	/__-__- M -__-ML+H-ML-M0/	4x20 exist 15+two	'ninety-seven'
<i>ja'kwa yla nsqwi qnyo xna</i>	/__-__- M -__-ML+H-M0/	4x20 exist 15+three	'ninety-eight'
<i>ja'kwa yla nsqwi qnyo ykwa</i>	/__-__- M -__-ML-+H/	4x20 + exist 15+four	'ninety-nine'
<i>qyu yla/ska se-ntu</i>	ML-M/__-H+0	5x20/ one hundred	'one hundred'

This set shows the same pattern as 60-79.

The following shows the use of *ndwa*^{HL+0} and *sqwi*.

Table 6.6: Use of 'seated' and 'exists'

Verbs	Numbers
-	60
<i>ndwa</i> ^{HL+0}	61,62,63,64
<i>sqwi</i>	65
<i>ndwa</i> ^{HL+0}	66,67,68,69
<i>sqwi</i>	70
<i>sqwi</i>	71,72,73,74
<i>sqwi</i>	75
<i>sqwi</i>	76,77,78,79
-	80
<i>ndwa</i> ^{HL+0}	81,82,83,84
<i>sqwi</i>	85
<i>ndwa</i> ^{HL+0}	86,87,88,89
<i>sqwi</i>	90
<i>sqwi</i>	91,92,93,94
<i>sqwi</i>	95
<i>sqwi</i>	96,97,98,99

6.6 CONCLUSION

The focus in this section is to show the patterns of tones in the numeric system. There were some numbers whose tones were anomalous: the "laminal" versions of numbers 1-4, 10, and 20; and versions of numbers appearing after *yla*^M 'twenty' (laminal version), and after the verbs *ndwa*^{HL+0} 'sits' and *sqwi* 'exists'. All these must reflect either

earlier morphology in Chatino, or else sandhi rules different from the normal ones presented in Ch. 3. From this we conclude that the number system is in many respects irregular and lexicalized with respect to tone.

Chapter 7

Tone in Loan Words

In this chapter we are going to see the role of tones in loan words in SJQ Chatino. The majority of the loan words come from Spanish. This chapter includes personal names and other common borrowings found in SJQ. The tones that are predominantly found in borrowings are /HL+0/ and /H+0/, except we find that other tones also appear in certain loans, especially personal names.

7.1 LOAN WORDS

Below is a list of loan words that come from Spanish. It is interesting to note that the majority of the tones found in one-syllable loans are /HL+0/ and /H+0/. The words with more syllables have more tones. The word for basket is probably a borrowing from Nahuatl.

Table 7.1: One syllable Loan Words from Spanish

Loans	Tones	Spanish	Gloss
<i>ja</i>	/H+0/	monja	‘nun’
<i>ka</i>	/H+0/	vaca	‘cow’
<i>kle</i>	/H+0/	alcalde	‘mayor’
<i>ksi</i>	/H+0/	cruz	‘cross’
<i>kxa</i>	/H+0/	aguja	‘needle’
<i>kxu</i>	/H+0/	queso	‘cheese’
<i>lya</i>	/H+0/	mula	‘mule’
<i>ndle</i>	/H+0/	servilleta	‘napkin’
<i>ndxi</i>	/HL+0/	chango	‘monkey’
<i>nku</i>	/H+0/	miercoles	‘Wednesday’
<i>ntɛ</i>	/HL+0/	gente	‘people’
<i>ntu</i>	/H+0/	tonto	‘stupid’
<i>nyo</i>	/H+0/	vino	‘wine’
<i>pya</i>	/H+0/	papaya	‘papaya’
<i>pyq</i>	/H+0/	rebozo	‘shawl’
<i>sa</i>	/H+0/	taza	‘cup’

Table 7.1: Continue

Loans	Tones	Spanish	Gloss
<i>se</i>	/H+0/	juez	‘judge’
<i>ska</i>	/H+0/	azúcar	‘sugar’
<i>skwa</i>	/H+0/	pascua	‘Easter week’
<i>slyi</i>	/H+0/	pantalón	‘pants’
<i>sna</i>	/H+0/	manzana	‘apple’
<i>stu</i>	/H+0/	gusto	‘wants’
<i>styq</i>	/H+0/	pichón	‘dove/pigeon’
<i>styü</i>	/H+0/	?	‘clay tea pot’
<i>su</i>	/H+0/	mozo	‘worker’
<i>sya</i>	/H+0/	esencia?	‘heart’
<i>syu</i>	/H+0/	costumbre	‘custom’
<i>tnyi</i>	/HL+0/	tomín	‘money’ ()
<i>wra</i>	/H+0/	hora	‘hour’
<i>wte</i>	/H+0/	cuete	‘fireworks’
<i>wyu</i>	/HL+0/	caballo	‘horse’
<i>xa</i>	/H+0/	misa	‘mass’
<i>xkaq</i>	/H+0/	mosca	‘fly’
<i>xla</i>	/H+0/	chocolate	‘chocolate’ (<Nahuatl)
<i>xlya</i>	/H+0/	castilla	‘Castilian’
<i>xlyu</i>	/H+0/	cuchillo	‘knife’
<i>xtyi</i>	/H+0/	machete	‘machete’
<i>xu</i>	/H+0/	peso	‘peso’
<i>xwi</i>	/H+0/	chiquihuite	‘basket’ (<Nahuatl)

Loan words that are one syllable in Chatino take the tones /HL+0/ and /H+0/. The words that have two or three syllables use more tones, but they still have tones /H+0/ and many cases toneless syllables. Below are examples of loan words with more than one syllable.

The words in Table 7.2 have the form of compounds in SJQ, in that they are lexemes with more than one tone-bearing syllable. But they do not actually arise from the composition of simple stems. Accordingly, the term that I will use is ‘fake compounds’:

Table 7.2: Two+ syllable Loan Words from Spanish

Loans	Tones	Spanish	Gloss
<i>ka-stu</i>	/_-H+0/	gasto	‘spending’
<i>ja-wo</i>	/_-HL+0/	favor	‘favor’
<i>je-ro</i>	/_-HL+0/	alférez?	‘alderman’
<i>ay-ma</i>	/_-H+0/	ánima	‘spirit’
<i>me-stra</i>	/_-H+0/	maestra	‘teacher’
<i>sa-la</i>	/_-H+0/	cazuela	‘clay plate’
<i>sa-lu</i>	/_-H+0/	sombrero	‘hat’
<i>se-te</i>	/_-H+0/	aceite	‘oil’
<i>ta-su</i>	/_-H+0/	cazo	‘container’
<i>we-se-nte</i>	/_-L-H+0/	presidente	‘president’
<i>xka-lyu</i>	/_-H+0/	mezcal	‘mezcal’ (Nahuatl)
<i>so-na</i>	/_-H+0/	semana	‘week’
<i>ndo-kto</i>	/_-HL+0/	doctor	‘doctor’
<i>jwe-sa</i>	/_-H+0/	fuerza	‘force’
<i>ka-jwe</i>	/_-HL+0/	café	‘coffee’
<i>ka-re</i>	/_-HL+0/	carrera	‘fast’
<i>ko-lo</i>	/_-HL+0/	color	‘color’
<i>lo-sa</i>	/_-HL+0/	almuerzo?	‘breakfast’
<i>lu-ga</i>	/_-HL+0/	lugar	‘place’
<i>me-ndo</i>	/_-HL+0/	montón	‘many’
<i>yka-ndwa</i>	/_-HL+0/	canoa	‘canoe’
<i>yo-li</i>	/_-HL+0/	violín	‘violin’
<i>xke-ru</i>	/M0-__/	becerro	‘baby cow’
<i>la-mbre</i>	/HL+0-__/	alambre	‘wire’
<i>lye-ra</i>	/HL+0-__/	libra	‘pound’
<i>xe-re</i>	/HL+0-__/	tijeras	‘scissors’
<i>kwe-nta</i>	/M-H+0/	cuenta	‘fortune telling’
<i>kwe-ntu</i>	/M-H+0/	cuento	‘gossip’
<i>ji-nchu</i>	/MH-H+0/	rancho	‘ranch’
<i>la-pi</i>	/MH-__/	lápiz	‘pencil’
<i>wye-rne</i>	/ML-H+0/	viernes	‘Friday’

The loan words with more than one syllable function as if they were compounds. Each syllable behaves as we expected in regards to sandhi. In compounds we also find that tone /HL+0/ does donate its floating tone and is tone /HL+0/, e.g., *xe^{HL}-re⁰* ‘scissors’. Another characteristic of these words is that the majority of them end with tone /HL+0/

and /H+0/. The following shows the combinations of tones found in words of more than one syllable.

Table 7.3: Tones in Words of More than One Syllable

/_-H+0/
/_-HL+0/
/M0-__/
/HL+0-__/
/M-H+0/
/MH-H+0/
/MH-__/
/ML-H+0

7.2 PERSONAL NAMES

The official first names and last names of the people of San Juan are all derived from Spanish. The first research on the borrowing of proper names in Chatino started with Kitty and Leslie Pride (2004) in their dictionary of the Eastern Chatino of Panixtlahuaca, a town neighboring San Juan where a moderately distinct dialect of Chatino is spoken. They made a list of about seventy names that were derived from Spanish. The following table shows some of the personal names that I found in San Juan.

Table 7.4: Personal Names in SJQ

	Names ²¹	Tone	Spanish
1	<i>Xwa</i>	/MH/	Juan
2	<i>Wjle</i>	/H+0/	Ángel
3	<i>Niyq</i>	/H+0/	Antonieta
4	<i>ndiyq</i>	/H+0/	Antonio
5	<i>Syu</i>	/H+0/	Ignacio
6	<i>Liya</i>	/HL+0/	María
7	<i>Tyu</i>	/HL+0/	Pedro

²¹ I use uppercase in the first consonant just like in Spanish.

Table 7.4: Continue

	Names	Tone	Spanish
8	<i>Xka</i>	/HL+0/	Francisca
9	<i>Xku</i>	/HL+0/	Francisco
10	<i>We</i>	/M0/	Abel
11	<i>Syq</i>	/M0/	Asunción
12	<i>Stɛ</i>	/M0/	Agustin
13	<i>ke</i>	/M0/	Miguel
14	<i>Lwi</i>	/M0/	Luis
15	<i>Xna</i>	/M0/	Juana?
16	<i>Pa-la</i>	/HL+0-__/	Paula
17	<i>We-ta</i>	/HL+0-__/	Alberta
18	<i>Ka-lo</i>	/M0-__/	Carlos
19	<i>Tu-ka</i>	/M0-__/	Lucas
20	<i>Ya-no</i>	/M0-__/	Justiniano
21	<i>Ndi-na</i>	/M0-__/	Valentina
22	<i>Me-la</i>	/M0-__/	Manuela
23	<i>Ti-mo</i>	/M0-__/	Artemio
24	<i>Ne-tu</i>	/M0-__/	Benito
25	<i>Sa-rya</i>	/M0-__/	Cesaria
26	<i>Sti-no</i>	/M0-__/	Celestino
27	<i>Ne-ya</i>	/M0-__/	Cornelia
28	<i>Mi-ti-yu</i>	/M0-__/	Demetrio
29	<i>Jna-ru</i>	/M0-__/	Jenaro
30	<i>Ste-wa</i>	/M0-__/	Estéban
31	<i>Je-yq</i>	/M0-__/	Eugenio
32	<i>Se-yu</i>	/M0-__/	Eusebio
33	<i>Li-pa</i>	/M0-__/	Felipa
34	<i>Si-ro</i>	/M0-__/	Isidro
35	<i>Tyu-sya</i>	/M0-__/	Tiburcia
36	<i>Mi-no</i>	/M0-__/	Maximino
37	<i>Ka-pyu</i>	/M0-__/	Policarpo

Table 7.4: Continue

	Names	Tone	Spanish
38	<i>We-yu</i>	/M0-__/	Siverio
39	<i>La-ya</i>	/M0-__/	Hilaria
40	<i>sti-no</i>	/M0-__/	Celestino
41	<i>Ro-mo</i>	/MH-__/	Romulo
42	<i>Ke-ve</i>	/MH-__/	Kevin
43	<i>Pe-tra</i>	/MH-__/	Petra
44	<i>Nyi-nyo</i>	/MH-__/	Benigno
45	<i>Ci-liya</i>	/MH-__/	Cecilia
46	<i>Ti-na</i>	/MH-__/	Celestina
47	<i>Ti-la</i>	/MH-__/	Domitila
48	<i>Li-jyo</i>	/MH-__/	Eligio
49	<i>Mu-ndo</i>	/MH-__/	Edmundo
50	<i>Te-yu</i>	/MH-__/	Elucterio
51	<i>Ri-ke</i>	/MH-__/	Enrique
52	<i>Re-l'yo</i>	/MH-__/	Eurelio
53	<i>Ce-nsya</i>	/MH-__/	Eusencia
54	<i>Ye-mo</i>	/MH-__/	Guillermo
55	<i>Ji-n'ya</i>	/MH-__/	Virginia
56	<i>Mar-ku</i>	/MH-__/	Marcos
57	<i>Nda-me-so</i>	/MH-__-__/	Damaso
58	<i>So-tera</i>	/MH-__-__/	Sotera
59	<i>Ja-ntra</i>	/_-H+0/	Alejandra
60	<i>Sya-na</i>	/_-H+0/	Donaciana
61	<i>Sa-we</i>	/_-HL+0/	Isabel
62	<i>Ma-teḡ</i>	/_-M0/	Martín
63	<i>To-ma</i>	/_-M0/	Tomás
64	<i>Wi-sa</i>	/_-M0/	Luisa
65	<i>Sa-jwi-a</i>	/_-M0-__/	Soffa
66	<i>Ma-rya-na</i>	/_-M0-__/	Emiliana
67	<i>Ki-li-no</i>	/_-MH-__/	Aquilino

Table 7.4: Continue

	Names	Tone	Spanish
68	<i>Je-ra-ldo</i>	/_-MH-_/	Gerardo
69	<i>Sa-li-no</i>	/_-MH-_/	Marcelino
70	<i>Ma-rya-na</i>	/_-MH-_/	Mariana

Based on Table 7.4 we can see the following:

Tones in words borrowed from Spanish normally take tone /H+0/, e.g. *ka*^{H+0} ‘cow’ or ‘vaca’. Of the names that carry tone /H+0/ in Chatino, most have the stress in the penultimate syllable in Spanish, e.g. *Wjle*^{H+0} ‘Ángel’.

The choice of /HL+0/ and /H+0/ as the Chatino accent often results when a coalescence of vowels occurs, e.g. *Pa*^{HL+0}*la* ‘Paula’. The only monosyllabic name found with tone /MH/ is *Xwa*^{MH} ‘Juan’. Also, multisyllabic names take tones /M0/, /MH/, HL+0, e.g. *Toma*^{M0} ‘Tomás’, *Nda*^{MH}*meso* ‘Damaso’, and *We*^{HL+0}*ta* ‘Alberta’.

Tone /HL+0/

Similar to tone /H+0/, names that stress the penultimate syllable in Spanish may also carry tone /HL+0/ in Chatino. Note that the floating tone (i.e. the 0 tone) is realized on the final syllable in the correct sandhi environment, e.g. *Pa*^{HL+0}*la* ‘Paula’ is pronounced as [pa^{HL}la⁰], as long as we assume that the final syllable is underlyingly /_/, the toneless tone, so that it receives the floating tone from the previous syllable bearing the tone /HL+0/.

Tone /M0/

Names that stress the final syllable in Spanish carry tone /M0/ in Chatino in the majority of cases, e.g. *Matε*^{M0} ‘Martín’. The names with tone /M0/ with stress on the penultimate syllable are followed by the toneless tone /_/_/ in the final syllable, and

accordingly (by the normal sandhi rules discussed in Chapter 3) are pronounced as [ML], e.g., *Ka^{M0}lo* ‘Carlos’ is pronounced as [ka^{M0}lo^{ML}].

Tone /MH/

In the majority of names with two or more syllables, the stressed syllable carries tone /MH/, and the non-stressed syllables take tone /___/, e.g. *Pe^{MH}tra* ‘Petra’. After /MH/, by the normal sandhi rules, the toneless tone is pronounced as [ML]: thus [pe^{M^}tra^{ML}]. Also, the only monosyllabic name with tone /MH/ is *Xwa^{MH}* ‘Juan’. If a non-stressed syllable precedes the /MH/ syllable, as in Gerardo (example 68) and Mariana (example 70), it is pronounced as [L] (barring sandhi effects from a previous word: e.g.: *Jera^{MH}do* is pronounced as [je^Lra^{M^}do^{ML}]; the pattern, of course, is as if only the stressed syllable has a tone at all (MH in this case) and that the /_/ everywhere else are predictable treatments, consistent with the non-stressed syllables being toneless.

Tone /_/

The un-stressed syllables of names that are disyllabic or trisyllabic take tone /_/, e.g. *Toma^{M0}*. I found three cases where the stress falls in tone /_/ (see Table 7.5 below) however, we might argue that from the point of view of Chatino perception, the stress in Spanish was not perceived as such by Chatino interpreters. In any case, tone /_/ appears in non-stressed pre-tonic syllables. This is the “toneless” tone in other Chatino varieties. As already noted, post-tonic /___/ is often affected by sandhi changes, e.g. *Ye^{MH}mo* ‘Guillermo’ is pronounced [ye^{M^}mo^{ML}]. Some Chatino names derived from Spanish are shown in Table 7.5. The stress-accented syllables of the Spanish sources are bolded. Notice that in some cases—e.g., (a), (b), and (k)—the Chatino perception of Spanish stress diverges from the actual stress in Spanish.

Table 7.5: Stress-accented Names in Borrowings

	Stress-associated tone	Chatino	Spanish
a.	/H+0/	<i>Niyq^{H+0}</i>	Antonieta
b.	/HL+0/	<i>Xku^{HL+0}</i>	Francisco
c.	/M0/	<i>Syq^{M0}</i>	Asunción
d.	/HL+0/	<i>Pa^{HL+0}la</i>	Paula
e.	/M0/	<i>Ka^{M0}lo</i>	Carlos
f.	/MH/	<i>Xwa^{MH}</i>	Juan
g.	/MH/	<i>Pe^{MH}tra</i>	Petra
h.	/HL+0/	<i>Sawe^{HL+0}</i>	Isabel
i.	/M0/	<i>Mate^{M0}</i>	Martín
j.	/MH/	<i>Jeral^{MH}do</i>	Gerardo
k.	/H+0/	<i>Jantra^{H+0}</i>	Alejandra

To conclude the discussion of names, Quiahije Chatino uses a tone in place of the main accent /MH/ /HL+0/, /H+0/ and /M0/. The non-stressed syllables take tones /_/ with normal sandhi effects created by any preceding tone. The sandhi processes found in these names are similar to those found in native Chatino words (see Table 7.6), except that the names tend to preserve multiple syllables and to render the (perceived) analogs of Spanish unstressed syllables as toneless; whereas the non-name loans tend to be monosyllabic.

Table 7.6: The Sandhi Processes

Spanish	Chatino	Pre-sandhi phonemic	Post-sandhi phonetic
Antonieta	<i>N'yaq^{H+0}</i>	/H+0/	[H+0]
Francisco	<i>Xku^{HL+0}</i>	/HL+0/	[HL+0]
Asunción	<i>Syq^{M0}</i>	/M0/	[M0]
Paula	<i>Pa^{HL+0}la</i>	/HL+0- _/	[HL- 0]
Carlos	<i>Ka^{M0}lo</i>	/M0- _/	[M0- ML]
Juan	<i>Xwa^{MH}</i>	/MH/	[MH]
Petra	<i>Pe^{MH}tra</i>	/MH- _/	[MH-ML]
Isabel	<i>Sawe^{HL+0}</i>	/_- HL+0/	[L- HL+0]
Martín	<i>Mate^{M0}</i>	/_- M0/	[L- M0]
Gerardo	<i>Jeral^{MH}do</i>	/_- MH- _/	[L- MH-ML]
Alejandra	<i>Jantra^{H+0}</i>	/_- H+0/	[L- H+0]

7.3 CONCLUSION

Chatino has fourteen lexical tones, and four of those tones appear as the stress associated tone of personal names and six in other loan words, as shown in Table 7.7. The following shows the tones found in loan words.

Table 7.7: Tones Found in Loan Words

	Tone	Personal Names (stress associated tone)	Other loans
1	/H/		—
10	/H+0/	√	√
2	/M/	—	√
4W	/_/	—	√
4S	/L/	—	√
20	/M0/	√	√
32	/+H/		—
3	/MH/	√	√
42	/LM/	—	—
40	/L+0/	—	—
04	/0L+0/	—	—
14	/HL+0/	√	√
24W	/ML+H/	—	—
24S	/ML/	—	—

CONCLUSION

My original intuition was that tones are very important in San Juan Quiahije Chatino. The dissertation supports this idea by showing that tone carries out a very wide range of functions in San Juan Quiahije Chatino. There is a very large inventory of lexical tones (fourteen by my analysis), and these serve to distinguish words that are segmentally otherwise alike.

These tones serve important and central functions in the language. Tone is central in marking aspect differences and in distinguishing first and second person singular forms of inalienable nouns, predicate adjectives, and verbs from base forms. Tone is further signaled and supported through a highly complex sandhi system; a floating tone of a first word influencing a second word; a toneless word receives an effect from a preceding word; and dissimilations.

Certain tones seem to arise only in morphologically specialized environments, e.g /L+0/ only occurs in first person singular inflected forms. In borrowing words from Spanish the non-stressed syllables take tones /_/ with normal sandhi effects created by any preceding tone. Tone /H+0/ is mainly found in borrowing words from Spanish. The tone /0L+0/ is mainly found in interjections. Tone /+H/ is not common in nouns, but found in verbs and compounds. Another aspect that we see in SJQ is the cognate with other varieties, particularly with other EC varieties and less similar to ZEN and TAT.

The relationship of tones in syntax was not included in this dissertation; and yet, the sandhi rules depend at times on the strength of syntactic boundaries and may fail or “reset” from one sentence to another, or from one major constituent to another, or across pauses. Further research needs to be done in this topic.

The issue of tone representation in a practical orthography is a complex issue and open to political discussion, where sometimes we cannot agree, particularly in the education system. Chatinos are not divorced from language politics, especially among teachers. In 2004 we had our first meeting with teachers in Santa Lucia Teotepec community. The main issues were the representation of the following: sh~x, w~u, and nasal vowels. The alphabet discussion took the entire three days of the meeting, and nobody agreed on anything.

Currently tones are not represented in the practical orthography, and in the following I propose a way to represent these tones. There are fourteen phonemic tones in SJQ: three level tones, [H], [M] and [L]; five rising tones [M0], [M^], [MH], [LM] and [L0]; and three falling tones, [0L], [HL] and [ML].

Tone /_/ should have no marking, e.g. yja ‘tortilla.’ Tone /L/ can be represented as /L/, e.g. keL ‘rock’. Tone [ML] phonemically has two tones, but it should be marked /ML/ in the orthography, e.g. klaML ‘twenty’. Tone [H] can be represented as /H0/ for those with floating tones like loan words and /H/ for those with no floating tone. The following examples illustrates the proposed tone representation for SJQ practical orthography:

	Phonemic	Phonetic	Practical orthography with letters
Level	/H/	[H]	H
	/H+0/	[H]	H0
	/M/	[M]	M
	/_/	[L]	
	/L/	[L]	L
Rising	/M0/	[M0]	M0
	/MH/	[M^]	M
	/+H/	[MH]	MH
	/LM/	[LM]	LM
	/L+0/	[L0]	L0

Falling	/OL+0/	[OL]	OL
	/HL+0/	[HL]	HL
	/ML/	[ML]	ML
	/ML+H/	[ML]	ML

To conclude, I have described the segmental sound system of SJQ Chatino, as well as the function of tones in SJQ. The fundamental principle for writing my dissertation on segmental phonology and tones of SJQ has been my commitment to creating linguistic material that would be accessible to speakers, educators and scholars. I believe that writing can be a powerful tool. Indigenous people can explore their language in creative ways, such as fiction, poetry, memoirs, and text transcription. Furthermore, a clear alphabet can support future language documentation by speakers.

APPENDIX

KWE^M-NTU^H QI⁰ YKA-TI^{MH}-NTA^{H0} ‘THE MANTIS STORY’

The following texts show an orthographic version of the results of sandhi. The column that shows sandhi has the phonemic tones that I mention in the dissertation. The no sandhi column is the underlying form.²²

1	CHAT	<i>jlya^{+H} req^{M0} qwa^H niya⁰ ndywiq^{+H} req qo^H kaq^{LM}</i>			
	ENG	I forgot how they call that.			
		without			
	Word	sandhi	sandhi	Grammatical category	Gloss
		<i>jlya^{+H}-req^{M0}</i>	<i>jlya^{+H}-req^{M0}</i>	C.forgot.1S	I forgot
		<i>qwa^H-niya⁰</i>	<i>qwa^{H+0}- niya^{ML}</i>	Q	how is it?
		<i>ndywiq^{+H}</i>	<i>ndywiq</i>	H.say.3S	they are saying
		<i>req</i>	<i>req</i>	PRO	them
		<i>qo^H</i>	<i>qo^H</i>	NL.3	to
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	that
2	CHAT	<i>yka-ti^{MH}-nta^H ndywiq qo^H jaq^{LM}</i>			
	ENG	They call that mantis.			
	Word	<i>yka-ti^{MH}- nta^{H+0}</i>	<i>yka-ti^{MH}- nta^{H+0}</i>	N(tree)-N(rope)-ADJ	mantis
		<i>ndywiq⁰</i>	<i>ndywiq</i>	H.say.3S	they say
		<i>qo^H</i>	<i>qo^H</i>	NL.3	to
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
3	CHAT	<i>qwa^H niya⁰ ndywiq^{+H} req qo^H ra^{MH}</i>			
	ENG	And how do they call that?			
	Word	<i>qwa^H-niya⁰</i>	<i>qwa^H-niya⁰</i>	Q	how is it?
		<i>ndywiq^{+H}</i>	<i>ndywiq</i>	H.say.3S	says
		<i>req</i>	<i>req</i>	PRO	them
		<i>qo^H</i>	<i>qo^H</i>	NL.3	to

²² The story is narrated by María Antonieta Apolonio, and recorded and transcribed by Emiliana Cruz. The Chatino sentences is followed by its English translation. Each word in the Chatino sentence is analyzed in the columns that follow.

		<i>rq^{MH}</i>	<i>rq^{MH}</i>	PRO	that
		<i>yka-ti^{MH-}</i>	<i>yka-ti^{MH-}</i>		
		<i>nta^{H+0}</i>	<i>nta^{H+0}</i>	N(tree)-N(rope)-ADJ	mantis
4	CHAT	<i>m-m^{MH} yka ti^{MH-}nta^H ti⁰ ndywiq^{ML} req^{ML} qo^{H-i}^{ML}</i>			
	ENG	They only call it mantis.			
	Word	<i>m-m^{MH}</i>	<i>m-m^{MH}</i>	INTJ	uhm
			<i>yka-ti^{MH-}</i>		praying
		<i>yka-ti^{MH-}nta^H</i>	<i>nta^{H+0}</i>	N(tree)-N(rope)-ADJ	mantis
		<i>ti⁰</i>	<i>ti</i>	ADV	only
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	H.say.3S	call
		<i>req^{ML}</i>	<i>req</i>	PRO	them
		<i>qo^{H-i}^{ML}</i>	<i>qo^{H-i}</i>	NL.3-PRO	to
5	CHAT	<i>m-m^{MH} ntyqya^{ML+H} niya^{ML} qne^{+H} nga^{ML} qi^{+H}</i>			
	ENG	It is a pretty animal.			
	Word	<i>m-m^{MH}</i>	<i>m-m^{MH}</i>	INTJ	uhm
		<i>ntyqya^{ML+H}</i>	<i>ntyqya^{ML+H}</i>	ADJ	pretty
		<i>niya^{ML}</i>	<i>niya^{ML}</i>	PRG.look.3S	is
		<i>qne^{+H}</i>	<i>qne</i>	N	animal
		<i>nga^{ML}</i>	<i>nga^{ML+H}</i>	PRG.be.3S	is
		<i>qi^{+H}</i>	<i>qi</i>	PRO	of
6	CHAT	<i>tkweq-qa^H staq^{ML-i}^{ML}</i>			
	ENG	It has very long nails.			
	Word	<i>tkweq</i>	<i>tkweq</i>	ADJ	long
		<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
		<i>staq^{ML-i}^{ML}</i>	<i>staq-i</i>	INA.3S	its nail
7	CHAT	<i>qo^H chaq^{MH} no^{ML} ndywiq^{ML} req^{ML} qo^H ji^{M0}</i>			
	ENG	And what they call it is...			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no</i>	COMP-REL	because
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	H.say.3S	call it
		<i>req^{ML}</i>	<i>req</i>	PRO	them
		<i>qo^H</i>	<i>qo^H</i>	NL.3	to
		<i>ji^{M0}</i>	<i>ji^{M0}</i>	DEM.Abs	then
8	CHAT	<i>qaq^H chaq^{MH} no^{ML} ngq^{HL+0} sneq⁰ req⁰ jlo^H qi^{ML} jaq^{LM}</i>			
	ENG	Ah, they spit on it because...			
	Word	<i>qaq^H</i>	<i>qaq^H</i>	ADV	ah
		<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no</i>	COMP-REL	because
		<i>ngq^{HL}</i>	<i>ngq^{HL}</i>	H.throw.3S	spit

		<i>sneq⁰</i>	<i>sneq</i>	N.3	saliva
		<i>req⁰</i>	<i>req</i>	PRO	them
		<i>jlo^H</i>	<i>jlo^H</i>	N.3	face
		<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	then
9	CHAT	<i>pe^Lro^L jlyu^M qi^H xtyaq^{MO} -^{+H} chaq^{MH}</i>			
	ENG	Let's say that it is a very big animal.			
	Word	<i>pe^Lro^L</i>	<i>pe^Lro^L</i>	CONJ	but
		<i>jlyu^M</i>	<i>jlyu^M</i>	ADJ	big
		<i>qi^H</i>	<i>qi</i>	NL.3-PRO	it
		<i>xtyaq^{MO} -^{+H}</i>	<i>xtyaq^{MO} -^{+H}</i>	P.put.1PLIN	put
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N	word
10	CHAT	<i>ti^L yka^{MO} niya^{ML} kyaq^{+H}, ti^L niya^{ML} qi^{+H} xtyaq^{MO} -^{+H} chaq^{MH}</i>			
	ENG	Let's say it is a thin animal.			
	Word	<i>ti^L</i>	<i>ti^L</i>	ADJ	thin
		<i>yka^{MO}</i>	<i>yka^{MO}</i>	ADJ	lanky
		<i>niya^{ML}</i>	<i>niya^{ML}</i>	H.appears.3S	is
		<i>kyaq^{+H}</i>	<i>kyaq^{+H}</i>	N.3	it's foot
		<i>ti^L</i>	<i>ti^L</i>	ADJ	thin
		<i>niya^{ML}</i>	<i>niya^{ML}</i>	H.appears.3S	it looks
		<i>qi^{+H}</i>	<i>qi^{+H}</i>	PRO	it's
		<i>xtyaq^{MO} -^{+H}</i>	<i>xtyaq^{MO} -^{+H}</i>	P.put.1PLIN	let's put
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N	thing
11	CHAT	<i>qo^H na^{MO} -ji^M kq^{MO} ndywiq^{ML} req^{ML} qo^H ji^M</i>			
	ENG	That is how they call it then.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>na^{MO} -ji^M</i>	<i>na^{MO} -ji^M</i>	INTJ	this
		<i>kq^{MO}</i>	<i>kq^{LM}</i>	ADV.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	H.say.3S	they said
		<i>req^{ML}</i>	<i>req</i>	PRO.A.IND.H	them
		<i>qo^H</i>	<i>qo^H</i>	NL.3	to
		<i>ji^M</i>	<i>ji^M</i>	ADV.Abs	then
12	CHAT	<i>chaq^{MH} ra^H -no⁰ xwe^{ML} kq^{MO} ndywiq^{ML} neq^{ML} jla^{ML} qna^{LM} qo^H xtyaq^{MO} chaq^{MH}</i>			
	ENG	For example, when you are a kid parents tell you:			
	Word	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>ra^H -no⁰</i>	<i>ra^H -no</i>	N-REL	when
		<i>xwe^{ML} -^{+H}</i>	<i>xwe^{ML}</i>	ADJ-1PLIN	we are kids
		<i>kq^{MO}</i>	<i>kq^{MO}</i>	ADV.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	H.say.3S	say

		<i>neq^{ML}</i>	<i>neq</i>	N	people
		<i>jla^{ML}</i>	<i>jla</i>	ADJ	big
		<i>qna^{LM}</i>	<i>qna^{LM}</i>	PRO	ours
		<i>qq^H</i>	<i>qq^H</i>	CONJ	to us
		<i>xyq^{M0-}</i>	<i>xyq^{M0-}</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	P.put.1PLIN-COMP	let's say
13	CHAT	<i>si^{H+0} ntyqq^{LM} qi no nga^{ML} ti^M-ta^H ndywiq⁰ ntyqo^{M0} chaq^{MH}</i>			
	ENG	They would tell us: if you see that animal called mantis...			
	Word	<i>si^{H+0}</i>	<i>si^{H+0}</i>	COND	if
		<i>ntyqq^{LM}</i>	<i>ntyqq^{LM}</i>	H.see.2S	see
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>no-nga^{ML+H}</i>	<i>no-nga^{ML+H}</i>	REL-PRG.COP.3S	that
		<i>ti^M-nta^H</i>	<i>ti^M-ta^H</i>	N(rope)-ADJ(black)	mantis
		<i>ndywiq⁰</i>	<i>ndywiq</i>	H.say.3S	they said
		<i>ntyqo^{M0-}</i>	<i>ntyqo^{M0-}</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.leave.3S-N	let's say
14	CHAT	<i>qo^H naq^{LM} chaq^{MH} qwi^{M0} lyq^{ML} qi^{+H} jaq^{LM} ti^M-sqne^H</i>			
	ENG	And I already knew about that animal.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>naq^{LM}</i>	<i>naq^{LM}</i>	PRO.1S	I
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>qwi^{M0}-lyq^{ML}</i>	<i>qwi^{M0}-lyq</i>	H.know.3S	knew
		<i>qi^{+H}</i>	<i>qi</i>	NL.3	to
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
					long time
		<i>ti^M-sqne^H</i>	<i>ti^M-sqne^H</i>	ADV-ADJ	ago
15	CHAT	<i>qwi lyq qi qq^H nu0 ntyqaq^{ML} neq^M xiq^M jq^{M0}, ri^{ML}-ti^{ML} tyqo^{M0} jloq^H</i>			
	ENG	When we used to go to the fields and it would suddenly appear on the road			
	Word	<i>qwi-lyq</i>	<i>qwi-lyq</i>	H.know.1S	knew
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>qq^H-no⁰</i>	<i>qq^H-no</i>	ADV.REL	when
		<i>ntyqaq^{ML}</i>	<i>ntyqaq^{ML}</i>	H.go.1PLEX	would go
		<i>neq^M</i>	<i>neq^M</i>	N	within
		<i>xiq^M</i>	<i>xiq^M</i>	N	grass
		<i>jq^{M0}</i>	<i>jq^{M0}</i>	ADV.Abs	then
		<i>ri^{ML}-ti^{ML}</i>	<i>ri^{ML}-ti^{ML}</i>	ADV	suddenly
					will come
		<i>tyqo^{M0}</i>	<i>tyqo^H</i>	P.exit.3S	out
		<i>jloq^H</i>	<i>jloq</i>	N.1PLIN	our face

- 16 CHAT *kq̄q^{LM} ndyweeq^{MO}, chaq^{MH} ngq^{HL} no^{MO}-xwe^{+H}*
ENG So as a girl I would tell it:
Word *kq̄q^{LM}* *kq̄q^{LM}* ADV then
ndyweeq^{MO} *ndyweeq^{MO}* H.say.1PLIN let's say
chaq^{MH} *chaq^{MH}* COMP because
ngq^{HL} *ngq^{HL}* H.COP.1PLIN we are
no^{MO}-xwe^{+H} *no^{MO}-xwe^{+H}* N children
- 17 CHAT *kwiq^{ML} chaq^{MH} kwq̄^{MO}-a^{ML} ndywiq^{+H} neq jla swe^{MH} chaq^{MH} naq^{MO}-ji^M*
ENG We would talk to it the way the elders told us to.
Word *kwiq^{ML}* *kwiq^{ML}* ADV same
chaq^{MH} *chaq^{MH}* COMP because
kwq̄^{MO}-a^{ML} *kwq̄^{MO}-a^{ML}* H.appears.3S this way
ndywiq^{+H} *ndywiq^{+H}* H.say.3S say
neq *neq* N people
jla *jla* ADJ big
sqwe^{MH} *sqwe^{MH}* ADJ well
chaq^{MH} *chaq^{MH}* COMP because
na^{MO}-ji^M *na^{MO}-ji^M* INTJ this
- 18 CHAT *nde^{MO}-a^{ML} tykwiq^{LM} qo^H yka-ti^M-nta^H kq̄q^{LM} ndywiq*
ENG That is what you tell a mantis.
Word *nde^{MO}-a^{ML}* *nde^{MO}-a^{ML}* H.appears.3S likes this
tykwiq^{LM} *tykwiq^{LM}* P.say.2S will say
qo^H *qo^H* NL.3 with
yka-ti^M-nta^H *yka-ti^M-nta^H* N(tree)-N(rope)-ADJ mantis
kq̄q^{LM} *kq̄q^{LM}* ADV.Abs that

ndywiq *ndywiq* H.say.3S he/she would say
- 19 CHAT *nkq^{MO} sneq^{+H} jlo^H kq̄q^{LM} tykwa^{HL} tu^M yaq^H ndywiq^{ML}*
ENG They would tell us to sit the mantis on our palm and spit on it.
Word *nkq^{MO}* *nkq^{MO}* H.throw.3S you throw
sneq^{+H} *sneq^{+H}* N saliva
jlo^H *jlo^H* N.3 it's face
kq̄q^{LM} *kq̄q^{LM}* DEM.Abs then
tykwa^{HL} *tykwa^{HL}* P.sit.3S it will sit
tu^M-yaq^H *tu^M-yaq^H* N-N.3 your palm
ndywiq^{ML} *ndywiq^{ML}* H.say.3S would say
- 20 CHAT *na^{MO}-ji^M lo la^{ML} na^{MO}-ji^M naq^{LM} nkq40 sneq^{MO} jlo^{LM}*
ENG I will spit on your face.

Word	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	this
	<i>lo-la^{ML}</i>	<i>lo-la^{ML}</i>	NUM	first
	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	this
	<i>naq^{LM}</i>	<i>naq^{LM}</i>	PRO.1S	I
	<i>nkq^{LO}</i>	<i>nkq^{LO}</i>	P.throw.1S	threw
	<i>sneq^{MO}</i>	<i>sneq^{MO}</i>	N.1S	your spit
	<i>jlo^{LM}</i>	<i>jlo^H</i>	N.2S	your face
21	CHAT	<i>la^L kwe^{MH} jyq^{ML} qq^{ML} kwa^{MO}-a^{ML} tykwia^{LM} qo^H kqq^{MO} ndywiq^{ML}</i>		
	ENG	“Which way is my boyfriend coming from?” That’s how they taught us to say.		
Word	<i>la^L</i>	<i>la^L</i>	Q	where
	<i>kwe^{MH}</i>	<i>kwe^{MH}</i>	N	pathway
	<i>jyq^{ML}</i>	<i>jyq</i>	P.come.3S~not base	coming
	<i>qq^{ML}</i>	<i>qq^{ML}</i>	N.1S	boyfriend
	<i>kwa^{MO}-a^{ML}</i>	<i>kwa^{MO}-a^{ML}</i>	H.appears.3S	like that
	<i>tykwia^{LM}</i>	<i>tykwia^{LM}</i>	P.say.2S	you will say
	<i>qo^H</i>	<i>qo^H</i>	NL.3	with
	<i>kqq^{MO}</i>	<i>kqq^{MO}</i>	ADV	that
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	H.say.3S	would say
22	CHAT	<i>qo^H ka^{ML} wa^H-q^{MO} ndyweq^{MO} qo^H chaq^{MH} xwe^{+H} jaq^{MO} ntyqo^{MO} chaq^{MH}</i>		
	ENG	We talked to it the way the elders told us to.		
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>ka^{ML}-wa^H-q^{MO}</i>	<i>ka^{ML}-wa^H-q^{MO}</i>	P.COP.DEM.H.appear.3S	same
	<i>ndyweq^{MO}</i>	<i>ndyweq</i>	H.say.1S	I would say
	<i>qo^H</i>	<i>qo^H</i>	NL.3	with
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
	<i>xwe^{+H}</i>	<i>xwe⁺</i>	ADJ.1PLIN	young
	<i>jaq^{MO}</i>	<i>jaq^{MO}</i>	ADV	then
	<i>ntyqo^{MO}-</i>	<i>ntyqo^{MO}-</i>		
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that's right
23	CHAT	<i>ja^L-ne^{+H} ri^{ML} nkq^{HL} sneq⁰ jlo⁰ jaq^{MO}-i^{MO}</i>		
	ENG	Then we would spit on it's face.		
Word	<i>ja^L-ne^{+H}</i>	<i>ja^L-ne^{+H}</i>	ADV	that way
	<i>ri^{ML}</i>	<i>ri^{ML}</i>	DEM	direction
	<i>nkq^{HL}</i>	<i>nkq^{HL}</i>	H.throw.3S	throw
	<i>sneq⁰</i>	<i>sneq⁰</i>	N.3	saliva
	<i>jlo⁰</i>	<i>jlo⁰</i>	N.3	it's face
	<i>jaq^{MO}-i^{MO}</i>	<i>jaq^{MO}-i^{MO}</i>	ADV.EMPH	then
24	CHAT	<i>tyi^{MO}-sna^M qne^{ML} yaq^M ji^{MO}</i>		

ENG	It would begin to move it's hand towards a direction.			
Word	<i>tyi^{MO}-sna^M</i>	<i>tyi^H-sna^M</i>	P.begin.3S	it will begin
	<i>qne^{ML}</i>	<i>qne^{ML}</i>	P.do.3S	to do
	<i>yaq^M</i>	<i>yaq^M</i>	N.3	its hand
	<i>ji^{MO}</i>	<i>ji^{MO}</i>	ADV	then
25	CHAT	<i>kwaaq^{OL} kwaaq^{OL} qne^H yaq^M ji^{MO}</i>		
	ENG	It would then start moving its hand this way.		
	Word	<i>kwaaq^{OL}</i>	<i>kwaaq^{OL}</i>	ADV like this
		<i>kwaaq^{OL}</i>	<i>kwaaq^{OL}</i>	ADV like this
		<i>qne^H</i>	<i>qne^H</i>	P.do.3S it will do
		<i>yaq^M</i>	<i>yaq^M</i>	N.3 its hand
		<i>ji^{MO}</i>	<i>ji^{MO}</i>	ADV then
26	CHAT	<i>la^{MO} nga^{ML} tkwe^{MH} jya^{ML} no ka^{ML} nte^{HL+0} qna^{LM} no4 ka^{ML} qq^{+H} jaq^{LM}-ja^{MO}</i>		
	ENG	Show me where my people (partner) will come from.		
	Word	<i>la^{MO}</i>	<i>la^{MO}</i>	Q where
		<i>nga^{ML}</i>	<i>nga^{ML}</i>	H.COP.1S is
		<i>tkwe^{MH}</i>	<i>tkwe^{MH}</i>	N pathway
		<i>jya^{ML}</i>	<i>jya^{ML}</i>	P.come.1S~not base comes
		<i>no</i>	<i>no</i>	REL who?
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.1S will be
		<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N people
		<i>qna^{LM}</i>	<i>qna^{LM}</i>	PRO.A.1PLIN our
		<i>no</i>	<i>no</i>	REL who?
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.1S will be
		<i>qq^{+H}</i>	<i>qq^{+H}</i>	N.1PLIN husband
		<i>jaq^{LM}-ja^{MO}</i>	<i>jaq^{LM}-ja^{MO}</i>	ADV then
27	CHAT	<i>kwaa^{MO} niya^{ML}, kwaa^{MO} niya^{ML} qne^{ML} yaq² jaq^{MO}-i^{ML}, qne^{ML} yaq^M qne^H jaq^{LM}-i^{ML}</i>		
	ENG	The animal moves its hand and points towards a direction; it's beautiful.		
	Word	<i>kwaa^{MO}-</i>	<i>kwaa^{MO}-</i>	
		<i>niya^{ML+H}</i>	<i>niya^{ML+H}</i>	ADV-H.appears.1S like that
		<i>kwaa^{MO}-</i>	<i>kwaa^{MO}-</i>	
		<i>niya^{ML+H}</i>	<i>niya^{ML+H}</i>	ADV-H.appears.1S like that
		<i>qne</i>	<i>qne</i>	P.do.3S will do
		<i>yaq^M</i>	<i>yaq^M</i>	N.3 its hand
		<i>jaq^{MO}-i^{ML}</i>	<i>jaq^{MO}-i^{ML}</i>	ADV then
		<i>qne^{ML+H}</i>	<i>qne^{ML+H}</i>	P.do.3S will do
		<i>yaq^M</i>	<i>yaq^M</i>	N.MH its hand
		<i>qne^H</i>	<i>qne^{ML}</i>	P.do.3S animal
		<i>jaq^{LM}-i^{ML}</i>	<i>jaq^{LM}-i^{ML}</i>	ADV that

		<i>ntyqya^{ML+H}</i>	<i>ntyqya^{ML+H}</i>	ADJ	pretty
		<i>qne^H</i>	<i>qne^H</i>	H.do.3S	do
		<i>yaq^M-i^H</i>	<i>yaq^M-i^H</i>	N.3S	its hand
28	CHAT	<i>jq-jq^{MH} yka ti-nta^{H+0} ndywiq⁰ req^{ML} qo^H-i^{ML}</i>			
	ENG	Yes, they call it mantis.			
	Word	<i>jq-jq^{MH}</i>	<i>jq-jq^{MH}</i>	ADV	yes
		<i>yka</i>	<i>yka</i>	N	stick
		<i>ti-nta^{H+0}</i>	<i>ti-nta^{H+0}</i>	N	mantis
		<i>ndywiq⁰</i>	<i>ndywiq</i>	H.say.1S	they call it
		<i>req^{ML}</i>	<i>req</i>	PRO	them
		<i>qo^H-i^{ML}</i>	<i>qo^H-i^{ML}</i>	NL.EMPH	to
29	CHAT	<i>ntyqya^{ML} qa^H qne^{ML}-e^H</i>			
	ENG	He acts beautifully.			
	Word	<i>ntyqya^{ML+0}</i>	<i>ntyqya^{ML+0}</i>	ADJ	pretty
		<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
		<i>qne^{ML}-e^H</i>	<i>qne^{ML}-e^H</i>	N	does

KWE^M-NTU^H QI⁰ KWNA^H ‘THE SNAKE STORY’

1	CHAT	<i>no nka^{ML} ska^{+H} neq Sya^M kaq^{LM} no^{ML}</i>			
	ENG	It is about someone from Tepenixtlahuaca			
			without	Grammatical	Gloss
	Word	sandhi	sandhi	category	
		<i>no</i>	<i>no</i>	REL	who
		<i>nka^{ML}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
		<i>ska^{+H}</i>	<i>ska</i>	NUM	one
		<i>neq</i>	<i>neq</i>	N	people
		<i>Sya^M</i>	<i>Sya^M</i>	N	Tepenixtlahuaca
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	ADV.Abs	that
		<i>no^{ML}</i>	<i>no</i>	REL	who
2	CHAT	<i>chaq^{MH} tqi^{HL+0} req⁰ kaq^{LM} ya^{LM} req, qwi mba^{HL+0} req⁰ no nka^{ML} Jjlyd^H</i>			
	ENG	Because he was very poor, he went to see his godfather from Ixpantepec.			
	Word	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>tqi^{HL+0}</i>	<i>tqi^{HL+0}</i>	ADJ	poor
		<i>req⁰</i>	<i>req</i>	PRO.A.IND.H	they

<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
<i>ya^{LM}</i>	<i>ya^{LM}</i>	C.go~base	went
<i>rẹq</i>	<i>rẹq</i>	PRO.A.IND.H	them
<i>qwi</i>	<i>qwi</i>	H.exist.3S	had
<i>mba^{HL+0}</i>	<i>mba^{HL+0}</i>	N	godfather
<i>rẹq⁰</i>	<i>rẹq</i>	PRO.A.IND.H	them
<i>no</i>	<i>no</i>	REL	who
<i>nka^{ML}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
<i>Jlya^H</i>	<i>Jlya^H</i>	N	Ixpantepec
<i>wa^M</i>	<i>wa^M</i>	DEM3	there
<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	then

3 CHAT
ENG
Word

ra^H-no⁰ wa^M ndIya^{+H} jlya^H jq̣q^{M0} ndywiq^{ML} chaq^{MH} na^{M0}-ji^M
He said that when he got to Ixpantepec...

<i>ra^H-no⁰</i>	<i>ra^H-no⁰</i>	ADV-REL	when
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i>	C.arrived.3S~base	arrived
<i>Jlya^H</i>	<i>Jlya^H</i>	N	ixpantepec
<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	then
<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that
<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	is

4 CHAT
ENG
Word

kq̣q^{LM} tsq̣^{HL+0} ta⁰ jnyaq^H ndywiq^{ML} mba^{HL+0} qo^H, kq̣q^{LM} ntqo^H nkya^{ML+H}
ta^{MH} jnyaq^H ji^{M0}
His godfather then told him - let's go hunt deer. So they went hunting.

<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	and then
<i>tsq̣^{HL+0}</i>	<i>tsq̣^{ML+H}</i>	P.go.1PLIN	let's go
<i>ta⁰</i>	<i>ta^{MH}</i>	N	hunt
<i>nyaq^H</i>	<i>jnyaq^H</i>	N	deer
<i>jndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S	said
<i>mba^{HL+0}</i>	<i>mba^{HL+0}</i>	N	godfather
<i>qo^H</i>	<i>qo^H</i>	with.3S	with him
<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	and then
<i>ntqo^H</i>	<i>ntqo^H</i>	C.exit.3S	he left
<i>nkya^{ML+H}</i>	<i>nkya^{ML+H}</i>	C.go.3S~base	he went
<i>ta^{MH}</i>	<i>ta^{MH}</i>	N	hunt
<i>nyaq^H</i>	<i>nyaq^H</i>	N	deer
<i>ji^{M0}</i>	<i>ji^{M0}</i>	DEM.Abs-INTJ	then

5	CHAT ENG	<i>qo^H qa^H no⁰ wa^M ndiya^{+H} neq^M kxiq^M kqq^{LM} sqwe^{HL+0} tqa^{LM}</i>	
		When they got to the mountain they got separated; and each one went their own way.	
	Word	<i>qo^H</i>	<i>qo^H</i> CONJ and
		<i>qa^H-no⁰</i>	<i>qa^H-no⁰</i> ADV-REL when
		<i>wa^M</i>	<i>wa^M</i> ADV already
		<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i> C.arrive.3S~base to arrive
		<i>neq^M</i>	<i>neq^M</i> N inside
		<i>kxiq^M</i>	<i>kxiq^M</i> N brush
		<i>kqq^{LM}</i>	<i>kqq^{LM}</i> ADV.Abs then
		<i>sqwe^{HL+0}</i>	<i>sqwe^{HL+0}</i>
		<i>tqa^{LM}</i>	<i>tqa^{LM}</i> V.split.3PL they separated
6	CHAT ENG	<i>ndiya^{+H}, nde^M ska^H sqe^{+H} tsa^{ML+H} qwe^{+H} hasta qne^H kwa^{MH} tyqq^{ML} tqaq^{LM} ti^{MH} qa^H ndywiq mba^{HL+0} qo⁰ jqj^{M0}</i>	
		His godfather told him- "You take that route and we will meet over there."	
	Word	<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i> C.arrived.3S~base arrived
		<i>nde^M</i>	<i>nde^M</i> DEM1 here
		<i>ska^H</i>	<i>ska^H</i> NUM one
		<i>sqe^{+H}</i>	<i>sqe^{+H}</i> H.exist.3S place
		<i>tsa^{ML+H}</i>	<i>tsa^{ML+H}</i> N place
		<i>qwe^{+H}</i>	<i>qwe^{+H}</i> PRO.2S you
		<i>hasta</i>	<i>hasta</i> ADV until
		<i>qne^H</i>	<i>qne^H</i> DEM there (all the way)
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i> DEM there
		<i>tyqq^{ML-}</i>	<i>tyqq^{ML-}</i> we will find each
		<i>tqaq^{LM-+H}</i>	<i>tqaq^{LM-+H}</i> P.find.3PL other
		<i>ti^{MH}-qa^H</i>	<i>ti^{MH}-qa^H</i> ADV later
		<i>ndywiq</i>	<i>ndywiq</i> C.say.3S would say
		<i>mba^{HL+0}</i>	<i>mba^{HL+0}</i> N godfather
		<i>qo⁰</i>	<i>qo⁰</i> with.3S with
		<i>jqj^{M0}</i>	<i>jqj^{M0}</i> DEM.Abs-DEF then
7	CHAT ENG	<i>sqwe^{MH} rq^{MH} ndywiq^{ML} jqj^{M0}</i>	
		He answered- "Sounds good."	
	Word	<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i> ADJ good
		<i>rq^{MH}</i>	<i>rq^{MH}</i> PRO.A.INA.3S thing
		<i>ndywiq^{ML}</i>	<i>ndywiq</i> C.say.3S said

		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	then
8	CHAT	<i>qo^H qq̣^{H-no⁰} wa^M ndIya^{+H} no tykeq^{HL+0} kwq̣⁰ jq̣q^{M0}, kq̣q^{LM} ndi^{+H} ti^{ML}</i>			
	ENG	It was really hot; he arrived to a place where there was a creek.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>qq̣^{H-no⁰}</i>	<i>qq̣^{H-no⁰}</i>	ADV-REL	when
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i>	C.arrived.3S~base	arrived
		<i>no</i>	<i>no</i>	REL	who
		<i>tykeq^{HL+0}</i>	<i>tykeq^{HL+0}</i>	ADJ	hot
		<i>kwq̣⁰</i>	<i>kwq̣⁰</i>	Q	how
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	then
		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>ndyi^{+H}</i>	<i>ndyi^{+H}</i>	C.thirst.3S(S)	thirst
		<i>ti^{ML}-riq^M</i>	<i>ti^{ML}-riq^M</i>	ADV-N	essence
		<i>nṭ̣̣^{HL+0}</i>	<i>nṭ̣̣^{HL+0}</i>	N	people
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
		<i>tyqa</i>	<i>tyqa</i>	N	water
		<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i>	C.arrived.3S~base	arrived
		<i>ska</i>	<i>ska</i>	NUM	a
		<i>tu^{MH}-ti^L</i>	<i>tu^{MH}-ti^L</i>	N-ADJ	creek
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	then
9	CHAT	<i>kq̣q^{LM} ne^{ML} qne^H ne^{ML}-qne^H xkeq^{M0} riq^M nṭ̣̣^{HL+0} jq̣q^{LM} j̣i^{M0}</i>			
	ENG	All of a sudden he (this person) heard something...			
	Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>ne^{ML}</i>	<i>ne^{ML}</i>	PRG.sound.3S	made a sound
		<i>qne^H</i>	<i>qne^H</i>	PRG.do.3S	made
		<i>ne^{ML}-qne^H</i>	<i>ne^{ML}-qne^{LM}</i>	PRG.do.3S	made a sound
		<i>xkeq^{M0}</i>	<i>xkeq^{M0}</i>	P.imagine.3S	imagined
		<i>riq^M</i>	<i>riq^M</i>	N	essence
		<i>nṭ̣̣^{HL+0}</i>	<i>nṭ̣̣^{HL+0}</i>	N	people
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
		<i>j̣i^{M0}</i>	<i>j̣i^{M0}</i>	ADV-INTJ	then
10	CHAT	<i>ne^{ML} ndywa^H tyqi^{M0} ne^{ML+H} xkeq^{M0} qi^{ML} jq̣q^{M0}, xqny^L riq^M jq̣q^{M0}</i>			
	ENG	He got scared because he started imagining that he heard whimpering sounds.			

Word	<i>ne^{ML}</i>	<i>ne^{ML}</i>	C.sound.3S	sounded
	<i>ndywa^{H+0}</i>	<i>ndywa^{H+0}</i>	H.sit.3S	came out
	<i>tyqi^{MO}</i>	<i>tyqi^M</i>	N	whining (smell)
	<i>ne^{ML+H}</i>	<i>ne^{ML+H}</i>	C.sound.3S	sounded
	<i>xkeq^{MO}</i>	<i>xkeq^{MO}</i>	P.imagine.3S	imagined
	<i>qi^{ML}</i>	<i>qi</i>	NL.animal	to him
	<i>jq^{MO}</i>	<i>jq^{MO}</i>	DEM.Abs-DEF	and then
	<i>xqnyi-riq^M</i>	<i>xqnyi-riq^M</i>	C.fear.3S-N	was scared
	<i>jq^{MO}</i>	<i>jq^{MO}</i>	DEM.Abs-DEF	and then
11	CHAT	<i>qo^H kq^{LM} ndiya^{+H} nt^{HL+0} jq^{LM} yqo^M tyqa tu^{MH} ti^L ja no^H wa^M ja no ntyqwi ntyqo^M tyqa jq^{LM} qo^H kwa^{MH} jna^H jq^{LM} ndIyq^{+H}</i>		
	ENG	He began to drink water, and meanwhile, a snake appeared.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs then
		<i>ndiya^{+H}</i>	<i>ndiya^{+H}</i>	C.arrived.3S~base arrived
		<i>nt^{HL+0}</i>	<i>nt^{HL+0}</i>	N people
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs that
		<i>yqo^M</i>	<i>yqo^M</i>	C.drink.3S drank (took)
		<i>tyqa</i>	<i>tyqa</i>	N water
		<i>tu^{MH}-ti^L</i>	<i>tu^{MH}-ti^L</i>	N creek
		<i>ja-no</i>	<i>ja-no</i>	ADV-REL within
		<i>wa^M</i>	<i>wa^M</i>	ADV already
		<i>ja-no</i>	<i>ja-no</i>	ADV-REL when
		<i>ntyqwi</i>	<i>ntyqwi</i>	H.exist.3S he was
		<i>ntyqo^M</i>	<i>ntyqo^M</i>	PRG.drink.3S drinking
		<i>tyqa</i>	<i>tyqa</i>	N water
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs then
		<i>qo^H</i>	<i>qo^H</i>	C.exit.3S came out
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	C.sit.3S appeared
		<i>jna^H</i>	<i>jna^H</i>	N snake
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs and then
		<i>ndiyq^{+H}</i>	<i>ndiyq^{+H}</i>	C.arrived.3S~base arrived to base
12	CHAT	<i>kq^{LM} ndywiq na^{MO}-ji^M ndywe riq^M nt^{HL+0} jq^{LM} chaq^{MH} no^{ML}, la^{MO}-nka^{ML} ntqq^{LM} la^{MO}-nka^{ML} ykwiq qa^H jna^H jq^{LM} qo^H nt^{HL+0} jq^{LM} ndywiq</i>		
	ENG	He was surprised because the snake said to him- “Where are you going?” – that’s what it said.		
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs then

<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	that
<i>ndywe-riq^M</i>	<i>ndywe-riq^M</i>	C.worry.3S-N	surprised
<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
<i>chaq^{MH-}</i>	<i>chaq^{MH-}</i>		
<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL	because
<i>la^{MO}-nka^{ML}</i>	<i>la^{MO}-nka^{ML}</i>	Q-H.COP.3S	where
<i>ntq^{LM}</i>	<i>ntq^{LM}</i>	H.go.3S~base	going about
<i>la^{MO}-nka^{ML}</i>	<i>la^{MO}-nka^{ML}</i>	Q-H.COP.3S	where
<i>ykwiq</i>	<i>ykwiq</i>	C.say.3S	said
<i>qa^H</i>	<i>qa^H</i>	EMPH	more
<i>jna^H</i>	<i>jna^H</i>	N	snake
<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
<i>qo^H</i>	<i>qo^H</i>	with.3S	with
<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said

- 13 CHAT *ta ntse^{LM} qnya ndywiq, ntse^{HL+0} chiq^{MO} qi^{LM} chaq^{MH-} no^{ML} skq te^{MO}*
ENG *ndywiq nte^{HL+0} jaq^{LM} qo^H*
"Are you afraid of me?" asked the snake. — "Yes, I am afraid of you because I came alone," replied the man.

Word	<i>ta</i>	<i>ta</i>	Q	what?
	<i>ntse^{LM}</i>	<i>ntse^{LM}</i>	H.afraid.2S?	are you afraid?
	<i>qnya</i>	<i>qnya</i>	PRO.A.1S	of me?
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>ntse</i>	<i>ntse</i>	PRG.afraid.1S	I am afraid
	<i>chiq^{MO}</i>	<i>chiq^{MO}</i>	ADJ	a little bit
	<i>qi^{LM}</i>	<i>qi^{LM}</i>	NL.2S	of you
	<i>chaq^{MH-}</i>	<i>chaq^{MH-}</i>		
	<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL	because
	<i>skq-te^{MO}</i>	<i>skq-te^{MO}</i>	NUM.1S-ADV	without company
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs	that
	<i>qo^H</i>	<i>qo^H</i>	with.3S	with

- 14 CHAT *qa^{ML}, ja-la^{+H} ktse^{LM} qnya ndywiq jaq^{MO}*
ENG "Don't be afraid of me," said the snake.

Word	<i>qq^{ML}</i>	<i>qq^{ML}</i>	PRG.look.2S	this
	<i>ja-la^{+H}</i>	<i>ja-la^{+H}</i>	NEG-EMPH	no
	<i>ktse^{LM}</i>	<i>ktse^{LM}</i>	P.be afraid.3S	be afraid
	<i>qnya</i>	<i>qnya</i>	PRO.A.1S	of me
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs-DEF	and then
15 CHAT	<i>jlyo^{M0} req^{M0} chaq^{MH} tqi^{HL+0} qa^{LM} chaq^{LM} ntyqq^{LM} neq^M xnya^{MH} ti^{ML}</i>			
ENG	<i>ntyji^{HL+0} jni⁰ qi^{LM} ndywiq</i>			
Word	I know you are a poor farmer.			
	<i>jlyo^{M0}-req^{M0}</i>	<i>jlyo^{M0}-req^{M0}</i>	H. to know.1S	I know
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that
	<i>tqi^{HL+0}</i>	<i>tqi^{HL+0}</i>	ADJ.2S	poor
	<i>qa^{LM}</i>	<i>qa^{LM}</i>	EMPH	you
	<i>chaq^{LM}</i>	<i>chaq^{LM}</i>	COMP	because
	<i>ntyqq^{LM}</i>	<i>ntyqq^{LM}</i>	H.go.2S~base	to go
	<i>neq^M</i>	<i>neq^M</i>	N.3S	stomach
	<i>xnya^{MH}</i>	<i>xnya^{MH}</i>	N	work in the fields
	<i>ti^{ML}</i>	<i>ti^{ML}</i>	ADV	alone
	<i>ntyji^{HL+0}</i>	<i>ntyji^{HL+0}</i>	H.miss.3S	to get
	<i>jni⁰</i>	<i>jni^{HL+0}</i>	N	money
	<i>qi^{LM}</i>	<i>qi</i>	NL.2S	you
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
16 CHAT	<i>ne^M-i^{M0} ndwiq^{ML} na^{M0}-ji^M</i>			
ENG	"Now," it told him.			
Word	<i>ne^M-i^{M0}</i>	<i>ne^M-i^{M0}</i>	ADV-INTJ	now
	<i>ndwiq^{ML}</i>	<i>ndwiq</i>	C.say.3S	said
	<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	this
17 CHAT	<i>lyo^{M0} la^{ML} sa-lu^{H+0} ke^{LM} chaq^{MH} no^{ML} stq^{LM} ke^M ndwa^{MH} chqq^{ML} re^M</i>			
ENG	<i>ndywiq^{+H} jq^{M0}</i>			
Word	The snake said, "cut the flower that's on my back and put it inside the hat."			
	<i>lyo^{M0}-la^{ML}</i>	<i>lyo^{M0}-la^{ML}</i>	P. take out-IMP	get out
	<i>sa-lu^{H+0}</i>	<i>sa-lu^{H+0}</i>	N	hat
	<i>ke^{LM}</i>	<i>ke^{LM}</i>	N.2S	your head
	<i>chaq^{MH}-</i>	<i>chaq^{MH}-</i>		
	<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL	so that
	<i>stq^{ML}</i>	<i>stq^{ML}</i>	P.cut.3S	cut

		<i>ke^M</i>	<i>ke^M</i>	N	flower
		<i>ndwa^{MH}</i>	<i>ndwa^{MH}</i>	PRG.sit.3S	sitting
		<i>chq^{ML}</i>	<i>chq^{ML}</i>	N.3S	my back
		<i>re^M</i>	<i>re^M</i>	DEM1	here
		<i>ndywiq^{+H}</i>	<i>ndywiq^{+H}</i>	C.say.3S	said
		<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs-DEF	and then
18	CHAT	<i>sqwe^{MH} rq^{MH} ndywiq^{ML} neq syaq^M qo^H, kq^{LM} nlo^{ML} neq^{+H} syaq^M-a^{MH}</i>			
	ENG	"OK," said the man from Tepenixtlahuaca.			
	Word	<i>sqwe^{MH}-</i>	<i>sqwe^{MH}-</i>		
		<i>rq^{MH}</i>	<i>rq^{MH}</i>	ADV	ok
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>neq</i>	<i>neq</i>	N	people
		<i>Syaq^M</i>	<i>Syaq^M</i>	N	Tepenixtlahuaca
		<i>qo^H</i>	<i>qo^H</i>	with.3S	to him
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
		<i>nlo^{ML}</i>	<i>nlo^{ML}</i>	C.take out.3S	took out
		<i>neq^{+H}</i>	<i>neq</i>	N	people (from)
		<i>Syaq^M-a^{MH}</i>	<i>Syaq^M-a^{MH}</i>	N	tepenixtlahuaca
19	CHAT	<i>na^{M0}-jⁱ^M sa-lu^{H+0} ke^{LM} chaq^{MH} stq^{LM} ke^M ndwa^{MH} chq^{LM} jna^H jq^{LM}</i>			
	ENG	With his hat he went ahead and cut the flower that was on the snake's			
	Word	back.			
		<i>na^{M0}-jⁱ^M</i>	<i>na^{M0}-jⁱ^M</i>	INTJ	this
		<i>sa-lu^{H+0}</i>	<i>sa-lu^{H+0}</i>	N	hat
		<i>ke^{LM}</i>	<i>ke^{LM}</i>	N.3S	his head
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	to/for
		<i>stq^{LM}</i>	<i>stq^{LM}</i>	P.cut.3S	cut
		<i>ke^M</i>	<i>ke^M</i>	N	flower
		<i>ndwa^{MH}</i>	<i>ndwa^{MH}</i>	PRG.sit.3S	seated
		<i>chq^{LM}</i>	<i>chq^{LM}</i>	N.3S	it's back
		<i>jna^H</i>	<i>jna^H</i>	N	snake
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs	that
20	CHAT	<i>kq^{M0} ndywiq^{ML} jna^H jq^{LM} qo^H jq^{M0} kq^{MH} chaq^{MH} ne^M ndywiq^H</i>			
	ENG	<i>jq^{M0}, tq ska na^{MH} sqwe^{MH} qi^{LM} chaq^{MH} no^{ML}</i>			
	Word	The snake then told him, "I am going to give you something sacred."			
		<i>kq^{M0}</i>	<i>kq^{M0}</i>	DEM.Abs-DEF	then
		<i>ndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S	said
		<i>jna^H</i>	<i>jna^H</i>	N	the snake

<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
<i>qo^H</i>	<i>qo^H</i>	with.3S	to him
<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
<i>kq̣q^{MH-}</i>	<i>kq̣q^{MH-}</i>		
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	DEM.Abs-COMP	that is why
<i>ne^M</i>	<i>ne^M</i>	ADV	now
<i>ndywiq^H</i>	<i>ndywiq</i>	C.say.3S	said
<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
<i>tq̣</i>	<i>tq̣</i>	P.give.3S	I will give you
<i>ska</i>	<i>ska</i>	NUM	a
<i>na^{MH}</i>	<i>na^{MH}</i>	N	thing
<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
<i>qi^{LM}</i>	<i>qi</i>	NL.2S	to you
<i>chaq^{MH-}</i>			
<i>no^{ML}</i>	<i>chaq^{MH-}no</i>	COMP-REL	so that

21 CHAT
ENG
Word

na^{M0}-ji^M qna^{MH} qa^{ML} qne^{ML} jlo^{LM} chaq^{MH} tqi^{+H} ndywiq^{ML-}i^{M0} na^{M0}-ji^M
 "I feel sorry for you because you are very poor," the snake told him.

<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	this
<i>qna^{MH}</i>	<i>qna^{MH}</i>	ADJ	poor
<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	is
<i>qne^{ML}</i>	<i>qne^{ML}</i>	C.do.3S	do/make
<i>jlo^{LM}</i>	<i>jlo^{LM}</i>	N.3S	your face
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
<i>tqi^{+H}</i>	<i>tqi^{HL+0}</i>	ADJ	poor
<i>ndywiq^{ML-}</i>	<i>ndywiq^{ML-}</i>		
<i>i^{M0}</i>	<i>i^{M0}</i>	C.say.3S-INTJ	said
<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	this

22 CHAT
ENG
Word

qo^H kq̣q^{LM} chaq^{MH} ja-la^{+H} kqu^{M0} qi^{ML} nte^{HL+0} no⁰ kla^{LM} ndywiq^{ML}
ntyqo^{M0} chaq^{MH}
 "When you get to the house where you are staying at, don't show it to anybody."

<i>qo^H</i>	<i>qo^H</i>	CONJ	and
<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
<i>ja-la^{+H}</i>	<i>ja-la^{+H}</i>	NEG-EMPH	no
<i>kqu^{M0}</i>	<i>kqu^{M0}</i>	P.show.2S	show
<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people

		<i>no</i> ⁰	<i>no</i> ⁰	REL	who
		<i>kla</i> ^{LM}	<i>kla</i> ^{LM}	P.arrive.3Sbase	arrive
		<i>ndywiq</i> ^{ML}	<i>ndywiq</i> ^{ML}	C.say.3S	said
		<i>ntyqo</i> ^{MO}	<i>ntyqo</i> ^{MO}	H.exit(S).3S	get out
		<i>chaq</i> ^{MH}	<i>chaq</i> ^{MH}	N	thing
23	CHAT ENG Word	<i>ni</i> ^{MO} - <i>kq̣</i> ^{LM} <i>ṛ</i> ^{MH} <i>neq</i> ^M <i>xkq̣</i> ^H <i>ti</i> ^M - <i>qa</i> ^H <i>ndywiq</i> ^{ML} <i>jq̣</i> ^{MO}			
		"Later put it inside your shirt," that's what it said.			
				C.CAUS.sit on the	
		<i>ni</i> ^{MO} - <i>kq̣</i> ^{LM}	<i>ni</i> ^{MO} - <i>kq̣</i> ^{LM}	ground.3S	put it
		<i>ṛ</i> ^{MH}	<i>ṛ</i> ^{MH}	PRO.A.INA.3S	that
		<i>neq</i> ^M	<i>neq</i> ^M	N	inside
		<i>xkq̣</i> ^H	<i>xkq̣</i> ^H	N.3S	your shirt
		<i>ti</i> ^M - <i>qa</i> ^H	<i>ti</i> ^M - <i>qa</i> ^H	ADV	later
		<i>ndywiq</i> ^{ML}	<i>ndywiq</i> ^{ML}	C.say.3S	said
		<i>jq̣</i> ^{MO}	<i>jq̣</i> ^{MO}	DEM.Abs-DEF	and then
24	CHAT ENG Word	<i>hasta kla</i> ^{LM} <i>xi</i> - <i>tyi</i> <i>jq̣</i> ^{MO} <i>kq̣</i> ^{MO} <i>no</i> ^{ML} <i>na</i> ^{MO} - <i>j̣</i> ^M <i>kq̣</i> ^{MO} <i>no</i> ^{ML} <i>sqwa</i> ^{MO} <i>na</i> ^{MH} <i>no</i> ^{ML} <i>nde</i> ^M <i>neq</i> ^M <i>tq̣</i> ^{LM} <i>tji</i> <i>ndywiq</i> <i>jq̣</i> ^{MO}			
		"When you get to your village, place it in a new vase."			
		<i>hasta</i>	<i>hasta</i>	ADV	until
		<i>kla</i> ^{LM}	<i>kla</i> ^{LM}	P.arrive.3S~base	arrive
		<i>xi</i> - <i>tyi</i>	<i>xi</i> - <i>tyi</i>	N-community.2S	to your town
		<i>jq̣</i> ^{MO}	<i>jq̣</i> ^{MO}	DEM.Abs-DEF	and then
				DEM.Abs-DEF-	
		<i>kq̣</i> ^{MO} - <i>no</i> ^{ML}	<i>kq̣</i> ^{MO} - <i>no</i> ^{ML}	REL	then
		<i>na</i> ^{MO} - <i>j̣</i> ^M	<i>na</i> ^{MO} - <i>j̣</i> ^M	INTJ	this
				DEM.Abs-DEF-	
		<i>kq̣</i> ^{MO} - <i>no</i> ^{ML}	<i>kq̣</i> ^{MO} - <i>no</i> ^{ML}	REL	then
		<i>sqwa</i> ^{MO}	<i>sqwa</i> ^{MO}	P.put.3S	put
		<i>na</i> ^{MH} - <i>no</i> ^{ML}	<i>na</i> ^{MH} - <i>no</i> ^{ML}	N-REL	that thing
		<i>nde</i> ^M	<i>nde</i> ^M	DEM1	this
		<i>neq</i> ^M	<i>neq</i> ^M	N	inside
		<i>tq̣</i> ^{LM}	<i>tq̣</i> ^{LM}	N	pitcher
		<i>tji</i>	<i>tji</i>	ADJ	new
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
		<i>jq̣</i> ^{MO}	<i>jq̣</i> ^{MO}	DEM.Abs-DEF	and then
25	CHAT ENG	<i>sqwe</i> ^{MH} <i>ṛ</i> ^{MH} <i>ndywiq</i> ^{ML} <i>jq̣</i> ^{MO}			
		"OK," said the man.			

	Word	<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
		<i>rq^{MH}</i>	<i>rq^{MH}</i>	PRO.A.INA.3S	thing
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>jqq^{M0}</i>	<i>jqq^{M0}</i>	DEM.Abs-DEF	and then
26	CHAT	<i>qo^H kq^{M0} no^{ML} kla^{ML+H} sti^{+H}-qo^M xi^{+H}-tyi^{LM} jqq^{M0}, kq^{M0} no^{ML} na^{M0}-ji^M tyq^{H+0} tqe^{LM} jqq qya^{M0} chaq^{MH} tyq^{ML} jlo^{LM} ja ka^{ML+H} xa^{H+0} jqq^{M0} ndywiq^{ML}</i>			
	ENG	"When the priest arrives, take the pitcher and put it in front of you during mass."			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kq^{M0}-no^{ML}</i>	<i>kq^{M0}-no</i>	DEM.Abs-DEF-REL	then
		<i>kla^{ML+0}</i>	<i>kla^{ML+0}</i>	P.arrive.3S-base	will arrive
		<i>sti^{+H}-qo^M</i>	<i>sti^{+H}-qo^M</i>	N.3S-N	sacred-father
		<i>xi^{+H}-tyi^{LM}</i>	<i>xi^{+H}-tyi^{LM}</i>	N-community.2S	your town
		<i>jqq^{M0}</i>	<i>jqq^{M0}</i>	DEM.Abs-DEF	and then
		<i>kq^{M0}-no^{ML}</i>	<i>kq^{M0}-no</i>	DEM.Abs-REL	and then
		<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	this
		<i>tyq^{H+0}</i>	<i>tyq^{H+0}</i>	ADV	all
		<i>tqe^{LM}</i>	<i>tqe^{LM}</i>	N	pitcher/vase
		<i>jqq^{LM}</i>	<i>jqq^{LM}</i>	DEM.Abs	this
		<i>qya^{M0}</i>	<i>qya^{M0}</i>	P.carry.2S	take
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	for
		<i>tyq^{ML}</i>	<i>tyq^{ML}</i>	P.stand.3S	will put
		<i>jlo^{LM}</i>	<i>jlo^{LM}</i>	P.take out.3S	take out
		<i>ja</i>	<i>ja</i>	ADV	while
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.3S	will be
		<i>xa^{H+0}</i>	<i>xa^{H+0}</i>	N	mass
		<i>jqq^{M0}</i>	<i>jqq^{M0}</i>	DEM.Abs-DEF	and then
		<i>ndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S	said
27	CHAT	<i>ja^H-no⁰ wa^M tyi^H xa^{H+0} jqq-i^{M0} kq^{M0} no^{ML} na^{M0}-ji^M, no^{ML} wa^M tyi^H xa^{H+0} jqq^{LM} kq^{M0} qya^{M0} tqe^{LM} jqq^{MH} kla^{LM} qe ntqe^{LM} kq^{M0} ndywiq^{ML}</i>			
	ENG	"When mass is over, take the pitcher back to your house."			
	Word	<i>ja^H-no⁰</i>	<i>ja^H-no⁰</i>	ADV-REL	when
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>tyi^H</i>	<i>tyi</i>	P.finish(S).3S	it's over
		<i>xa^{H+0}</i>	<i>xa^{H+0}</i>	N	mass
		<i>jqq-i^{M0}</i>	<i>jqq-i^{M0}</i>	DEM.Abs.IND-	then

		INTJ	
		DEM.Abs.INDF-	
<i>kq̣q^{MO}-no^{ML}</i>	<i>kq̣q^{MO}-no^{ML}</i>	REL	then
<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	that
<i>no^{ML}</i>	<i>no</i>	REL	when
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>tyi^H</i>	<i>tyi^H</i>	P.finish(S).3S	it's over
<i>xa^{H+0}</i>	<i>xa^{H+0}</i>	N	mass
<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
<i>kq̣q^{MO}</i>	<i>kq̣q^{MO}</i>	DEM.Abs-DEF	then
<i>qya^{MO}</i>	<i>qya^{MO}</i>	P.carry.2S	take
<i>tq̣e^{LM}</i>	<i>tq̣e^{LM}</i>	N	pitcher
<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
<i>kla^{LM}</i>	<i>kla^{LM}</i>	P.arrive.2S	you will arrive
<i>qe</i>	<i>qe</i>	N	where
<i>ntq̣e^{LM}</i>	<i>ntq̣e^{LM}</i>	PRG.live.3S	you live
<i>kq̣q^{MO}</i>	<i>kq̣q^{MO}</i>	DEM.Abs-DEF	then
<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said

28 CHAT
ENG
Word

kq̣q^{LM} ni^{MO} qya^{LM} na^{MH} no^{ML} sqwi neq^M rq̣^{MH} ntyqo^{MO} chaq^{MH}
 "Then you will see what's inside."

<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
<i>ni^{MO}-qya^{LM}</i>	<i>ni^{MO}-qya^{LM}</i>	P.ADV.2S-ADV.2S	will see
<i>na^{MH}</i>	<i>na^{MH}</i>	N	thing
<i>no^{ML}</i>	<i>no</i>	REL	what
<i>sqwi</i>	<i>sqwi</i>	H.exit.3S	is
<i>neq^M</i>	<i>neq^M</i>	N	inside
<i>rq̣^{MH}</i>	<i>rq̣^{MH}</i>	PRO.A.INA.3S	that
<i>ntyqo^{MO}</i>	<i>ntyqo^{MO}</i>	H.exit.3S	get out
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N	thing

29 CHAT
ENG
Word

qo^H chi^{MH}-nyi^{ML} kwq̣^{MO}-nlyq̣^{ML} qne^{LM} nte^{HL+0} jq̣q^{LM} jq̣q^{MO}
 They say it's true because that person did it.

<i>qo^H</i>	<i>qo^H</i>	CONJ	and
<i>chi^{MH}-nyi^{ML}</i>	<i>chi^{MH}-nyi^{ML}</i>	EXCL	it's true
<i>kwq̣^{MO}-</i>	<i>kwq̣^{MO}-</i>		
<i>niyq̣^{ML}</i>	<i>niyq̣^{ML}</i>	ADV-H.appear.3S	that is
<i>qne^{LM}</i>	<i>qne^{LM}</i>	C.do.3S	did
<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that

		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
30	CHAT ENG Word	<i>qo^H qq̣^H no⁰ wa^M sla^H req̣^{ML} tq̣^{LM} jq̣q^{M0}</i>			It was true because when he opened the pitcher...
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>qq̣^H</i>	<i>qq̣^H</i>	ADV	when
		<i>no⁰-wa^M</i>	<i>no⁰-wa^M</i>	REL-ADV	already
		<i>sla^H</i>	<i>sla^H</i>	C.open.(Tr)3S	opened
		<i>req̣^{ML}</i>	<i>req̣^{ML}</i>	PRO.A.IND.H	they
		<i>tq̣^{LM}</i>	<i>tq̣^{LM}</i>	N	pitcher
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
31	CHAT ENG Word	<i>hasta sq̣q̣^H ntq̣^{LM} jq̣q^{LM} sq̣wi jnyi^{HL+0} nlo^H-ta⁰ jq̣q^{M0}</i>			The pitcher was filled with silver coins.
		<i>hasta</i>	<i>hasta</i>	ADV	until
		<i>sq̣q̣^H</i>	<i>sq̣q̣^H</i>	ADJ	full
		<i>ntq̣^{LM}</i>	<i>ntq̣^{LM}</i>	N	pitcher
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
		<i>sq̣wi</i>	<i>sq̣wi</i>	PRG.exist.3S	did
		<i>jnyi^{HL+0}</i>	<i>jnyi^{HL+0}</i>	N	money
		<i>nlo^H-ta⁰</i>	<i>nlo^H-ta⁰</i>	N	silver
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
32	CHAT ENG Word	<i>kq̣q^{LM} no qya^{MH} nte^{HL+0} no nkwa^M na^{MH} no^{ML} nka^{ML} tiye^{+H} chaq^{MH} qya^{HL+0} jq̣q^{M0}</i>			So those people bought things.
		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>no -qya^{MH}</i>	<i>no -qya^{MH}</i>	C.buy.3S	bought
		<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
		<i>no</i>	<i>no</i>	REL	who
		<i>nkwa^M</i>	<i>nkwa^M</i>	C.COP.3S	went
		<i>na^{MH}</i>	<i>na^{MH}</i>	N	thing
		<i>no^{ML}</i>	<i>no</i>	REL	who
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	is
		<i>tiye^{+H}</i>	<i>tiye^{+H}</i>	N	his chest
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>qya^{HL+0}</i>	<i>qya^{HL+0}</i>	P.buy.2S	will buy
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
33	CHAT	<i>nyq̣^{HL+0} qa⁰ tyi^{ML} nya^{HL+0}</i>			

ENG	He built his house.			
Word	<i>nyq^{HL+0}</i>	<i>nyq^{HL+0}</i>	C.built.3S	he built
	<i>qa⁰-tyi^{ML}</i>	<i>qa-tyi</i>	N-N	his house
	<i>nya^{HL+0}</i>	<i>nya^{HL+0}</i>	C.built.3S	he built
34 CHAT	<i>na^{MO}-ji^M kyqa^{ML} na^{MH} ntqe^{ML} qi^{ML} nte^{HL+0} ndywe riq^M tqa^{LM} xi^{MH}-tyi</i>			
ENG	<i>na^{MO}-nka^{ML} jwi^{MH} jnyi^{HL+0} qi⁰ kwa^{MH}</i>			
ENG	The man bought many things and his countrymen were very surprised.			
Word	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	uhm
	<i>kyqa^{ML}</i>	<i>kyqa^{ML}</i>	ADJ	a lot
	<i>na^{MH}</i>	<i>na^{MH}</i>	N	thing
				thrown around
	<i>ntqe^{ML}</i>	<i>ntqe</i>	H.exit.3S	(he had)
	<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
	<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
	<i>ndywe -riq^M</i>	<i>ndywe -riq^M</i>	C.worry.3S-N	surprised
				family
	<i>tqa^{LM}</i>	<i>tqa^{LM}</i>	N	(countrymen)
	<i>xi^{MH}-tyi</i>	<i>xi-tyi</i>	N.3	his town
	<i>na^{MO}-nka^{ML}</i>	<i>na^{MO}-nka^{ML}</i>	Q-H.COP.3S	where
	<i>jwi^{MH}</i>	<i>jwi^{MH}</i>	C.obtain.3S	he got
	<i>jnyi^{HL+0}</i>	<i>jnyi^{HL+0}</i>	N	money
	<i>qi⁰</i>	<i>qi</i>	NL.3	to
	<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	that
35 CHAT	<i>tqi^{HL+0} qa⁰ kwa^{MH}, neq^M xnya^{MH} ti^{ML} ntqa^{+H} qo^H ne^M-i^{MO} na^{MO}-ji^M</i>			
ENG	They wondered where he had gotten all that money because he only worked as a peasant.			
Word	<i>tqi^{HL+0}</i>	<i>tqi^{HL+0}</i>	ADJ	poor
	<i>qa⁰</i>	<i>qa⁰</i>	EMPH	a lot
	<i>kwa^{MH},</i>	<i>kwa^{MH},</i>	DEM3	that
	<i>neq^M-</i>	<i>neq^M-</i>		
	<i>xnya^{MH}</i>	<i>xnya^{MH}</i>	N-CAUS-work.3S	farmer
	<i>ti^{ML}</i>	<i>ti^{ML}</i>	ADV	only
			H.go	
	<i>ntqa^{+H}</i>	<i>ntqa^{+H}</i>	around.3S~base	goes
	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>ne^M-i^{MO}</i>	<i>ne^M-i^{MO}</i>	ADV-INTJ	now
	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	now

36	CHAT ENG Word	<i>ta^H qa⁰ sqwe^{MH} na^{MH} sqwi^{ML} qi^{ML} ndywiq^{ML} nte^{HL+0} jq^{LM}</i> People were saying that he was only buying fancy things.		
		<i>ta^H-qa⁰</i>	<i>ta^H-qa⁰</i>	NUM a lot
		<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ good
		<i>na^{MH}</i>	<i>na^{MH}</i>	N thing
		<i>sqwi^{ML}</i>	<i>sqwi^{ML}</i>	H.exit(S).3S he has
		<i>qi^{ML}</i>	<i>qi^{ML}</i>	NL.3 to him
		<i>ndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S said
		<i>nte^{HL+0}+⁰</i>	<i>nte^{HL+0}+⁰</i>	N people
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs that
37	CHAT ENG Word	<i>ja-la^{+H} ndi^{M0} riq^M nte^{HL+0} chaq^{MH} no^{ML} kwq^{M0} niyq na^{MH} jwi^{MH} qi^{ML}</i> <i>xtyq^{ML} chaq^{MH}</i> People didn't know about his good luck.		
		<i>ja-la^{+H}</i>	<i>ja-la^{+H}</i>	NEG-EMPH no
		<i>ndi^{M0}-riq^M</i>	<i>ndi^{M0}-riq^M</i>	PRG.feel.3S-N know
		<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N people
		<i>chaq^{MH}-</i>	<i>chaq^{MH}-</i>	
		<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL because
		<i>kwq^{M0}-</i>	<i>kwq^{M0}-</i>	
		<i>niyq^{ML}</i>	<i>niyq^{ML}</i>	ADV-H.appears.3S it's
		<i>na^{MH}</i>	<i>na^{MH}</i>	N thing
		<i>jwi^{MH}</i>	<i>jwi^{MH}</i>	C.obtain.3S got/obtained
		<i>qi^{ML}</i>	<i>qi^{ML}</i>	NL.3 to him
		<i>xtyq^{ML}-</i>	<i>xtyq^{ML}-</i>	
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	P.put.1PLIN-COMP suppose
38	CHAT ENG Word	<i>kna^H jq^{LM} qwq^H-niyq⁰ na⁰ kna⁰ jq^{LM}</i> That snake... "and what is the snake's name?"		
		<i>kna^H</i>	<i>kna^H</i>	N snake
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs that
		<i>qwq^H-niyq⁰</i>	<i>niyq^{ML+H}</i>	Q-H.appears.3S how?
		<i>na⁰</i>	<i>na^{H+0}</i>	C.look for.3S called
		<i>kna⁰</i>	<i>kna^H</i>	N snake
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs that
39	CHAT ENG Word	<i>jna^H ji^{HL+0}-ke⁰. jna^H ji^{HL+0}-ke⁰] ja-ne^{+H} jna^H ji^{HL+0}-ke⁰. qo^H tlyu^M rq^{MH}</i> <i>jq^{M0}] tlyu^M jna^H jq^{LM}</i> "Is it a big snake? Yes, it is a big snake"		
		<i>jna^H</i>	<i>jna^H</i>	N snake

<i>ji^{HL+0}-ke⁰</i>	<i>ji^{HL+0}-ke⁰</i>	N	
<i>jna^H</i>	<i>jna^H</i>	N	snake
<i>ji^{HL+0}-ke⁰</i>	<i>ji^{HL+0}-ke⁰</i>	EXCL	
<i>ja-ne^{+H}</i>	<i>ja-ne^{+H}</i>	ADV	like that
<i>jna^H</i>	<i>jna^H</i>	N	snake
<i>ji^{HL+0}-ke⁰</i>	<i>ji^{HL+0}-ke⁰</i>	N	
<i>qo^H</i>	<i>qo^H</i>	CONJ	and
<i>tlyu^M</i>	<i>tlyu^M</i>	ADJ.SG	big
<i>rq^{MH}</i>	<i>rq^{MH}</i>	PRO.A.INA.3S	that's right
<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs-DEF	and then
<i>tlyu^M</i>	<i>tlyu^M</i>	ADJ.SG	big
<i>jna^H</i>	<i>jna^H</i>	N	snake
<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs	then

- 40 CHAT
ENG
Word

qo^H ndywiq^{LM} chaq^{MH} lo-ntqa^{HL+0} wa⁰ ye^{LM}-qa^{ML} sqwi rq^{MH}-i^{M0}
You said that there's a lot in Oaxaca right?

<i>qo^H</i>	<i>qo^H</i>	CONJ	and
<i>ndywiq^{LM}</i>	<i>ndywiq^{LM}</i>	C.say.3S	you said
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that
<i>lo-ntqa^{HL+0}</i>	<i>lo-ntqa^{HL+0}</i>	N	oaxaca
<i>wa⁰</i>	<i>wa⁰</i>	ADV	there
<i>ye^{LM}-qa^{ML}</i>	<i>ye^{LM}-qa^{ML}</i>	ADV-EMPH	a lot
<i>sqwi</i>	<i>sqwi</i>	H.have.3S	there are

- 41 CHAT
ENG
Word

rq^{MH}-i^{M0} rq^{MH}-i^{M0}
jq-jqq^{MH} qwi rq^{MH} lo ntqa^{HL+0} wa⁰
Yes, there's a lot in Oaxaca.

<i>rq^{MH}-i^{M0}</i>	<i>rq^{MH}-i^{M0}</i>	PRO.A.INA.3S-INTJ	thing
<i>jq-jqq^{MH}</i>	<i>jq-jqq^{MH}</i>	EXCL	yes
<i>qwi</i>	<i>qwi</i>	H.exit.3S	there are
<i>rq^{MH}</i>	<i>rq^{MH}</i>	PRO.A.INA.3S	thing
<i>lo-ntqa^{HL+0}</i>	<i>lo-ntqa^{HL+0}</i>	N	Oaxaca
<i>wa⁰</i>	<i>wa^{MH}</i>	ADV	there

- 42 CHAT
ENG
Word

jq-jqq^{MH} sqwi lo ntqa^{HL+0}, qo^H kwiq^{ML} qwi rq^{MH} Jlya^H kwa^{MH}
Yes, there are in Oaxaca, but also in Tepenixtlahuaca.

<i>jq-jqq^{MH}</i>	<i>jq-jqq^{MH}</i>	EXCL-EXCL	yes
<i>sqwi</i>	<i>sqwi</i>	H.exit(S).3S	there are
<i>lo-ntqa^{HL+0}</i>	<i>lo-ntqa^{HL+0}</i>	N	Oaxaca
<i>qo^H</i>	<i>qo^H</i>	CONJ	and

<i>kwiq^{ML}</i>	<i>kwiq^{ML}</i>	REFL	the same ones
<i>qwi</i>	<i>qwi</i>	H.exit(S).3S	are
<i>rq^{MH}</i>	<i>rq^{MH}</i>	PRO.A.INA.3S	thing san Francisco
<i>Jlya^H</i>	<i>jlya^H</i>	N	Ixpantepec
<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	there

43	CHAT	<i>qo^H na^{MO}-ji^M na^{MH}-nkwa^M qi^H lo -ntqa^{HL+0} chaq^{MH} ndywiq^{LM} chaq^{MH} ja ntyqya^H qa⁰ kyo</i>		
	ENG	What did you say happened in Oaxaca since it doesn't rain that often now?		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ this
		<i>na^{MH}-</i>	<i>na^{MH}-</i>	
		<i>nkwa^M</i>	<i>nkwa^M</i>	Q(N)-C.COP.3S what happened?
		<i>qi^H</i>	<i>qi</i>	NL.3 to
		<i>lo -ntqa^{HL+0}</i>	<i>lo -ntqa^{HL+0}</i>	N Oaxaca
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP that
		<i>ndywiq^{LM}</i>	<i>ndywiq</i>	C.say.2S said
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP that
		<i>ja</i>	<i>ja</i>	NEG no
		<i>ntyqya^H</i>	<i>ntyqya^{LM}</i>	H.comes down.3S comes down
		<i>qa⁰</i>	<i>qa^H</i>	EMPH more
		<i>kyo</i>	<i>kyo</i>	N rain

44	CHAT	<i>qa^H no chaq^{MH} neq pi^{MO} jaq^{LM} nkwi^{MH} riq^M chaq^{MH} su^{LM} jna^H jaq^{LM}, kaq^{LM} yjwi^{LM} neq pi^{MO} jaq^{LM} qi</i>		
	ENG	Ah, it's because the conquerors knew where the snake was and they killed it.		
	Word	<i>qa^H</i>	<i>qa^H</i>	EXCL ah
		<i>no -chaq^{MH}</i>	<i>no -chaq^{MH}</i>	REL-COMP because
		<i>neq</i>	<i>neq</i>	N people
		<i>pi^{MO}</i>	<i>pi^{MO}</i>	N turkey
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs those
		<i>nkwi^{MH}-</i>	<i>nkwi^{MH}-</i>	
		<i>riq^M</i>	<i>riq^M</i>	C.realized.3S-N it gave
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP because
		<i>su^{LM}</i>	<i>su^{LM}</i>	PRG.lay on ground.3S thrown
		<i>jna^H</i>	<i>jna^H</i>	N snake
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	DEM.Abs that

		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	that
		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
		<i>neq</i>	<i>neq</i>	N	people
		<i>pi^{M0}</i>	<i>pi^{M0}</i>	N	turkey
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	that
		<i>qi</i>	<i>qi</i>	NL.3	to
44	CHAT	<i>kq̣q^{LM} yjwi^{LM} neq pi^{M0} jq̣q^{LM} qi jq̣q^{M0}</i>			
	ENG	Then the Europeans killed it			
	Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
		<i>neq</i>	<i>neq</i>	N	people
		<i>pi^{M0}</i>	<i>pi^{M0}</i>	N	turkey
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	those
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs-DEF	and then
45	CHAT	<i>qo^H na^{M0}-ji^M chaq^{MH} nkwi^{MH} riq^M neq^H pi^{M0} jq̣q^{LM} chaq^{MH} no^{ML} ji^M-ta^H</i>			
	ENG	<i>qa^H ye^{LM} ntyqya^{ML+H} kyo^{+H} ntyqo^{M0} chaq^{MH}</i>			
	Word	In those times it rained a lot but the white men found out it was because of the snake.			
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	then
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>nkwi^{MH}-</i>	<i>nkwi^{MH}-</i>		
		<i>riq^M</i>	<i>riq^M</i>	C.realized.3S-N	noticed
		<i>neq^H</i>	<i>neq</i>	N	people
		<i>pi^{M0}</i>	<i>pi^{M0}</i>	N	turkey
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	DEM.Abs	those
		<i>chaq^{MH}-</i>			
		<i>no^{ML}</i>	<i>chaq^{MH}-no</i>	COMP-REL	because
		<i>ji^M-ta^H-qa^H</i>	<i>ji^M-ta^H-qa^H</i>	EMPH	too much
		<i>ye^{LM}</i>	<i>ye^{LM}</i>	EMPH	a lot
		<i>ntyqya^{ML+H}</i>	<i>ntyqya^{ML+H}</i>	ADJ	to fall
		<i>kyo^{+H}</i>	<i>kyo^{+H}</i>	N	rain
		<i>ntyqo^{M0}</i>	<i>ntyqo^{M0}</i>	C.leave.3S(S)	took out
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N	thing
46	CHAT	<i>qo^H no⁰ nyi^{LM} qya^H tykwq^{MH} jna^{ML} neq^M yu jq̣q^{M0} kq̣q^{LM} ntq̣q^{LM} chaq^{MH}</i>			
		<i>su^{LM} qi xtyq^{M0} chaq^{MH}</i>			

ENG	With a rod and a mirror they saw that it was underneath the ground.			
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>no⁰</i>	<i>no⁰</i>	REL	who
	<i>nyi^{LM}-qya^H</i>	<i>nyi^{LM}-qya^H</i>	ADV-H.watch.3S	watch
	<i>tykwq^{MH}</i>	<i>tykwq^{MH}</i>	N	iron rod
	<i>jna^{ML}</i>	<i>jna^{ML}</i>	N	mirror
	<i>neq^M</i>	<i>neq^M</i>	N	within
	<i>yu</i>	<i>yu</i>	N	ground/earth
	<i>jaq^{MO}</i>	<i>jaq^{MO}</i>	DEM.Abs-DEF	and then
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
	<i>ntq^{LM}</i>	<i>ntq^{LM}</i>	C.see.3S	saw
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that
	<i>su^{LM}</i>	<i>su^{LM}</i>	PRG.lay on ground.3S	thrown
	<i>qi</i>	<i>qi</i>	NL.3	to
	<i>xtyq^{MO}-</i>	<i>xtyq^{MO}-</i>		
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	P.put.1PLIN-COMP	let's say

47	CHAT	<i>kq^{LM} yjwi^{LM} qi je^{MO}</i>		
	ENG	they killed it, they killed it then.		
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs.IND then
		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S killed
		<i>qi</i>	<i>qi</i>	NL.3 to
		<i>je^{MO}</i>	<i>je^{MO}</i>	DEM.Abs.DEF then
48	CHAT	<i>qo^H qa^H no⁰ wa^M yjwi^{LM} qi kq^{LM} lo^{ML+H} kji^H qi⁰ kq^{LM} lo^{ML+H}</i>		
	ENG	When it was already dead, they peeled off it's skin.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>qa^H-no⁰</i>	<i>qa^H-no⁰</i>	ADV.REL when
		<i>wa^M</i>	<i>wa^M</i>	ADV already
		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S killed
		<i>qi</i>	<i>qi</i>	NL.3 to
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs.IND took off
		<i>lo^{ML+H}</i>	<i>lo^{ML+H}</i>	C.take out.3S took off
		<i>kji^H</i>	<i>kji</i>	N skin
		<i>qi⁰</i>	<i>qi</i>	NL.animal then
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs.IND then
		<i>lo^{ML+H}</i>	<i>lo^{ML+H}</i>	LOC.3S on

49 CHAT *kq^{LM} na^{MO}-ji^M ni^{LM}-qya^H req^{ML} ntyqo^{MO} chaq^{MH}*

ENG	So, they found it there.			
Word	<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs.IND	then
	<i>na^{MO}-j̄i^M</i>	<i>na^{MO}-j̄i^M</i>	INTJ	that
	<i>ni^{LM}-qya^H</i>	<i>ni^{LM}-qya^H</i>	ADV-H.watch.3S	watch
	<i>req^{ML}</i>	<i>req^{ML}</i>	PRO.A.IND.H	them
	<i>ntyqo^{MO}-</i>	<i>ntyqo^{MO}-</i>	H.come out.3S(S)-	
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that's how

50 CHAT *qo^H ne^M-i^{MO} ja-la^{+H} qa^{ML} ntyqya^{ML} ye^{LM} qa^{ML} kyo chaq^{MH} no^{ML} neq
pi^{MO} jq̄q^{LM} wi^{MH}-riq^M chaq^{MH} no^{ML} kwq^{MO}-niyq^{ML} qne no sqwe^{MH} qa^{ML}
su^{LM} ntyqo^{MO} chaq^{MH}*

ENG It doesn't rain that much because they found and killed it (the snake).
Word

<i>qo^H</i>	<i>qo^H</i>	CONJ	and
<i>ne^M-i^{MO}</i>	<i>ne^M-i^{MO}</i>	ADV-INTJ	now
<i>ja-la^{+H}-</i>	<i>ja-la^{+H}-</i>		
<i>qa^{ML}</i>	<i>qa^{ML}</i>	NEG-EMPH-EMPH	no longer
<i>ntyqya^{ML}</i>	<i>ntyqya^{ML}</i>	H.fall.3S	falls
<i>ye^{LM}-qa^{ML}</i>	<i>ye^{LM}-qa^{ML}</i>	ADV-EMPH	a lot
<i>kyo^{ML}</i>	<i>kyo^{ML}</i>	N	rain
<i>chaq^{MH}-</i>	<i>chaq^{MH}-</i>		
<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL	because
<i>neq</i>	<i>neq</i>	N	people
<i>pi^{MO}</i>	<i>pi^{MO}</i>	N	turkey
<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	DEM.Abs	them absent
<i>wi^{MH}-riq^M</i>	<i>wi^{MH}-riq^M</i>	C.realized.3S-N	found out
<i>chaq^{MH}-</i>	<i>chaq^{MH}-</i>		
<i>no^{ML}</i>	<i>no^{ML}</i>	COMP-REL	that
<i>kwq^{MO}-</i>	<i>kwq^{MO}-</i>		
<i>niyq^{ML}</i>	<i>niyq^{ML}</i>	EXCL-H.appears.3S	that way
<i>qne</i>	<i>qne</i>	N	animal
<i>no</i>	<i>no</i>	REL	who
<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	a lot
<i>su^{LM}</i>	<i>su^{LM}</i>	C.lay on ground.3S	thrown down
<i>ntyqo^{MO}-</i>	<i>ntyqo^{MO}-</i>	H.come out.3S(S)-	
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that's how

51 CHAT *kq̄q^{LM} chaq^{MH} yjwi^{LM} qi jq̄q^{LM}*
ENG That is why they killed it.
Word *kq̄q^{LM}* *kq̄q^{LM}* DEM.Abs.IND then
chaq^{MH} *chaq^{MH}* COMP because

		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs	that
52	CHAT ENG Word	<i>qne sqwe^{MH} qa^{ML}, qne jno qa^H nka^{ML} kq^{LM} ndywiq ntyqo^{M0}-chaq^{MH}</i> It was a good animal, but they didn't see it that way.			
		<i>qne</i>	<i>qne</i>	N	animal
		<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
		<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	no
		<i>qne</i>	<i>qne</i>	C.do.3S	did
		<i>jno</i>	<i>jno</i>	ADJ.PL	big
		<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	C.COP.3S	was
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	and then
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>	H.come out.3S(S)-	
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that's how
53	CHAT ENG Word	<i>xwe ta-su^{H+0} ndywiq^{ML} ntyqo^{M0}-chaq^{MH} jno la^H ti^{ML} jq^{LM}</i> <i>The case is small in comparison to the snake.</i>			
		<i>xwe</i>	<i>xwe</i>	ADJ	small
		<i>ta-su^{H+0}</i>	<i>ta-su^{H+0}</i>	N	case
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>	H.come out.3S(S)-	
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that's how
		<i>jno</i>	<i>jno</i>	ADJ.PL	big
		<i>la^H-ti^{ML}</i>	<i>la^H-ti^{ML}</i>	EMPH.ADV	more
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	DEM.Abs	that
54	CHAT ENG Word	<i>xwe ka-su^{H+0} ndywiq^{ML} jno la^H ti^{ML} qne^{ML} nka^{ML}</i> They say that the snake was bigger than the case (pot).			
		<i>xwe</i>	<i>xwe</i>	ADJ	small
		<i>ka-su^{H+0}</i>	<i>ka-su^{H+0}</i>	N	case
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>jno</i>	<i>jno</i>	ADJ.PL	big
		<i>la^H-ti^{ML}</i>	<i>la^H-ti^{ML}</i>	EMPH.ADV	more
		<i>qne^{ML}</i>	<i>qne</i>	N	animal
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	C.COP.3S	was
55	CHAT	<i>Marcos ja^{ML} tno la^H ti^{ML}.jno qa^H ndywiq^{ML}</i>			

ENG	Marcos "Ah, it's bigger." "Yes, it is bigger."			
Word	<i>ja^{ML}</i>	<i>ja^{ML}</i>	EXCL	ah
	<i>tno</i>	<i>tno</i>	ADJ.PL	big
	<i>la^H-ti^{ML}</i>	<i>la^H-ti^{ML}</i>	EMPH.ADV	more
	<i>jno</i>	<i>jno</i>	ADJ.PL	big
	<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
	<i>ndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S	said
56	CHAT	<i>jno qa^H qne nka^{ML} ndywiq^{+H} ntyqya^{ML} qa^H nIyq^{ML} qi^{+H} ndywiq</i>		
ENG	They say it was very big and pretty.			
Word	<i>jno</i>	<i>jno</i>	ADJ.PL	big
	<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
	<i>qne</i>	<i>qne</i>	N	animal
	<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	is
	<i>ndywiq^{+H}</i>	<i>ndywiq^{+H}</i>	C.say.3S	say
	<i>ntyqya^{ML}</i>	<i>ntyqya^{ML}</i>	ADJ	pretty
	<i>qa^H</i>	<i>qa^H</i>	EMPH	a lot
	<i>niyq^{ML}</i>	<i>niyq^{ML}</i>	H.appears.3S	appears
	<i>qi^{+H}</i>	<i>qi^{+H}</i>	NL.animal	that
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
57	CHAT	<i>qne sqwe^{MH} qa^{ML} nka^{ML+H} qi^{+H} ndywiq, ja-la^{+H} nka^{ML+H} ta jna^H no</i>		
ENG	<i>ti^{MH}-xwe xtyq^{M0} chaq^{MH}</i> They say it was a miraculous animal; let's say it was not a small snake.			
Word	<i>qne</i>	<i>qne</i>	N	animal
	<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
	<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	a lot
	<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
	<i>qi^{+H}</i>	<i>qi</i>	NL.animal	that
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	they say
	<i>ja-la^{+H}</i>	<i>ja-la^{+H}</i>	NEG-EMPH	no
	<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
	<i>ta</i>	<i>ta</i>	CONJ	or
	<i>jna^H</i>	<i>jna^H</i>	N	snake
	<i>no</i>	<i>no</i>	REL	that
	<i>ti^{MH}-xwe</i>	<i>ti^{MH}-xwe</i>	ADV-ADJ	still small
	<i>xtyq^{M0}-</i>	<i>xtyq^{M0}-</i>		
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	P.put.1PLIN-COMP	that's how it is

KWE^M-NTU^H QI⁰ KCHA^{LM} QO^H KOQ^{MH} ‘THE SUN AND THE MOON STORY’

- 1 CHAT *ska kwe^Mtu^H qi⁰ no, no nka^{ML} koq^{MH}, qo^H na^{MO}-ji^M qo^H kcha^{LM}*
 ENG A story about the sun and the moon.
- | | sandhi | without sandhi | Grammatical category | Gloss |
|------|---------------------------------------|---------------------------------------|-----------------------------|--------------|
| Word | <i>ska</i> | <i>ska</i> | NUM | one |
| | <i>kwe^M-tu^H</i> | <i>kwe^M-tu^H</i> | N | story |
| | <i>qi⁰</i> | <i>qi</i> | NL.3 | of |
| | <i>no</i> | <i>no</i> | REL | who |
| | <i>no</i> | <i>no</i> | REL | who |
| | <i>nka^{ML}</i> | <i>nka^{ML}</i> | H.COP.3S | is |
| | <i>koq^{MH}</i> | <i>koq^{MH}</i> | N | moon |
| | <i>qo^H</i> | <i>qo^H</i> | CONJ | and |
| | <i>na^{MO}-ji^M</i> | <i>na^{MO}-ji^M</i> | INTJ | this |
| | <i>qo^H</i> | <i>qo^H</i> | CONJ | and |
| | <i>kcha^{LM}</i> | <i>kcha^{LM}</i> | N | sun |
- 2 CHAT *jaq^{MH} qo^H qwaq^H n'ya⁰ ntyqo^{MO} jaq^{LM}*
 ENG And how does the story go?
- | | | | | |
|------|--|--|---------------|-----------|
| Word | <i>jaq-jaq^{MH}</i> | <i>jaq-jaq^{MH}</i> | EXCL | yes |
| | <i>qo^H</i> | <i>qo^H</i> | CONJ | and |
| | <i>qwaq^H-n'ya⁰</i> | <i>qwaq^H-n'ya⁰</i> | Q-H.appear.3S | how |
| | <i>ntyqo^{MO}</i> | <i>ntyqo^{MO}</i> | H.exit.3S | comes out |
| | <i>jaq^{LM}</i> | <i>jaq^{LM}</i> | DEM | that |
- 2 CHAT *na^{MO}-ji^M, ra^{MO} jlo^{LM} kaq^{MO} no^{ML}, kaq^{MO} no no*
 ENG From the beginning then...
- | | | | | |
|------|---|---|-----------------|-----------|
| Word | <i>na^{MO}-ji^M</i> | <i>na^{MO}-ji^M</i> | INTJ | uhm |
| | <i>ra^{MO}</i> | <i>ra^{MO}</i> | N | when |
| | <i>jlo^{LM}</i> | <i>jlo^{LM}</i> | ADV | beginning |
| | <i>kaq^{MO}-no^{ML}</i> | <i>kaq^{MO}-no^{ML}</i> | ADV.Abs-REL | then |
| | <i>kaq^{MO}-no-no</i> | <i>kaq^{MO}-no no</i> | ADV.Abs-REL-REL | then |
- 3 CHAT *ska neq-jla jaq^{LM} kaq^{LM} no na^{MO}-ji^M, ntqq^{+H} kta^{MH} tu^{MH}-sqq^{ML} ji^{MO}*
 ENG she was an old woman and when...
- | | | | | |
|------|-------------------------|-------------------------|---------|-----------|
| Word | <i>ska-</i> | <i>ska-</i> | NUM | an |
| | <i>neq-jla</i> | <i>neq-jla</i> | N-ADJ | old woman |
| | <i>jaq^{LM}</i> | <i>jaq^{LM}</i> | DEM.Abs | that one |

		<i>kq̣q^{LM}-no</i>	<i>kq̣q^{LM}-no</i>	ADV.Abs-REL	that
		<i>na^{MO}-j̣i^M</i>	<i>na^{MO}-j̣i^M</i>	INTJ	then
		<i>ntq̣q^{+H}</i>	<i>ntq̣q^{+H}</i>	PRG.go.3S	went
		<i>kṭa^{MH}</i>	<i>kṭa^{MH}</i>	??	fishing
		<i>tu^{MH}-sq̣q^{ML}</i>	<i>tu^{MH}-sq̣q^{ML}</i>	N-ADJ	pool of water
		<i>j̣i^{MO}</i>	<i>j̣i^{MO}</i>	INTJ	then
4	CHAT	<i>ska neq-jla nka^{ML} qo^H, qo^H kq̣q^{LM} no^{H+0} wa^M</i>			
	ENG	She was an old woman and then she...			
	Word	<i>ska-</i>	<i>ska</i>	NUM	an
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	is
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kq̣q^{LM}-no^{HO}</i>	<i>kq̣q^{LM}-no</i>	ADV.Abs-REL	then
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
5	CHAT	<i>kq̣q^{LM} ndywiq xka^{+H} tq̣a^{LM} ntq̣q^{+H} qo^H j̣i^{MO}</i>			
	ENG	Then she told the other person that was with her.			
	Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	and then
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	she said
		<i>xka^{+H}</i>	<i>xka^{+H}</i>	ADV.3S	other
		<i>tq̣a^{LM}</i>	<i>tq̣a^{LM}</i>	N.3S	family/partner
		<i>ntq̣q^{+H}</i>	<i>ntq̣q^{+H}</i>	H.go around.3S.~base	went
		<i>qo^H</i>	<i>qo^H</i>	CONJ/ADV.3S	with
		<i>j̣i^{MO}</i>	<i>j̣i^{MO}</i>	INTJ	then
6	CHAT	<i>no^{MO} ndyi^H no^{+H} ta^{LM} jq̣q^{LM} qi^{LM} neq-jla kq̣q^{LM} ndywiq</i>			
	ENG	When she was done fishing she said:			
	Word	<i>no^{MO}</i>	<i>no</i>	REL	when
		<i>ndyi^H</i>	<i>ndyi^H</i>	C.finish.3S	finished
		<i>no^{+H}</i>	<i>no^{+H}</i>	C.catch.3S	grabbed
		<i>ta^{LM}</i>	<i>ta^{LM}</i>	N	shrimp
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	ADV.Abs	that
		<i>qi^{LM}</i>	<i>qi</i>	NL.3	of
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	DEM.Abs	that
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	would say
7	CHAT	<i>ta^H qa^H yaq^{MH} tqi na^{+H} tqwn^{MO}-q⁰ ja sqwe^{MH} qa^{ML} nka^{ML} qnya^{+H} ndywiq</i>			

	<i>ji^{MO}</i>			
ENG	"I have a bad toothache and don't feel good," said the woman.			
Word	<i>ta^H-qa^H-yaq^{MH}</i>	<i>ta^H-qa^H-yaq^M</i>	ADV-EMPH-N??	a lot
	<i>tqi</i>	<i>tqi</i>	H.hurt.3S	hurts
	<i>na^{+H}</i>	<i>na^{+H}</i>	PRG.sore.3S	prick
	<i>tqwaq^{MO}</i>	<i>tqwaq^{MO}</i>	N.3S	my mouth
	<i>ja</i>	<i>ja</i>	NEG	no
	<i>sqwe^{MH}</i>	<i>sqwe^{MH}</i>	ADJ	good
	<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	a lot
	<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	is
	<i>qnya^{+H}</i>	<i>qnya^{+H}</i>	PRO.A.1S	to me
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	she said
	<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then

- 8 CHAT *chaq^H no^H ja xi^{MH}-yqwa^{LM}, ne^H lo^{LM} lya^{ML} qa^H sneq^{+H} chaq^{MH} sqwa^{MO} lo^{ML} tyqa^{+H} kwa^{MH} qo^H tyji na^{+H} tyqwa^{+H}, ndywiq xka^{+H} no-qq^H jaq^{LM} qo^H ji^{MO}*
 "Why don't you put your tooth in the water, then spit on it, that's how the

ENG	pain will go away," said her partner.			
Word	<i>chaq^H-no^H</i>	<i>chaq^H-no</i>	Q-REL	how come?
	<i>ja</i>	<i>ja</i>	NEG	no
	<i>xi^{MH}-yqwa^{LM}</i>	<i>xi^{MH}-yqwa^{LM}</i>	CAUS-C.drawn.3S	sink
	<i>neq^H</i>	<i>neq^H</i>	INTJ	that
	<i>lo^{LM}-lya^{ML}</i>	<i>lo^{LM}-lya^{ML}</i>	P.take out.	take it out
	<i>qa^H-sneq^{+H}</i>	<i>qa-sneq</i>	N-N.3S	your saliva
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	so that
	<i>sqwa^{MO}</i>	<i>sqwa^{MO}</i>	P.put.2S	you will put
	<i>lo^{ML}</i>	<i>lo</i>	Loc.3S	upon
	<i>tyqa^{+H}</i>	<i>tyqa</i>	N	water
	<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	there
	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>tyji-</i>	<i>tyji</i>	P.finish.3S	will finish
	<i>na^{+H}</i>	<i>na^{+H}</i>	P.throb.3S	pricks
	<i>tqwa^{+H}</i>	<i>tqwa</i>	N.3S	your mouth
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>xka^{+H}</i>	<i>xka^{+H}</i>	ADV.3S	another
	<i>no-qq^H</i>	<i>no-qq^H</i>	REL-N	woman
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>qo^H</i>	<i>qo^H</i>	CONJ/ADV.3S	with
	<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then

- 9 CHAT *qo^H kq^{LM} ndyi^H-sna^M na^{MO}-ji^M, chi^{MH}-nyi^{MH} r^{MH} qi^{ML} nte^{HL+0} ji^{MO} ndywiq^{ML}*
ENG And they said that the other person was right.
Word *qo^H* *qo^H* CONJ and
kq^{LM} *kq^{LM}* DEM.Abs then
ndyi^H-sna^M *ndyi^H-sna^M* C.begin.3S began
na^{MO}-ji^M *na^{MO}-ji^M* INTJ uhm
chi^{MH}-nyi^{MH}- *chi^{MH}-nyi^{MH}-*
r^{MH} *r^{MH}* EXCL TRUE
qi^{ML} *qi^{ML}* NL.3 to
nte^{HL+0} *nte^{HL+0}* N person
ji^{MO} *ji^{MO}* INTJ then
ndywiq^{ML} *ndywiq* C.say.3S they say
- 10 CHAT *ra^H lo⁰ neq^{+H} jla j^{LM} tyqa sneq xqwa^H lo^{ML} lo tyqa^{+H} j^{LM} j^{LM} j^{LM} ndywiq*
ENG At that moment the old woman spit in the water.
Word *ra^H* *ra^H* ADV immediately
lo⁰ *lo* C.take out.3S she took out
neq^{+H}-jla^{ML} *neq^{+H}-jla^{ML}* N-ADJ old woman
j^{LM} *j^{LM}* ADV.Abs that
tyqa-sneq- *tyqa-sneq* N.3S her saliva
xqwa^H *xqwa^H* C.drown.3S sunk
lo^{ML} *lo^{ML}* Loc.3S upon
lo *lo* Loc.3S upon
tyqa^{+H} *tyqa^{+H}* N water
j^{LM}-j^{LM} *j^{LM}-j^{LM}* ADV.Abs-DEM-Abs then
ndywiq *ndywiq* C.say.3S they say that
- 11 CHAT *qo^H, snyiq neq-kwla j^{LM} nka^{ML} no^H xqwa^H lo tyqa^{+H} j^{LM} j^{LM} j^{LM}*
ENG People say that the old woman was throwing away her kids.
Word *qo^H* *qo^H* CONJ and
snyiq- *snyiq-* N.3S son/daughter
neq-kwla- *neq-kwla-* N-ADJ old woman
j^{LM} *j^{LM}* ADV.Abs that
nka^{ML}-no^H *nka^{ML}-no* H.COP.3S-REL was who
xqwa^H *xqwa^H* C.drown.3S drowned
lo *lo* Loc.3S upon
tyqa^{+H} *tyqa* N water
j^{LM}-j^{LM} *j^{LM}-j^{LM}* ADV.Abs-DEM-Abs then
ndywiq^{ML} *ndywiq* C.say.3S they say

- 12 CHAT *qo^H no^{ML} wa^M, qo^H nte^{HL+0} ntqq^{+H} kta^{MH} jaq^{LM}*
 ENG There were people fishing around there.
 Word *qo^H* *qo^H* CONJ and
no^{ML} *no* ADV when
wa^M *wa^M* ADV already
qo^H *qo^H* CONJ and
nte^{HL+0} *nte^{HL+0}* N people
ntqq^{+H} *ntqq^{+H}* C.goaround.3S.~base were around
kta^{MH} *kta^{MH}* C.fish.3S fishing
jaq^{LM} *jaq^{LM}* ADV.Abs there
- 13 CHAT *chaq^{MH} tlyu^M ska^H tu^{MH}-sqq^{ML} nka^{ML} rq^{MH} ji^{M0} kqq^{LM}*
 ENG The pond where people would fish was very big.
 Word *chaq^{MH}* *chaq^{MH}* COMP because
tlyu^M *tlyu^M* ADJ big
ska^H *ska* NUM a
tu^{MH}-sqq^{ML} *tu^{MH}-sqq^{ML}* N pool of water
nka^{ML}-rq^{MH} *nka^{ML}-rq^{MH}* H.COP.3S- was
ji^{M0} *ji^{M0}* INTJ then
kqq^{LM} *kqq^{LM}* DEM.Abs then
- 14 CHAT *no ntqq^{+H} kta^{MH} la qya la^H*
 ENG People were fishing on the lower side.
 Word *no* *no* REL who
 PRG.go
ntqq^{+H} *ntqq^{+H}* around.3S.~base went
kta^{MH} *kta^{MH}* ADJ fishing
la *la* EMPH more
qya- *qya* ADV down
la^H *la^H* EMPH more
- 15 CHAT *ha sta kqq^{LM} nu ntqo^{HL+0} no-xwe^{+H} jaq^{LM} chaq^{MH} nu^{ML}, wa^{MH} nka^H nte⁰*
 ENG People say that the kids became human.
 Word *ha-sta-* *ha-sta-* ADV until
kqq^{LM} *kqq^{LM}* DEM.Abs then
no *no* ADV when
ntqo^{HL+0} *ntqo^{HL+0}* C.exit.3S got out

		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys/girls
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	those
		<i>chaq^{MH-no^{ML}}</i>	<i>chaq^{MH-no^{ML}}</i>	COMP-REL	because
		<i>wa^{MH}</i>	<i>wa^{MH}</i>	ADV	already
		<i>nka^H</i>	<i>nka^H</i>	PRG.COP.3S	were
		<i>nte⁰</i>	<i>nte^{HL+0}</i>	N	people
		<i>jaq^{M0}</i>	<i>jaq^{LM}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
16	CHAT	<i>kq^{LM} qya^{MH} na^M req^H no-xwe^{+H} jaq^{LM}, qya^M na^M req^H jaq^{M0} ndywiq^{ML}</i>			
	ENG	Then those kids were kidnapped, people say.			
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
		<i>qya^{MH-na^M}</i>	<i>qya^{MH-na^M}</i>	C.carry.3S-ADJ	robbed
		<i>req^H</i>	<i>req^H</i>	PRO.A.INDEF.H	those
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys/girls
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	those
		<i>qya^{M-na^M}</i>	<i>qya^{M-na^M}</i>	DEM.Abs	robbed
		<i>req^H</i>	<i>req^H</i>	PRO.A.INDEF.H	those
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
17	CHAT	<i>tkwa^{ML} nka^{ML} no^H-kyqyu^H jaq^{M0} ndywiq^{ML}</i>			
	ENG	They say that it was two kids.			
	Word	<i>tkwa^{ML}</i>	<i>tkwa^{ML}</i>	NUM	two
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	were
		<i>no^H-kyqyu^H</i>	<i>no^H-kyqyu^H</i>	REL.N	men
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
18	CHAT	<i>qo^H tyqa sneq ti neq-jla jaq^{LM} xo^M-yqwa^H jaq^{M0} xkeq^{M0} qi^{ML} ndywiq^{ML}</i>			
	ENG	They say that the old woman thought she was only spitting her saliva in the water.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>tyqa-sneq-</i>	<i>tyqa-sneq-</i>	N	saliva
		<i>ti</i>	<i>ti</i>	ADV	only
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>xo^M-yqwa^H</i>	<i>xo^M-yqwa^H</i>	C.drown.3S	drowned
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
		<i>xkeq^{M0}</i>	<i>xkeq^{M0}</i>	H.imagine.3S	imagined

		<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
19	CHAT	<i>qo^H ji^{LM} chaq^{MH} na^{+H} tqwa tu^{MH} xkaq ti riq^M qu^{HL+0} snyiq⁰ jaq^{M0}</i>			
	ENG	The pain went away, but she was left with a whole in her mouth; that's where she had her kids.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>ji^{LM}</i>	<i>ji^{LM}</i>	C.stop.3S	finished
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	that
		<i>na^{+H}</i>	<i>na^{+H}</i>	H.throb.3S	pricked
		<i>tqwa</i>	<i>tqwa</i>	N.3S	her mouth
		<i>tu^{MH}-xkaq</i>	<i>tu^{MH}-xkaq</i>	N-ADJ	hole
		<i>ti</i>	<i>ti</i>	ADV	only
		<i>riq^M</i>	<i>riq^M</i>	N	her kids
		<i>ntqu^{HL+0}</i>	<i>ntqu^{HL+0}</i>	P.grow/raise.3S	grow, raise
		<i>snyiq⁰</i>	<i>snyiq</i>	N.3S	son/daughter
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
20	CHAT	<i>qo^H kaq^{LM}, ja^H-nu⁰ wa^{MH}, qya^{MH} nte^{HL+0} jaq^{LM} qi no-xwe^{+H} jaq^{M0}-i^{M0}, kaq^{LM} qne^{LM} kqu^M jaq^{M0} ndywiq^{ML}</i>			
	ENG	People said that the people that took the children also took care of them.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	then
		<i>ja^H-no⁰</i>	<i>ja^H-no</i>	ADV-REL	when
		<i>wa^{MH}</i>	<i>wa^{MH}</i>	ADV	already
		<i>qya^{MH}</i>	<i>qya^{MH}</i>	C.carry.3S	took
		<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	those
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
		<i>jaq^{M0}-i^{M0}</i>	<i>jaq^{M0}-i^{M0}</i>	ADV.Abs-REL	then
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	that
		<i>qne^{LM}</i>	<i>qne^{LM}</i>	C.do.3S	they did
		<i>kqu^M</i>	<i>kqu^M</i>	C.raise.3S	raise
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
21	CHAT	<i>qo^H noo^{M0} ntyqya^{ML} n'ya^H ndwa^{HL+0} ska⁰ yka ntswe^{HL+0} tqwa⁰ qa qi nte^{HL+0} ji⁰ ndywiq^{ML}</i>			
	ENG	They say that in front of those people's house there was a beautiful			

	orange tree.			
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>noo^{MO}</i>	<i>noo^{MO}</i>	EMPH	very
	<i>ntyqya^{ML}</i>	<i>ntyqya^{ML}</i>	ADJ	pretty
	<i>n'yq^H</i>	<i>n'yq^H</i>	H.appear.3S	it looked
	<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit.3S	is seated
	<i>ska⁰</i>	<i>ska⁰</i>	NUM	a
	<i>yka</i>	<i>yka</i>	N	
	<i>ntswε^{HL+0}</i>	<i>ntswε^{HL+0}</i>	N	orange
	<i>tqwa⁰</i>	<i>tqwa⁰</i>	N.3S	mouth
	<i>qqa</i>	<i>qqa</i>	N	house
	<i>qi-</i>	<i>qi-</i>	NL.3	of
	<i>ntε^{HL+0}</i>	<i>ntε^{HL+0}</i>	N	people
	<i>ji⁰</i>	<i>ji⁰</i>	ADV	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say

22	CHAT	<i>kqa^{LM} ntyqqa neq-jla jaq^{LM} ntyqqa nyi qya^{MO} jaq^{MO} ndywiq^{ML}</i>		
	ENG	They say that the old woman used to go see them there.		
	Word	<i>kqa^{LM}</i>	<i>kqa^{LM}</i>	DEM.Abs there
		<i>ntyqqa</i>	<i>ntyqqa</i>	H.goaround.3S.~base would go
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ old woman
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs that
		<i>ntyqqa</i>	<i>ntyqqa</i>	H.goaround.3S.~base would go
		<i>nyi-qya^{MO}</i>	<i>nyi-qya^{MO}</i>	H.see.3S to see
		<i>jaq^{MO}</i>	<i>jaq^{MO}</i>	DEM.Abs then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S they would say

23	CHAT	<i>qo^H jnyaq^H kqa^{LM} nka^{ML} ntε^{HL+0} qi⁰ neq^H-jla jaq^{LM} kqa^{MO} ndywiq^{ML}</i>		
	ENG	They would say that the old woman's husband was a deer.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N deer
		<i>kqa^{LM}</i>	<i>kqa^{LM}</i>	DEM.Abs that
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S was
		<i>ntε^{HL+0}</i>	<i>ntε^{HL+0}</i>	N husband
		<i>qi⁰</i>	<i>qi</i>	NL.3 of
		<i>neq^H-jla</i>	<i>neq^H-jla</i>	N-ADJ old woman
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs that
		<i>kqa^{MO}</i>	<i>kqa^{MO}</i>	ADV.Abs then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S they would say

24	CHAT	<i>qo^H kq^{LM} no⁰ wa^M jq^{LM} jq^{M0} ndywiq^{ML}</i>		
	ENG	One day they said that...		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ a
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs then
		<i>no⁰</i>	<i>no⁰</i>	REL when
		<i>wa^M</i>	<i>wa^M</i>	ADV already
		<i>jq^{LM}-jq^{M0}</i>	<i>jq^{LM}-jq^{M0}</i>	ADV.Abs-DEM-Abs then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S they said
25	CHAT	<i>kq^{LM} ntykwiq ntē^{HL+0} jq^{M0} qo^H jq^{M0} ntywiq^{ML}, na^{M0}-jī</i>		
	ENG	Then those people told the old woman:		
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs that
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S they told her
		<i>ntē^{HL+0}</i>	<i>ntē^{HL+0}</i>	N people
		<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs then
		<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs then
		<i>ntywiq^{ML},</i>	<i>ntywiq</i>	C.say.3S said
		<i>na^{M0}-jī^M</i>	<i>na^{M0}-jī^M</i>	INTJ then
26	CHAT	<i>jno qa^H chaq^{MH} qī^{LM} neq-jla chaq^H chi^H-yqwa^{LM} snyiq^{LM} ntykwiq jq^{M0}</i>		
	ENG	They told her, "what you did was a crime. Why did you want to drown your kids?"		
	Word	<i>jno</i>	<i>jno</i>	ADJ big
		<i>qa^H</i>	<i>qa^H</i>	EMPH very
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N thing
		<i>qī^{LM}</i>	<i>qī</i>	NL.2S you
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ old woman
		<i>chaq^H</i>	<i>chaq^H</i>	?? because
		<i>chi^H-yqwa^{LM}</i>	<i>chi^H-yqwa^{LM}</i>	CAUS-C.drown.2S drowned
		<i>snyiq^{LM}</i>	<i>snyiq</i>	N.3S your kids
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S would say
		<i>jq^{M0}</i>	<i>jq^{M0}</i>	DEM.Abs then
27	CHAT	<i>wa^{LM} re^M qya^{MH} wa^{LM} snyiq^{LM} wa^M jno^H no-xwe^{+H} qī^{LM} ne^M neq^M nka^H</i>		
	ENG	"We brought your kids and now they are big and enjoy themselves in the cornfield." They told her.		
	Word	<i>wa^{LM}-re^M</i>	<i>wa^{LM}-re^M</i>	PRO.A.PLEX-DEM1 us here
		<i>qya^{MH}</i>	<i>qya^{MH}</i>	C.take.3S took

<i>wa</i> ^{LM}	<i>wa</i> ^{LM}	PRO.A.PLEX	us
<i>snyiq</i> ^{LM}	<i>snyiq</i> ^{LM}	N.2S	your children
<i>wa</i> ^M	<i>wa</i> ^M	ADV	already
<i>jno</i> ^H	<i>jno</i> ^H	ADJ	big
<i>no-xwe</i> ^{+H}	<i>no-xwe</i> ^{+H}	N-ADJ	boys
<i>qi</i> ^{LM}	<i>qi</i>	NL.2S	yours
<i>ne</i> ^M	<i>ne</i> ^M	ADV	now
<i>neq</i> ^M	<i>neq</i> ^M	N	within
<i>nka</i> ^H	<i>nka</i> ^H	N	leave
<i>jlaq</i> ^{LM}	<i>jlaq</i> ^{LM}	N	cornfield
<i>ntyqq</i>	<i>ntyqq</i>	H.goaround.3S.~base	they go
<i>wa</i> ^M	<i>wa</i> ^M	PRO.A.PLEX	them
<i>ne</i> ^M	<i>ne</i> ^M	ADV	now
<i>ntykwiq</i> ^H	<i>ntykwiq</i>	C.say.3S	they said
<i>jaq</i> ^{M0}	<i>jaq</i> ^{M0}	DEM.Abs	then
<i>ntykwiq</i> ^{ML}	<i>ntykwiq</i>	C.say.3S	they told

- 28 CHAT *qo*^H *ntyqya*^{HL+0} *ntyqwi*^{+H} *nlya*^{HL+0} *lo*⁰ *yka* *ndzwe*^{HL+0} *jaq*^{LM}
ENG The twins looked really beautiful playing around the orange tree.
Word *qo*^H *qo*^H CONJ and
ntyqya^{HL+0} *ntyqya*^{HL+0} ADJ pretty
ntyqwi^{+H} *ntyqwi* H.exist.3S they were
nlya^{HL+0} *nlya*^{HL+0} H.peel.3S peel
*lo*⁰ *lo* NL.3 on top
yka *yka* N tree
ndzwe^{HL+0} *ndzwe*^{HL+0} N orange
jaq^{LM} *jaq*^{LM} ADV.Abs then
- 29 CHAT *lo* *yka* *ndzwe*^{HL+00} *lo* *yka* *ndwa*^{HL+0} *tqwa*⁰ *qq* *qi* *nte*^{HL+0} *jaq*^{LM} *ji*^{M0}
ENG On that orange tree that was at those people's house.
Word *lo* *lo* LOC.3S on top
yka *yka* N tree
ntswē^{HL+0} *ntswē*^{HL+0} N orange
lo *lo* LOC.3S on top
yka *yka* N tree
ndwa^{HL+0} *ndwa*^{HL+0} PRG.sit_above_flor.3S seated
*tqwa*⁰ *tqwa* N.3S it's mouth
qq *qq* N house
qi *qi* NL.3 of
nte^{HL+0} *nte*^{HL+0} N people

		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ji^{M0}</i>	<i>ji^{M0}</i>	INTJ	then
30	CHAT	<i>qo^H kaq^{LM} ti ntyqwi no-xwe^{+H} jaq^{M0} qa^{H+0} no⁰ ki^{M0} ti^{ML} riq^M no-xwe^{+H}</i>			
		<i>chaq^{MH} t'ya^{ML} neq^{+H} -jla t'ya^{ML} qi^{ML} ji^{M0}</i>			
	ENG	Ah, the children would play around the orange tree when they noticed that the old woman came to look for them...			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	that
		<i>ti-</i>	<i>ti-</i>	ADV	still
		<i>ntyqwi-</i>	<i>ntyqwi-</i>	COMP.exist.3S	were
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	those
		<i>qa^{H0} -no⁰</i>	<i>qa^{H0} -no⁰</i>	ADV.REL	when
		<i>ki^{M0} -ti^{ML}</i>	<i>ki^{M0} -ti^{ML}</i>	P.realize.ADV.3S	they noticed
		<i>riq^M</i>	<i>riq^M</i>	N.3S	them
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
		<i>t'ya^{ML}</i>	<i>t'ya^{ML}</i>	P.arrive.3S.base	would arrive
		<i>neq^{+H} -jla-</i>	<i>neq^{+H} -jla-</i>	N-ADJ	old woman
		<i>t'ya^{ML}</i>	<i>t'ya^{ML}</i>	P.arrive.3S.base	would arrive
		<i>qi^{ML} -ji^{M0}</i>	<i>qi^{ML} -ji^{M0}</i>	NL.3-ADV.Abs	then
31	CHAT	<i>wa^M ykq^{H+0} sqq⁰ nkya^{ML} nd'ya neq^M nka^H jlaq^{LM} ntqε qi nte^{HL+00} jaq^{LM},</i>			
		<i>kaq^{LM} ti^{ML} ntyqwi^H tsi^{MH} jaq^{M0} ndywiq^{ML}</i>			
	ENG	People said that they would pick the work and hide inside.			
	Word	<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>ykq^{H0} -sqq⁰</i>	<i>ykq^{H0} -sqq⁰</i>	C.close.3S-ADV	they closed
		<i>nkya^{ML}</i>	<i>nkya^{ML}</i>	C.close.3S.~base	would go
		<i>nd'ya</i>	<i>nd'ya</i>	ADV	all
		<i>neq^M</i>	<i>neq^M</i>	N	inside
		<i>nka^H -jlaq^{LM}</i>	<i>nka^H -jlaq^{LM}</i>	N-ADJ	cornfield
		<i>ntqε</i>	<i>ntqε</i>	P.exist_on the ground.3S	thrown
		<i>qi</i>	<i>qi</i>	NL.3	of
		<i>nte^{HL+0}</i>	<i>nte^{HL+0}</i>	N	people
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	then
		<i>ti^{ML}</i>	<i>ti^{ML}</i>	ADV	still
		<i>ntyqwi-tsiq^{MH}</i>	<i>ntyqwi-tsiq^{MH}</i>	PTCP.exist.3S-ADJ	they hid

		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
32	CHAT	<i>qo^H ra^H wa⁰ jno^H jq̣q^{M0} hasta kq̣q^{M0} qne^{LM} neq-jla ka-na^{HL+0}-i⁰, nkya^{LM}</i>			
	ENG	<i>lyo^{ML} qi^{+H} ntyqo^{M0} chaq^{MH}</i> The old woman was able to take the kids once they were grown.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>ra^H</i>	<i>ra^H</i>	N	when
		<i>wa⁰</i>	<i>wa⁰</i>	ADV	already
		<i>jno^H</i>	<i>jno^H</i>	ADJ	grown
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
		<i>hasta</i>	<i>hasta</i>	ADV	until
		<i>kq̣q^{M0}</i>	<i>kq̣q^{M0}</i>	ADV.Abs	then
		<i>qne^{LM}</i>	<i>qne^{LM}</i>	C.do.3S	made
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>ka-na^{HL+0}-i⁰</i>	<i>ka-na^{HL+0}-i⁰</i>	ADV	won
		<i>nkya^{LM}</i>	<i>nkya^{LM}</i>	C.go.3S.base	went
		<i>lyo^{ML}</i>	<i>lyo^{ML}</i>	CAUS.pull out.3S	took out
		<i>qi^{+H}</i>	<i>qi^{+H}</i>	NL.3	to
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that is how
33	CHAT	<i>nkya^{LM} lyo^{ML} qi^{+H} jq̣q^{M0} ndywiq^{ML} como kyqyu^H nka^{ML} tywa^{LM} jq̣q^{M0}</i>			
	ENG	<i>ndywiq^{ML}</i> They say that the woman picked them up because they were boys.			
	Word	<i>nkya^{LM}</i>	<i>nkya^{LM}</i>	C.go.3S.base	went
		<i>lyo^{ML}</i>	<i>lyo^{ML}</i>	CAUS.pull out.3S	took out
		<i>qi^{+H}</i>	<i>qi^{+H}</i>	NL.3	to
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
		<i>como</i>	<i>como</i>	ADV	how
		<i>kyqyu^H</i>	<i>kyqyu^H</i>	N	male
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	were
		<i>tywa^{LM}</i>	<i>tywa^{LM}</i>	ADV	both of them
		<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
34	CHAT	<i>qo^H ja^H no⁰ wa^M jno^H kq̣q^{LM} nkya^{LM} qya^{MH} neq^{ML} jla^{ML} qi^{ML} jq̣q^{M0} ndywiq^{M0}</i>			
	ENG	They say that the old woman picked them up when they were older.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and

<i>ja^H-no⁰</i>	<i>ja^H-no⁰</i>	ADV.REL	when
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>jno^H</i>	<i>jno^H</i>	ADJ	big
<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	DEM.Abs	then
<i>nkyā^{LM}</i>	<i>nkyā^{LM}</i>	C.go.3S.base	went
<i>qya^{MH}</i>	<i>qya^{MH}</i>	C.carry.3S	to bring
<i>neq^{ML}-jla</i>	<i>neq^{ML}-jla</i>	N-ADJ	old woman
<i>q̣i^{ML}</i>	<i>q̣i^{ML}</i>	NL.3	to
<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
<i>ndywiq^{M0}</i>	<i>ndywiq^{M0}</i>	C.say.3S	they said

35 CHAT *kq̣q^{LM} ntykẉiq qo^H neq jla^{ML} jq̣q^{LM}-j̣i^{M0} ndywiq^{ML}*

ENG They say that they talked to the old woman.

Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	DEM.Abs	that
	<i>ntykẉiq-</i>	<i>ntykẉiq</i>	C.say.3S	said
	<i>qo^H</i>	<i>qo^H</i>	with.3S	to
	<i>neq^{ML}</i>	<i>neq</i>	N-ADJ	old woman
	<i>jq̣q^{LM}-j̣i^{M0}</i>	<i>jq̣q^{LM}-j̣i^{M0}</i>	ADV.Abs-INTJ	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they told

36 CHAT *na^{M0}-j̣i^M, qu^{M0} chiq^{M0} qwa^{LM} qwa^{H+0} n'yq⁰ no^{+H} nka^{ML} no nka^{ML} sti^{+H} wa^{LM}, ndywiq ndywiq qo^H neq^{ML} jla^{ML} jq̣q^{M0} ndywiq^{ML}*

ENG Then they told the old woman, "show us who our father is," they said.

Word	<i>na^{M0}-j̣i^M</i>	<i>na^{M0}-j̣i^M</i>	INTJ	that
	<i>qu^{M0}</i>	<i>qu^{M0}</i>	P.show.2S	show us
	<i>chiq^{M0}</i>	<i>chiq^{M0}</i>	ADJ	a little
	<i>qwa^{LM}</i>	<i>qwa^{LM}</i>	PRO.A.1PLIN	us
	<i>qwa^{H0}</i>	<i>qwa^{H0}</i>	Q	how
	<i>n'yq⁰</i>	<i>n'yq⁰</i>	H.appear.3S	appear
	<i>no^{+H}</i>	<i>no^{+H}</i>	Q	who
	<i>nka^{ML}-no</i>	<i>nka^{ML}-no</i>	H.be.3S-REL	who is
	<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
	<i>sti^{+H}</i>	<i>sti</i>	N.3S	your father
	<i>wa^{LM},</i>	<i>wa^{LM}</i>	PRO.A.PLEX	our
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
	<i>qo^H</i>	<i>qo^H</i>	CONJ/ADV.3S	with
	<i>neq^{ML}-jla^{ML}</i>	<i>neq-jla</i>	N-ADJ	old woman
	<i>jq̣q^{M0}</i>	<i>jq̣q^{M0}</i>	DEM.Abs	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said

- 37 CHAT *se^{+H} ntyqq neq-jla ntyqq qo^{M0} jlya^{MH} jaq^{M0} ndywiq^{ML}*
 ENG The old woman would go to the mountain to leave him food.
 Word *se^{+H}* *se^{+H}* N evenings
ntyqq- *ntyqq-* H.go around.3S.~base walked
neq-jla *neq-jla* N-ADJ old woman
ntyqq-qo^{M0} *ntyqq-qo^{M0}* H.go around.3S.~base- take.3S would take
jlya^{MH} *jlya^{MH}* N food
jaq^{M0} *jaq^{M0}* DEM.Abs then
ndywiq^{ML} *ndywiq* C.say.3S said
- 38 CHAT *kq^{LM} na^{M0}-ji^M ska qwa^{+H} nte^q ti kq^{LM} ntyqq neq-jla ntyqq qo^{M0} jlya^{MH} qo^H*
 ENG The old woman would go to the mountain to leave him food.
 Word *kq^{LM}* *kq^{LM}* DEM.Abs then
na^{M0}-ji^M *na^{M0}-ji^M* INTJ then (he?)
ska *ska* NUM one
qwa^{+H} *qwa^{+H}* N.3S mouth
nte^q *nte^q* N hill
ti *ti* ADV still
kq^{LM} *kq^{LM}* DEM.Abs there
ntyqq *ntyqq* H.go around.3S.~base would go
neq-jla *neq-jla* N-ADJ old woman
ntyqq-qo^{M0} *ntyqq-qo^{M0}* H.go around.3S.~base- take.3S would take
jlya^{MH} *jlya^{MH}* N food
qo^H *qo^H* CONJ and
- 39 CHAT *su^{LM} ska xiq^M jaq^{LM} ji^{M0} ndywiq^{ML}*
 ENG In that place there was a spot with grass.
 Word *su^{LM}* *su^{LM}* PRG.lay flat on the ground.3S thrown
ska *ska* NUM one
xiq^M *xiq^M* N grass
jaq^{LM}-ji^{M0} *jaq^{LM}-ji^{M0}* ADV.Abs-INTJ then
ndywiq^{ML} *ndywiq* C.say.3S they said
- 40 CHAT *qo^H kq^{LM} nde^{M0}-a^{ML} ndywiq^{+H} neq-jla kq^{LM} ntq^{+H} jaq^{M0} ntykwiq^{ML}*
 ENG They say that the old woman had a way of calling her husband when she

		arrived at the spot.			
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ/ADV.3S	with	
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	then	
	<i>nde^{MO}-a^{ML}</i>	<i>nde^{MO}-a^{ML}</i>	EXCL_DEM1-		
	<i>ndywiq^{+H}</i>	<i>ndywiq^{+H}</i>	H.appears.3S	that way	
	<i>neq-jla</i>	<i>neq-jla</i>	C.say.3S	said	
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	N-ADJ	old woman	
	<i>ntq^{+H}</i>	<i>ntq^{+H}</i>	DEM.Abs	then	
	<i>jq^{MO}</i>	<i>jq^{MO}</i>	PRG.go around.3S	walking	
	<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	DEM.Abs	then	
			C.say.3S	they said	
41	CHAT	<i>ne^{MO}i^{ML} ky^{LM} ku^{LM} ta^{MH} ndwa^{HL+0} ky^{LM} ku^{LM} ta^{MH} tkq^M ntykwiq^{ML} neq-jla</i>			
	ENG	<i>jq^{MO} ntyqq ndywiq^{ML}</i>			
	Word	and then, the deer answered son32 son32, while he got closer			
		<i>ne^{MO}-i^{ML}</i>	<i>ne^{MO}-i^{ML}</i>	INTJ	now
		<i>ky^{LM}</i>	<i>ky^{LM}</i>	P.come.3S.base	you will come
		<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	will eat
		<i>ta^{MH}-ndwa^{HL+0}</i>	<i>ta^{MH}-ndwa^{HL+0}</i>	N	type of grass
		<i>ky^{LM}</i>	<i>ky^{LM}</i>	P.come.3S.base	you will come
		<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
		<i>ta^{MH}-tkq^M</i>	<i>ta^{MH}-tkq^M</i>	N	type of grass
		<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>jq^{MO}</i>	<i>jq^{MO}</i>	DEM.Abs	then
		<i>ntyqq</i>	<i>ntyqq</i>	H.go around.3S.~base	went about
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
42	CHAT	<i>kq^{LM} sq^{+H} sq^{+H} nqne^{ML} jnyaq^H jq^{LM} qo^H jq^{MO} ndywiq^{ML}</i>			
	ENG	Supposedly, they say that the deer would go to that place to eat			
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	then
		<i>sq^{+H}</i>	<i>sq^{+H}</i>	ONOM	son3
		<i>sq^{+H}</i>	<i>sq^{+H}</i>	ONOM	son3
		<i>nqne^{ML}</i>	<i>nqne^{ML}</i>	C.did.3S	did
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
		<i>jq^{LM}</i>	<i>jq^{LM}</i>	ADV.Abs	that
		<i>qo^H</i>	<i>qo^H</i>	CONJ/ADV.3S	with
		<i>jq^{MO}</i>	<i>jq^{MO}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said

43	CHAT	<i>qo^H kq̄q^{LM}, ntqo^{M0} kwa^{MH} jnyaq^H jq̄q^{LM} nd'yq̄^{ML} ku^{+H} jlya^{MH} nd'ya^M chaq^{MH} jq̄q^{M0}</i>			
	ENG	They say that the deer would arrive to eat there			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	then
		<i>ntqo^{M0}</i>	<i>ntqo^{M0}</i>	C.come out.3S	came out
				C.sit elevated from	
		<i>tkwa^{MH}</i>	<i>tkwa^{MH}</i>	ground.3S	appeared
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
		<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	ADV.Abs	there
		<i>nd'yq̄^{ML}</i>	<i>nd'yq̄^{ML}</i>	C.arrived.3S~base	arrived
		<i>ku^{+H}</i>	<i>ku</i>	P.eat.3S	will eat
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
		<i>nd'ya^{M-}</i>	<i>nd'ya^{M-}</i>	PRG.happening-	
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	apparently
		<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	DEM.Abs	then

44	CHAT	<i>qo^H kq̄q^{LM}, qq̄^{M0}-q̄^{ML} yqwi^H lyo^{ML} wa^{LM} ne^M kwa^{MH} nka^{ML} sti^{+H} wa^{LM} ntywiq^{+H} no-xwe^{+H} jq̄q^{M0}</i>			
	ENG	Then the kids said, "is that our father?" We already met him then," they said.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	then
		<i>qq̄^{M0}-q̄^{ML}</i>	<i>qq̄^{M0}-q̄^{ML}</i>	EXCL	oh
		<i>yqwi^H-lyo^{ML}</i>	<i>yqwi^H-lyo^{ML}</i>	C.exist.3S-ADV	we met
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>ne^M</i>	<i>ne^M</i>	ADV	now
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM.3	that
		<i>nka^{ML}</i>	<i>nka^{ML}</i>	H.COP.3S	is
		<i>sti^{+H}-wa^{LM}</i>	<i>sti^{+H}-wa^{LM}</i>	N.1PEXCL	our father
		<i>ndywiq^{+H}</i>	<i>ndywiq^{+H}</i>	C.say.3S	said
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
		<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	DEM.Abs	then

45	CHAT	<i>kya^{M0} ykwiq ti wa^{LM} jyq wa^{LM} chaq^{MH}</i>			
	ENG	"Tomorrow we can come on our own to bring him food because..."			
	Word	<i>kya^{M0}</i>	<i>kya^{M0}</i>	N	tomorrow
		<i>ykwiq-ti</i>	<i>ykwiq-ti</i>	ADV-ADV	only
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>jyq-</i>	<i>jyq-</i>	P.come.3S~base	will come

		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
46	CHAT	<i>ka^M chaq^{MH} ja ka^{LM} qa^{ML} kya^{MO} kwiq ti wa^{LM} ka^{ML} qo^{MO} wa^{LM} jlya^{MH} qi^{ML}</i>			
	ENG	<i>sti^{ML} wa^{LM}, ne^M qwi^H lyo^{ML} wa^{LM} qi^{ML} sti^{ML} wa^{LM}</i>			
	Word	<i>ka^M-chaq^{MH}</i>	<i>ka^M-chaq^{MH}</i>	P.be able.3S-COMP	we can
		<i>ja</i>	<i>ja</i>	NEG	no
		<i>ka^{LM}</i>	<i>ka^{LM}</i>	P.come.3S.~base	you will come
		<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	more
		<i>kya^{MO}</i>	<i>kya^{MO}</i>	N	tomorrow
		<i>kwiq-ti</i>	<i>kwiq-ti</i>	ADV-ADV	only
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.come.3S.~base	will come
		<i>qo^{MO}</i>	<i>qo^{MO}</i>	P.bring.1PLIN	to bring
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
		<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
		<i>sti^{ML}</i>	<i>sti</i>	N.3S	dad
		<i>wa^{LM},</i>	<i>wa^{LM},</i>	PRO.A.PLEX	we
		<i>ne^M</i>	<i>ne^M</i>	ADV	now
		<i>qwi^H-lyo^{ML}</i>	<i>qwi^H-lyo^{ML}</i>	C.exist.3S-ADV	met
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>qi^{ML}</i>	<i>qi</i>	NL.3	to
		<i>sti^{ML}</i>	<i>sti</i>	N.3S	your father
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
47	CHAT	<i>sqwe^{MH} rq^{MH} ntywiq^{ML} yqq^H</i>			
	ENG	"OK," their mother said.			
	Word	<i>sqwe^{MH}-rq^{MH}</i>	<i>sqwe^{MH}-rq^{MH}</i>	ADV-.PRO.A.INAN	it's ok
		<i>ntywiq^{ML}</i>	<i>ntywiq^{ML}</i>	C.say.3S	said
		<i>yqq^H</i>	<i>yqq^H</i>	N.3S	their mother
48	CHAT	<i>qya^{LM} xa^{MH} xka^{+H} tsq^{+H}, kqq^{LM} no</i>			
	ENG	Then the next morning...			
	Word	<i>qya^{LM}</i>	<i>qya^{LM}</i>	C.come down.3S	came down
		<i>xa^{MH}</i>	<i>xa^{MH}</i>	N	light
		<i>xka^{+H}</i>	<i>xka^{+H}</i>	ADV.3S	other
		<i>tsq^{+H},</i>	<i>tsq</i>	H	day

		<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	then
		<i>no</i>	<i>no</i>	REL	when
49	CHAT	<i>ya qo^H lya^H wq̄^{ML} jlya^{MH} qi^{ML} sti^{ML} wq̄^{ML} ne^M</i>			
	ENG	"Now take the food to your father."			
	Word	<i>ya-qo^H-lya^H</i>	<i>ya-qo^H-lya^H</i>	C.go.3S~base- ADV.3S-IMP	take
		<i>wq̄^{ML}</i>	<i>wq̄^{ML}</i>	PRO.A.PLEX	you guys
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
		<i>qi^{ML}</i>	<i>qi^{ML}</i>	NL.3	to
		<i>sti^{ML}</i>	<i>sti^{ML}</i>	N.3S	your dad
		<i>wq̄^{ML}</i>	<i>wq̄^{ML}</i>	PRO.A.PLEX	you guys
		<i>ne^M</i>	<i>ne^M</i>	ADV	now
50	CHAT	<i>ka^{ML} n'yq̄^H ntykwęq̄^{M0}, kwq̄^{M0} n'yq̄^H tykwıq̄^{+H} wq̄ t'ya^{ML} wq̄^{+H} ntykwıq̄</i>			
	ENG	"Call him the way I called him when you guys arrive to the place."			
	Word	<i>ka^{ML}-n'yq̄^H</i>	<i>ka^{ML}-n'yq̄^H</i>	P.be able-H.appear.3S	same
		<i>ntykwęq̄^{M0}</i>	<i>ntykwęq̄^{M0}</i>	H.speak.1S	talked
		<i>ka^{ML}-n'yq̄^H</i>	<i>ka^{ML}-n'yq̄^H</i>	P.be able-H.appear.3S	same
		<i>tykwıq̄^{+H}</i>	<i>tykwıq̄^{+H}</i>	P.speak.3S	will talk
		<i>wq̄-</i>	<i>wq̄-</i>	PRO.2S	you guys
		<i>t'ya^{ML}</i>	<i>t'ya^{ML}</i>	P.arrive.3S~base	will arrive
		<i>wq̄^{+H}</i>	<i>wq̄^{+H}</i>	PRO.2S	you guys
		<i>ntykwıq̄</i>	<i>ntykwıq̄</i>	C.say.3S	said
51	CHAT	<i>qo^H kchi^{MH} nyi^{ML} ndywiq̄^{ML}, ja^H nu⁰ wa^M nd'ya^{+H} no-xwe^{+H} ndywiq̄</i>			
	ENG	That's how it was because when the kids arrive there they said:			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kchi^{MH}-nyi^{ML}</i>	<i>kchi^{MH}-nyi^{ML}</i>	ADV	true
		<i>ndywiq̄^{ML}</i>	<i>ndywiq̄^{ML}</i>	C.say.3S	said
		<i>ja^H-no⁰</i>	<i>ja^H-no⁰</i>	ADV.REL	when
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>nd'ya^{+H}</i>	<i>nd'ya^{+H}</i>	P.arrive.3S~base	arrived
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
		<i>ndywiq̄^{ML}</i>	<i>ndywiq̄^{ML}</i>	C.say.3S	said
52	CHAT	<i>kyq̄^{LM} ku^{LM} ta^{HL+0} ndwa^{HL+0} kyq̄^{LM} ku^{HL+0} ta^M tkq̄q̄^M ntykwıq̄^H qo^H jnyaq̄^H</i>			
	ENG	Come eat "son1 son1 venado," that's how they called the deer.			
	Word	<i>kyq̄^{LM}</i>	<i>kyq̄^{LM}</i>	P.come.3S~base	will come

<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	will eat
<i>ta^{HL+0-}</i>	<i>ta^{HL+0-}</i>		
<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	N	type of grass
<i>kyq^{LM}</i>	<i>kyq^{LM}</i>	P.come.3S.base	come
<i>ku^{HL+0}</i>	<i>ku^{HL+0}</i>	P.eat.2S	will eat
<i>ta^M-tkq^M</i>	<i>ta^M-tkq^M</i>	N	type of grass
<i>ntykwiq^H</i>	<i>ntykwiq^H</i>	C.say.3S	said
<i>qo^H</i>	<i>qo^H</i>	with.3S	with
<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then

- 53 CHAT *kq^{LM} sq^H sq^H nqne^{ML} jnyaq^H jaq^{LM} ntqo^H jnyaq^H jaq^{LM} yla^{LM} jaq^{M0}*
ndywiq^{ML}
 Then the deer would answer "son1 son1 venado," while coming out of his

ENG hiding.

Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
	<i>sq^H</i>	<i>sq^H</i>	ONOM	son3
	<i>sq^H</i>	<i>sq^H</i>	ONOM	son3
	<i>nqne^{ML}</i>	<i>nqne^{ML}</i>	C.do.3S	said
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>ntqo^H</i>	<i>ntqo^H</i>	C.came out.3S	came out
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>yla^{LM}</i>	<i>yla^{LM}</i>	C.arrive.3S.~base	arrived
	<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	answered

- 54 CHAT *qwe⁻ nka^{LM} sti wa^{LM} a^{ML} naq^{LM} ntykwiq qa^H jnyaq^H jaq^{LM} qo^H jaq^{M0}*
ntykwiq^{ML}

ENG "Are you our father?" They asked him, "yes," he answered.

Word	<i>qwe⁻</i>	<i>qwe⁻</i>	PRO.2S	you
	<i>nka^{LM}</i>	<i>nka^{LM}</i>	H.COP.2S	are
	<i>sti</i>	<i>sti</i>	N.3S	it's father
	<i>wa^{LM} a^{ML}</i>	<i>wa^{LM} a^{ML}</i>	PRO.A.PLEX-Q	us?
	<i>naq^{LM}</i>	<i>naq^{LM}</i>	PRO.1S	i
	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>qa^H</i>	<i>qa^H</i>	EMPH	more
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer

		<i>jq̣^{LM}</i>	<i>jq̣^{LM}</i>	ADV.Abs	that
		<i>qo^H</i>	<i>qo^H</i>	with.2S	with
		<i>jq̣^{M0}</i>	<i>jq̣^{M0}</i>	DEM.Abs	then
		<i>ntykẉiq^{ML}</i>	<i>ntykẉiq</i>	C.say.3S	they said
55	CHAT	<i>jq̣^{+H} ntykẉiq^{ML} ne^M ntyqq̣^{ML} ndywiq</i>			
	ENG	if you really are our father			
	Word	<i>jq̣^{+H}</i>	<i>jq̣^{+H}</i>	EXCL	ahh
		<i>ntykẉiq^{ML}</i>	<i>ntykẉiq</i>	C.say.3S	said
		<i>ne^M</i>	<i>ne^M</i>	ADV	now
		<i>ntyqq̣^{ML}</i>	<i>ntyqq̣^{ML}</i>	P.see.3S	will see
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
56	CHAT	<i>si^{H+0} chi^{MH} nyi^{ML} ka^{ML} chaq̣^{MH} nka^{LM} sti wa^{LM} ndywiq^{ML}</i>			
	ENG	"Let's see if you are really our father..."			
	Word	<i>si^{H0}</i>	<i>si^{H0}</i>	EXCL	yes
		<i>chi^{MH}-nyi^{ML}</i>	<i>chi^{MH}-nyi^{ML}</i>	EXCL	it's true
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.3S	sera
		<i>chaq̣^{MH}</i>	<i>chaq̣^{MH}</i>	COMP	that
		<i>nka^{LM}</i>	<i>nka^{LM}</i>	PRG.COP.2S	you are
		<i>sti</i>	<i>sti</i>	N.3S	it's father
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
57	CHAT	<i>ne^M qị^{M0} ntykẉiq^{ML} jq̣^{M0}</i>			
	ENG	Then they said "now."			
	Word	<i>Ne^{M-ị^{M0}}</i>	<i>Ne^{M-ị^{M0}}</i>	ADV-INTJ	now
		<i>ntykẉiq^{ML}</i>	<i>ntykẉiq</i>	C.say.3S	said
		<i>jq̣^{M0}</i>	<i>jq̣^{M0}</i>	DEM.Abs	then
58	CHAT	<i>sna^{HL+0} kiq̣^M ska kyqya^M ntyqn^H ntykẉiq</i>			
	ENG	"Let's race up the mountain."			
	Word	<i>sna^{HL+0}</i>	<i>sna^{HL+0}</i>	P.run.3S	let's run
		<i>kiq̣^M</i>	<i>kiq̣^M</i>	compete.1PLIN	compete
		<i>ska</i>	<i>ska</i>	NUM	one
		<i>kqya^M</i>	<i>kqya^M</i>	N	uphill
		<i>ntyqq̣^H</i>	<i>ntyqq̣^H</i>	P.appear.1PLIN	let's see
		<i>ntykẉiq</i>	<i>ntykẉiq</i>	C.say.3S	said
59	CHAT	<i>qo^H na^{M0}-jị^M, no nka^{ML} no nka^{ML} kcha^{LM} kwa^{MH} ndyi^M sna^M na^H ska^{ML} na^H</i>			

sne^H ndywiq^{ML}

ENG	And then the twin that was the sun looked for a frog.			
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	that
	<i>no-nka^{ML}</i>	<i>no-nka^{ML}</i>	REL-Q	who is
	<i>no-nka^{ML}</i>	<i>no-nka^{ML}</i>	REL-Q	who is
	<i>kcha^{LM}</i>	<i>kcha^{LM}</i>	N	sun
	<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	that
	<i>ndyi^M-sna^M</i>	<i>ndyi^M-sna^M</i>	C.begin.3S	began
	<i>na^H</i>	<i>na^H</i>	C.look.3S	looked for
	<i>ska^{ML}</i>	<i>ska</i>	NUM	one
	<i>na^H</i>	<i>na^H</i>	C.begin.3S	looked for
	<i>sne^H</i>	<i>sne^H</i>	N	frog
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said

60 CHAT *kq^{LM} nyi^H kq^{MO} nda^H ta⁰ nyi^H kq^{MO} jaq^{LM} ska^{LM} ska ska siq kyqya^M jlyu^M ndywiq^H*

ENG	Then on purpose they placed the frog on the way uphill.			
Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
	<i>nyi^H-kq^{MO}</i>	<i>nyi^H-kq^{MO}</i>	C.hit.3S-on the ground	they gathered
	<i>nda^H-ta⁰</i>	<i>nda^H-ta⁰</i>	ADV-ADJ	all
	<i>nyi^H-kq^{MO}</i>	<i>nyi^H-kq^{MO}</i>	C.hit.3S-on the ground	they gathered
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>ska^{LM}</i>	<i>ska^{LM}</i>	NUM	each one
	<i>ska</i>	<i>ska</i>	NUM	one
	<i>ska</i>	<i>ska</i>	NUM	one
	<i>siq</i>	<i>siq</i>	N	it's waist
	<i>kyqya^M</i>	<i>kyqya^M</i>	N	uphill
	<i>jlyu^M</i>	<i>jlyu^M</i>	ADJ	big
	<i>ndywiq^H</i>	<i>ndywiq^H</i>	C.say.3S	they said

61 CHAT *si^{MO} qne^{LM} ka na^{HL+0} tyqo^{MO} skwa^H lo qya^M-i^{MO}, kq^{MO} no^{ML} tkwa^{HL+0} jlo^{LM} chaq^{MH} nka^{LM} sti wa^{LM}*

ENG "If you get to the top of the mountain first, that means that you are truly our father."

Word	<i>si^{MO}</i>	<i>si^{MO}</i>	COND	yes
	<i>qne^{LM}</i>	<i>qne^{LM}</i>	P.do.2S	you do
	<i>ka-na^{HL+0}</i>	<i>ka-na^{HL+0}</i>	P.win.3S	win
	<i>tyqo^{MO}</i>	<i>tyqo^{MO}</i>	P.exit.3S	will leave
	<i>skwa^H</i>	<i>skwa^H</i>	lay flat.2S	leave to the

<i>lo-</i>	<i>lo</i>	Loc.3S	top
<i>qya^M-i^{MO},</i>	<i>qya^M-i^{MO},</i>	N-INTJ	upon
<i>kq^{MO}-no^{ML}</i>	<i>kq^{MO}-no^{ML}</i>	ADV.Abs-REL	mountain
<i>tkwa^{HL+0}</i>	<i>tkwa^{HL+0}</i>	P.wish.3S	then
<i>jlo^{LM}</i>	<i>jlo^{LM}</i>	N.3S	will obey
<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	C	your face
<i>nka^{LM}</i>	<i>nka^{LM}</i>	PRG.COP.2S	that
<i>sti</i>	<i>sti</i>	N.3S	you are
<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	it's father
			us

- 62 CHAT *qo^H si^{H+0} qwe^{MO} ja ke^{LM} tyqo^{MO} skwa^H kyqya^M ti^M qa^H-i^{MO}, kq^{LM} no ja*
jlyo^{MO} req^M na^{MH} no^H ka^{ML} qi^{LM} ntykwiq qo^H sti^{ML}-ji^{MO} ntyqo^{MO} chaq^{MH}
 "And you cannot reach the top of the mountain, then we don't know what
 ENG might happen to you," they told their dad.

Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>si^{H0}</i>	<i>si^{H0}</i>	COND	if
	<i>qwe^{MO}</i>	<i>qwe^{MO}</i>	Q	you
	<i>ja</i>	<i>ja</i>	NEG	don't
	<i>ke^{LM}</i>	<i>ke^{LM}</i>	P.take it.3S	handle it
	<i>tyqo^{MO}-skwa^H</i>	<i>tyqo^{MO}-skwa^H</i>	P.exit.3S-PRG.lay.3S	appear on top
	<i>kyqya^M</i>	<i>kyqya^M</i>	N	uphill
	<i>ti^M-qa^H-i^{MO}</i>	<i>ti^M-qa^H-i^{MO}</i>	ADV-INTJ	later
	<i>kq^{LM}-no</i>	<i>kq^{LM}-no</i>	ADV.Abs-REL	then
	<i>ja</i>	<i>ja</i>	NEG	no
	<i>jlyo^{MO}</i>	<i>jlyo^{MO}</i>	know.3S	know
	<i>req^M</i>	<i>req^M</i>	N	essence
	<i>na^{MH}-no^{ML}</i>	<i>na^{MH}-no^{ML}</i>	N-REL	what thing?
	<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.3S	will happen
	<i>qi^{LM}</i>	<i>qi^{LM}</i>	N	to you
	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>qo^H</i>	<i>qo^H</i>	with.3S	to
	<i>sti-jⁱMO</i>	<i>sti-jⁱMO</i>	N.3S	their father
	<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then
	<i>ntyqo^{MO}-</i>	<i>ntyqo^{MO}-</i>		
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that's how it is

- 63 CHAT *qo^H kq^{LM}, chi^{MH}-nyi^{ML} sna^{MH} jnyaq^H jq^{LM}, ndywiq ntyqo^{MO}-chaq^{MH}*
 ENG They say that the deer starting running then.
 Word *qo^H* *qo^H* CONJ and

		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	DEM.Abs	then
		<i>chi^{MH}-nyi^{ML}</i>	<i>chi^{MH}-nyi^{ML}</i>	Affirmation	it's true
		<i>sna^{MH}</i>	<i>sna^{MH}</i>	C.run.3S	he ran
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
		<i>jaq̣q^{LM}</i>	<i>jaq̣q^{LM}</i>	ADV.Abs	that
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	they say
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that's how it is
64	CHAT	<i>ja^H-no⁰ ja nke^{LM} qa^{ML}</i>			
	ENG	When he couldn't handle it anymore			
	Word	<i>ja^H-no⁰</i>	<i>ja^H-no⁰</i>	ADV.REL	when
		<i>ja</i>	<i>ja</i>	NEG	no
		<i>nke^{LM}</i>	<i>nke^{LM}</i>	C.take it.3S	stand it
		<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	more
65	CHAT	<i>nde^{M0} qa^{ML} ntykwiq^{+H} qa^{ML} sne^H jaq̣q^{LM} nkq̣q jaq̣q^{M0} ndywiq^{ML}</i>			
	ENG	This is what the frog was saying from her spot:			
	Word	<i>nde^{M0}</i>	<i>nde^{M0}</i>	DEM1-H.appear.3S	that way
		<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	very
		<i>ntykwiq^{+H}</i>	<i>ntykwiq^{+H}</i>	C.say.3S	said
		<i>qa^{ML}</i>	<i>qa^{ML}</i>	EMPH	very
		<i>sne^H</i>	<i>sne^H</i>	N	frog
		<i>jaq̣q^{LM}</i>	<i>jaq̣q^{LM}</i>	ADV.Abs	that
		<i>nkq̣q</i>	<i>nkq̣q</i>	PRG.sit_flor.3S	seated
		<i>jaq̣q^{M0}</i>	<i>jaq̣q^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
66	CHAT	<i>sa qa^H ta^H xtya^{M0} sne^H jaq̣q^{LM} siq kqya^M jaq̣q^{M0} ndywiq^{ML}</i>			
	ENG	At once the frog created a line in the mountain, they say.			
	Word	<i>sa-qa^H-ta^H</i>	<i>sa-qa^H-ta^H</i>	EXCL.EMPH.ADV	at once
		<i>xtya^{M0}</i>	<i>xtya^{M0}</i>	P.put.3S	put
		<i>sne^H</i>	<i>sne^H</i>	N	frog
		<i>jaq̣q^{LM}</i>	<i>jaq̣q^{LM}</i>	ADV.Abs	then
		<i>siq-</i>	<i>siq-</i>	N	waist
		<i>kqya^M</i>	<i>kqya^M</i>	N	uphill
		<i>jaq̣q^{M0}</i>	<i>jaq̣q^{M0}</i>	DEM.Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
67	CHAT	<i>kq̣q^{LM} la^M che^{MH} ntykwiq^{ML} no⁰ ntyji^{HL+0} jaq̣q^{LM} nkya jaq̣q^{M0}</i>			

ENG	When the deer was passing, the frog said			
Word	<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	and then
	<i>la^M</i>	<i>la^M</i>	ADJ	fast
	<i>che^{MH}</i>	<i>che^{MH}</i>	N	friend
	<i>ntykw̄iq^{ML}</i>	<i>ntykw̄iq</i>	C.say.3S	said
	<i>no⁰</i>	<i>no</i>	ADV.REL	when
	<i>ntyj̄i^{HL+0}</i>	<i>ntyj̄i^{HL+0}</i>	P.pass.3S	passed
	<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	ADV.Abs	then
	<i>nkyā</i>	<i>nkyā</i>	C.go.3S.~base	went
	<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	DEM.Abs	then
68	CHAT	<i>la^M che^{MH} ntykw̄iq^{ML} jnyaq^H ndywiq no sne^H jq̄q^{M0} ndywiq^{ML}</i>		
	ENG	"Fast, my friend," the frog would tell the deer.		
	Word	<i>la^M</i>	<i>la^M</i>	ADV
		<i>che^{MH}</i>	<i>che^{MH}</i>	N
		<i>ntykw̄iq^{ML}</i>	<i>ntykw̄iq</i>	C.say.3S
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N
		<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S
		<i>no</i>	<i>no</i>	REL
		<i>sne^H</i>	<i>sne^H</i>	N
		<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	DEM.Abs
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S
				fast
				friend
				said
				deer
				said
				when
				frog
				then
				they said
69	CHAT	<i>ndyi^H-sna^M, kq̄q^{M0} nka^{ML} xna^{HL+0} no⁰-xwe^{+H} jq̄q^{LM}, kq̄q^{M0} nka^{ML} xna^{HL+0} jnyaq^{M0} jq̄q^{M0} ndywiq^{ML}</i>		
	ENG	They say that everyone started running, the children and the deer.		
	Word	<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S
		<i>kq̄q^{M0}-nka^{ML}</i>	<i>kq̄q^{M0}-nka^{ML}</i>	ADV.Abs-H.COP.3S
		<i>xna^{HL+0}</i>	<i>xna^{HL+0}</i>	CAUS.run.3S
		<i>no⁰-xwe^{+H}</i>	<i>no⁰-xwe^{+H}</i>	N-ADJ
		<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	ADV.Abs
		<i>kq̄q^{M0}-nka^{ML}</i>	<i>kq̄q^{M0}-nka^{ML}</i>	ADV.Abs-H.COP.3S
		<i>xna^{HL+0}</i>	<i>xna^{HL+0}</i>	CAUS.run.3S
		<i>jnyaq^{M0}</i>	<i>jnyaq^{M0}</i>	N
		<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	DEM.Abs
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S
				began
				then
				ran
				boys
				then
				and then
				ran
				deer
				then
				they say
70	CHAT	<i>qo^H, ja^H no^M wa^M jnyaq jnyaq^H jq̄q^{LM} ya^{LM} tq̄ jnyaq^H, jq̄q^{LM} no ndywi^H tseq^{ML} jq̄q^{LM} ndq^{LM}</i>		
	ENG	The deer couldn't handle it anymore, he stopped next to the mountain		

		with its tongue out.		
Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>ja^H-no^M</i>	<i>ja^H-no^M</i>	ADV-REL	when
	<i>wa^M</i>	<i>wa^M</i>	ADV	went
	<i>jnyaq</i>	<i>jnyaq</i>	C.tired.3S	tired
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>ya^{LM}-tq</i>	<i>ya^{LM}-tq</i>	C.go.3S.~base-stand.3S	he stayed
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>no</i>	<i>no</i>	REL	who
	<i>ndywi^H</i>	<i>ndywi</i>	H.hang.3S	hung
	<i>tseq^{ML}</i>	<i>tseq</i>	N	tongue
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>ndq^{LM}</i>	<i>ndq^{LM}</i>	PRG.stand.3S	stood

71	CHAT	<i>ndyi^H-sna^M</i>	<i>nkq^M ji jnyaq^H jaq^{LM} ntyqo^{M0} chaq^{MH}</i>	
	ENG	At once they shot the deer		
	Word	<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.ADV-begin.3S they began
		<i>nkq^M</i>	<i>nkq^M</i>	C.throw.3S shot
		<i>ji</i>	<i>ji</i>	ADV at once
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N deer
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs then
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>	
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP that's how it is

72	CHAT	<i>nkq^M jnyaq^H jaq^{LM} nkq^M jaq^{M0}, ja^H no⁰ wa^M ndyi^H nkq^M jnyaq^H jaq^{LM}</i>		
	ENG	<i>qya^{MH} jnaq^H kaq^{LM} qya^{MH}</i> After they shot the deer, they took the meat.		
	Word	<i>nkq^M</i>	<i>nkq^M</i>	C.throw.3S gunshot
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N deer
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs that
		<i>nkq^M</i>	<i>nkq^M</i>	C.throw.3S gunshot
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs then
		<i>ja^H-no⁰</i>	<i>ja^H-no</i>	ADV-REL when
		<i>wa^M</i>	<i>wa^M</i>	ADV already
		<i>ndyi^H</i>	<i>ndyi^H</i>	C.finish.3S finished
		<i>nkq^M</i>	<i>nkq^M</i>	C.throw.3S gunshot
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N deer

		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>qya^{MH}</i>	<i>qya^{MH}</i>	C.take.3S	he took
		<i>jnaq^H</i>	<i>jnaq^H</i>	N	meat
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	then
		<i>qya^{MH}</i>	<i>qya^{MH}</i>	C.take.3S	took
73	CHAT	<i>qo^H no nka^{ML} kjⁱ^{H+0} ja^{LM}-i^{M0}, kq^{LM} no qnyi^H sti^{M0} ska^{ML} kyaq^{ML} yka^{ML} jaq^{M0}</i>			
	ENG	They left the skin around a tree.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>no-nka^{ML}</i>	<i>no-nka^{ML+H}</i>	REL-H.COP.3S	who was
		<i>kjⁱ^{H0}</i>	<i>kjⁱ^{H0}</i>	N	skin
		<i>ja^{LM}-i^{M0}</i>	<i>ja^{LM}-i^{M0}</i>	ADV.Abs-INTJ	then
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
		<i>no</i>	<i>no</i>	REL	who
		<i>qnyi^H-sti^{M0}</i>	<i>qnyi^H-sti^{M0}</i>	C.thow.C.lay on the	they left on the
		<i>ska^{ML}</i>	<i>ska</i>	NUM	one
		<i>kyaq^{ML}</i>	<i>kyaq^{ML}</i>	N	foot
		<i>yka^{ML}</i>	<i>yka</i>	N	tree
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
				?	then
74	CHAT	<i>ndyi^H-sna^M na^H no nka^{ML} ktq jla jaq^{LM}, kq^{LM} sqwa^{HL+0} neq^{ML} kjⁱ jaq^{LM}</i>			
	ENG	Then they started looking for angry bees to put under the skin.			
	Word	<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S	began
		<i>na^H-no</i>	<i>na^H-no</i>	H.look.3S-REL	looked
		<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	who
		<i>ktq</i>	<i>ktq</i>	N	bee
		<i>jla</i>	<i>jla</i>	ADJ	angry
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	then
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
		<i>sqwa^{HL+0}</i>	<i>sqwa^{HL+0}</i>	C.put.3S	put
		<i>neq^{ML}</i>	<i>neq</i>	N	inside
		<i>kjⁱ-</i>	<i>kjⁱ-</i>	N	skin
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	C.exit.3S-COMP	like that
75	CHAT	<i>qo^H kq^{LM}, ya na^H la^H qwe^{+H} xka^{+H} knyi^M nyi^M ntykwiq^H jaq^{M0} ndywiq^{ML}</i>			
	ENG	He told the other, "go look for a bird."			

Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	then
			C.go.3S.~base-C.look	
	<i>ya-na^H-la^H</i>	<i>ya-na^H-la^H</i>	for.3S	look
	<i>qwe^{+H}</i>	<i>qwe^{+H}</i>	PRO.2S	you
	<i>xka^{+H}</i>	<i>xka^{+H}</i>	ADV.3S	other
	<i>knyi^M</i>	<i>knyi^M</i>	N	bird
	<i>nyi^M</i>	<i>nyi^M</i>	ADV	now
	<i>ntykwiq^H</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>jaq^{MO}</i>	<i>jaq^{MO}</i>	ADV.Abs-REL	and then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say

76 CHAT *ja^H-no⁰ kq no ma^{MO}-la^{ML} wa^{MH} kya^{MO} ne^M ja^{MO}-i^{ML} kq qo^{MO} jlya^{MH} ne^M*
 "So the old woman doesn't notice, tomorrow afternoon when she comes

ENG to drop-off his food..."

Word	<i>ja^H-no⁰</i>	<i>ja^H-no</i>	ADV-REL	when
	<i>kq^{LM}-no</i>	<i>kq^{LM}-no</i>	ADV.Abs-REL	and then
	<i>ma^{MO}-la^{ML}</i>	<i>ma^{MO}-la^{ML}</i>	VOC-ADJ	old hag
	<i>wa^{MH}</i>	<i>wa^{MH}</i>	ADV	already
	<i>kya^{MO}</i>	<i>kya^{MO}</i>	N	tomorrow
	<i>ne^M</i>	<i>ne^M</i>	ADV	now
	<i>ja^{MO}-i^{ML}</i>	<i>ja^{MO}-i^{ML}</i>	ADV-REL	then
	<i>kq</i>	<i>kq</i>	C.come.3S.~base	will come
	<i>qo^{MO}</i>	<i>qo^{MO}</i>	CONJ	and
	<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
	<i>ne^M</i>	<i>ne^M</i>	ADV	now

77 CHAT *kq^{LM}-chaq^{MH} ja ktsq^H chaq^{MH} no^{ML} nkoq^M ste^{+H} ja ktsq^{H+0} kq^{MO}*
ntykwiq^{ML}

ENG "Let's not tell her what happened; we won't tell her that we shot our father."

Word	<i>kq^{LM}-chaq^{MH}</i>	<i>kq^{LM}-chaq^{MH}</i>	C.C.3S-COMP	that is why
	<i>ja</i>	<i>ja</i>	NEG	no
	<i>ktsq^H</i>	<i>ktsq^H</i>	P.tell.1PLIN	notify
	<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no^{ML}</i>	COMP-REL	that
	<i>nkoq^M</i>	<i>nkoq^M</i>	C.shot.1PLIN	we shot
	<i>ste^{+H}</i>	<i>ste^{+H}</i>	N.1PLIN	our father
	<i>ja</i>	<i>ja</i>	NEG	no
	<i>ktsq^{H0}</i>	<i>ktsq^{H0}</i>	P.tell.1PLIN	notify
	<i>kq^{MO}</i>	<i>kq^{MO}</i>	ADV.Abs	then

		<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	said
78	CHAT	<i>na^{MO}-ji^M kq^{LM}-chaq^{MH} qy^{HL+0} jnaq^H re^M jlq^{HL+0} chaq^{MH} no^{ML} ke^{HL+0} chaq^{MH}</i> <i>ku^{ML} jlya^{MH} nka^{ML} t'ye^{+H} jq^{MO}</i>			"That's why we should take her this meat so she could cook and eat it,"
	ENG				that's why they thought.
	Word	<i>na^{MO}-ji^M</i>	<i>na^{MO}-ji^M</i>	INTJ	this (uhm)
		<i>kq^{LM}-chaq^{MH}</i>	<i>kq^{LM}-chaq^{MH}</i>	C.COP.3S-COMP	that's why
		<i>qy^{HL+0}</i>	<i>qy^{HL+0}</i>	P.carry.1PLIN	we will take
		<i>jnaq^H</i>	<i>jnaq^H</i>	N	meat
		<i>re^M</i>	<i>re^M</i>	DEM1	this (uhm)
		<i>jlq^{HL+0}</i>	<i>jlq^{HL+0}</i>	P.arrive.3S.~	arrive
		<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no</i>	COMP-REL	so that
		<i>ke^{HL+0}</i>	<i>ke^{HL+0}</i>	P.cook.3S	to eat
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP-REL	so/for
		<i>ku^{ML}</i>	<i>ku^{ML}</i>	P.eat.3S	will et
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
		<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	felt
		<i>t'ye^{+H}</i>	<i>t'ye^{+H}</i>	N	chest
		<i>jq^{MO}</i>	<i>jq^{MO}</i>	ADV.Abs-REL	then
79	CHAT	<i>qo^H kq^{LM} no^M wa^{MH} jq^{LM} jq^{MO} ndywiq^{ML} ndyi^H-sna^M</i>			
	ENG				And so they began to plan everything.
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>kq^{LM}-no</i>	<i>kq^{LM}-no</i>	ADV-REL	then
		<i>wa^{MH}</i>	<i>wa^{MH}</i>	ADV	already
		<i>jq^{LM}-jq^{MO}</i>	<i>jq^{LM}-jq^{MO}</i>	ADV.Abs-DEM-Abs	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S	began
80	CHAT	<i>ntsqwa^{HL+0} ktq⁰ neq⁰ neq^M kjjⁱ ntsqwa^{HL+0} nyi ka^{HL+0} n'yq^{MO} jnyaq^H qnyi^H-</i> <i>sti^{MO} kyaq^{ML} yka^{ML} jq^{MO}</i>			They filled the skin with bees and it looked exactly like before. Then
	ENG				they left it under a tree.
	Word	<i>ntsqwa^{HL+0}</i>	<i>ntsqwa^{HL+0}</i>	C.put.3S	put
		<i>ktq⁰</i>	<i>ktq</i>	N	wasp
		<i>neq⁰</i>	<i>neq</i>	N	inside
		<i>neq^M</i>	<i>neq^M</i>	N	inside
		<i>kjjⁱ</i>	<i>kjjⁱ</i>	N	skin
		<i>ntsqwa^{HL+0}</i>	<i>ntsqwa^{HL+0}</i>	C.put.3S	put

<i>nyi-ka^{ML}</i>	<i>nyi-ka^{ML}</i>	ADV-P.COP.3S	same
<i>n'yq^{M0}</i>	<i>n'yq^{M0}</i>	H.appears.3S	appears
<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
		C.thow.C.lay on the	left on the
<i>qnyi^H-sti</i>	<i>qnyi^H-sti</i>	ground.3S	ground
<i>kyaq^{ML}</i>	<i>kyaq^{ML}</i>	N	foot
<i>yka^{ML}</i>	<i>yka^{ML}</i>	N	tree
<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then

- 81 CHAT *qo^H qwε tsa^{ML} na^{LM} xka^{LM} knyi^M ndywiq^H*
ENG "And you go look for another bird," he said.
Word *qo^H* *qo^H* CONJ and
qwε *qwε* PRO.2S you
tsa^{ML} *tsa^{ML}* P.go.3S.~ will go
na^{LM} *na^{LM}* P.look.3S will look
xka^{LM} *xka^{LM}* ADV other
knyi^M *knyi^M* N bird
ndywiq^H *ndywiq^H* C.say.3S said
- 82 CHAT *sku^{M0} yu^{M0} sku^{M0} yu^{M0} tykwiq^{LM} kq^{M0} qq^H no⁰ t'yq^{ML} ska^{+H} no tykwiq sku^{M0}*
yu^{M0}, sku^{M0} yu^{M0}.
ENG When they found the bird they said-- "a person will come tomorrow and
you will answer "sku20 yu20" when the person says sku20 yu20".
Word *sku^{M0}* *sku^{M0}* ONOM sku
yu^{M0} *yu^{M0}* ONOM yu
sku^{M0} *sku^{M0}* ONOM sku
yu^{M0} *yu^{M0}* ONOM yu
tykwiq^{LM} *tykwiq^{LM}* P.say.2S will say
kq^{M0} *kq^{M0}* ADV.Abs then
qq^H-no⁰ *qq^H-no* ADV.REL when
t'yq^{ML} *t'yq^{ML}* P.come.3S.base will come
ska^{+H} *ska^{+H}* NUM one
no *no* REL who
tykwiq *tykwiq* P.say.2S will say
sku^{M0} *sku^{M0}* ONOM sku
yu^{M0} *yu^{M0}* ONOM yu
sku^{M0} *sku^{M0}* ONOM sku
yu^{M0} *yu^{M0}* ONOM yu

- 83 CHAT *kyq^{LM} ku^{LM} ta^{ML}-ndwa^{HL+0} kyq^{LM} ku^{LM} ta^{ML}-tkaq^M tykwiq ska no t'yq kya^{M0}*

		<i>ntykwiq^{ML} req^{ML} qo^H knyi^M jaq^{LM} jaq^{M0}</i>		
ENG		"Come and eat 'ta24 ndwa14', come and eat 'ta24 tkan72'. That's what		
Word		that person will say," they told the bird.		
	<i>kyq^{LM}</i>	<i>kyq^{LM}</i>	P.come.2S	will come
	<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
	<i>ta^{ML}-ndwa^{HL+0}</i>	<i>ta^{ML}-ndwa^{HL+0}</i>	N	type of grass
	<i>kyq^{LM}</i>	<i>kyq^{LM}</i>	P.come.2S	you will come
	<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
	<i>ta^{ML}-tkaq^M</i>	<i>ta^{ML}-tkaq^M</i>	N	type of grass
	<i>tykwiq-</i>	<i>tykwiq-</i>	P.say.3S	will say
	<i>ska</i>	<i>ska</i>	NUM	one
	<i>no</i>	<i>no</i>	REL	who
	<i>t'yq</i>	<i>t'yq</i>	P.come.3S.base	will come
	<i>kya^{M0}</i>	<i>kya^{M0}</i>	N	tomorrow
	<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	H.say.3S	said
	<i>req^{ML}</i>	<i>req^{ML}</i>	PRO.A.INDEF.H	them
	<i>qo^H</i>	<i>qo^H</i>	with.3S	with
	<i>knyi^M</i>	<i>knyi^M</i>	N	bird
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then

84	CHAT	<i>sqwe^{MH}-raq^{MH} ndywiq^{ML} knyi^M jaq^{LM} ji^{M0}, ndyi^H-sna^M na^{M0}-ji^M</i>		
	ENG	"That's OK," said the bird.		
	Word	<i>sqwe^{MH}-raq^{MH}</i>	<i>sqwe^{MH}-raq^{MH}</i>	ADJ-PRO.A.INAN that's ok
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S said
		<i>knyi^M</i>	<i>knyi^M</i>	N bird
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs that
		<i>ji^{M0}</i>	<i>ji^{M0}</i>	INTJ then
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S began
		<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ this

85	CHAT	<i>qo^H kq^{LM} lo yka nde^M tykwa^{M0} kq^{M0} ndywiq^{ML}</i>		
	ENG	"You have to sit on this tree," they said.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs then
		<i>lo</i>	<i>lo</i>	LOC.3S about
		<i>yka</i>	<i>yka</i>	N tree
		<i>nde^M</i>	<i>nde^M</i>	DEM1 here
		<i>tykwa^{M0}</i>	<i>tykwa^{M0}</i>	P.sitt.2S you will seat
		<i>kq^{M0}</i>	<i>kq^{M0}</i>	ADV.Abs then

- | | | | | | |
|----|------|--|--|-------------------|----------|
| | | <i>ndywiq^{ML}</i> | <i>ndywiq</i> | C.say.3S | said |
| 86 | CHAT | <i>no^{MO} wa^M jaq^{LM}-jaq^{MO}, kq^{LM} ntyqya^{MH} jnaq^H jaq^{LM} yla^{LM}</i> | | | |
| | ENG | They took the deer meat home. | | | |
| | Word | <i>no^{MO}</i> | <i>no</i> | ADV | when |
| | | <i>wa^M</i> | <i>wa^M</i> | ADV | already |
| | | <i>jaq^{LM}-jaq^{MO}</i> | <i>jaq^{LM}-jaq^{MO}</i> | ADV.Abs-DEM-Abs | then |
| | | <i>kq^{LM}</i> | <i>kq^{LM}</i> | DEM.Abs | and then |
| | | <i>ntyqya^{MH}</i> | <i>ntyqya^{MH}</i> | COMP.carry.3S | took |
| | | <i>jnaq^H</i> | <i>jnaq^H</i> | N | meat |
| | | <i>jaq^{LM}</i> | <i>jaq^{LM}</i> | ADV.Abs | that |
| | | <i>yla^{LM}</i> | <i>yla^{LM}</i> | C.arrive.3S.~base | arrived |
| 87 | CHAT | <i>qya^{MH} ji^{MO}, chaq^{MH} qwi^{ML} t'ye^{+H} ti ja-la^{+H} qa^{ML} ykwiq^{ML} sqe^{LM}</i> | | | |
| | ENG | They took the meat home only to be annoying and said nothing; it was a secret. | | | |
| | Word | <i>qya^{MH}</i> | <i>qya^{MH}</i> | COMP.carry.3S | took |
| | | <i>ji^{MO}</i> | <i>ji^{MO}</i> | INTJ | then |
| | | <i>chaq^{MH}</i> | <i>chaq^{MH}</i> | COMP | because |
| | | <i>qwi^{ML}</i> | <i>qwi^{ML}</i> | H.exist.3S | had |
| | | <i>t'ye^{+H}</i> | <i>t'ye^{+H}</i> | N | chest |
| | | <i>ti</i> | <i>ti</i> | ADV | only |
| | | <i>jala^{+H}</i> | <i>jala^{+H}</i> | NEG | no |
| | | <i>qa^{ML}</i> | <i>qa^{ML}</i> | EMPH | more |
| | | <i>ykwiq^{ML}</i> | <i>ykwiq</i> | C.say.3S | said |
| | | <i>sqe^{LM}</i> | <i>sqe^{LM}</i> | ADV | nothing |
| 88 | CHAT | <i>kq^{LM} naq^M-ji^M, nkeq^{MH} neq^{ML} jla^{ML} jnaq^H nkeq^{MH} ji^{MO}</i> | | | |
| | ENG | The old woman started cooking the meat... | | | |
| | Word | <i>kq^{LM}</i> | <i>kq^{LM}</i> | DEM.Abs | |
| | | <i>na^{MO}-ji^M</i> | <i>na^{MO}-ji^M</i> | INTJ | then |
| | | <i>nkeq^{MH}</i> | <i>nkeq^{MH}</i> | C.cook.3S | cooked |
| | | <i>neq^{ML}</i> | <i>neq</i> | N | person |
| | | <i>jla^{ML}</i> | <i>jla^{ML}</i> | ADJ | old |
| | | <i>jnaq^H</i> | <i>jnaq^H</i> | N | meat |
| | | <i>nkeq^{MH}</i> | <i>nkeq^{MH}</i> | C.cook.3S | cooked |
| | | <i>ji^{MO}</i> | <i>ji^{MO}</i> | INTJ | then |
| 89 | CHAT | <i>lo ntq^{+H} neq-jla tyku^H chaq^{MH} no^{ML} no^{+H} jnaq^H no^H jnyaq^H jaq^{MO}</i> | | | |
| | ENG | The old woman was happy because she deer meat, then she went to the | | | |

				well to get water.
Word	<i>lo</i>	<i>lo</i>	LOC.3S	on
			PRG.go	went
	<i>ntq^{+H}</i>	<i>ntq^{+H}</i>	around.3S.~base	about/was
	<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
	<i>tyku^H</i>	<i>tyku^H</i>	N	well
	<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no^{ML}</i>	COMP-REL	so
	<i>no^{+H}</i>	<i>no^{+H}</i>	REL	that
	<i>jnaq^H</i>	<i>jnaq^H</i>	N	meat
	<i>no^H</i>	<i>no^H</i>	REL	who
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	that

- 90 CHAT *kq^{LM} ntykwiq ska no ndwa^{HL+0} tyku⁰ jaq^{LM} qo^H jaq^{M0} ndywiq^{ML}, kq^{LM} no^H nka^{ML} kytyiq^M wa^M jaq^{M0} ndywiq^{ML}*
 He heard someone talking to her. It was something that was sitting on the well. It was the frog.

Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	and then
	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>ska</i>	<i>ska</i>	NUM	one
	<i>no</i>	<i>no</i>	REL	who
	<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	seated
	<i>tyku⁰</i>	<i>tyku⁰</i>	N	well
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>qo^H</i>	<i>qo^H</i>	with.3S	with
	<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs	that
	<i>no^H</i>	<i>no^H</i>	REL	who
	<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	was
	<i>kytyiq^M</i>	<i>kytyiq^M</i>	N	frog
	<i>wa^M</i>	<i>wa^M</i>	DEM2	that
	<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	DEM.Abs	then
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said

- 91 CHAT *qo^H nde^{M0}-a^{ML} ntykwiq^{+H} kytyiq^M jaq^{M0} ndywiq^{ML} ku qo ku snyiq ku qo ku snyiq ntykwiq qa^H kytyiq^M jaq^{LM} jaq^{M0} ndywiq^{ML}*
 It started saying, "you will eat your husband, your children," that's what the voice was saying.

Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
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<i>nde^{M0}-a^{ML}</i>	<i>nde^{M0}-a^{ML}</i>	DEM1.H.appear.3S	that's how
<i>ntykwiq^{+H}</i>	<i>ntykwiq</i>	PTCP.say.3S	said
<i>kytyiq^M</i>	<i>kytyiq^M</i>	N	frog
<i>jq^{M0}</i>	<i>jq^{M0}</i>	ADV.Abs-REL	then
<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
<i>ku</i>	<i>ku</i>	P.eat.3S	will eat
<i>qo</i>	<i>qo</i>	N.3S	husband
<i>ku</i>	<i>ku</i>	P.eat.3S	will eat
<i>snyiq</i>	<i>snyiq</i>	N.3S	son
<i>ku</i>	<i>ku</i>	P.eat.3S	will eat
<i>qo</i>	<i>qo</i>	N.3S	husband
<i>ku</i>	<i>ku</i>	P.eat.3S	will eat
<i>snyiq</i>	<i>snyiq</i>	N.3S	son
<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
<i>qa^H</i>	<i>qa^H</i>	EMPH	more
<i>kytyiq^M</i>	<i>kytyiq^M</i>	N	frog
<i>jq^{LM}</i>	<i>jq^{LM}</i>	ADV.Abs	that
<i>jq^{M0}</i>	<i>jq^{M0}</i>	ADV.Abs-REL	then
<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said

92	CHAT	<i>qo^H kq^{LM} ntykwiq^{ML} no ma^{M0}-la^{ML} qo no-xwe^{+H LM}-i^{M0}</i>		
	ENG	The old woman said to her sons.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	DEM.Abs then
		<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S said
		<i>no</i>	<i>no</i>	REL who
		<i>ma^{M0}-la^{ML}</i>	<i>ma^{M0}-la^{ML}</i>	N-ADJ old woman
		<i>qo</i>	<i>qo</i>	with.3S to
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ boy
		<i>jq^{LM}-i^{M0}</i>	<i>jq^{LM}-i^{M0}</i>	ADV.Abs-INTJ then

93	CHAT	<i>no-xwe^{+H}, ta na^{MH} sti^{ML} wq^{ML} yjwi^{LM} wq chaq^H-nka^{ML}-no^H ntykwiq ska</i>		
	ENG	<i>ndwa^{HL+0} tyku⁰ qq^H</i>		
	ENG	"Kids, any chance that you killed your father? Someone on the road said some things."		
	Word	<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ kids
		<i>ta-</i>	<i>ta-</i>	Q that
		<i>na^{MH}</i>	<i>na^{MH}</i>	N perhaps
		<i>sti</i>	<i>sti</i>	N.2S your father
		<i>wq^{ML}</i>	<i>wq^{ML}</i>	PRO.A.2PL you guys

<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
<i>wq-</i>	<i>wq-</i>	PRO.A.2PL	you guys
<i>chaq^H-</i>	<i>chaq^H-</i>	COMP-H.COP.3S-	
<i>nka^{ML+H}-no^H</i>	<i>nka^{ML+H}-no^H</i>	REL	because
<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
<i>ska</i>	<i>ska</i>	NUM	one
<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	seated
<i>tyku⁰-</i>	<i>tyku⁰-</i>	N	well
<i>qq^H</i>	<i>qq^H</i>	with.1S	with me

- 94 CHAT *ku qo ku snyiq ku qo ku snyiq ntykwiq qq^H*
ENG They told you pure lies, said the boys
Word *ku ku P.eat.3S will eat*
qo qo N.3S husband
ku ku P.eat.3S will eat
snyiq snyiq N.2S your son
ku ku P.eat.3S will eat
qo qo N.3S husband
ku ku P.eat.3S will eat
snyiq snyiq N.3S sons/daughters
ntykwiq ntykwiq C.say.3S said
qq^H qq^H with.1S with me
- 95 CHAT *qq^{MO} chaq^{MH} qa^{ML}-ta^{MO} nda^{MO} lo cha^{LM} chqq^{LM} ntykwiq qa^H no-xwe^{+H} jqj^{LM}*
ENG "Pure lies!" that's what the kids told her.
Word *qq^{MO} qq^{MO} EXCL ahh*
chaq^{MH} chaq^{MH} N word
qa^{ML}-ta^{MO} qa^{ML}-ta^{MO} NEG-P.give.1PLIN stupid things
nda^{MO} nda^{MO} H.give.3S to give
lo-cha^{LM} lo-cha^{LM} LOC.3S-ADJ brake
chqq^{LM} chqq^{LM} N its back
ntykwiq ntykwiq C.say.3S said
qa^H qa^H EMPH more
no-xwe^{+H} no-xwe^{+H} N-ADJ kids
jqj^{LM} jqj^{LM} ADV.Abs those
qo^H qo^H with.3S with
jqj^{MO} jqj^{MO} ADV.Abs-REL then
ndywiq^{ML} ndywiq C.say.3S they said

- 96 CHAT *kq̄q^{LM} q̄q^H-no⁰ wa^M ya^{LM} ma^{MO}-la^{ML}, kw̄iq^{ML}-ti^{ML} n'ya^{ML} ndywiq^{+H} kytyiq^M jaq^{MO}*
 ENG Then the old woman went back and the frog said the same thing.
 Word *kq̄q^{LM}* *kq̄q^{LM}* DEM.Abs then
q̄q^H-no⁰ *q̄q^H-no* ADV.REL when
wa^M *wa^M* ADV already
ya^{LM} *ya^{LM}* C.go.3S.~base went
ma^{MO}-la^{ML} *ma^{MO}-la^{ML}* VOC-ADJ old hag
kw̄iq^{ML}-ti^{ML} *kw̄iq^{ML}-ti^{ML}* REFL-ADV same
n'ya^{ML} *n'ya^{ML}* H.appears.3S appears
ndywiq^{+H} *ndywiq* C.say.3S said
kytyiq^M *kytyiq^M* N frog
jaq^{MO} *jaq^{MO}* ADV.Abs-REL then
- 97 CHAT *kq̄q^{LM}, ya^{LM} la^{ML} ma^{MO}-la^{ML} lo^{ML}-cha^H choq^{LM} kytyiq^M jaq^{MO}, kq̄q^{LM} ntsa^H choq^{LM} kytyiq ndywiq^{ML} jaq^{MO}*
 ENG The old woman got mad and broke the frog's back.
 Word *kq̄q^{LM}* *kq̄q^{LM}* DEM.Abs then
ya^{LM}-la^{ML} *ya^{LM}-la^{ML}* C.go.3S.~base-EMPH she left
ma^{MO}-la^{ML} *ma^{MO}-la^{ML}* VOC-ADJ old hag
lo^{ML}-cha^H *lo^{ML}-cha^H* LOC.3S-ADJ broke
choq^{LM} *choq^{LM}* N.3S its back
kytyiq^M *kytyiq^M* N frog
jaq^{MO} *jaq^{MO}* ADV.Abs-REL then
kq̄q^{LM} *kq̄q^{LM}* DEM.Abs then
ntsa^H *ntsa^H* C.brake(S).3S broke
choq^{LM} *choq^{LM}* N.3S its back
kytyiq *kytyiq* N frog
ndywiq^{ML} *ndywiq* C.say.3S said
jaq^{MO} *jaq^{MO}* ADV.Abs-REL then
- 98 CHAT *qo^H kq̄q^{LM} no^H wa⁰ jaq^{LM}-ji^{MO}, nkeq^{MH} ma^{MO}-la^{ML} jnaq^H nkeq^{MH} ji^{MO}*
 ENG Then the old woman cooked the meat.
 Word *qo^H* *qo^H* CONJ and
kq̄q^{LM} *kq̄q^{LM}* DEM.Abs then
no^H *no^H* REL when
wa⁰ *wa⁰* ADV already
jaq^{LM}-ji^{MO} *jaq^{LM}-ji^{MO}* ADV.Abs-INTJ then
nkeq^{MH} *nkeq^{MH}* C. cooked
ma^{MO}-la^{ML} *ma^{MO}-la^{ML}* VOC-ADJ old hag

		<i>jnaq^H</i>	<i>jnaq^H</i>	N	meat
		<i>nkeq^{MH}</i>	<i>nkeq^{MH}</i>	C.cook.3S	cooked
		<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then
99	CHAT	<i>yku jaq^{MO} no, ntykwe^M ma^{MO}-la^{ML} no-ntykwe^{MH} ra^H-no⁰ wa^M ndyi^H yku^H</i>			
	ENG	She ate the meat and when she finished she started throwing up.			
	Word	<i>yku-</i>	<i>yku-</i>	C.eat.3S	ate
		<i>jaq^{MO}</i>	<i>jaq^{MO}</i>	DEM.Abs	then
		<i>no-ntykwe^M</i>	<i>no-ntykwe^M</i>	EMPH-PTCP.vomit.3S	vomited
		<i>ma^{MO}-la^{ML}</i>	<i>ma^{MO}-la^{ML}</i>	VOC-ADJ	old hag
		<i>no-ntykwe^M</i>	<i>no-ntykwe^M</i>	EMPH-PTCP.vomit.3S	vomited
		<i>ra^H-no⁰</i>	<i>ra^H-no</i>	N-REL	when
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>ndyi^H</i>	<i>ndyi^H</i>	C.finish.3S	finished
		<i>yku^H</i>	<i>yku^H</i>	C.eat.3S	ate
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	N	food
		<i>jnaq^H</i>	<i>jnaq^H</i>	N	meat
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then
100	CHAT	<i>ntykwe^M hasta ji^{HL+0}-a⁰ chaq^{MH} ja nkjwi^{LM} ti</i>			
	ENG	She almost died for throwing up too much.			
	Word	<i>ntykwe^M</i>	<i>ntykwe^M</i>	PRG.vomit.3S	vomited (throw up)
		<i>has-sta-</i>	<i>ha-sta-</i>	ADV	until
		<i>ji^{HL+0}-a⁰</i>	<i>ji^{HL+0}-a⁰</i>	EMPH	just
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	so
		<i>ja</i>	<i>ja</i>	NEG	no
		<i>nkjwi^{LM}</i>	<i>nkjwi^{LM}</i>	C.die.3S	died
		<i>ti</i>	<i>ti</i>	ADV	only
101	CHAT	<i>kq^{LM}-no qya^{LM}-xa^{MH} xka^{+H} tsq^{+H} ya^{LM} ma^{MO}-la^{ML} ya^{LM} ya^{LM} qo^H jlya^{MH}</i>			
	ENG	The next day she brought him food again.			
	Word	<i>kq^{LM}-no</i>	<i>kq^{LM}-no</i>	ADV.Abs-REL	then
		<i>qya^{LM}-xa^{MH}</i>	<i>qya^{LM}-xa^{MH}</i>	ADV	the next morning
		<i>xka^{+H}</i>	<i>xka^{+H}</i>	ADV.3S	other
		<i>tsq^{+H}</i>	<i>tsq^{+H}</i>	N	day

		<i>ya^{LM}</i>	<i>ya^{LM}</i>	C.go.3S.~base	went
		<i>ma^{M0}-la^{ML}</i>	<i>ma^{M0}-la^{ML}</i>	VOC-ADJ	old hag
		<i>ya^{LM}</i>	<i>ya^{LM}</i>	C.go.3S.~base	went
		<i>ya^{LM}-qo^H</i>	<i>ya^{LM}-qo^H</i>	COMP.carry.3S-	
		<i>jlya^{MH}</i>	<i>jlya^{MH}</i>	with.3S	took
		<i>xka^{+H}</i>	<i>xka^{+H}</i>	N	food
		<i>tsq</i>	<i>tsq</i>	ADV.3S	other
				N	day
102	CHAT	<i>kyq^{LM} ku^{LM} ta^{MH} ndwa^{HL+0} kyq^{LM} ku^{LM} ta^{MH} ntkqq^M</i>			
	ENG	"Come eat ta3 ndwa14, come eat ta3 ntkan73", she said.			
	Word	<i>kyq^{LM}</i>	<i>kyq^{LM}</i>	P.come.2S~base	you will come
		<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
		<i>ta^{MH}-ndwa^{HL+0}</i>	<i>ta^{MH}-ndwa^{HL+0}</i>	N	type of grass
		<i>kyq^{LM}</i>	<i>kyq^{LM}</i>	P.come.2S~base	you will eat
		<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
		<i>ta^{MH}-ntkqq^M</i>	<i>ta^{MH}-ntkqq^M</i>	N	type of grass
103	CHAT	<i>ja ne^H qa⁰ qne^{ML} jnyaq^H jaq^{LM} sqe^{LM}, kqq^{LM} ntykwiq kny^{iM} jaq^{LM} ndwa^{HL+0}</i>			
	ENG	She didn't hear anything; the deer wouldn't come then the bird that was seating there said:			
	Word	<i>ja</i>	<i>ja</i>	NEG	no
		<i>ne^H</i>	<i>ne^H</i>	C.sound(S)-3S	sounded
		<i>qa⁰</i>	<i>qa⁰</i>	EMPH	more
		<i>qne^{ML}</i>	<i>qne^{ML}</i>	H.sound(S)-3S	sounded
		<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>sqe^{LM}</i>	<i>sqe^{LM}</i>	ADV	nothing
		<i>kqq^{LM}</i>	<i>kqq^{LM}</i>	DEM.Abs	then
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>kny^{iM}</i>	<i>kny^{iM}</i>	N	bird
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	seated
104	CHAT	<i>sku^{M0} yu^{M0} sku^{M0} yu^{M0} ntykwiq^{ML} kny^{iM} jaq^{LM} ndwa^{HL+0}</i>			
	ENG	"sku20 yu20 sku20 yu20" the bird kept saying			
	Word	<i>sku^{M0}</i>	<i>sku^{M0}</i>	ONOM	sku
		<i>yu^{M0}</i>	<i>yu^{M0}</i>	ONOM	yu
		<i>sku^{M0}</i>	<i>sku^{M0}</i>	ONOM	sku
		<i>yu^{M0}</i>	<i>yu^{M0}</i>	ONOM	yu

<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	said
<i>knyi^M</i>	<i>knyi^M</i>	N	bird
<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	seated

105 CHAT *qo^H kaq^{LM} ntywiq ma^{M0}-la^{ML} jaq^{LM} ja^H-nu⁰ yla^{LM}, no-xwe^{+H} ta na^{MH} sti^{ML}*
wq^{ML} yjwi^{LM} wq

The old woman went back home and asked her sons - "Kids, did you guys killed your father?"

Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>kaq^{LM}</i>	<i>kaq^{LM}</i>	DEM.Abs	then
	<i>ntywiq</i>	<i>ntywiq</i>	C.say.3S	said
	<i>ma^{M0}-la^{ML}</i>	<i>ma^{M0}-la^{ML}</i>	VOC-ADJ	old hag
	<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
	<i>ja^H-no⁰</i>	<i>ja^H-no</i>	ADV.REL	when
	<i>yla^{LM}</i>	<i>yla^{LM}</i>	C.arrive.3S.~base	arrived
	<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
	<i>ta-</i>	<i>ta-</i>	Q	that
	<i>na^{MH}</i>	<i>na^{MH}</i>	N	any chance
	<i>sti</i>	<i>sti</i>	N.2S	your father
	<i>wq^{ML}</i>	<i>wq^{ML}</i>	PRO.2S	you guys
	<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
	<i>wq</i>	<i>wq</i>	PRO.2S	you guys

106 CHAT *chaq^{MH}-nka^{ML}-nu^{+H} ntykwiq ska ndwa^{HL+0} kyaq⁰ qq^H, sku^{M0} yu^{M0} ntykwiq^{ML}*

ENG how are we going to kill our father?

Word	<i>chaq^{MH}-</i>	<i>chaq^{MH}-</i>	COMP-H.COP.3S-	
	<i>nka^{ML+H}-no^{+H}</i>	<i>nka^{ML+H}-no^{+H}</i>	REL	because
	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>ska</i>	<i>ska</i>	NUM	one
	<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	sat/seated
	<i>kyaq⁰</i>	<i>kyaq^{HL+0}</i>	ADJ	up
	<i>qq^H</i>	<i>qq^H</i>	with.1S	with me
	<i>sku^{M0}</i>	<i>sku^{M0}</i>	ONOM	sku
	<i>yu^{M0}</i>	<i>yu^{M0}</i>	ONOM	yu
	<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	said

107 CHAT *kaq^{LM} ntykwiq no-xwe^{+H} jaq^{LM} qo^H, qa^{M0} nyi chaq^{MH} kjwi^{ML} wa^{LM}-re^M sti^H*
 ENG *wa^{LM} qa^H na^{MH}*
 "Why would we kill our father?"

Word	<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	then
	<i>ntykw̄iq</i>	<i>ntykw̄iq</i>	C.say.3S	said
	<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
	<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	ADV.Abs	those
	<i>qo^H</i>	<i>qo^H</i>	with.3S	with
	<i>qq̄^{M0}-nyi</i>	<i>qq̄^{M0}-nyi</i>	ADV.ADJ	now
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	because
	<i>kjwi^{ML}</i>	<i>kjwi^{ML}</i>	P.kill.3S	will kill
	<i>wa^{LM}-re^M</i>	<i>wa^{LM}-re^M</i>	PRO.A.PLEX-DEM1	us here
	<i>sti^H</i>	<i>sti^H</i>	N.3S	his father
	<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
	<i>qq̄^H-na^{MH}</i>	<i>qq̄^H-na^{MH}</i>	Q-H.appear.3S	how (why)?

108 CHAT *ja la^{+H} yjwi^{LM} wa^{LM}-re^M sti^H wa^{LM} ntykw̄iq no-xwe^{+H} jq̄q^{M0}*

ENG "It wasn't us," said the kids.

Word	<i>jala^{+H}</i>	<i>jala^{+H}</i>	NEG	no
	<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
	<i>wa^{LM}-re^M</i>	<i>wa^{LM}-re^M</i>	PRO.A.PLEX-DEM1	us here
	<i>sti^H</i>	<i>sti^H</i>	N.2S	your father
	<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
	<i>ntykw̄iq</i>	<i>ntykw̄iq</i>	C.say.3S	said
	<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
	<i>jq̄q^{M0}</i>	<i>jq̄q^{M0}</i>	ADV.Abs-REL	then

109 CHAT *qo^H kq̄q^{LM} tsa^{ML} nyi^{M0} sq̄^{LM} yka qe-no ndwa^{HL+0} knyi⁰ no^{ML} ndywiq^{ML} jq̄q^{LM} nyi^M*

ENG "Go see, maybe the deer is sleeping," they said to her

Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
	<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	DEM.Abs	then
	<i>tsa^{ML}</i>	<i>tsa^{ML}</i>	P.go.3S~base	you will go
	<i>nyi^{M0}</i>	<i>nyi^{M0}</i>	ADV	now
	<i>sq̄^{LM}</i>	<i>sq̄^{LM}</i>	NL.3	beneath
	<i>yka</i>	<i>yka</i>	N	tree
	<i>qe-no</i>	<i>qe-no</i>	H.exist.3S-REL	where
	<i>ndwa^{HL+0}</i>	<i>ndwa^{HL+0}</i>	PRG.sit_above_flor.3S	seated
	<i>knyi⁰</i>	<i>knyi⁰</i>	N	bird
	<i>no^{ML}</i>	<i>no</i>	Q	who
	<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
	<i>jq̄q^{LM}</i>	<i>jq̄q^{LM}</i>	ADV.Abs	that
	<i>nyi^M</i>	<i>nyi^M</i>	ADV	now

- 110 CHAT *kq̄q^{LM} tsa^{ML} nyi^{MO} qya^{LM} si^H no⁰ ja la^{+H} su^{LM} ntjaq^{HL+0} ntykwiq no-xwe^{+H}
 j̄q̄q^{LM} qo^H j̄i^{MO}*
 ENG "Go see over there, maybe the deer is sleeping," the kids said.
 Word *kq̄q^{LM}* *kq̄q^{LM}* DEM.Abs there
tsa^{ML} *tsa^{ML}* P.go.2S go
nyi^{MO}-qya^{LM} *nyi^{MO}-qya^{LM}* ADV-P.see.2S you will see
si^H-no⁰ *si^H-no* if-REL if (or yes)
ja-la^{+H} *ja-la^{+H}* NEG no
su^{LM} *su^{LM}* PRG.laydown.3S laying down
ntjaq^{HL+0} *ntjaq^{HL+0}* PRG.sleep.3S sleeping
ntykwiq *ntykwiq* C.say.3S said
no-xwe^{+H} *no-xwe^{+H}* N-ADJ boys
j̄q̄q^{LM} *j̄q̄q^{LM}* ADV.Abs those
qo^H *qo^H* CONJ with
j̄i^{MO} *j̄i^{MO}* INTJ then
- 111 CHAT *ndyi^H-sna^M ntqo^H ma^{MO}-la^{ML} nkya xka^{+H}-yaq j̄q̄q^{MO}*
 ENG The old woman went back to look for the deer.
 Word *ndyi^H-sna^M* *ndyi^H-sna^M* C.begin.3S began
ntqo^H *ntqo^H* C.exit.3S came out
ma^{MO}-la^{ML} *ma^{MO}-la^{ML}* VOC-ADJ old hag
she went (or
nkya *nkya* C.go.3S.~base left)
xka^{+H}-yaq *xka^{+H}-yaq* ADV again
j̄q̄q^{MO} *j̄q̄q^{MO}* ADV.Abs-REL then
- 112 CHAT *kwiq^{ML}-ti^{ML}-n'yq^{ML} ndywiq^{+H} knyi^M kq̄q^{LM}-no ya^{LM} ma^{MO}-la^{ML}, chi-nyi^{ML} qi^{ML}*
 ENG When she got there the bird told her the same thing.
 Word *kwiq^{ML}-ti^{ML}-* *kwiq^{ML}-ti^{ML}-*
n'yq^{ML} *n'yq^{ML}* same
ndywiq^{+H} *ndywiq^{+H}* C.say.3S said
knyi^M *knyi^M* N bird
kq̄q^{LM}-no *kq̄q^{LM}-no* ADV.Abs-REL then
ya^{LM} *ya^{LM}* C.go.3S.~base went
ma^{MO}-la^{ML} *ma^{MO}-la^{ML}* VOC-ADJ old hag
chi-nyi^{ML} *chi-nyi^{ML}* ADV it's true
qi^{ML} *qi^{ML}* NL.3 to
- 113 CHAT *chaq̄no kq̄q^{LM} su^{LM} j̄nyaq^H j̄q̄q^{LM}, wa^{MH} sqwi^{ML} na^{MO}-j̄i^M ktq̄ j̄q̄q^{LM} neq^M*

		<i>ntyqo^{M0}-chaq^{MH}</i>		
ENG		The deer ws laying there; it was full of bees.		
Word	<i>chaq^{MH}-no</i>	<i>chaq^{MH}-no</i>	COMP-REL	because
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	and then
	<i>su^{LM}</i>	<i>su^{LM}</i>	C.lay on the ground.3S	thrown/laying
	<i>jnyaq^H</i>	<i>jnyaq^H</i>	N	deer
	<i>jq^{LM}</i>	<i>jq^{LM}</i>	ADV.Abs	that
	<i>wa^{MH}</i>	<i>wa^{MH}</i>	ADV	already
	<i>sqwi^{ML}</i>	<i>sqwi^{ML}</i>	C.existential.3S	had
	<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	uhm
	<i>ktq</i>	<i>ktq</i>	N	bee
	<i>jq^{LM}</i>	<i>jq^{LM}</i>	ADV.Abs	that
	<i>neq^M</i>	<i>neq^M</i>	ADJ	inside
	<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>		
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	C.exit.3S-COMP	that
114	CHAT	<i>nd'ya^{+H}-ti ma^{M0}-la^{ML} ncha^H kwa^{ML} sna^H lo yka ti^{+H} ndyi^H-sna^M nchu^H</i>		
		<i>chq^{LM} kjj</i>		
ENG		The old woman cut two to three sticks and began hitting the skin of the deer.		
Word	<i>nd'ya^{+H}-ti</i>	<i>nd'ya^{+H}-ti</i>	C.arrive.3S.~base-	
	<i>ma^{M0}-la^{ML}</i>	<i>ma^{M0}-la^{ML}</i>	ADV	arriving
	<i>ncha^H</i>	<i>ncha^H</i>	VOC-ADJ	old hag
	<i>kwa^{ML}</i>	<i>kwa^{ML}</i>	C.brake.3S	broke
	<i>sna^H</i>	<i>sna^H</i>	NUM	two
	<i>lo</i>	<i>lo</i>	NUM	three
	<i>yka</i>	<i>yka</i>	LOC.3S	above
	<i>ti^{+H}</i>	<i>ti</i>	N	tree
	<i>ndyi^H-na^M</i>	<i>ndyi^H-na^M</i>	ADJ	thin
	<i>nchu^H</i>	<i>nchu^H</i>	C.begin.3S	began
	<i>chq^{LM}</i>	<i>chq^{LM}</i>	C.hit.3S	hit
	<i>kjj</i>	<i>kjj</i>	N.3S	back
			N	skin
115	CHAT	<i>ma^{MH} re^{ML} sa nti^{MH} si^{ML} ma^{ML}</i>		
ENG		"Oh my god!"		
Word	<i>ma^{MH}-re^{ML}</i>	<i>ma^{MH}-re^{ML}</i>	N.3S	mother
	<i>sa-</i>	<i>sa-</i>		
	<i>nti^{MH} si^{ML} ma^{ML}</i>	<i>nti^{MH} si^{ML} ma^{ML}</i>	EXCL	holy

- 116 CHAT *ntqo^H ktq ntqo^H ktq hasta twe^{H+0} ntyqq neq-jla*
 ENG The bees kept coming out and the woman couldn't walk away.
 Word *ntqo^H* *ntqo^H* C.exit.3S came out
ktq *ktq* N bee
ntqo^H *ntqo^H* C.exit.3S came
ktq *ktq* N bee
hasta *hasta* ADV until
twe^{H0} *twe^{H0}* ADJ slowly
ntyqq- *ntyqq-* PCTP.walk.3S walked
neq-jla *neq-jla* N-ADJ old woman
- 117 CHAT *ndyii^{+H} neq-jla yjoq ktq^{+H} qi*
 ENG The bees stang her all over.
 Word *ndyi^{+H}* *ndyi* C.finish.3S all
neq-jla *neq-jla* N-ADJ old woman
yjoq *yjoq* C.stung.3S stung
ktq^{+H} *ktq^{+H}* N bee
qi *qi* NL.3 to
- 118 CHAT *kqq^{LM} ntykwiq, na^{MO}-ji^M, kqq^{LM} na^H wa⁰ yla^{LM} xa^H jno⁰ ntyqq neq-jla*
 ENG The old woman could barely walk.
 Word *kqq^{LM}* *kqq^{LM}* ADV.Abs then
ntykwiq *ntykwiq* C.say.3S they said
na^{MO}-ji^M *na^{MO}-ji^M* INTJ uhm
kqq^{LM} *kqq^{LM}* ADV.Abs then
na^H-wa⁰ *na^H-wa⁰* ADV.ADV when already
yla^{LM} *yla^{LM}* C.arrive.3S.~base arrived
xa^H-jno⁰ *xa^H-jno* ADV-ADJ a little bit
ntyqq *ntyqq* PCTP.walk.3S walked
neq-jla *neq-jla* N-ADJ old woman
- 119 CHAT *kqq^{LM} ntykwiq, na^{MO}-ji^M no-xwe^{+H} tqi qa^H yjoq^{ML} ktq^{+H} qnya*
 ENG She said, "kids, I'm hurt because the bees stung me."
 Word *kqq^{LM}* *kqq^{LM}* ADV.Abs then
ntykwiq *ntykwiq* C.say.3S said
na^{MO}-ji^M *na^{MO}-ji^M* INTJ uhm
no-xwe^{+H} *no-xwe^{+H}* N-ADJ kids
tqi *tqi* N pain
qa^H *qa^H* EMPH a lot
yjoq^{ML} *yjoq^{ML}* C.stung.3S stung

		<i>ktq^{+H}</i>	<i>ktq</i>	N	bee
		<i>qnya</i>	<i>qnya</i>	PRO.A.1S	to me
120	CHAT	<i>yjoq ktq^{+H} qi^{LM} a^{ML}, yjoq r^{MH} q^{+H} ti^{MH}-qa^H jnya^{HL+0} wa^{LM} t'yq^H chaq^{MH} tyqwi^{LM}</i>			
	ENG	"The bees stung you?" asked the kids. "Yes," she answered-- "we are going to prepare a steam bath so you can get in."			
	Word	<i>yjoq</i>	<i>yjoq</i>	C.stung.3S	stung
		<i>ktq^{+H}</i>	<i>ktq</i>	N	bee
		<i>qi^{LM} a^{ML}</i>	<i>qi a^{ML}</i>	NL.2S-Q	to you
		<i>yjoq-</i>	<i>yjoq</i>	C.stung.3S	stung
		<i>r^{MH}</i>	<i>r^{MH}</i>	PRO.A.INAN	thing
		<i>q^{+H}</i>	<i>q^{+H}</i>	INTJ	ah
		<i>ti^{MH}-qa^H</i>	<i>ti^{MH}-qa^H</i>	ADV	later
		<i>jnya^{HL+0}</i>	<i>jnya^{HL+0}</i>	P.make.3S	will do
		<i>wa^{LM}</i>	<i>wa^{LM}</i>	PRO.A.PLEX	us
		<i>t'yq^H</i>	<i>t'yq^H</i>	N	steam bath
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	so that
		<i>tyqwi^{LM}</i>	<i>tyqwi^{LM}</i>		you can get in
121	CHAT	<i>chaq^{MH} nu^{ML} ks^{MO} qi^{LM} nt'kwiq no xwe^{+H}, kq^{LM} nd'sna^M nte^{MH} no-xwe^{+H} jaq^{LM} n'a^{HL+0} t'q^H nd'i^H sna^M</i>			
	ENG	"So you can get some warmth," they told her. The kids began building the steam bath.			
	Word	<i>chaq^{MH}-no^{ML}</i>	<i>chaq^{MH}-no</i>	COMP-REL	so that
		<i>ks^{MO}</i>	<i>ks^{MO}</i>	P.warm up.2S	you warm up
		<i>qi^{LM}</i>	<i>qi</i>	PRO.A.2S	to you
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S	began
		<i>nte^{MH}</i>	<i>nte^{MH}</i>	P.enter.3S	they entered
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	those
		<i>nya^{HL+0}</i>	<i>nya^{HL+0}</i>	C.built.3S	built
		<i>t'yq^H</i>	<i>t'yq^H</i>	N	steam bath
122	CHAT	<i>ndyi^H-sna^M kq^{LM}, qa^{MO}-no^{ML} wa^M kqnyi t'yq^H</i>			
	ENG	When the steam bath was deep enough...			
	Word	<i>ndyi^H-na^M</i>	<i>ndyi^H-na^M</i>	C.begin.3S	began

<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	and then
<i>qa^{MO}-no^{ML}</i>	<i>qa^{MO}-no^{ML}</i>	ADV.REL	when
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>kq̣nyi</i>	<i>kq̣nyi</i>	N	mushroom
<i>t'yq̣^H</i>	<i>t'yq̣^H</i>	N	steam bath

- 123 CHAT *qwi nyi^{HL+0} no-xwe^{+H}, kq̣q^{LM} nde^M tsa^{LM} ne^M chaq^{MH} ktsq^{MO} ntykẉiq^{ML}*
 ENG The kids they told her to get in the hole where the built the steam bath.

Word	<i>qwi</i>	<i>qwi</i>	C.exist.3S	was
	<i>nyi^{HL+0}</i>	<i>nyi^{HL+0}</i>	C.dig.3S	dug
	<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	boys
	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
	<i>nde^M</i>	<i>nde^M</i>	DEM1	here
	<i>tsa^{LM}</i>	<i>tsa^{LM}</i>	P.go.3S~3S	you will go
	<i>ne^M</i>	<i>ne^M</i>	ADV	now
	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	to
				so you warm
	<i>ktsq^{MO}</i>	<i>ktsq^{MO}</i>	P.warm up.2S	up
	<i>ntykẉiq^{ML}</i>	<i>ntykẉiq^{ML}</i>	C.say.3S	said

- 124 CHAT *ti^M ne^{HL+0}-la⁰ ndywiq^{ML} neq^{ML} jla^{ML}*
 ENG You could still hear the old woman's voice.

Word	<i>ti^M</i>	<i>ti^M</i>	ADV	still
	<i>ne^{HL+0}-la⁰</i>	<i>ne^{HL+0}-la⁰</i>	H.sound (S)-EMPH	could hear
	<i>ndywiq^{ML}</i>	<i>ndywiq^{ML}</i>	C.say.3S	said
	<i>neq^{ML}-jla^{ML}</i>	<i>neq^{ML}-jla^{ML}</i>	N-ADJ	old woman

- 125 CHAT *tyq̣q^{MO} ne^M tykeq^{HL+0} qa⁰ ne^M*
 ENG "I want to get out, it's really warm!"

Word	<i>tyq̣q^{MO}</i>	<i>tyq̣q^{MO}</i>	P.exit.1S	i will get out
	<i>ne^M</i>	<i>ne^M</i>	ADV	now
	<i>tykeq^{HL+0}</i>	<i>tykeq^{HL+0}</i>	ADJ	hot
	<i>qa⁰</i>	<i>qa^H</i>	EMPH	a lot
	<i>ne^M</i>	<i>ne^M</i>	ADV	now

- 126 CHAT *q̣q̣ ntsq^{MO} la^{ML} q̣i^{LM}, q̣q̣ ntsq^{MO} la^{ML} q̣i^{LM} ntykẉiq̣ qo^H yq̣q̣^H*
 ENG "Keep warming up, keep warming up," they would tell their mom.

Word	<i>q̣q̣</i>	<i>q̣q̣</i>	INTJ	ah
	<i>ntsq^{MO}</i>	<i>ntsq^{MO}</i>	P.warm up.2S	warm up
	<i>la^{ML}</i>	<i>la^{ML}</i>	EMPH	more

		<i>qi^{LM}</i>	<i>qi</i>	NL.2S	to you
		<i>qq</i>	<i>qq</i>	P.sit.2S	sit down
		<i>ntsq^{MO}</i>	<i>ntsq^{MO}</i>	P.warm up.2S	warm up
		<i>la^{ML}</i>	<i>la^{ML}</i>	EMPH	more
		<i>qi^{LM}</i>	<i>qi</i>	PRO.A.2S	to you
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>yqq^H</i>	<i>yqq^H</i>	N.3S	his/her mom
127	CHAT	<i>ndyi^H-sna^M tykwi^{HL+0} ra⁰ jaq^{LM} nkqā ntykqā^{MH} tsa^{ML} la^H ti^{ML} tu^H jaq^{LM}</i>			
	ENG	Suddenly, the hole closed.			
	Word	<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S	began
		<i>tykwi^{HL+0}-ra⁰</i>	<i>tykwi^{HL+0}-ra⁰</i>	ADV.N	all the time
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	then
		<i>nkqā</i>	<i>nkqā</i>	PRG.sit_flor.3S	seated
		<i>ntykqā^{MH}</i>	<i>ntykqā^{MH}</i>	PRG.close(S).3S	closed
		<i>tsa^{ML}</i>	<i>tsa^{ML}</i>	ADJ	tight
		<i>la^H-ti^{ML}</i>	<i>la^H-ti^{ML}</i>	EMPH	more
		<i>tu^H</i>	<i>tu^H</i>	N	hole
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	they said
128	CHAT	<i>ntykqā^{MH} t'yu^{+H} jaq^{LM}, ntykqā^{MH} tsa^{ML} ji^{MO} ma^{MH} ntre^{ML}</i>			
	ENG	"Mom, it closed, it closed!"			
	Word	<i>ntykqā^{MH}</i>	<i>ntykqā^{MH}</i>	PRG.close(S).3S	closed
		<i>t'yu^{+H}</i>	<i>t'yu^{+H}</i>	N	hole
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>ntykqā^{MH}</i>	<i>ntykqā^{MH}</i>	PRG.close(S).3S	closed
		<i>tsa^{ML}</i>	<i>tsa^{ML}</i>	ADJ	for sure
		<i>ji^{MO}</i>	<i>ji^{MO}</i>	INTJ	then
		<i>ma^{MH} ntre^{ML}</i>	<i>ma^{MH} ntre^{ML}</i>	EXCL	mother
129	CHAT	<i>ja ne^{H+0} qa⁰ ndywiq^{ML} neq^{ML} jla^{ML} ji^{MO}, kqā^{LM} nkjwi^{LM} neq-jla jaq^{LM}</i>			
	ENG	The old woman stopped talking; then she died.			
	Word	<i>ja</i>	<i>ja</i>	NEG	no
		<i>ne^{H0}</i>	<i>ne²⁴</i>	PRG.sound (S)	sounded
		<i>qa⁰</i>	<i>qa^H</i>	EMPH	more
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	spoke
		<i>neq^{ML}-jla^{ML}</i>	<i>neq-jla^{ML}</i>	N-ADJ	old woman

		<i>jĩ^{MO}</i>	<i>jĩ^{MO}</i>	INTJ	then
		<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>nkjwi^{LM}</i>	<i>nkjwi^{LM}</i>	C.die.3S	died
		<i>neq-jla</i>	<i>neq-jla</i>	N-ADJ	old woman
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	ADV.Abs	that
130	CHAT	<i>kq̣q^{LM} ndyi^H-sna^M na^{MO}-jĩ^M yjwi^{LM} ska ktu^{LM} jq̣q^{MO} ndywiq^{ML}</i>			
	ENG	They began to kill a chicken.			
	Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs	then
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S	began
		<i>na^{MO}-jĩ^M</i>	<i>na^{MO}-jĩ^M</i>	INTJ	uhm
		<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
		<i>ska</i>	<i>ska</i>	NUM	one
		<i>ktu^{LM}</i>	<i>ktu^{LM}</i>	N	chicken
		<i>jq̣q^{MO}</i>	<i>jq̣q^{MO}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
131	CHAT	<i>yjwi^{LM} ska ktu^{LM} slu^{HL+0} jne^{LM} ktu^{LM} jq̣q^{LM} slu^{HL+0}</i>			
	ENG	They killed the chicken and spilled its blood.			
	Word	<i>yjwi^{LM}</i>	<i>yjwi^{LM}</i>	C.kill.3S	killed
		<i>ska</i>	<i>ska</i>	NUM	one
		<i>ktu^{LM}</i>	<i>ktu^{LM}</i>	N	chicken
		<i>slu^{HL+0}</i>	<i>slu^{HL+0}</i>	C.spill.3S	threw
		<i>jne^{LM}</i>	<i>jne^{LM}</i>	N	blood
		<i>ktu^{LM}</i>	<i>ktu^{LM}</i>	N	chicken
		<i>jq̣q^{LM}</i>	<i>jq̣q^{LM}</i>	ADV.Abs	that
		<i>slu^{HL+0}</i>	<i>slu^{HL+0}</i>	C.spill.3S	threw
132	CHAT	<i>nde^M ka^{ML} sti^H klo nde^M ka^{ML} yq̣q^H klo^{ML} qwẹ ku^{LM} klo^{MH} qwẹ qu^{MO} klo^{ML}</i>			
	ENG	"This will be the mother, the father... you eat first, you will live first."			
	Word	<i>nde^M</i>	<i>nde^M</i>	DEM1	here
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.3S	will be
		<i>sti^H</i>	<i>sti^H</i>	N.3S	father
		<i>klo^{ML}</i>	<i>klo^{ML}</i>	N.2S	your face
		<i>nde^M</i>	<i>nde^M</i>	DEM1	here
		<i>ka^{ML}</i>	<i>ka^{ML}</i>	P.COP.3S	will be
		<i>yq̣q^H</i>	<i>yq̣q^H</i>	N.3S	its mother
		<i>klo^{ML}</i>	<i>klo^{ML}</i>	N.3S	its face
		<i>qwẹ</i>	<i>qwẹ</i>	PRO.2S	you

		<i>ku^{LM}</i>	<i>ku^{LM}</i>	P.eat.2S	you will eat
		<i>klo^{MH}</i>	<i>klo^{MH}</i>	ORD_NUM	first
		<i>qwɛ</i>	<i>qwɛ</i>	PRO.2S	you
		<i>qu^{M0}</i>	<i>qu^{M0}</i>	P.show.3S	you will show
		<i>klo^{ML}</i>	<i>klo^{ML}</i>	ORD_NUM	first
		<i>ntykwiq^{ML}</i>	<i>ntykwiq</i>	C.say.3S	said
133	CHAT	<i>ntykwiq ntqɛ jaq^{M0} ndywiq^{ML} ntyqo^{M0} chaq^{MH}, kq^{LM} no ykwiq ti no xwe^{+H}</i>			
	ENG	They ended up alone because they killed their mother and father.			
	Word	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>ntqɛ</i>	<i>ntqɛ</i>	H.exist.3S	was
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>ntyqo^{M0}-</i>	<i>ntyqo^{M0}-</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that is how
		<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
		<i>no-yqwi</i>	<i>no-yqwi</i>	REL.C.exist.3S	were
		<i>ykwiq-ti</i>	<i>ykwiq-ti</i>	REFL-ADV	only
		<i>no-xwe^{+H}</i>	<i>no-xwe^{+H}</i>	N-ADJ	kids
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>wa^M</i>	<i>wa^M</i>	CONJ	and
		<i>yjwi^{LM}</i>	<i>yjwi</i>	C.kill.3S	killed
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>yq^H</i>	<i>yq^H</i>	N.3S	its mother
		<i>wa^M</i>	<i>wa^M</i>	ADV	already
		<i>yjwi^{LM}</i>	<i>yjwi</i>	C.kill.3S	killed
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>sti</i>	<i>sti</i>	N.3S	their father
		<i>jaq^{M0}</i>	<i>jaq^{M0}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they said
134	CHAT	<i>kq^{LM} no^{H+0} wa⁰ ndyi^H chaq^{MH} nkjwi^{LM} sti wa^M ndyi^H, hasta kq^{LM} no wa^M</i>			
	ENG	When everything happened and they had killed their parents, then they realized who God is.			
	Word	<i>kq^{LM}-no⁰</i>	<i>kq^{LM}-no</i>	ADV.Abs-REL	then
		<i>wa⁰</i>	<i>wa⁰</i>	ADV	already
		<i>ndyi^H</i>	<i>ndyi^H</i>	C.finish.3S	finished

<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	N	thing
<i>nkjwi^{LM}</i>	<i>nkjwi^{LM}</i>	C.die(S).3S	died
<i>sti</i>	<i>sti</i>	N.3S	their father
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>ndyi^H</i>	<i>ndyi^H</i>	C.finish.3S	finished
<i>hasta</i>	<i>hasta</i>	ADV	until
<i>kq^{LM}-no</i>	<i>kq^{LM}-no</i>	ADV.Abs-REL	then
<i>wa^M</i>	<i>wa^M</i>	ADV	already
<i>ntq^{LM}</i>	<i>ntq^{LM}</i>	C.see.3S	saw
<i>no</i>	<i>no</i>	REL	who
<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
<i>nd'yo^H-si⁰</i>	<i>nd'yo^H-si⁰</i>	N	god
<i>jq^{M0}</i>	<i>jq^{M0}</i>	ADV.Abs-REL	then

- 135 CHAT *chaq^{MH} nka^{ML}-no^H qne^{LM} wq kwq^{M0}-ntyq^{ML} ne^M ndywiq^H nd'yo^{HL+0}-si⁰ ne^{M0}*
ENG "Why did you do that?" asked God.

Word	<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	Q	why
	<i>nka^{ML+H}-no^H</i>	<i>nka^{ML+H}-no^H</i>	H.COP.3S-REL	that
	<i>qne^{LM}</i>	<i>qne^{LM}</i>	C.do.3S	did
	<i>wq-</i>	<i>wq-</i>	PRO.2S	you guys
	<i>kwq^{M0}-</i>	<i>kwq^{M0}-</i>		
	<i>ntyq^{ML}</i>	<i>ntyq^{ML}</i>	ADV-H.appear.3S	like that
	<i>ne^M</i>	<i>ne^M</i>	ADV	now
	<i>ndywiq^H</i>	<i>ndywiq^H</i>	C.say.3S	said
	<i>nd'yo^{HL+0}-si⁰</i>	<i>nd'yo^{HL+0}-si⁰</i>	N	god
	<i>ne^M</i>	<i>ne^M</i>	ADV	now

- 136 CHAT *na^M-ji^M kq^{LM} ntykwiq nd'yo^{HL+0}-si⁰ jq^{LM} qo^H*

ENG Then God told them:

Word	<i>na^M-ji^M</i>	<i>na^M-ji^M</i>	INTJ	uhm
	<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
	<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
	<i>nd'yo^{HL+0}-si⁰</i>	<i>nd'yo^{HL+0}-si⁰</i>	N	god
	<i>jq^{LM}</i>	<i>jq^{LM}</i>	ADV.Abs	that
	<i>qo^H</i>	<i>qo^H</i>	with.3S	with

- 137 CHAT *yjoq yka^{LM} la^{ML} ska siq yu^{+H} chaq^{MH} tq nka^{ML} no tyqo^{M0} tkwa^{MH} tyqa qi-*
ENG "Dig the wall until water comes out."

Word	<i>yjoq</i>	<i>yjoq</i>	P.put in.3S	put in
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		<i>yka^{LM}</i>	<i>yka^{LM}</i>	N	stick
		<i>la^{ML}</i>	<i>la^{ML}</i>	EMPH	more
		<i>ska</i>	<i>ska</i>	NUM	a
		<i>siq</i>	<i>siq</i>	N	waist
		<i>yu^{+H}</i>	<i>yu</i>	N	wall
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	COMP	so that
		<i>tq</i>	<i>tq</i>	Q [specific]	who
		<i>nka^{ML+H}-no</i>	<i>nka^{ML+H}-no</i>	C.COP.3S-REL	is
		<i>tyqo^{M0}</i>	<i>tyqo^{M0}</i>	P.exit.3S	will come out
		<i>tkwa^{MH}</i>	<i>tkwa^{MH}</i>	PCTP.sit.3S	will come out
		<i>tyqa</i>	<i>tyqa</i>	N	water
		<i>qi-ⁱM0</i>	<i>qi-ⁱM0</i>	NL.3	to
138	CHAT	<i>qo^H tq nka^{ML} no^H tyqo^{M0} jnyaq^{LM} qi ntykwiq</i>			
	ENG	"Ans so that honey comes out."			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>tq-</i>	<i>tq-</i>	Q [specific]	who
		<i>nka^{ML+H}-no^H</i>	<i>nka^{ML+H}-no^H</i>	C.COP.3S-REL	is
		<i>tyqo^{M0}</i>	<i>tyqo^{M0}</i>	P.exit.3S	get out
		<i>jnyaq^{LM}</i>	<i>jnyaq^{LM}</i>	N	honey
		<i>qi</i>	<i>qi</i>	NL.3	to
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
139	CHAT	<i>na^{MH}-nka^{ML}-no^H tyqo^{M0} ti^{ML} qwa^{ML} ti^{MH}-qa^H yjoq^H yka^{LM}-la^{ML} siq^{ML} yu^{+H}</i>			
	ENG	so they both began to scrape			
	Word	<i>na^{MH}-</i>	<i>na^{MH}-</i>		
		<i>nka^{ML+H}-no^H</i>	<i>nka^{ML+H}-no^H</i>	N-H.COP.REL	whatever
		<i>tyqo^{M0}-ti^{ML}</i>	<i>tyqo^{M0}-ti^{ML}</i>	P.exit.3S-ADV	comes out
		<i>qwa^{ML}</i>	<i>qwa^{ML}</i>	PRO.A.PLEXCL	you guys
		<i>ti^{MH}-qa^H</i>	<i>ti^{MH}-qa^H</i>	ADV	later
		<i>yjoq^H</i>	<i>yjoq^H</i>	C.poke.2S	poke
		<i>yka^{LM}</i>	<i>yka</i>	N	stick
		<i>la^{ML}</i>	<i>la^{ML}</i>	LOC.3S	do it
		<i>siq^{ML}</i>	<i>siq</i>	N	waist
		<i>yu^{+H}</i>	<i>yu</i>	N	yu4
		<i>ntykwiq</i>	<i>ntykwiq</i>	C.say.3S	said
		<i>ndyo-si^{H0}</i>	<i>ndyo-si^{H0}</i>	N	god
		<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that
		<i>qo^H</i>	<i>qo^H</i>	with.3S	with

140	CHAT	<i>kq̣q^{LM} ndyi^H-sna^M nṭ̣̣^{MH} yjoq^{ML} yka^{ML} j̣̣̣^{M0}</i>		
	ENG	Each one started digging.		
	Word	<i>kq̣q^{LM}</i>	<i>kq̣q^{LM}</i>	ADV.Abs then
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	C.begin.3S began
		<i>nṭ̣̣^{MH}</i>	<i>nṭ̣̣^{MH}</i>	C.enter.3S entered
		<i>yjoq^{ML}</i>	<i>yjoq</i>	C.poke.3S prick
		<i>yka^{ML}</i>	<i>yka</i>	N stick
		<i>j̣̣̣^{M0}</i>	<i>j̣̣̣^{M0}</i>	INTJ then
141	CHAT	<i>no-nka^{ML} kcha^{LM} kwa^{MH} no^{ML}</i>		
	ENG	That one is the sun.		
	Word	<i>no-nka^{ML+H}</i>	<i>no-nka^{ML+H}</i>	REL-H.COP.3S who is?
		<i>kcha^{LM}</i>	<i>kcha^{LM}</i>	N sun
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3 that one
		<i>no^{ML}</i>	<i>no</i>	REL who
142	CHAT	<i>kwiq^{LM} ka^{ML} tyqa ndywa^{HL+0} q̣̣̣⁰</i>		
	ENG	When the sun started digging, water came out.		
	Word	<i>kwiq^{LM}-ka^{ML}</i>	<i>kwiq^{LM}-ka^{ML}</i>	REFL-ADV only
		<i>tyqa</i>	<i>tyqa</i>	N water
		<i>ndywa^{HL+0}</i>	<i>ndywa^{HL+0}</i>	PCTP.sit.3S came out
		<i>q̣̣̣⁰</i>	<i>q̣̣̣⁰</i>	with.3S to
143	CHAT	<i>qo^H kwiq^{ML} no^{ML}-nka^{ML} koq^{MH} kwa^{MH} no^{ML}</i>		
	ENG	And that one is the moon.		
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ and
		<i>kwiq^{ML}</i>	<i>kwiq^{ML}</i>	REFL that one
		<i>no^{ML}-nka^{ML+H}</i>	<i>no^{ML}-nka^{ML+H}</i>	H.COP.3S is
		<i>koq^{MH}</i>	<i>koq^{MH}</i>	N moon
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3 that one
		<i>no^{ML}</i>	<i>no</i>	Q who
144	CHAT	<i>kwiq^{LM} ka^{ML} jnyaq^{LM} ndywa^{HL+0} q̣̣̣⁰ j̣̣̣^{M0}</i>		
	ENG	Only honey came out.		
	Word	<i>kwiq^{LM}-ka^{ML}</i>	<i>kwiq^{LM}-ka^{ML}</i>	REFL-ADV only
		<i>jnyaq^{LM}</i>	<i>jnyaq^{LM}</i>	N honey
		<i>ndywa^{HL+0}</i>	<i>ndywa^{HL+0}</i>	PCTP.sit.3S came out
		<i>q̣̣̣⁰</i>	<i>q̣̣̣⁰</i>	NL.3 to
		<i>j̣̣̣^{M0}</i>	<i>j̣̣̣^{M0}</i>	INTJ then

145	CHAT	<i>kq̄q^{LM} no na^{MO}-jĩ^M</i>			
	ENG	Then said:			
	Word	<i>kq̄q^{LM}-no</i>	<i>kq̄q^{LM}-no</i>	ADV.Abs-REL	and then
		<i>na^{MO}-jĩ^M</i>	<i>na^{MO}-jĩ^M</i>	INTJ	uhm
146	CHAT	<i>kq̄q^{LM} tykwĩq̄ qw̄ę no no na^{MO}-jĩ^M no ndywa^{HL+0} no ndywa^{HL+0} tyqa re^M</i> <i>nde^M nde^M kno^H ke lo kw̄ę ntykwĩq̄^{ML} ntyqo^{MO} chaq^{MH}</i>			
	ENG	"The one that had water come out, it will be the right side," he said.			
	Word	<i>kq̄q^{LM}</i>	<i>kq̄q^{LM}</i>	ADV.Abs	then
		<i>ntykwĩq̄</i>	<i>ntykwĩq̄</i>	C.say.3S	said
		<i>qw̄ę</i>	<i>qw̄ę</i>	PRO.2S	you
		<i>no</i>	<i>no</i>	REL	who
		<i>no</i>	<i>no</i>	REL	who
		<i>na^{MO}-jĩ^M</i>	<i>na^{MO}-jĩ^M</i>	INTJ	uhm
		<i>no</i>	<i>no</i>	REL	who
		<i>ndywa^{HL+0}</i>	<i>ndywa^{HL+0}</i>	PTCP.brake out.3S	brake out
		<i>no</i>	<i>no</i>	REL	who
		<i>ndywa^{HL+0}</i>	<i>ndywa^{HL+0}</i>	PTCP.brake out.3S	brake out
		<i>tyqa</i>	<i>tyqa</i>	N	water
		<i>re^M</i>	<i>re^M</i>	DEM1	here
		<i>nde^M</i>	<i>nde^M</i>	DEM1	here
		<i>nde^M</i>	<i>nde^M</i>	DEM1	here
		<i>kno^H</i>	<i>kno^H</i>	P.stay.3S	wil stay
		<i>ke-lo</i>	<i>ke-lo</i>	N-N	eye
		<i>kw̄ę</i>	<i>kw̄ę</i>	ADJ	right
		<i>ntykwĩq̄^{ML}</i>	<i>ntykwĩq̄</i>	C.say.3S	said
		<i>ntyqo^{MO}-</i>	<i>ntyqo^{MO}-</i>		
		<i>chaq^{MH}</i>	<i>chaq^{MH}</i>	H.exit.3S-COMP	that's right
147	CHAT	<i>qo^H no ndywa^{HL+0} jnyaq^{LM} kwa^{MH} no^{ML} kno^H ke lo ka^{LM} ndywiq̄ nd'yo^H-si⁰</i> <i>jq̄q^{LM} qo^H</i>			
	ENG	"And the one that had honey come out will stay on the left," God told them.			
	Word	<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>no</i>	<i>no</i>	REL	when
		<i>ndywa^{HL+0}</i>	<i>ndywa^{HL+0}</i>	H.brake out.3S	brake out
		<i>jnyaq^{LM}</i>	<i>jnyaq^{LM}</i>	N	honey
		<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	that
		<i>no^{ML}</i>	<i>no</i>	Q	who

<i>kno^H</i>	<i>kno^H</i>	P.stay.3S	will stay
<i>ke-lo</i>	<i>ke-lo</i>	N-N	eye
<i>ka^{LM}</i>	<i>ka^{LM}</i>	ADJ	left
<i>ndywiq</i>	<i>ndywiq</i>	C.say.3S	said
<i>nd'yo^{H-si⁰}</i>	<i>nd'yo^{H-si⁰}</i>	N	god
<i>jaq^{LM}</i>	<i>jaq^{LM}</i>	ADV.Abs	that one
<i>qo^H</i>	<i>qo^H</i>	with.3S	with

- 148 CHAT *ja ne^{+H} kwq^{M0}-n'ya^{ML} ndykwiq^{+H}, sqwe^{MH}-raq^{MH} ndykwiq^{ML} jaq^{M0}*
ENG That's what he said. "O.K. then," they answered.
Word *jane^{+H}* *jane^{+H}* Affirmation that way
kwq^{M0}-n'ya^{ML} *kwq^{M0}-n'ya^{ML}* ADV-H.appear.3S that way
ndykwiq^{+H} *ndykwiq* C.say.3S said
sqwe^{MH}-raq *sqwe^{MH}-raq* ADJ-PRO.A.INAN that's o.k.
ndykwiq^{ML} *ndykwiq* C.say.3S said
jaq^{M0} *jaq^{M0}* ADV.Abs-REL then
- 149 CHAT *ja ska^{+H} chaq^{MH} nka^{ML} ne^{M-i^{M0}} wa tykwe^{HL+0} ji⁰ wq⁰ kya^{ML} wq^M kwq^M ska^{LM}*
ENG *jnya^{MH} ntqε chaq^{MH} ka^{ML} wq^{+H} ne^M, kwq^{M0}-a^{ML} ndywiq^{+H}*
"\"There is no problem, the only thing left is to climb to the sky and fullfill
your duties.\""
Word *ja* *ja* NEG no
ska^{+H} *ska* NUM nothing
chaq^{MH} *chaq^{MH}* N word
nka^{ML+H} *nka^{ML+H}* H.COP.3S is
ne^{M-i^{M0}} *ne^{M-i^{M0}}* ADV.INTJ now
wa *wa* ADV already
tykwe^{HL+0} *tykwe^{HL+0}* P.go up (S).3S will go up
ji⁰ *ji⁰* ADV at once
wq^{H+0} *wq* PRO.A.PLEXCL you guys
kya^{ML+H} *kya^{ML+H}* P.go.3S.base wil go
wq^M *wq^M* PRO.A.PLEXCL you guys
kwq^M *kwq^M* ADJ up
ska^{LM} *ska^{LM}* NUM each one
jnya^{MH} *jnya^{MH}* N work
ntqε *ntqε* H.exist.3S has
chaq^{MH} *chaq^{MH}* N thing
ka^{ML} *ka^{ML}* P.COP.3S will do
wq^{+H} *wq* PRO.A.PLEXCL you guys
ne^M *ne^M* ADV now

		<i>kwq^{M0}-a^{ML}</i>	<i>kwq^{M0}-a^{ML}</i>	ADV-H.appear.3S	that way
		<i>ndywiq^{+H}</i>	<i>ndywiq</i>	C.say.3S	said
150	CHAT	<i>kwq^{M0} n'yq^{ML} ndywiq^{+H} nd'yo^{HL+0}-si⁰ jqq^{LM} qo^H ndyi^H-sna^M</i>			
	ENG	That's what God told them.			
	Word	<i>kwq^{M0}-n'yq^{ML}</i>	<i>kwq^{M0}-n'yq^{ML}</i>	ADV-H.appear.3S	that's right
		<i>ndywiq^{+H}</i>	<i>ndywiq</i>	C.say.3S	said
		<i>nd'yo^{HL+0}-si⁰</i>	<i>nd'yo^{HL+0}-si⁰</i>	N	god
		<i>jqq^{LM}</i>	<i>jqq^{LM}</i>	ADV.Abs	that
		<i>qo^H</i>	<i>qo^H</i>	with.3S	and
		<i>ndyi^H-sna^M</i>	<i>ndyi^H-sna^M</i>	H.begin.3S	started
151	CHAT	<i>kq^{LM} a^{ML} no^{+H} na^{M0}-ji^M ntykwε^{MH} nkya^{ML} kwq^M jqq^{M0} ndywiq^{ML}</i>			
	ENG	So they say that they climbed to the sky.			
	Word	<i>kq^{LM}-a^{ML}</i>	<i>kq^{LM}-a^{ML}</i>	ADV.Abs-NEG	then
		<i>no^{+H}</i>	<i>no</i>	REL	when
		<i>na^{M0}-ji^M</i>	<i>na^{M0}-ji^M</i>	INTJ	uhm
		<i>ntykwε^{MH}</i>	<i>ntykwε^{MH}</i>	C.go up.3S	went up
		<i>nkya^{ML+H}</i>	<i>nkya^{ML+H}</i>	PTCP.go.3S.~	it left
		<i>kwq^M</i>	<i>kwq^M</i>	ADJ	up
		<i>jqq^{M0}</i>	<i>jqq^{M0}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	said
152	CHAT	<i>kq^{LM} nka^{ML} no^{+H} yno^H no^{ML} nka^{ML} kcha^{LM} qo^H koq^{MH} jqq^{M0} ndywiq^{ML}</i>			
	ENG	That's how they ended as the sun and the moon.			
	Word	<i>kq^{LM}</i>	<i>kq^{LM}</i>	ADV.Abs	then
		<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
		<i>no^{+H}</i>	<i>no</i>	REL	when
		<i>yno^H</i>	<i>yno^H</i>	C.stay.3S	stayed
		<i>no^{ML}</i>	<i>no</i>	Q	who
		<i>nka^{ML+H}</i>	<i>nka^{ML+H}</i>	H.COP.3S	is
		<i>kcha^{LM}</i>	<i>kcha^{LM}</i>	N	sun
		<i>qo^H</i>	<i>qo^H</i>	CONJ	and
		<i>koq^{MH}</i>	<i>koq^{MH}</i>	N	moon
		<i>jqq^{M0}</i>	<i>jqq^{M0}</i>	ADV.Abs-REL	then
		<i>ndywiq^{ML}</i>	<i>ndywiq</i>	C.say.3S	they say
153	CHAT	<i>kwa^{MH} no^{ML} qne^{LM} no qne^{LM} kwq^{M0}-n'yq^{ML} ndywiq^{+H}</i>			
	ENG	This is what they did			
	Word	<i>kwa^{MH}</i>	<i>kwa^{MH}</i>	DEM3	that

<i>no</i> ^{ML}	<i>no</i>	REL	who
<i>qne</i> ^{LM}	<i>qne</i> ^{LM}	C.do.3S	did
<i>no</i>	<i>no</i>	REL	who
<i>qne</i> ^{LM}	<i>qne</i> ^{LM}	C.do.3S	did
<i>kwq</i> ^{MO} - <i>n'yq</i> ^{ML}	<i>kwq</i> ^{MO} - <i>n'yq</i> ^{ML}	ADV-H.appear.3S	like that
<i>ndywiq</i> ^{+H}	<i>ndywiq</i> ^{+H}	C.say.3S	said

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