

COMPARATIVE STUDY OF MEZQUITAL OTOMI AND MEXICAN SPANISH

GRAMMAR AND PHONOLOGY

by

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Comparative Study of Mezquital Otomi and Mexican Spanish Grammar and Phonology

Thesis directed by Professor J. Andrew Cowell

My degree will specialize in teaching English to speakers of other languages.

Comparative studies of different languages are very useful for language teachers. The idea for this thesis grew from a video I made which presents the Mezquital Otomi language to Spanish speakers of Otomi ancestry. Mezquital Otomi is spoken in central Mexico, so it has had much contact with Mexican Spanish ever since Spanish conquest in the sixteenth century. There used to be many dialects of a single Otomi language, including the Mezquital dialect, spoken by the Mezquital Otomi people. However, nowadays those dialects have become mutually unintelligible languages.

My speakers for this endeavor were two sisters who spoke Mezquital Otomi with their mother in Mexico until about ages eight and nine, when they began learning Spanish. They never went to school in their native country, instead working in the fields. Their experience seems typical of Otomi people, who were conquered by the Aztecs shortly before the Spanish arrived. For hundreds of years, they have been poor; Mezquital Otomi is a low-status language. Mezquital Otomi is one of the more widely spoken Otomian languages. Nonetheless, many Otomi parents want their children to learn Spanish in order to ascend the social ladder. My speakers are now about 50 and 51 years old. They have lived in Boulder, Colorado for about six years, and speak Spanish at native level.

There are many similarities and differences between the two languages. For example, Mezquital Otomi contains three phonemic tones, while Spanish has none. Otomi tones may resemble differences in pitch, vowel length, or stress to Spanish speakers. Phonemes in Mezquital Otomi but not Mexican Spanish include /ε/, /ʊ/, /φ/, and /ʃ/. Grammatically, both languages are nominative-accusative and fusional. The basic word order in Mezquital Otomi and Mexican Spanish is AVP. However, the former sometimes uses verbs for things that would be expressed by adjectives in Spanish. For example, “to be cold” is a verb. Furthermore, Otomi does not mark gender, while Spanish genders everything, even inanimate objects. Knowledge of Spanish would help learners of Otomi in some ways, but also present them with challenges.

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## Introduction

I have worked with speakers of Mezquital Otomi during almost the entire time I have been a graduate student at the University of Colorado, Boulder. I chose this school because it had a two-year master's program in Linguistics for TESOL Professionals. My career goal is to teach English as a second/foreign language at the university level. I grew up learning about different cultures, and saw TESOL (teaching English to speakers of other languages) as a way to further a social justice goal.

### How TESOL and Mezquital Otomi Further Social Justice

As a university ESL/EFL professor, I will be able to increase the number of educated professionals in countries that have emerging economies. In many places, people must know English in order to secure a powerful job. A teacher never reaches only one student or class; they will in turn affect the other people in their native countries. Nations such as China and South Korea are rapidly developing, in part because of English teachers.

Some English teachers worry that they are causing their students to lose their native languages and cultures. But my mother is bilingual in French and English, so I knew that people could be fluent in more than one language. Furthermore, knowledge of English can actually foment intercultural understanding. English is today's international lingua franca, so people who know it as a second language can communicate their people's perspective to a wider audience. As a writing and speaking teacher, I will give my students the power to represent their native countries and cultures.

I am fluent in Spanish, and have often wished that I could find a job teaching in Latin America. Since the age of 15, I have participated in various service projects that help people in

that region. I have seen grinding poverty, resulting in minimal education and a lack of basic healthcare. At the same time, I have been amazed by friendly, hardworking people from a diversity of indigenous cultures. When I came to graduate school, I hoped that I would be able to complete some sort of educational service project during my time here.

I had hardly begun school when I heard that Finn Thye, a Ph.D. student in my department, was recruiting people to document indigenous languages of the Americas. She had already found speakers among the Latino immigrant community in Denver and Boulder, Colorado. When I suggested that I document a language as a thesis, she helped me contact her advisor, J. Andrew Cowell. We decided that I would work with two speakers of Mezquital Otomi.

When I first met with Andy, he had another idea for me in addition to a thesis. I spent part of 2011 working for him as a research assistant, creating a video that presents the Mezquital Otomi language for heritage speakers to learn. We defined heritage speakers as grown children of Otomi immigrants who speak Spanish and perhaps English, but want to learn Mezquital Otomi. The video is titled, “El otomi mezquital para los hispanohablantes,” or “Mezquital Otomi for Spanish Speakers.” My career goal is to increase the leadership classes of other countries by teaching English to college students. In a sense, I thought, the adult children of Otomi immigrants are the leadership class of their people. Having grown up in the United States, they have had many more opportunities for education than have Otomi people in Mexico. If they learn Mezquital Otomi, they should be able to elevate their people’s status.



## Background and Design of This Project

Mezquital Otomi is one of the languages spoken by the Otomi people, who are from the Central Highlands region of Mexico. The Otomian family of languages is a subset of the Otomanguan one ([http://www.ethnologue.com/show\\_family.asp?subid=1865-16](http://www.ethnologue.com/show_family.asp?subid=1865-16), 2011). My speakers grew up speaking Otomi with their mother in Mexico until they started learning Spanish around ages eight and nine. They are now about 50 and 51 years old, and came to the United States about six years ago. I began working with them in March, 2011.

First, I elicited some basic vocabulary for topics in the video. These words included Otomi words for places in Mexico, animals, numbers, etc. I met with my speakers for about an hour or two at a time, mostly individually, at the University of Colorado, Boulder. Twice, the younger sister generously made tamales at her home in Boulder. I went there with a camera and filmed that event. The video features her explanation of how to make tamales in both Spanish and Otomi, with key words highlighted for learners. I finished the video in August.

Some of the data for the phonemes and phonology sections of this paper is from the video, since any words contain the sounds of a language. With the start of the fall 2011 semester, I began elicitation sessions on campus for my thesis. For about two hours at a time, I asked the younger sister to translate sentences from Spanish to Mezquital Otomi. The data that I analyzed in the grammar section is from these sessions. They took place from August to November, 2011. Otomi has no writing system of its own; all utterances in that language have been transcribed using the International Phonetic Alphabet here.

This paper will focus on comparing Mezquital Otomi with Mexican Spanish for teaching purposes. Language learners' strengths and weaknesses in the target language are often the result of grammar and pronunciation similarities and differences between it and their native

language. For example, the alveolar trill in Spanish is notoriously hard for English speakers to produce. But the same phoneme exists in Gulf Arabic, so if a Gulf Arabic speaker started learning Spanish, that knowledge would help him or her.

The sisters I worked with are from a rural area in the state of Hidalgo. They never had a chance to go to school in Mexico, but instead spent their childhood working in the fields. As I got to know them, it seemed clear to me that they are barely literate in Spanish, though they speak that language at native level. At every elicitation session, I brought a written list of sentences in Spanish for my speaker to translate into Mezquital Otomi. When Francisca asked me to repeat a sentence, she would always say she had forgotten her glasses. This happened several times. I think she was embarrassed that she could not read the words on the page. She did take one-word notes at various times, such as if she had to think or ask Bernarda for a word in Otomi. Even then, sometimes I had to help her with spelling. Bernarda's reading comprehension is very low; she had trouble with a simple page of directions to the university.

Nonetheless, both of my speakers are exceedingly smart and resourceful. Their energy and enthusiasm, as well as their knowledge of Otomi, are apparent in my video. Neither this paper nor the video would have been possible without them.

My thesis will focus on the grammatical and phonological differences between Mezquital Otomi and Mexican Spanish. There have been many contrastive studies between English and other languages (David Rood, personal communication, March 21, 2012). This study is different because it focuses on two languages that have had much contact with each other. My thesis could even be used as background for the purpose of teaching Mezquital Otomi to Spanish speakers.

Finn Thye and another student had already begun working with the speakers that Andy selected for me. Her research partner, Alexander Ferguson, had completed a B.A. in linguistics from our university; he was working on a second bachelor's degree, in anthropology. Ideas from Finn and Alexander's elicitation sessions are therefore scattered throughout my paper.

### Information About Otomi

My source for this section is Hekking and Bakker, 2007.

Otomi is the fifth most commonly spoken indigenous language in Mexico. It has had contact with Nahuatl since the beginning of the tenth century, when the Aztecs came into Otomi territory, and Nahuatl became the privileged language when the twelfth century started. Otomi has been influenced by Spanish since the beginning of the sixteenth century, and is now spoken by about 330,000 bilinguals in the states of Mexico, Hidalgo, Queretaro, Puebla, Guanajuato, Tlaxcala, Veracruz, and Michoacan.

Spanish missionaries such as Fray Pedro Carceres and Fray Alonso Urbano documented Otomi in the sixteenth century. They used Spanish orthography, which lacked many of the sounds in Otomi. The twentieth century saw a policy of bilingual education in Mexican indigenous communities, but most Otomi people are still illiterate in their own language and many do not speak standard Spanish well. Otomi is only spoken informally, among family and friends. Thus my speakers' experience is fairly typical of Otomi people.

Some aspects of Otomi grammar and phonology transfer into the Spanish of Otomi people in Mexico; their Spanish is thus imperfect. Since Otomi is a stigmatized language, many Otomi people do not want to teach it to their children. Also, the younger that Otomi people learn

Spanish, the more they insert loanwords into their Otomi, and the closer their Spanish is to the standard Mexican version.

#### More Acknowledgements

I received valuable help on my thesis from Professor David Rood in the Linguistics Department at the University of Colorado, Boulder. He is the person who first taught me how to analyze grammar in documentation. Professor Esther Brown, in the Department of Spanish and Portuguese, also provided me with reading recommendations on Spanish phonology. These books gave me information that I needed to compare patterns in the sounds of Spanish to those of Mezquital Otomi. I am immensely grateful for the support of these two professors.

## Phonemes of Mezquital Otomi and Mexican Spanish

The phonemes of Mezquital Otomi are as follows:

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Ejective Stop		t'	ts'	tʃ'	k'	
Unaspirated Stop	p	t	ts	tʃ	k	ʔ
Voiced Fricative						
Voiceless Fricative	ɸ	θ	s	ʃ	x	h
Nasal	m	n		ɲ		
Tap or Flap			r			
Lateral			l			
Semivowel	w			j		

	Front		Central		Back	
	Oral	Nasal	Oral	Nasal	Oral	Nasal

Close	i      ñ	I	u    ʊ      ù
Close-mid	e		o      õ
Near-open	ɛ      ẽ		
Open		a      ǣ	

The consonants of Mexican Spanish follow:

	Labial	Alveolar	Post- Alveolar	Palatal	Velar	Labio-velar	Glottal
Plosive	/p/ /b/	/t/ /d/		/ð/	/k/ /g/	/k <sup>w</sup> /	
Affricate	/β/	/tʃ/ /ts/	/tʃ/ /dʒ/				
Fricative	/f/ /v/	/s/ /z/	/ʃ/ /ʒ/		/x/ /ɣ/	/x <sup>w</sup> / /ɣ <sup>w</sup> /	/χ/
Nasal	/m/	/n/		/ɲ/	/ŋ/		
Approximant		/l/		/j/ /ɰ/		/w/	
Trill		/r/ /ɾ/					

From [http://en.wikipedia.org/wiki/Mexican\\_Spanish](http://en.wikipedia.org/wiki/Mexican_Spanish), 2011.

Spanish has just five vowels: /a/, /e/, /i/, /o/, and /u/.

Mezquital Otomi includes many phonemes that do not exist in Spanish. Otomi vowels include /ʊ/, as in /ʊni/, the word for “chicken.” Another vowel found in Otomi but not Spanish is /ɛ/. Learners of Otomi would have to work hard in order to hear the difference between /e/ and /ɛ/, /o/ and /ʊ/, and say them correctly. They might substitute /e/ for /ɛ/ and /o/ for /ʊ/ otherwise. Also, Otomi often uses nasalized vowels, which do not occur in Spanish. Thus heritage learners of Otomi would have to learn how to consistently produce those, too.

Otomi also has many ejective consonants. Some examples are /t'/, /ts'/, /tʃ'/, and /k'/. /t/ and /k/ exist in Spanish, but not even with aspiration, so heritage learners of Otomi would benefit from instruction on how to produce ejectives.

There is a bilabial voiceless fricative in Otomi, which Spanish speakers might substitute with /p/ or /f/ from their native language. There is also /ʃ/ in Otomi, which Spanish speakers might substitute with /tʃ/. All of these sounds would be challenging and require much practice for native Spanish speakers.

In Mezquital Otomi, /o/ and /u/ are not phonemic. For example, “You’re going to eat” could be said either /magi njone/ or /magi njune/; they seem to be in free variation. Since /o/ and /u/ are contrastive in Spanish, students of Otomi would have to be told that /o/ and /u/ are the same sound in that language. Practice listening for this aspect of Otomi should help them.

Like in Spanish, /g/ can be substituted by /ɣ/ intervocalically in fast speech. For instance,

3. mavi                      tsiθe<sup>1</sup>

AUX-2S.FUT              drink

“You’re going to drink.”

Here, /mavi/ is the same auxiliary verb as /magi/.

Alternation can occur between /a/ and /ε/, too. For example,

6. ʃan<sup>j</sup>ũ:                      ma              n<sup>j</sup>o

hurt-3PS me              my              head

“I have a headache.”

Here, /ʃan<sup>j</sup> ũ/ is the same particle as /ʃεn<sup>j</sup>o/ in:

8. ʃεn<sup>j</sup>o                      me                      gu

hurt-3PS me              my                      ear

“My ear hurts.”

Students of Otomi should be taught to hear differences between /a/ and /ε/, the new vowel for them, so they will understand Otomi properly.

Otomi and Spanish also share many phonemes. Spanish of Central Mexico includes the phoneme /x/, which is especially salient intervocalically—for example, in the word “Mexico” /mexiko/ (Lipski, 1994). In some other parts of the Spanish-speaking world, this phoneme

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<sup>1</sup> Like in Spanish (and English, which some heritage speakers are likely to know), there is one verb in Otomi that can mean either “eat” or “drink.” The verb root tsi- is the Otomi equivalent of the Spanish tom- from the infinitive “tomar.”



becomes more of an /h/ (Lipski, 1994). In Mezquital Otomi, the two phonemes seem to alternate. One of my speakers translated the Spanish version of “You’re going to drink that water there” as /noʔe magi tsinona dehe bixa:ni/, using the distal demonstrative, but /noʔe magi tsinona dehe bihanijabu/ was “You’re going to drink that water over there,” using the very distal demonstrative. She said both sentences at the same speed, so these consonants seem to be in free variation.

Otomi also has a flap, like Spanish. However, the Otomi flap seems to only occur intervocally, while the Spanish one can happen anywhere. An example of the flap in Otomi is the determiner /no oɾa/.

Mezquital Otomi has both voiced and voiceless interdental sounds. For example, “my dad” in Otomi is /ma ɬaɬa/, and “red” is /θɛni/. Students would have to be taught, and subsequently reminded, to place their tongues between their teeth—not substitute /d/ for /θ/ or /s/ for /θ/, for example. The letter “d” is sometimes pronounced as /θ/ in Spanish (e.g., Eddington, 2004), other times as /d/, so heritage speakers would have to learn to view them as different phonemes and pronounce them in the appropriate words in Otomi.

Glottal stops are often used in Otomi, but not in Spanish. If heritage learners of Otomi live in the United States and know English, they will be at an advantage for knowing this phoneme as well as interdental ones. If not, they will have to be taught how to make a glottal stop. Pointing to the glottis on a diagram should help. Speakers of English might not notice they make glottal stops, however, since they are often substituted for /t/ in informal speech. Consequently, they might not hear glottal stops in Otomi.

Mezquital Otomi and Mexican Spanish still have many phonemes in common. Like many languages around the world, they share the voiceless oral stops /p/, /t/, and /k/. Both languages also have the voiced oral stops /b/, /d/, and /g/, as well as the fricatives /s/, /x/ and /z/. Although there is no /h/ on the chart, that phoneme is sometimes substituted for /x/ in Mexican Spanish, so heritage speakers might know how to produce /h/. Otherwise, they would have to be taught how to make this voiceless glottal fricative.

Mexican Spanish contains many other phonemes also found in Mezquital Otomi. These include nasals /m/, /n/, /ɲ/ as well as the rhotics /r/ and /ɾ/. The liquid /l/ is also in both languages, as are the semivowels /w/ and /j/. All of these factors would give Spanish speakers some foundation for learning Otomi.

### Tones of Mezquital Otomi

The tones of Otomi would be a challenge for heritage speakers because Spanish is not a tonal language. Otomi has three tonemes: high, low, and rising (Sinclair and Pike, 1948). For example, /jà/ is “the” plural, /já/ is the 3PS possessive plural, and /jǎ/ means “liver” (Sinclair and Pike, 1948). I have updated the transcription and grammar explanation from Sinclair and Pike’s 1948 analysis. Additionally, /rà/ means “the” singular, while /rá/ is the 3PS possessive singular (Sinclair and Pike, 1948).

Sinclair and Pike count 33 consonants and clusters of glottal stop plus consonant, and claim that all of them appear before the high toneme in the same syllable (Sinclair and Pike, 1948). All of them but /ʔr/, /tʃ/, and /l/ occur before the low tone in their research (Sinclair and Pike, 1948). Every one except /tʃ/, /kʔ/, /ʔm/, and /tʔ/ occurs before the rising toneme (Sinclair

and Pike, 1948). All consonants but /tʃ/ occur after the high toneme, and all but /k/, /kʔ/, /ʔw/, and /x/ occur after the rising one (Sinclair and Pike, 1948).

Sinclair and Pike also find that all types of tones can occur in neighboring syllables; they are not conditioned by different environments (1948). All three tonemes can occur in monosyllabic words, though monosyllabic nouns are all rising or high in their research. Verbs can be high, rising, or low (Sinclair and Pike, 1948). The first syllable of dissyllabic words can have any of the three tonemes (Sinclair and Pike, 1948). The second syllable can also have any of the three, though the rising tone is less common (Sinclair and Pike, 1948). The rising tone is rare on the final syllable of trisyllabic words, which tend to have two morphemes (Sinclair and Pike, 1948). In some words with high tones on both syllables, the tone on the second syllable can be either high or low (Sinclair and Pike, 1948).

Otomi utterances tend to have high intonation at the end, so Sinclair and Pike only found high and rising tonemes there. Nevertheless, high tonemes in that position have occurred in a medium high tone, and a rising glide has been heard as a descending glide (Sinclair and Pike, 1948). When people talk in an animated way, their overall pitch rises, sometimes changing the tones (Sinclair and Pike, 1948).

Sinclair and Pike list some borrowed words that demonstrate Otomi tonal interpretations of Spanish stress. “Newspaper” is /peri ‘odiko/ in Spanish, but /ʔnà rà pèríódíkó/ in Otomi (Sinclair and Pike, 1948). “Wednesday” is /mierkoles/ in Spanish, but /miérkólé/ in Otomi (Sinclair and Pike, 1948). “School” is /la eskwela/ in Spanish, /rà skwěla/ in Otomi (Sinclair and Pike, 1948). “Book” is /libro/ in Spanish, /rà lǐbró/ in Otomi (Sinclair and Pike, 1948). In these examples, adjacent high tonemes can represent stressed and unstressed syllables in Spanish

(Sinclair and Pike, 1948). Nouns are also higher in pitch relative to their articles in both Spanish and Otomi (Sinclair and Pike, 1948).

Sinclair and Pike note several difficulties that Spanish-speaking researchers have had in hearing tone in Otomi. First, the high tone sounds like pitch-stress to Spanish speakers (Sinclair and Pike, 1948). Many dissyllabic words with low and then high pitch have been transcribed as having accent on the last syllable (Sinclair and Pike, 1948). The rising tone also sounds to Spanish speakers like vowel length difference, because it is longer than the other tonemes (Sinclair and Pike, 1948). These challenges would be the same for Spanish-speaking learners of Otomi.

Spanish loanwords in Otomi provide insight into how Spanish phonotactics adjust according to Otomi tones (Wichman, 2006). ‘C(C)V(C)CV becomes C(C)V<sup>MH</sup>(C)CV, for example the Spanish “pato” becomes /ba<sup>MH</sup>do/ (“duck”) (Wichman, 2006). (C)V’CVC(C)V becomes (C)VH’CVHC(C)V, for example the Spanish “chaqueta” becomes /tʃa<sup>H</sup>ke<sup>H</sup>ta/ (“jacket”) (Wichman, 2006). (C)V’CVC becomes (C)V<sup>H</sup>CV, for example the Spanish “color” becomes /ko<sup>H</sup>lo/ (“color”) (Wichman, 2006). Final consonants in words stressed on the last syllable in Spanish are deleted because Otomi prefers open syllables (Wichman, 2006). In Wichman’s notation, <sup>MH</sup> marks the rising tone and <sup>H</sup>, the high tone (Wichman, 2006).

I did not transcribe tone, since it seems to have no grammatical function. Very little research has been done by other linguists on Mezquital Otomi, so more information about how Otomi tone corresponds to Spanish stress appears to not be known.

## Mezquital Otomi and Mexican Spanish Phonology

### Comparison of Conditioning Environments

The phoneme /g/ is an allophone of /ɣ/ in Mezquital Otomi. /g/ appears in many more conditioning environments than /ɣ/; the latter phoneme only occurred in the environments a\_I, o\_u, and u\_u in my data. (/g/ occurred in a\_I, as well.) The situation in Spanish is very similar, as /ɣ/ is an allophone of /g/. /ɣ/ is used when the phoneme is not word-initial or after a nasal, in which case /g/ is correct (Schwegler et al., 2010). In Mezquital Otomi, /d͡ʒ/ and /ð/ occur in many of the same conditioning environments, with /d͡ʒ/ more common. In my data, the only times /ð/ and not /d͡ʒ/ was used were word-initially before /a/ and between /e/ and /o/. In Spanish, /d͡ʒ/ is correct after a nasal, pause, or /l/. The same grapheme is pronounced as the fricative /ð/ in all other cases (Schwegler et al., 2010). Heritage learners of Otomi would have to become accustomed to these different conditioning environments over time.

In my data, the ending /-n/ was added to /noʔera/ and /ra/ before /tʃutsi/, the word for “girl,” and /metsi/, the word for “boy.” The same thing happened on the prefix /ja-/, to make singular /tʃutsi/ plural. It is possible that these two nouns are in their own noun class—or that it is more efficient to epenthesize an /n/ in this language, which has many nasalized vowels. My dataset for this project was not large enough to be conclusive.

Several vowels are interchangeable in Otomi, but contrastive in Spanish. For example, my speaker told me “they make” could be said /nujʊ hoki/ or /nujʊ hoka/. Similarly, “they are going to make” is either /nujʊ magahjoka/ or /nujʊ magahoki/. This concept would be a task for heritage speakers to remember as they work on their listening skills in Otomi.

As in Spanish, /b/ and /v/ are interchangeable in Otomi. Intervocally, they can also become /β/ in fast speech. For example, my speaker translated “right now” both as /nuvia/ and

/nuβia/ in different sentences. /k/ can also be pronounced as the fricative /h/ intervocalically in fast speech. My speaker translated “we make” as /ðihoke/ and /ðihohe/, saying each one was correct.

The underlying form of the negative particle for most negative Otomi sentences, /hin/, can be pronounced many different ways. In the sentence

122. in	gatsi	jateḁi
NEG	eat-2PS.PAST	tamale-PL

“Didn’t you eat tamales?”

/hin/ is said without the word-initial /h/, and the /n/ harmonizes with /g/’s velar place of articulation.

Some conditioning environments are different cross-linguistically for phonemes that appear in both languages. For example, /f/ and /φ/ are only intervocalic in my Otomi data, yet in Spanish, there are consonant clusters such as /fr/ in words like “fresco” (/fresko/, “fresh”). Similarly, /p/ is always either word-initial (preceding a vowel) or intervocalic in my Otomi data, but can occur in such Spanish words as “imprimir” (/imprimiɾ/, “to print”) and “playa” (/plaija/, “beach”). The flap /ɾ/ is also word-initial preceding a vowel or intervocalic, in contrast to common Spanish words like /fresko/ and /imprimiɾ/. People tend to disprefer consonant clusters, so these phonemes would be easier for Spanish speakers to say in Otomi. An ideal syllable is CV, or consonant, vowel (class notes, Phonology with Prof. Rebecca Scarborough, University of Colorado, Boulder, March 15, 2011).

The phoneme /l/ only occurs in Spanish loanwords according to my Otomi data, and then only when the Spanish feminine definite article (/la/) is part of an Otomi word. It is always intervocalic. Indeed, consonant clusters are rare in Mezquital Otomi, and the more common

clusters include /n/, /ŋ/, or /ʔ/. /n/ and /ŋ/ are always the first consonant in a cluster; the exception is that my data showed /n/ after /r/ in words borrowed from Spanish. /ʔ/ is always the second consonant in a cluster.

Glides, especially /j/, are also common beside vowels, avoiding hiatus. The Spanish vowels /i/ and /u/ convert to semivowels /j/ and /w/ in cases of hiatus (Schwegler et al., 2010). Two adjacent vowels can also be diphthongs in Spanish (Schwegler et al., 2010) as in Otomi.

Some vowels in Otomi are oral, others nasal. The i-vowel and e-vowel in Mezquital Otomi are almost always oral (Wichman, 2006). The u-vowel is nasal almost all the time (Wichman, 2006). There is contrast between /a/ and /ã/, however (Wichman, 2006). This contrast might be difficult for heritage speakers to learn because there are just two conditioning environments in which vowels are nasalized in Spanish (Schwegler et al., 2010). Any vowel is nasalized between two nasal consonants, or word-initially before a nasal consonant (Schwegler et al., 2010). Students of Otomi would have to be told the difference between an oral and nasalized vowel, and know when they are producing which one, in order to pronounce Otomi properly.

Mezquital Otomi, unlike Spanish, is a tonal language. For example, the word for “one,” /na/, has a tone that falls, then rises. It is not the same word if the tone is incorrect, so Spanish speakers would have to learn this new concept. However, tone seems to have no grammatical function in Otomi, as evidenced by H. Harwood Hess’ 1968 study of the language. Therefore, I did not transcribe it in this paper.

## Comparing Loanwords

Mezquital Otomi has had centuries of contact with Spanish, and loanwords reveal a great deal about Otomi phonology compared to Spanish. My speaker translated the Spanish word for “store,” “tienda,” into Otomi as /denda/. Thus the diphthong disappears, supporting a claim that Hekking and Bakker made with more data (ed. Matras and Sakel, 2007). Heritage speakers of Otomi would have to try not to use diphthongs when speaking their new language.

According to my speaker, “mesa” (“table” in Spanish) is /meʃa/, so the /s/ becomes postalveolar. The same phenomenon seems to occur with “queso” (the Spanish word for “cheese”), which is /geʃo/ in Otomi. This finding agrees with Hekking and Bakker’s (ed. Matras and Sakel, 2007). They found the same initial consonant that I did for the name “Juan” (ed. Matras and Sakel, 2007), which my speaker translated as /ʃuva/. Spanish speakers would have to beware of using intervocalic /s/ when they speak Otomi.

The voicing of /k/ in the borrowed word /geʃo/ supports another of Hekking and Bakker’s findings. They write that voiceless stops from Spanish tend to become voiced in Otomi. This rule might be a good one to tell Otomi learners as they recognize borrowed words from Spanish.



## Describing Mezquital Otomi and Spanish Grammar

### Introduction

Like Spanish, Mezquital Otomi is a fusional language. The basic word order is AVP. The basic word order in a noun phrase is determiner, adjective, head noun. Thus, noun phrases are head-final. Otomi is a nominative-accusative language, like Spanish, and has proximal, distal, and very distal demonstratives. Mezquital Otomi has some adjectives and a copula, but some verbs can also express things that would be adjectives or adverbs in Spanish or English. Otomi does not mark gender, even on pronouns—very different from Spanish, in which everything has a gender, even inanimate objects. Otomi also has a plural prefix, while Spanish has a plural suffix. Syntax for possession follows:

name of possessor, determiner, possessive adjective, noun (P).

A system of prefixes and suffixes marks tense, aspect, and mode in Otomi. The negative Otomi particle is /hin/ most of the time, but /o/ in imperative sentences. Question words come first in Otomi open-ended questions, and yes-no questions have the same word order and morphemes as statements. These formulas are approximately the same as in Spanish grammar. Relative clause markers are optional in Otomi as in Spanish. Imperatives in Otomi are just the simple form of the verb, but they can become stronger if the speaker adds a particle. After centuries of contact with Spanish, Otomi contains many borrowed words, including some prepositions and adverbs of time. Mezquital Otomi and Mexican Spanish grammar have much in common, but learners of Otomi would also have many new grammar concepts to learn.

## Abbreviation Guide

1PS	First person singular
1PP	First person plural
2PS	Second person singular
2PP	Second person plural
3SF	Third person singular
3PP	Third person plural
A	The most agent-like argument
ADJ	Adjective
AUX	Auxiliary
CAUS	Causative
DAT	Dative
DET	Determiner
DET.ACC	Accusative Determiner
DET.NOM	Nominative Determiner
DIST	Distal
FUT	Future
IMP	Imperative
IMPF	Imperfect
NEG	Negative
OBLG	Obligatory
P	The most patient-like argument
PAST	Past tense

PL	Plural marker
PRES	Present tense
PROG	Progressive aspect
PROX	Proximal
REL	Relative clause marker
SG	Singular
V	Verb
VERY DIST	Very distal

## Word Order

The basic word order in Mezquital Otomi is AVP, the same as Spanish. In the following example, “he” is the agent, “three big snakes” is the patient, and “killed” is the verb.

29. nonĩ	vijo	nju	jak'enja	dongi
he	kill-3S.PAST	three	snake-PL	big

“He killed three big snakes.”

Word order can vary, though, to become PVA in some situations. This phenomenon might be more generally true for non-agentive subjects, though the only examples in my data were for body parts. To say a part of the body hurts, there is a phrase that means “hurts” and then the part of the body follows. For instance:

7. ʃan'ũ	ma	wa
hurt.PRES	my	feet

“My feet hurt.”

This system seems close to the Spanish one, in which a reflexive verb (“me duele”) is used, followed by a definite article and the part of the body. However, Otomi does not appear to distinguish between singular and plural things that hurt, while Spanish does. Also, the verb in Otomi does not point out who the body part hurts. Instead, the possessive (/ma/ for “my,” /di/ for “your”) on the body part signals who hurts. Learners of Otomi should be made aware of these differences.

Like in Spanish, agent pronouns can be omitted in Otomi, since they are expressed by the verb. They are both pro-drop languages. The auxiliary verb /magi/ (also pronounced /magI/ or /mavi/) seems to show future tense in 2PS. For example,

1. magi                      niune  
     AUX.2PS.FUT    eat  
     “You’re going to eat.”

This explanation works with many other sentences, such as

3. mavIn                      tsiθe  
     AUX.2PS.FUT    drink  
     “You’re going to drink.”

The auxiliary /maga/ also exists for first person plural future tense.

19. maga                      tsihu                      da                      ?aro  
     AUX.3PP.FUT    eat                      some                      rice  
     “We’re going to eat rice.”

This similarity between Spanish and Otomi grammar would help heritage speakers learn Otomi.

## Noun Phrase Word Order

The usual order of elements in a Mezquital Otomi noun phrase follows:

number, head noun, possessor, relative clause.

Pronouns also come before determiners, which precede the head noun, but adjectives can precede or follow it. (The only pronouns that accompany other elements in noun phrases in my data are third person singular.) For example,

29.	noni	vijo	nju	jak'enja	dongi
	3PS	kill-3PS.PAST	three	snake-PL	big-PL
“He killed three big snakes.”					

The previous sentence demonstrates that numerals (e.g., “three”) go before the described noun (“snakes”), while adjectives (“big”) come after it.

A longer example displays more elements in a noun phrase:

134.	noni	ra	ɸuɸua	vihio	nojɔ	nju
	3PS	DET.NOM	Juan	kill-3PS.PAST	?	three
	jak'enja	de	mige	me	bui	haran
	snake-PL	of	Miguel	?	?	the
						field
“Juan killed Miguel’s three snakes, which were in the field.”						

In the first noun phrase, the 3PS pronoun and nominative determiner precede the head noun. In the second noun phrase, the number precedes the head noun, but the possessor and relative clause follow it.

## Head Marking

Noun phrases are head-final in Mezquital Otomi. “Your snake” is

ri k'enja

your snake.

A longer noun phrase is structured the same way. “Miguel’s snake” in Otomi is

paɸi no o ra k'enja

Miguel DET snake

The snake, the head, comes at the end of each noun phrase.

Mezquital Otomi is verb-medial in verb phrases. In the example

95. era ðame tihi du:nti

DET man run-3PS.PRES a lot

“The man runs a lot.”

the verb /tihi/, “runs,” is the head of the verb phrase and at the beginning of it.

## Grammatical Relationships: S, A, P

Mezquital Otomi is a nominative/accusative language. The verb agrees with the S and A arguments in the nominative case. There appear to be no affixes to mark the A or the P, which are instead shown through syntax.

Sometimes, it seems that the system of determiners in Mezquital Otomi serves as a case-marking mechanism. /noʔo ra/, /no ra n/, /nu ra ŋ/, and /noʔa ra/ are all A markers, while /ra n/, /ra/, and /era/ are the P markers. For instance,

43. no ra n tʃutsi bijandi era metsi

DET.NOM girl see-3PS.PAST DET.ACC boy

“The girl saw the boy.”

Here, /no<sub>r</sub>an/ is the A determiner; /e<sub>r</sub>a/ is the one for the P. Further evidence is in the next sentence:

44. no <sub>r</sub> an	metsi	bijandi	e <sub>r</sub> a	tʃutsi
DET.NOM	boy	see-3PS.PAST	DET.ACC	girl

“The boy saw the girl.”

The determiners do not vary with gender, but with case. /no<sub>r</sub>an/ is the nominative case marker, /e<sub>r</sub>a/ the accusative one. H. Harwood Hess claims that /nú ra/ means “that the” or “the one referred to” (1968). /nú ra/ appears often in his data, before nouns, so it seems that my speakers simply pronounced this expression differently. However, the first mention of the girl is not an anaphoric reference in my data, so Hess’ theory of the meaning of /nú ra/ does not work for /no<sub>r</sub>an/ here.

There are other times when this theory does not work. For example,

36. no o <sub>r</sub> e	ʃuvua	vihio	paɸi	no o <sub>r</sub> a	k’enja
DET.NOM	Juan	kill-3PS.PAST	Miguel	DET.ACC	snake

“Juan killed Miguel’s snake.”

Here, both the A and the P receive the supposed A marker. Perhaps a study with more data would be more conclusive about case-marking in Otomi.

In Spanish, like English, determiners do not vary according to case, so this concept would be a new one for heritage learners of Otomi. Also, Spanish is a gendered language, and most feminine words (including the feminine article, /la/) end in /a/. Spanish speakers might be tempted to put /e<sub>r</sub>a/ before a feminine noun, even in the nominative case.

These determiners can come before names of specific people, but are omitted when the A or P is a pronoun or when there are adjectives or quantifiers before them. For example:

30. noni	vijo	na	doŋga	k'enja
3PS	kill-3PS.PAST	one	big-SG	snake

“He killed one big snake.”

Here there are no determiners even though this sentence is transitive.

36. no ore	ʃuɣua	vihio	paɸi	no ora	k'enja
DET.NOM	Juan	kill-3PS.PAST	Miguel	DET.ACC	snake

“Juan killed Miguel’s snake.”

Here, there is a determiner before a proper noun, which never happens in Spanish. Also, word order for possession is very different in Otomi than in Spanish. The Spanish way to say “Miguel’s snake” would be “the snake of Miguel,” with the possessor at the end and the possessed at the beginning. This format reverses that word order.

Also, it does not matter whether the A or P is human or animate:

34. noʔora	ben <sup>ʔ</sup> ia	obizi	ra	uni
DET.NOM	woman	eat-3PS.PAST	DET.ACC	chicken

“The woman ate the chicken.”

Here, /noʔora/ is the nominative determiner. “Chicken” is the same word in Otomi whether it is alive or dead/edible, unlike Spanish. I could not figure out why the consonant /n/ is at the end of the first determiner, for the girl and boy, and not on this one. The glottal stop could disappear for phonological reasons, so perhaps that explains the /n/ as well.

The dative case also seems to be marked by word order alone. An example follows:



77. noni	biunβaβi	jaɽeɽi	nojo	jantʃutsi
3PS	give-3PS.PAST	tamale-PL	to	girl-PL

“She gave tamales to the girls.”

There are no determiners in this sentence, yet it is clear that “she” is the A and “the girls” are the P.

### Demonstratives

In Otomi, as in Spanish, there are proximal, distal, and very distal demonstratives. For example, the simple form of one sentence (with no demonstratives) is:

20. maga	tsihu	da	dahe
AUX.3PP.FUT	drink	some	water

“We’re going to drink water.”

A similar sentence, but with a proximal demonstrative, follows:

22. noʔe	magi	tsinona	dehe	novua
2PS	AUX.2PS.FUT	drink	water	PROX

“You’re going to drink this water right here.”

The Otomi demonstrative /novua/ would easily translate into Spanish as “este.” Yet Otomi differs from Spanish in the order of P and demonstrative. In Spanish, demonstratives come before their nouns, while demonstratives go after them in Otomi.

23. The same is true with distal demonstratives:

noʔe	magi	tsinona	dehe	bixa:ni
2PS	AUX.2PS.FUT	drink	water	DIST

“You’re going to drink that water there.”

The Otomi distal demonstrative /bixa:ni/ corresponds to the Spanish one “ese,” except that the word order is opposite.

The pattern continues with very distal demonstratives, the equivalent of “aquel” in Spanish:

24. noʔe	magi	tsinona	dehe	bihanijabu
2PS	AUX.2PS.FUT	drink	water	VERY DIST

“You’re going to drink that water over there.”

Here, -jabu seems to be a suffix that increases the intensity of distalness.

Otomi also has some determiners that might seem redundant to someone proficient in Spanish when Otomi borrows words from that language. In the example

25. none	la rana	ʃəŋgami
DET	the frog	be-green-3PS.PRES

“The frog is green.”

In Spanish, the article “la” is already a determiner for “frog.” The article is borrowed lexically as part of the word. However, in Otomi, the determiner /none/ must be added. Heritage learners of Otomi might omit either /none/ or /la/.

## Adjectives

The basic rule in Spanish is that adjectives come after the nouns they describe, but some (including, notably, quantifiers) precede these nouns. I could not gather enough data in my thesis to determine the entire pattern for that in Otomi. However, quantifiers do consistently precede their nouns in my data, and other adjectives can come before or after their nouns. For instance,

30. noni	vijo	na	doŋga	k’enja
----------	------	----	-------	--------

3PS          kill.3PS.PAST          one          big.SING          snake

“He killed one big snake.”

In this sentence, the adjective “big” (/dɔŋga/), as well as the quantifier “one” (/na/), precede the noun “snake” (/kʼenja/) that they describe. But consider the following sentence, which also uses a quantifier and the adjective “big”:

29. noni          vijo          nju          jakʼenja          dɔŋgi  
3PS          kill.3PS.PAST          three          snake.NC          big.PL

“He killed three big snakes.”

Like in the first example, the quantifier goes before the noun it describes. The adjective root for “big,” dɔŋg-, takes the singular suffix –a or the plural one –i. Nonetheless, my speakers did not always follow this rule. There is also a plural prefix for the noun, ja-. But the same adjective, “big,” comes after the noun, even though it was before the noun in the first example.

Some verbs contain words that are adjectives in Spanish and English. For instance,

47. no          ma          ɖaɖa          ʃidanoho  
DET.NOM          my          dad          be-fat-3PS.PRES

My dad is very fat.

The third person singular form of the copula would be /ra/, but that word is not above. Instead, one word says “is very fat.”

Some adverbs that modify adjectives are contained in verbs. For example, there is one copula verb, “to be,” as well as another for “to be very.”

71. ra          dehe          ʃʌŋgʷami  
DET          water          be green-3PS.PRES

The water is green.

This sentence uses an adjectival verb, /ʃɪrɒŋg<sup>2</sup>ami/.

72.   ra               dehe               ʃɪrɒŋg<sup>2</sup>ami  
      DET       water               be very-3PS.PRES green  
      The water is very green.

The verb in the previous sentence is not in this one. Instead, there is a different verb, /ʃɪrɒŋg<sup>2</sup>ami/, for the sentence that translates as “The water is very green.”

H. Harwood Hess claims that Mezquital Otomi has a copula (1968), which is rare in languages that use verbs instead of adjectives (J. Andrew Cowell, personal communication, December 13, 2011). My data agrees with Hess’ claim:

45.   nuraŋ                       hwa               ra                       doŋgi  
      DET.NOM               fish               be-3PS.PRES               big-SG  
      The fish is big.

Hess lists /ra/ as the 3PS present form of the copula (1968). Hess also finds that /dɒŋga/ is the word for “big,” an adjective (1968). He elaborates that there is a –ɕ suffix which marks the quality verb type, with such meanings as “to be cold” (Hess, 1968). The adjective “cold” would thus be contained in this verb, though Mezquital Otomi also has a copula.

### Gender/Person/Number Marking

The prefix ja- is the plural prefix that my speaker consistently used to translate plural nouns from Spanish to Otomi. This information agrees with that found by Hess (1968). For example, /jaɬeɖi/ is how my speaker pronounced “tamales” translated from Spanish. Heritage

speakers would be used to suffixes as plural markers, so they would have to learn to put this affix at the beginning of the noun.

My speaker could not recall a difference in Otomi between “he” and “she.” Thus /noni/ or /none/ must be the universal third person singular subject pronoun. This idea could pose difficulties for heritage speakers as they practice listening skills in Otomi. In Spanish, they can distinguish the gender of a person from the pronoun used, but in Otomi, the same pronoun can correspond to a male or female person as well as an inanimate noun. They might have to ask the gender of a person if they need to know it.

In Otomi, unlike in Spanish, pronouns and determiners come before proper nouns. In

134. noni	ra	ʃuxua	vihio	nojɔ	nju	jak'enja
3PS	DET.NOM	Juan	kill-3PS.PAST	?	three	snake-PL
de	mige	me	bui	haran	hwāhi	
of	Miguel	?	?	the	field	

“Juan killed Miguel’s three snakes, which were in the field.”

/noni ra/ might seem like extraneous information to learners of Otomi, who do not put determiners before proper nouns.

A quantifier seems obligatory before nouns such as “rice” and “water.” My speaker translated “We’re going to eat rice” (with no determiner in English or Spanish) as

19. maga	tsihu	da	ʔaro
AUX-1PP.FUT	eat	some	rice

“We’re going to eat rice.”

Similarly, “We’re going to drink water” became

20.	maga	tsihu	da	dahe
	AUX-3PP.FUT	drink	some	water

“We’re going to drink water.”

/da/ is absent in sentences that use possessives, definite articles, or demonstratives. The one exception in my data is:

22.	maga	tsihu	natuki	da dehe
	AUX-1PP.FUT	eat/drink	a little	water

“We’re going to drink a little water.”

/natuki da/ means “a little,” but more research would be necessary to determine other meanings of /natuki/ and /da/. Suffice to say that in my data, every noun must be preceded by a determiner.

### Possession

Some possessive adjectives exist in Otomi. For example,

32.	noni	vijo	ma	k’enja
	3PS	kill-3PS.PAST	my	snake

“He killed my snake.”

Here, “ma” is “my.” /ri/ is “your” (second person singular), and /ra/ is the third person singular possessive. These possessive adjectives come before what is possessed, just like in Spanish.

Word order varies with how possession is expressed. When there is a possessive adjective, the determiner on the P comes before the possessive adjective, which is followed by the noun:

35. noni	vihio	no <sup>2</sup> o	ri	k'en'ja
3PS	kill-3PS.PAST	DET.ACC	your	snake

“He killed your snake.”

When a sentence mentions the name of the person to whom the P belongs, the name is followed by the determiner, then the noun:

36. no ore	ɟuvua	vihio	paɸi	no ora	k'enja
DET.NOM	Juan	kill-3PS.PAST	Miguel	DET.ACC	snake

“Juan killed Miguel’s snake.”

Syntax for possession can thus be characterized as: name of possessor (if applicable), determiner, possessive adjective (if applicable), noun (P). This pattern is the same as the one Hess describes (1968).

#### Tense/Aspect/Mode

##### Present

1PS	ði- or da-
1PP	-e
2PS	-ika
3PS	-i
3PP	-a

An example follows:

11.     nuga             đin<sup>j</sup>uni  
           1SG             eat-1SG.PRES  
           “I eat.”

Here, the prefix *đi-* marks first person singular present tense. The next example shows the other prefix that marks the same person and tense:

59.     noga             dahoka                     jaṭeḍi             mande  
           1PS             make-1PS.PAST             tamale-PL             yesterday  
           I made tamales yesterday.

Past

- 1PS                     dai- or di-  
 1PP                     đā- and -e  
 2PS                     gai- or gra- (hoki)  
 3PS                     bi-  
 3PP                     vi- and –i

An example follows:

111.    đahohe             jaṭeḍi             mande  
           make-1PP.PAST     tamale-PL             yesterday  
           We made tamales yesterday.

The verb root for “make” is /hok/, which becomes /hoh/ here because /k/ is intervocalic. Both the prefix *đā-* and the suffix *–e* are added to mark first person plural past tense.



## Future

1PS	hamaga-
1PP	maga-
2PS	magi-
3PS	mađa- and -i
3PP	maga- and –a

An example follows:

103.	noni	mađahoki	jateđi	ɟudi
	3PS	make-3PS.FUT	tamale-PL	tomorrow

She is going to make tamales tomorrow.

A prefix, mađa-, and suffix, -i, are both necessary to mark third person singular future tense.

## Progressive Aspect

1PS	-i
1PP	đi- and -e
2PS	gi-
3PS	bi- and -i
3PP	vi- and –i

An example follows:

57.	noga	dijoki	jateđi	nuvia
	1PS	make-1PS.PRES-PROG	tamale-PL	right now

I am making tamales right now.

Here, *di-* is the first person singular present tense prefix. The verb root for “make,” /hok/, is /jok/ intervocalically. *-i* is the first person singular progressive suffix.

## Negation

In general, the negative particle for Mezquital Otomi is /hin/. It comes before the verb, after the subject if one is specified, i.e. by a pronoun. For instance,

119.	nuga	hin	dahoka	jateḡi
	1PS	NEG	make-1PS.PAST	tamale-PL

“I didn’t make tamales.”

This account agrees with Hess’ (1968). Please see the Phonology section for further discussion of how this negative particle can be pronounced.

The particle /o/ negates imperative sentences. For example,

53.	o	gi	niune
	NEG	2PS	eat-2PS

“Don’t eat!”

This discovery agrees with that found by Hess (1968).

There might be other ways to negate other types of sentences, however. For example,

48.	no <sup>?</sup> o	ma	ḡaḡa	inʃanoḡo
	DET	my	dad	not-be-fat-3PS.PRES

“My dad is not fat.”

Here, the verb negates the sentence. /in/ is not the negative particle here because the 3PS present form of the verb “be fat” is /ʃidanohoh/. I did not gather enough data to determine whether this claim is true for any adjectival verb, and Hess does not list any way other than /hin/ (1968) to

signal negation—even for adjectival verbs. It is possible that /ʃidanoho/ in rapid speech sounds like /ʃanoho/. Without more data, I could not determine whether there was a negative particle and then an adjectival verb, or a different adjectival verb that marks negation.

## Questions

Question words in Otomi follow:

when	ham ũ
who	toʔo
where	hawu
what	te
why	haŋka
how	haŋka

Each question word comes first in the sentence. For example,

86. ham ũ	magihoki	jateḍi
when	make-2PS.FUT	tamale-PL

“When are you going to make tamales?”

This rule applies to all sentences with question words, regardless of which question word is used.

The same rule exists in Spanish.

Yes-no questions in Otomi use the same word order and morphemes as statements. For example, the statement

64. noʔe	mai hoka	jateḍi	ʃodi
2PS	make-2PS.FUT	tamale-PL	tomorrow

“You are going to make tamales tomorrow.”

is the same in that regard as the question

124. magihoka                      jatedi  
make-2PS.FUT                      tamale-PL

“Are you going to make tamales?”

Hess contends that /ha/ is the question particle, coming at the beginning of each sentence (1968).

However, my speaker did not include any such particles when she translated yes-no questions.

Negative questions are formed with the negative particle first, then the verb, and then the object. For instance,

121. hin                      gahoka                      jatedi  
NEG                      make-2PS.PAST                      tamale-PL

“Didn’t you make tamales?”

Rising intonation at the end of an utterance signals a question.

## Relative Clauses

Like Spanish and English, relative clause markers are optional. In Spanish, “The woman who ate the chicken is sleeping” would translate thus:

la                      muher                      ke                      komio                      el                      pojo  
ART-DEF                      woman                      REL                      eat-3PS.PAST                      ART-DEF                      chicken  
  
esta durmiendo  
  
sleep-3PS.PRES-PROG

“The woman who ate the chicken is sleeping.”

Although the words here are different from English, the grammar is the same. In Otomi, one of my speakers translated the same sentence as:

38. noʔara      benʔ ĩa      biziɾa      uni      ja binʔoho  
 DET      woman      eat-3PS.PAST      chicken      sleep-3PS.PRES-PROG

“The woman who ate the chicken is sleeping.”

There is no relativizer such as “who,” like in English, or /ke/, like in Spanish. However, the same speaker translated the following sentences thus:

96. none      ɛɾa      ɔame      ʃi      dihi      du:nti      ɾa      doŋgi  
 3PS      the      man      REL      run-3PS.PRES      a lot      be-3PS.PRES      big

“The man who runs a lot is big.”

Here, /ʃi/ is the relativizer. In each type of relative clause, the relative clause follows its head.

## Causatives

In Spanish, there are two basic types of indirect causatives and one direct causative.

These are the only types of sentences that I asked my speaker to translate.

Indirect causatives:

Weakest-

50. ma      nana      bihokagi      ga      nione  
 my      mom      let-3PS.PAST      me      eat

“My mom let me eat.”

Strongest-

51. ma      nana      bimaʃkagi      ga      nione  
 my      mom      help-3PS.PAST      me      eat

“My mom helped me eat.”

In English, “My mom had me eat” would be the strongest. There is no exact equivalent of that in Spanish, though, so I only asked my speaker about these two.

Direct causative:

52.	ma	nana	bijēna	ge	pɛtsi	ganione
	my	mom	make-3PS.PAST	me	OBLG	eat

“My mom made me eat.”

As my speaker explained, when the particle /pɛtsi/ is used, it means something is almost obligatory.

Imperatives

One way to say an imperative sentence in Otomi is to use just the simple form of the verb. The translation for “eat!” follows:

54. niune  
eat-2PS  
“Eat!”

There is a stronger version, with the particle /pɛtsi/, which my speaker said makes a command almost obligatory:

55.	pɛtsi	gi	nione
	OBLG	2PS	eat

“You have to eat!”

As described in the Negation section, /o/ negates an imperative sentence.

## Borrowed Words from Spanish in Otomi

Native speakers of Spanish will recognize some borrowed grammatical words in Otomi. For example, the Otomi word for the verb “cook” is /pa.raginione/. “Eat” is /ginione/, and “para” means “for” in Spanish. Hence “cook” is “for eat.” Also, Spanish speakers often use “para” to mean “to,” as in “Voy para allí” for “I’m going there.” “Home” as an adverb is /pa.rangu/ in Otomi, with /ngu/ meaning “house.” This preposition must have been borrowed from Spanish into Otomi, and pointing out that relationship would help Spanish speakers remember that aspect of their new language.

## Conclusion

Mezquital Otomi is a unique language that has also had much contact with Spanish. Its grammar and phonology thus have much in common with those in Spanish, yet heritage speakers would have many new concepts to learn. I hope that this paper, and the accompanying DVD, bring more pride to the Otomi people. They were oppressed for centuries by the Spanish, and before that, the Aztecs (Hekking and Bakker, 2007). When the Spanish arrived, they asked the Aztecs for an account of the Otomi, and thus concluded that the Otomi were coarse and unskillful (ed. Matras and Sakel, 2007). Today, in Mexico, the Otomi are poor, and live off the land. One of my speakers told me she never went to school growing up—in any language, which would make it very difficult for her to document Mezquital Otomi or elevate the status of the culture.

Children of immigrants who were able to come to the United States have a much higher quality of life than their forebears. My speaker seemed sad and dismissive when she described life in Mexico, but lit up when she made tamales. She said cooking them makes her like Otomi. I hope that heritage learners of Otomi feel that way about the video I made. Additionally, perhaps an academic portrayal of an Otomian language would be a more accurate representation of the Otomi than the pejorative ones from the past. It seems that any interest they have in their ancestors' language can only be good for their people. I made my video and wrote this paper with a social justice motivation.



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## Appendix A: Gloss

1.     magi            njune  
      AUX-2S.FUT eat  
      “You’re going to eat.”
2.     magi            nione  
      AUX-2S.FUT eat  
      “You’re going to eat.”
3.     mavIn          tsiθe  
      AUX-2S.FUT eat/drink  
      “You’re going to drink.”
4.     magI            ōhō  
      AUX-2S.FUT go to bed  
      “You’re going to go to bed.”
5.     magi            nangi  
      AUX-2S.FUT get up  
      “You’re going to get up.”
6.     ʃan<sup>j</sup>ũ:        ma n<sup>j</sup>o  
      hurt.PRES my head  
      “I have a headache.”
7.     ʃɛn<sup>j</sup>o        ma wa  
      hurt.PRES my feet  
      “My feet hurt.”
8.     ʃɛn<sup>j</sup>o        me gu

hurt.PRES my ear

“My ear hurts.”

9.     ʃan<sup>j</sup>ũ       di     ʃin<sup>j</sup>o

hurt.PRES your nose

“Your nose hurts.”

10.    te     magi               pefi

what AUX-2S.FUT do

“What are you going to do?”

11.    nuga ðin<sup>j</sup>uni

1SG eat-1SG

“I eat.”

12.    nuga hamagan<sup>j</sup>uni

1PS eat-1PS.FUT

“I’m going to eat.”

13.    nuga dain<sup>j</sup>o:ni

1PS eat-1PS.PAST

“I ate.”

14.    nu<sup>ʔ</sup>i gain<sup>j</sup>uni

2SG eat-2SG.PAST

“You ate.”

15.    nũnĩ bin<sup>j</sup>ũnĩ

3PS eat-3PS.PAST

“He ate.”

16. ja gain<sup>l</sup>oni  
already eat-2PS.PAST  
“Did she eat?”
17. nuni ja bIn<sup>l</sup>oni  
3PS already eat-3PS.PAST  
“She ate.”
18. nōnē bin<sup>l</sup>ūnī  
3PS eat-3PS.PAST  
“Did he eat?”
19. maga tsihu da ʔaro  
AUX-1PP.FUT eat some rice  
“We’re going to eat rice.”
20. maga tsihu da dahe  
AUX-1PP.FUT eat/drink some water  
“We’re going to drink water.”
21. maga tsihu natuki da dehe  
AUX-1PP.FUT eat/drink a little water  
“We’re going to drink a little water.”
22. noʔe magi tsinona dehe novua  
2PS AUX-2PS.FUT drink water PROX  
“You’re going to drink this water right here.”
23. noʔe magi tsinona dehe bixa:ni  
2PS AUX-2PS.FUT eat/drink water DIST

“You’re going to drink that water there.”

24. noʔe magi                      tsinona dehe    bihanijabu  
2PS   AUX-2PS.FUT   drink   water VERY DIST

“You’re going to drink that water over there.”

25. none la rana    ʃəngami  
3PS   the frog be-green-3PS.PRES

“The frog is green.”

26. nuga dra                      nʰonʰo  
1PS   be-1PS.PRES Otomi

“I am Otomi.”

27. noni binʼu kagiga nʰonʰo  
3PS ? ?                      Otomi

She taught me Otomi.

28. noga θaʔontwaʔida nʰonʰo  
1PS ? ? ?                      Otomi

I taught her to speak Otomi.

29. noni vijo                      nju    jakʼenja dongi  
3PS   kill-3PS.PAST three snake-PL big-PL

He killed three big snakes.

30. noni vijo                      na    donga    kʼenja  
3PS   kill-3PS.PAST one big-SG snake

He killed one big snake.

31. noni vijo                      ra kʼenja

3PS kill-3PS.PAST his snake

He killed his snake.

32. noni vijo                      ma k'enja

3PS kill-3PS.PAST my snake

He killed my snake.

33. noʔo ra      ben<sup>ʔ</sup>ia    jabin<sup>j</sup>oho

DET.NOM woman sleep-3PS.PRES.PROG

The woman is sleeping.

34. noʔo ra      ben<sup>ʔ</sup>ia    obizi                      ra                      uni

DET.NOM woman eat-3PS.PAST DET.ACC chicken

The woman ate the chicken.

35. noni vihio                      no<sup>ʔ</sup>o                      ri                      k'en'ja

3PS kill-3PS.PAST DET.ACC your-SG snake

He killed your snake.

36. no o re      ʃuvua vihio                      paʔi      no o ra      k'enja

DET.NOM Juan    kill-3PS.PAST Miguel DET.ACC snake

Juan killed Miguel's snake.

37. no o ra      ʃuvua vihio                      kagihu mazi k'enjahu

DET.NOM Juan    kill-3PS.PAST      ?                      ?                      ?

Juan killed our snake.

38. noʔa ra      ben<sup>ʔ</sup>ia    bizira                      uni      ja      bin<sup>j</sup>oho

DET.NOM woman eat-3PS.PAST chicken now sleep-3PS.PRES.PROG

The woman who ate the chicken is sleeping.

39. noni viho                      nou jatedi       vihioki                      noni

3PS like-3PS.PAST REL tamale-PL make-3PS.PAST 3PS

He liked the tamales that she made.

40. noni vivi                      jatedi       vihioke                      noni

3PS eat-3PS.PAST tamale-PL make-3PS.PAST 3PS

He ate the tamales that she made.

41. gi tihi                      du:nti

2PS run-2PS.PRES a lot.

You run a lot.

42. no ran       tʃutsi vinio tsi jatedi       parangu

DET.NOM girl ? ? tamale-PL home

The girl took the tamales home.

43. no ran       tʃutsi bijandi                      era                      metsi

DET.NOM girl see-3PS.PAST DET.ACC boy

The girl saw the boy.

44. no ran       metsi bijandi                      era                      tʃutsi

DET.NOM boy see-3PS.PAST DET.ACC girl

The boy saw the girl.

45. nu ran       hwa ra dongi

DET.NOM fish is big-SG

The fish is big.

46. nu ran       hwa ra ōki

DET.NOM fish is small-SG

The fish is small.

47. no ma ðaða ʃidanoho

DET.NOM my dad be-fat-3PS.PRES

My dad is very fat.

48. no<sup>ʔ</sup>o ma ðaða inʃanoho

DET.NOM my dad not-be-fat-3PS.PRES

My dad is not fat.

49. no<sup>ʔ</sup>o ra wã in ra doŋgi

DET.NOM be-3PS.PRES fish NEG be-3PS.PRES big-SG

The fish is not big.

50. ma nana bihokagi ga nione

my mom let-3PS.PAST me eat

My mom let me eat.

51. ma nana bimaʃkagi ga nione

my mom help-3PS.PAST me eat

My mom helped me eat.

52. ma nana bijēna ge pɛtsi ganione

my mom ? me make-3PS.PAST eat

My mom made me eat.

53. o gi niune

NEG 2PS eat-2PS

Don't eat!

54. niune



eat-2PS

Eat!

55. pɛtsi gi nione

OBLG 2PS eat

You have to eat!

56. noga ɖihoka                      jaɖeɖi              hjasto

1PS make-1PS.PRES tamale-PL daily

I make tamales every day.

57. noga dijoki                                      jaɖeɖi              nuvia

1PS make-1PS.PRES-PROG tamale-PL right now

I am making tamales right now.

58. noga mavahoki              jaɖeɖi              ʃudi

1PS make-1PS.FUT tamale-PL tomorrow

I'm going to make tamales tomorrow.

59. noga dahoka              jaɖeɖi              mande

1PS make-1PS.PAST tamale-PL yesterday

I made tamales yesterday.

60. noga ndihoga              jaɖeɖi              nujujaheja biθogi

1PS make-1PS.IMPF tamale-PL in past years

I used to make tamales in past years.

61. seria gaθo no<sup>ʔ</sup>ũ jaheja ʃan<sup>ɛ</sup>epu magahoki                      jaɖeɖi

? ?              1PS years              ?              make-1PS-PRES.PROG tamale-PL

In years, I will make (be making) tamales every once in a while.

62.   noʔe hokika                   jaʔeɖi       hjasto  
 2PS   make-2PS.PRES tamale-PL every day  
 You make tamales every day.
63.   noʔe gihoki                               jaʔeɖi       nuvia  
 2PS   make-2PS.PRES-PROG tamale-PL right now  
 You are making tamales right now.
64.   noʔe maihoka                               jaʔeɖi       ʃodi  
 2PS   make-2PS.PRES-PROG tamale-PL tomorrow  
 You are going to make tamales tomorrow.
65.   noʔe grahoki                   jaʔeɖi       mande  
 2PS   make-2PS.PAST tamale-PL       yesterday  
 You made tamales yesterday.
66.   noʔi magisige ihoki bihoka   jaʔeɖi       nandio  
 2PS   make-2PS.PAST-PROG tamale-PL in past years  
 You used to make tamales in past years.
67.   nuga dahoka                   jaʔeɖi       fono a ra huni dega deθã  
 1PS   make-1PS.PAST tamale-PL ?   ? ? ?   ?   ?  
 I made tamales with corn flour.
68.   noga ga onbabi                   jaʔeɖi       noũ no ma haʔi  
 1PS   ?   give-1PS.PRES tamale-PL to   ? my people  
 I give tamales to my people.
69.   noni larana ʃirʌŋgʔami

3PS frog be very-3PS.PRES green

The frog is green.

70. ra dehe ʃatse

DET.NOM water be cold-3PS.PRES cold

The water is cold.

71. ra dehe ʃʌng<sup>2</sup>ami

DET.NOM water be green-3PS.PRES

The water is green.

72. ra dehe ʃirʌng<sup>2</sup>ami

DET.NOM water be very-3PS.PRES green

The water is very green.

73. ʃirʌtse ra dehe

be very cold-3PS.PRES DET.NOM water

The water is very cold.

74. nuga ðahoki ku ra n<sup>1</sup>ĩ nera ðentʃi

1PS cook-1PS.PAST with DET.ACC chiles and onions

I cooked with chiles and onions.

75. noni vihio na ra k'enja ko n<sup>2</sup>a ra za

3PS kill-3PS.PAST one DET.ACC snake with one DET stick

He killed the snake with a stick.

76. ðahoki noju jaɽeɽi ko ra ge:ʃo

make-1PS.PAST 3PP tamale-PL with DET.ACC cheese

I made tamales with cheese.

77. noni biunβaβi                      jaṭeḍi                      nojɔ jantʃutsi  
 3PS give-3PS.PAST tamale-PL to girl-PL  
 She gave tamales to the girls.
78. nuni birakagi                      du:nti jaṭeḍi  
 3PS give-3PS.PAST me many tamale-PL  
 He gave me many tamales.
79. noga diʔonbaβi                      joho jaṭeḍi                      noni hjasto  
 1PS give-3PS.PAST her ? tamale-PL 3PS every day  
 I give her tamales every day.
80. noga diʔonbaβi                      joho jaṭeḍi                      hjasto                      noni  
 1PS give-1PS.PRES her ? tamale-PL every day 3PS  
 I give her tamales every day.
81. noga ḍahotsʔi                      du:nti jaṭeḍi                      para ma ngu  
 1PS take-1PS.PAST many tamale-PL to my house  
 I took the tamales home.
82. noga ḍatsi                      ra                      dehe miha                      hara meʃa  
 1PS drink-1PS.PAST DET.ACC water be-3PS.PAST on table  
 I drank the water that was on the table.
83. ma ngu                      ra                      dongi  
 my house be-3PS.PRES big  
 My house is big.
84. ran hwa ra                      dongi  
 DET fish be-3PS.PRES big

The fish is big.

85. nojʊ jangu ja doŋgi

? house-PL be-3PP.PRES big

The houses are big.

86. hamũ magihoki jaṭeḍi

when make-2PS.FUT tamale-PL

When are you going to make tamales?

87. hamũ none maḍahjoki jaṭeḍi

when 3PS make-3PS.FUT tamale-PL

When is she going to make tamales?

88. toʔo maḍahjoki jaṭeḍi

who make-3PS.FUT tamale-PL

Who is going to make tamales?

89. toʔo maḍahjoka jaṭeḍi

who make-3PS.FUT tamale-PL

Who is going to make tamales?

90. toʔo vihi oʔa k'enja

who kill-3PS.PAST DET.ACC snake

Who killed the snake?

91. hawʊ magihjoki jaṭeḍi

where make-3PS.FUT tamale-PL

Where are you going to make tamales?

92. hawʊ magihjoka jaṭeḍi

where make-3PS.FUT tamale-PL

Where are you going to make tamales?

93. te magihoki bia paraginione

what make-2PS.FUT ? cook

What are you going to cook?

94. te maðahjoki bia paraginione

what make-3PS.FUT ? cook

What is she going to cook?

95. era ðame tihi du:nti

DET man run-3PS.PRES a lot

The man runs a lot.

96. none era ðame fi dihi du:nti era dongi

3PS the man REL run-3PS.PRES a lot be-3PS.PRES big

The man who runs a lot is big.

97. none era ðame fi dihi du:nti ra dongi

3PS the man REL run-3PS.PRES a lot be-3PS.PRES big

The man who runs a lot is big.

98. no<sup>?</sup>ora fuvua vinjo ku ra nana

DET.NOM Juan talk-3PS.PAST with his mom

Juan talked with his mom.

99. jantfutsi jani ku jaku

girl-PL play-3PP.PRES with sibling-PL

The girls play with their sisters.

100. jantʃutsi njeni                      ku noju jaku  
girl-PL play-3PP.PRES with 3PP sibling-PL  
The girls play with their sisters.
101. noni hoki                      jaṭeḍi      hjasto  
3PS make-3PS.PRES tamale-PL every day  
She makes tamales every day.
102. none bihoki                      jaṭeḍi              nuvia  
3PS make-3PS.PRES.PROG tamale-PL right now  
She is making tamales now.
103. noni maḍahoki              jaṭeḍi      ʃudi  
3PS make-3PS.FUT tamale-PL tomorrow  
She is going to make tamales tomorrow.
104. noni vihioki                      jaṭeḍi              mande  
3PS make-3PS.PAST tamale-PL yesterday  
She made tamales yesterday.
105. noni mihoki                      jaṭeḍi              mameḍo  
3PS make-3PS.PAST.IMPF tamale-PL in the past  
She used to make tamales in the past.
106. noni maḍahjoki              jaṭeḍi      nojʊ jaheja ʃenjepu  
3PS make-3PS.FUT tamale-PL ?    ?    ?  
She will make tamales in coming years.
107. noni ra                      ben'ia biunbi                      nujo jaṭeḍi  
3PS DET.NOM woman give-3PS.PAST to tamale-PL 3PS

noni era            dame bihio            na ra            k'enja

3PS DET.ACC man kill-3PS.PAST one DET.ACC snake

The woman gave the tamales to the man who killed the snake.

108.    ðihoke            jaṭeḍi            hjasto

make-1PP.PRES tamale-PL every day

We make tamales every day.

109.    ðihohe            jaṭeḍi            nuβia

make-1PP.PRES.PROG tamale-PL right now

We are making tamales right now.

110.    magahohe            jaṭeḍi            ʃuḍi

make-1PP.FUT tamale-PL tomorrow

We are going to make tamales tomorrow.

111.    ðahohe            jaṭeḍi            mande

make-1PP.PAST tamale-PL yesterday

We made tamales yesterday.

112.    ḍihohe            jaṭeḍi            nuʔujahejabiθogi

make-1PP.PAST.IMPF tamale-PL in past years

We used to make tamales in past years.

113.    nuʃo hoka            jaṭeḍi            hjasto

3PP make-3PP.PRES tamale-PL every day

They make tamales every day.

114.    nuʃo vihoki            jaṭeḍi            nuvia

3PP make-3PP.PRES.PROG tamale-PL right now



- They are making tamales right now.
115.    *nuju magahjoka        jaṭeḍi        ʃuḍi*  
          3PP   make-3PP.FUT   tamale-PL tomorrow  
          They are going to make tamales tomorrow.
116.    *vihjoki                jaṭeḍi                mande*  
          make-3PP.PAST   tamale-PL yesterday  
          They made tamales yesterday.
117.    *mihoka                        jaṭeḍi                nuʔujahejabiθgi*  
          make-3PP.PAST.IMPF   tamale-PL    in past years  
          They used to make tamales in past years.
118.    *maḍahjo                nju        jak'enja*  
          kill-3PS.PRES.PROG   three   snake-PL  
          He is killing three snakes.
119.    *nuga hin        dahoka                jaṭeḍi*  
          1PS   NEG        make-1PS.PAST   tamale-PL  
          I didn't make tamales.
120.    *nunka ḍihoki                jaṭeḍi*  
          never   make-1PS.PRES   tamale-PL  
          I never make tamales.
121.    *hin    ga    hoka                jaṭeḍi*  
          NEG   you   make-2PS.PRES   tamale-PL  
          Didn't you make tamales?
122.    *iṇ        gatsi        jaṭeḍi*

- NEG ? tamale-PL  
 Didn't you eat tamales?
123. magi hoki tegitsi  
 AUX-2PS.FUT make-2PS food for yourself  
 Are you going to make food for yourself?
124. magi hoka jaṭeḍi  
 AUX-2PS.FUT make-2PS tamale-PL  
 Are you going to make tamales?
125. nuni maḍa hjoki jaṭeḍi  
 3PS AUX-3PS.FUT make-3PS.FUT tamale-PL  
 Is she going to make tamales?
126. nune viʔoho  
 3PS sleep-3PS.PRES.PROG  
 He/she is sleeping.
127. haṅka magi hoki jaṭeḍi  
 how AUX-2PS.FUT make-2PS tamale-PL  
 How are you going to make tamales?
128. haṅka magi hoki jaṭeḍi  
 why AUX-2PS.FUT make-2PS tamale-PL  
 Why are you going to make tamales?
129. nora dehe miha har meʃa  
 DET.NOM water be-3PS.PAST on table  
 The water was on the table.

130.   nora           dehe   χa                   hara meʃa  
 DET.NOM water be-3PS.PRES on   table  
 The water is on the table.
131.   gaho                   ora               dehe  
 like-3PS.PAST DET.ACC   water  
 He/she liked the water.
132.   gaho               jatedi  
 like-3PS.PAST tamale-PL  
 He liked the tamales.
133.   biho               noʔora   dehe miha               hara meʃa  
 like-3PS.PAST DET.ACC water be-3PS.PAST on   table  
 He liked the water that was on the table.
134.   noni ra               ʃuvua vihio               nojo   nju   jak'enja de mige  
 3PS DET.NOM Juan   kill-3PS.PAST   ?   three snake-PL of Miguel  
 me bui haran hw āhi  
 ?   ?   in the   field  
 Juan killed Miguel's three big snakes, which were in the field.
135.   te           gihogi hoki  
 what   ?           do  
 What do you like to do?
136.   te ra ve ʔa gihoki  
 what ? ? ? do-2PS.PRES.PROG  
 What are you doing?

## Appendix B: Lexicon

### *Adjectives*

n <sup>1</sup> on <sup>1</sup> o	Otomi
donɣ-	big
ok-	small
k'a <sup>2</sup> mi	green
tse	cold

### *Adverbs*

du:nti	a lot
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### *Affixes*

ja-	plural prefix
-a	singular suffix on adjectives
-i	plural suffix on adjectives

### *Determiners*

noʔora	nominative
noɾan	nominative
nuraŋ	nominative
no, noʔo	nominative
ɾan	accusative

ra	accusative
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era	accusative
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### ***Demonstratives***

tsinona	prenominal demonstrative
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novua	proximal (postnominal)
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bixa:ni	distal (postnominal)
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bihanijabu	very distal (postnominal)
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### ***Nouns***

Mexico	monda
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Actopan	ma <sup>?</sup> n <sup>i</sup> ut'e
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Pachuca	n <sup>i</sup> onte
---------	---------------------

city	něine
------	-------

tamales	ṭedi
---------	------

mother/mom	nana
------------	------

father/dad	ḏaḏa
------------	------

water	dehe
-------	------

rice	aro
------	-----

frog	rana
------	------

snake	k'enja
-------	--------

dog	sad'jo
-----	--------

cat	miʃi
-----	------

mouse	doŋgu
sheep	ɕe:ti
goat	jo
coyote	mi <sup>?</sup> n <sup>j</sup> o
calf	terneɾo
horse	ɕani
rabbit	anɣua
snake	k'en <sup>j</sup> a
rooster	menɣa
chicken/hen	ɕni
pig	ts'ɤɕi
donkey	buro
frog	rana
corn	dεɣa
bean	hɤ
seed	semija
animals	bon'e
fly	gin'ue
bird	ts'ɪnts'ɤ
skirt	gɤ ɕe
sandal	z εsti
blankets	tɕu ʃos

blanket	tku ʃo
shirt	pani
shirts	pani
stones	do
bank (of a river)	tunĩ
tortillas	mε
bread	tuo mε
pulque/maguey	hoadā
water	dehe
head	nʲamʲõ
mouth	nε
throat	juga
fingers	saha
feet	vua
ear	gu
hand	ʃε
earrings	tsʹɪngu
nose	ʃinʲo
eye	ɖa
hair	stõ
chile	nʲi
red chile	tanganʲe

napkins	maʒume
night	ntʃue
store	denda
table	meʃa
cheese	geʃo
Juan	ʃuɣua
Miguel	paɸi
boy	metsi
girl	tʃutsi
fish	hwa
people	haʔi
stick	za
house	ngu
sibling	ku
alcohol	refino
grandmother	ʒuʒu
grandfather	ʃiṭa
bicycle	bisikleta

### ***Possessives***

my	ma
your	ri



his	ra
our	mametiho
their	noʀi

### *Prepositions*

with	ku
to	nujo
on	har

### *Pronouns*

I	nuga
you	noʔe
he/she	noni
we	noje
they	nujo

### *Quantifiers*

one	na
three	nju
some	da
a little	natuki

### ***Question Words***

what	te
when	ham ũ
who	toʔo
where	hawu
how	haŋka
why	haŋka

### ***Time Adverbs***

every day	hjasto
right now	nuvia
tomorrow	ʃudi
yesterday	mande
in past years	nujujaheja biθogi
every once in a while ?	

### ***Verb Roots***

eat	-n <sup>i</sup> uni
drink	tsi-
kill	vihio, vijo
get up	nangi
make	-hok-

### ***Verb Affixes***

hamaga-	1PS future prefix
da-	1PS past prefix
ði-, ɖi-	1PS present prefix
magi-, mavi-	2PS future auxiliary
da-, dai- (#13)	1PS past prefix
ga-, gai- (#14)	2PS past prefix
bi-	3PS past prefix
mada-	3PS future auxiliary
-i	progressive suffix
-a	suffix for simple aspect

### ***Greetings***

good morning	ke atʃa ual
good afternoon	ki ve
good night	tʃue