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by

Susan Smythe Kung

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## A Descriptive Grammar of Huehuetla Tepehua

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# A Descriptive Grammar of Huehuetla Tepehua 

by

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## Dissertation

Presented to the Faculty of the Graduate School of The University of Texas at Austin
in Partial Fulfillment
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## Dedication

For the Tepehua people of Huehuetla, Hidalgo, Mexico, and especially for Nicolás.

If it were not for their friendship and help, I never would have begun this dissertation. If it were not for their encouragement of me, as well as their commitment to my project, I never would have finished it.

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# A Descriptive Grammar of Huehuetla Tepehua 

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This dissertation is a comprehensive description of the grammar of Huehuetla Tepehua (HT), which is a member of the Totonacan language family. HT is spoken by fewer than 1500 people in and around the town of Huehuetla, Hidalgo, in the Eastern Sierra Madre mountains of the Central Gulf Coast region of Mexico. This grammar begins with an introduction to the language, its language family, and its setting, as well as a brief history of my contact with the language. The grammar continues with a description of the phonology of HT, followed by morphosyntactic and syntactic description of all of the major parts of speech, including verbs, nouns, adjectives, adverbs, and numbers; the grammar concludes with a description of the sentence-level syntax. A compilation of interlinearized texts appears in the appendix.

HT is a polysynthetic, head-marking language with complex verbal morphology. Inflectional affixes include both prefixes and suffixes for which a
templatic pattern is difficult to model. In addition to inflectional and derivational morphology, HT verbs are also host to a large number of aspectual derivational morphemes, each of which alters the meaning of the verb in a very specific way. Plural marking on both nouns and verbs for any third person argument is optional and determined by an animacy hierarchy, which is also used to determine verbal argument marking in various morphosyntactic constructions. HT nouns are completely unmarked for case, and certain nouns, including kinship terms and parts of a whole, are obligatorily possessed. The order of the major constituents is pragmatically determined, with a tendency towards VSO order in the absence of pragmatic or contextual clues and SVO order in context-rich textual examples.

HT is an under-documented moribund language that is at imminent risk of extinction within the next two-to-three generations. Thus, this dissertation is a major contribution not only to the field of linguistics, but also to the Tepehua people who might one day be interested in the language of their grandparents.

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## List of Abbrevations

| 1 | first person |
| :--- | :--- |
| 2 | second person |
| 3 | third person |
| ADJ | adjective |
| ADJZ | adjectivizer |
| ADV | adverb |
| AGAIN | again |
| AGNM | agent nominalizer |
| ALD | already |
| AMB | ambulative |
| APPL | applicative |
| ART | article |
| ART.IN | indefinite article |
| AS | affectionate speech |
| AUX | auxiliary verb |
| BLV | belief (epistemic) |
| CAUS | causative |
| CL | classifier |
| CLT | clitic |
| COM | comitative |
| COMP | complementizer, subordinator |
| DADJ | demonstrative adjective |
| DAT | dative |
| DIS | distributive action |
| DM | discourse marker |
| DO | direct object |
| DESID | desiderative |
| DST | distal |
| DTR | detransitivizer |
| DVB | deverbalizer |
| EMP | emphatic, emphasis |
| EPE | epenthetic |
| EVI | evidential |
| EXCL | exclusive |
| FOC | focus |
| FUT | future |
| ID | ideophone |
| IMM | imminent |
| IMPFV | imperfective aspect |
|  |  |


| INCH | inchoative |
| :---: | :---: |
| INF | infinitive |
| INO | indefinite object |
| INS | indefinite subject |
| INST | instrumental |
| IPOS | impersonal possessor |
| IRR | irrealis |
| JST | just |
| LOC | locative |
| NEG | negative |
| NOM | nominalizer |
| OBJ | object |
| PAST | past tense |
| PFV | perfective aspect |
| PL | plural |
| PL.POS | plural possessor |
| PM | possessum |
| POS | possessive/possession |
| PR | possessor |
| PREP | preposition |
| PRES | present |
| PRN | pronoun |
| PRT | particle |
| PRX | proximal |
| Q | interrogative pronoun |
| RC | relative clause |
| RCP | reciprocal |
| REL | relativizer, relative pronoun |
| RELCL | relative clause |
| REP | repetitive |
| RFL | reflexive |
| RHET | rhetorical |
| RPT | reported speech (evidential) |
| RT | round trip |
| S | noun (sustantivo) |
| SG | singular |
| SPEC | specifier |
| Sr | relational noun (sustantivo relacional) |
| SUB | subject |
| TAM | tense/aspect/mood |
| va | auxiliary verb (verbo auxiliary) |
| vi | intransitive verb (verbo intransitivo) |


| VOC | vocative |
| :--- | :--- |
| vt | transitive verb (verbo transitivo) |
| XXX | unidentified morpheme or word |
| - | affix boundary |
| + | clitic boundary |
| $=$ | compound boundary |
| $\#$ | word boundary |
| $*$ | reconstructed form |
| $* *$ | ungrammatical, unattested form |
| $? ?$ | questionable grammaticality |

## Chapter 1: Introduction

### 1.1 Introduction to the Language

Tepehua is an under-documented, moribund, indigenous language that is spoken in the Mexican towns of Huehuetla, Hidalgo and Mecapalapa Puebla. Tepehua belongs to the Totonacan language family, which has two branches: Tepehua and Totonac. ${ }^{1}$ The Totonacan languages are spoken in the Eastern Sierra Madre mountain chain in the Central Gulf Coast region of Mexico where the contiguous states of Hidalgo, Veracruz, and Puebla fit together like pieces of a jigsaw puzzle. Illustration 1 is a map the geographical location of the Totonacan language family within Mexico.

Illustration 1: Map of Totonacan Languages within Mexico


[^0]There are three varieties of Tepehua: Huehuetla Tepehua (HT), Pisaflores Tepehua (PT), and Tlachichilco Tepehua (TT). Illustration 2 shows the four locations where the Tepehua languages are spoken: in and around the towns of Tlachichilco and Pisaflores, Veracruz, in Huehuetla, Hidalgo, and in Mecapalapa, Puebla. This map also shows the cities of Tulancingo, Hidalgo and Mexico City for reference. The variety of Huehuetla Tepehua that is spoken in Huehuetla, Hidalgo is the topic of this grammar.

Illustration 2: Map of Tepehua Languages


According to Ethnologue, all three Tepehua varieties combined are spoken by approximately 10,000 people (Gordon 2005). The Instituto Nacional de Estadística, Geografía e Información (INEGI), the organization responsible for the census in the United States of Mexico, reported 8,325 speakers of Tepehua (all three varieties) over 5 years old in the 1980 census and 8,120 speakers in the 1990 census. Of the 8,120 Tepehua speakers reported in the 1990 census, 2,001 of them lived in the state of Hidalgo (MacKay 1999), meaning that they were most likely speakers of HT. In the most recent census of 2005, INEGI reported 8,321 total Tepehua speakers, 1,470 of which were living in Huehuetla, Hidalgo (INEGI 2005) and were most likely speakers of Huehuetla Tepehua and not one of the other two varieties.

The town of Huehuetla is quite remote, even by Mexican standards. To get there, one must begin in Mexico city and travel north-east (by car or bus) on a divided highway for one-and-a-half to two hours to the small city of Tulancingo, Hidalgo. From Tulancingo, one must first travel east on a two-lane highway for about 30 minutes, then travel north and north-east on two- or one-lane mountainous roads for three to four hours. The roads are quite treacherous in places, and the scenery in the mountains is breathtaking. The climate and environment make two dramatic changes during the trip. The area around Tulancingo is dry and arid, with lots of maguey, cacti, and scrub brush. As the elevation increases, the climate becomes quite cold, and the flora gradually changes to pine forest. After cresting the mountain range and upon descent on the other side, the flora becomes dense and tropical, and the climate becomes hot and
humid. Huehuetla is the last community on the road and the last stop on the bus route.

The town of Huehuetla is the county seat of Huehuetla County (Municipio de Huehuetla). It lies at the bottom of a deep valley, beside a river whose name I never learned because the people is Huehuetla call it simply el rio or juu lakxkaan [1hu: lak.'Ska:n] 'the river'. From looking at maps of the area, I have decided that this river is the River Pantepec. My consultants described the town as being made up of approximately half Tepehua and half people of non-indigenous descent. The HT-speakers call the non-indigenous population Laawaan [la:.'ßa:n], or 'Spanish people', even though many of them are descendents of a German family who at one time owned a local coffee exportation business.

HT is spoken in the town of Huehuetla, the nearby communities of Barrio Atzlán and Linda Vista (Mirasol), and in the more distant town of Mecapalapa, Puebla. Both Barrio Atzlán and Linda Vista are a short ten- to fifteen-minute walk from downtown Huehuetla, while Mecapalapa is about a day's walk down-river from Huehuetla. I visited the two nearby communities often, but I never went to Mecapalapa. Totonac is the principle indigenous language spoken in Mecapalapa, and the Tepehua speakers there are immigrants (or their descendents) from Huehuetla (Kryder 1987).


Illustration 3: Huehuetla, Hidalgo, Mexico

Almost all HT-speakers are bilingual in Spanish. At the time of my fieldwork, I met two women who were monolingual in HT; both of them where in their 90 s, and both of them lived in the remotest part of Barrio Atzlán. Everyone else I met was bilingual in HT and Spanish, and many of the older men were multilingual in HT, Spanish, Totonac, and Otomí. With respect to the younger generations, I met only two teenagers who actively spoke HT (as well as Spanish) in the home: a 14 year old girl and a 15 year old boy. I do not mean to imply that these two teenagers were Tepehua-dominant, because they were not; they used Tepehua (as well as Spanish) only with their parents and grandparents, and they switched to Spanish with everyone else. All of the other young adults, teenagers, and children that I met chose to speak only Spanish in the home, even though many or most of them understood HT.

I met only one HT-dominant couple who spoke to their young toddler and pre-school aged children in HT; everyone else addressed their children and grandchildren in Spanish. Since I left the village, a teacher's college has been constructed there, which has caused the non-HT-speaking population to increase and has lead to even more intermarriage between Tepehua and non-Tepehua, thereby reducing even more the likelihood that HT will be passed on to future generations. English-but not Tepehua-is taught in the local middle and high schools, and more and more people want to learn English in order to emigrate to the United States of America.

Otomí is spoken in many of the ranches and towns that are a part of the Huehuetla Municipio. On Market day, when people come from the outlying areas to do business, it is quite common to hear Otomí, as well as Tepehua, spoken in the town. The town of Huehuetla is a Tepehua island surrounded by a sea of Otomí. Outside the Huehuetla Municipio boundaries, going east towards the Gulf Coast, both Totonac and Nahuatl are spoken. Many of the older Tepehua men who had left Huehuetla to work (and then returned) were multilingual in Totonac, Otomí, Tepehua, and-of course-Spanish. However, I did not meet an HT speaker who claimed to know Nahuatl, too.

The HT autonyms are Maqalhqama7 [ma,qatqa'ma?] 'Tepehua people' and Lhiimaqalhqama7 [14i:ma,qałqa'ma?] 'Tepehua language'. In general, HT speakers are not aware that there are two other varieties of Tepehua or that there are Tepehua speakers in or around Tlachichilco or Pisaflores, both of which are in the state of Veracruz. Both of these groups have their own autonyms to refer to
their language: Lhiimaasipijni /hima:sipihni/ or Liimaasipijni /li:ma:sipihni/ in Tlachichilco Tepehua and Lhichiwin /hitjiwin/ in Pisaflores Tepehua (INALI 2006, Watters p.c.). According to Watters (1988), the word Tepehua is an exonym from Nahuatl: tepe- 'mountain' and hua 'dweller, owner' (p. 4). The word Huehuetla 'place of the old people' is also of Nahuatl origin, and there are two possible etymologies: (i) huehue 'old person' and -tla 'place of' and (ii) huehuetzotl 'old god' or 'god of the town' (Palacios 1993). ${ }^{2}$


Illustration 4: Angela Patricio
Tolentino, Wearing Traditional Tepehua Dress, Huehuetla, Hidalgo, Mexico, May 2005

Farming is the dominant economic activity of the Tepehua people in Huehuetla. They cultivate and sell coffee and corn. They cultivate squash, peppers, palm, and tomatoes for personal use. Unlike the Totonac of Papantla, the Tepehua do not traditionally cultivate vanilla. The Tepehua do not participate in community

[^1]farming. Each family has a plot of land outside the village where they grow the above-mentioned crops. During the time of my fieldwork (2000-2001), the price of coffee had dropped so low that many of the Tepehua had decided that it was not worth the effort to pick the beans from the coffee bushes. Instead many of the men found work in Tulancingo or Mexico City, and some crossed over into the United States in search of work.

The people of Huehuetla are predominantly Catholic with a large protestant community, as well. I did not observe any protestant ceremonies, but I did observe, record, and participate in several of the traditional Catholic ceremonies that the town of Huehuetla celebrates, including Candlemas (Candelaria) in February and Mardi Gras (Carnaval), which fell in early March the year that I was there. All of the names of the ancient deities have been lost, but the spiritual practices and rituals have been syncretically blended with Catholicism. Though the Candlemas celebration (fiesta de Candelaria), for example, is a Catholic one, more importance is placed on the celebrations officiated over by the brujos, 'male witches' or 'shamen', than on the mass held at the parish church. There is a strong belief in shamanism and witchcraft that goes beyond mere superstition.

### 1.2 My Research: The History, Setting, and Methodology

My first contact with HT was in the summer of 1999 when I began working on the Project for the Documentation of the Languages of Mesoamerica (PDLMA), directed by Dr. Terrence Kaufman, Dr. John Justeson, and Dr. Roberto Zavala Maldonado, in Catemaco, Veracruz. When he hired me, Dr.

Kaufman gave me a choice between Zapotec, which is a tone language, and Tepehua, which is not. I chose Tepehua.

During the nine-week field summer in 1999, I worked with two native speaker consultants of HT conducting mainly one-on-one lexical elicitation. For the first three weeks, I worked with Micaela Santiago Plata, who was 23 years old at the time; for the last six weeks, I worked with Nicolás Vigueras Patricio, who was 44 years old at the time. Under Dr. Kaufman's tutelage, I established the practical phonemic orthography that I have used in all of my subsequent fieldwork and that appears in this grammar. ${ }^{3}$

Micaela's first language was HT; she began speaking Spanish when she started primary school. Micaela was immensely proud of her heritage and her language, and she spoke only Tepehua in the home and with her extended family. However, she was studying in Tulancingo, Hidalgo to be a teacher, and she had not lived in Huehuetla continuously since graduating from secondary school. She had attended high school in another town, where Spanish and Otomí were spoken. During the time that she worked with me, she was on vacation from her teachertraining school. She was new to linguistic consultation, and I was new to linguistic elicitation; we trained each other.

For those readers who know something of my medical history during my field work, it was while I was working with Micaela during our second week in Catemaco that I came down with appendicitis. After watching me struggle through our elicitation sessions for four days, she finally insisted that I see a

[^2]doctor. The next day-a Friday-I was operated on for a ruptured appendix in a small hospital in the nearby town of San Andrés Tuxla, Veracruz. I spent the weekend in the hospital, went back to the Hotel Playa Cristal (the PDLMA headquarters) on Sunday afternoon, and was back at work on Wednesday morning. Micaela and I worked together for another week and a half before she had to go back to school.


Illustration 5: Micaela Santiago Plata and Susan Smythe Kung, Hotel Playa Cristal, Catemaco, Veracruz, Mexico, June 1999

Micaela returned to Huehuetla on her way back to Tulancingo to find a replacement for herself and to visit her family. Her HT-dominant mother recommended someone, but when Micaela got to his house, she found that he was out of town, but that his brother was willing to join the PDLMA in his stead.

By the time Nicolás Vigueras Patricio joined the project, I had a better understanding of what I was doing (with respect to the lexical elicitation and how to use different elicitation techniques, such as the mirror image analogy). He
proved to be one of the best consultants that I've had the opportunity to work with. He, too, had learned HT as his first language, and-like Micaela-had not learned Spanish until he started school. Unlike Micaela, he had not had the opportunity to pursue an education. As the son of poor farmers, he had left school to work after completing the sixth grade.

Don Nicolás loved working with me as a linguistic consultant, and he never grew bored or impatient with the repetition. He is a farmer by birth and a musician by trade, and he has a strong, clear speaking voice. He also proved to be a highly creative HT-speaker. He rarely said that a word did not exist in HT; instead, he found a way to say it, even if we had to resort to a Spanish dictionary to figure out what a particular prompt meant. He was immensely patient with my less-than-perfect Spanish. He claims, with pride, that he taught me both Tepehua and Spanish.


Illustration 6: Nicolás
Vigueras Patricio and Susan Smythe Kung, Hotel Playa Cristal, Catemaco, Veracruz, Mexico, July 1999

I returned to Mexico to work for PDLMA in the summer of 2000. During the eight-week (June-July) field season that was again held in Catemaco, Veracruz, I worked with Nicolás Vigueras Patricio for a second time, but only for
one week. Dr. Kaufman decided that we needed an older speaker of HT, someone whose idiolect still retained vestiges of the uvular stops that he hypothesized were found in Proto-Tepehua; sadly, there was no trace of the historic uvular stop or glottalized uvular stop in the idiolects of either don Nicolás or Micaela. Don Nicolás was gracious beyond expectation. He took me to his village, introduced me to dozens of HT speakers older than himself, and even made me feel like an honored guest in his home. After two days in Huehuetla, during which time I had met many older speakers (older than 60) who retained plain uvular stops, I had found no one who was willing to return to Catemaco to work with me at the PDLMA headquarters. Just as I was about to leave, we met don Nicolás' uncle, Antonio Vigueras Huerta, who had just returned to town and who was more than willing to work with me in Catemaco.

At this point in my fieldwork, I was planning to continue my own grammatical research on HT in the town of Huehuetla after the PDLMA field summer was over. Knowing this, don Nicolás invited me to stay with him and his family for the duration of my fieldwork even though I had to replace him with another, older consultant that summer.

I worked with don Antonio Vigueras Huerta for the final seven weeks of the 2000 field summer. It was only after working with don Antonio that I fully appreciated what a dedicated linguistic consultant don Nicolás was. Don Antonio was 76 years old that summer. He tired easily, and he was somewhat hard of hearing, both of which made him lose patience easily with the repetitious rootdictionary task that Dr. Kaufman had assigned to us. Don Antonio was missing
most of his front teeth, which made him difficult for me to understand, and he spoke an antiquated, agrarian Spanish that I was not familiar with. He could not see well enough to be able to identify photos and drawings of flora and fauna, a lexical task that Dr. Kaufman had assigned us. We ended up spending most of the summer going on long walks during which I carried a mini-disk recorder and microphone to record in HT anything that he saw, identified, and cared to tell me. We also spent many hours in the project's sound room, recording him talking about any subject that came to his mind. However, the most important task that we did that summer was to go through the HT lexemes that I had elicited from Micaela and don Nicolás, with me re-eliciting the same forms from don Antonio to see if they contained a uvular stop or a glottal stop in his idiolect.

Even though don Antonio did not enjoy the work of a linguistic consultant, he did enjoy working with me. I became closer to him than I was to either of my own grandfathers, and I know that he felt the same towards me. Several months later, when I was living in Huehuetla with don Nicolás' family, I discovered that don Antonio had spent the entire summer speaking to me in the register that don Nicolás later dubbed "affectionate speech"; please see Chapter 2, section 2.6.10.2 for a description of this register. Don Antonio passed away in October 2005, may he rest in peace.

The data resulting from my first two field summers (1999 and 2000) working for PDLMA fill three file slip boxes, approximately 700 notebooks pages, and approximately 10 hours of audio-recordings. The direct elicitation tasks that I conducted with Micaela, don Nicolás, and don Antonio include
elicitation using vocabulary lists (Kaufman's short vocabulary list (220 words), his lexical list ( 651 words), and his long lists ( 4300 words)) and the Bouquiaux Questionnaire; elicitation of male and female names; and elicitation of ethnobotanical and ethnozoological terms by means of taking walks and looking at botanical and zoological books. I also recorded, transcribed, and translated narrative texts in HT from all three consultants.


Illustration 7: Antonio Vigueras Huerta and Susan Smythe Kung, Hotel Playa Cristal, Catemaco, Veracruz, Mexico, July 2000

After briefly returning to Texas for 3 weeks, I went back to Mexico in late August of 2000, this time with funding from a Fulbright García-Robles fellowship and an NSF Dissertation Improvement grant (\#0078453 with Anthony C. Woodbury, PI). After spending a week in Mexico City and another five weeks in Cholula, Puebla at the Universidad de las Americas Puebla, I established myself in Huehuetla, Hidalgo in October of 2000, in the home of my principal consultant, Nicolás Vigueras Patricio. Though I maintained an apartment in Cholula until January 2001, I lived primarily with the Vigueras family from October 2000 through early July 2001.

For the first three months, I shared a room with several of the family members. However, I needed a more private space in which to be able to conduct my research and store my equipment, so rather than moving into my own house, I decided to build a room onto the Vigueras' home. Construction of the room began in November 2000, and I was able to move into it full-time in January 2001.


Illustration 8: Building a "Linguistic Facility"

During my time in Huehuetla, I utilized a discourse-centered approach to data collection (Sherzer 1987) in order to understand how and for what purposes HT-speakers use their language in their daily lives. I tried to be a participant in, as well as an observer of, the community; I took my mini-disk recorder with me everywhere that I went (along with several of my NSF consent forms), and
recorded as often as possible. A discourse-centered approach to research is a crucial component of descriptive linguistic research because one-on-one elicitation does not produce naturally occurring speech.


Illustration 9: Participant Observer: The Linguist (left) and Dance Partner, Dressed as "Huehues" for Mardi Gras (Carnaval) 2001

However, I quickly learned that it is very difficult to be a participantobserver when all anyone was interested in doing was observing me. With my fair, freckled skin and my strawberry blond hair, I stood out like a sore thumb in the indigenous community. I couldn't go anywhere alone without being followed by a crowd, and I never quite got used to being stared at constantly. Nevertheless, as time passed, it became easier to integrate myself into the community, especially since the Vigueras family had adopted me as one of their own.

I worked primarily with don Nicolás, and my first task was to teach him to read and write my HT practical orthography. We spent much of the nine months that I was there recording narratives and conversations with various community members, then transcribing them and translating them into Spanish.

In a rural village, the mornings are the busiest time of the day for the town's people, who rise early to begin their daily tasks. The men go off to the fields to work, while the women see their children off to school and hurry to get some of the never-ending housework done before the children come home again in the early afternoon. Thus, the mornings were never a good time for me to search out consultants because no one-except don Nicolás-had time to work with me.

Thus, don Nicolás and I spent our mornings transcribing and translating texts. The first step in this process involved transcribing an entire HT text. Next don Nicolás translated the HT text loosely into Spanish. Finally, we completed a word-for-word translation together; this allowed me to analyze the words as we worked and to conduct impromptu grammatical and semantic tests when I encountered new forms.

In the early afternoons, there was a period of about two hours that fell after most of the chores were done but before the children came home from school. During these two hours, the whole town was very peaceful, and the adults were resting. This was the best time of the day for me to go visiting other people in the community in search of HT consultants. Thus, most afternoons, don

Nicolás and I would venture out into the town to record texts and word lists with various community members.

In addition to transcribing and translating texts with don Nicolás, I also conducted straight lexical and grammatical elicitation with him, often involving one to three additional HT speakers in the sessions. I organized the grammatical elicitation sessions based on topics suggested in Payne (1997) and issues that came up during text transcription and translation.

Even though I worked with 50 different HT-speakers during the course of my fieldwork, the bulk of the grammatical judgments on which this grammar are based belong to don Nicolás; thus, this dissertation could be considered to be a descriptive grammar of his idiolect, to some extent.

I used a Sony MZ-R30 portable mini-disk recorder and a Sony DCRTRV11 Digital Handycam to record digital video onto mini-DVs. I also used a Marantz PMD222 Portable Cassette Recorder to copy and play back audio data, and a dictophone transcription machine and foot pedal to transcribe the recorded discourse. I used the SIL computer program Shoebox 1.0 (the DOS version that was still used by the PDLMA) to database the collected data and to interlinearize the texts, and I used Speech Analyzer (version unknown) to make spectrograms in the field.

In addition to audio-recording narratives, texts, and conversation, I video recorded the events of several of the town's major holidays, including Candlemas (Candelaria) and Mardi Gras (Carnaval). The data from my time in Huehuetla include 53 transcribed and translated texts that vary in length from one to sixty
minutes and that fill over 800 notebook pages; seven untranscribed narrative recordings; approximately 700 pages of notes from grammatical and lexical elicitation sessions; 16 hours of audio recordings; and 12 hours of video recordings.

In the summer of 2005 , I returned to Catemaco to complete my third and final summer for the PDLMA. This time, because of family obligations at home in Texas, I spent only five weeks working on the project. Once again, don Nicolás was my principal consultant. During this time, I finished direct elicitation of the Bouquiaux Questionnaire. I tested all of the ethnobotanical and ethnozoological terms in the database, then don Nicolás sorted them all into taxonomies. We went through Melissa Bowerman's Topological Picture Series (no date), which produced positional verbs, relational nouns, and prepositional phrases. I elicited color terms using a color chart (Hoogshagen and Hoogshagen 1993), and I elicited smells using those listed in Enríquez (2004) for Papantla Totonac. We used a large toolbox full of tools typically found in Mexican farming communities to generate words for all of the various tools. I used the existing ethnozoological terms in the database to elicit words for animal cries, noises, and movements. We did not record any texts at all that summer, nor did we do any transcription or translation. This was the first field summer that I did not work with notebooks. To save time, I entered most of the data directly into the database, resorting to file slips only occasionally.

In all I spent 14 months conducting field work on Huehuetla Tepehua. I have so much data in notebooks, on file slips, on mini-(audio)-disks, on video,
even on random scraps of paper, that I feel like I will never have enough time to analyze it all. After I returned from the field in 2001, it took me three years to organize the small portion of the data that I have used to write this grammar. ${ }^{4}$ Even though I felt compelled to continue adding to the dictionary and interlinearizing texts, I reached a point when I had to stop organizing and start analyzing and writing. There are many gaps in the analyzed data presented here, but I am sure that answers to the questions left by these gaps can be found somewhere in the volumes that I have collected, if only I knew where to look. Cecil Brown recently told me that it is only after the Ph.D. is done that the real work begins. I know that I have my work cut out for me for years to come.

### 1.3 HUEHUETLA TEPEHUA AND THE TOTONACAN LANGUAGE FAMILY

Huehuetla Tepehua is a member of the Tepehua branch of the Totonacan language family, which has only two branches, Tepehua and Totonac (see Figures 1 and 2 below). The Totonacan languages are spoken in the Mexican states of Veracruz, Puebla, and Hidalgo, and the Totonac and Tepehua branches are mutually unintelligible (MacKay 1999). Because so little documentation exists for the Totonacan languages, it has not been possible to determine if this language family is a linguistic isolate or if it is related to Mayan and Mixe-Zoquean, as suggested by Greenberg (1987) and McQuown (1940, 1942). However, Kaufman (2003) argued that the lexical cognates that exist between Totonacan and MixeZoquean are the result of contact rather than genetics.

[^3]Figures 1 and 2 below are two versions of a Totonacan family tree. The Tepehua branch of both of these trees is exactly the same; it has three members: Huehuetla Tepehua, Pisaflores Tepehua, and Tlachichilco Tepehua, all of which are named after a community in or around which the language is spoken. There are many more Totonac varieties than Tepehua varieties, and many of the Totonac varieties remain largely undocumented. Thus, it is much more difficult to determine the members and branchings of the Totonac branch of the language family, and for this reason, I give two different versions of the tree.

## Figure 1: INALI Totonac-Tepehua Divisions ${ }^{5}$



[^4]Figure 2: The Totonacan Language Family ${ }^{6}$


The HT speakers, as a whole, are unaware that Tepehua is spoken in and around the towns of Pisaflores or Tlachichilco, Veracruz. Both of these communities are separated from Huehuetla by both distance and mountain ranges so that the three groups have no contact. However, there is a communityMecapalapa, Puebla-where both HT and Totonac are spoken. Mecapalapa is down-river from Huehuetla, about a day's walk away. The HT speakers in this community are, for the most part, relatives or descendents of the HT speakers in

[^5]Huehuetla (Kryder 1987). Although there is considerable movement between the two communities, the Huehuetla natives nevertheless consider the speech of the Mecapalapa natives to be less grammatical than their own, and they recognize slight differences in the HT speech of the two communities.

HT is in serious danger of extinction because it is being rapidly replaced by Spanish. During the nine months that I spent in Huehuetla, I observed that it was spoken by very few adults under the age of 30 and that almost no children were learning to speak it. If this pattern continues, the language likely will be dead in the next two-to-three generations (Krauss 1992).

HT is a polysynthetic, head-marking (Nichols 1986) language with complex verbal morphology. Inflectional affixes include both prefixes and suffixes for which a templatic pattern is difficult to model. Third person singular is not marked on the verb, but-for reasons that are enumerated in Chapter 3cannot be analyzed as a zero marker occupying a given slot in a verbal template. In addition to inflectional and derivational morphology, the HT verbs are also host to a large number of aspectual derivational morphemes, each of which alters the meaning of the verb in a very specific way.

Nominals can be divided into lexical nouns and derived nouns. A derived noun may include body part prefixes, compounded nouns, and nominalized verbs. Plural marking is not obligatory, though human nouns tend to be marked for number, while nonhuman nouns tend not to be. HT nouns are completely unmarked for case. Certain nouns, including kinship terms, honorifics, and parts of a whole are obligatorily possessed.

In addition to verbs and nouns, HT also has a separate class of both adjectives and adverbs, some of which are full words, but others of which are particles.

HT is interesting from a phonological perspective for at least two reasons. There is a word-final process of devoicing that affects not only vowels, but also the liquid $/ 1 /$, which is prohibited from occurring in coda position. When morphophonological processes occur that would force /l/ into a coda position, it neutralizes with the voiceless lateral fricative phoneme / $1 /$. Next, a second person subject is marked on the verb through the laryngealization of stops and affricates; in some cases, a second person subject is doubly marked by laryngealization as well as suffixation.

### 1.4 REVIEW OF THE LITERATURE

MacKay (1999) provides a thorough review of all of the linguistic literature on Totonac and Tepehua spanning from the colonial vocabularies and grammars of Olmos (1547) and Zambrano Bonilla (1752) and ending with her own work from the 1990s. Because her review is so thorough, I refer the reader to that source for reference to anything written before 1997 about Totonac, Tepehua, or the Totonacan language family. This review of the literature picks up where MacKay's left off.

In fact, since the publication of MacKay's (1999) grammar of Misantla Totonac, we seem to have entered the golden age of Totonacan research, especially with respect to the Tepehua branch of the family. Just two decades ago, the only member of the Tepehua branch to have been documented was the

Tlachichilco variety (Watters 1980, 1984, 1987, 1988, 1994, 1996a, 1996b). The only published materials on Huehuetla Tepehua were a 1976 translation of the New Testament by the Liga Bíblica Mundial de Hogar, several short stories written by SIL consultants and published by the SIL, Kryder's (1987) Masters thesis, which is a sketch of the HT phonology and morphology, and three short linguistics articles by SIL linguists that either describe or analyze HT numerals (Bower 1948), HT sentences (Bower and Erickson 1967), and HT verbal inflection (Herzog 1974).

My own work on HT includes acoustic analysis of uvular stops, glottal stops, and vowels (Smythe 2000, 2002), reconstruction of uvular stops (Smythe 2003), description and analysis of "affectionate speech", sound symbolism, and ideophones in HT (Smythe 2003; Smythe Kung 2005a, 2005c), external possession or possessor ascension (Smythe Kung 2004), Spanish loanwords (Smythe Kung 2005b), numeral classifiers (Smythe Kung 2006a, 2007), and split intransitivity (Smythe Kung 2006b).

Pisaflores Tepehua was a completely undocumented language two decades ago, but today the work on this language includes not only Hernández Sierra's (1986) ENAH thesis on the history of the Tepehua people of Pisaflores and the phonemes of the language, but also several SIL-published stories in the language that are available on-line through the SIL and Ethnologue websites, as well as two forthcoming linguistic descriptions of the language: a grammatical sketch (MacKay and Trechsler, to appear c) and a phonological sketch (MacKay and Trechsel, to appear a).

The last decade has been fruitful for four members of the Totonac branch: Papantla Totonac, Upper Necaxa Totonac, Misantla Totonac, and Filomeno Mata Totonac. The closed 'parts' class in Papantla Totonac has been the particular focus of attention by Levy (1999a, 1999b, 2003, 2004), who has also analyzed applicatives (2002a), specifiers and determiners (2002b), and relational nouns (2006) in the language. Enriquez (2004) categorized words for odors in Papantla Totonac.

Upper Necaxa Totonac (UNT)—also known as Patla-Chicontla Totonacis now widely documented due to the Upper Necaxa Field Project II: The Structure and Acquisition of an Endangered, Indigenous Language, directed by Dr. David Beck and funded by the Social Sciences and Humanities Research Council of Canada. Publications and presentations that have resulted from Dr. Beck's research on UNT include a grammatical sketch of the language (Beck 2004), an analysis of UNT adjectives (Beck 1999, 2000, 2002), verbal paradigms and person-marking hierarchies (Beck 2003), diachronic and synchronic phonetic and phonological analysis of a rare class of ejective fricatives found in UNT (Beck 2006b), agreement in multi-object constructions (Beck 2006a, 2006c), ideophones and adverbs (Beck to appear a, to appear b), and an investigation of extreme head-marking patterns within the language (Beck 2007). Other publications or presentations that have resulted from Beck's project include an examination of language loss (Beck and Lam in press) and first language acquisition of locative constructions (Varela 2006).

Recent work on Misantla Totonac includes a grammatical sketch (MacKay and Trechsel 2005b) and an analysis of symmetrical (double) objects (MacKay and Trechsel, to appear b). The same duo focused their attention on the Totonacan language family at large in their analysis of the Totonacan reciprocal marker laa(MacKay and Trechsel 2003) and in symmetrical object-marking in Totonacan (MacKay and Trechsel 2005a, 2006).

Finally, Teresa McFarland is writing a detailed overview of the phonology and morphology of Filomeno Mata Totonac for her Ph.D. dissertation at the University of California at Berkeley (in progress). She has analyzed the inflectional system (2005) and the templatic morphology of ideophones (2006, to appear).

### 1.5 OVERVIEW OF THE GRAMMAR

Chapter 2: Phonology presents the Huehuetla Tepehua phonemes and their allophones, the practical orthography that I use to represent HT in all subsequent chapters, a phonemic merger that is currently taking place in the language, the syllable structure, rules for primary and secondary stress assignment, general phonological processes that occur in the language, and morphophonemic processes that affect the boundaries of particular morphemes.

I have put everything having to do with verbs into Chapter 3: Verbs and Verbal Morphology. This chapter covers verbal inflectional morphology (including person-marking and tense/aspect/mood), verbal derivational morphology (including valence-changing affixes, verb-compounding, and apectual derivational affixes), existential verbs, positional and postural verbs, the
copula, periphrastic verbal constructions such as the auxiliary-like verb laa 'can' and infinitival phrases that are used to convey the periphrastic future and the progressive and inchoative aspects.

Similarly, I have put everything to do with nouns into Chapter 4: Nouns and Nominal Morphology. Not only does this chapter include nominal inflectional morphology (pluralization and possession) and derivational morphology (deriving nouns from nouns and nouns from verbs), it also includes syntactic information relevant to the noun phrase, relational noun constructions, and pronouns.

Chapter 5: Modifiers is quite small. It includes discussion of the HT quantifiers and adjectives. The adjective section is subdivided further into adjectival inflection and adjectival derivation.

Chapter 6: Adverbs includes quantifiers used adverbially, prepositions, and adverbs. Sub-topics under adverbs include temporal, locative, and manner adverbs, adverbial particles, and adverbial clitics. Manner adverbs can be further divided into ideophonic and non-ideophonic manner adverbs. Finally, this chapter includes discussion of the derivational prefix lhii-, which creates a directional adverb from an adverb or adjective.

Numbers and numeral affixes are discussed in Chapter 7: Numbers. Subtopics in this chapter include cardinal numbers, ordinal numbers, numeral classifiers, numeral inflection, and the counting of days.

Syntactic analysis of HT is found in Chapter 8: Syntax. Topics discussed in this chapter include word order of major constituents, focus, interrogation, negation, comparative and superlative constructions, and complex clauses. The
complex clauses are divided into coordination and subordination, the latter of which is further divided into relative clauses, complement clauses, adverbial clauses, and conditional clauses.

Finally, the grammar concludes with an appendix that consists of six fully interlinearized and analyzed HT narrative texts.

Though I have tried to include as much information about Huehuetla Tepehua as possible in this grammar, there will always be more that could be added. However, the most obvious omission from this grammar is an analysis of HT discourse. Because of time constraints, I have chosen not to include a chapter dedicated to discourse. However, if one reads the other chapters closely, $\mathrm{s} / \mathrm{he}$ will find bits of information about the discourse dispersed throughout the grammar.

## Chapter 2: Phonology

### 2.1 Phonemic Inventory

There are twenty-six consonants (section 2.1.1) and five vowels (section 2.1.2) in the phonemic inventory of Huehuetla Tepehua. In this chapter, I use both IPA and a practical orthography-which I explain in section 2.1.3-to write HT. In subsequent chapters, I use only the practical orthography.

### 2.1.1 Consonants

There are twenty-one native HT consonant phonemes. Two phonemes (/r/ and /f/) occur only in ideophones ${ }^{7}$ and Spanish loan words, and three phonemes $(/ \mathrm{b} /, / \mathrm{d} /, / \mathrm{g} /$ ) occur only in Spanish borrowings and as allophones of their voiceless counterparts. The twenty-six consonants are charted in Table 1.

Table 1: HT Consonant Phonemes

|  | Bilabial | Alveolar | Lateral | PalatoAlveolar | Palatal | Velar | Uvular | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | p (b) | t (d) |  |  |  | k (g) | q |  |
| Glottalized Stop | p' | t' |  |  |  | k' |  | $?$ |
| Nasal | m | n |  |  |  |  |  |  |
| Fricative |  | S | 4 | $\int$ |  |  |  |  |
| Affricate |  | ts |  | t 5 |  |  |  |  |
| Glottalized Affricate |  | ts' |  | t5 |  |  |  |  |
| Liquid |  |  | 1 |  |  |  |  |  |
| Trill \& Flap |  | r $\quad$ |  |  |  |  |  |  |
| Approximant | W |  |  |  | j |  |  | h |

[^6]As can be seen from Table 1, there is a gap in the class of glottalized stops due to the absence of a glottalized uvular /q'/ phoneme. According to Bower (1948), Herzog (1974), Kryder (1987), and Watters (1988), HT has a glottalized uvular stop that corresponds to the other glottalized stops, $/ \mathrm{p}^{\prime} /$, $/ \mathrm{t}^{\prime} /$, and $/ \mathrm{k}^{\prime} /$; however, in my own fieldwork, I found no evidence of a glottalized uvular. I also found that the plain uvular had already merged with $/ 2 /$ in the speech of the younger (i.e., $<76$ years old) speakers. ${ }^{8}$ Whenever I had the opportunity to check a lexeme with an older speaker, I did so. Unfortunately, I was not able to test all lexical items with older speakers. If one speaker pronounced a word with a uvular stop and another pronounced it with a glottal stop, I noted both pronunciations in the database. The transcriptions in this chapter reflect the speech of the eldest speaker who gave me the particular lexeme.

### 2.1.2 Vowels

Historically, Proto-Totonacan had a three-vowel system, consisting of $/ \mathrm{i} /$, $/ \mathrm{u} /$, and $/ \mathrm{a} /$, plus their long counterparts (Arana 1953; Watters 1988). Today, HT has a five-vowel system, due both to the influence of Spanish bilingualism and to the loss of the uvular stops ( $/ \mathrm{q} /$ and ${ }^{*} \mathrm{q}^{\prime}$ ) that condition the lowering of $/ \mathrm{i} /$ and $/ \mathrm{u} /$ to /e/ and /o/, respectively. Vowel length is phonemic. The HT vowels are charted in Table 2.

[^7]Table 2: HT Vowel Phonemes

|  | Front | Central | Back |
| :--- | :---: | :---: | :---: |
| High | $\mathrm{i}(:)$ |  | $\mathrm{u}(:)$ |
| Mid | $\mathrm{e}(:)$ |  | $\mathrm{o}(:)$ |
| Low |  | $\mathrm{a}(:)$ |  |

### 2.1.3 Practical Orthography

When I began my work on HT under the auspices of the Project for the Documentation of the Languages of Mesoamerica, Dr. Terrence Kaufman, the director of the PDLMA, instructed me to create a practical (i.e., typewriter friendly) orthography for writing HT. Under his guidance, I did so, and I have used this orthography for all of my subsequent fieldwork, as well as in my dictionary and textual databases. Therefore, I continue to use the practical orthography in this current work. Table 3 is a conversion chart showing the HT phonemes in the characters of my practical orthography followed by IPA characters in parentheses only where the two orthographic systems differ.

Table 3: HT Practical Orthography

|  | Bilabial | Alveolar | Lateral | PalatoAlveolar | Palatal | Velar | Uvular | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Stop | p | t d |  |  |  | k g | q |  |
| Glottalized Stop | p' | t' |  |  |  | k' |  | 7 (2) |
| Nasal | m | n |  |  |  |  |  |  |
| Fricative |  | S | lh (4) | $\mathrm{x}(\mathrm{S})$ |  |  |  |  |
| Affricate |  | tz (ts) |  | ch (t) |  |  |  |  |
| Glottalized Affricate |  | tz' (ts') |  | ch' ( $\mathrm{t} \mathrm{f}^{\prime}$ ) |  |  |  |  |
| Liquid |  |  | 1 |  |  |  |  |  |
| Trill \& Flap |  | $\begin{gathered} \text { rr (r) } \\ \mathrm{r}(\mathrm{r}) \\ \hline \end{gathered}$ |  |  |  |  |  |  |
| Approximant | w |  |  |  | y (j) |  |  | j (h) |

The characters used in my practical orthography come from five different sources: the typewriter keyboard, the IPA, the Americanist phonetic system, modern Spanish, and $16^{\text {th }}$ century grammars of indigenous Mexican languages. My overarching concern was that all of the characters of the practical orthography be characters that are found on a standard typewriter. Since no one in Huehuetla owned a computer (at the time I began my fieldwork) and since many people owned or had access to typewriters, I could not use any special characters, such as the glottal stop $/ \mathrm{R} /$ or the esh $/ \mathrm{S} /$. Next, I wanted to follow the IPA as closely as possible. Thus, where the IPA character matched a typewriter character, I used it ( $\left.\mathrm{p}, \mathrm{p}^{\prime}, \mathrm{t}, \mathrm{t}^{\prime}, \mathrm{k}, \mathrm{k}^{\prime}, \mathrm{q}, \mathrm{m}, \mathrm{n}, \mathrm{s}, \mathrm{l}, \mathrm{w}\right)$.

However, there are three IPA characters that correspond to keyboard characters that I chose not to use, and they are $/ \mathrm{h} / \mathrm{l} / \mathrm{j} /$, and $/ \mathrm{r} /$. Since I use the character $<\mathrm{h}>$ in my practical orthography in the digraphs $<\mathrm{ch}>$ and $<\mathrm{lh}>$ for $/ \mathrm{t} \mathrm{f} /$
and $/ 4 /$, respectively, and since there are situations in which the phoneme $/ \mathrm{h} / \mathrm{might}$ be contiguous with the $<\mathrm{ch}>$ or the $<\mathrm{lh}>$, I chose to represent this phoneme with the character $\langle\mathrm{j}\rangle$, because it is the character that modern Spanish uses for $/ \mathrm{x} /$, and because [ x ] is an allophone of $/ \mathrm{h} / \mathrm{in}$ Tepehua.

Since I used the $<j>$ to represent $/ \mathrm{h} /$, I chose to represent $/ \mathrm{j} /$ as $<\mathrm{y}>$, following the Americanist phonetic system. I chose to represent $/ \mathbf{r} /$ as the doubled consonant $<\mathrm{rr}>$ and thus, $/ \mathrm{f} /$ as $<\mathrm{r}>$ because $/ \mathrm{r} /$ and $/ \mathrm{f} /$ are new sounds in Tepehua that do not occur in native non-ideophonic words. Since these two sounds are borrowed from Spanish, I chose to represent them using the modern Spanish orthography.

The use of $<\mathrm{x}>$ for $/ \mathrm{S} /,<\mathrm{ch}>$ for $/ \mathrm{t} \mathrm{f} /,<\mathrm{tz}>$ for $/ \mathrm{ts} /$, and $<\mathrm{lh}>$ for $/ \mathrm{t} /$ all date back to the $16^{\text {th }}$ century grammars of Mexican indigenous languages. First, in $16^{\text {th }}$ century Spanish orthography, $\langle\mathrm{x}\rangle$ was used to represent $/ \mathrm{f} /$, and $<\mathrm{ch}>$ was used to represent $/ \mathrm{t} \mathrm{f} /{ }^{9}$ so this orthographic practice was continued by the missionary friars in their indigenous grammars (Smith Stark 2005). The use of $\langle\mathrm{tz}>$ for $/ \mathrm{ts} /$ goes back to Molina's 1571 and to Carochi's 1645 grammars of Nahuatl (Smith Stark 2005). I chose to use $<$ tz $>$ rather than $<$ ts $>$ so that this sound would not be confused with a consonant cluster comprised of $/ \mathrm{t} / \mathrm{and} / \mathrm{s} /$. I chose to represent the ejective counter parts to <ch> and <tz> as <ch’> and <tz’>, respectively, mirroring the use of $<\prime>$ by the IPA to indicate glottalization. The digraph <lh> was first used to represent /4/ by Olmos in his 1547 grammar of Nahuatl, while the digraph $<$ hl $>$ was used later by Romero in his $17^{\text {th }}$ century grammar of Totonac

[^8](Smith Stark 2005). I chose to use $<\mathrm{lh}>$ since this is commonly used today to represent $/ 4$ / in the practical orthographies of other Totonacan languages (e.g., Aschmann 1973, 1983 [1962]; Herzog no date; Reid 1991; Reid and Bishop 1974).

Finally, I chose to use a $\langle 7\rangle$, rather than $\langle>\rangle$, to represent $/ \mathcal{R} /$ because I wanted to emphasize the fact that the glottal stop is a phoneme in its own right and not just a quality of other phonemes, as is indicated by the $\langle$ ' $>$ on the glottalized stops and affricates.

My practical orthography differs from that of the SIL missionaries to Huehuetla (Bethel Bower and Dorothy Herzog) in the following ways. Where I use $<\mathrm{q}>$ to represent the uvular phoneme, they use $<\mathrm{k}>$ (Herzog 1974, no date) or $<\mathrm{g}>$ (Bower 1948). Where I use $<\mathrm{k}>$ to represent the velar phoneme, Herzog uses $<\mathrm{c}>$ and $<\mathrm{qu}>$ (1974, no date). Where I use <tz>, they use <ts> (Herzog 1974, no date) and $<\mathrm{c}>$ (Bower 1948).

Choosing a way to represent the HT vowels in my practical orthography was less problematic since there are only five that are qualitatively distinct: /i, e, $a, o, u /$. I chose to represent vowel length by doubling the vowel character-as in $x k a a n$ 'water'-rather than by following the vowel with a colon-as in $x k a: n$. This was a purely aesthetic decision on my part, based first on my principal consultant's dislike for the vowel-colon combination and secondly on my own tendency to read a colon as in $\langle\mathrm{i}\rangle$ when reading Tepehua words that were handwritten.

### 2.2 Phonemic Description

The HT consonants and vowels are described in sections 2.2.1 and 2.2.2, respectively. Examples of phonemic contrasts appear in section 2.2.3, and distinctive feature charts are given in section 2.2.4.

### 2.2.1 Consonants

The HT native consonantal inventory includes plain and glottalized voiceless stops, voiceless fricatives, plain and glottalized voiceless affricates, laterals, and approximates. The trill and flap occur in Spanish loan words and a very few ideophones.

### 2.2.1.1 Stops

HT has a series of both plain and glottalized voiceless stops, $/ \mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{q} /$ and $/ \mathrm{p}^{\prime}, \mathrm{t}^{\prime}, \mathrm{k}$ '/, respectively. Glottal stop / $\mathrm{R} / \mathrm{is}$ phonemic. The voiced stops $/ \mathrm{b}, \mathrm{d}, \mathrm{g} /$ occur only in Spanish borrowings; they do not have glottalized counterparts.

Plain Voiceless Stops /p/, /t/, /k/, /q/
The plain voiceless stops (/p/, /t/, /k/, /q/ $)^{10}$ occur syllable (and word) initially (1a), syllable (or word) finally (1b), and inter-vocalically (1c). They may occur in a two-consonant cluster in which the other consonant is a sibilant fricative, $/ \mathrm{s} /$, $/ \mathrm{x} /$, or $/ \mathrm{lh} /$. In an onset consonant cluster, the stops occur as the second consonant, or C 2 , as seen in the example in (1d). In a coda consonant cluster, they may occur as the first consonant, or C 1 , as seen in (1e).

[^9]

In word final position, the stops are optionally unreleased (2).


In connected speech, when $/ \mathrm{p} /$, /t/, or $/ \mathrm{k} /$ occurs between two voiced sounds, such as a nasal and a vowel or a vowel and a vowel, it is optionally voiced (3). I do not have any examples in which / $q /$ is voiced in this environment.
(3) kimpay
[kim.' ${ }^{\text {pay }] ~ ~[k i m . ' b a y] ~}$
juntaa ['hun.ta:]~['hun.da:]
'my father'
jii kumpaalii [,his.kum.'pa:.li:] ~ [1hi..gum.'ba:.li:] 'Voc compadre'

The stop /q/ may also occur as the first member of a two-consonant syllable-final cluster in which the other member is an affricate, /tz, ch/. The following examples in (4) account for all such examples in my database. I have no examples in which /q/ co-occurs with a glottalized affricate.

| soqch | ['soqts] | 'straight' |
| :--- | :--- | :--- |
| 7aqtz | ['laqts] | 'pillow' |
| jaqtz | ['haqts] | ID: 'sobbing sound' |
| loqtz | ['loqts] | ID: 'sound of applause' |

The alveolar stop /t/ is articulated as the dental stop [ t ] word initially, word finally, and intervocalically, as seen below in (5).
(5) a. tamp'uktz'ulh [,tam.6uk.'ts'ul] 'belly button'
$\begin{array}{llll}\text { b. } & \text { 7alhunut } & {[\text { Pa.''u.nut'] }} & \text { 'heart' } \\ \text { c. } & \text { tiitamp'in } & \text { [,ti..tam.'6in] } & \text { 'buttocks' }\end{array}$

## Glottalized Stops /p'/, /t'/, and /k'/

The HT /p'/ and /t'/ are phonetically closer to the implosive stops [6] and [ d$]$, respectively, while the $/ \mathrm{k}^{\prime} /$ is a voiceless ejective stop [ $\mathrm{k}^{\prime}$ ].

The glottalized stops may occur syllable (or word) initially (6a), intervocalically (6b), and as the second member of a syllable (or word) initial consonant cluster in which $/ \mathrm{s} /, \mathrm{x} / \mathrm{l}$, or $/ \mathrm{lh} /$ is the first member ( 6 c ).

b. paap'alh [pa:.'bał] 'broom'
puut'iijooqat [1pui.di:.'hos.qat] 'father-in-law' ch'ak'an [tf'a.'k'an] 'ladder'
c. maklhp'ak [mak.'Ibak] 'liver'
lakat'ikst'i [la.ka.'dik.sdi] 'small', 'little'
$\mathbf{x k}$ 'ip'it ['Sk'r.6it] 'scale' (e.g., fish scale)
The distribution of the glottalized stops differs from that of the plain stops in that the glottalized stops may not occur syllable or word finally, either alone or in a consonant cluster.

## Glottal Stop /?/

In the speech of an older Tepehua speaker, the distribution of the glottal stop is limited to word initial (7a), word final (7b), and intervocalic (7c) positions.
a. 7aay
['Pa:y]
hair
b. maqalhqama7
[ma.,qał.qa.'ma?] Tepehua
c. cha7aan
[tfa.' ${ }^{\text {'2a:n] }}$
ant

However, the glottal stop and the uvular stop are in the process of merging (see section 2.3). Although the uvular stop /q/ is still found in the speech of the older HT speakers, it has been replaced by glottal stop in the speech of the younger HT speakers. Thus, in the speech of the younger Tepehua, the distribution of the glottal stop is not limited to that given in (7). Essentially,
anywhere that a / $\mathrm{q} /$ appears in the speech of an older HT speaker, a glottal stop may occur in its place in the speech of a younger HT speaker. In example (8a), it is the second element in a syllable initial consonant cluster; in example (8b), it is the first element in a syllable final consonant cluster.
a. x7ooy ['ऽRo:i] 'dog'
b. ma7x ['ma? $\}]$ 'left (hand)'
so7ch ['soPtf] 'straight'

## Voiced Stops /b/, /d/, /g/

The voiced stops $/ \mathrm{b}, \mathrm{d}, \mathrm{g} /$ are mainly found in recent Spanish borrowings and in ideophones, ${ }^{11}$ and they occur very seldom. They occur at the beginning of a word (9), intervocalically (10), and after a continuant (11). They are not found word-finally. Note that both $/ \mathrm{b} /$ and $/ \mathrm{d} /$ pattern like Spanish $/ \mathrm{b} /$ and $/ \mathrm{d} /$ intervocalically in that they occur as $/ \beta /$ and $/ \delta /$, respectively, in this environment; however, $/ \mathrm{g} /$ has no intervocalic allophone.

## (9) Word-initially

| buutak | ['bu:.tak] | 'type of chair' $\quad$ 'butaque, sillón' |  |
| :--- | :--- | :--- | :--- |
| barra | ['ba.ra] | ID: 'sound of a frog' |  |
| duulsii | ['du:l.si:] ${ }^{12}$ | 'candy' | 'dulce' |
| durr | ['dur] | ID: 'sound of stomach grumbling' |  |
| gaanchu | ['ga:n.tfu] | 'hook' $\quad$ 'gancho' |  |
| gwaw | ['gwau] | ID: 'sound of a dog barking' |  |

[^10](10) Intervocalically

| 7abonalaa | [?a.ßo.'na.la:] | 'fertilize' | 'abonar' |
| :--- | :--- | :--- | :--- |
| 7abudiiyas | [?a.ßa'ði..jas] | male name | 'Abadías' |
| borreeguu | [bo.'re'.gu:] | 'sheep' | 'borrego' |

(11) After a continuant
7alaambrii [?a.'la:m.brii] 'wire' 'alambre'
saandiiyak [sa:n.'di..jak] 'watermelon' 'sandía'
7oongoos ['Ro:n.go:s] 'mushroom' 'hongo'
7aarreesgaalaa [1a:.re:s.'ga:.la:] 'take a chance' 'se arriesga'

### 2.2.1.2 Fricatives

The HT fricatives are $/ \mathrm{s} /, / \mathrm{S} /$, and / $/$ /. They may occur syllable (or word) initially (12a), syllable (or word) finally (12b), and intervocalically (12c).

| a. | teensuun | ['te:n.su:n] | 'goat' |
| :---: | :---: | :---: | :---: |
|  | kikxix |  | 's/he is thirsty' |
|  | kuklhilh | [kuk.'ıı4] | 'avocado' |
| b. | chaas | ['tfa:s] | 'spark' |
|  | ch'aqawaxt'i | [1 t a.qa.' $\beta$ af.di] | 'Totonac' |
|  | kilhmakchat | [kıl.'mak.tfat] | 'rainbow' |
| c. | qesiit | ['qe.sit] | 'nail' (of the finger or toe) |
|  | lhiixin | [4i..'Sm] | 'nose' |
|  | kilhij | [kı.'tih] | 'lace' |

The fricatives may occur as the first member of a syllable initial consonant cluster in which the second member is a plain or glottalized stop (13a), a nasal (13b), the lateral /l/ (13c), or the approximant/w/ (13d). The two lateral consonants, /lh/ and /1/, may not form a consonant cluster together.

| a. | 7 aqstu | ['Paq.stu] ${ }^{13}$ | 'alone' |
| :---: | :---: | :---: | :---: |
|  | sp'ililinti | ${ }_{1}$ s6is.li.'lin.ti] | 'plant sp.' |
|  | juukxpi | ['hu:k.Jpi] | 'alligator' |
|  | kikxt'aqa | [kık. $\int$ da.qa] | 'lip' |
|  | lhk'ak | ['\$k'ak] | 'ashes' |
| b. | smalaq | [sma.'laq] | 'black' |
|  | xnapap | [Jna.'pap] | 'white' |
|  | lhman | ['\$man] | 'long' |
| c. | slulh | ['sluy] | 'lizard' |
|  | kikxlawti **1hl | [kık.'Slau.ti] | 'drool' |

d. swilink'inti $\quad[\mathbf{s} \boldsymbol{s} \boldsymbol{\beta}$ i.lin.' k 'in.ti] 'swirl shape'
xwaat'i ['Jwa:.di] 'metate' (grinding stone)
laqlhwaqnin [1aq.twaq.'nin] 'dismember'

Finally, all of the fricatives may occur as the second member of a syllable final consonant cluster in which the first member is a stop (14).

| (14) | laqpuuluks | [laq.pu:.'luks] | 'sty (on eye) |
| :---: | :---: | :---: | :---: |
|  | ch'oqx |  | 'net' |
|  | tiichutlh | [ti..'tfutt] | 'bottle cap' |

The voiceless lateral fricative $/ \mathrm{lh} /$ is a dental phoneme that is articulated with the tip of the tongue touching the back of the upper teeth, (15).
(15) lhaklh
['dak. ${ }_{\sim}^{2 i}$ ] 'bitter-sweet'

[^11]
### 2.2.1.3 Affricates

HT has a series of both plain and glottalized voiceless affricates, /ts, t / and /ts', t '/ , respectively.

## Plain Affricates /tz/ and /ch/

The plain affricates / $\mathrm{t} /$ / and /ts/ may occur syllable (or word) initially (16a), syllable (or word) finally (16b), and intervocalically (16c).
(16) a. 7awilhchan [,1a.ßił.'tfan] 'day'
chiwinti [tfI.' $\beta$ In.ti] $] \quad$ 'word'
tampuktzulh [,tam.6uk.'tsuł] 'navel'
b. lhii7iich [fi:.'iits] 'heat' najatz [na.'hats] 'nine'
c. kachupin [ka.'tfu.pin] 'gringo'
tatzalat [ta.'tsa.lat] 'tooth'

Both affricates may occur as the second member of a syllable final consonant cluster; however / $\mathrm{t} /$ may occur with a wider range of consonants than /ts/. While $/ \mathrm{t} \mathrm{f} /$ may occur following the nasals (17a), the fricatives (17b), and /q/ (17c), /ts/ may follow/q/ only (17c).
(17) a. 7uxamch [?u.'SamtS] 'the day before yesterday' yu7unch [ju.'?untf] 'they' $\left(3^{\text {rd }}\right.$ person plural pronoun $)$
b. k'uusch ['k'ustf] 'pretty'
qoxch ['qフJt5] 'well', 'good'
milhch ['mittf] 's/he already came'
c. soqch ['ssqtS] 'straight'
loqtz ['loqts] 'applause'

## Glottalized Affricates

The glottalized affricates /ts'/ and $/ \mathrm{t} \mathrm{f}^{\prime} /$ are ejective phonemes, unlike the glottalized alveolar stop $/ \mathrm{t}$ '/, which is implosive [d].
/ts'/ and /t ${ }^{\prime}$ '/ may occur syllable (or word) initially (18a) and intervocalically (18b). They do not occur syllable finally or in consonant clusters.
a.
tz'alh
['ts'ał] 'boy'
laqtz'in [laq.'ts'in] 's/he sees it/him/her'
ch'ap'a ['ts'a.6a] 'palm'
laqch'iiti ['laq.tf'ii.ti] 'cover'
b. katz'aluunas [1ka.ts'a.'lu..nas] 'chicharrones’ (fried pork skins)
tach'iin [ta.'tf'iin] 'prisoner'

### 2.2.1.4 Liquids and Rhotics

HT has one liquid consonant, the lateral /1/, and two rhotic consonants, the flap /r/ and the trill /r/.

## The Liquid /l/

The HT phoneme /l/ is a true alveolar lateral (i.e., it is not palatal) made with the tip of the tongue touching the alveolar ridge. This phoneme has a very limited distribution, and it always precedes a vowel. It occurs syllable (or word) initially (19a), intervocalically (19b), and as the second member of a consonant cluster in which the first member is $/ \mathrm{s} /$ or $/ \mathrm{x} /(19 \mathrm{c})$.

| a. | luw | ['lu:] | 'snake' |
| :---: | :---: | :---: | :---: |
|  | ch'anlukut | [tf'an.'lu.kut] | 'leg bone' |
| b. | chamulu7 | [, t¢a.mu.'Iur] | 'cartilage' |
| c. | slulh | ['sluy] | 'lizard' |
|  | kik.xlawti | [kık.'Slau.tio | 'drool' |

/l/ may not occur syllable or word finally. In syllable and word final position, /1/ neutralizes to /\&/ (see section 2.6.2), as can be seen in (20), where milh 'thousand' is a borrowed from the Spanish word mil.
(20) milh ['mid] 'mil' 'thousand'

Occasionally, the first person subject prefix $k$ - precedes $/ 1 /$, and this combination forms a consonant cluster, as seen in the elicited in (21).
[.kla.ka.'k'u:nd]
/k-laka-k'u:n-li/
1SUB-BODY-swell-PFV
'I swelled up'
However, in naturally occurring speech, a $/ \mathrm{k} /+/ 1 /$ consonant cluster is frequently broken up by syllabifying the $/ \mathrm{k} /$ as the coda of a preceding vowel-final syllable, as seen in (22).
(22) [ $\beta$ a:k.la:.hu.'nautS]
/wa: k-la:-hun-aw+tf/
FOC 1SUB-RCP-say(IMPFV)-1PL.SUB + ALD
'I tell you all'

## The Rhotics /rr/ and/r/

The two rhotic phonemes-the trill /r/ and the flap /f/-occur only in Spanish loan words (23a) and in ideophones, shown in (23b). In fact, these ideophones might be borrowed from Spanish.
(23) a. karrilh [ka.'rıl] 'lane' from carril
kumpaarii [kum.'pai..ri:] 'compadre'
$\begin{array}{lll}\text { b. } \begin{array}{lll}\text { tarr } & {[' t a r]} & \text { ID: 'running motion' } \\ & \text { turrun } & {[\text { 'tu.run }]^{14}}\end{array} & \text { ID: 'sound of thunder' } \\ \text { chur } & {[\text { 'tfur }]} & \text { ID: 'the sound of trickling water' }\end{array}$

### 2.2.1.5 Nasals

HT has two nasal consonants, $/ \mathrm{m} /$ and $/ \mathrm{n} /$, which occur syllable (or word) initially (24a), syllable (or word) finally (24b), intervocalically (24c), and as the second member of a syllable initial consonant cluster in which a fricative [ $\mathrm{s}, \mathrm{x}, \mathrm{lh}$ ] is the first member (24d). ${ }^{15}$
a. laxmaka7

| [1aS.ma.'ka?] | 'handrail' |
| :--- | :--- |
| ['tsa:s.na..ti] | 'iron' |

b. puumpu7
[pu:m.'pu2]
'clothes'
jaantu
['ja:n.tu]
'no'
c. siimaqat [si..'ma.qat] 'tongue'
7akanit [?a.'ka.nit] 'flesh'

[^12]d.

| lhman | ['mman] | 'long' |
| :--- | :--- | :--- |
| smalaq | [sma.'laq] | 'black' |
| 7ajilaqsnin | ['a..hi.laq.'snin] | 'hiccups' |
| talaqxmilh | [ta.'laq.Smił] | 'bean tamales' |
| moqxnu7 | [moq.'Jnu?] | 'owl' |

The place of articulation of the alveolar nasal varies depending of the place of articulation of the following consonant. When it precedes a vowel, an alveolar consonant, or a glottal stop, it is articulated at the alveolar ridge, as seen below in (25a). When $/ \mathrm{n} /$ precedes a velar consonant, it is articulated at the velum, as shown in (25b). When it precedes a uvular consonant, it is pronounced as [ N ], as seen in $(25 \mathrm{c})$. When it precedes a palatal consonant, it is palatalized [ n ], as seen in (25d). When $/ \mathrm{n} /$ precedes a bilabial consonant, its pronunciation varies depending on the speed of speech. In slow careful speech it is articulated at the alveolar ridge, but in fast speech, it is bilabial, as seen in (25e).

| ch'anaxtaqa | [15'a.naf.'taqa] | 'callous (on foot)' |
| :---: | :---: | :---: |
| ch'anlukut | [tf'an.'lu.kut] | 'leg bone' |
| ch'antanuuti | [ t ', an. 'ta.nus.ti] | 'shoe' |
| ch'an7akanit | [, tf'an.ia.'ka.nit] | 'flesh or muscle of the leg' |
| ch'ankat | ['ţ'ay.kat] | 'sugar cane' |
| ch'anqesiit | [tf'an.'qع.sit] | 'toe nail' |
| ch'anchaja7 | [, tf'an.tfa.'ha?] | 'leg' |
| ch'anpa7at | n.'pa. 2 at$] \sim$ [tf'a | m.'pa.?at] 'crack in skin of |

### 2.2.1.6 Approximants

HT has three approximant consonants: bilabial /w/, palatal/j/, and glottal /h/.

## The bilabial Approximant /w/

The bilabial approximant $/ \mathrm{w} /$ is realized as the voiced bilabial fricative [ $\beta$ ] when it occurs inter-vocalically (26a), syllable (or word) initially (26b), or as the second element of a syllable (or word) initial consonant cluster, in which the first member is a fricative (26c).
(26) a. awiy [?a.' $\beta \mathrm{i} \mathrm{i}] \quad$ 'mouse'

| b. | waati | $[$ ' $\beta$ a..ti] $]$ | 'tortilla' |
| :--- | :--- | :--- | :--- |
|  | kukwiitii | $[k u k . ' \beta \mathrm{i} . . \mathrm{ti}:]$ | 'horse tail plant' |

c. xwaat'i ['Sßai.di] 'grinding stone'

Ihwak ['\$wak] ID: 'sawing sound’
When /w/ occurs after a vowel, it behaves as a glide, forming the second vowel in a diphthong (27).

| (27)chiiwx $[$ 'tf'i:u $]]$ | 'rock' |  |
| :--- | :--- | :--- |
| skaw | $[$ 'skau $]$ | 'rabbit' |

Even though /w/ acts as a semi-vowel in order to form a diphthong, it is not a true vowel, as seen in the following examples. In (28a), the /w/ is pronounced as the second member of a diphthong in the word k'iw 'wood'. However, k'iw is the root of $k^{\prime}$ 'iwin 'trees' in (28b), and in k'iwin the /w/ is pronounced as a bilabial fricative [ $\beta$ ].
(28) a. k'iw ['k'iu] 'wood', 'stick'
b. k'iwin [k'ı.'ßin] 'trees'

## The Palatal Approximant /j/

The palatal approximant /j/ occurs syllable (or word) initially (29a) and intervocalically (29b).
a. $\quad y a 7 a 7$ moqyaw
[ja.''iar]
[moq.'jau]
'white person'
‘fungus species’
b. maalhiyut [ma:.4i.'jut] 'spider'
juuyuu ~ kuuyuu ['hu:.ju:] ['ku:.ju:] 'armadillo'
Word-finally after a vowel, $/ \mathrm{j} /$ behaves as a glide, acting as the second vowel in a diphthong, as seen in (30).
(30) xqooy
['Sqəi]
'dog'
xqoy
['Sqoi]
'leaf'

## The Glottal Approximant /h/

The glottal approximant $/ \mathrm{h} /$ is articulated as [h] syllable initially (31a), syllable finally (31b), and intervocalically (31c).
(31) a. takjuwin [tak.hu.'ßin] 'pulse'
juu [hu:] 'definite article'

c. ch'aja7 [tf'a.'ha?] 'foot'

In word initial position, /h/ is optionally pronounced as the voiceless palatal fricative [c] before the front vowels $/ \mathrm{i} /$ and $/ \mathrm{e} /$, as seen in (32a), and as the
voiceless velar fricative [x] before the back vowels $/ \mathrm{u} /$ and $/ \mathrm{o} /$ and before the low vowel $/ a /$, as seen in (32b).
(32) a. jip ['çıp]~['hıp] 'fire'
jenew [çع.'nєu] ~[je.'neu] 'dark brown color'
b. juuki ['xu:.ki] ~ ['hu:.ki] 'deer'
joo7at ['xo:.2at]~['ho:.2at] 'male', 'manly'
jaap'ati ['xa:.6a.ti]] ['ha:.6a.ti] 'japa plant'

### 2.2.2 Vowels

Proto-Totonac had a three vowel system /i, a, u/(Arana 1953) ${ }^{16}$ that is still preserved in many of the modern Totonacan languages, including Coatepec Totonac (McQuown 1990b), Misantla Totonac (MacKay 1999), and Sierra Totonac (Aschmann 1983 [1962]). Other modern Totonacan languages now a have five-vowel system that includes the mid vowels $/ \mathrm{e}, \mathrm{o}$; ; these five-vowel languages include Xicotepec de Juárez Totonac (Reid and Bishop 1974), Upper Necaxa Totonac (Beck 2004), and Tlachichilco Tepehua (Watters 1988). In the three-vowel Totonacan systems, the presence of a uvular stop produces a lowering of the contiguous high vowels $/ \mathrm{i}, \mathrm{i} / /$ and $/ \mathrm{u}, \mathrm{u}: /$ to $\left[\varepsilon, \mathrm{e}_{:}\right]$and $\left[\mathrm{\rho}, \mathrm{o}_{\mathrm{i}}\right]$, respectively (as seen in MacKay 1999, among others).

HT currently has a five-vowel system that includes the mid vowels /e/ and $/ \mathrm{o} /$. At the time of my fieldwork, the uvular stop was in the process of merging with the glottal stop in HT; this sound change is described in detail in section 2.3.

[^13]The older HT speakers (>64) still retained a contrast between $/ q /$ and $/ R /$, which conditioned the lowering of $/ \mathrm{i}, \mathrm{i} / /$ and $/ \mathrm{u}, \mathrm{u}: /$ to $\left[\varepsilon\right.$, e:] and [ $\left.0, \rho_{:}\right]$, respectively, in their speech. Thus, mid vowels were in complementary distribution with high vowels in the environment of a uvular stop. Sadly, all of the elder speakers with whom I worked have since passed away. Today I would be hard-pressed to find a native HT speaker for whom $\left[\varepsilon, e_{:}\right]$and $\left[0, \rho_{:}\right]$are in complementary distribution with /i, i:/ and /u, u:/.

However, at the time of my fieldwork, the younger HT speakers ( $<64$ ) had already lost the distinction between $/ \mathrm{q} /$ and $/ \mathrm{R} /$, the environment which conditioned the vowel lowering. In their speech, the mid vowels were contrastive with the high vowels. Furthermore, the mid vowels were found in Spanish loanwords and in some native ideophones of speakers of all ages.

Vowel length is contrastive in HT, though it is difficult to perceive because stressed vowels are also lengthened. ${ }^{17}$

This section is divided into high vowels (section 2.2.2.1), mid vowels (section 2.2.2.2), and the low vowel (section 2.2.2.3).

### 2.2.2.1 High Vowels

HT has two high vowels: the front vowel $/ \mathrm{i}, \mathrm{i} / /$ and the back vowel $/ \mathrm{u}, \mathrm{u}: /$. The short high front vowel /i/ is perceived as tense [i] in two environments: (i) when it is followed or preceded by a sonorant consonant or vowel and (ii) at the end of a non-ideophonic word, as seen in (33a). Everywhere else /i/ is perceived

[^14]as lax [r], including word-finally in an ideophone, as seen in (33b). The long high front vowel /i:/ is perceived as tense [i:], as seen below in (34).

| a. | k'iw |
| :--- | :--- |
|  | p'in |
|  | xixniwaati |
|  | xkaanilaata |
|  | xkiwti |
|  | xqolit'i |

b. ch'ix
jip
xix
xk'ip'i
xk'ita
(34) awiy
jii
kaalhmiiluu
lhii7iiych
lhii7uti
miistu7
xiiwaan
['k'iu]
['6in]
[/SiI.ni.'wa:.ti]
[/Ska:.ni.'lai.ta]
['Skiu.ti]
[Sqo.'li.t’i]
['tf'rf]
['çıp] 'fire'
['SIf] 'dry'
['Sk'ı6ı]
['Sk'ıta]
'bat'
'tree'
'chili'
'dried bread'
'juicy’
'black ant'
'millipede'

ID: ‘sound/movement of centipede’

Examples of the short and long high back vowel /u, u:/ are shown in (35). I
did not perceive a tense/lax distinction with respect to this phoneme.
(35) 7aklhunti

7alhunut
7achup
puumpu7
stapu
7aqxuunuuk
[Pak.'łun.ti] 'cold, illness'
[?a.'fu.nut] 'heart'
[?a.'chup] 'hummingbird'
[pu:m.'pu?] 'clothing'
['sta.pu] 'bean'
[?a.'Su..nu:k] 'bug sp.'

| kuchiiluu | [ku.'tfi:.lu:] | 'knife' |
| :--- | :--- | :--- |
| luw | [lu:] | 'snake' |
| puutamaan | [pu:.ta.'ma:n] 'bed' |  |
| t'uun | ['du:n] | 'earth, dirt' |

### 2.2.2.2 Mid Vowels

As I mentioned above, at the time of my fieldwork, the mid vowels /e, e:/ and $/ \mathrm{o}, \mathrm{o}: /$ were in complementary distribution with the high vowels $/ \mathrm{i}, \mathrm{i} / /$ and $/ \mathrm{u}$, $\mathrm{u}: /$ in the environment of (preceding or following) a uvular stop, but only in the speech of the older HT speakers. However, even in their speech, the mid vowels were still found in ideophones and in Spanish borrowings. For this section only, I include three sets of examples for each vowel quality, /e, e:/ and /o, o:/: nonideophonic lexemes, ideophones, and Spanish loanwords. ${ }^{18}$

The short mid front vowel /e/ is perceived as lax [ $\varepsilon$ ] in HT lexemes, while the long mid front vowel /e:/ is perceived as tense [e:]. Examples of nonideophonic native HT lexemes are shown below in (36); examples of HT ideophones are shown in (37); and examples of Spanish loanwords in HT are shown in (38).
(36) Non-ideophonic lexemes /e/, /e:/

| 7achen7e | [?a.'t¢En.?8] | 'toasted' |
| :---: | :---: | :---: |
| 7alh7epx | [Taq.'Repf] | 'ant sp.' |
| 7eeliis | ['Re:.liss] | 'parrot sp.' |
| qex | ['q¢ ${ }^{\text {] }}$ | 'rock wall', 'dam' |
| siileq | ['si..lcq] | 'cricket' |

[^15]| ch'oolew | [t]'o:.'leu] | 'multi-colored' |
| :--- | :--- | :--- |
| malhtee7aa | [ma:'.'te:.?a:] | 'it opened it' |
| maaxteewan | [ma:!.'te:.wan] | 'brown tadpole' |
| teensuun | ['te:n.su:n] | 'goat' |

(37) Ideophones /e/, /e:/

| me7e | ['me., $\mathrm{l}^{\text {c }}$ ] | ID: 'smell of raw milk and beef' |
| :---: | :---: | :---: |
| ch'eq | ['ch' $¢ \mathrm{q}$ ] | ID: 'chirping sound' |
| lhme7 | ['9meR] | ID: 'sound of a sheep' |
| lhte7e | ['tte, $\mathrm{T} \mathrm{\varepsilon}$ ] | ID: 'creak of a door' |
| 7 eli | ['? 1 , li] | ID: 'head \& leg motion of turtle walking' |
| seenik | ['se..,nik] | ID: 'sound of a tree falling' |
| teen | ['te:n] | ID: 'sound of something big falling' |
| tiitiilii7ee | ['ti..ti:.li:., Re:] ${ }^{19}$ | ID: 'cock-a-doodle-doo' |

(38) Loanwords /e/, /e:/

| kaapeen | [ka..'pe:n] | 'coffee' | 'café' |
| :--- | :--- | :--- | :--- |
| 7ensayalaa | [?عn.sa.'ja.la:] | 'he rehearsed' | 'ensayar' |
| 7espiirituu | [18s.'pi..ri.tu:] | 'spirit' | 'espírito' |
| duseenaa | [du.'se:.na:] | 'dozen' | 'docena' |
| koneejuu | [ko.'ne..ju:] | 'rabbit' | 'conejo' |

Both /o/ and / $\mathrm{o}: /$ are perceived as slightly lower [ 0 ] and [ $5:$ ] in the context of a uvular stop. There is no perceptual tense/lax difference between the short and the long mid back vowels /o/ and /o:/. Non-ideophonic lexemes are shown in (39); ideophones are shown in (40), and Spanish loanwords are shown in (41).
(39) Non-ideophonic lexemes /o/, /o:/

| joo7at | ['ho:.2at] | 'male' |
| :--- | :--- | :--- |
| xqoy | ['Sqoi] | 'leaf' |
| xqooy | ['Sqo:i] | 'dog' |

[^16]| 7oqxqew | [ 3 ¢q.'Sqzu] | 'yucca', 'casava' |
| :---: | :---: | :---: |
| tz'oqo | ['ts'o.qə ] | 'bird' |
| 7aqalhoona7 | [?a.,qa.ło..'na?] | 'thief' |
| 7atook'analuw | [,Pa.to:., k'a.na.'lu:] | 'snake sp.' |
| choola 7 | [t5o..'la?] | 'turkey' |
| ch'oolew | [t9'o:'leu] | 'multi-colored' |
| ch'ooqx | [ t ' $\mathrm{o}: \mathrm{q}$ /J] | 'net' |
| puutook'a | [pu:.'to:.k'a] | 'horse' |

(40) Ideophones /o/, /o:/

| moq | ['moq] | ID: 'nauseous sensation' |
| :--- | :--- | :--- |
| p'oqot | ['6o.,qot] | ID: 'sensation of walking in mud' |
| qoli | ['qo.,li] | ID: 'snake-like motion' |
| qoom | ['qo:m] | ID: 'sound of dirt being thrown' |
| qooni7 | ['qo..,ni'] | ID: 'very slow gait' |
| lht'oo | ['ldo:] | ID: 'jumping motion' |
| lootz | ['lo:ts] | ID: 'snapping sound, like a rubber band' |
| loomp'a | ['lo:m.,6a] | ID: 'sound of a buzzard's wings flapping' |

(41) Loanwords /o/, /o:/

| kompaalii | [kom.'pa:.li:] | 'compadre' | 'compadre' |
| :--- | :--- | :--- | :--- |
| koneejuu | [ko.'ne..ju:] | 'rabbit' | 'conejo' |
| atoolii | ['a.'to..li:] | 'corn drink' | 'atole' |
| sapootii | [sa.'po..ti:] | 'fruit sp.' | 'zapote' |
| choorruu | ['tfo..ru:] | 'trickle' | 'chorro' |

### 2.2.2.3 Low Vowel

There is one low central vowel /a/. It may be long or short. Examples are shown in (42)
(42) 7achaakxk'u [?a.'tfa:k.Sk'u] 'herb sp.' 7ach'ananti [13a.tf'a.'nan.ti] 'garden' 7akanit [Pa.'ka.nit] 'flesh', 'meat'

| 7 akapiya 7 | [?a., ka.pi.'ja?] | 'uvula' |
| :---: | :---: | :---: |
| cha7aan | [tfa.'Ra:n] | 'ant' |
| chamulu7 | [, t¢a.mu.'lư] | 'cartilage' |
| chaqa 7 | [tJa.'qa?] | 'house' |
| jaantu | ['ha:n.tu] | 'no' |
| juk'aa | ['hu.k'a:] | 'hanging' |
| maak'uk'a7 | [1ma:.k'u.'k'a?] | 'pack animal', 'beast of burden' |
| skaw | ['skau] | 'rabbit' |
| stay | ['stai] | 'squirrel' |
| xaanti | ['Sa:n.ti] | 'flower' |
| waakax | ['ßar.kaS] | 'cow', 'cattle' |

### 2.2.2.4 HT Vowel Space

After my first summer of field work on HT, and before returning to the field the following summer, I measured a small sample of HT vowels in a phonetics laboratory in order to determine the acoustics of the HT vowel space. ${ }^{20}$ The data used for this study were taken from several tape recordings that I made during the summer 1999. The speaker on all tapes is don Nicolás, who was 44 years old at the time. Each tape-recording was made in a cinder block room using a Sony TCM-EV cassette recorder. At the time that I made these recordings, I did not plan to use them for acoustic analysis; therefore, I made no attempt either to elicit the words in a frame or carrier sentence or to control the phonetic environment around the vowels. Furthermore, there is a good deal of background noise on the recordings.

[^17]I digitized each lexical item using the computer program Sound Scope (version unknown), in which I used 6 dB pre-emphasis and set the other spectrogram settings as follows: 1024 FFT points, filter at 184 Hz (8ms) for a man's voice, and 0.000 to 3.000 kHz display range.

I spread each waveform out to 50 msec before making a spectrogram of it. I then measured F1 and F2 for every occurrence of each vowel. In order to take F1 and F2 measurements, I estimated the center point (in both time and frequency) of F1, and took a measurement there. Next I estimated the mid-point in Hz of F2 and took the measurement directly above the mid-point where I had taken the F1 measurement (i.e., along the same time line). After measuring the F2 mid-point, I also measured the beginning and end times of F1. I saved all measurements in a Microsoft Excel spreadsheet, grouped by phoneme.

After I had completed digitizing and measuring the data, I ended up with 94 tokens of /a/ (the most commonly-occurring vowel in the data set), 22 tokens each of $/ \mathrm{i} /$ and $/ \mathrm{u} /, 20$ tokens of $/ \mathrm{o} /$, and 14 tokens of $/ \mathrm{e} /$ (the least commonlyoccurring vowel in the data set). I arbitrarily decided to limit the data to 20 tokens of each of the vowels $/ \mathrm{i} /$, $/ \mathrm{a} /$, /o/, and $/ \mathrm{u} /$ and 14 tokens of the vowel /e/.

Table 4 shows the mean and the standard deviation of each of the five HT vowels. The means of the five vowels are plotted in Illustration 10.

Table 4: F1 \& F2 Means and Standard Deviations of HT Vowels

| HT Vowel | F1 Mean | F1 St Dev | F2 Mean | F2 St Dev |
| :---: | :---: | :---: | :---: | :---: |
| i | 406 | 54 | 2063 | 158 |
| e | 499 | 62 | 1793 | 135 |
| a | 612 | 53 | 1394 | 120 |
| o | 525 | 28 | 1077 | 153 |
| u | 426 | 38 | 1140 | 192 |

In the vowel chart shown in Illustration 10, F1 is shown on the vertical axis, and F2 is shown on the horizontal axis. The axes cross in the upper right corner, following Ladefoged (1993). Numbers along both axes represent Hertz (Hz). This illustration shows that the HT vowel space is a symmetrical five vowel system.


Illustration 10: Mean HT Vowel Space

### 2.2.3 Phonemic Contrasts

The following are minimal pairs or near minimal pairs showing free variation between phonemes in HT. I do not include $/ \mathrm{b}, \mathrm{d}, \mathrm{g} / \mathrm{or} / \mathrm{f}, \mathrm{r} /$ since they are non-native phonemes.

### 2.2.3.1 Consonants

$\mathbf{p}-\mathbf{p}^{\prime}$

| paax | $\left[\right.$ 'pa: $\left.\int\right]$ | 's/he bathes' |
| :--- | :--- | :--- |
| p'ax | $[' \mathbf{b a f}]$ | 'pig' |

$\mathbf{p}-\mathbf{m}$

| xputu | $[$ 'Spu.tu $]$ | 'tadpole' |
| :--- | :--- | :--- |
| xmut | $\left[' \int m u t\right]$ | $\mathrm{PA}: ~ ' t h e ~ s o u n d ~ a ~ c o w ~ m a k e s ~ w h e n ~ c h e w i n g ' ~$ |

$\mathbf{p}-\mathbf{w}$
paa- ['pa:] Instrumental prefix
waa [' $\boldsymbol{\beta} \mathbf{a}:] \quad$ focus particle
$\mathbf{p}^{\prime}$ - $\mathbf{m}$
p'in ['bin] 'pepper', 'chili', 'salsa'
min ['min] 's/he comes'
$\mathbf{p}^{\prime}$ - w

| witilh |  | 'she somersaulted |
| :---: | :---: | :---: |
| p'it'ilh | ['bi.dit] | 'she scrubbed it' |
| $\mathbf{m}$ - w |  |  |
| milh | ['mid] | 's/he came' |
| wiilh | ['Bi: $]$ | 'seated' |
| $\mathbf{t}-\mathbf{t}^{\prime}-\mathbf{s}-\mathbf{x}-\mathbf{c h}-\mathrm{ch}^{\prime}-\mathrm{k}^{\prime}-7-\mathbf{t z}$ |  |  |
| tuun | ['tu:n] | ID: 'splat' |
| t'uun | ['du:n] | 'earth' |
| suun | ['su:n] | 'bitter' |
| xuun | ['Ju:n] | ID: ‘smell of burnt |


| chuun | ['tfu:n] | 'fish sp.' |
| :---: | :---: | :---: |
| ch'uun | ['ţ'u:n] | 'buzzard' |
| k'uun | ['k'u:n] | 'it swells' |
| 7uun | ['Pu:n] | 'wind' |
| tzuum | ['tsu:m] | 'smoke' |
| $\mathbf{t}$ - $\mathbf{t z}$ - $\mathbf{z z}^{\prime}$ |  |  |
| tukulun | [,tu.ku.'lun] | 'rheumatism' |
| tzukulh | ['tsu.kuł] | 'it began' |
| tz'ukunk'u | [ts'u.'kuy.k'u] | 'cold' |
| $\mathbf{t}^{\prime}-\mathbf{t z}^{\prime}$ |  |  |
| t'a7ax | ['da.iaf] | 'sticky', 'gummy' |
| tz'a7am | [ $\mathbf{f}$ ' ${ }^{\text {a }}$ ''Ram] | 'dried shaft of corn stalk' |
| $\mathbf{t}-\mathbf{t z}-\mathbf{t z}^{\prime}-\mathbf{s}-\mathbf{c h}^{\prime}-\mathbf{m}-\mathbf{k}-\mathbf{j}-\mathbf{p}-\mathbf{n}$ |  |  |
| taw | ['tau] | ID: 'sound of a guitar' |
| tzaw | ['tsau] | 'edible greens' |
| tz'aw | ['ts'au] | ID: 'buzzing sound, e.g., of flies’ |
| saw | ['sau] | ID: 'smell of a rotting corpse' |
| maw | ['mau] | ID: 'meow' |
| kaw | ['kau] | 'ten' |
| jaw | ['hau] | ID: 'howl' |
| paw | ['pau] | ID: 'bark' |
| ch'awti | ['tf'au.ti] | 'body hair', 'pubic hair' |
| naaw | ['na:u] | ID: ‘swinging motion' |
| t-ch |  |  |
| xaanti | ['Sa:n.ti] | 'flower' |
| xaanchi | ['Sa:n.t5i] | 'general greeting, hello' |
| $\mathbf{s}$ - $\mathbf{x}$ |  |  |
| p'as | ['6as] | 'she shells it (corn)' |
| p'ax | ['6as] | pig |

7ukstín [?uk.'stin] 'green fly'
7ukxtín [?uk.'Stin] 'boss', 'mayor', 'president'
$\mathbf{s}-\mathbf{n}-\mathbf{t}-$
sii
nii
tii
lhii-
tziitzi
$\mathbf{l h}-\mathbf{l}-\mathbf{n}$

| lhuu | ['fu:] | 'much', 'many' |
| :--- | :--- | :--- |
| luw | ['lu:] | 'snake' |
| nuu | ['nu:] | 'be inside' |

$\mathbf{l h}-\mathbf{x}-\mathbf{s}$
xkuluk'u
lhkuluk
skuluk
$\mathbf{n}-\mathbf{w} \underset{\text { nati }}{\mathbf{m}}$
waati
mati7
$\mathbf{k}-\mathbf{k}^{\prime}$
kukat ['ku.kat] 'oak tree', 'acorn'
$k^{\prime} u k$ 'ata
[k'u.'ka.ta] 'he had carried it'
kachuchu ['ka.,tfu.,tfu] ID: 'sound of flautas being eaten'
$\mathbf{k}^{\prime}$ achuchu ['k'a.,tfu.tfu] ID: 'sound of walking through dry leaves'

$$
\begin{aligned}
& \mathbf{q} \text { - } 7 \\
& \text { qaay ['qa:i] 'hog plum tree'21 } \\
& 7 \text { [aay ['Pa:i] 'hair' } \\
& \mathbf{q} / 7 \text { — } \mathbf{k} \\
& \text { qay } \sim 7 \text { ay } \quad\left[\text { 'qai] } \sim \text { ['Tai] 'big' }{ }^{22}\right. \\
& \text { kay ['kai] ID: 'very slow gait' } \\
& \text { makakan [ma.ka.'kan] 'someone/they throw(s) it' } \\
& \text { maka7an [ma.ka.'Ran] 'he throws it away' } \\
& h-k \\
& \text { kuuk ['ku:k] 'uncle' } \\
& \text { juuki } \\
& \text { ['hu:.ki] 'deer’ } \\
& \text { h - } 7
\end{aligned}
$$

### 2.2.3.2 Vowel Quality

$\mathbf{i}$ - $\mathbf{u}$
kachichi ['ka., $\left.t \mathrm{f}_{\mathbf{r}, \mathrm{t}} \mathrm{t} \mathbf{I}\right] \quad$ ID: 'sound of a mountain lion'
kachuchu ['ka., tfu.t tsu] ID: 'sound of flautas being eaten'
$\mathbf{i}$ - $\mathbf{e}$
tiin ['ti:n] ID: 'sound of something falling on the (cement) floor' teen ['te:n] ID: 'sound of a tree falling'

[^18]| tz'uuliw ch'oolew | $\begin{array}{ll} \text { [ts'u.'.'liu] } & \text { 'bla } \\ \text { [tf'o:.'leu] } & \text { 'mu } \end{array}$ | 'black and white' 'multi-colored' |
| :---: | :---: | :---: |
| $\mathbf{i}-\mathbf{0}$ |  |  |
| kiin | ['ki:n] | 'aunt' |
| qoon $\sim 700 n$ | ['qo:n] ~ ['Ro:n] | ] 'fat' |
| tz'i7 | ['ts'ı'ı] | 'mole', 'birthmark' |
| tz'oqo | ['ts's.qo] | 'bird' |
| $\mathbf{a}-\mathbf{e}, \mathbf{a}-\mathbf{i}$ |  |  |
| $7 \mathrm{aax} \sim$ qaax | ['?a:S] ~ ['qa: 5$]$ | ] 'gourd' |
| $7 \mathrm{ex} \sim \mathrm{qex}$ | ['Ref] ~ ['qef] | 'rock wall', 'dam' |
| saala7 | [sa:.'la?] | 'clean' |
| siile $7 \sim$ siileq | ['si:.le?] ~ ['si..leq] | .leq] 'cricket' |
| 7intach | ['?in.tat5] | 'approximately' |
| 7antach | ['?an.tats] | 'he had already gone' |
| $\mathbf{a}-\mathbf{u}$ |  |  |
| kalakx | ['ka., lakf] ID: | ID: 'sound of a horse walking' |
| kalukx | ['ka.lukJ] ID: | ID: 'sound of a gun firing' |
| taran | [ta. ${ }^{\text {ran }}{ }^{\text {a }}{ }^{23}$ ID: | ID: 'clang', 'sound of a bell' |
| turun | [tu.'run] ID: | ID: 'sound of a clap of thunder' |
| jaak | ['ha:k] 'ban | 'banana' |
| juuki | ['hu:.ki] 'dee | 'deer' |
| $\mathbf{a}-\mathbf{0}$ |  |  |
| x7aay | ['S\}a:i] | 'his/her hair' |
| x700y | ['§Ro:i] ~ ['Sqo:i] ${ }^{24}$ | ii] ${ }^{24}$ 'dog' |

[^19] borrowed from Spanish. See sections 2.5.2 and 2.5.3.

| $\mathbf{u}-\mathbf{0}$ |  |  |
| :---: | :---: | :---: |
| pututu | [pu.'tu.tu] | 'a ball' |
| pototo | [po.'to.to] | 'a bigger ball' |
|  | [ts'u..'liu] | 'black and white' |
| ch'oolew | [tf'o..'leu] | 'multi-colored' |
| 2.2.3.3 Vowel Length |  |  |
| i-is |  |  |
| 7 in | [ ${ }^{\text {P2 }} \mathrm{in}$ ] | 'you go' |
| 7iilh | [ ${ }^{\text {Pist] }}$ | 'he got it' |
| 7it'it | [ ${ }^{2} \mathrm{i} . \mathrm{dit}$ ] | 'you all went' |
| 7iit'it | ['Piu.dit] | 'you all brought it' |
| $\mathbf{u}-\mathbf{u}$ |  |  |
| tzuunun | [tzu:.'nun] | 'he always puts it out (e.g., a fire)' |
| tanuun | [ta.'nu:n] | 'it is inserted (horizontally)' |
| $\mathbf{e}-\mathbf{e}$ |  |  |
| 7achen7e | [?a.'tfen.? $\mathbf{\varepsilon}$ ] | 'toasted' |
| tiitiilii7ee | ['tiu.ti..li'., Re:] | ID: 'cock-a-doodle-doo' |
| teensuun | ['tern.suin] | 'goat' |
| taliten7e | [,ta.li.'ten.? ${ }^{\text {] }}$ | 'cylindrical' |
| O- $0:$ |  |  |
| xqoy | ['Sqsi] ${ }^{25}$ | 'leaf' |
| xq00y | ['Sqo:i] ${ }^{26}$ | 'dog' |

${ }^{24}$ Younger speakers pronounced this as ['S?o:i], while older speakers pronounced it as ['Sqoii] at the time of my fieldwork.
${ }^{25}$ Younger speakers pronounced this as [' $\int$ ?oi], while older speakers pronounced it as ['Sqoi] at the time of my fieldwork
${ }^{26}$ See footnote 24.

$$
\mathbf{a}-\mathbf{a}:
$$

| qay $\sim 7$ ay | $[$ 'qai $] \sim\left[{ }^{\prime} \text { '3ai }\right]^{27}$ | 'big' |
| :--- | :--- | :--- |
| 7 7aay | $['$ 'a:i $]$ | 'hair' |

chaa7an [tfar.'?an] 'he arrives there'
cha7aan [tfa.'Ta:n] 'ant'

### 2.2.3.4 Stress

The first member of each of the following pairs is a derived verb form, while the second member of each pair is an un-derived form. I include them to show that a change in stress can signal a change in meaning.

| 7alamaa | [1a.la.'ma:] | 'lying spread eagle' |
| :--- | :--- | :--- |
| 7alamaa | [?a.'la.ma:] | 'ocean', 'sea' |
| luuluu | ['lu..lu:] | 'submerged' |
| luuluu | [lu..'lu:] | 'soft' |
|  |  |  |
| lhii7iich | ['łi..?i:tf] | 'Bring it!' (command) |
| lhii7iiych | [ti:.'li:tf] | 'hot (weather)' |

### 2.2.4 Distinctive Features of Phonemes

The distinctive features of the HT consonants are shown in Table 5, and the distinctive features of the HT vowels are shown in Table 6. With respect to the consonants, I have assigned the feature [ + son] to the glottal approximant $/ \mathrm{h} /$ and the glottal stop / $/$ / (following MacKay 1999) because these two phonemes pattern like the other sonorant consonants in that they attract stress in word-final position (please see section 2.5). I have assigned the features [-son][+cont] to the voiceless

[^20]lateral fricative /A/ because it patterns like the other fricatives with respect to syllable structure and stress assignment ([-son][+cont] consonants do not attract primary stress); please see sections 2.4 and 2.5 , respectively.

Table 5: Distinctive Features of HT Consonants ${ }^{28}$

|  | p | $\mathrm{p}^{\prime}$ | t | t' | k | k' | q | S | $\pm$ | $\int$ | ts | ts' | t $\int$ | t ${ }^{\text {, }}$ | m | n | 1 | r | ¢ | W | j | h | $?$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| cons | + | + | + | + | + | + | $+$ | + | + | + | + | + | + | + | + | + | + | $+$ | + | - | - | - | - |
| son | - | - | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | $+$ | $+$ | $+$ | $+$ | $+$ | $+$ | $+$ | $+$ |
| cont | - | - | - | - | - | - | - | + | + | + | + | + | + | + - + | - | - | - | + | - | + | + | $+$ | - |
| strid | - | - | - | - | - | - | - | + | - | + | + | $+$ | + | + | - | - | - | - | - | - | - | - | - |
| nas | - | - | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | $+$ | - | - | - | - | - | - | - |
| lat | - | - | - | - | - | - | - | - | + | - | - | - | - | - | - | - | $+$ | - | - | - | - | - | - |
| lab | + | + | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | - | - | - | - | + | - | - | - |
| cor | - | - | + | + | - | - | - | + | + | + | + | + | + | + | - | + | + | $+$ | + | - | - | - | - |
| ant | $+$ | + | $+$ | $+$ | - | - | - | + | $+$ | - | + | $+$ | - | - | $+$ | $+$ | $+$ | $+$ | $+$ | - | - | - | - |
| dist | - | - | + | $+$ | - | - | - | + | + | + | + | + | $+$ | + | - | + | + | $+$ | $+$ | - | - | - | - |
| dor | - | - | - | - | + | + | + | - | - | - | - | - | - | - | - | - | - | - | - | + | + | - | - |
| back | - | - | - | - | + | + | + | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | - | $+$ | - |
| high |  |  |  |  | + | $+$ | - |  |  |  |  |  |  |  |  |  |  |  |  | + | + | - | - |
| vd | - | - | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | $+$ | $+$ | $+$ | $+$ | $+$ | + | - | - |
| sprd glot | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | $+$ | - |
| cnstr glot | - | $+$ | - | $+$ | - | $+$ | - | - | - | - | - | $+$ | - | $+$ | - | - | - | - | - | - | - | - | $+$ |

Table 6: Distinctive Features of HT Vowels

|  | i | i: | e | e: | a | a: | o | o: | u | u: |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| High | + | + | - | - | - | - | - | - | + | + |
| Low | - | - | - | - | + | + | - | - | - | - |
| Back | - | - | - | - | + | + | + | + | + | + |
| Round | - | - | - | - | - | - | + | + | + | + |

[^21]
### 2.3 Sound Change in Progress (/q/ $\rightarrow / \mathrm{q} /$ )

At an diachronically earlier stage of the language, the phonemic inventory of Huehuetla Tepehua included a glottal stop, a plain voiceless uvular stop, and a glottalized voiceless uvular stop; these three phonemes have been documented in Arana 1953; Bower 1948; Herzog 1974, no date; Kryder 1987; and Watters 1988. Of these researchers, Bower, Herzog, and Kryder conducted linguistic fieldwork on HT; Arana got her HT data from Bower, while Watters got his HT data from Herzog. I have no doubt that there was a three-way distinction between / $/$ /, /q/, and $/ \mathrm{q}$ '/ in HT at the time that Bower and Herzog began their fieldwork just after World War II. However, by the time that Kryder began her fieldwork in 1984, the merger had already begun. In an appendix to her 1987 master's thesis, Kryder includes a list of approximately 400 HT lexical roots, some of which contain a uvular stop / $q /$, but none of which contains a glottalized uvular stop /q'/.

During the course of my own fieldwork on HT that began in June 1999 and concluded in July 2005, I found no perceptible evidence of a glottalized voiceless uvular stop $/ \mathrm{q}$ '/. Furthermore, I perceived the plain voiceless uvular stop /q/ only in the speech of the oldest speakers; and I noticed that where the oldest speakers had a/q/, younger speakers had a/ $1 /$. This empirical evidence led me to two conclusions: first, the glottalized uvular stop most likely had already merged with the plain uvular stop (prior to my first contact with the language), and, second, the plain uvular stop was in the process of merging with the glottal stop. The mergers are shown below in Figure 3.

Figure 3: Two Mergers


In order to test this conclusion, I conducted a sociolinguistic survey in Huehuetla in the spring of 2001; I first reported the results of this survey in a unpublished presentation that I gave at the 2002 Annual Meeting of the Society for the Study of the Indigenous Languages of the Americas (Smythe 2002), and I summarize them here. Using a small set of sources (Arana 1953; Herzog no date; and Kryder 1987), as well as my own field notes, I created a list of 44 lexemes that contained either a glottal stop, a plain uvular stop, and/or a glottalized uvular stop. This list of lexemes, along with the source where I found each lexeme, is shown below in Table 7. I recorded this list of words with 24 native HT speakers between the ages of 15 and 82 ( 8 males and 16 females). I recorded each word two times with each speaker so that I would have two tokens of each lexeme. My findings are summarized below the table.

Table 7: List of Lexemes Containing/q/, /q'/, and/or / / /

| Token Number | Tepehua Lexeme ${ }^{29}$ | Gloss | HT Lexeme and Source(s) ${ }^{30},{ }^{31}$ |
| :---: | :---: | :---: | :---: |
| L03:01 a/b | ['qa:i] ~ ['?a:i] | hog plum tree (tree sp.) | $\begin{array}{\|l} \hline---(\mathrm{A}) \\ / \mathbf{q}, \mathrm{a} /(\mathrm{H}) \\ ---(\mathrm{K}) \\ \hline \end{array}$ |
| L03:02 a/b | ['qai] ~ ['?ai] | big | $\begin{aligned} & \hline--(\mathrm{A}) \\ & / \mathbf{q} \cdot \mathrm{ay} /(\mathrm{H}) \\ & \text { /'qahi/ (K) } \end{aligned}$ |
| L03:03 a/b | ['qaf] ~ ['9af] | gourd | $\begin{array}{\|l\|} \hline---(\mathrm{A}) \\ / \mathbf{q} \mathrm{af} /(\mathrm{H}) \\ / \mathbf{q a f} /(\mathrm{K}) \\ \hline \end{array}$ |
| L03:04 a/b | ['2a:i] | hair | $\begin{array}{\|l\|} \hline--- \text { (A) } \\ \text { /ay/ (H) } \\ / \text { Ray/ (K) } \end{array}$ |
| L03:05 a/b | ['Pu:n] | wind | $\begin{array}{\|l} \hline \text { /Ru:n/ (A) } \\ \text { /un/ (H) } \\ \text { /u:n/ (K) } \\ \hline \end{array}$ |
| L03:06 a/b | ['qOS] ~ ['?of] | good, well | $\begin{aligned} & \hline--(\mathrm{A}) \\ & / \mathbf{q}{ }^{\circ} \mathrm{O} /(\mathrm{H}) \\ & ---(\mathrm{K}) \\ & \hline \end{aligned}$ |
| L03:07 a/b | ['ha:n.tuts tu.'?up] | you are welcome, nothing | --- (A) <br> /hantut tuPuP/ (H) <br> /'hantu tu' $\mathbf{~ Y u / ~ ( K ) ~}$ |
| L03:08 a/b | $\begin{aligned} & \text { [tso.'qot] ~ } \\ & \text { [tso.''.'ot] } \end{aligned}$ | knee | /ts'uqut/ (A) <br> /tsoqotni/ (H) <br> /'tsoqot/ (K) |

[^22]| L03:09 a/b | [la.ka.mu.nut.'pa?] <br> [la.ka.mu.nuł.'pa?] | world | --- (A) <br> /lakamunutpa?/~ <br> /lakamunulpa?/ (H) <br> --- (K) |
| :---: | :---: | :---: | :---: |
| L03:10 a/b | $\begin{aligned} & \text { [tfa.'qai] ~ } \\ & \text { [tfa.''aap] } \end{aligned}$ | house | /tfaqa?/ (A) <br> /tJaqa?/ (H) <br> /t $\mathrm{f} \mathrm{a}^{\mathbf{\prime}} \mathbf{\text { Pap }}$ / (K) |
| L03:11 a/b | $\begin{aligned} & \text { [pa.'paP] ~ } \\ & \text { [po.'pa?] } \end{aligned}$ | man | $\begin{array}{\|l} \hline---(\mathrm{A}) \\ / \text { papa?/ (H) } \\ \text { /pa'pa?/ (K) } \end{array}$ |
| L03:12 a/b | [tfa.'2a:n] | ant | /tfa?a:n/ (A) <br> /tfaPan/ (H) <br> /tJa'Pan/(K) |
| L03:13 a/b | [yu.'Punts ta.-'Puy] | they <br> 3PL.SUB-eat_it | --- (A) <br> /juPunt ta-Puy/ (H) /ju'Puntf/ (K) |
| L03:14 a/b | [mis.'tu?] | cat |  |
| L03:15 a/b | [?aq.'ts'i:s] [PaP.'ts'i:s] | flea | $\begin{aligned} & \text { /Raqts'iss/ (A) } \\ & \text { /aqts'is/ (H) } \\ & \text { /aq'ts'is/ (K) } \end{aligned}$ |
| L03:16 a/b | [Sqo:.'ja:m] <br> [ [ Po:.'ja:m] | coal, charcoal | /Squya:m/ (A) <br> /Sqoyam/ (H) <br> /Sqo'ya:m/ (K) |
| L03:17 a/b |  | tomato | /paqtf/ (A) <br> /paqt $\int \mathrm{u} / \sim /$ paqt $\int \mathrm{i} /$ (H) <br> /paqtf/ (K) |
| L03:18 a/b | ['saq. ${ }_{\text {Sil }}$ ] ~ ['saP.sid ${ }^{\text {a }}$ ] | sweet | $\begin{aligned} & \hline \text { saqs/ (A) } \\ & ---(\mathrm{H}) \\ & / \mathrm{saqs} /(\mathrm{K}) \\ & \hline \end{aligned}$ |


| L03:19 a/b | ['pa:q. $\left.\int \mathbf{q} \mathbf{q}_{\mathrm{o}}\right]$ ~ <br> ['pa:P.SPa] | skillet | $\begin{array}{\|l} \hline \text { /pa: } \int \mathbf{q}^{\prime} \mathrm{a} /(\mathrm{A}) \\ / \mathrm{paq} \int_{\mathrm{S}} \mathbf{q}^{\prime} \mathrm{a} /(\mathrm{H}) \\ --(\mathrm{K}) \\ \hline \end{array}$ |
| :---: | :---: | :---: | :---: |
| L03:20 a/b | [puq.'qom] <br> [puq.'Rom] <br> [pu\&.'?um] ~ <br> [put.'Ram] | mud | $\begin{array}{\|l} \hline \text { /puiqum/ (A) } \\ \text { /puiq'om/ (H) } \\ ---(\mathrm{K}) \end{array}$ |
| L03:21 a/b | [qo..'leqs t'a.'ku?] | inch worm | $\begin{array}{\|l\|l\|} \hline--- \text { (A) } \\ ----(\mathrm{H}) \\ \hline--(\mathrm{K}) \\ \hline \end{array}$ |
| L03:22 a/b | $\begin{aligned} & {[\text { ['seq] }] \sim[' s e \boldsymbol{P}] \sim} \\ & {[\text { ['saq] }]} \end{aligned}$ | silent, calm | $\begin{array}{\|l} \hline---(\mathrm{A}) \\ / \operatorname{seq} /(\mathrm{H}) \\ ---(\mathrm{K}) \end{array}$ |
| L03:23 a/b | [1as.'qa.t'a] ~ <br> [?as.'Ra.t'a] | child | $\begin{array}{\|l\|} \hline---(\mathrm{A}) \\ \text { /asq'at'a/ (H), } \\ \text { /as' }{ }^{2} \mathrm{at}^{\prime} / \text { / (K) } \end{array}$ |
| L03:24 a/b | [?as.qa.'t'an] <br> [?as.?a.'t'an] | children | $\begin{aligned} & \hline---(\mathrm{A}) \\ & \text { /asq'at'an/ (H) } \\ & \text {--- (K) } \end{aligned}$ |
| L03:25 a/b | ['p'aP.la:ti] ~ <br> ['p'aq.la:ti] | coffin, box | $\begin{aligned} & \hline--(\mathrm{A}) \\ & \text { /p'aqlat/ (H) } \\ & ---(\mathrm{K}) \end{aligned}$ |
| L03:26 a/b | [Paq.'ta.nu:.ti] <br> [PaP.'ta.nu..ti] | hat | $\begin{array}{\|l} \hline \text { /Raqtanu:t/ (A) } \\ \text { /aqtanut/ (H) } \\ ---(\mathrm{K}) \\ \hline \end{array}$ |
| L03:27 a/b | [?a.qaf.'qoł] ~ [?a.3af.'2ot] | ear | $\begin{aligned} & \text { /Ra:qafkut/32 (A) } \\ & \text { /aq'afq'ot/ (H) } \\ & \text { /a'a' }{ }^{\prime} \text { of } /(\mathrm{K}) \\ & \hline \end{aligned}$ |
| L03:28 a/b | ['SRo.pat] | pinole ${ }^{33}$ | $\begin{array}{\|l} \hline / \int q \text { qapat/ (A) } \\ ---(\mathrm{H}) \\ --(\mathrm{K}) \\ \hline \end{array}$ |

[^23]| L03:29 a/b | ['SRoi] ~ ['Sqoi] | leaf | --- (A) <br> / $\mathbf{q}^{\prime}$ 'oy/ (H) <br> /SPoy/ (K) |
| :---: | :---: | :---: | :---: |
| L03:30 a/b | ['SRo:i] ~ ['Sqoii] | dog | $\begin{aligned} & \hline--(\mathrm{A}) \\ & / \int \mathbf{q} \text { 'oy/ (H) } \\ & / \int \mathbf{R o y} /(\mathrm{K}) \end{aligned}$ |
| L03:31 a/b | [1ma. ${ }^{\text {a }}$. ${ }^{\text {lip] }}$ | rich (person) | ```--- (A) /maq'alit/ ~ /maqalit/ (H) --- (K)``` |
| L03:32 a/b | $\begin{aligned} & {[\mathrm{ma.,} \mathrm{Paq.} \mathrm{Pa.'ma?} \mathrm{]}} \\ & \sim \\ & {[\mathrm{ma.,qat.qa.'ma?]}} \end{aligned}$ | Tepehua (person) | $\begin{aligned} & \hline--(\mathrm{A}) \\ & \left./ \mathrm{maq}{ }^{\prime} \text { aqq'ama } \mathbf{P} / \mathrm{H}\right) \\ & \text { /maPad?a'ma? } / \sim \\ & \text { /ma?ad?a'mat/ }(\mathrm{K}) \\ & \hline \end{aligned}$ |
| L03:33 a/b | [ts'o.'2on] ~ <br> [ts'o.'qon] | Otomí (person) | $\begin{aligned} & \hline---(\mathrm{A}) \\ & \text { /ts'oq'on/ (H) } \\ & \text { /ts'o'Po:n/ (K) } \end{aligned}$ |
| L03:34 a/b | [, tfa.?a.'waf.di] <br> [,tfa.qa.'waf.di] | Totonaco (person) | --- (A) <br> --- (H) <br> /t $\int a a^{\prime} a^{\prime} w a f t /(\mathrm{K})$ |
| L03:35 a/b | [la.' ${ }^{\text {'aww] }}$ ~ <br> [la.'qaw] | brother | --- (A) <br> --- (H) <br> /la'?aw/ (K) |
| L03:36 a/b | [ło.'2o?] ~ <br> [ło.'qoq] | hollow | --- (A) <br> --- (H) <br> /puła'?o?/ (K) |
| L03:37 a/b | ['ts'o. Po ] ~ <br> ['ts'o.qo] | bird | $\begin{array}{\|l\|} \hline---(\mathrm{A}) \\ / \mathrm{ts}{ }^{\prime} \mathrm{oq}{ }^{\prime} \mathrm{o} /(\mathrm{H}) \\ / \mathrm{ts}^{\prime} \mathrm{o} / \mathrm{P} /(\mathrm{K}) \end{array}$ |
| L03:38 a/b | ['we:n.qe:n] ~ ['we:n. Pe:n] | frog | $\begin{aligned} & \text { /--- (A) } \\ & \text { /wenq'en/ (H) } \\ & \text { /'wenqen/ (K) } \end{aligned}$ |
| L03:39 a/b | $\begin{aligned} & \text { [1maq.ti.'li?] ~ } \\ & {\left[{ }_{1} \mathrm{maq.ti.}\right. \text { 'li?] }} \end{aligned}$ | wild cat | $\begin{aligned} & \hline---(\mathrm{A}) \\ & / \mathrm{maqtili} \text { : } /(\mathrm{H}) \\ & ---(\mathrm{K}) \end{aligned}$ |


| L03:40 a/b | [sii.'leq] ~ [sis.'le?] | cricket | --- (A) <br> /sileq/ (H) <br> /si'laq/ (K) |
| :---: | :---: | :---: | :---: |
| L03:41 a/b | ['qo:n.ta] ~ <br> ['Po:n.ta] | fat | $\begin{array}{\|l} \hline---(\mathrm{A}) \\ / \mathbf{q} \text { 'onta/ (H) } \\ / \mathbf{q o u n t} /(\mathrm{K}) \end{array}$ |
| L03:42 a/b | [.po.qo.'?ut] ~ [,po.?o.'2uł] | old man | --- (A) <br> /poqo?ul/ (H) <br> /poqo'?uq/ (K) |
| L03:43 a/b | $\begin{aligned} & \text { [qo:.'qe?] ~ } \\ & \text { [?o:.'?e?] } \end{aligned}$ | firefly | --- (A) <br> --- (H) <br> /o'qe?/ (K) |
| L03:44 a/b | ['Sqan] ~ ['Sqen] ~ ['S?en] | fly | $\begin{aligned} & ---(\mathrm{A}) \\ & / \int \mathbf{q}^{\prime} \mathrm{an} / \sim / \int \boldsymbol{q}^{\prime} \mathrm{en} /(\mathrm{H}) \\ & / \int \mathbf{q}^{\mathrm{an}} /(\mathrm{K}) \end{aligned}$ |

The contrastive environments for / $\mathrm{q}, \mathrm{q}^{\prime} /$ versus $/ \mathrm{Z} /$ that are represented by the words on the list are shown in (43). All three phonemes can appear word initially, intervocalically, and word finally.
(43) Contrastive Environments: /q, q'/ vs. / $\mathbf{1} /$
(a) Word initial
(i) \#__a
[qa:i] 'hog plum tree'
[Pa:i] 'hair'
(ii) \#__
$\qquad$ [qo:.'qe?] 'firefly'
[?u:n] 'wind'
(b) Intervocalic
(i) $\mathrm{a} \_\mathrm{a}$

$$
\begin{array}{ll}
{[\mathrm{t} \text { a.'.'qa?] }} & \text { 'house' } \\
{[\mathrm{t} \text { fa.' 'aa:n] }]} & \text { 'ant' }
\end{array}
$$

> (ii) o __ o [ts’o.'qэn] ‘Otomí (person)' u _ u [tu.'Tu?] 'something'
(c) Word final

$$
\begin{array}{ll}
\text { ['si..leq] } & \text { 'cricket' } \\
{\left[{ }_{1} \mathrm{ma.}\right. \text { ?a.'li?] }} & \text { 'rich (person)' }
\end{array}
$$

There were also words on the list that historically contained either a/q/ or /q'/ in environments where / $\mathrm{q} /$ did not occur. These non-contrastive environments are shown below in (44). In the prevocalic position, they are found as the second member of a syllable initial consonant cluster and in syllable onset (non-wordinitial) position. Post-vocalically, they occur syllable finally in coda position or as the first member of a syllable-final consonant cluster.
(44) Non-contrastive Environment: historically /q/ or /q'/ only
(a) Second consonant in syllable-initial cluster (CqV)

| /Sq'oi/ (H) | 'dog' |
| :--- | :--- |
| /Sqapat/ (A) | 'pinole' |

(b) Word-internal, syllable initial (C.qV)
/wenq'en/ (H) 'frog'
/pułqum/ (A) 'mud’
(c) Syllable final consonant cluster (VqC.)
/saqs/ (A) 'sweet'
(d) Word-internal, syllable final (Vq.C)
/p'aqlat/ (H) 'coffin'

I chose a subset of six male speakers based on their ages and the quality of the recordings. They ranged in age from 15 to 80 years old. I did not initially divide these speakers into groups. Using the computer program Speech Analyzer, I made spectrograms of all of the individual tokens for each of the six speakers. I
examined the spectrograms of the "uvular" words for phonetic evidence of uvular phonemes, and I compared the spectrograms of these "uvular" words with the spectrograms of the words that indisputably contained glottal stops. On a spectrogram, a stop produces a gap in the pattern formed by the formants of the vowels. The locus of closure of a glottal stop does not effect the formant structures of the contiguous vowels; thus, a glottal stop between two vowels is transparent to the transition between those two vowels. A uvular stop, on the other hand, does affect the formant structures of the contiguous vowels by producing a narrowing of the distance between formant 1 (F1) and formant 2 (F2), with a high F1 frequency and a low F2 frequency, at the beginning of a following vowel or at the end of a preceding vowel's formants (Bessell 1998).

Comparison of all of the spectrograms revealed that there were three different age-groups representing three different pronunciation patterns. The speakers, their ages, and their groupings are shown in Table 8.

Table 8: Age-graded Grouping of HT Consultants

| GROUP | CONSULTANT | AGE |
| :---: | :---: | :---: |
| 1 | EDS | 80 |
|  | AVH | 76 |
| 2 | LRM | 62 |
|  | LVP | 44 |
| 3 | ASG | 30 |
|  | NGG | 15 |

Group 1, with two members, represents the oldest group, with speakers ranging in age from 76 to 80 years old. Group 2, with only one member, is the middle group; the sole member was 62 years old at the time of recording. Group

3, the youngest group, has three members who ranged in age from 15 to 44 years old.

The speech patterns that I found were the following: the plain uvular stop was still present in all environments (both contrastive and non-contrastive) in the speech of the members of Group 1; however, it consistently alternated with the glottal stop. When uttering the lexemes that historically contained a uvular stop, each member of Group 1 consistently pronounced the first token of each lexeme with a glottal stop. When I asked him to repeat himself, he pronounced the second token of that lexeme with a uvular stop. Thus, the uvular and glottal stops were in free variation in the speech of Group 1.

For Group 2, I found that in both the contrastive and the non-contrastive environments, /q/ was only sporadically and unpredictably maintained prevocalically, while it never occurred post-vocalically. Furthermore, the uvular stop never manifested itself in the first token, only in the second, repeated, token, and sometimes not even then. Thus, $/ \mathrm{q} /$ and $/ \mathrm{R} /$ are in free variation pre-vocalically, and /q/ has merged with / $\mathrm{q} /$ post-vocalically in the speech of the sole member of Group 2.

Finally, there was no spectrographic evidence of a uvular stop in any of the tokens uttered by members of Group 3. In their speech, the uvular stop had been completely replaced by $/ \mathrm{R} /$.

Unfortunately, it is virtually impossible to distinguish a plain from a glottalized stop using spectrograms, and I am told that the test to distinguish plain stops from glottalized ones is quite invasive (Scott Myers p.c.). I was limited to
using my ear to distinguish a plain uvular stop from a glottalized one. The 76-year-old speaker AVH spent a summer working with me on the Project for the Documentation of the Languages of Mesoamerica. During that summer neither I, nor any of the more experienced linguists with whom I worked on the PDLMA (including Terrence Kaufman, Roberto Zavala, and Thom Smith Stark), could detect a glottalized uvular stop in his speech.

In conclusion, the uvular stop is merging with the glottal stop and is retained only sporadically in the speech of the oldest (older that 60) HT speakers. Today, the presence of a plain uvular stop in an HT speaker's phonemic inventory falls on an age-graded continuum: the younger the speaker, the less likely he is to have uvular stops in his phonemic inventory. In the speech of the younger HT speakers, the uvular stop has been completely replaced by the glottal stop.

This merger has two consequences for the HT: first and most obviously, the uvular stop is no longer a separate phoneme because (i) it is in free variation with glottal stop in the speech of the older speakers and (ii) it is no longer a part of the phonemic inventory of "younger" HT speakers. Second, in ProtoTotonacan and in some present-day Totonac languages, the presence of a contiguous uvular stop conditions the lowering of $/ \mathrm{i}, \mathrm{i}: /$ and $/ \mathrm{u}, \mathrm{u}: /$ to $[\varepsilon, \varepsilon:]$ and $[\mathrm{o}$, o :], respectively. In these languages, $/ \mathrm{i}(:), \mathrm{u}(:) /$ are in complementary distribution with $[\varepsilon(:)$, o(:)] (Arana 1953; MacKay 1999; among others). However, even though the HT speakers have lost the uvular stop, they have retained the mid vowels in the lexemes that historically contained uvular stops. Thus, in modern HT, the mid vowels are contrastive with the high vowels.

### 2.4 SYLLABLE STRUCTURE

In Huehuetla Tepehua, only vowels are syllabic (i.e., only a vowel may serve as the nucleus of a syllable), while both vowels and sonorant consonants may be moraic (i.e., both vowels and sonorant consonants add weight to the syllable). These constraints on the syllable are schematized in (45), following Zec (1995: 115, ex. 77).
a. HT syllabicity constraint

b. HT moraic constraint


The fact that sonorant consonants in HT are moraic while non-sonorant consonants are not means that HT has both light and heavy closed syllables such that a light closed syllable has a non-sonorant consonant in the coda while a heavy closed syllable has a sonorant consonant in the coda. According to Hayes (1989, 1995) a syllable coda may be assigned a mora and incorporated into the syllable by virtue of weight by position, as seen in (46a). If the coda is not assigned a mora, then it is an adjunct to the syllable, as seen in (46b).


Zec (1995) models the difference between a moraic and a non-moraic coda by adjunction of the non-moraic coda directly to the syllable, as seen below in (47). I follow Zec's model hereafter because it makes a clearer distinction
between a moraic coda, which is associated directly with a mora, and a nonmoraic coda, which is associated with the syllable and not with a mora.
(47) a. Heavy closed syllable

b. Light closed syllable


In HT only a sonorant consonant is moraic in coda position and, thus, adds weight to the syllable, as seen in (48a). A non-sonorant consonant in coda position is an adjunct to the syllable, as seen in (48b).
a. HT heavy closed syllable
(Weight by position)

b. HT light closed syllable (Coda adjunction)


In addition to demonstrating the above sonority constraints on the syllable, HT also demonstrates edge constraints (Itô 1989) that affect the structure of the syllable. First, there are two constraints on the coda in HT. The first coda constraint prevents the sonorant lateral [1] from occurring in syllable final position; the constraint is shown in example (49). When there is an underlying /l/ in coda position, it neutralizes to the non-sonorant [4], as discussed in section 2.6.2. Since this phone is underlying sonorant, it still contributes weight to the syllable, as can be seen in the example [1Ra.mak.'Stad] 'trash', which is underlying /Ramakftal/, based on the primary stress pattern discussed in section 2.5 .
(49) Lateral coda constraint

* $[+$ son, + lat $]]_{\sigma}$

The second coda constraint prevents a glottalized consonant $/ \mathrm{p}^{\prime}, \mathrm{t}^{\prime}, \mathrm{k}^{\prime} /$ from occurring in coda position; the constraint is shown below in (50).
(50) Glottalized C coda constraint

* [-son, + constr] $]_{\sigma}$

There is one onset constraint that specifies that a syllable must have a consonant in the onset; the constraint is shown below in (51). If a syllable does not have an onset, a glottal stop is inserted, as discussed in section 2.6.3.
(51) Onset constraint

$$
*{ }_{\sigma}[\text { [-cons }]
$$

Finally, there is an edge constraint that affects both edges of the syllable: the onset and the coda. This constraint specifies that only coronal consonants may occur as the first member of an onset consonant cluster and as the last member of a coda consonant cluster. The constraint in (52a) specifies that a non-coronal consonant may not precede another consonant in onset position, while the constraint in (52b) specifies that a non-coronal consonant may not follow another consonant in coda position. It is typologically quite common for coronal consonants to occur at the edges of syllables; in fact, it is reminiscent of English (M. Crowhurst, p.c.).
(52) a. Coronal onset constraint

b. Coronal coda constraint
$\left.{ }^{*} \begin{array}{cc}\mathrm{C} & \mathrm{C}\end{array}\right]_{\sigma}$

Nevertheless, there is one exception to the onset constraint given in (52a). The first person subject marker $k$ - may occur as the first member of a syllable-initial
consonant cluster preceding any other consonant. However, the language utilizes various techniques to break up this $[\mathrm{k}]+\mathrm{C}$ cluster; please see the discussion in section 2.4.5.

Other constraints on the syllable include a constraint against two contiguous laterals in a consonant cluster, as seen in (53), and a constraint against two contiguous sonorant consonants in either onset (54a) or coda position (54b).
(53) * [+lat $[$ [lat $]$
(54) a. $\quad *_{\sigma}[[+$ son,+ cons $][+$ son,+ cons $]$
b. $\quad *[+$ son,+ cons $][+$ son,+ cons $]]_{\sigma}$

In HT, a syllable minimally consists of a consonant and a vowel: CV. The maximal syllable is $(\mathrm{C}) \mathrm{CV}(:)(\mathrm{V})(\mathrm{C})(\mathrm{C})$. The syllable structure is shown below in (55). Note that this model does not include moras, which I have omitted here in order to make the diagram as general and inclusive as possible. I return to the issue of syllable weight in the discussion of stress (section 2.5).
(55) Huehuetla Tepehua syllable structure


Attested syllable structures are shown below in example (56). With respect to syllables that end in consonant clusters, the syllable type CVCC, shown in example $(56 \mathrm{q})$, is quite common, while the other CC-final syllable types, CV:CC, CVVCC, CCVCC, CCV:CC, and CCVVCC, are not. Two possible CCfinal syllable types, CV:VCC and CCV:VCC, are not attested at all.
(56) Attested syllables

| a. | CV | [tfa.'qai] | 'house' |
| :--- | :--- | :--- | :--- |
| b. | CV: | ['ti.] | 'road' |
| c. | CVV | [tfau.'lai] | 'turkey' |
| d. | CV:V | ['la:i] | 's/he can' |
| e. | CCV | ['ap.'sna.ti] | 'female turkey' |
| f. | CCV: | [Spa..'hah] | 'flat' |
| g. | CCVV | ['Sqoi] | 'leaf' |
| h. | CCV:V | ['Sqo:i] | 'dog' |
| i. | CVC | [kuk.' 'ititi] | 'avocado' |
| j. | CV:C | ['fa:n.ti] | 'flower' |
| k. | CVVC | ['ta.maui] | 's/he bought it' |

1. CV:VC
m. CCVC
n. CCV:C
o. CCVVC
p. CCV:VC
q. CVCC
r. CV:CC
s. CVVCC ['ta.mautt $]$
t. CCVCC ['Smitt5]
u. CCV:CC ['\&ka:łtf]
v. CCVVCC
['t t ius $]$
['Smul]
['lka:n.ti]
['Skait!]
['Sma:ut]]
['qakt]
['ts'i:nk]
['Sjaults]
'stone', 'rock'
'gourd for holding liquid'
'measurement'
'it already hurts'
'we (INCL) were lying down'
'sour-sweet taste'
'heavy'
's/he already bought it'
's/he would have come already'
's/he measured it already'
's/he would have stopped'

I have found only one form that has a three-member consonant cluster in the coda, shown below in (57). I have found no onsets that consist of three consonants.
(57) CCC cluster in coda
['PakstS] 'when'

### 2.4.1 Syllable Onsets

Any single HT consonant may occur at the beginning of a syllable. The phonemes /r/ and /r/ occur syllable-initially only in ideophones and Spanish loanwords. Examples are shown below in (58).
(58) Consonants in onset position
[Pa.' ${ }^{\text {Bii:] }}$
[pu:4.'t'uh]
[,tak.hu.'ßin]
['kan]
['qah]
[tfa.' ${ }^{\text {Pa:n] }}$
['p'aq.la.ti]
'mouse'
'water frog'
'pulse'
'delicious'
'nettle'
'ant'
'chest', 'coffin'

| ['t'ak.t'a] | 'ear of corn' |
| :---: | :---: |
| ['k'u.tf'u] | 'remedy', 'cure' |
| ['sa:s.ti] | 'new' |
| ['fu:] | 'much', 'many' |
| ['SIS] | 'dry' |
| [tsa.'hi:n] | 'eight' |
| [tfa.'ßai] | 'now', 'today' |
| ['ts'at] | 'boy' |
| [ ii. . 'tJ'ad.kat] | 'work', 'job' |
| [la:.'tfah] | 'fighting cock' |
| ['mah.qot] | 'palm sp.' |
| ['nipf] | 'zucchini', 'squash' |
| [']ai.ti] | 'tortilla' |
| ['jutS] | 'third person pronoun' |
| [hu:] | 'definite article' |
| ['run] | ID: 'buzz of a bee', 'sound of a motor' |
| [,1a.ku:m.'pai.ri:] | 'compadre relationship', 'compadrazgo' |

The following types of consonant cluster are allowed in the syllable onset position: (a) [fricative] + [nasal], (b) [fricative] + [stop], (c) [fricative] $+/ \mathrm{w} /$, and (d) [fricative] + [liquid]. All four types of consonant cluster have in common the fact that the first member must be a fricative: $/ A / / / \mathcal{S} /$, or $/ \mathrm{s} /$, all of which are coronals. Additionally, all four types of consonant cluster may occur at a morphophonemic boundary, as well as in root lexemes. The fourth type (/s/ + /1/) never occurs at a morphophonemic boundary. Examples are shown below in (59).
(59) Onset consonant clusters
a. Fricative + nasal
['łman] 'long'
['aq.Jmu.ti] 'arch', 'bow'
[sma.'laq] 'dark-skinned'

| ['Ina.kak] | 'laughingly' |
| :--- | :--- |
| ['Sna.ti] | 'his/her/its mother' |
| ['ak.sni:] | 'when' |

b. Fricative + stop
[kik.'\$pa.kał]
[1Ro?.Spa.'lan]
[maq.'spa?]
[tbu.'duy]
[_J6a.t'aq.'nun]

[ttu.,ku.ni.'ni?]
['Sta:n]
['stai]

['Jda.qa]
[.kik.łka.'win.k'i]
['Ska:n]
['ski.ti.ti]
['tk'ak]
['Sk’a.:pił]
[sk'i:k.'luu]
['łqa.baqł] ${ }^{34}$
[JSqa.pa.'ßa..ti] ${ }^{35}$
['sqah] ${ }^{36} \quad$ 'rotten'
c. Fricative $+/ \mathrm{w} /$
[sßa:.'qai] 's/he regrinds it'
['Sßa:.di]
'harelip'
'plant (orchid or lily) sp.'
'outside'
'scar'
'hammer'
'plant/orchid sp.'
'beetle'
'opossum'
'squirrel'
'fin'
'skin', 'leather'
'handlebar mustache'
'water'
'dough'
'ashes'
's/he locked it'
‘eel'
‘spoon’
'bread'

[^24]\[

$$
\begin{array}{ll}
\text { ['Sßa:.ti] } & \text { 'his/her-tortilla' } \\
\text { [1\&3a.da.'lan.tid] } & \text { 'scaly' } \\
\text { d. Fricative + liquid }{ }^{37} & \\
\text { ['sluł] } & \text { 'lizard' } \\
\text { [sli.'ßiu] } & \text { 'elliptical' } \\
\text { [sla.'puł] } & \text { 'red' } \\
\text { [Jla.'k'a.6u] } & \text { 'down (feather)' } \\
\text { ['Sla.ia.ti] } & \text { 'bird sp.' } \\
\text { ['Slitł] } & \text { 'she ironed it' }
\end{array}
$$
\]

The consonant clusters shown in (59a) and (59d) conform to the Sonority Sequencing Principle (SSP) that states that within a syllable, the sequence up to the peak must be rising in sonority, and the sequence after the peak must be falling in sonority (Selkirk 1984). In the [fricative] + [nasal] clusters shown in (59a), the nasal is more sonorous than the fricative that precedes it. It is also the case that the liquid lateral $/ 1 /$ is more sonorous than the fricatives $/ \mathrm{s} /$ and $/ \mathrm{J} /$ that precede it in the examples shown in (59d). The clusters in (59b) and (59c) do not violate the SSP because stops and fricatives-both being obstruents-are of equal sonority. Note that the forms in (59c) vary with the pronunciation of the speaker. Some older HT speakers pronounce the glide $/ \mathrm{w} /$ as a true bilabial approximant [w] when it occurs in an onset position, while all younger speakers and most older speakers pronounce it as a bilabial fricative [ $\beta$ ] in onset position.

[^25]
### 2.4.2 Syllable Nuclei

All ten of the HT vowels may occur as the syllable nucleus. Examples are shown in (60).
(60) Vowels in nucleus position

| [puf. 'lim.ti] | 'nephew' |
| :---: | :---: |
| [17i..ma.,qaa.qa.'ma?] | 'Tepehua language' |
| ['ţ'e.qe] | 'thrush' |
| [mad.'ter.qa:] | 's/he opened it' |
| [ts'a.''am] | 'dried corn stalk' |
| ['Sqa:m] | 'corn husk', 'corn shuck' |
| [di..'qo.da.ti] | 'drink ( N ) ${ }^{\text {' }}$ |
| [,ta.mak.'po:.qa.ti] | 'space between the fingers' |
| ['slut] | 'lizard' |
| ['hus.ki] | 'deer' |

The only diphthongs in the language are those that are formed (i) by the combination of a vowel followed by one of the glides $/ \mathrm{w} /$ or $/ \mathrm{j} /$, or (ii) by deletion of an intervocalic $/ \mathrm{h} /$ (see section 2.6.9). There are eight possible diphthongs: [a(:)i], $[\mathrm{a}(:) \mathrm{u}],[\mathrm{u}(:) \mathrm{i}],[\mathrm{o}(:) \mathrm{i}],[\mathrm{o}(:) \mathrm{u}],[\mathrm{e}(\mathrm{i}) \mathrm{u}]$, [ei], and [i(:)u]. With the exception of [ei], the first member of each diphthong may be short or long. The lack of an example of [e:i] might be the result of an accidental gap in the data; however, instances of [ei], [ou], and [o:u] are extremely rare. Examples are shown below in (61).
(61) Diphthongs
[ai] and [a:i]
['qai] 'big'
['Raii] 'hair'

```
[au] and [a:u]
    [?a1.'Slau.ti] 'sap'
    [?a2.'Sa:u] 'large pot with handles' (tinaja)
[ui] and [u:i]
    ['?ui] 's/he eats it'
    ['t t uii] 'large basket used for fishing'
[oi] and [o:i]
    ['Sqoi] 'leaf'
    ['Sqoii] 'dog'
[ou] and [o:u]
    [1?ak.Stou.'kai] 'it hops'
    ['sko:u.ro:] 'chisel'
[eu] and [e:u]
    [Roq.'Sqeu] 'yucca', 'sweet potato'
    [spesu] 'mirror'
[ei]
    [?a.'Reif.ta:] 'tree sp.'
[iu] and [i:u]
    ['k'iu] 'tree', 'wood', 'stick'
    ['ki:u] 'chayote' (edible plant sp.)
```

The diphthongs [au] and [ai] are optionally pronounced [o:] and [e:] by HT speakers. Examples are shown in (62).
(62) $[\mathrm{au}] \sim[\mathrm{o}:]$ and $[$ ai $] \sim[\mathrm{e}]$

| /tfawla?/ | [tgau.'la?] | [tJos.'la?] | 'turkey' |
| :---: | :---: | :---: | :---: |
| /kaw-tam/ | [kau.'tam] | [ko. ${ }^{\text {dam] }}$ | 'eleven' |
| /Ra-qadaju-nV?/ | [?a.,qa.1au.'na?] | [?a.,qa.do.'na?] | 'thief' |
| /tajuk'a-lh/ | ['tau.k'ał] | ['tor.k'ał] | 'he went up' |
| /wahin-putun/ | [,waim.pu'tun] ~ [ | e:m.pu'tun] 'h | ants to eat it'38 |

[^26]When the glide $/ \mathrm{w} /$ follows the high, back vowel /u/ or /u:/, the results is [u:], and when the glide $/ \mathrm{j} /$ follows the high, front vowel $/ \mathrm{i} /$ or $/ \mathrm{i} / /$, the result is [ i i ]. Examples appear in (63).
(63) /uw/ $\rightarrow$ [u:] and $/ \mathrm{ij} / \rightarrow$ [i:]

| /ju:kiluw/ | [hu:.ki.'lu:] | 'boa constrictor' |
| :--- | :--- | :--- |
| /k-Ru-w/ | ['k'u:] | 'we (EXCL) eat it' |
| /awij/ | [Pa.'ßi:] | 'mouse' |
| /hun-ni-j/ | [hu:.ni:] | 'he says it' |

### 2.4.3 Syllable Codas

The glottalized consonants $/ \mathrm{p}^{\prime}, \mathrm{t}^{\prime}, \mathrm{k}^{\prime}$, ts ', $\mathrm{t} \mathrm{f}^{\prime} /($ (i.e., $\mathrm{C}[-$-son, + constr gl]) do not occur in the coda position, but all other consonants-including the glottal stop $/ 2 / 39$ - do occur in the coda. Examples are shown below in (64). Note that there is a phonological rule that neutralizes $/ 1 /$ to [ 4$]$ in coda position (see section 2.6.2).
(64) Consonants in coda position

| ['hip] | 'fire' |
| :---: | :---: |
| [14ak.tfa.'Rat] | 'envy' |
| ['ha:k] | 'banana' |
| ['si..leq] | 'cricket' |
| [t9'a.'ha?] | 'foot' |
| ['Ra:.liss] | 'parrot', 'parakeet' |
| [tay.'k'af] | 'fer-de-lance' (snake sp.) |
| [1mas..a.'ßai.kat] | 'basket used to harvest corn' (tancolote) |
| [na.'hats] | 'nine' |
| [qa.'itf] | 'half-burned log' (tizón) |

[^27]| [ts'a.''am] | 'dried corn stalk' |
| :--- | :--- |
| [.tan.ta.''an] | 'fire ant' |
| ['tar] | ID: 'running action' |
| ['t]ur] | ID: 'gurgling sound' |
| [tsa:.'pu:h] | 'caterpillar', 'bug' |

Far fewer consonant clusters occur in coda position than occur in onset position. The following types of consonant cluster are found in coda position: (a) [stop] + [fricative] or $/ \mathrm{ts} /$, (b) $/ \mathrm{n} /+/ \mathrm{t} / /$, and (c) $\mathrm{C}+$ temporal clitic ( + ch ALD). Examples are shown below in (65).
(65) Coda consonant clusters
a. Stop + fricative or /ts/

| [a..'k'i..luks] | 'frog sp.' (rana pinta) |
| :---: | :---: |
| ['mutsaqs] ~ ['mutsais] | 'camote', 'sweet potato' |
| ['k'i.lipl] | ID: 'action/sound of turtle hiding in shell' |
| [ti:.'tfutt] | 'lid', 'cap' |
| [tan. 'dukd] | 'small fish sp.' |
| ['toq\] ~ ['to $\mathbf{P} \mathbf{4}]$ | ID: 'burning' |
| [Raq.'Repx] | 'ant sp.' |
| ['?ukx] | 'surface' |
| ['maqx] | 'left' |
| ['dapx] | ID: 'sound of footsteps' |
| ['loqts] | ID: 'sound of applause' |
| ['si..la?ts] | ID: 'flashing' (e.g., lightening) |

b. Nasal +/t $f /$
[ju.'Puntf]
[tants]
[ku..'ta:ntf]
[?u.'SamtS]
'third person plural pronoun'
'where'
'yesterday'
'day before yesterday'
c. $\mathrm{C}+$ ch (temporal clitic ALD)

| ['miltf] | 's/he came already' |
| :--- | :--- |
| [na.'huntf] | 's/he says' |
| [la.,pa.nak.'nintf] | 'person-PL' |
| ['ni:ntf] | 'nearby' |
| ['soqtS] | 'straight' |
| ['?akstS] | 'when' |

With respect to the first type of consonant cluster, [stop] + [fricative] or /ts/, shown above in (65a), there are several gaps in the paradigms: while $/ \mathrm{k} /, / \mathrm{q} /$, and $/ \mathrm{R} /$ occur before $/ \mathrm{s} /$, $/ \mathrm{p} /$ and $/ \mathrm{t} /$ do not; all stops except $/ \mathrm{t} /$ occur before $/ \mathrm{S} /$; and only / $\mathrm{q} /$ and $/ \mathrm{R} /$ precede /ts/. All stops occur before $/ \mathrm{A} /$, making its paradigm the only complete one. Furthermore, there are no lexical examples at all in which a stop is followed by $/ \mathrm{t} /$ / in the coda. I do not know if these gaps in the paradigm represent disallowed consonant cluster combinations or if they represent gaps in my data.

Though I have found no lexicalized forms that end in a [stop] + / $\mathrm{t} /$ cluster, there are many lexicalized forms that end in a [nasal] $+/ t \mathrm{t} /$, as seen in the examples in (65b). However, I have found no examples of a [nasal] +/ts/ cluster in the coda.

The temporal clitic + ch (ALD), shown above in (65c), may follow inflected verbs ending in $/ 4 /$ or $/ \mathrm{n} /$ and words of other classes that end in $/ \mathrm{n} /$. I have found the temporal clitic + ch on two other lexemes-one ending in $/ \mathrm{q} /$, soqch 'straight', and one ending in /s/, 7aksch 'when'. This last form, 7aksch, is the only example that I have found of a three-member consonant cluster.

### 2.4.4 Medial Consonant Clusters

Medial consonant clusters can be divided into those comprised of two members, shown below in (66), and those comprised of three members, shown below in (67). With respect to the two-member consonant clusters, all combinations of [sonorant], [stop], [fricative], and [affricate] are attested. With respect to the three-member clusters, there are some restrictions. First, the middle member must be a fricative, while the external members may be stops or sonorants; the combinations include [stop] + [fricative] + [sonorant], [stop] + $[$ fricative $]+[$ stop $],[$ sonorant $]+[$ fricative $]+[$ stop $]$, and [sonorant $]+[$ fricative $]+$ [sonorant]. Finally, an affricate never appears in a three-member medial cluster.
(66) Two-member medial consonant clusters
a. Stop + Sonorant
[kuk.'ßii.ti:]
[la.,pa.nak.'nintf]
[1aq.4waq.'nin]
[ma.,?a.lip.'ni?]
[moq.'jau]
[sk'i:k.'luu]
[soq.'ni.k'a]
[tak.hu.' $\beta \mathrm{in}$ ]
[1t ${ }^{\text {'ad.kat.'na?] }}$
b. Stop + Stop
[,ta.mak.'po..qa.ti]
[laq.pu:.'luks]
['Sqop.tatS]
[, tf'an.kat.'pał]
[?a.,maq.taj.'na?]
[,pa.itit.'kan.ta]
'horse tail plant'
'person-PL'
'dismember'
'lightening'
'fungus species'
'eel'
'straight'
'pulse'
'worker'
'space between the fingers'
'sty (on eye)'
'tired'
'plant sp.'
'fire'
'bruised'
[?ak.'ti.jak]
[mak.'ba.qał]
[1pa:.laq.'baqx]
[12aq.day.'man]
[1pa:S.k'it.'k'in]
[la.ka.'dik.di]
c. Stop + Fricative [?a?.'Ja:u]
[?ak.'łun.ti]
[,1a.mak.'Stal]
[Paq.'Su:.nu:k]
[kuk.'\$If]
d. Stop + Affricate
[kıı.'mak.tfat]
[,łak.tfa.'Rat]
[laq.'ts' ${ }^{\text {in] }}$
['laq.tf'i..ti]
[,tam.6uk.'tsuł]
e. Fricative + Sonorant
[ka:t.'mi..lu:]
[kıı.'mak.tfat]
[1af.ma.'ka?]
[puf.'lim.ti]
['tsa:s.na:.ti]
[/JIf.ni.'wai..ti]
f. Fricative + Stop
[?a.'Reif.ta:]
[?ał.' 2 epx]
[kıl.'tu?]
[, iis.ma.,qad.qa.'ma?]
'weed'
'he peeled (dead skin off) his hand'
'ax'
'bean tortilla'
'comb'
'small'
'large pot with handles' (tinaja)
'cold, illness'
'trash'
'bug sp.'
'avocado'
'rainbow'
'envy'
's/he sees it/him/her'
'cover'
'navel'
'sheep’
'rainbow'
'handrail'
'nephew'
'iron'
'dried bread'
'tree sp.'
'ant sp.'
'edge’
'Tepehua language’
[mad.'te:.qa:] 's/he opened it'
[ma.,qał.qa.'ma?] 'Tepehua'
[ma:f.'te..wan] 'brown tadpole'
[mis.'.tu?]
[, tfa.qa.'ßaf.di]
[,t's'ad.kat.'na?]
[, t' 'a.naf.'taqa]
g. Fricative + Fricative
[Ja.,qof.ta: $\int . '$ 'ba:n] 'plant species' (chichicastle)
[?at., spu.tu.'tun.ti] 'bean fritter' (tamalate)
h. Fricative + Affricate
[12a.ßił.'tfan] 'day'
[,tis.tfa.' $\beta$ aitf] 'who'
[pa:.qof.'tfaq.Jni] 'unworked land'
[,Rał.tsa.'hin]
i. Sonorant + Stop
[Ra.'tJen.? $\varepsilon$ ]
[kau.'tam] ${ }^{40}$
['ja:n.tu]
[pu:m.'pu?]
[,tam.buk.'tsuł]
[tay.'k'af]
[1waim.pu'tun]
[ ${ }_{1}$ s 3 ii.lig.' ${ }^{\prime}$ 'in.ti]
['tf'ay.kat]
[tf'an.'qع.si:t]
'toasted'
'eleven'
'no'
'clothes'
'navel'
‘fer-de-lance' (snake sp.)
'he wants to eat it'
'swirl shape'
‘sugar cane’
'toe nail'
j. Sonorant+ Fricative (no /m/ exs)
['te:n.suin] 'goat'

[^28]```
        [1aq.Stan.'\a?] 'cheek'
        [,t'an.ła:.'la?] 'barefoot'
    k. Sonorant + Affricate
        [pu:.,tan.tsu.'pi.pi] 'horizontal corner'
        [bu:.,\intam.tfa:'\intan] 'twenty-six'
        [6u..,\intam.tsa.'hin] 'twenty-eight'
        [du..'\am.tfitf] 'day before yesterday'
        [,t'an.tfa.'ha?] 'leg'
    1. Sonorant + Sonorant
        [1t'an.Pa.'ka.nit] 'flesh or muscle of the leg'
        ['tfah.?i:t]
        'hail'
        [tfau.'la?]'41 'turkey'
        [t\'an.'lu.kut] 'leg bone'
(67) Three-member medial consonant clusters
a. Stop + Fricative + Sonorant
[?a?.'Slau.ti] 'sap'
[?a.,hi.laq.'snin] 'hiccups'
['aq.Jmu.ti] 'arch', 'bow'
[kık.'Slau.ti] 'drool'
[1aq.łwaq.'nin] 'dismember'
[moq.'Snu?] 'owl'
[ta.'laq.jmif] 'bean tamales'
b. Stop+Fricative + Stop
[12ak.Jtou.'kai] 'it hops'
['Paq.stu] 'alone'
['hu:k.Spi] 'alligator'
[,kık.łka.'win.k'i] 'handlebar mustache'
[kık.'\$pa.kał] 'harelip'
```

[^29][kık.'Jfa.qa] 'lip'
[maq.'spa?] 'outside'
[1?o?.Spa.'lan] 'plant (orchid or lily) sp.'
[?oq.'Sqeu] 'yucca', 'sweet potato'
c. Sonorant + Fricative + Stop
[,t''an.Jda.'qan] 'sandals'
[pa:.tan.'Stuk.ni] 'fishing spear'
[?a.,tan.tdor..'qon.ti] 'knife-wound'
d. Sonorant+Fricative + Sonorant
[laq. Jtan.Jwi:h.'kan] 'he shaves'
[tan.swi.lin.'k'in.ti] 'swirl of the belly button'

### 2.4.5 Syllabification

Syllabification of phonemes into syllables follows the sequence of rules shown in (68).
(68) Syllabification Rules:
(i) first establish the vocalic nucleus, then
(ii) establish a consonant onset, ${ }^{42}$ then
(iii) establish a consonant coda, then
(iv) assign any pre-vocalic unsyllabified consonant that is [-son] [+cont] [+cor] to the Left (Onset) edge of the syllable, and/or
(v) assign any post-vocalic unsyllabified consonant that is [-son] [+cont] [+cor] to the Right (coda) edge of the syllable, and/or
(vi) if an unsyllabified segment falls between a coda and an onset, assign it to the following onset (favor onsets over codas).

These syllabification rules favor onset consonant clusters and disfavor coda consonant clusters at syllable boundaries, based on the constraint that all syllables must have an onset (see example (51) in section 2.4). For example, following these syllabification rules, the word 7aqstu 'alone' is syllabified as

[^30]['Raq.stu] and not as ['Paqs.tü]. Unfortunately, I have not found a good test for syllable constituency in HT to reinforce these syllabification rules. The derivation of the syllable structures of ['Paqs.tu]] 'alone' and [1?o?.Spa.'lan] 'lily species' are shown below in (69).
(69) Syllabification of ['Paq.stu] 'alone' and [1?o?.Spa.'lan] 'lily species'

(ii)

(iii)

(vi)


There are three prefixes which, when added to a consonant-initial stem, have the potential to create an onset consonant cluster that does not conform to the syllable structure given in (55). These prefixes are the first person subject prefix $k$ - that occurs on verb stems, the past tense prefix $x$ - that also occurs on verb stems, and the homophonous third person possessor prefix $x$ - that occurs on noun stems.

The first person subject prefix $k$ - (1SUB) may precede any consonant except $/ \mathrm{k} / 43$ and $/ \mathrm{q} /{ }^{44}$ The examples below show $k$ - preceding a stop (70a), a nasal

[^31](70b), a fricative (70c), an affricate (70d), the liquid (70e), an approximant (70f), the glottal stop $(70 \mathrm{~g})$, and a vowel (70h).
(70) $k-(1 \mathrm{SUB})+\mathrm{C}$
a. $k$ - + stop
[ktaf.'tui]
/k-taftu-y/
1SUB-go.out-IMPFV
'I go out'
[kda.'hun]
/k-t'ahun/
1SUB-be
'I am X-ing'
b. $k-+$ nasal
[kna.' $\beta \mathrm{ir}$ ]
/k-nawii-y/
1SUB-make-IMPFV
'I do/make it'
c. $k$ - + fricative
[k\$i.'.'an.ta]
/k-ti:Pan-ta/
1SUB-wear-PF
'I wear it'
d. $k$ - + affricate
[1ktJa. $\beta$ a.'ni:]
/k-tJawani-y/
1SUB-be.hungry-IMPFV
'I am hungry'

[^32]e. $k$ - + liquid
[,kla.ka.' ii :]
/k-lakaRii-y/
1SUB-believe-IMPFV
'I believe it'
f. $k-+$ approximant
[khu.'nau]
/k-hun-aw/
1SUB-say(IMPFV)-1PL.SUB
'we say'
[kßa.'hin] ~ [kwa.'hin]
/k-wahin/
1SUB-eat(IMPFV)
'I eat'
g. $k-+/$ /
[1k'ak.lduy.'k'u.ta]
/k-Pak-tt'unk'u-ta/
1SUB-HEAD-carry-PF
'I had carried it on my head'
h. $k-+\mathrm{V}$
[1kam.pu.'tun]
/k-?an-putun/
1SUB-go-DESID(IMPFV)
'I want to go'
Though the above examples in (70) are attested forms, the onset consonant cluster produced by the prefixation of $k$ - $(1 \mathrm{SUB})$ to a consonant-initial stem does not conform to the syllable structure shown above in (55) because the $/ \mathrm{k} /$ is neither a continuant, nor a coronal. Speakers resolve this conflict in one of four ways: (i) they allow the cluster, as seen in the examples above in (70), which are exceptions to the coronal edge constraint, (ii) they syllabify the $/ \mathrm{k} /$ of the first
person prefix as the coda of a preceding vowel-final particle or word, (iii) they insert an epenthetic [?i-] before the [k], or (iv) they omit the $k$ - prefix entirely.

Examples of syllabification as a coda of the first person subject prefix $k$ are shown below in (71). In (71a), the $/ \mathrm{k} /$ has been syllabified as the coda of the preceding adverb, and in (71b), the $/ \mathrm{k} /$ has been syllabified as the coda of the preceding particle. Evidence for syllabification of the prefix as a coda is found in the form of an audible release after the [k] in both forms in (71). In these examples, the $[\mathrm{k}]$ behaves more like a word-final stop (in that it is released) than a word-initial stop (which is not released). In contrast, the word-initial [k] in the examples shown in (70) above is not released preceding another consonant in onset position. This process of syllabifying the $k$ - prefix as the coda of the preceding word or particle conforms to the syllabification rules shown above in (68) in that an unsyllabified consonant will be put into coda position before it will be put into a consonant cluster in onset position.
(71) a. ['jun.ta:k. ta.,pa:.sa.'jau]
/junta: k-ta-pa:sa-j-aw/
where 1SUB-INCH-pass-IMPFV-1PL.SUB 'where we pass'
b. [ßa:k. ,ta.ła.'nan]
/wa: k-talhanan/
FOC 1SUB-be.scared(IMPFV)
'I am scared.'
[T0054: 034]
The elder speaker with whom I worked closely, don Antonio, would sometimes resolve the conflict by inserting an epenthetic [?i-] before the [k], so
that $/ \mathrm{k} /$ became the coda and not the onset of its syllable, as seen in the example in (72). This process, too, conforms to the syllabification rules given in (68).
(72) [Pık.'mak.tfa:t hu: 'ti..?uti]
/?i-k-maktJa:-li hu: di:?uti/
EPE-1SUB-ripen(VT)-PFV ART fruit
'I let the fruit ripen.'
[ELIEX1: 002 (AVH)]
While I was eliciting verb paradigms, I noticed that all of my consultants frequently omitted the first person subject prefix on consonant-initial verb stems. The example in (73a) is from don Nicolás, my 46-year-old consultant, the one in (73b) is from Micaela, my 23-year-old consultant, and the example in (73c) is from don Antonio, my 76-year-old consultant. ${ }^{45}$ However, if the first person subject prefix is omitted, then the verb is ambiguous and may be (mis)interpreted as having a third person singular subject. The translations in these examples reflect this ambiguity.
(73) a. [ta.'nu:i]
/tanu:-j/
enter-IMPFV
'I enter.' / 'S/he enters.'
[MNB16: 99 (NVP)]
b. [na.'ßii 'ßa:ti]
/nawi:-j wa:ti/
make-IMPFV tortilla
'I make tortillas.' / 'S/he makes tortillas.'
[MNB6: 355 (MSP)]
c. [,ta.q\&y.'ta.hultf]
/taqeytahu-li+tf/
get.off-PFV+ALD
'I got off.' / 'S/he got off' (e.g., the bus).
[MNB16: 30 (AVH)]

[^33]Only after I asked the speaker to repeat him- or herself, would he or she include the first person prefix, and it usually took more than one emphatic repetition before the $[\mathrm{k}]+\mathrm{C}$ combination was auditorily perceptible, especially when $k$ preceded another stop. In the emphatic repetition, don Nicolás and Micaela both would use the $k$ - prefix, (74a) and (74b), respectively. Don Antonio, on the other hand, would use $7 i k$ - in such environments, as seen in ( 74 c ).
(74) a. [kta.'nu:i]
/k-tanu:-j/
1SUB-enter-IMPFV
'I enter.'
[MNB16: 99 (NVP)]
b. [kna.' $\beta$ i:
'ßa:ti]
/k-nawi:-j wa:ti/
1SUB-make-IMPFV tortilla
'I make tortillas.'
[MNB6: 355 (MSP)]
c. [Pık.ta.q\&\&.'ta.jult $]$
/Ri-k-taqe
EPE-1SUB-get.off-PFV+ALD
'I got off (e.g., the bus).'
[MNB16: 30 (AVH)]
Furthermore, the $k$ - prefix is frequently omitted even when it could have been syllabified with the preceding particle, as seen in the example in (75). In this example, the focus particle waa precedes the verb. It is frequently the case that $k$ is syllabified as the coda of this particle, as seen in (71b) above. However, in the clause shown here in (75), the $k$ - is simply omitted. Though the gloss says 'I killed it', the verb maqniilhch ['maqni:1tf] is not marked for first person and literally means 'He killed it'. This process of omission does not fall out from the syllabification rules given in (68).
(75) ['pu:s ßa: 'maqni:1tf ,ka?u'ja:ut]]
/pu:s wa: maqni--li $+\mathrm{t} \int \quad \mathrm{ka}-\mathrm{Ru}-\mathrm{ya} 2-\mathrm{w}+\mathrm{t} \mathrm{f} /$
well FOC kill-PFV+ALD IRR-eat-FUT-1PL.SUB+ALD
'Well, I killed it and we are going to eat it.'
[T0059: 013]
The other two prefixes, the verbal past tense marker $x$ - and the nominal third person possessor marker $x$-, are homophones, and they are syllabified in exactly the same way. Though they do conform to the syllable structure given in (55), they create consonant clusters such as [fricative] + [fricative] or [fricative] + [affricate] that are not otherwise attested. They are syllabified in the same way that the first person subject prefix $k$ - is: either as the coda of a preceding word or particle, as seen in the examples in (76), or as the coda of an epenthetic [1ㅍ], as seen in the examples in (77). However, unlike the $k$ - prefix, these two prefixes are never omitted. ${ }^{46}$

In the example in (76a), the possessive prefix $x$ - is syllabified as the coda of the preceding article $j u u$. In the example in (76b), the past tense prefix $x$ - is syllabified as the coda of the preceding focus particle waa.
(76) a. [hu: $\int \quad \mathrm{t}$ a.' qa ]
/hu: $\quad \int$-tfaqa?/
ART 3POS-house
'his/her house'
b. [ $\beta \mathrm{a}: \int \quad$, $\int$ fu.tfu.'?uit $]$
/wa: $\quad \int-\mathrm{t} \int \mathrm{ut} \int u=? u-j+t \int /$
FOC PAST-suck=eat-IMPFV+ALD
'S/he sucked it.'

[^34]When there is no preceding vowel-final word or particle, an epenthetic [?I] is inserted before the prefix $x$-, and [J] is syllabified as the coda of this syllable, as seen in the examples in (77).
(77) a. [12ix.tfa.'qa?]
/?i-f-tfaqa?/
EPE-3POS-house
'his/her house'
b. [Pif., tfu.tfu.'Ruitf]
/?i-f-t $\int u t \int u=? u-j+t \int /$
EPE-PAST-suck=eat-IMPFV+ALD
'S/he sucked it.'
Comparing epenthesis of [21] before these two $x$ - prefixes to epenthesis of [?1] before the first person subject prefix $k$-, I found one important difference: whereas only the eldest of my three principal consultants used the epenthesis strategy to syllabify the $k$ - prefix, all three of them (as well as other speakers with whom I worked in Huehuetla) used the epenthesis strategy to syllabify the two $x$ prefixes.

### 2.5 STRESS

Huehuetla Tepehua displays three stress patterns: one pattern for native words, including verbs, adjectives, non-ideophonic adverbs, and nouns (section 2.5.1), a second pattern for ideophonic adverbs (section 2.5.2), and a third pattern for loanwords from Spanish (section 2.5.3).

### 2.5.1 Stress in Native, Non-ideophonic Words

HT has two degrees of stress: primary and secondary. Stress is assigned from right to left. Primary stress may fall on the ultimate, penultimate, or antepenultimate syllable of the word, depending on syllable codas, word length, and word class. Secondary stress is assigned to alternate syllables in the morphological word, moving from right to left starting at the syllable bearing primary stress. The primary stress rule is as follows: stress the final syllable if it ends in a sonorant (i.e., moraic) ${ }^{47}$ consonant or glide, otherwise, stress the penult. The sonorant consonants are $/ \mathrm{m}, \mathrm{n}, \mathrm{l}, \mathrm{r}, \mathrm{r} /$ and the glides are $/ \mathrm{h}, \mathrm{p}, \mathrm{w}, \mathrm{j} /{ }^{48}$ Note that $/ \mathrm{R} /$ is included in this group even though it is not typically considered to be a sonorant; it is included in the sonorant class because it patterns like the other sonorant consonants in that it adds weight to a syllable. Furthermore, it behaves differently from the glottalized consonants $/ \mathrm{p}^{\prime}, \mathrm{t}^{\prime}, \mathrm{k}^{\prime} /$, which do not occur syllable-finally and which do not add weight to a syllable. Certain morphemes are extrametrical and may not bear primary stress; these include the body part prefixes, the third person plural subject and object markers (ta- and lak-, respectively), the instrumental prefix paa-, and the nominalizing suffix -ti. These prefixes may bear secondary stress, but the suffix never does.

An alternative way to state the stress rule is to specify that primary stress falls on the final syllable only if that syllable has a moraic coda; otherwise, stress

[^35]falls on the penult (or antepenult in the case of some nominalized forms, see section 2.5.1.4). Recall from section 2.4 that HT has both heavy and light closed syllables: CVS and CVO, ${ }^{49}$ respectively, because sonorants in coda position are moraic, while obstruents in coda position are not. Since vowel length is distinctive in HT, the language also has both heavy and light opened syllables: CVV and CV. What is interesting and unique about the HT stress pattern is that the heavy opened syllable CVV behaves like the light syllables CV and CVO with respect to stress assignment in that none of these three syllable types attracts primary stress. Only the heavy closed syllable CVS attracts primary stress. Cross-linguistically, it is typically the case that if a heavy closed syllable attracts stress, then a heavy opened syllable will also attract stress (Zec 1995). However, this is not the case in HT, and I do not know of any other language which exhibits this unusual stress assignment pattern. Examples showing the contrast in stress between words ending in CVS versus words ending in CVV, CVO, and CV are given in each of the following subsections.

Examples of words from which an intervocalic /h/ has been deleted provided evidence that primary and secondary stress assignment do not happen simultaneously. ${ }^{50}$ Instead, /h/-deletion happens after primary stress assignment and before secondary stress assignment. Simultaneous assignment of primary and secondary stress, shown in the derivation in (78), produces ungrammatical forms in which either (i) /h/-deletion fails to happen, which is the case with the first example in this derivation or (ii) the secondary stress assignment is incorrect,

[^36]which is the case with the second example in this derivation. In the derivation in (79), primary stress assignment precedes $/ \mathrm{h} /$-deletion, which in turn precedes secondary stress assignment, and the outputs are grammatical.
(78) Simultaneous stress assignment

| Underlying Rep | /wahin-putun/ | /Ra-qałahu-nan/ |
| :--- | :--- | :--- |
| N-assimilation | /wahim-putun/ | ----- |
| $1^{\circ}$ stress | /wahim-pu'tun/ | /Ra-qałahu-'nan/ |
| H-deletion | /waim-pu'tun/ | /Ra-qałau-'nan/ |
| $2^{\circ}$ stress | /,waim-pu'tun/ | /Ra-,qałau-'nan/ |
| Surface Rep | [,waimpu'tun] | [?a,qałau'nan] |
| Gloss | 'he wants to eat' | 'he steals' |

(79) Ordered stress assignment

| Underlying Rep | /wahin-putun/ | /Ra-qałahu-nan/ |
| :--- | :---: | :---: |
| N-assimilation | /wahim-putun/ | ---- |
| Stress | /wa,him-pu'tun/ | /,Ra-qa,łahu-'nan/ |
| H-deletion | ---- | /,Ra-qa,qau-'nan/ |
| Surface Rep | $* *\left[\right.$ wa.,him.pu.'tun] ${ }^{51}$ | $* *$ [,Pa.qa.,qau.'nan] |

The rest of this section is organized as follows: verbal stress is covered in section 2.5.1.1, adjectival stress in 2.5.1.2, adverbial (non-ideophonic) stress in 2.5.1.3, and nominal stress in 2.5.1.4.

### 2.5.1.1 Stress in Verbs

The assignment of stress in a verb is quite straight-forward: if the final syllable ends in a sonorant consonant or glide, it receives primary stress; otherwise the penultimate syllable receives primary stress. Secondary stress is assigned to every other syllable from right to left starting at the syllable bearing

[^37]the primary stress. Verbs that bear primary stress on the final syllable are shown below in (80), and verbs that bear primary stress on the penultimate syllable are shown in (81). If a verb consists of a single syllable, it receives primary stress, even if the syllable ends in a non-sonorant consonant; examples are shown below in (82).
(80) Verbs: Primary stress on ultimate syllable
7akminaaw [1?ak.mi.'na:u] /Ra-k-min-a?-w/ 'we (EXCL) will come’
chaa7an [tJa:.'Ran] /t $\mathrm{a}:$ :-Ran/ 'he arrives there'

7iknawiiy [1Prk.na.'ßii] /Ri-k-nawi--j/ 'I do/make it'
7ixchuchu7uy [Rı,. .tfu.tfu.'?ui] /Ri-f-tfutfu-Ru-j/ 'S/he sucked it.'
junaw [hu.'nau] /hun-aw/ 'we (INCL) say it'
ka7ana7 [.ka.?a.'na?] /ka-?an-a?/ 's/he will go'
k'anchoqoya7 [k'an.,tfo.qo.'ja?] /k-Pan-t5oqo-ja?/ 'I will go again'
k'anputun [1k'am.pu.'tun] /k-Pan-putun/ 'I want to go'
laka7iiy [1a.ka.'2ii] /lakaPi:-j/ 'he believes it'
laqlhwaqnin [,laq.1ßaq.'nin] /laq-twaq-nin/ 'to dismember'
laqtz'in [laq.'ts'in] /laqts'in/ 's/he sees it/him/her'
tanuuy [ta.'nu:i] /tanu:-j/ 'S/he enters.'
taxtuy [taf.'tui] /taftu-j/ 'he goes out'
t'ajun [da.'hun] /t'ahun/ 'he is X-ing'
wajin [ßa.'hin] /wahin/ 'he eats'
(81) Verbs: Primary stress on penultimate syllable

| 7anawiit'i | [,Pa.na.'ßii.di] | /Ra-nawi--t'i/ | '(you SG) do it!' |
| :---: | :---: | :---: | :---: |
| k'i7ut'i |  | /ki-?u-t'i/ | 'you eat me' |
| k'uk'ata | [k'u.'ka.ta] | /k'uka-ta/ | 'he has carried it' |
| lhii7anta | [ il. .'Ran.ta] | /di:Pan-ta/ | 'he wears it' |
| malhtee7aa | [ma:4.'te:.1a:] | /ma:\&te:3a:-li/ | 'it opened it' |
| nawiiyat'it |  | /nawi:-j-at'it/ | 'you all do/make it' |
| p'it'ilh | ['6ı.did] | /p'it'i-li/ | 'she scrubbed it' |


| taqelhtajulh | [1ta.qeł.'ta.hul] | /taqeitaju-li/ | 'S/he got off' |
| :---: | :---: | :---: | :---: |
| tzukulh | ['tsu.kuł] | /tsuku-li/ | 'it began' |
| witilh | ['ßı.tit] | /witi-li/ | 'she somersaulted' |
| xk'aapilh | ['Sk'a.:pıı] | /Sk'a:pi-li/ | 's/he locked it' |

(82) Single syllable verbs

| $\min$ | ['min] | $/ \mathrm{min} /$ | 'he comes' |
| :--- | :--- | :--- | :--- |
| milh | ['mił] | $/ \mathrm{min}-\mathrm{li} /$ | 'he came' |
| 7uy | ['?ui] | $/ \mathrm{u}-\mathrm{j} /$ | 'he eats' |
| 7ulh | ['?uł] | $/ \mathrm{u}-\mathrm{li} /$ | 'he ate' |

As discussed above, a heavy CVS syllable attracts primary stress in wordfinal position while the other syllable types (heavy CVV, light CVO, and light CV) do not attract stress in word-final position. Examples demonstrating this contrast appear below in (83) and (84). The examples in (83) all end in a heavy CVS syllable, and they all have primary stress on the ultimate syllable. All of the examples in (84) have penultimate stress: the examples in (84a) end in a heavy opened syllable, CVV; the examples in (84b) end in a light closed syllable, CVO; and the examples in (84d) end in a light opened syllable, CV.
(83) Final heavy CVS syllable bears ultimate stress

| junaw | [hu.'nau] | /hun-aw/ | 'we (INCL) say it' |
| :--- | :--- | :--- | :--- |
| ka7ana7 | [.ka.?a.'na?] | /ka-Ran-a?/ | 's/he will go' |
| k'anputun | [.k'am.pu.'tun] | /k-Ran-putun/ | 'I want to go' |
| tanuuy | [ta.'nu:i] | /tanu:-j/ | 'S/he enters.' |

(84) Final syllable types that do not bear ultimate stress
a. Heavy CVV
malhtee7aa [ma:1.'te:.1a:] /ma:\&te:Ra:-li/ 'it opened it'
maaqeswaa [ma:.'qes.ßa:] /ma:qeswa:-li/ 'it scared him/her' talaamaqnii [.ta.la:.'maq.ni:] /ta-la:-maqni:-li/ 'they killed each other'
b. Light CVO
nawiiyat'it [na.ßii.'ja.dit] /nawi:-j-at'it/ 'you all do/make it'
xk'aapilh ['Sk'ai.pIt] / Sk 'a:pi-li/ 's/he locked it'
d. Light CV

| 7anawiit'i | [.1a.na.'ßii.di] | /Ra-nawi:-t'i// | '(you SG) do it!' |
| :--- | :--- | :--- | :--- |
| lhii7anta | [fi..''an.ta] | /hi:3an-ta/ | 'he wears it' |

Certain verbal affixes do not bear primary stress. These include body part prefixes (BPPs) and subject and object third person plural markers. Examples of verbs bearing body part prefixes are shown below in (85). In (85a) the stress falls on the penultimate syllable of a three-syllable word because the final syllable ends in a non-sonorant consonant. The first syllable of this word is a body part prefix. In (85b), the word has been reduced to two syllables by the removal of reflexive suffix -kan; the first syllable is a body part prefix, which may not bear primary stress. Thus, in this example, the primary stress must occur on the final syllable, even though it ends in the non-sonorant consonant [1]. Additional examples of primary stress on verbs bearing body part prefixes are shown in (85c). Though the BPPs are extrametrical with respect to primary stress assignment, they may bear secondary stress, as seen in the final two examples in (85c).
(85) Body part prefixes
a. [tan.'Sdu.ka:t]
/tan-St'uk-kan-li/
TORSO-button-RFL-PFV
'Someone buttoned his shirt.'
b. [tan.'Scukł hu: ,PIS.pu:m.'pu? hu: 'Si..ßan]
/tan-St'uk-li hu: Rif-pu:mpu? hu: Ji:wan/
TORSO-button-PFV ART 3POS-shirt ART John
'John buttoned his shirt.'
[PDLMA05]
c. 7aqxt'aqlh [Raq.'Sdaqł] /Raq-St'aq-li/ 'he covers it' kikxix [kık.' SI I$]$ /kik-Jif/ 's/he is thirsty' ch'anch'aqay [1f'an.tf'a.'qai] /ch'an-tf'aqa-j/ 'he washes his feet' makxakay [1mak.fa.'kai] /mak-Saka-j/ 'he cleaned his hands'

Person prefixes that indicate a third person plural subject ( $t a-$ ) and object (lak-) do not bear primary stress, as seen in the examples below in (86). According to the stress rule, if the word does not end in a sonorant consonant, the penultimate syllable should carry the primary stress. However, in each example in (86), the verb ends in two non-sonorant consonants, and the final syllable bears the primary stress even though we would expect the stress to fall on the penultimate syllable. In (86a) the third person plural subject prefix $t a$ - is the penult, but it may not bear primary stress, and in (86b) the third person plural object prefix lak- is the penult, but it may not bear primary stress either.
(86) Subject and object person marking prefixes
a. [hu: su.sa.'ni.ta hu: ?o.'ta.ñat
ta.'6uft]
/hu: susan-ita hu: otana+tf ta-p'uf-li/
ART Susan-DIM ART Otaña+ALD 3PL.SUB-pick-PVF
[hu: Ra:.'la:.fu:f]
/hu: Ra:la:ju: $/$
'Susanita and Otaña picked the oranges.'
b. [hu: su.sa.'ni.ta lak.'bufł hu: la.k'a..'la:.fu:S]
/hu: susan-ita lak-p'uf-li hu: lak-Ra:la:fu:S/
ART Susan-DIM 3PL.OBJ-pick-PFV ART PL-orange 'Susanita picked the oranges.'
[PDLMA05]
When the root consists of a single syllable that is prefixed with a person marker or a body part prefix that may not bear primary stress, the perfective
aspect suffix /-li/ may be preserved (i.e., it does not neutralize [1]) as seen in the examples in (87). ${ }^{52}$
[hu: su.sa.'ni.ta lak.'6uf.li
hu: , la.k'a:.'la:.fu:S]
/hu: susan-ita lak-p'uf-li
hu: lak-Ra:la: $u$ u: $\int /$
ART Susan-DIM 3PL.OBJ-pick-PFV ART PL-orange 'Susanita picked the oranges.'
[PDLMA05]
b. [ti:.'puj.li
, $2 \mathrm{II} \mathrm{S} . \mathrm{ti}$. . k 'iu
hu: 'puł.ki]
/ti:-puj-li
Pij-ti:-k'iw
hu: pułki/
BUTT-dig.up-PFV 3POS-BUTT-tree ART maguey
'He dug up the maguey plant.'
[PDLMA05]

### 2.5.1.2 Stress in Adjectives

Primary stress is assigned to an adjective in the same way it is assigned to a verb. If the final syllable ends in a sonorant consonant or glide, it receives primary stress; otherwise the penult receives primary stress. Secondary stress is assigned to alternate syllables from right to left starting at the syllable bearing the primary stress. Adjectives that bear primary stress on the final syllable are shown below in (88), and adjectives that bear primary stress on the penult are shown in (89).
(88) Adjectives: Primary stress on ultimate syllable

| ch'oolew | [tf'o..'leu] | /tf'o:lew/ | 'multi-colored' |
| :--- | :--- | :--- | :--- |
| saala7 | [sa:.'la?] | /sa:la?/ | 'clean' |
| sliwiw | [sli.''Biu] | /sliwiw/ | 'elliptical' |
| tz'uuliw | [ts'u:.'liu] | /ts'u:liw/ | 'black and white' |
| xpaajaj | [Spa:.'hah] | /Spa:hah/ | 'flat' |

[^38](89) Adjectives: Primary stress on penultimate syllable

| 7achen7e | [1a.'tfen.2q] | /at 5 en-q'V/ | 'toasted' |
| :---: | :---: | :---: | :---: |
| kuliknik'a | [1ku.lik.'ni.k'a] | /kulik-ni-k'a/ | 'curvy' |
| k'ayank'a | [k'a.'jay.k'a] | /k'aja-n-k'V/ | 'painful' |
| lalhank'a | [la.''ay.k'a] | /lada-n-k'V/ | 'hanging' |
| laman7a | [la.'man.2a] | /laman-q'V/ | 'sticky' |
| lhkuluku | [1ku.'lu.ku] | /4kuluku/ | 'crooked', 'twisted' |
| pututu | [pu.'tu.tu] | /pututu/ | 'round' |
| smalaqa | [sma.'la.qa] | /smalaqa/ | 'dark-skinned', 'black' |
| soqnik'a | [soq.'ni.k'a] | /soq-ni-k'a/ | 'straight' |
| st'ilik'a | [sdi.'li.k'a] | /st'ili-k'a/ | 'standing' |
| taliten7e | [ta.li.'ten. 2 l ] | /talite-n-q'V/ | 'cylindrical' |
| xnapapa | [Sna.'pa.pa] | /Snapapa/ | 'white' |

In the previous subsection on verbal stress, we saw that a heavy CVS syllable is the only type of syllable that attracts primary stress in word-final position; verbs ending in any of the other syllable types (CVV, CVO, and CV) have penultimate stress. This stress pattern is not so obvious with respect to the class of adjectives because the final syllable of an adjective may belong to one of only two syllable types: the heavy type CVS, as seen in the examples in (90), or the light type CV, as seen in the examples in (91). The other two possible syllable types (CVO and CVV) do not occur word-finally in adjectives. The CVS-final adjectives have ultimate stress, while the CV-final adjectives have penultimate stress.
(90) Final heavy CVS syllable bears ultimate stress

| k'ilhij | [k'i.''ih] | /k'iłih/ | 'stiff' |
| :--- | :--- | :--- | :--- |
| maqaqay | [1ma.qa.'qai] | /maqaqaj/ | 'wide' |
| slawa7 | [sla.' $\beta a$ '] | /slawa'/ | 'slippery' |
| slaajan | [sla.'.han] | /sla:han/ | 'soft' |


| tzasaw | $[$ tsa.'sau $]$ | /tsasaw/ | 'bald' |
| :--- | :--- | :--- | :--- |
| waqtam | $[\beta$ aq.'tam $]$ | $/$ waq-tam $/$ | 'together' |

(91) Final light CV syllable does not bear ultimate stress

| lhkilik'i | [4ki.'li.k'i] | /4kili-k'V/ | 'trashy' |
| :--- | :--- | :--- | :--- |
| matzatnik'a | [1ma.tsat.'nik'a] | /matsat-ni-k'a/ 'salty' |  |
| sluyon7o | [slu.'jon.?o] | /slujo-n-q'V/ | 'extended' |
| sqoqo | ['s?o.1o] | /sqoqo/ | 'salty' |
| spututu | [spu.'tu.tu] | /spututu/ | 'round' |

Though body part prefixes do occur on adjectives, I have found no examples in which a final syllable ending in something other than a sonorant consonant was stressed in order to avoid stressing the BPP. The only singlesyllable adjective that I found which may be prefixed with a BPP is qay /qaj/ 'big', which ends in a sonorant consonant, so it receives primary stress. In all other examples of adjectives prefixed with BPPs that I have found, the adjective is at least two syllables long, so there is no stress conflict. Examples are shown in (92).
(92) Adjectives: Primary stress and body part prefixes

| 7aktzasan | .tsa.'san] | Pak-tzasan/ | 'gray |
| :---: | :---: | :---: | :---: |
| kiksmulunk'u | [1kık.smu.'luy.k'ü] | /kik-smulu-n-k’V/ | 'thick-lipped' |
| at'ikst'i | la.ka.'drk.sdi] | /laka-t'ikst'i/ | 'small-bodied' |
| ixqawaaw | [laq. Jti:S.qa.'ßa:u] | /laqJti:-Sqwaiw/ | 'blond-haired' |
| aqaqay | [1ma.qa.'qai] | /maqa-qaj/ | 'wide' |
| puutanqay | [pui.tan.'qai] | /pui-tan-qaj/ | 'tall' |

### 2.5.1.3 Stress in Non-ideophonic Adverbs

Non-ideophonic adverbs ${ }^{53}$ follow the same primary stress rule as verbs and adjectives: stress the final syllable if it ends in a sonorant consonant or glide; otherwise stress the penult. Secondary stress is assigned to every other syllable from right to left starting at the syllable bearing the primary stress. Examples of word-final stress appear in (93), and examples of penultimate stress appear in (94). Body part prefixes do not occur on adverbs.
(93) Adverbs: Primary stress on ultimate syllable

| 7 aali 7 | [ $2 \mathrm{a} . .1 \mathrm{l}$ '12] | /a:li?/ | 'more' |
| :---: | :---: | :---: | :---: |
| chaway | [tfa.'ßai] | /t 5 awaj/ | 'now' |
| ch'ayaaw | [t' ${ }^{\text {'a. }}$ 'ja:u] | /t ${ }^{\text {'ajaim/ }}$ | 'sweet flavor/scent' |
| kuutanch | [ku:.'ta:nts] | /kus.ta:n+t ${ }^{\text {/ }}$ | 'yesterday' |
| laanij | [la:.'ni:h] | /la:ni:h/ | 'truly', 'really' |
| palay | [pa.'lai] | /palaj/ | 'more', 'better' |
| p'ulhnan | [6ut.'nan] | /p'ünan/ | 'first' |
| tawanan | [,ta. $3 \mathrm{a} .{ }^{\text {'nan] }}$ | /tawanan/ | 'never' |
| tunkajun | [,tuy.ka.'hun] | /tunkahun/ | 'daily' |

(94) Adverbs: Primary stress on penultimate syllable

| 7aksnii | ['Pak.sni:] | /aksni:/ | 'when' |
| :---: | :---: | :---: | :---: |
| 7 aqstu | ['Paq.stu] | /aqstu/ | 'alone' |
| juntaa | ['hun.ta:] | /hunta:/ | 'where' |
| laqasii | [la.'qa.si:] | /laqasi:/ | 'first' |
| maqanchi | [ma.'qan.tfi] | /maqant 5 / | 'long time' |
| palata | [pa.'la.ta] | /palata/ | 'more', 'better' |
| tzakaa | ['tsa.ka:] | /tsaka:/ | 'heavily' |
| tz'isich | ['ts'i..sit]] | /ts'issi+tj/ | 'last night' |
| 7uwiint'i | [?u.'ßim. $\mathrm{di}_{0}$ ] | /uwint'i/ | 'over there' |
| waataach | ['3a:.ta:t]] | /wa:ta:ts/ | 'always' |

[^39]With respect to syllable weight and stress, we once again find the pattern in which a heavy CVS syllable attracts primary stress in word-final position while the other three syllable types (CVV, CVO, and CV) do not. All of the examples of words with ultimate stress in (93) end in a sonorant consonant (CVS), while all of the examples of words with penultimate stress in (94) end in one of the other syllable types.

### 2.5.1.4 Stress in Nouns

Nouns follow the same primary stress rule as the other word classes: stress the final syllable if it ends in a sonorant consonant, otherwise stress the penult. Secondary stress is assigned to alternate syllables from right to left, starting at the syllable bearing primary stress. Examples of nouns with word-final stress appear in (95), and examples of nouns with penultimate stress appear in (96). Once again, we see the stress pattern in which the CVS syllable behaves differently in wordfinal position than the other syllable types do. All of the words in (95) end in a sonorant consonant (CVS), and they all have ultimate primary stress. The words in (96) end in one of the other three syllable types (CVV, CVO, CV), and these words all have penultimate stress.
(95) Nouns: Primary stress on ultimate syllable

| 7 amakxtal | [,1a.mak.'Stal] | /Ramakftal/ | 'garbage' |
| :---: | :---: | :---: | :---: |
| 7aqalhoona7 | [?a.,qa.1o..'na?] | /Ra-qałahun-nV?/ | 'thief' |
| 7awiy | [1a.' $\beta$ ir] | /awij/ | 'mouse' |
| ch'alhkatna7 | [1t ${ }^{\text {d'ad.kat.'na? }}$ | /tf'ałkat-nV?/ | 'worker' |
| juumpay | [hu:m.'pai] | /hu:mpaj/ | 'dragonfly' |
| kilhij | [ki.'1ih] | /kiłih/ | 'lace' |
| k'iwin | [k'i.'ßin] | /k'iw-Vn/ | 'trees' |


| miistu7 | [miss.'tui] | /mistu?/ | 'cat' |
| :---: | :---: | :---: | :---: |
| 7oqxqew | [3oq.'Sqzu] | /oq.fqew/ | 'yucca', 'cassava' |
| puulht'uj | [pu:4.'duh] | /puitt'uh/ | 'water frog' |
| puutamaan | [1pu..ta.'ma:n] | /pui-ta-mai-n/ | 'bed' |
| sk'iikluw | [sk'i.k.'lu:] | /sk'i:k-luw/ | 'eel’ |
| tach'iin | [ta.'tf'iin] | /ta-ts'ii-n/ | 'prisoner' |
| tukulun | [,tu.ku.'lun] | /tukulun/ | 'rheumatism' |
| tzaapuuj | [tsa:.'pu:h] | /tsa:pu:h/ | 'caterpillar' |
| tz'a7am | [ts'a.''1am] | /ts'a?am/ | 'dried corn stalk’ |
| 7ukstin | [?uk.'stin] | /ukstin/ | 'green fly' |
| ya7a7 | [ja.'2a?] | /jaPa?/ | 'white person' |

(96) Nouns: Primary stress on penultimate syllable

| 7a7eyxtaa | [Ra.'Reif.ta:] | /aqejfta:/ | 'tree sp.' |
| :---: | :---: | :---: | :---: |
| 7aak'iiluks | [?a..'k'i.luks] | /a:k'i:luks/ | 'frog sp.' |
| 7aalaaxuux | [fa:.'la:.fu: 5 ] | $a: \int u: / 5$ | 'orange' |
| 7asiiwiik | [1a.'si.. $\beta \mathrm{i}$ k] | /asiswi:k/ | 'vein', 'vine' |
| chu7ut | ['tfu.?ut] | /tfuPut/ | 'saliva' |
| ch'aqawaxt'i | ['tfa.qa.'ßaf.t'i] | /tfaqawast'i/ | 'Totonac' |
| joo7at | ['ho:.3at] | /'ho:Rat/ | 'male' |
| juuyuu ~ kuuyuu | ['hu:.ju:]~['ku:.ju:] | /hu:ju:/~/ku: | 'armadillo' |
| katz'aluunas | [,ka.ts'a.'lu..nas] | /kats'alu:nas/ | 'fried pork skin' |
| kukat | ['ku.kat] | /kukat/ | 'oak tree', 'acorn' |
| kuklhilhi | [kuk.'1iłi ${ }^{\text {] }}$ ] | /kukłiłi/ | 'avocado' |
| kukwiitii | [kuk'. $\beta$ is.tii.] | /kukwi:ti:/ | 'horse tail plant' |
| kuukuu | ['kus.ku:] | /ku:ku:/ | 'sand' |
| lapanak | [la.'pa.nak] | /lapanak/ | 'person', 'man' |
| lhqapaq | ['qa.pa?] | /tqapaq/ | 'walking stick bug' |
| maalhawaakalh | [ ma:.fa.'ßai.kad] | /ma:ława:kaq/ | 'large basket' |
| maalhiyuk | [ma:.'1i.juk] | /ma:ijuk/ | 'spider' |
| maatuupik | [ma:'.tui.prk] | /ma:tu:pik/ | 'butterfly' |
| mutzaqs | ['mu.tsaqs] | /mutsaqs/ | sweet potato |
| puxlimti | [puf.'lim.ti] | /puflimti/ | 'nephew' |


| puut'iijooqat | [pui.dis.'ho..qat] | /pu:t'i:ho:qat/ | 'father-in-law' |
| :--- | :--- | :--- | :--- |
| qesiit | ['qe.si:t] | /qesi:t/ | 'nail' (finger, toe) |
| siileq | ['si.leq] | /si:leq/ | 'cricket' |
| siimaqat | [si..'ma.qat] | /si:maqat/ | 'tongue' |
| talaqxmilh | [ta.'laq.Smił] | /talaqSmiq/ | 'bean tamales' |
| tziitzii | ['tsi..tsi:] | /tsi:tsi:/ | 'rain' |

Body part prefixes affixed to nouns may bear secondary stress, but not primary stress. Examples of nouns affixed with body part prefixes are shown in (97). If the noun root is longer than one syllable, the addition of the body part prefix does not cause a conflict in stress assignment, as seen in the examples in (97a). However, if the noun root consists of a single syllable, it will bear the primary stress, even if it does not end in a sonorant consonant, as seen in the examples in (97b).
(97) Nominals bearing BPPs
a. Noun roots larger than one syllable

| 7aqxlawti | [Ra?.'Slau.tio | /Raq-Slawti/ | 'sap' |
| :---: | :---: | :---: | :---: |
| $7 \mathrm{Taqxu}{ }^{\text {danuu }}$ | [Paq.'Su..nu:] | /Raq-Su:nu:/ | 'bug sp.' |
| ch'an7akanit | [, tf'an. Pa .'ka.nit] | /tf'an-Rakanit/ | 'leg flesh or muscle' |
| ch'anchawti | [tf'an.'tfau.tio | /tf'an-tfawti/ | 'leg hair' |
| ch'anlukut | [tf'an.'lu.kut] | /t ${ }^{\text {'an-lukut/ }}$ | 'leg bone' |
| ch'anqesiit | [tf'an.'qe.sit] | /t ${ }^{\prime}$ 'an-qesit/ | 'toe nail' |
| kiklhkawink'i | [,kık.7ka.'ßiı.k'i] | /kik-4kawin-k’V/ | 'handlebar mustache' |
| kikxlawti | [kık.'Slau.tio | /kik-Slawti / | 'drool' |
| kikxt'aqa | [kık.'Sda.qa] | /kik-ft'aqa/ | 'lip' |
| b. Single syllable noun roots |  |  |  |
| ch'anp'aas | [t9'am.'6as] | /ts'an-p'a:s/ | 'callous (on foot)' |
| laqpuuluks | [,laq.pu:.'luks] | /laqpu:-luks/ | 'sty (on eye)' |
| $\boldsymbol{t a n t}$ 'uklh | [tan.'dukt] | /tan-t'uk ${ }^{\text {d }}$ | 'small fish sp.' |
| tiichuth | [ti..'tfutt] | /ti--tfuty/ | 'lid', 'cap' |

tiitanp'in [.ti..tam.'6in] /tii-tan-p'in/ 'buttocks'
Similarly, the instrumental prefix paa- may bear secondary stress, but not primary stress; examples of nouns bearing the instrumental prefix are shown in (98). These nouns are actually comprised of a verb root, plus the instrumental prefix. If the verb root is longer than one syllable, there is no conflict with the stress rule, as seen in the examples in (98a). However, if the root consists of a single syllable, that syllable will bear the primary stress, even if it does not end in a sonorant consonant; examples with single syllable roots appear in (98b).
(98) Nominals bearing the instrumental prefix paa-
a. Multi-syllable roots

| in | [1pai.tfi.'ßin] | /pa:-tfißin/ | phone' |
| :---: | :---: | :---: | :---: |
| 'apa | [pa:.'tf'a.pa] | /pa:-tf'apa/ | 'pliers' |
| ch'un | [pai.k'u.'tf'un] | /pai-k'utf'u-n/ | 'hospital' |
| h'uk'un | [pa:,lak.tf'u.'k'un] | J'uk'u-n/ | saw |
| t'alan | [pai.da.'lan] | ala- | ol', 'gun' |
| aatz'oqo | [pa:.'ts'o.q\%] | / pai-ts'oqs/ | ncil', 'p |

b. Single syllable roots

| paalhkaan | [pa:4.'ka:n] | /pas--4ka:n/ | 'ruler' |
| :---: | :---: | :---: | :---: |
| paalhoq | [pa:.'ıoq] | /pa:-łoq/ | 'plow' |
| paalhwaj | [pa:\&.'ßah] | / pai-1 $\mathrm{p}^{\text {a }}$ | 'toothbrush' |
| paap'alh | [pa:.'bał] | /pai-p'al/ | 'broom' |
| paaxoq | [pa:.'Soq] | /pa:-Soq/ | 'shovel' |
| paaxqan | [pa:S.'qan] | / pa:-Sqan / | 'reaper' |
| paaxtuk | [pa:S.'tuk] | /pa:-Stuk/ | 'fish-hanging |

There are several noun forms that violate the primary stress rule. Among these are nouns that end in the nominalizing suffix $-t i$ [-tion], examples of which appear below in (99). The examples in (99a) all have antepenultimate stress,
where the stress rule would predict penultimate stress because the final syllable does not end in a sonorant consonant. However, not all nominals ending in $-t i$ actually violate the stress rule; the nominalized examples shown in (99b) do not end in a sonorant consonant, and they exhibit the expected penultimate stress. The examples in (99a) do not follow the stress rule because the nominalizing suffix $-t i$ is extrametrical with respect to primary stress assignment. Since $<-t i>$ is invisible to stress assignment, the assignment of primary stress will begin with the penultimate syllable, which is the final syllable disregarding $<-t i>$. If that syllable does not end in a sonorant consonant, as is the case for the examples in (99a), then the antepenultimate syllable is stressed. If the penultimate syllable ends in a sonorant consonant, as is the case for the examples in (99b), then it is stressed.
(99) Nominalized forms suffixed with -ti
a. Antepenultimate stress

| ch'anka<ti> | ['t ${ }^{\text {'a }}$ ay.kati] | /t ${ }^{\prime}$ 'an-kan-ti/ | 'sugarcane' |
| :---: | :---: | :---: | :---: |
| lhii7u<ti> | ['ti..3u.tio | /dis-Ru-ti/ | 'fruit' |
| laqch'ii<ti> | ['laq.tf'i..ti] | /laq-tt'ii-ti/ | 'cover' |
| p'aqlaa<ti> | ['6aq.laa.ti] | /p'aq-laa-ti/ | 'trunk', 'coffin' |
| xla7a<ti> | ['Sla.Ra.ti] | /SlaPa-ti/ | 'bird sp.' |

b. Penultimate stress

7ach'anan<ti> [1Ra.tf'a.'nan.ti] /Ra-tf'an-nan-ti/ 'garden'
chiwin<ti> [tfr.'ßın.ti] /tfiwin-ti/ 'word'
lhakcha7an<ti> [,łak.tfa.'Ran.ti] /faktfa-Ran-ti/ 'envy’
Additional nouns that violate the stress rule are shown below in (100). The examples in (100a) show word-final stress where the stress rule predicts penultimate stress. The first form lapanak 'people' is a lexicalized form from an older form lapanakni [1a.pa.'nak.ni], which bears a nominalizing suffix -ni that is
cognate in other Totonacan languages and that is falling into disuse in modern HT; this older, nominalized form does show the expected stress pattern. Furthermore, the singular form lapanak [la.'pa.nak] 'person' also exhibits the expected stress pattern. The second form tankilhak [1tay.ki.'łak] has an older form, tankilhakni (Herzog no date), that also ends in the nominalizing suffix -ni; the stress pattern is retained from this older form. The final form najatz 'nine' has lexical stress.
(100) Noun forms that violate the stress rule
a. Final stress instead of penult stress

| lapanak | [1a.pa.'nak] | /lapanak-ni/ | 'people' |
| :--- | :--- | :--- | :--- |
| tankilhak | [1ta..ki.'łak] | /tankiłak(-ni)/ 'chest' |  |
| najatz | [na.'hats] | /nahats/ | 'nine' |

b. Penult stress instead of final stress

| maaxteewan | [ma:f.'te:.San] | /ma:Ste:wan/ | 'brown tadpole' |
| :--- | :--- | :--- | :--- |
| teensuun | ['te:n.su:n] | /te:nsu:n/ | 'goat' |
| lhqapan | ['tqa.pan] | /tqapan/ | 'horse' |
| xtiilaan | ['Sti.la:n] | /Sti:la:n/ | 'green cockroach' |

The examples in (100b) show penultimate stress where the stress pattern predicts word-final stress. The first two forms, maaxteewan 'brown tadpole' and teensuun 'goat', do not sound like native HT words to me because of their [e:] phones (as well as their stress patterns), and I suspect that they loanwords, though I do not know their origins. ${ }^{54}$ As will be seen in the next section, when loanwords are incorporated into HT, their native stress pattern is maintained-at least when

[^40]the loanword is of Spanish origin. If these two words are loanwords, their stress pattern most likely reflects that of the origin words.

The last two examples in (100b), lhqapan 'horse' and xtiilan 'green cockroach', do sound like native HT words. Though the horse species is not native to the Americas and was introduced by the Spanish, there is an ideophone qapa, the refers to the sound made by a horse's hooves. The word for horse, lhqapan, is clearly derived from the ideophone, and it seems to retain the stress on the initial syllable found in the ideophone. I have no explanation for the stress pattern found in xtiilan 'green cockroach', and I have no alternative but to claim that this form has lexical stress.

### 2.5.2 Stress in Ideophonic Adverbs

The assignment of both primary and secondary stress in ideophonic adverbs, or simply ideophones, is completely different from stress assignment in the other word classes. In ideophones, primary stress is assigned to the first syllable of the word. Secondary stress is assigned to all subsequent syllables from left to right. Examples are shown in (101).
(101)Ideophones: initial syllable stress

| chilili | ['tSi., li., li] | 'sensation of fear' |
| :---: | :---: | :---: |
| kulhuk | ['ku.,1uk] | 'action of entering' |
| k'achuchu | ['k'a., tfu.tfu] | 'sound of walking through dry leaves' |
| lapaq | ['la.,paq] | 'the motion of moving like a snake' |
| $7 \mathrm{ot}^{\prime} \mathrm{it}^{\text {i }}$ | ['Ro.,di., di] | 'sensation of being upset or bothered' |
| kixixi | ['ki.,Ji.,Si] | 'hiss', 'sound a snake makes' |
| maqeqe | ['ma.,Re., Pe ] | 'sensation of being sick to the stomach' |
| taqaqa | ['ta., 1a., Ra] | 'the cry of a hen that is going to lay an egg' |
| qolo | ['3o., lo] | 'the cry of a male turkey' |

lhkuku ['4ku.,ku] 'purring of a cat'

### 2.5.3 Stress in Spanish Loanwords

Primary stress in a Spanish loanword falls on the syllable that corresponds to the stress-bearing syllable in the origin word, regardless of its class (verb or noun). Secondary stress is assigned to alternate syllables from right to left, beginning at the syllable bearing primary stress. Examples of HT loanwords from Spanish are shown in (102). In these examples, I have underlined the stressed syllable of each of the Spanish words.

## (102) Loanwords from Spanish

| 7 abonalaa | [1a.ßo.'na.la:] | 'abonar' | 'fertilize' |
| :---: | :---: | :---: | :---: |
| 7alaambrii | [Pa.'la:m.bri:] | 'alambre' | 'wire' |
| 7aarreesgaalaa | [17a:.re:s.'ga:.la:] | 'arresgar' | 'take a chance' |
| atoolii | [?a.'to:.lii] | 'atole' | 'corn drink' |
| buutak | ['bus.tak] | 'butaque' | 'type of chair' |
| choorruu | ['tSo..ru:] | 'chorro' | 'trickle' |
| duulsii | ['du:l.si:] | 'dulce' | 'candy' |
| duseenaa | [du.'se:.na:] | 'docena' | 'dozen' |
| 7 ensayaalaa | [1?en.sa.'ja:.la:] | 'ensayar' | 'he rehearsed' |
| 7 espiirituu | [?عs.'pi..ri.tu:] | 'espírito' | 'spirit' |
| gaanchu | ['ga:j.tfu] | 'gancho' | 'hook' |
| jaa'ati | ['ha:.6a.ti] | 'japa' | 'plant sp.' |
| kachuupiin | [ka.'tfux.pinn] | 'gachupin' | 'gringo' |
| kaapeen | [ka..'pe:n] | 'cafe' | 'coffee' |
| karrilh | [ka.'rı'] | 'carril' | 'lane' |
| koneejuu | [ko.'ne:.ju:] | 'conejo' | 'rabbit' |
| kuchiiluu | [ku.'tfi..lu:] | 'cuchillo' | 'knife' |
| kumpaalii | [kum.'pa:.li:] | 'compadre' | 'compadre' |
| 7oongoos | ['Ro:y.go:s] | 'hongo' | 'mushroom' |
| saandiiyak | [sa:n.'di..jak] | 'sandía' | 'watermelon' |


| sapootii | [sa.'po:.ti:] | 'zapote' | 'sapote' (fruit sp.) |
| :--- | :--- | :--- | :--- |
| waakax | ['ßa:.kaf] | 'vacas' | 'cow','cattle' |
| borreeguu | [bo.'re'.gu:] | 'borrego' | 'sheep' |

### 2.6 Phonological Rules and Processes

HT phonological rules include word-final short vowel weakening (section 2.6.1), liquid neutralization (section 2.6.2), glottal stop insertion (section 2.6.3), epenthesis (section 2.6.4), consonant place assimilation (section 2.6.5), velar metathesis and spirantization (section 2.6.6), coda consonant deletion (section 2.6.7), compensatory lengthening (section 2.6.8), $/ \mathrm{h} /$-deletion (section 2.6.9), and sound symbolic alternations (section 2.6.10). Derivations showing critical ordering of particular rules are given within the relevant sections.

### 2.6.1 Word-Final Short Vowel Weakening

Word-final short vowels undergo two weakening processes when they occur phrase-finally: they are always devoiced in this context (section 2.6.1.1), and they are optionally deleted (2.6.1.2). The second process is a stronger version of the first.

### 2.6.1.1 Word-Final Short Vowel Devoicing

Word-final short vowels are devoiced when they occur utterance-finally; the rule is shown in (103) and examples appear in (104) and (105).

$$
\begin{equation*}
\left.\mathrm{V} \underset{[\text {-voice }]}{\rightarrow \mathrm{V}} / \_\right]_{\mathrm{XP}} \tag{103}
\end{equation*}
$$

(104) Word-final devoiced short vowels

| juukxpi | ['hu:k.jpi] | /hu:kjpi/ | 'alligator' |
| :--- | :--- | :--- | :--- |
| staku | ['sta.ku_] | /staku/ | 'star' |


| 7achaakxk'u 7ilht'i | [?a.'tfa:k.Jk'u] ['?ił.di] | $\text { /atfa:k } \mathrm{k}^{\prime} \mathbf{u} /$ <br> /itt'i/ | 'a type of edible green 'excrement' |
| :---: | :---: | :---: | :---: |
| nati | ['na.ti] | /nati/ | 'mother' |
| k'usi | ['k'u.sio] | / k'usi/ | 'pretty' |

(105) Voiceless utterance-finally ${ }^{55}$
$[\text { jii } \quad \text { kiinati }]_{\mathrm{NP}} \quad[\mathrm{jii} \text { kiinati }]_{\mathrm{NP}}$
[hi: kis.'na.ti, hi: ki..'na.ti]
/hi: kin-nati, his kin-nati//
VOC 1POS-mother, VOC 1POS-mother
'Mother! Mother!' [Someone calling for his mother]
When the word occurs as a non-final element within a larger phrase (e.g., a noun phrase), the short vowel is voiced, as seen in the examples in (106).
(106) Voiced phrase internally
a. [juu 7ilht'i t'akt'a] $]_{\mathrm{NP}}$
[hu: 'Rił.di 'dak.da]
/hu: iiłt'i t'akt'a/
ART excrement ear.of.corn
'corn smut', 'huitlacoche'
b. [juu nati xqooy] $]_{\mathrm{NP}}$
[hu: 'na.ti 'Sqoi]
/hu: nati $\int q 0: j /$
'female dog'
c. [juu 7ilht'i p'aax $]_{\mathrm{NP}}$
[hu: 'Pił.di 'ba:f]
/hu: ?itt'i ba: /
ART excrement pig
'pig excrement'

[^41]
### 2.6.1.2 Word-Final Short Vowel Deletion

When a word ending in a short vowel occurs at the end of its phrase (e.g., a predicate phrase), the final short vowel is optionally deleted; the rule is given in (107) and examples appear in (108).
$(107) \mathrm{V} \rightarrow \varnothing / \ldots_{\mathrm{XP}}$
(108) Optional phrase final short V deletion ${ }^{56}$
a. No phrase-final short $V$ deletion
[[naa k'usi $\left.]_{\text {PRED }} \quad[j u u \quad 7 a t z i 7]_{\text {N }}\right]_{\mathrm{S}}$
[na: 'k'u.si hu: Pa.'tzi?]
/na: k'usi hu: atzi?/
EMP pretty ART girl
'The girl is very pretty.'
b. Phrase-final short V deletion

| $\left[\begin{array}{lll}\text { naa } & \text { k'us }]_{\text {PRED }} & \text { [juu } \\ \left.\text { 7atzi7 }]_{\text {NP }}\right]_{S} \\ {[\text { na: }} & \text { 'k'us } & \text { hu: } \\ \text { Pa.'tziP] }\end{array}\right.$ |  |  |  |
| :--- | :--- | :--- | :--- |
| /na: | k'usi | ju: | atzi?/ |
| EMP | pretty | ART | girl |
| 'The girl is very pretty.' |  |  |  |

### 2.6.2 Liquid Neutralization

The voiced, sonorant, lateral liquid $/ 1 /$ neutralizes to the voiceless, nonsonorant, lateral fricative [1] in syllable final (i.e., coda) position. This rule is formulated in (109); examples appear in (110), (111), and (112). This rule crucially follows word-final short vowel deletion (section 2.6.1.2).

[^42]

The examples in (110) show the singular form and the plural form of $t z^{\prime} a l$ 'boy'. When the plural suffix $-V n$ follows the noun, the $/ 1 /$ acts as syllable onset for the suffix, and it does not neutralize, as seen in (110a). Without the suffix, /l/ occurs in coda position and neutralizes to [4], as seen in (110b). Furthermore, one elderly speaker gave me the singular form in (110c).
(110) a. [ts'a.'Ian]
b. ['ts'al]
c. [ts'a.'la?]
/tz'al-Vn/
boy-PL ${ }^{57}$
'boys'
/ts'al/
boy
'boy'
/ts'ala?/
boy
'boy'

In the example in (111a), the adjective 7at'ili 'old' occurs in the middle of the phrase; in this position, the word-final short vowel is not deleted (see section 2.6.1), so the $/ 1 /$ acts as a syllable onset and not a syllable coda. In the examples in (111b), the adjective is in phrase-final position, so the word-final short vowel may be deleted, and the $/ 1 /$ neutralizes to [ 4$]$.
(111)a.

| [juu | 7at'ili | puumpu7] $]_{\text {NP }}{ }^{58}$ |
| :--- | :--- | :--- |
| [hu: | Pa.'di.li | pum.'pu?] |
| hu: | at'ili | pumpu?/ |
| ART old | clothing |  |
| 'the old clothing' |  |  |

[^43]b. [naa 7at'ilh $]_{\text {PRED }}$ [juu puumpu7] $]_{\text {NP }}$
[na: Ra.'dił hu: pu:m.'pu?]
/na: at'ili hu: pu:mpu?/
EMP old ART clothing
'The clothing is very old.'
In the example in (112a), the adjective wiik'ili 'wrinkled' is affixed with a nominalizing suffix -nti, which preserves the word-final short vowel, causing the /l/ to occur in onset-not coda-position. In the example in (112b), there is no suffix to preserve the word-final short vowel, so it may be deleted and the /1/ neutralizes to [ $\left.{ }^{4}\right]$ or the vowel may be retained, bleeding the liquid neutralization rule.
(112) a. lakpuuwiik'ilinti
[1ak.pu:., ßii.k'i.'lin.ti]
/lakpu:-wi:k'ili-nti/
FACE-wrinkled-NOM
'wrinkled face'
b. lakawiik'ilh ~ lakawiik'ili
[la.,ka.ßi..'k'il] [la.,ka.ßia.'k'i.li]
/laka-wi.k'ili/
BODY-wrinkled
'wrinkled’
/laka-wi:k'ili/
BODY-wrinkled 'wrinkled'

Examples of words borrowed from Spanish, shown in (113), demonstrate the liquid neutralization rule quite well. Where the Spanish word has the syllablefinal liquid [1], the HT word has [1], and where the Spanish word has a syllableinitial lateral [1], the HT word also has [1].
(113) Spanish borrowings

| HT | Spanish | English |
| :--- | :--- | :--- |
| $[' \mathrm{mI} \downarrow]$ | 'mil' | 'thousand' |


| ['kał] | 'cal' | 'lime' |
| :--- | :--- | :--- |
| [ka.'rİ] | 'carril' | 'lane' |
| [ku.'tji:.lu:] | cuchillo | 'knife' |
| [?a.''la:m.bri:] | 'alambre' | 'wire' |
| [mu.'la:.tu:] | 'mulato' | 'mulato' |

The derivation in (114) shows that stress assignment precedes short-vowel deletion and that short-vowel deletion precedes liquid-neutralization.

| (114) Underlying Rep | /wi:k'ili-nti/ | /witk'ili/ | /slapulu/ | /kukitiqi/ |
| :---: | :---: | :---: | :---: | :---: |
| Stress Assign | /,wi:k'i'li-nti/ | /wi''k'ili/ | la'pulu/ | /kuk'tiqi/ |
| V-deletion | ---- | /wi'k'k'il/ | /sla'pul/ | /kuk'tiq/ |
| L-neutralization | ---- | /wi':k'id/ | /sla'pui/ |  |
| Surface Rep |  | [wi..'k'il] | [sla.'puł] | [kuk'fid] |
| Gloss | 'wrinkle' | 'wrinkled' | 'red' | 'avocado' |

### 2.6.3 Glottal Stop Insertion

Every HT syllable must have an onset. ${ }^{59}$ If the syllable is stem-initial and begins with a vowel, a glottal stop is inserted to act as the onset of the syllable. The rule is shown in (115) and examples are shown in (116).

$$
\begin{equation*}
\varnothing \underset{\substack{[+ \text { sonorant }] \\[+ \text { constr glot }]}}{\rightarrow \mathrm{C}} \quad / \# \_\mathrm{V} \tag{115}
\end{equation*}
$$

(116) 7ach'itin

7iismilh
7uklik
7 an
[,Ra.tf'i.'tin] ['ii:s.mił] /i:smiq/ 'watercress' ['?uk.lik] /uklik/ 'gum tree' [?an] /an/ 'he goes'

This rule must happen before a vowel-initial verb stem is inflected or else it will not happen at all (which is the case in many attested examples). In the

[^44]example in (117a), inflection happens before glottal stop insertion. The first person subject prefix $k$ - serves as the onset for the vowel-initial root an 'go', thus preventing the glottal stop insertion rule from happening. In (117b), a glottal stop is inserted as the onset of the vowel-initial root before inflection, and the glottal stop is co-articulated with the $/ \mathrm{k} /$ of the first person subject prefix, producing a glottalized velar.
(117) a. [.kam.pu.'tun]
/k-an-putun/
1SUB-go-DESID(IMPFV)
'I want to go'
b. [1, $\mathrm{k}^{\prime}$ am.pu.'tun]
/k-Pan-putun/
1SUB-go-DESID(IMPFV)
'I want to go'

### 2.6.4 [a]-Epenthesis

Epenthesis happens both as a phonological process and a morphophonemic process. The phonological process is described here, and the morphophonemic processes of epenthesis are described in section 2.7.2.

When a uvular or velar stop occurs syllable-finally following the low vowel and preceding another stop or affricate, low-vowel epenthesis may optionally occur between the two consonants. The epenthetic vowel is an echo copy of the low vowel that precedes the uvular or velar stop. The rule is formulated in (118). This process is optional because speakers both produce and accept the utterance with or without epenthesis, as seen in the following examples in (119).

$$
\begin{equation*}
\underset{[+ \text { low }]}{\emptyset \rightarrow \mathrm{V}} \underset{\substack{\text { [+low] }] \\[\text { [-son] }] \\[+ \text { back }]}}{\mathrm{C}} \underset{[- \text { son }]}{\mathrm{C}} \tag{118}
\end{equation*}
$$

(119) a. ['Paq.tsuł] ~ ['Pa.qa.tsuł]
/aqtsuq/
'head'
b. [lak.,pa..li.'pi.pi] ~ [la.ka., pa:.li.'pi.pi]
/lakpa:-lipipi/
HEAD-bald
'bald-headed'
Epenthesis happens after stress assignment because the epenthetic vowel is never stressed. A derivation is shown in (120). Glottal stop insertion is not crucially ordered with stress assignment.
(120) Underlying Rep /aqtsuy/ /lakpa:-lipipi/

Stress Assign /'aqtsuy/ /lak,pa:-li'pipi/
[a]-epenthesis /'aqatsui/ /laka,pa:-li'pipi/
Surface Rep ['Ra.qa.tsuł] [la.ka.,pa:.li.'pi.pi]
Gloss 'head' 'bald-headed'
I have found one example, shown below in (121), of [a]-epenthesis that intervenes between a prefix and a root where the prefix ends and the root begins with the same sound. Ordinarily, when like consonants are contiguous at a morpheme boundary, one of them is deleted to avoid a sequence of two identical consonants (see section 2.6.7.1). However, in this particular case, deletion of one of the consonants would cause ambiguity. In (121a), the epenthetic [a] intervenes between the body part prefix 7aks- and the root saa 'hit'; together the prefix and the root mean 'hit on the shoulder'. If one of the alveolar fricatives were to be
deleted, the result would be the attested form in (121b) 7aksaay [?ak.'sa:i] 'he hits him on the head'. The lack of secondary stress on the example in (121a) indicates that this epenthetic process happens after stress assignment.
(121)a. [Rak.sa.'sa:i]
/Raks-a-sa:-j/
SHOULDER-EPE-hit-IMPFV
'he pats him on the back'
b. [?ak.'sa:i]
/Rak-sa:-j/
HEAD-hit-IMPFV
'he hits him on the head'
This is the only attested example that I have found of [a]-epenthesis being used to break up a sequence of two identical consonants; however, I assume that it would happen whenever the body part prefix 7aks- 'shoulder' precedes a root that begins with /s/ because deletion of an /s/ causes ambiguity between 7aks'shoulder' and 7ak- 'head'. Thus, even though this process is very similar to the process shown above in (118), it would be best to view this particular case as a morphophonemic alternation between 7aks- and 7aksa- 'shoulder,' where the latter occurs before $/ \mathrm{s} /$ and the former occurs elsewhere.

### 2.6.5 Place Assimilation

Assimilation in HT happens from right to left within the morphological word. Nasals assimilate in place to a following contiguous consonant (section 2.6.5.1) and velars assimilate in place to a following uvular (section 2.6.5.2).

### 2.6.5.1 Nasal Assimilation

A nasal consonant assimilates to the place of articulation of a following consonant. The rule is formulated in (122) and examples appear in (123).
(122) $\left.\underset{[+ \text { nasal }]}{\mathrm{C}} \rightarrow \underset{[\alpha \text { place }]}{\mathrm{C}} /^{\prime} \xrightarrow[{[\alpha \text { place }}]\right]{\mathrm{C}}$


### 2.6.5.2 Velar Assimilation

The alternation between $/ \mathrm{k} /$ and $/ \mathrm{q} /$ discussed in section 2.6 .10 goes beyond sound symbolism. In non-symbolic language, a velar stop in certain morphemes will assimilate in place to an adjacent uvular stop across morphemic boundaries. The rule is formulated in (124), and examples are shown in (125). Note that neither the first person subject prefix $k$ - nor the first person possessor prefix kin- is affected by this rule, as seen in (125d) and (125e), respectively.
(124) a. $\quad \mathrm{k} \rightarrow \mathrm{q} / \ldots$ (V) stem $[\ldots \mathrm{q}$
b. $\mathrm{C} \quad \rightarrow \quad \mathrm{C} \quad / \ldots(\mathrm{V})$ steм $[\ldots \mathrm{C}$

(125) a. [,ta.laq.'baq.ft]
/ta-lak-p'aqf-li/
3PL.SUB-DIS-break(VI)-PFV
'They all broke.'
b. [1a.qa.tfa.'qa?]
/'laka-tfa'qa?/
PREP-house
'in the house'
c. [laq.1ßaq.nin]
/lak-łwaq-nin/
DIS-dismember-INF
'to dismember it.'
d. [wa:k. maq.tf'a.qai]
/wa: k-mak-tf'aqa-j/
FOC 1SUB-HAND-wash-IMPFV
'I wash my hands'
e. [la.ki..la.,qa.tfa.'qan]
/laka-kin-laqatJaqan/
PREP-1POS-village
'in my town'
Because the uvular stop has merged (is merging) with the glottal stop in HT (see section 2.3), the younger speakers will optionally assimilate the velar to the glottal stop that has replaced the uvular stop. In the example in (126a), the velar stops have assimilated to the stem internal glottal (* q ) stop, but in the example in (126b), the velar stops did not assimilate.
(126)a. [1a.Ra.laP.tfa.'ㄹa?]
/laka-lak-tfaqa?/
PREP-PL-house
'in the houses'
b. [1a.ka.lak.tfa.' ${ }^{\text {ana }}$ ]
/laka-lak-tfaqa?/
PREP-PL-house
'in the houses'

### 2.6.6 Phonological Processes Affecting Velars

Phonological processes affecting velar consonants include metathesis (section 2.6.6.1) and spirantization (section 2.6.6.2).

### 2.6.6.1 Velar Metathesis

When a velar stop follows the low vowel and precedes the approximant $/ \mathrm{h} /$, metathesis occurs and the $/ \mathrm{k} /$ and the $/ \mathrm{h} /$ change places. I have not found this process to happen when $/ \mathrm{k} /$ follows any other vowel. The rule is formulated in (127) and the examples appear in (128).
(127) a. $\mathrm{kh} \rightarrow \mathrm{hk} / \mathrm{a}$ $\qquad$
b
$\mathrm{C} \quad \mathrm{C}$
[-son] [+son] [+son]
[+back] [+sprd glot] [+sprd glot]
$\begin{array}{lr}\text { C } & / \mathrm{V} \\ {[\text {-son }]} & {[+ \text { low }]} \\ {[+ \text { back }]} & \\ {[+ \text { high }]} & \end{array}$
(128) a. [.Jah.ku:.'ni.ta] / Sa-k-hun-ni:ta/ PAST-1SUB-be-PF 'I was'
b. [12ah.ku.'na?] /Ra-k-hun-a?/
IRR-1SUB-be-FUT
'I will be'
c. [J, Jah.ku:.'ni:]
/Sa-k-hun-ni-j/
PAST-1SUB-say-DAT-IMPFV
'I would tell him'
d. [PIJ., lah.ku..'ni..ta]
/Ri-f-lak-hun-ni:ta/
EPE-PAST-DIS-be-PF
'they (inanimate) were'
The examples in (129) show contexts in which metathesis does not occur. In (129a), $k$ - is word-initial (it does not follow $/ \mathrm{a} /$ ), and metathesis does not happen. In (129b), there are intervening phones between the $/ \mathrm{k} /$ and the $/ \mathrm{h} /$.
(129) a. [khu.'nau]
/k-hun-aw/
1SUB-say(IMPFV)-1PL.SUB
'We say it.'
b. [Ja.,ki.hu:.'ni:]
/Sa-kin-hun-ni-j/
PAST-1OBJ-say-DAT-IMPFV
'he would say to me'
A derivation is shown in (130). Though metathesis precedes [?i]epenthesis in this derivation, they are not crucially ordered.

| (130) Underling Rep | /k-hun-ni-j/ | /Ra-k-hun-a?/ |
| :--- | :--- | :--- |
| Metathesis | ---- | /Ra-h-kun-a?/ |
| [Pi]-epenthesis | /?ik-hun-ni-j/ | ---- |
| Surface Rep | [,1ik.hu.'ni:] | [,?ah.ku.'na?] |
| Gloss | 'I tell him' | 'I will be' |

### 2.6.6.2 Velar Spirantization (Place Dissimilation)

A velar stop $/ \mathrm{k} /$ spirantizes and becomes the approximant $/ \mathrm{h} /$ when it is preceded by a vowel and followed by a velar or uvular stop $/ \mathrm{k}, \mathrm{k}$, $\mathrm{q} /$. The rule is formulated in (131) and examples are shown in (132).
(131) a. $\quad / \mathrm{k} / \rightarrow[\mathrm{h}] / \mathrm{V} \_\quad\left\{\mathrm{k}, \mathrm{k}^{\prime}, \mathrm{q}\right\}$
b. $\mathrm{C} \rightarrow \mathrm{C} / \mathrm{V} \_\mathrm{C}$

[+back] [+ sprd glot] [+back] [+high]
(132) Velar spirantization
a. [,?a.lah.,kık.na.' ${ }^{\prime} \mathrm{ii}$ ]
/Ra-lak-kiknawi:-j/
PL-3PL.OBJ-flatter-IMPFV
'he flatters them'
b. [1ah.kıl.tu.sa:.'ma:i]
/lak-kiłtu-sa:ma:-j/
DIS-edge-smooth-IMPFV
'he smoothes all the edges'
c. [na:h. 'k'u.si]
/naa k-k'usi/
EMP 1SUB-pretty
'I am very pretty.'
d. [lah.'k'u.si]
/lak-k'usi/
DIS-pretty
'they are pretty'
e. [laq. $\int \tan . \int \beta$ iih.' ${ }^{\prime}$ kan]
/laqStan- $\int$ witk-kan/
JAW-shave-RFL(IMPFV)
'he shaves himself (on the face)'
f. [tan.'Sduh.kał]
/tan-St'uk-kan-li/
TRUNK-button-RFL-PFV
'He buttoned his shirt.'
g. [lah.'k'a.?uł]
/lak-k'aPuq/
PL-dish
'dishes’
h. [kıh.'k'iu]
/kik-k'iw/
mOUTH-wood
'jawbone'
i. [mah.'qe.si:t]
/mak-qesi:t/
HAND-nail
'fingernail', 'claw'

### 2.6.7 Coda Consonant Deletion

Processes of coda consonant deletion include identical consonant deletion (2.6.7.1) and word-final glottal stop deletion (2.6.7.2).

### 2.6.7.1 Identical Consonant Deletion

HT has no true geminate consonants, such as that shown in (133a). However, a fake geminate may result from morpheme concatenation when two identical consonants end up next to each other, as seen in (133b).
(133) a.


When a sequence of two identical consonants results from morpheme concatenation, the first of the two consonants is deleted. The rule is shown in (134), and examples appear in (135). We know that it is the first consonant that is deleted and not the second one based on evidence provided by the sonorant consonants, which are moraic in coda position. ${ }^{60}$ When the first of the two identical consonants is a sonorant consonant, as is the case in examples (135a) through (135c) below, deletion of this consonant leaves behind a mora, and the preceding vowel is compensatorily lengthened. Thus, this rule must precede the compensatory lengthening rule discussed in section 2.6.8.

$$
\begin{equation*}
\mathrm{C}_{\alpha} \rightarrow \varnothing / \ldots \operatorname{stем~}\left[\mathrm{C}_{\alpha}\right. \tag{134}
\end{equation*}
$$

(135)a. [?a.lak.hu:.'ni:]
/Ra-lak-hun-ni-j/
PL-3PL.OBJ-say-DAT-IMPFV
'he says it to them'
b. [ła:.,qa.ma:.'nan]
/a:qaman-nVn/
waste-INO(IMPFV)
'he (habitually) wastes (stuff)'
c. [mi.. na.ti]
/min-nati/
2POS-mother
'your mother'

[^45]d. [?a.,qa.ło..'na?]
/Ra-qałahun-nV?/
PL.INO-steal(VT)-AGNM
'thief'
e. [1kıf.k'a.'ts'ai]
/k-kił-k'atz'a-j/
1SUB-MOUTH-know-IMPFV
'I taste it'
f. [t'a:.'qo.t'i]
/t'a:-qot-t'i/
COM-drink-2SG.SUB.PFV
'you drank with him'
Identical consonant (ID-C) deletion occurs after nasal assimilation and velar spirantization, as seen in the derivation in (136). Nasal assimilation and spirantization are not crucially ordered with each other. Identical consonant deletion precedes compensatory lengthening (see section 2.6.8).

| (136) Underlying Rep | /kin-maka?/ | /k | /k-katuch'i: | -k'iw/ |
| :---: | :---: | :---: | :---: | :---: |
| Nasal Assimilation | /kimmaka?/ | ---- | ---- |  |
| Vel Spirantization | ---- | ---- | ---- | /kih-k'iw/ |
| ID-C Deletion | /kimaka?/ | /kinana?/ | /katuch'iif/ | ---- |
| Comp Length | /ki:maka?/ | /ki:nana?/ | ---- | ---- |
| Surface Rep | [1kii.ma.'ka?] | [1ki..na.'nai | [ka.'tu.tf'iit] | [kıh.'k'iu] |
| Gloss | 'my hand' | 'my elder woman' | 'I yoke them' (e.g. oxen) | 'jawbone' |

### 2.6.7.2 Glottal Stop Deletion

A stem-final glottal stop is deleted before a suffix or an enclitic. The rule is shown in (137); examples appear in (138) and (139).

(138) Glottal stop deletion before an enclitic
a. [.maq.ti.'li:ts]
/maqtili?+tf/
'wild animal'
b. [?a.'nu:tf]
/anu? + t /
'that'
c. [pa.'pa:tf]
/papa?+tf/
'man'
d. [,ka.?a.'na:t $]$
/ka-Ran-a?+t $/$
IRR-go-FUT+ALD
'he will go'
(139) Glottal stop deletion before a suffix
a. [1da.ku:.'nin]
/t'akuP-nin/
'woman-PL'
b. [,maq.ti.'li:n]
/maqtili?-n/
'wild animal-PL'
c. [tfi..'la:n]
/tfi:la?-n/
'chicken-PL'
d. [,ka.la.,qo.fi.'jaau]
/ka-laqofi-ja?-w/
IRR-fix-FUT-1 PL.SUB
'we (INCL) will fix it'
e. [,Rak.mi.'na:u]
/Ra-k-min-a?-w/
IRR-1 SUB-come-FUT-1PL.SUB
'we (EXCL) will come'
Stress assignment must precede glottal stop deletion, and glottal stop deletion precedes compensatory lengthening (see section 2.6.8). The derivation is shown in (140).

| (140) Underlying R | /t'aku?-ts/ | /t'aku?-nin/ | /ka-7an-a?-ts/ |
| :---: | :---: | :---: | :---: |
| Stress assign | /t'a'kup-ts / | /,t'aku2-'nin/ | /,ka-7a'n-a?-ts/ |
| 2-del | /t'a'ku-tj/ | /,t'aku-'nin/ | /,ka-7a'n-a-ts/ |
| Comp length | /t'a'kus-tf/ | /,t'aku:-'nin/ | /,ka-7a'n-as-tf/ |
| Surface Rep | [t'a.'ku:tf] | [t'a.ku..'nin] | [,ka.2a.'na:t ${ }^{\text {a }}$ ] |
| Gloss | 'woman' | 'women' | 'he will go' |

### 2.6.8 Compensatory Lengthening

Compensatory lengthening (Hayes 1989) of a syllable nucleus happens in HT after a sonorant (moraic) consonant has been deleted from coda position (see section 2.6.7). The vowel is lengthened to fill the timing gap left by the moraic coda. The rule is formulated two ways in (141). Please see sections 2.4 and 2.5 for a discussion of moraic codas.
(141) a.

b. V C $\rightarrow$ V: Ø
[+son]
Compensatory lengthening follows both of the consonant deletion rules discussed in section 2.6.7 (identical consonant deletion and glottal stop deletion), as well as the coda nasal deletion rules discussed below in sections 2.7.3 and 2.7.6.3. Derivations appear below in (142) and above in (136) and (140).

| (142) Underlying Rep | /kin-wayti/ | /kin-lak-maka?/ | /kin-nati/ | /t'aku?-nin/ |
| :--- | :--- | :--- | :--- | :--- |
| ID-C-del | ---- | --- | /ki-nati/ | ---- |
| Nasal-del | /ki-wayti/ | /ki-lak-maka?/ | ---- | --- |
| P-del | --- | --- | ---- | /t'aku-nin/ |
| Comp length | /kis-wayti/ | /kis-lak-maka?/ | /ki.-nati/ | /t'aku:-nin/ |
| Surface Rep | [ki..'ßai.ti] | [ki..lak.ma.'ka?] | [ki..'na.ti] | [,da.ku..'nin] |
| Gloss | 'my food' | 'my hands' | 'my mother' 'women' |  |

## 2.6 .9 /h/-Deletion

An intervocalic $/ \mathrm{h} /$ in a stem is deleted when the following vowel is not stressed. The rule is formulated in (143), and examples appear in (144).


[^46](144) /h/-deletion
a. [qa.'qauł] $* *$ [qa.'ta.huł] ${ }^{62}$
/qa'łahu-li/
steal-PFV
'he stole it'
b. [Pa.,qa.qau.'nan] $* *$ [1Ra.qa., \&a.hu.'nan]
/Ra-qałahu-nan/
PL-steal-INO(IMPFV)
'he steals (habitually, unspecified object)'
c. [mak.'tailts] **[mak.'ta.hilt $]$
/maktahi-li+tf/
flame-PFV+ALD
'it (a fire) flamed'

/Ra-k-wahin-a?-w/
IRR-1SUB-eat-FUT-1PL.SUB
'We (EXCL) will eat'
e. [,ta.min.'qo:Ats]
/ta-min-qohu-li+tg/
3PL.SUB-come-ALL-PFV+ALD
'they all came'
If the vowel following the $/ \mathrm{h} /$ is stressed, then the $/ \mathrm{h} /$ is not deleted, as seen in the examples in (145).
(145) No /h/-deletion
a. [qqa.ła.'hui]
/qałahu-j/
steal-IMPFV
'he steals it'

[^47]b. [na.'hun]
/nahun/
say(IMPFV)
'he says it'
c. [,mak.ta.'hi:]
/maktahi-j/
flame-IMPFV
'it (the fire) flames'
d. [ßa.'hin.tat 5$]$
[wa'hin-ta+tf]
eat-PF+ALD
'he has eaten'
Derivations are shown below in (146) and (147). This rule interacts crucially with the primary stress rule. In fact, it provides evidence that primary and secondary stress assignment do not happen simultaneously. Primary stress assignment precedes $/ \mathrm{h} /$-deletion, and secondary stress assignment follows $/ \mathrm{h} /-$ deletion (specifically, see the last example in (146) and the first and last examples in (147)). Perfective nasal-deletion must precede both primary stress assignment and /h/-deletion.
(146) URep /qałahu-j/ /qałahu- $\mathrm{j} /$ /Ra-qałahu-nan/
$1^{\circ}$ stress /qała'hu-j/ /qa'łahu- $\mathrm{q} / \mathrm{/Ra}$-qałahu-'nan/
H-del ---- /qa'łau-q/ /Ra-qałau-'nan/
$2^{\circ}$ stress /,qała'hu-j/ ---- /Ra-,qałau-'nan/
S rep [.qa.ła.'hui] [qa.'łauł] [?a.,qa.łau.'nan]
Gloss 'he steals it' 'he stole it' 'he steals'

| (147) U Rep | /wahin-putun/ | /Ra-k-wahin-a3-w/ |
| :---: | :---: | :---: |
| N -assim | /wahim-putun/ | ---- |
| $1^{\circ}$ stress | /wahim-pu'tun/ | /Ra-k-wahi'n-aP-w/ |
| ?-del | ---- | /Ra-k-wahi'n-a-w/ |
| Comp leng | ---- | /Ra-k-wahi'n-a:-w/ |
| H-del | /waim-pu'tun/ | /Ra-k-wai'n-a:-w/ |
| $2^{\circ}$ stress | /,waim-pu'tun/ | /,Ra-k-wai'n-a:-w/ |
| S Rep | [,waim.pu'tun] | [,1ak.ßai.'na:u] |
| Gloss | 'he wants to eat it' | 'We (EXCL) will eat' |

### 2.6.10 Sound Symbolic Phonemic Alternations

Sound symbolic phonemic alternations ${ }^{63}$ are found in five areas of the Tepehua lexicon: the diminutive and augmentative (section 2.6.10.1), affection speech (section 2.6.10.2), lexical sets (section 2.6.10.3), phonemic alternations in body part prefixes (section 2.6.10.4), and ideophones (see Chapter 6, section 6.3.1). Verbs, nouns, adjectives, and adverbs may undergo sound symbolic phonemic alternations. The sound symbolic phonemic alternations are summarized below in Table 9 and in greater detail in the subsequent subsections.

Table 9: Sound Symbolic Phonemic Alternations

$$
\begin{aligned}
& \mathrm{s} \sim \mathrm{f} \sim \mathrm{t} \\
& \mathrm{ts}, \mathrm{ts}{ }^{\prime} \sim \mathrm{t} f, \mathrm{tf} \\
& \mathrm{k}, \mathrm{k}^{\prime} \sim \mathrm{q} / \mathrm{R}, \mathrm{t}^{\prime} / \mathrm{l} \\
& \mathrm{i}, \mathrm{u} \sim \mathrm{e}, \mathrm{o}
\end{aligned}
$$

[^48]The consonantal phonemic alternations exist in many, if not all, of the Totonacan languages. The alternations involve at least three different phonemic sets, $/ \mathrm{s} \sim \int \sim \mathrm{t} /$, / ts, ts' $\sim \mathrm{t} \int, \mathrm{t} \mathrm{f}^{\prime} /$, and $/ \mathrm{k}, \mathrm{k}{ }^{\prime} \sim \mathrm{q}, \mathrm{q}^{\prime} /$, and usually distinguish semantic extension, affection, or variations in intensity (McQuown 1940; Aschmann 1973; Bishop 1984; Levy 1987; MacKay 1999). However, as MacKay (1999) points out, phonemic alternation is not always accompanied by a change in meaning. McQuown (1940) was the first to note the phonemic alternation between $/ \mathrm{k} /$ and $/ \mathrm{q} /$ in words derived from the same root in Coatepec Totonac, but he gave only one example and did not extend his analysis to the other phonemic sets. In the subsequent literature, these phonemic alternations have been called juego simbólico 'symbolic set' by Aschmann (1973) and simbolismo fonético 'phonetic symbolism' by Levy (1987) for Papantla Totonac; consonant play by Bishop (1984) for Apapantilla (Northern) Totonac; and sound symbolism by MacKay (1999) for Misantla Totonac. This phenomenon in HT has been described by Herzog (1987), Smythe (2003), and Smythe Kung (2005a, 2005c, 2006c).

### 2.6.10.1 The Diminutive and Augmentative

In the Tepehua diminutive, the palato-alveolar fricatives and affricates are fronted to alveolars; the uvular stops are fronted to velars; and the mid-vowels /e/ and $/ \mathrm{o} /$ are raised to $/ \mathrm{i} /$ and $/ \mathrm{u} /$, respectively. In the augmentative, we find the reverse pattern: the alveolar fricative $/ \mathrm{s} /$ and the alveolar affricates are backed to become palato-alveolars; the velar stops are backed to uvular stops; and the highvowels are lowered to mid-vowels. Thus, in Huehuetla Tepehua, alveolar and
velar consonants and high vowels are associated with small size, while palatoalveolar and uvular consonants and mid-vowels are associated with large size. These alternations are summarized in Table 10, and examples (in practical orthography) appear in (148)

Table 10: Diminutive and Augmentative

| Alternation | Diminutive | Augmentative |
| :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{s} \sim \mathrm{f} \sim \mathrm{t} \\ & \mathrm{ts}, \mathrm{ts}^{\prime} \sim \mathrm{t} f, \mathrm{t} \mathrm{f}^{\prime} \\ & \mathrm{k}, \mathrm{k}^{\prime} \sim \mathrm{q} / \mathrm{P}, *^{\prime} \mathrm{q}^{\prime} / \mathrm{?} \end{aligned}$ | $\int, \ddagger \rightarrow s$ <br> $\mathrm{tf}, \mathrm{t} \mathrm{s}^{\prime} \rightarrow \mathrm{ts}, \mathrm{ts}$, $\mathrm{q} / 2, \mathrm{q}^{\prime} / \mathrm{R} \rightarrow \mathrm{k}, \mathrm{k}^{\prime}$ | $\begin{aligned} & \mathrm{s} \rightarrow \int, \mathrm{t} \\ & \mathrm{ts}, \mathrm{ts}^{\prime} \rightarrow \mathrm{t},, \mathrm{t} \rho^{\prime} \\ & \mathrm{k}, \mathrm{k}^{\prime} \rightarrow \mathrm{q} / \mathrm{R}, \mathrm{~F}^{\prime} / \mathrm{q} \end{aligned}$ |
| i, $u \sim e, o$ | $\mathrm{e}, \mathrm{o} \rightarrow \mathrm{i}, \mathrm{u}$ | i, u $\rightarrow$ e, o |


| (148)Normal Speech | $\sim$ | Diminutive | $\sim$ | Augmentative |
| :---: | :---: | :---: | :---: | :---: |
| a. lhoqoqo 'something hollow' | $\sim$ | sukuku |  |  |
| b. Ihpututu 'round thing' | $\sim$ | spututu <br> 'small, round thing' | $\sim$ | pototo <br> 'large, round thing' |
| c. tz'alh |  |  | $\sim$ | ch'alh |
| 'boy' |  |  |  | 'big boy' |
| d. kilh |  |  | $\sim$ | qelh |
| 'mouth' |  |  |  | 'big mouth' |
| e. ch'aay 'ripened' | $\sim$ | tz'aay <br> 'small and ripened' |  |  |

According to Hinton, Nichols, and Ohala (1994), the Frequency Code is the linguistic phenomenon according to which
high tones, vowels with high second formants (notably /i/), and highfrequency consonants are associated with high-frequency sounds, small
size, sharpness, and rapid movement; low tones, vowels with low second formants (notably $/ \mathbf{u} /$ ), and low-frequency consonants are associated with low-frequency sounds, large size, softness, and heavy, slow movements" (p. 10).

All of the phonemic alternations found in the HT diminutive and augmentative correspond to the Frequency Code with the exception of the alternation between /o/ and /u/.

### 2.6.10.2 Affectionate Speech

"Affectionate speech," or "el habla con cariño," is the name that my principal consultant, don Nicolás, gave to this speech style, which is similar to baby talk in its social use. According to don Nicolás, affectionate speech can be used when an older speaker is addressing someone much younger than him/herself and when the speaker wants to indicate affection towards the addressee; for example, it is used when a parent or grandparent talks to a young adult or child. I observed both men and women using affectionate speech in Huehuetla, but I actually noticed more men than women using it. However, I did not hear this speech style used very often, and, according to don Nicolás, affectionate speech is used much less today than it was in the past. I presume that this is because, as I observed, the Tepehua people mostly speak to their children and grandchildren in Spanish now.

HT speakers usually translate affectionate speech into the Spanish diminutive, but it is not the equivalent of the Spanish diminutive for two reasons. First, the Spanish diminutive is a morphological process, while affectionate
speech is a phonological process. And, second, when I tried to elicit affectionate speech using the Spanish diminutive, I was given the HT equivalent of little $X$. For example, if I asked for birdy, or pajarito, I was given [1aka'dikst'i 'ts'o?], which literally means 'little bird' or 'pájaro pequeño'. I found that I had to elicit affectionate speech by requesting that the speaker pretend to be talking to a child.

Bishop (1984) describes "baby talk" in Apapantilla (Northern) Totonac as follows: "Some fronting of the /ch/ has been observed in baby-talk (adults to babies)" (p.31); however, she mentions no other phonological examples.

In HT, affectionate speech involves four sets of phonemic changes. First, the voiceless palato-alveolar fricative and affricates front to the corresponding alveolar consonants, as shown below in (149).
(149) Change 1: Palato-alveolar fronting: [ $\left[\int, \mathrm{t} \int, \mathrm{t}^{\prime}\right] \rightarrow$ [s, ts, ts']
a. xaanti ['Ja:n.ti] $\rightarrow$ ['sa:n.ti] 'flower'
b. paqachu [pa.'qa.tfu] $\rightarrow$ [pa.ka.'tsu] 'wing'
c. kikwinch'u [kık.' $\beta$ in.tf'u] $\rightarrow$ [kık.' $\beta$ in.ts'u] 'whiskers'

In example (149a), the $/ \mathrm{S} /$ in xaanti 'flower' fronts to /s/. In example (149b), the $/ \mathrm{t} \mathrm{f} /$ in paqachu 'wing' ${ }^{64}$ fronts to /ts/. And in example (149c), the glottalized $/ \mathrm{t} \mathrm{f}$ '/ in kikwinch'u 'whiskers' fronts to glottalized /ts'/. Note that the quality of glottalization on the palato-alveolar affricate is carried over to the alveolar affricate.

[^49]Second, the voiceless lateral fricative delateralizes only after a long vowel and at the beginning of a word, shown below in (150), where a double asterisk ** indicates an unacceptable or unattested form. ${ }^{65}$
(150) Change 2: Delateralization: $[\mathrm{t}] \rightarrow[\mathrm{s}] /\left\{\begin{array}{l}\mathrm{V}_{-} \\ \#_{-}\end{array}\right\}$
a. puulhtuj [pu:q.'tuh] $\rightarrow$ [pu:s.'tuh] 'toad'

| lhoqoqo | [ヶ..'qo.qจ $] \rightarrow$ [su.'ku.ku] | 'hollow' |
| :---: | :---: | :---: |

b. talhpa ['tat.pa] $\quad$ **['tas.pa] 'hill'
pulhqom [puł.'qom] **[pus.'k(')um] 'mud'
maqalhqama7 [ma.,qał.qa.'ma?] **[ma.,kas.ka.'ma?] 'Tepehua'
In the examples in (150a), the /4/ follows a long vowel or begins the word, and it delateralizes to $/ \mathrm{s} /$. However, in the examples in (150b), the $/ \mathbf{4} /$ follows a short vowel, and it cannot not delateralize.

Third, the voiceless uvular stop front to a voiceless velar stop, shown below in (151).
(151) Change 3: Uvular fronting: *q, *q' $[q / R, ~ ?] \rightarrow[k, k ’]$
a. chaqa7 [tfa.'qa?] $\rightarrow$ [tfa.'ka?] **chak'ak 'house'
b. xqan ['SPan] $\rightarrow$ ['sk'an] ${ }^{* *} x \mathbf{k}$ an 'fly'

Example (151a) is revealing because the word chaqa7 'house' contains both a plain uvular stop between the vowels and a glottal stop at the end of the word. In regular speech, the older HT speakers pronounce the word as [ t faq a ?], with a plain uvular stop and a glottal stop, while the younger speakers pronounce the word as [tfa.'?a?], with two glottal stops. In affectionate speech, everyone fronts the first stop to a velar, but no one fronts the word-final stop to a velar, which

[^50]indicates that this particular glottal stop was not historically a uvular. Also, no one fronts the first stop to a glottalized velar, implying that the underlying uvular was historically [-constricted glottis] *chaqa7. In example (151b), the word xqan 'fly' contains a plain uvular stop, [ $\int \mathbf{q} a n$ ], in the speech of the older HT speakers and a glottal stop, [ $\int$ Ran], in the speech of the younger HT speakers. In affectionate speech, speakers of all ages front this sound to a glottalized velar, $x \boldsymbol{k}^{\prime} a n$. Recall from the discussion of (149), above, that the quality of glottalization on the palato-alveolar affricate carried over to the alveolar affricate in palato-alveolar fronting; assuming that the same pattern is to be found in uvular fronting, the reconstructed form of this word would be *xq'an in Proto-HT.

Finally, the mid vowels raise to high vowels. According to Watters (1988), Tepehua previously had a three vowel system, /i, u, a/, and the mid vowels /e, o/ appeared only in the context of a uvular stop and at certain morpheme boundaries. The mid vowels have since become phonemic, but they are still scarce except in some loan words, at certain morpheme boundaries, and in the context of a glottal stop that was historically a uvular stop. Below in (152a), the mid vowels in $t z^{\prime} o q o n^{66}$ 'Otomí' raise to high vowels in [ts'u'k'un]. Based on the glottalized velar in [ts'u.'k'un], I would reconstruct *tz'uq'un in Proto-HT. In (152b), the /e/ in teensuun 'goat' raises to /i/ in affectionate speech. Since goats were not native to the Americas, I do not attempt to reconstruct this word.
(152) Change 4: Mid vowel raising: /e, o/ $\rightarrow$ [i, u]

[^51]b. teensuun ['te:n.su:n] $\rightarrow$ ['ti:n.su:n] 'goat'

A summary of the sound changes involved in affectionate speech is given
in Table 11.

Table 11: Phoneme Changes in Affectionate Speech

| Regular Speech | Affectionate Speech | Sound Change Rule |
| :---: | :---: | :---: |
| $\int$ | S | Palato-alveolar fronting |
| t 5 | ts | Palato-alveolar fronting |
| tf | ts ${ }^{\text {, }}$ | Palato-alveolar fronting |
| $\pm$ | s | Delateralization |
| ? | k | Uvular fronting |
| ? | k | Uvular fronting |
| $\mathrm{q} /$ ? | k | Uvular fronting |
| $\mathrm{q} /$ ? | k' | Uvular fronting |
| O | u | Mid-vowel raising |
| e | i | Mid-vowel raising |

### 2.6.10.3 Lexical Sets

In addition to signaling the diminutive, the augmentative, and/or affectionate speech, all of the above mentioned phonemic alternations are also found in HT lexical sets that are based on the same root. In all of the lexical sets in (153), a phonemic alternation corresponds to a slight change in meaning.
(153)HT lexical sets
a. $\quad \mathbf{x a q} \mathbf{x}$
saqs
$[$ ' Jaq S$] \sim[1 \mathrm{Ja} \mathrm{S}]]$
$[$ 'saqs $] \sim[$ 'sa?s $]$
'fig tree'
'candy, sweet'


Note that in the examples in (153f), the temporal clitic $+c h\left[\mathrm{t} \int\right]$ does not vary, even when other phonemes within the word do.

What is interesting about all of the examples in (153) is that some reflect a difference in size, while others do not. Furthermore, it is almost impossible to determine which word in each set reflects the root.

### 2.6.10.4 Phonemic Alternation in Body Part Prefixes

Though this section deals with a particular set of morphemes (the body part prefixes), I have chosen to include it here because it is a continuation of the theme of the sound symbolic alternations that was explored in the last three subsections.

Many of the body part prefixes (BPPs) show alternating forms based on the phonemic alternations discussed in this section. The relevant BPPs are shown below in table 12. For a complete list of all of the BPPs, please see Chapter 3, section 3.2.1.8.

Table 12: Alternating Body Part Prefixes

| Body Part Prefix <br> (practical orthography) | Full <br> Noun | Gloss |
| :--- | :--- | :--- |
| 7aq- $\sim$ 7ak- $\sim$ lacuna- | 7aqtzulh | head |
| 7aqx(a) $-\sim$ 7aks(a)- $\sim$ 'aqxp'in- | 7aqxp'un | shoulder, upper back, flat surface |
| ch'an $\sim$ tz'an- | ch'aja7 | foot, leg, paw |
| kik- $\sim$ kilhtu- $\sim$ qelh- | kilh | mouth, edge |
| kinka- $\sim$ ka- | kinkati7 | tip, point |
| kinka- $\sim$ kanka- $\sim$ kanqa- | lhiixin | nose |
| laka- $\sim$ lak- $\sim$ laqa- $\sim$ laq- | lakatunaj | body |
| lakpuu- $\sim$ laq(a)puu- $\sim$ laq- $\sim$ lak- | 7ukxpu7 | face |
| lakpuu- $\sim$ laq(a)puu- $\sim$ laq- $\sim$ lak- | laqchulh | eye |
| mak- $\sim$ maq- | maka7 | hand, arm |
| qaq- $\sim$ kaq- $\sim$ laq(a)xtan | laqxtan | cheek |
| qaq- $\sim$ kaq- | kaalhtz'an | jaw |

The choice between alternate forms of a BPP can be resolved in one of two ways: (i) the BPP may be symbolic of the size of a noun to which it attaches or (ii) the BPP may harmonize with a root consonant.

The first option is very similar to the distinction between the augmentative and the diminutive, which was see above in section 2.6.10.1. An example is shown below in (154). This example is unique because it is the only example that I have found of an alternation between $/ \mathrm{i} /$ and $/ \mathrm{a} /$. Note that while the place of the second stop alternates between velar and uvular, the place of the first stop does
not alternate. Note, also, that it is not the size of the 'nose' that is relevant, but rather the size of the 'hair'.
(154)a. [_kan.qa.'tf'au.ti]
/kanqa-tf'awti/
NOSE-hair
'mustache'
b. [,kay.ka.'tf'au.ti]
/kanka-tf'awti/
NOSE-hair
'tentacle/filament on a bug's face'
c. [,kiy.ka.'tf'au.ti]
/kinka-t ${ }^{\text {'awti/ }}$
NOSE-hair
'nose hair'
The second type of alternation found in the BPPs is dependent on the place of articulation of the consonants within the root. When a BPP has more than one allomorph, the allomorph whose consonants are the most similar to the consonants found in the root will be chosen. In other words, the consonants of the BPP will harmonize with the consonants of the root. Examples are shown below in (155) and (156). In (155a), the root contains a velar consonant, and the BPP $7 a k$ - 'head' harmonizes with that consonant. In (155b), the root contains a uvular consonant, and the BPP 7aq- 'head' harmonizes with it. In (156a), the root contains a uvular stop, so the BPP 7aqx- 'shoulder' that contains a uvular stop is used. In (156b), the root contains an alveolar fricative /s/, the BPP 7aks'shoulder' that contains an alveolar fricative is used.

```
(155)a. [,k'ak.tduy.'k'u.tatS]
    /k-Tak-lt'unk'u-ta+tf/
    1SUB-HEAD-carry-PF+ALD
    'I carried it on my head.'
    b. [?aq.\intddaq.pu.'tun]
    /Paq-St'aq-putun/
    HEAD-cover-DESID(IMPFV)
    'he wants to cover (the top of) it'
(156)a. [_Paq.Sqo.'qa.tatS]
    /PaqJ-qoqa-ta+tf/
    SHOULDER-throw-PF+ALD
    'He threw it on his shoulder.'
    b. [,Tak.sa.'sa:i]
    /Taks-a-sa:-j/
    SHOULDER-EPE-hit-IMPFV
    'he pats him on the back'
```


### 2.7 MORPHOPHONEMICS

In this section, I briefly examine the morphophonemic patterns found in the HT morphology. A more detailed discussion of each morpheme and any allomorphs it might have is found in the chapter to which that morpheme pertains. For example, verbal inflectional affixes are discussed in Chapter 3 on verbs, and nominal inflectional affixes are discussed in Chapter 4 on Nouns. Any cross-over morphemes are cross-referenced in the relevant chapters.

### 2.7.1 Second Person Subject Marking

A second person subject (both singular and plural) is indicated primarily by means of glottal constriction on all stops and affricates in the verbal stem, and a stem-internal glottal approximate $/ \mathrm{h} /$ becomes a glottal stop / $\mathrm{R} /$. Additionally, a
second person singular subject is co-referenced by the suffix $-t^{\prime} i$ in the perfective aspect, and a second person plural subject is co-referenced with the suffix $-t^{\prime} i t$. Comparison of the examples in (157) shows that (in the imperfective aspect) the only difference between a third person singular subject (157a) and a second person singular subject (157b) is the glottalization of the (non-nasal) stops in the stem; this glottalization indicates a second person subject.
(157) a. [lah.,kık.na.'ßii]
/lak-kiknawi:-j/
3PL.OBJ-flatter-IMPFV
'he flatters them'
b. [lah., $\mathbf{k}^{\prime}{ }^{\prime}{ }^{\prime} \mathbf{k}^{\prime}$. na.' ${ }^{\prime}$ (ii]
/lak-kiknawi:-j [+constr glot]/
3PL.OBJ-flatter-IMPFV
'you flatter them'
The alternation between $/ \mathrm{h} /$ and [?] in second person is shown in the examples in (158). The verb in (158a) has a third person singular subject, and the $/ \mathrm{h} /$ of the verb root is retained as [h]. The verb in (158b) has a second person singular subject, and the $/ \mathrm{h} /$ of the root surfaces as a glottal stop [?].
(158) a. [Jta.hu..'ni..ta]
/S-hun-ni:ta/
PAST-be-PF
'he was'
b. [1Pif.Ru..'ni..da]
/Ri-f-hun-ni:ta [+glot constr]/
EPE-PAST-be-PF
'you (SG) were'

For more examples of second person subject glottalization, please see Chapter 3, sections 3.1.1.1 and 3.1.2.2.

### 2.7.2 Epenthesis

There are three types of morphophonemic epenthesis in HT: [a]-epenthesis between a stem and a suffix (section 2.7.2.1), [a]-epenthesis between a prefix and a stem (section 2.7.2.2), and [?i-]-epenthesis before a prefix (section 2.7.2.3).

### 2.7.2.1 Suffix [a]-Epenthesis

An epenthetic [a] occurs between a verb stem that ends in a consonant and a suffix that begins with a consonant. The suffixes that demonstrate this type of allomorphy include the first person plural subject suffix (-w $\sim-a w$ ), the second person plural subject suffix (-t'it $\sim-a t ' i t)$, and the second person object suffix ( $-\mathrm{n} \sim$ -an). The consonant-initial allomorph of each of these prefixes occurs after a stem-final vowel, and the vowel-initial allomorph occurs after a stem-final consonant. The rule is shown in (159), and examples appear in (160), (161), and (162). It is not possible to make the environment of this rule more general because there a numerous consonant-initial verbal suffixes to which this rule does not apply, including second person singular subject (perfective aspect only) $-t^{\prime}$ i, reflexive/unspecified subject -kan, indefinite object -nVn, infinitive -nin, etc.

$$
\emptyset \rightarrow \underset{[+ \text { low }]}{\mathrm{V}} / \mathrm{C}]_{\text {stem }}-\left\{\begin{array}{l}
-\mathrm{w}  \tag{159}\\
-\mathrm{t} \text { 'it } \\
-\mathrm{n}
\end{array}\right\}
$$

(160) First person plural subject
a. [.Jah.kun.'tau]
$/ \int-a-k-h u n-t a-w /$
PAST-EPE-1SUB-be-PF-1PL.SUB
'we (EXCL) were'
b. [ $\left.\int \mathrm{a}_{1} \cdot \mathrm{ku}: \int . \mathrm{tu} . \mathrm{j} \mathbf{j a u}\right]$
/ $\int-\mathrm{a}-\mathrm{k}-\mathrm{ku}: \int t u-j-\mathbf{a}-\mathbf{w} /$
PAST-EPE-1SUB-cultivate.corn-IMPFV-EPE-1PL.SUB
'we (EXCL) cultivated corn'
(161) Second person plural subject
a. [,Ra.ts'a.'la.dit]
/Ratzala-t'it [+constr glot]/
run(PFV)-2PL.SUB
'you (PL) ran'
b. [da., Gai.ni.'ja.dit]
/tapajni-j-a-t'it [+constr glot]/
ask.forgiveness-IMPFV-EPE-2PL.SUB
'you (PL) ask forgiveness'
(162)Second person object
a. [,ta.ki..,pu: $\int . k a$. 'jun]
/ta-ki:-pu:xkaju-n/
3PL.SUB-RT-search.for(PFV)-2OBJ
'they went looking for you (and came back)'
b. [.Ja.tfo..'jan]
/ $\int$-a-t $\int$ Jahu-j-a-n/
PAST-EPE-fall.on-IMPFV-EPE-2OBJ
'it would fall on you'
For more information on these suffixes, please see Chapter 3, sections
3.1.1.1 and 3.1.1.4.

### 2.7.2.2 Prefix [a]-Epenthesis

A second type of [a]-epenthesis applies only to the past tense prefix $x$ when it precedes the first person subject prefix $k$ - and the first person object prefix kin-. In these two contexts, an epenthetic [a] occurs between the past tense prefix and the first person prefixes. The rule is formulated in (163), and examples are shown in (164).
(163) a. $\quad / \mathrm{S} / \rightarrow / \mathrm{sa} / / \_\left\{\begin{array}{l}\text { k- } \\ \text { kin- }\end{array}\right\}$
b. $\quad \varnothing \rightarrow \underset{[+ \text { low }]}{ } / \begin{gathered}\text { C } \\ {[+ \text { strid }]} \\ {[+ \text { cont }]} \\ {[- \text { ant }]}\end{gathered} \quad\left\{\begin{array}{l}\text { k- } \\ \text { kin- }\end{array}\right\}$
(164) a. Past tense + first person subject
[/fak.tf'at.kat.na.'naw]
/f-a-k-tf'ałkat-nVn-a-w/
PAST-EPE-1SUB-work-INO(IMPFV)-EPE-1PL.SUB
'we worked'
b. Past tense + first person object
[Ja.ki.hu:.'ni:]
/ $\mathbf{~ - a}$-kin-hun-ni-j/
PAST-EPE-1OBJ-say-DAT-IMPFV
'he would say it to me'
Please see Chapter 3, section 3.1.2.1 for more information on the past tense prefix.

### 2.7.2.3 [Pi-]-Epenthesis

A third type of epenthesis-[?i-]-epenthesis-occurs when the addition of a prefix to a stem creates a word-initial onset consonant cluster that does not
conform to the syllable structure given in (55). This type of epenthesis happens only with the addition of the following prefixes: (i) the first person subject prefix $k$ - that occurs on verb stems, (ii) the past tense prefix $x$ - that occurs on verb stems, and (iii) the third person possessor prefix $x$ - that occurs on noun stems.

The [?i-]-epenthesis rule is formulated below in (165), and examples appear in (166), (167), and (168). The addition of word-initial [Ri-] allows the following prefix to act as a syllable coda rather than as a syllable onset. Please see section 2.4.5 for discussion of syllabification of these prefixes.

(166) Before $k$ - 1 SUB
a. [?ik.'ta.ma:d]
/?i-k-tama:-li/
EPE-1SUB-lie.down-PFV
'I laid down.'
b. [.12k.Jtaq.ni.pu.'tun]
/2i-k-Staq-ni-putun/
EPE-1 SUB-give-DAT-DESID(IMPFV)
'I want to give it to him'
(167) Before $x$ - PAST
a. [PIf. $1 \mathrm{t} 5 \mathrm{ai} . \mathrm{ta}$ ]
/2i-f-tfa:-ta/
EPE-PAST-ripe-PF
'it was ripe'
b. [PIf.'da.Ra]
/ $\mathbf{i} \mathbf{i}-\int-\int t ’ a q-\mathrm{Pa} /$
EPE-PAST-give/gush-IMPFV
'it (e.g., a liquid) would gush'
(168) Before $x$ - 3POS
a. [PIf.'tsi2]
/?i-S-tsi?/
EPE-3POS-girl
'his/her daughter'
b. [PIf.'qoi]
/2i-S-Sqoj/
EPE-3POS-leaf
'its leaf (e.g., of a plant or tree)'

### 2.7.3 Coda Nasal Deletion from a Prefix

The second type of nasal deletion applies to the first and second person possessive prefixes, kin- and min-, respectively, and to the first person object prefix kin-. When kin- 1OBJ, kin- 1POS, or min- 2 POS precedes either of the approximants $/ \mathrm{w} /$ or $/ \mathrm{h} /$, it is deleted. Unfortunately there is a gap in my data with respect to the behavior of these prefixes preceding the other approximant $/ \mathrm{j} /$. The rule is formulated in (169) and examples are shown in (170). Nasal deletion is followed by compensatory lengthening; please see section 2.6.8.
(169) Prefix $N$-deletion before an approximant

$$
\underset{[+ \text { nasal] }}{\mathrm{C} \rightarrow \varnothing /} \underset{\substack{[+ \text { son }] \\[- \text { nasal }]}}{\mathrm{C}}
$$

(170)a. [ki..'ßai.ti]
/kin-wajti/
1POS-food
'my food'
b. [mi..'ßai.kaS]
/min-wa:kaf/
2POS-cow
'your cow'
c. [,ki..hu.'ni:]
/kin-hun-ni-j/
1OBJ-say-DAT-IMPFV
'he says it to me'
When the first and second person possessive prefixes kin- and min- and the first person object prefix kin- precede the liquid $/ 1 /$ or the glottal stop $/ 2 /$, the $\mathrm{n} / \mathrm{of}$ the prefix is optionally deleted. This rule is formulated in (171) and examples are shown in (172). If this rule applies, then compensatory lengthening follows it (see section 2.6.8).
(171) Optional prefix N-deletion before /l/ and /?/

| $\underset{[+ \text { nasal }]}{\mathrm{C} \rightarrow \varnothing /}$ | $\{\mathrm{C}$ <br>  <br>  <br>  <br>  <br> $[+$ son $]$ <br> $[+$ lateral $]$ | $\mathrm{C}\}$ <br> $[+$ son $]$ <br> $[+$ constr glot $]$ |
| :---: | :---: | :---: |

(172) a. [kin.'Raq.tsuł] ~ [ki.'.'Raq.tsuł]
/kin-Raqtsul/
1POS-head
'my head'
b. [kin.lak.ma.'ka?] ~ [ki..,lak.ma.'ka?]
/kin-lak-maka?/
1POS-PL-hand
'my hands'
c. [1kin.la.'qo. $\left.\int ı \ddagger\right] \sim$ [,kis.la.'qo. $\left.\int ı \ddagger\right]$
/kin-laqoxi-li/
1OBJ-cure-PFV
'he cured me'

### 2.7.4 Vowel Harmony

There are several suffixes which have a vowel that is unspecified for quality; the unspecified vowel harmonizes with the last vowel of the stem to which the suffix attaches. These suffixes include the adjectivizing suffixes $-k^{\prime} V$ and $-7 V\left({ }^{*}-q^{\prime} V\right)$, the indefinite object suffix $-n V n$, the infinitive suffix $-n V 7$, the plural nominal suffix $-V n$, and the agent nominalizing suffix $-n V 7$. Vowel harmony spreads from left to right from the stem to the suffix. The rule is formulated in (173), and examples appear in (174), (175), (176), (177), and (178).

$$
\begin{align*}
& \mathrm{V} \rightarrow \mathrm{~V} \quad / \quad \mathrm{V} \ldots]_{\text {stem }} \text {-(C) }  \tag{173}\\
& \text { [-place] [ } \alpha \text { place] [ } \alpha \text { place] }
\end{align*}
$$

(174) Adjectivizer $-k^{\prime} V$
a. [la.'łay.k'a]
/lała-n-k'V/
XXX-DVB-ADJZ ${ }^{67}$
'hanging'
b. [tsi.'hiy.k'i]
/tsihi-n-k'V/
XXX-DVB-ADJZ
'serrated'

[^52]c. [ts'u.'kuy.k'u]
/ts'uku-n-k'V/
be.cold-DVB-ADJZ
'cold'
(175) Indefinite object -nVn
a. [.Sta.1a.,maq.pa.'nan]
/ $\int$-ta-?a-maqpa-nVn/
PAST-3PL.SUB-PL-wash-INO(IMPFV)
'they were washing'
b. [ta., Rał.duh.'nun]
/ta-Ralt'uh-nVn/
3PL.SUB-jump-INO(IMPFV)
'they jump'
c. [,kma:.laq.'tf'i..ni:A]
/k-ma:laqt5'i:-nVn-li/
1SUB-get.dressed-INO-PFV
'I got dressed'
(176) Infinitive $-n \boldsymbol{V} 7$
a. [1ma:.?a.'na?]
/ma:?an-nV ${ }^{\text {/ }}$
throw-INF
'to throw it'
b. [tan. $\int d$ u. $d u$. 'nu?]
/tan-St'ut'u-nV?/
TORSO-suck-INF
'to nurse'
c. laqtz'ini7
[1aq.ts'i.'ni'?
/laqts'in-nV?/
see-INF
'to see it'
(177) Plural noun -Vn
a. [ts'a.'lan]
/ts'al-Vn/
boy-PL
‘boys'
b. [_ts'o.qo.'nun]
/ts'oqon- Vn /
*ts'uq'un-Vn
Otomí-PL
'Otomí people'
c. [1?a.tsi.'?in]
/atsip-Vn/
girl-PL
'girls'
(178) Agent nominalizer -nV7
a. [, tf'ał.kat.'na?]
/t' 'adkat-nV?/
work-AGNM
'worker'
b. [?a.,k'u.ts'u.'nu?]
/Ra-k'uţ'u-nV?/
PL-cure-AGNM
'healer', 'doctor'
c. [?i..'ni?]
/Ri:-n-2/
bring-AGNM
'servant'

### 2.7.5 Strident Assimilation

The strident continuant non-anterior consonant $/ \mathrm{S} /$ in the third person possessive inflectional prefix $x$ - becomes anterior when there is a following
anterior non-lateral strident consonant $/ \mathrm{s} / \mathrm{in}$ the stem. The rule is formulated in (179), and examples appear in (180).

| C | $\rightarrow \mathrm{C}$ | $/$ |
| :--- | ---: | ---: |
| $[+$ strid $]$ | $[$-ant $]$ | $\left[\begin{array}{l}\text { steм } \\ {[+ \text { strid }]} \\ {[+ \text { cont }]}\end{array}\right.$ |
| $[+$ ant $]$ | $[+$ cont $]$ |  |
| $[-$ lat $]$ | $[-$ ant $]$ |  |
|  |  | $[-$ lat $]$ |

(180) Strident Assimilation
sasqat'a [sas.'qa.t'a] / $\int$-asqat'a/ 'his child'
7istampuus [s'tam.pu:s] / $\int$-tampu:s/ 'its middle'
7isawaw [?ı.sa.'ßau] / -sawaw/ 'sis muscle' $^{\prime}$
The derivation shown in (181) demonstrates that strident assimilation precedes both [Ri]-epenthesis (section 2.7.2.2) and identical consonant deletion (section 2.6.7.1).

| (181) Underlying Rep | /S-sawaw/ | /S-tf'aha?/ | /S-tampu:s/ |
| :---: | :--- | :---: | :--- |
| Strident Assim | /s-sawaw/ | ---- | /s-tampu:s/ |
| [Ri]-epenthesis | /Ri-s-sawaw/ | /Rif-tf'aha?/ | ---- |
| ID-C deletion | /Ri-Ø-sawaw/ | ---- | --- |
| Surface Rep | [?I.sa.'ßau] | [?If.tf'a.'hai] | [s'tam.pu:s] |
| Gloss | 'his muscle' | 'his foot' | 'its middle' |

### 2.7.6 Perfective Apsect Morphophonemic Rules

Three morphophonemic rules are specific to the perfective aspect only. They are perfective lateral neutralization (section 2.7.6.1), perfective lateral deletion (section 2.7.6.2), and perfective nasal deletion (section 2.7.6.3).

### 2.7.6.1 Perfective Lateral Neutralization

The perfective aspect suffix -li neutralizes to $-l h$ in all environments except when it occurs between a consonant-final stem and the temporal enclitic + ch (ALD). In other words, perfective lateral neutralization occurs in two environments: (i) when -li follows a vowel and precedes a word boundary or the temporal clitic $+c h$, and (ii) when -li occurs word-finally after a consonant or glide; this rule is shown below in (182).

$$
-\mathrm{li} \operatorname{PFV} \rightarrow\left\{\begin{array}{l}
-\mathrm{lh} / \mathrm{V}_{\ldots}\left\{\begin{array}{l}
\# \\
+ \text { ch ALD }
\end{array}\right\}  \tag{182}\\
-\mathrm{lh} / \mathrm{C} \_\ldots
\end{array}\right\}
$$

The examples in (183) demonstrate that -li always neutralizes to [4] following a vowel. In (183a), -li occurs between a stem-final vowel and a word boundary. In (183b), -li occurs between a stem-final vowel and the temporal clitic $+c h$. In both cases, $-l i$ neutralizes to [ 4$]$.
(183) a. ['tsu.kut]
/tsuku-li\#/
begin-PFV
'it began'
b. [Pa.'ts'a.lattf]
/ats'ala-li+t $\mathrm{f} /$
run-PFV+ALD
'he ran'
The examples in (184) demonstrate the outcome of the rule when -li follows a consonant. In (184a), -li occurs between a stem-final consonant and a word boundary, so it changes to [ł]. In (184b) it occurs between a stem-final consonant and the temporal clitic $+c h$, and it does not change.
(184) a. ['tas.pitt]
/taspit-li\#/
return-PFV
'he returned'
b. [tas.'pit.lit]]
/taspit-li+tf/
return-PFV+ALD
'he already returned'
This rule feeds the perfective lateral deletion rule that is discussed in the next section. A derivation that shows this rule ordering is given there in (188).

Perfective lateral neutralization differs from the liquid neutralization rule that was discussed in section 2.6 .2 in that the liquid neutralization rule (i) is not limited to the perfective aspect and (ii) must follow both primary stress assignment and short-vowel deletion. Perfective lateral neutralization, on the other hand, (i) is limited to the perfective aspect, and (ii) it occurs before stress assignment, and (iii) it bleeds both short-vowel deletion and liquid neutralization. A derivation showing this ordering appears in (185).

| (185) Under Rep PFV L-Neut | /witk'ili/ | /taspit-li/ <br> /taspit- 4 / | /taspit-li+tf/ | /tsuku-li+tf/ /tsuku-1+tg/ |
| :---: | :---: | :---: | :---: | :---: |
| $1^{\circ}$ Stress | /wi''k'ili/ | /'taspit- y / | /tas'pit-li+tf/ | /'tsuku-i+ts/ |
| V-Del | /wi:'k'il/ | ---- | ---- | ---- |
| L-Neut | /wi''k'iq/ | ---- |  |  |
| Surface Rep | [wi..'k'il] | ['tas.pitt] | [tas.'pit.litf] | ['tsu.kuitf] |
| Gloss | 'wrinkled' | 'he returned' | 'he already returned' | 'he already began' |

### 2.7.6.2 Perfective Lateral Deletion

After the application of the perfective lateral neutralization rule (previous section), the resulting allomorph [-4] may then optionally undergo word-final lateral deletion in a polysyllabic word when it occurs between a vowel and a word boundary. The rule is formulated in (186), examples are shown in (187), and a derivation is shown in (188). This is an optional process that seems to be agegraded; the younger the speaker, the more likely $\mathrm{s} / \mathrm{he}$ is to delete the word-final perfective [-4].

$$
\begin{equation*}
-4 \operatorname{PFV} \rightarrow \varnothing / \mathrm{V} \ldots \# \tag{186}
\end{equation*}
$$

(187) a. [ma:.'qes. $\beta a: \mathbf{t}]$ ~ [ma:.'qes. $\beta \mathrm{ar}:]$
/ma:-qeswaa-li/
CAUS-be.scared-PFV
'He scared her.'
b. ['maq.ni: $\mathbf{t}]$ ~ ['maq.ni:]
/maqni:-li/
kill-PFV
'He killed it.'
This rule crucially follows perfective neutralization. If a form undergoes $/ \mathrm{h} /$-deletion, ${ }^{68}$ then it will not undergo perfective lateral deletion, even though the former neither feeds nor bleeds the latter.

[^53](188) Underlying Rep /maqni:-li/ /maqni:-li/ /tamaju-li/ /ma:qeswa:-li/

PFV L-Neut /maqni:- 4 /maqni:- 4 / /tamaju- 4 / /ma:qeswa:- $4 /$
Stress /'maqni:/ /'maqnii- $4 /$ /ta'majut/ /ma:'qeswa:- $\mathbf{4} /$
H-del ---- ---- /ta'mauy/ ----
PFV Lat-Del /maqni:/ ---- ---- /ma:'qeswa:/
Surface Rep ['maq.ni:] ['maq.ni:i] [ta.'maut] [ma:.'qes.wa:] 'he killed it' 'he killed it' 'he bought it' 'it scared her'

### 2.7.6.3 Perfective Nasal Deletion

A stem-final nasal is deleted in the perfective aspect only. The rule is formulated in (189), and examples are shown in (190).

$$
\begin{equation*}
\mathrm{C} \rightarrow \varnothing / \ldots]_{\mathrm{STEM}}-\mathrm{PFV} \tag{189}
\end{equation*}
$$

[+nasal]
(190) Stem-final nasal deletion, perfective aspect
a. ['miltf]
/min-li+t $\mathrm{f} /$
come-PFV+ALD
'He already came'
b. [laq.'ts'iŋ.kał]
/laqts'in-kan-li/
see-INS-PFV
'someone saw him'
c. [kla.'kau]
/k-lak-an-w/
1SUB-DIS-go(PFV)-1PL.SUB
'We (EXCL) all went'
d. [?u.'pu.tu:tts]
/u-putun-li+tf/
eat-DESID(PFV)-PFV+ALD
'he wanted to eat it'

Perfective nasal deletion must precede perfective lateral neutralization in order to create a vowel-final environment in which perfective lateral neutralization can happen. Also, perfective nasal deletion must precede stress assignment in order for the penult to bear stress in the perfective aspect ${ }^{69}$ and to feed the $/ \mathrm{h} /$-deletion rule. It is followed by compensatory lengthening, which assigns the mora of the deleted moraic $/ \mathrm{n} /$ to the preceding vowel. Derivations appears in (191).

| (191)U Rep | /ta-Pan-li+tf/ | /laqts'in-kan-li/ | /nahun-li/ /Ra-k-lak-Pan-w/ |
| :---: | :---: | :---: | :---: |
| PFV N-Del | /ta-Ra-li+tf/ | /laqts'in-ka-li/ | /nahu-li/ /Ra-k-lak-Ra-w/ |
| Comp Leng | /ta-Ra:-li+tf/ | /laqts'in-ka:-li/ | /nahu:-li/ /Ra-k-lak-3a:-w/ |
| PFV L-Neut | ---- | /laqts'in-ka:-4/ | /nahu:-1/ |
| $1^{\circ}$ Stress | /ta- Pa - $\mathrm{li}+\mathrm{tf} /$ | /laq'ts'in-ka:-4/ | /'nahu:-1/ /Ra-k-lak-'Ra:-w/ |
| H-Del | ---- | ---- | /'nau:-4/ |
| $2^{\circ}$ Stress | ---- | ---- | /,Ra-k-lak-'Pa:-w/ |
| S Rep | [ta'2alits] | [laq.'ts'in.ka:t] | ['nau:d] [12aklak'2a:w] |
| Gloss | 'they left' | 'they saw it' | 'he said it' 'we could go' |

[^54]
## Chapter 3: Verbs and Verbal Morphology

### 3.1 INFLECTION

Inflectional categories in HT include nominative and accusative person and number, as well as tense, aspect, and mood. Inflection is accomplished by means of affixation, glottalization, deletion, and suppletion of the verb stem.

### 3.1.1 Person and Number Marking

Person and number are co-referenced on the Tepehua verb by prefixation, suffixation, glottalization, and suppletion. Person marking consists of first, second, and third; number consists of singular, simple plural, multiple plural, and first person plural inclusive and exclusive. The categories of third person and singular are not marked overtly on the verb; instead they are the default readings when there is no overt person or number morphology on the verb stem. Given that there is no case marking on the noun in HT and that there is only one set of free pronouns, grammatical relationships in HT are distinguished by means of word order of the major constituents, discourse pragmatics, and pronominal crossreferencing on the verb. The word order (which is both pragmatic and relatively fixed) is discussed in chapter 8 , section 8.1 . Pronominal cross-referencing is the topic of this section.

Person marking in Tepehua follows a predominantly accusative pattern. On a transitive verb, nominative person markers co-index subjects: a first person subject is shown in the example in (192a), a second person subject is shown in (192b), and a third person plural subject is shown in (192c).


Accusative person markers co-index objects on transitive verbs, as seen in the examples in (193). A first person object is shown in (193a), a second person object is shown in (193b), and a third person plural object is shown in both (193c) and (193d).
(193)a. ki(n)7aqlhteyjuuy
ki(n)-7aqlhteyjuu-y
1OBJ-help-IMPFV
'He helps me.'
[3QI]
b. k'aqlhteyjuuyanch
k-7aqlhteyjuu-y-an+ch
1SUB-help-IMPFV-2OBJ+ALD
'I help you.'
c. maa yuuch laktitaymay juu t'akuunin
maa yuuch lak-titayma-y juu t'aku7-nin
RPT PRN.3SG PL-chase-IMPFV ART woman-PL
'It [the snake] chases after the women.'
[T0003: 005]
d. xatalaqp'aqx7ulaay
xa-ta-lak-p'aqx7ulaa-y
juu xlhiisaan7an
juu x-hisisan-7an
PAST-3PL.SUB-PL-break(VT)-IMPFV ART 3POS-instrument-PL.POS
'They broke their musical instruments.'
[T0063: 086]

HT displays split-intransitivity (Merlan 1985) in its alignment system. According to Dixon's (1994) types of split system, the split found in HT is conditioned by the semantics of the nominal referent. While first and second person subjects of intransitive verbs are always co-indexed with nominative person markers, as seen in the examples in (194a) and (194b), only animate third person plural subjects of intransitive verbs are co-indexed with nominative person markers, as seen in the example in (194c). An inanimate third person plural subject is co-indexed with the plural marker lak-, as seen in the example in (194d). This split is clearly conditioned by the animacy of the plural third person subject.
(194)a. kti7anch
k-ti-7an+ch
1SUB-IMM-go(IMPFV)+ALD
'I'm leaving.'
[T0066: 278]
b. t'i7inch
ti-7an+ch
IMM-go(2SUB.IMPFV) +ALD
'Are you leaving now?'
[T0066: 279]
c. tachaa7an juu pulasiyaa
ta-chaa7an juu pulasiyaa
3PL.SUB-arrive.there(IMPFV) ART police
'The police arrive.'
[T0055: 027]
d. juu jaak lakchaay
juu jaak lak-chaa-y
ART banana PL-ripen-IMPFV
'The bananas ripen.'
[PDLMA2005]
The rest of this section describes the following topics with respect to person-marking in greater detail: nominative person marking (Section 3.1.1.1),
multiple plural and distributive marking (Section 3.1.1.2), indefinite subject marking (Section 3.1.1.3), accusative person marking (Section 3.1.1.4), indefinite object and plural indefinite and indirect object marking (Section 3.1.1.5), double object marking (Section 3.1.1.6), speech act participant marking (Section 3.1.1.7), and split-intransitivity (Section 3.1.1.8). All person and number markers covered in this section are summarized at the end in Section 3.1.1.9.

### 3.1.1.1 Nominative Marking

HT nominative marking consists of first person singular, plural inclusive, and plural exclusive; second person singular and plural; and third person plural. Third person singular is not overtly marked.

## First Person

A first person singular subject is indicated on the verb by the prefix $k$ ( $\sim 7 i k$-), as seen below in (195a). A first person plural inclusive subject is indicated on the verb by the suffix $-w$ ( $\sim-a w$ after a consonant or semi-vowel), as seen below in (195b). A first person plural exclusive subject is doubly marked by both the prefix $k$ - and the suffix $-w$, as seen below in (195c).

| (195)a. | waa | ktalhanan |
| :--- | :--- | :--- |
|  | waa | k-talhtanan |
|  | FOC | 1SUB-scared(IMPFV) |
|  | 'I'm afraid.' |  |

[T0054: 034]
b. mapayniyaw juu ki7asqat'a7an
mapay-ni-y-aw juu ki-7asqat'a-7an love-DAT-IMPFV-1PL.SUB ART 1POS-child-PL.POS 'We (INCL) love our children.'
[T0059: 033]

| juu | luwch | kjunaw |
| :---: | :---: | :---: |
| juu | luw + ch | k-jun-aw |
| ART | snake+ALD | 1SUB-call(IMPFV)-1PL.SUB |
| 'We | ) call it 'sn |  |

[T0009: 012]
Herzog (1974) gives ic-, where $<\mathrm{c}>$ represents $/ \mathrm{k} /$, as the first person prefix (p. 45). However, only the eldest of my consultants used 7ik-, and he did so only in elicited speech at the beginning of a phrase when the addition of $k$ - alone would have caused an dispreferred consonant cluster ${ }^{70}$ and only after I had asked him to repeat himself.

However, despite the fact that this consultant consistently used 7ik-during elicitation, I do not have a single occurrence of him or anyone else using it in naturally occurring speech. I do not know if this omission represents a gap in the data (i.e., I simply did not happen to record anyone making such an emphatic reference) or if it means that the 7 ik - allomorph of the first person prefix does not occur in discourse. However, I think that it is clear that 7ik- is used only by the older speakers and only for emphasis.

Furthermore, it is quite common for speakers to omit the first person prefix altogether when the subject is first person singular and when the context makes it clear that the subject is first person singular. The example in (196a) is part of a first person narration from a traditional story. Though the gloss says 'I killed it', the verb maqniilhch is not marked for first person and literally means 'He killed it'. If the $k$ - prefix had been affixed to the verb in this example, it would have been syllabified as the coda of the preceding particle waa. The verb in (196b) does not bear the first person subject prefix either, but it does bear prefixes

[^55]indicating that the object is third person plural. However, the presence of the first person independent pronoun kit'in makes it emphatically clear that the subject is first person singular.
(196)a. puus waa maqniilhch ka7uyaawch
puus waa maqnii-li+ch ka-7u-ya7-w+ch
well FOC kill-PFV+ALD IRR-eat-FUT-1PL.SUB+ALD
'Well, I killed it and we are going to eat it.' [T0059: 013]
b. juu kit'in jaantu 7alaqkiknawiiy
juu kit'in jaantu 7a-laq-kiknawii-y
ART PRN.1SG NEG PL-3PL.OJB-flatter-IMPFV
'I do not flatter them.'
[T0066: 049]

## Second person

A second person singular subject is indicated on the verb by means of glottalization of any stops and affricates that occur in the stem, as seen below in (197a). The glottal approximate $/ \mathrm{h} /<\mathrm{j}>$ becomes a glottal stop $/ \mathrm{R} /<7>$ when the subject is second person, shown in (197b). When the word has no glottal approximates or plain stops or affricates, there is no indicator of second person in the imperfective aspect, as seen in (197c). In these instances, the subject of the clause is ambiguous between second and third person singular given that third person singular is not overtly marked on the verb.

```
(197)a. t'amak'oomp'ut'unch tamakajun-putun+ch stay-DESID(IMPFV)+ALD
'You want to stay.'
```

[T0055: 065]
b. t'at'akuunin 7unt'at'it
t'at'akuun-in jun-ta-t'it
witch-PL be(2SUB.IMPFV)-PF(2SUB)-2PL.SUB
'You (PL) are witches.'
[PDLMA05]
c. 7ap'alhnan

7ap'alhnan
sweep(IMPFV)
'You sweep.'
'She sweeps.'
In the perfective aspect, second person singular is marked either by the suffix $-t^{\prime}$, shown in (198a), or it is morphologically unmarked, as seen in (198b). Please see the Section 3.1.2.2 on the Perfective Aspect for more information regarding second person marking in the perfective aspect. Note that the example in (198a) is doubly marked for a second person subject: may means of glottalization of the stop [ $\mathrm{k}^{\prime}$ ], as well as by the suffix $-t^{\prime} i$.
(198)a. lhk'aat'i
lhk'aan-t'i
measure(2SUB.PFV)-2SG.SUB.PFV
'You measured it.'
[TPWDB]
b. laqtz'i
laqtz'in.PFV.2SG.SUB
'You saw him.'
A plural second person subject is co-indexed by the suffix $-t$ 'it, as seen below in (199a). This suffix is used regardless of tense, aspect, or mood. The allomorph -at'it occurs after a semi-vowel or consonant, as seen in (199b) and (199c), respectively.
(199)a. jaantuch waa 7atz'alaat'it
jaantu+ch waa 7atz'alaa-t'it
NEG+ALD FOC run(IMPFV)-2PL.SUB
'Don't run away!'
[T0055: 081]
b. jaantu tapayniyat'it
jaantu tapaynin-y-at'it
NEG ask.forgiveness-IMPFV-2PL.SUB
'You all don't ask for forgiveness.'
[T0054: 055]

c. 7ap'alhnanat'it<br>7ap'alhnan-at'it<br>sweep(IMPFV)-2PL.SUB<br>'You (PL) sweep.'

[MSW]
A plural second person subject is additionally marked in the future tense by the suffix $-7 i$, which occurs after the future suffix and before $-t^{\prime} i t$, as seen in the examples in (200a) and (200b). According to Watters (1988), both singular and plural second person subjects are co-indexed by $-p^{\prime} i$ in Tlachichilco Tepehua in the future tense. Furthermore, he states that this suffix occurs as $-7 i$ in the singular in Tlachichilco Tepehua, but that it occurs as $-p^{\prime} i$ in Huehuetla (p. 317). I did not find this to be the case. The HT speakers with whom I worked never used $-p^{\prime} i$, and they used $-7 i$ only with plural second person subjects and never with singular ones. The example in (200c) shows that $-7 i$ does not occur when the subject is second person singular.
(200)a. lhi7 7at'anaa7it'it
lhi7 7a-min-a7-7i-t' it
tomorrow IRR-come(2SUB)-FUT-2PL.SUB.FUT-2PL.SUB
'You (PL) will come tomorrow.'
b. 7alhk'aanaa7it'it

7a-lhk'aan-a7-7i-t'it
IRR-measure-FUT-2PL.SUB.FUT-2PL.SUB
'You (PL) will measure it.'
[TPWDB]
c. 7at'ana7 lhi7

7a-min-a7 lhi7
IRR-come(2SUB)-FUT tomorrow
'You (SG) will come tomorrow.'

A small set of verbs have suppletive forms-shown below in (201)-when the subject is second person singular or plural. All of these verbs belong to the semantic field of coming or going.
(201)a. 7an 'he goes' $7 i^{71}$ 'you go'
b. min 'he comes' t'an 'you come'
c. chaa7an 'he arrives here' ch'it'an 'you arrive'

## Third person

A lack of subject marking on the Tepehua verb indicates a singular third person subject, as shown below in (202).
(202)a. muujuuy juu waati lakap'aaqxqa
muujuu-y juu waati laka-p'aaqxqa
throw-IMPFV ART tortilla PREP-griddle
'She throws the tortillas on the griddle.'
[TPWDB]
b. juu pumatam lapanak niilh
juu puma-tam lapanak nii-li
ART CL:human-one person die-PFV
'A person died.'
[T0009: 001]
A plural third person subject is indicated by the prefix $t a$-, as seen below in the examples in (203). This same prefix is also used to co-index a plural first or second person object when the subject of the verb is third person (singular or plural); please see examples (216) and (217) in section 3.1.1.4 on accusative marking.
(203) a. tanawiiych
ta-nawii-y+ch
3PL.SUB-make-IMPFV+ALD
'They make tortillas.'
$\begin{array}{lll}\text { juu yu7unch } & \text { juu waati } \\ \text { juu yu7unch } & \text { juu waati } \\ \text { ART } & \text { PRN.3PL } & \text { ART tortilla }\end{array}$
[TPWDB]

[^56]b. katamina7
ka-ta-min-a7
IRR-3PL.SUB-come-FUT
'They are going to come.' / 'They will come.'
[TPWDB]

### 3.1.1.2 Multiple Plural and Distributive Marking

The plural prefix lak- is used to distinguish a simple plural argument (that is, a plural argument that consists of two or three entities) from a multiple plural argument (a plural argument that consists of more than three entities); the examples in (204) through (206) demonstrate this use. The same prefix is also used to co-index a third person plural object on a transitive verb, as will be shown in Section 3.1.1.4. In all of these examples in (204), (205), and (206), the stative verb yaa 'standing' has a single argument that is plural; in (204) the argument is first person plural exclusive, in (205) the argument is second person plural, and in (206) the argument is third person plural. All of the (a) examples demonstrate the simple plural, which consists of two to three entities; these examples bear the nominal subject morphology that was discussed above in Section 3.1.1.1. The (b) examples demonstrate the multiple plural, which consists of more than three entities; all of these examples bear the same nominal subject morphology seen in the (a) examples, as well as the plural prefix lak-.

$$
\begin{aligned}
& \text { (204)a. xakyaaw juu lakatii } \\
& \text { xa-k-yaa-w juu laka-tii } \\
& \text { PAST-1SUB-standing(IMPFV)-1PL.SUB ART PREP-road } \\
& \text { 'We (EXCL, 2-3) were standing in the road.' } \\
& \text { PAST-1SUB-PL-standing(IMPFV)-1PL.SUB ART PREP-road } \\
& \text { 'We (EXCL, >3) were standing in the road.' }
\end{aligned}
$$

| (205)a. | 7ixyaat'it | juu lakatii |  |
| :--- | :--- | :--- | :--- |
|  | 7ix-yaa-t'it | juu laka-tii |  |
|  | PAST-standing(IMPFV)-2PL.SUB | ART | PREP-road |
|  | 'You all (2-3) were standing in the road.' |  |  |

b. xlakyaat'it juu lakatii
x-lak-yaa-t'it juu laka-tii
PAST-PL-standing(IMPFV)-2PL.SUB ART PREP-road
'You all ( $>3$ ) were standing in the road.'
(206)a. xtayaanalh juu lakatii
x-ta-yaa-nalh juu laka-tii
PAST-3PL.SUB-standing(IMPFV)-3PL.STV ART PREP-road
'They (2-3) were standing in the road.'
b. xtalakyaanalh juu lakatii
x-ta-lak-yaa-nalh juu laka-tii
PAST-3PL.SUB-PL-standing(IMPFV)-3PL.STV ART PREP-road
'They (>3) were standing in the road.'
Multiple plurality is not obligatorily marked on the HT verb, as can be seen from the examples in (207), which come from the same narrative. In all the examples, the noun referent of the third person plural argument of each of the verbs is a large group of thieves. While the intransitive verbs in (207a) and (207c) are both marked for multiple plurality, neither the intransitive nor the transitive verbs in (207b) or (207d) are marked for multiple plurality, even though the third person plural argument is the same noun referent for all of them.

| (207) a. | waa | naach | nii | talaklhtatalhch |
| :--- | :--- | :--- | :--- | :--- |
|  | waa | naa + ch | nii | ta-lak-lhtata-li+ch |

b. y luego nii takujchalhch $y$ luego nii ta-kuj-chaa-li+ch and then COMP 3PL.SUB-awaken(VI)-DIST-PFV+ALD
juu 7aqalhoonin talaqtz'inch juu 7aqalhoona7-nin ta-laqtz'in+ch ART thief-PL 3PL.SUB-see(VT)(IMPFV)+ALD
'And later, when the thieves woke up, they see him.' [T0055: 074]
c. waa naa naa tarr talak7atz'alay
waa naa naa tarr ta-lak-7atz'ala-y
FOC EMP EMP ID:run 3PL.SUB-PL-run(VI)-IMPFV
'They take off running.'
[T0055: 077]
d. ta7alhch tamuku7ulaaqolhch
ta-7an-li+ch ta-muku7ulaa-qoju-li+ch
3PL.SUB-go(VI)-PFV+ALD 3PL.SUB-leave.behind(VT)-ALL-PFV+ALD
juu xtuumiin7an
juu $x$-tuumiin-7an
ART 3POS-money-PL.POS
'They went and they left all of their money.'
[T0055: 079]
Another possible analysis of the examples in (207a) and (207c) is that the prefix lak- does not indicate multiple plurality of the verb's argument here, but that instead it indicates distributive action of the verb in which the action applies equally to all members of the plural argument. Furthermore, it seems that the argument does not need to be plural in order for the action to be distributive, as seen in the examples in (208). In both of these examples, the action of the verb applies to the entirety of the sole verbal argument.

| (208) a. | laklhkulh | juu | t'aku7? |
| :--- | :--- | :--- | :--- |
|  | lak-lhku-li | juu | t'aku7 |
|  | DIS-burn(VI)-PFV | ART | woman |

'Did the woman burn (all over)?'
[T0057: 067]
b. lakpaatajuqoo
lak-paataju-qoju
DIS-fall(VI)-ALL.PFV
'It (her skin) all fell off.'
[T0057: 079]
The distinction between simple and multiple plural has not been documented in any of the other members of the Totonacan language family. However, the use of a cognate morpheme to indicate distributive verbal action is widely documented within the family (e.g., Upper Necaxa Totonac (Beck 2004), Papantla Totonac (Levy p.c.), Misantla Totonac (MacKay 1999), Coatepec Totonac (McQuown 1990)).

### 3.1.1.3 Indefinite Subject Marking

An indefinite subject in Huehuetla Tepehua is indicated by the suffix -kan. ${ }^{72}$ Though native speakers of both HT and Spanish sometimes translate the HT indefinite subject construction into the reflexive passive construction in Spanish, it is more often the case that they translate it as the impersonal or indefinite third person plural subject 'they'. Whereas the passive construction promotes an object argument to the subject position, the indefinite subject construction in Tepehua serves to foreground the object and background the subject without changing their semantic roles, as seen below in the example in (209). In this example, the prefix lak- (which is underlined) co-references a third person plural object, and -kan (which is in bold type) co-references an indefinite subject.

[^57]| (209) jaantuch | laay | xlakmaaxtukanta |
| ---: | :--- | :--- |
| jaantu + ch | laa-y | x-lak-maaxtu-kan-ta |
| NEG + ALD | can- IMPFV | PAST-PL-take.out-INS-PF |

juu laktaxtoqta naa lhuu
juu lak-taxtoqta naa lhuu
[T0018: 005]
Unlike the passive construction in English, the indefinite subject construction in HT does not decrease the valency of the verb; the object retains its object status, and the subject retains its subject status. However, this construction does serve to foreground the object while backgrounding the subject, as seen below in the examples in (210). In (210a), the verb bears the indefinite subject suffix, and the clause has an overt object (juи xaniin lapanák 'the dead people'), as well as an overt subject (juu lapanák 'the people'). Similarly, in (210b), the verb bears the indefinite subject suffix, and the clause has an overt subject (juu 7 anu7 lapanak 'that person'), an overt direct object (juu lhiich'alhkat 'a job'), and an indirect object ('me') that is co-referenced on the verb by first person subject inflection, which is underlined in the example.

b. [juu 7anuu lapának] $]_{\text {sub }}$ xakxtaqnikalhch juu 7anuu lapanak xa-k-xtaq-ni-kan-li+ch ART DADJ person PAST-1SUB-give-DAT-INS-PFV+ALD
[juu lhiich'alhkat] ${ }_{\text {овл }}$
juu lhiich'alhkat
ART job
'That person gave me a job.'
[ELIEX2: 010]
When a first or second person foregrounded object occurs with an indefinite subject, it is co-indexed on the verb by nominative-not accusativeperson markers, as seen in the examples below in (211) and above in (210b).
(211)a. k'asmatnikan
k-qasmat-ni-kan
1SUBJ-hear-DAT-INS(IMPFV)
'They/someone hear/s me.'
b. qasmatnikanaw
qasmat-ni-kan-aw
hear-DAT-INS(IMPFV)-1PL.SUBJ
'They/someone hear/s us.'
c. qasmat'nik'an
qasmat-ni-kan
hear-DAT-INS(IMPFV)
'They/someone hear/s you (SG).'
d. qasmat'nik'anat'it
qasmat-ni-kan-at'it
hear-DAT-INS(IMPFV)-2PL.SUBJ
'They/someone hear/s you (PL).'
[Qlak1]
However, when the foregrounded object in an indefinite subject construction is third person plural, it is co-indexed on the verb by a combination of two plural object markers $7 a$ - and lak-, as seen in the example in (212). ${ }^{73}$

[^58](212) 7alak'asmatnikan

7a-lak-qasmat-ni-kan
PL.INO-PL-hear-DAT-INS(IMPFV)
'They/someone hear/s them.'
The indefinite subject construction is one of several places in the HT grammar in which a distinction is drawn between first and second person versus third person. Whereas the morphosyntax predominately follows a nominativeaccusative pattern, there are certain points in the grammar in which first and second persons follow an accusative pattern, while third person follows an ergative pattern. This division or split in the alignment system can be modeled by the person hierarchy shown in (213).

## (213) Person Hierarchy and Indefinite Subject



In this hierarchy, first and second person are equal to each other, and they both outrank third person plural. The pivot point between nominative and accusative person-marking (and between an accusative and an ergative pattern) occurs between the division between first and second persons on one side and third person plural on the other side. Since third person singular is not overtly marked on the verb, it is not involved in this hierarchy.

Finally, I want to justify my decision to name this construction the "indefinite subject construction", especially in light of the fact that both of the examples in (210) have a definite subject that is introduced by the article juu.

Perhaps 'indefinite subject' is not the best name for this morpheme; however, I have chosen to follow the example of other Totonacanists in naming it. McQuown (1990: 162) and MacKay (1999: 191) also call the cognate Totonac morpheme the 'indefinite subject'. Beck calls it the 'indefinite agent' (2003: 46) and the 'indefinite actor' (2004: 31). ${ }^{74}$ The difference between the HT construction and the cognate construction in the Totonac languages described by MacKay and Beck is that in the Totonac languages, the indefinite subject/actor/agent really is indefinite, unspecified, non-overt, or non-referential, while in HT, the subject that corresponds to the -kan suffix can be definite, specified, overt, and referential, as seen above in the examples in (210). For this reason, I have analyzed this construction as backgrounding (and not demoting) the subject. However, examples such as those in (210) are rare in HT, and the vast majority of the HT examples of this construction do not have a definite, specified, overt, or referential subject, as is the case in the examples in (211) and (212). Thus, I follow the Totonacan tradition of calling this suffix the 'indefinite subject'.

### 3.1.1.4 Accusative Marking

HT accusative marking consists of first person singular and plural, second person singular and plural, and third person plural. There is no first person inclusive/exclusive distinction in the accusative, nor is there any overt marking for third person singular.

[^59]
## First Person

A first person object-regardless of its number-is indicated on the verb with the first person object prefix kin- ( $\sim k i$-, kim-). Before the dental and alveolar phonemes $/ \mathrm{t} /$, /t'/, /lh/, /ch/, and /ch'/, kin- occurs as [kin-] and [kin-], respectively, and before the velar phoneme $/ \mathrm{k} /$, it occurs as [kin-], all of which are represented orthographically by kin-, shown below in (214a). The allomorph kim- occurs before $/ \mathrm{p} /$ and $/ \mathrm{p}$ '/, shown below in (214b). Everywhere else, the first person object morpheme may optionally appear as the reduced form $k i-[\mathrm{ki}-],(214 \mathrm{c})$.
(214) a. kin-lhiisk'awatz'alat'i 'You ran me off.'
kin-takiknawii
kin-ch'an7ulh
kin-kalhawlh
'They flattered me.'
'It smashed me on the foot.'
'It infected me.'
b. kim-puukilhch'uch'uy 'He kisses me.'
c. jaantu k'i-7ut'i
xa-ki-juuniy
ki-laqoxipaa
ki-maqlhtaylh
'Don't eat me!'
'He would tell me.'
'He cured me.'
'He received me.' / 'He saw me.'
First person accusative marking varies depending on the person of the subject and the number of the first person object. When a transitive verb has a third person subject, and the first person object is singular, all that is needed is the kin- prefix, as seen below in (215).
$\begin{array}{lll}\text { (215)a. } & \text { kint'ajunch } & \text { juunini7 } \\ & \text { kin-t'ajun+ch } & \text { jun-ni-nV7 } \\ & \text { 1OBJ-be(IMPFV)+ALD } & \text { tell-DAT-INF } \\ & \text { 'He was telling me . . }\end{array}$
[T0066: 039]
b. xakijuuniy juu kimpay
xa-kin-jun-ni-y juu kin-pay
PAST-1OBJ-tell-DAT-IMPFV ART 1POS-father
'My father told me.'
[T0022: 005]
When the subject is third person and the object is first person plural, this argument configuration is co-indexed on the verb by the combination of the first person object prefix kin-, second person object suffix $-n$, and the prefix $t a-$, which is used to co-index three different types of verbal argument: (i) a third person plural subject (see above in section 3.1.1.1), (ii) a first person plural object with a third person (singular or plural) subject, and (iii) a second person plural object with a third person (singular or plural) subject. Thus, the verbal configuration when the subject is third person and the object is first person plural is kin-ta-V-n (1OBJ-3PL.SUB-V-2OBJ), as seen below in (216) and (217). These examples demonstrate that the prefix $t a$ - appears in this construction even if the third person subject is singular, which leads to the ambiguity seen in (217a).
(216) kimpay7an juu kintalhiist'aktan
kin-pay-7an juu kin-ta-lhiist'ak-ta-n
1POS-father-PL.POS REL 1OBJ-3PL.SUB-care.for-PF-2OBJ
'Our Father who has taken care of us.'
[T0063:084]
(217) a. kintalhiist'ak'an
kin-ta-lhiist'ak-7a-n
1OBJ-3PL.SUB-care.for-IMPFV-2OBJ
'He takes care of us.'
'They take care of us.'
b. juu t'aku7 kintalhiist'ak'an
juu t'aku7 kin-ta-lhiist'ak-7a-n
ART woman 1OBJ-3PL.SUB-care.for-IMPFV-2OBJ
'The woman takes care of us.'
c. juu yu7unch kintalhiist'ak'an juu yu7unch kin-ta-lhiist'ak-7a-n ART PRN.3PL 1OBJ-3PL.SUB-care.for-IMPFV-2OBJ 'They take care of us.'

When a first person singular object occurs with a second person singular subject, the person marking is straight-forward. The first person singular object is co-indexed by the prefix kin-, and the second person singular subject is indicated by the glottalization of stops and affricates in the stem and (in the perfective aspect) by the suffix $-t^{\prime} i$, as seen in the example in (218).
(218) kiqaqlht'ey7uut'i
ki-qaqlhteyjuu-t'i
1OBJ-help-2SG.SUB.PFV
'You (SG) helped me.'
A first person plural object combined with a second person singular subject is indicated on the verb by the combination of the first person object prefix kin-, the reciprocal prefix laa-, and the first person plural subject suffix $-w$, as seen below in example (219); however, the usual process of glottalization of stops and affricates that is used to indicate a second person subject does not occur in this context (i.e., when both arguments are speech act participants and when one or both of these SAP arguments is/are plural). This same combination of prefixes is used in two other contexts: (i) a first person plural object with a second person plural subject, and (ii) a first person singular object with a second person plural subject. Just as the process of glottalization does not occur to indicate a second person subject, nor does the second person plural subject suffix $-t$ 'it occur.

Thus, a three-way ambiguity-shown below in the glosses of (219a)—results from this person configuration of kin-laa-V-w (1SUB-RCP-V-1PL.SUB). ${ }^{75}$
(219) a. kilaalhiist'ak'aw
ki-laa-lhiist'ak-7a-w
1OBJ-RCP-care.for-IMPFV-1PL.SUB
'You (SG) take care of us.'
'You (PL) take care of us.'
'You (PL) take care of me.'
b. juu 7ixint'i kilaalhiist'ak'aw
juu 7ixint'i ki-laa-lhiist'ak-7a-w
ART PRN.2SG 1OBJ-RCP-care.for-IMPFV-1PL.SUB
'You (SG) take care of us.'
c. juu 7uxijnan kilaalhiist'ak'aw
juu 7uxijnan ki-laa-lhiist'ak-7a-w
ART PRN.2PL 1OBJ-RCP-care.for-IMPFV-1PL.SUB
'You (PL) take care of us.'
'You (PL) take care of me.'

## Second Person

A singular second person object is marked on the verb by the suffix $-n$, as seen below in (220); the allomorph -an occurs after a consonant or semi-vowel, as seen in (221a) and (221b), respectively.
(220) ka7uyaan juu Siiliiyaa
ka-7u-ya7-n juu Siiliiyaa
IRR-eat-FUT-2OBJ ART Cecilia
'Cecilia is going to eat you (SG).'
[T0058: 031]
(221)a. jaantu xaklaqtz'inputunan
jaantu xa-k-laqtz'in-putun-an
NEG PAST-1SUB-see-DESID(IMPFV)-2OBJ
'I did not want to see you (SG).'

[^60]b. k'aqlhteyjuuyan
k-7aqlhteyjuu-y-an
1SUB-help-IMPFV-2OBJ
'I help you (SG).'
[Q3I]
Second person accusative marking, like first person accusative marking, varies depending on the person of the subject and the number of the object. The combination of a third person singular subject and a second person singular object is shown above in (220). When the subject is third person, a plural second person object is indicated by the suffix $-n$, plus the prefix $t a$-, which is used to co-index (i) a third person plural subject (see above in section 3.1.1.1), (ii) a first person plural object with a third person (singular or plural) subject, and (iii) a second person plural object with a third person (singular or plural) subject. Examples that have a plural second person object are shown below in (222).

| (222)a. | juu Siiliiyaa kata7uyaan |
| :--- | :--- | :--- |
|  | juu Siiliiyaa ka-ta-7u-ya7-n |
|  | ART Cecilia IRR-3PL.SUB-eat-FUT-2OBJ |
|  | 'Cecilia is going to eat you (PL).' |

$\begin{array}{lll}\text { b. juu minati7an } & \text { naa } & \text { tamaapaayniyan } \\ \text { juu mi-nati-7an } & \text { naa } & \text { ta-maapaayni-y-an } \\ \text { ART 2POS-mother-PL.POS EMP } & \text { 3PL.SUB-love-IMPFV-2OBJ }\end{array}$
'Your (PL) mother loves you (PL).'

Note that when the verb is marked with the prefix $t a$ - and the suffix $-n$, there is a three-way ambiguity-shown in (223)-resulting from the multiple uses of the prefix $t a-$

## (223)talhiist'ak'an

ta-lhiist'ak-7a-n
3PL.SUB-care.for-IMPFV-2OBJ
'They take care of you (SG).'
'They take care of you (PL).'
'He takes care of you (PL).'
Though the person-marking on the verb is straight-forward when the subject is first person, the object is second person, and both arguments are singular-as seen above in the examples in (b)-ambiguities arise when one or both of the speech act participants (first and second persons) is plural, as seen below in (224). In this example, the first person prefix $k$ - occurs with the reciprocal prefix laa- and the first person plural subject suffix -(a)w. Please see Section 3.1.1.7 for more information on speech act participant marking.

## (224)naa klaamaapaayniyaw

naa k-laa-maapaayni-y-aw
EMP 1SUB-RCP-love-IMPFV-1PL.SUB
'I love you (PL).'
'We love you (PL).'
'We love you (SG).' ${ }^{76}$

## Third Person

Just as a lack of subject marking on the Tepehua verb indicates a third person singular subject, a lack of object marking on a transitive verb signals a third person singular patient or object argument, as seen below in (225), where the verb laqtzaman 'fill' is completely unmarked for person.

[^61](225) maa laqtzamalhch juu x kuweetaa
maa laqtzaman-li+ch juu x-kuweetaa
RPT fill(VT)-PFV+ALD ART 3POS-bucket
'He filled his bucket.'
[T0058:023]
A third person plural patient object is indicated on the verb by the plural prefix lak-, as seen in the examples in (226). In (226a), the direct object nominal 7 antiiwaa is marked for plurality (also by lak-), while in (226b) the direct object nominal chaqa7 is not.
(226)a.

| juu | lak7antiiwaa | xlaksaay |
| :--- | :--- | :--- |
| juu | lak-7antiiwaa | x-lak-saa-y |
| ART | PL-old.one | PAST-PL-play-IMPFV |


| juu liijuuntoo | kintata7an | Riik'ii |
| :--- | :--- | :--- |
| juu liijuuntoo | kin-tata-7an | Riik'ii |
| ART deceased | 1POS-old.man-PL.POS Enrique |  |
| 'The deceased 'old man' Enrique played the old ones [songs].' |  |  |

[T0066: 077-078]
b. laklhii7alhch juu chaqa7
lak-lhii7an-li+ch juu chaqa7
PL-take-PFV+ALD ART house
'It [the river] carried away the houses.'
[T0057: 067]
It is important to note that only human third person plural objects are obligatorily co-indexed on the verb, as seen in (227). When the third person plural object is non-human and animate (228) or inanimate (229), it is optionally coindexed on the verb.
(227)a. juu Xiiwan tup lakch'int'aa juu tz'alan
juu Xiiwan tup lak-ch'int'aa juu tz'al-an ART John ID:kick PL-kick(PFV) ART boy-PL
'John kicked the boys.'
b. ** juu Xiiwan tup ch'int'aa juu tz'alan

Target: 'John kicked the boys.'
(228)(lak)ch'apamaalh
(lak-)ch'apa=maa-li
(PL-)touch=lying-PFV
'The hen covered her chicks.
[TPWDB]
(229)(lak)puulhkulh juu 7ixstapu juu t'aku7
(lak-)puu-lhku-li juu 7ix-stapu juu t'aku7
(PL-)INST-burn-PFV ART 3POS-bean ART woman
'The woman burned the beans.'
[ELIEX14: 005]
Examples containing two third person plural arguments (subject and object) are shown in (230).
(230) a. xatalaqp'aqx7ulaay juu xlhiisaan7an
xa-ta-lak-p'aqx7ulaa-y juu x-lhiisan-7an
PAST-3PL.SUB-PL-break(VT)-IMPFV ART 3POS-instrument-PL.POS
'They broke their musical instruments.'
[T0063: 086]
b. talak7ulatach juu lhuu
ta-lak-7ulaa-ta+ch juu lhuu
3PL.SUB-PL-place-PF+ALD ART much
'They put in a lot (of money).'
[T0055: 054]
c. talaklhkaa
ta-lak-lhkaan
3PL.SUB-PL-measure(PFV)
'They measured them.'
[TPWDB]
In some cases, it is not clear if the prefix lak- co-indexes a plural third person object or if it indicates distributive action of the verb. The glosses for both of the examples in (231) were given to me with singular direct objects-'onion' in the case of (231a) and 'tortilla' in the case of (231b); however, when I tested the glosses with plural direct objects-'onions' and 'tortillas'-both glosses were accepted. Thus, in these sentences, the prefix lak- co-indexes either distributive, repeated action of the verb or third person plural objects. Of course, even if both of these objects started out in one (singular) piece (i.e., one onion and one
tortilla), they would end up in many (plural) pieces as a result of the action of their respective verbs.
(231)a. lakch'uk'u7ulaay juu 7icebolla juu laxkuchiiluu lak-ch'uk'u=7ulaa-y juu 7ix-cebolla juu laka-x-kuchiiluu DIS-cut=place-IMPFV ART 3POS-onion ART PREP-3POS-knife 'She cuts the onion(s) into pieces with her knife.' [ELIEX3: 011]
b. laktz'akay juu wati
lak-tz'aka-y juu wati
DIS-chew-IMPFV ART tortilla
'She chews the tortilla(s).'
[ELIEX3: 037]

### 3.1.1.5 Indefinite Object, Plural Indefinite Object, and Plural Indirect Object Marking

The indefinite object suffix in HT is $-n V n$ (INO). This suffix serves three functions: (i) it backgrounds the object argument of a transitive verb; (ii) in the imperfective aspect, it produces a habitual reading of both transitive and intransitive verbs; and (iii) when combined with the plural indefinite object prefix $7 a$ - and attached to an ideophone, ${ }^{77}$ it creates an intransitive verb whose meaning is related to that of the ideophone. I discuss the morphophonemics of the suffix after discussing the first two of these uses. The third use of this morphemes is covered in Chapter 6, Section 6.3.1.

I follow Levy (1999b: 329), MacKay (1999: 321), and McQuown (1990: 168) in calling this suffix the 'indefinite object' marker. Beck (2004: 64) calls the cognate suffix in Upper Necaxa Totonac a 'detransitivizer', and Watters (1988: 210) calls the Tlachichilco Tepehua cognate the 'antipassive'.

[^62]The indefinite object suffix $-n V n$ is commonly used to background an object argument, as seen in the examples in (232). In the example in (232a), the clause has both an overt object (juи chulux 'the coati') and an overt subject (juи xqooy 'the dog'). In (232b), the indefinite object suffix appears on the verb, and there is no longer an overt, specific, definite object. ${ }^{78}$

## (232) a. 7utayaputun juu xqooy juu chulux 7utaya-putun juu xqooy juu chulux sniff-DESID(IMPFV) ART dog ART coati <br> 'The dog wants to track (sniff out) the coati.'

[MNB13: 38]
b. 7utayanan juu xqooy juu lakak'iwin

7utaya-nVn juu xqooy juu laka-k'iw-in sniff-INO(IMPFV) ART dog ART PREP-tree-PL
'The dog tracks in the woods.'
[MNB13: 38]
In the second use of the indefinite object suffix, the affixation of $-n V n$ to a verb stem produces a habitual reading of the verb in the imperfective aspect; examples are shown below in (233) through (235). The transitive verb in the example in (233a) is in the perfective aspect, and the clause has an overt direct object. In the example in (233b), the clause has the same direct object, and the indefinite object suffix appears on the imperfective verb, giving it a habitual reading.

| (233)a.lhaaqamanqoolh $\quad[\text { juu xtuumiin }]_{\text {OBJ }}$ <br> lhaaqaman-qoju-li <br> juu x-tuumiin |  |
| :--- | :--- |
|  | waste-ALL-PFV |
|  | 'He wasted all of his money.' |

[ELIEX4: 038]

[^63]b. lhaaqamanan [juu xtuumiin] овs juu 7anu7 lapanak lhaaqaman-nVn juu x-tuumiin juu 7anu7 lapanak waste-INO(IMPFV) ART 3POS-money ART DADJ person 'That man wastes (habitually) his money.'
[ELIEX4: 037]
I did not test this construction while I was in the field to see if I could get a habitual reading of a transitive verb with a specific object.

A habitual reading is also possible when $-n V n$ co-occurs with the plural indefinite object prefix $7 a$ - (discussed below) in the imperfective aspect, as seen below in (234).
(234)maa xta7amaqpanan juu papaanin maa x-ta-7a-maqpa-nVn juu papa7-nin RPT PAST-3PL.SUB-PL.INO-wash.clothes(VT)-INO(IMPFV) ART elder-PL
'The elders washed clothes (habitually).'
[T0022: 002]
The indefinite object suffix may also be added to an intransitive verb to produce a habitual reading in the imperfective aspect, as seen in example (235).
(235) lakaxixnin
laka-xix-nVn
CL:place-dry-INO(IMPFV)
'This month is habitually dry.'

| juu | chaway | maalhkiyu7 |
| :--- | :--- | :--- |
| juu | chaway | maalhkiyu7 |

juu chaway maalhkiyu7
ART now month

Unfortunately, I have no other HT examples of the habitual use of the indefinite object suffix. However, this usage of the cognate suffix in other Totonacan languages has been documented by Beck (2004: 64), Beck (to appear b: 14), MacKay (1999: 321), and Watters (1988: 214).

The unspecified vowel of the indefinite object suffix $-n V n$ harmonizes with the final vowel of the verb stem. It occurs as -nan following an $/ \mathrm{a} /$, as seen in (232), (233b), and (234) above; it occurs as -nin following /i/, as seen in (235) above; and it occurs as -nun after a root containing $/ \mathrm{u} /$, as seen in (236) below.
(236) 7ap'uksnun juu makxtalh

7a-p'uks-nun juu makxtalh
PL.INO-ID:stink-INO(IMPFV) ART garbage
'The garbage stinks.'

## Plural Indefinite Object

In HT, the prefix $7 a$ - (PL.INO) is used to co-index an understood plural third person object on a verb stem in which the object has been backgrounded or detransitivized in some way; examples are shown in (237) and (238). In each example in (237), the transitive verb bears the indefinite object suffix $-n V n$, which backgrounds the direct object. In the example in (238a), the transitive verb has been detransitivized by means of the reciprocal prefix laa- (see Section 3.2.1.2), and the transitive verb in (238b) has been detransitivized by the reflexive suffix
-kan (see Section 3.2.1.1).
(237)a. waa xta7asaanan
waa $x$-ta-7a-saa-nVn
FOC PAST-3PL.SUB-PL.INO-hit/play(VT)-INO(IMPFV)
'They played [instruments].'
[T0063: 004]
b. 7ach'anan

7a-ch'an-nVn
PL.INO-plant(VT)-INO(IMPFV) ART PREP-ground
'He sows [seeds] in the ground.'
[ELIEX1: 066]
(238) a. 7alaasaalh juu xlakaw juu lapanak

7a-laa-saa-li juu x-lakaw juu lapanak
PL.INO-RCP-hit(VT)-PFV ART 3POS-sibling ART person
'The man fought with his brother.'
[ELIEX4: 013]
b. 7alaqxtanxwíikalh juu papaanin

7a-laqxtanxwii-kan-li juu papa7-nin
PL.INO-shave-RFL-PFV ART man-PL
'The men shaved (themselves)'

The prefix $7 a$ - is also found on many lexicalized nominals that were derived from transitive verbs, as seen in the examples in (239).
(239) a. 7aqalhoona7

7a-qalhajun-nV7
PL.INO-steal(VT)-AGNM
'thief'
b. 7amaanawiin

7a-maa-nawii-n
PL.INO-CAUS-do-DVB
'owner'
c. x7atz'akanti
x-7a-tz'aka-nti
3POS-PL.INO-bite(VT)-NOM2
'its [a snake's] bites'
[T0009: 015]
Morphological ordering indicates that the plural indefinite object prefix is more closely attached to the stem than other inflectional affixes. In (240a), the plural prefix lak-, which co-indexes a third person plural object, precedes the comitative prefix $t^{\prime} a a$-; lak- and its corresponding nominal milhpaati 'song' are both underlined once, while $t^{\prime} a a$ - and its corresponding nominal Weensis 'Lawrence' are both underlined twice. However, in (240b), the plural indefinite object prefix $7 a$ - occurs on a detransitivized verb, and it follows the comitative prefix.
(240)a.

| juu ki7in | klakt'aasaay |
| :---: | :---: |
| juu ki7in | k-lak-t'aa-saa-y |
| ART PRN.1SG | 1SUB-PL-COM-play-IMPFV |
| juu milhpaati | juu Weensis |
| juu milhpaati | juu Weensis |
| ART song | ART Lawrence |
| 'I play the songs | ith Lawrence.' |

$\begin{array}{llll}\text { b. juu ki7in } & \text { kt'aa7asaanan } & \text { juu } & \text { Weensis } \\ \text { juu ki7in } & \text { k-t'aa- } 7 \text { la-saa-nVn } & \text { juu } & \underline{\text { Weensis }} \\ \text { ART PRN.1SG } & \text { 1SUB-cOM-PL.INO-play-INO(IMPFV) } & \text { ART } & \text { Lawrence } \\ \text { 'I play with Lawrence.' } & & \text { [TPWDB] }\end{array}$
Another example of the combined indefinite object suffix $-n V n$ and the plural indefinite object prefix $7 a$ - is shown in (241). An overt plural object (juu kuих, juи stapuch, у juи nipxch 'the corn, the bean(s), and the squash') is coindexed on the verb by lak- in (241a), while in (241b) there is no overt object, and the verb is affixed with the indefinite object suffix $-n V n$ and the plural indefinite object prefix 7a-.

b. 7ach'anan juu lakat'uun

7a-ch'an-nVn juu laka-t'uun
PL.INO-plant-INO(IMPFV) ART PREP-ground
'He plants (seeds) in the ground.'
[ELIEX1: 066]

## Plural Indirect Object

The prefix $7 a$ - is also used to co-index a plural indirect object. In mostbut not all-of these cases, it co-occurs with the plural prefix lak-. In all of these examples, $7 a$ - precedes $l a k$-, indicating that it is not co-indexing a plural indefinite object in these instances. Most of the cases in which 7a- and lak- cooccur involve ditransitive verbs of telling-such as jun 'tell', sakmin 'ask', and lhiijun 'order'—that have a plural third person indirect object, shown below in
(242). Note that when the third person indirect object is singular, "tell" verbs are not marked with either $7 a$ - or $l a k$-, as seen in the examples in (243).

| "ki7in | ki7in!" | maa | 7ala |
| :--- | :--- | :--- | :--- |
| ki7in | ki7in | maa | 7a-la |
| PRN.1SG | PRN.1SG | RPT | PL.I |
| ""It's me, it's me!" | he says to them.' |  |  |
| maa | 7alaksakmich . . |  |  |
| maa | 7a-lak-sakmin+ch |  |  |
| RPT | PL.INO-PL-ask(PFV)+ALD |  |  |
| 'He asked them, ". . ."" |  |  |  |

[T0055: 060]
c. waa naa 7alaklhiijuuniy ki7in
waa naa 7a-lak-lhiijun-ni-y ki7in
FOC EMP PL.INO-PL-order-DAT-IMPFV PRN.1SG
'I order (beer) for them.'
[T0066: 056]
(243)a. ". .." maa juuniych juu xkumwaree
". .." maa jun-ni-y+ch juu x-kumwaree
". .." RPT tell-DAT-IMPFV+ALD ART 3POS-compadre
، "..." his compadre tells him.'
[T0055: 009]
b. maa kasakminaach juu xaapay
maa ka-sakmin-a7+ch juu xaa-pay
RPT IRR-ask-FUT+ALD ART IPOS-father
'The father will ask her, "...""
[T0059:011]
c. waa kintalhiijuunilh p'uulhnan
waa kin-ta-lhiijun-ni-li p'ulhnan
FOC 1OBJ-3PL.SUB-order-DAT-PFV first
'They ordered (beer) for me first.'
[T0066: 052]
The combination of $7 a$ - and lak- also occurs in constructions that have only one object; in these constructions, the object argument is less animate than the subject argument. The animacy hierarchy shown in (244) is based on the Person Hierarchy first introduced in example (213) of Section 3.1.1.3. The animacy hierarchy is almost identical to the person hierarchy, but it further
divides third person plural into animate and inanimate. Again first and second person arguments are equal to each other, and they outrank third person animate arguments, which in turn outrank third person inanimate arguments.
(244) HT Animacy Hierarchy
$1^{\text {st }} \& 2^{\text {nd }}$ person $\gg 3^{\text {rd }}$ person plural animate $\gg 3^{\text {rd }}$ person plural inanimate

In the following example in (245a), the plural object lapanák 'people' is more animate than the nominal argument chiiwx 'rock(s)', and it is co-indexed on the verb by the combination of $7 a$ - and lak-. Since the subject chiiwx 'rock(s)' is inanimate, it is not obligatorily marked for plurality, and since it is less animate than the object, it is not co-indexed on the verb. When the animacy of the subject is greater than or equal to that of the object, then the plural subject is co-indexed on the verb by $t a$ - and the plural object is co-indexed on the verb by lak-, as seen in (245b).
$\begin{array}{lllll}\text { (245) a. } & \begin{array}{ll}\text { juu chiiwx } & \text { 7alakmaqnii }\end{array} & \text { juu lapanák } \\ \text { juu chiiwx } & \text { 7a-lak-maqnii } & \text { juu lapanák } \\ & \text { ART rock } & \text { PL.INO-PL-kill(PFV) } & \text { ART people } \\ & \text { 'The rock(s) killed the people.' } & & \end{array}$
[Qlak1]
b. talaklhkaa
ta-lak-lhkaan
3PL.SUB-PL-measure(PFV)
'They measured them [people or clothing].'
[TPWDB]
The animacy hierarchy can also be used to explain the presence of both $7 a$ - and lak- on the verbs of telling shown above in (242). In these constructions, the indirect object (a plural group of people) is more animate than the direct object (which is the statement being communicated). Thus, the animacy hierarchy
is relevant not just with respect to distinguishing the subject and the object, but the indirect object as well (see also Section 3.1.1.6 on Double Object Marking).

When the animacy of the indefinite subject is unknown (or not relevant), the prefixes 7alak- and lak- may be used interchangeably, as seen below in (246). Both of these examples come from the same story, and they both were uttered by the same consultant. In the story, the 'someone' who removed the protagonists from the cave is some sort of quasi-human devil or spirit whose animacy is questionable.
(246) a. laktantamakxtuukalhch
lak-tan-ta-makxtuu-kan-li+ch
PL-TORSO-INCH-take.out-INS-PFV+ALD
'Someone removed them (from the cave).'
[T0063: 079]
b. 7alaktantamakxtuukalhch

7a-lak-tan-ta-makxtuu-kan-li+ch
PL.INO-PL-TORSO-INCH-take.out-INS-PFV+ALD
'Someone removed them (from the cave).'
[T0063: 085]
I should note that my analysis of $7 a$ - and lak- differs from that found in Watters 1988 (pp. 329-331). According to Watters, the prefix 7a- is the default to co-index a plural third person object in HT, and the prefix lak- only co-occurs with $7 a$ - in HT. However, my analysis of HT 7a- and lak- is more consistent with Watters' analysis of the cognate prefixes in Tlachichilco Tepehua, where "lakmarks 'third plural (syntactic) object', while ha:- marks 'third plural unspecified object'" (p. 331). Watters goes on to state that ha:- in Tlachichilco Tepehua additionally indicates "multiple action" of the verb, but my data indicate that lakand not $7 a$ - indicates distributive or repeated action of the verb in HT.

### 3.1.1.6 Double Object Marking

One of the differences among the various languages in the Totonacan language family has to do with how the object arguments of a ditransitive verb are co-indexed on the verb; some Totonacan languages exhibit symmetrical object marking in which both objects are marked on the verb, while others exhibit asymmetrical object marking in which only one object is marked on the verb, and yet other languages exhibit some combination of symmetrical and asymmetrical object marking (MacKay and Trechsler 2005, 2006). HT displays both symmetrical and asymmetrical object marking, which I describe below.

HT double object marking can be modeled using the person hierarchy that was introduced above in example (213) of Section 3.1.1.3, and which is repeated below in (247).
(247) Person Hierarchy and Object Marking


In this hierarchy, the speech act participants (SAPs)-that is, first and second persons-are equal to each other, and they outrank all third person object arguments. A plural third person object outranks a singular third person object by virtue of the fact that a singular third person object is never overtly marked on the verb. When both objects are SAPs, object marking is symmetrical. When both objects are third person plural, object marking is also symmetrical. However,
when a SAP object co-occurs with a third person plural object, the object marking on the verb is asymmetrical. Specific examples follow.

The examples in (248) show that when both objects are speech act participants, the object marking is symmetrical: both first and second person object affixes appear on the verb. Note that the verb in (248a) is exactly the same as the verb in (248b) and that the example sentences are ambiguous with respect to the thematic roles of the objects: either object may be the patient and either object may be the benefactive/recipient argument.
(248) a. waatach xakimaa7axtaqniyanch
waatach xa-ki-maa7axtaq-ni-y-an+ch
always PAST-1OBJ-hand.over-DAT-IMPFV-2OBJ+ALD
juu kinati
juu ki-nati
ART 1POS-mother
'My mother always handed me over to you.'
'My mother always handed you over to me.'
b. waatach xakimaa7axtaqniyanch
waatach xa-ki-maa7axtaq-ni-y-an+ch
always PAST-1OBJ-hand.over-DAT-IMPFV-2OBJ+ALD
juu minati
juu mi-nati
ART 2POS-mother
'Your mother always handed you over to me.'
'Your mother always handed me over to you.'
The examples in (249) and (250) show that when one of the objects is a SAP and the other is a plural third person, object marking is asymmetrical: only the SAP is marked on the verb, regardless of its thematic role. In both (249a) and (250a), the SAP is the recipient or benefactive argument (the indirect object),
which is indicated by the valence-increasing dative suffix $-n i$ (which is underlined in both examples). In both (249b) and (250b), the SAP is the patient argument (the direct object) as evidenced by the lack of the dative suffix -ni on either of these two verbs. Also in each of these two examples, there is an overt plural third person nominal that co-references the benefactive argument (the indirect object); however this argument is not registered on the verb.
(249)a. juu ki7in xakimaa7axtaqniych
juu ki7in xa-ki-maa7axtaq-ni-y+ch

ART PRN.1SG PAST-1OBJ-hand.over-DAT-IMPFV+ALD

| juu | 7itz'alan |
| :--- | :--- |$\quad$ juu t'aku7

b. juu ki7in xakimaa7axtaq'ach
juu ki7in xa-ki-maa7axtaq-7a+ch
ART PRN.1SG PAST-1OBJ-hand.over-IMPFV+ALD
$\begin{array}{llll}\text { juu } & \text { kinati } & \text { juu } & 7 \text { atzi7in } \\ \text { juu } & \text { ki-nati } & \text { juu } & \text { 7atzi7-in }\end{array}$
ART 1POS-mother ART girl-PL
'My mother handed me over to the girls.'
[Q3I]
(250)a. waatach xakmaa7axtaqniyanch
waatach xa-k-maa7axtaq-ni-y-an+ch
always PAST-1SUB-hand.over-DAT-IMPFV-2OBJ+ALD
juu kintz'alan juu 7ixint'i
juu kin-tz'al-an juu 7ixint'i
ART 1POS-boy-PL ART PRN.2SG
'I always handed over my sons to you.'

```
b. waatach xakmaa7axtaq'anch
waatach xa-k-maa7axtaq-7a-n+ch
always PAST-1SUB-hand.over-IMPFV-2OBJ+ALD
juu 7ixint'i juu 7atzi7in
juu 7ixint'i juu 7atzi7-in
ART PRN.2SG ART girl-PL
'I handed you over to the girls.'
```

The examples in (251) show that when one of the objects is third person plural and the other is a third person singular, the plural object is co-indexed on the verb, regardless of its thematic role. ${ }^{79}$ Note, however that the prefix used to co-index a plural third person object varies depending on the thematic role of the argument. In (251a), the plural third person patient argument is co-indexed on the verb by the prefix lak-, while in (251b), the plural third person benefactive argument is co-indexed on the verb by the prefix $7 a$-, which is also used to indicate an understood plural object on a detransitivized verb (see Section 3.1.1.4). In both cases, the dative suffix $-n i$ occurs on the verb, as well.
(251)a. juu ki7in xaklaqmaa7axtaqniy

| juu | ki7in |
| :--- | :--- |
| ART | PRN.1SG |
| PAST-lak-maa7axtaq-ni-y |  |
| PASUB-PL-hand.over-DAT-IMPFV |  |

juu kintz'alan juu 7 atzi7
juu kin-tzal-an juu 7atzi
ART 1POS-boy-PL ART girl
'I used to hand over my sons to the girl.'

[^64]| b. | juu <br> ki7in <br> juu <br> ki7in | xak7amaa7axtaqniy <br> xa-k-7a-maa7axtaq-ni-y |
| :--- | :--- | :--- |
| ART | PRN.1SG | PAST-1SUB-PL.INO-hand.over-DAT-IMPFV |

Finally, when both objects are third person and plural, object marking is symmetrical, as seen in (252), where both third person plural objects are coindexed on the verb. Here the patient argument is co-indexed by lak-, and the benefactive/recipient argument is co-indexed by $7 a$-.

```
juu ki7in xak'alaqmaa7axtaqniy
juu ki7in xa-k-7a-lak-maa7axtaq-ni-y
ART PRN.1SG PAST-1SUB-PL.INO-PL-hand.over-DAT-IMPFV
```

| juu | kintz'alan | juu | 7atzi7in |
| :--- | :--- | :--- | :--- |
| juu | kin-tz'al-an | juu | 7atzi7-in |
| ART | 1POS-boy-PL | ART | girl-PL |

'I used to hand my sons over to the girls.'
Despite the very neat examples shown in (251) and (252), it is important to note that these readings are potentially the result of the overt nominals. When I tested the three verbs in isolation (i.e., without overt nouns or pronouns to clarify the plurality of the objects), each verb was ambiguous with regard to the three possible readings, as seen in (253).
(253)a. xaklaqmaa7axtaqniy
xa-k-lak-maa7axtaq-ni-y
PAST-1SUB-PL-hand.over-DAT-IMPFV
'I used to hand him over to them.'
'I used to hand them over to him.'
'I used to hand them over to them.'
b. xak7amaa7axtaqniy
xa-k-7a-maa7axtaq-ni-y
PAST-1SUB-3PL.INO-hand.over-DAT-IMPFV
'I used to hand him over to them.'
'I used to hand them over to him.'
'I used to hand them over to them.'
c. xak'alaqmaa7axtaqniy
xa-k-7a-lak-maa7axtaq-ni-y
PAST-1SUB-PL.INO-PL-hand.over-DAT-IMPFV
'I used to hand him over to them.'
'I used to hand them over to him.'
'I used to hand them over to them.'
The Spanish glosses provided by my principal consultant helped me to disambiguate the co-indexing of the third person plural arguments in the examples shown in (251) and (252) above, as well as in (254) below. For each of the examples in (254), I provided the HT clause, and my consultant approved the clause and provided a Spanish gloss. In example (254a), the prefix lak- co-indexes the patient argument milhpaati 'song(s)' on the transitive verb. In (254b) the verb is made ditransitive by the addition of the comitative prefix $t^{\prime} a a$-, and the new argument Weensis 'Lawrence' is singular; the gloss of the patient argument is still 'songs', and this argument is still co-indexed on the verb by the prefix lak-. In (254c), the comitative argument is the third person plural pronoun yu7unch, and the gloss of the patient argument milhpaati is now the singular argument 'music', indicating that it is no longer the argument which is co-indexed by lak-; instead the plural comitative argument is co-indexed by lak-.

| (254)a. | juu | ki7in | klaksaay | juu |
| :--- | :--- | :--- | :--- | :--- |
|  | juu | ki7inpaati |  |  |
| k-lak-saa-y | juu | milhpaati |  |  |
|  | ART PRN.1SG | 1SUB-PL-play(VT)-IMPFV | ART | song |
|  | 'I play the songs.' |  |  |  |



### 3.1.1.7 Speech Act Participant Marking

The reciprocal marker laa- ${ }^{80}$ is used in a non-reciprocal way when both the subject and the object of the verb are first or second person and either or both arguments are plural, as seen below in (255). In these instances, the prefix laaindicates that both participants are speech act participants and that one or both is/are plural; it does not indicate mutual, reciprocal action. In (255a), a first person subject is acting on a second person object, and in (255b), a second person subject is acting on a first person object. The only difference in the two conjugations is in the first prefix, which is $k$ - if the subject is first person-as in (255a)—and $k i(n)$ if the object is first person-as in (255b).

$$
\begin{array}{ll}
\text { (255) a. } & \text { klaat'alhnuuyaaw } \\
& \text { k-laa-t'alhnu-ya7-w } \\
& \text { 1SUB-RCP-jail(VT)-FUT-1 PL.SUB } \\
& \text { 'We're going to throw you (SG) in jail!', } \\
& \text { 'We're going to throw you (PL) in jail!' } \\
& \text { 'I'm going to throw you (PL) in jail!' }
\end{array}
$$

[T0055: 038]

[^65]b. kilaat'alhnuuyaw
ki-laa-t'alhnuu-ya7-w
1OBJ-RCP-jail(VT)-FUT-1 PL.SUB
'You (SG) are going to throw us in jail!'
'You (PL) are going to throw us in jail!'
'You (PL) are going to throw me in jail!'
If both the subject and the object are singular, the reciprocal marker is not used, as seen below in (256).

| (256) a. | kaa laay | xak'ampaalhchaan |
| :--- | :--- | :--- | :--- |
|  | kaa laa-y | xa-k-7an-pala-chaa-n |
|  | BLV can-IMPFV | PAST-1SUB-go-REP.PFV-DST-2OBJ |
|  | 'I think I would have |  |

'I think I would have been able to meet you there.'
[T0066: 023]
b. juu 7uxint'i ki7aqlht'ey7uut'i
juu 7uxint'i ki-7aqlhteyjuu-t'i
ART PRN.2SG 1OBJ-help(2SUB)-2SG.SUB.PFV
'You helped me.'
The use of the reciprocal morpheme in this non-standard reciprocal context in which SAPs are acting on each other is common to the Totonacan language family (MacKay and Trechsel 2003).

### 3.1.1.8 Split-intransitivity

Though the HT alignment system is predominantly an accusative (i.e., not ergative) one, there seems to be an emerging system of split intransitivity (Dixon 1994; Merlan 1985; Mithun 1991) in which the split involves only third person plural arguments, and it is determined by the animacy of the noun referent of the argument. If the third person plural argument of an intransitive verb is animate, as is juu lapanák 'the people' in (257a), it is co-indexed on the verb with the prefix $t a$-, the nominative third person plural subject marker. However, when the argument is inanimate like juu 7alhik 'the paper' in (257b), it is co-indexed on the
verb by the prefix lak-, which is used both to co-index multiple plurality of the argument of an intransitive verb and to co-index an accusative third person plural object.
(257) a. maa 7anch xtawiilanalh juu lapanák
maa 7anch x-ta-wii-lanalh juu lapanák
RPT there PAST-3PL.SUB-seated(IMPFV)-3PL.STV ART people
'The people lived/were there.'
[T0057: 006]
b. juu 7alhík laktanuun juu lakapaaxtuk
juu 7alhík lak-tanuun juu laka-paaxtuk
ART paper PL-inserted(IMPFV) ART PREP-point 'The papers are on the point.'
[In the image, a pointed instrument is stuck through the middle of the papers, like an old-fashioned paper holder.]
[MB22]
Split intransitivity in HT is not limited to stative verbs, but is also found with intransitive verbs that refer to uncontrolled events, as seen in the examples in (258). The animate noun in (258) a), juu tz'alan 'the boys', is co-referent with the nominative prefix $t a$-, while in (258b) the inanimate noun juи xlakmaka juu k'iw 'the tree branches' is co-referent with the prefix lak-

| a.tapaatajuu juu <br> ta-paatajua  <br>  juu <br> 3PL.SUB-fal-an  <br>  The boys fell.' |  |
| :--- | :--- |
|  |  |

b. lakpatajuu juu xlakmaka7 juu k'iw
lak-patajuu juu x-lak-maka7 juu k'iw
PL-fall(VI)(PFV) ART 3POS-PL-hand ART tree
'The tree branches fell.'
Further examples in which a third person plural subject of an intransitive verb is co-indexed by the prefix lak- are shown below in (259).
(259)a. waa lakt'ikt'i 7ixlakjuuniita juu chiiwx
waa lak-t'ikt'i 7ix-lak-jun-niita juu chiiwx
FOC PL-small PAST-PL-be-PF ART rock
'The rocks were small.'
[Qlak1]
b. laklhkulhch juu kistapu
lak-lhku-li+ch juu ki-stapu
PL-burn(VI)-PFV+ALD ART 1POS-bean
'My beans burned.'
[TPWDB]
c. xlakp'uks juu paamata
x-lak-p'uks juu paamata
PAST-PL-stink(ID)(IMPFV)ART fish
'The fish (PL) stunk.'
[TPWDB]
HT split intransitivity can be modeled using the animacy hierarchy that was introduced in example (244) of Section 3.1.1.5 and that is repeated below in (260). First and second persons are equal to each other, and they outrank third person animate arguments, which in turn outrank third person inanimate arguments. With respect to split intransitivity, the pivot point occurs between third person animate and inanimate; first, second, and third plural animate subjects are co-indexed on the verb by nominative morphology, while third person plural inanimates are co-indexed on the verb by the "accusative" prefix lak-.
(260)HT Animacy Hierarchy and Split Intransitivity
$1^{\text {st }} \& 2^{\text {nd }}$ person $\gg 3^{\text {rd }}$ person plural animate $\gg 3^{\text {rd }}$ person plural inanimate

Above I called this pattern an "emerging" one because I believe that this is relatively new pattern in HT for various reasons. First, no other documented Totonacan language exhibits patterns of syntactic or morphosyntactic split
alignment or split intransitivity; instead they are all documented as being strictly accusative in their syntax and morphology.

Second, the pattern of split intransitivity in Huehuetla Tepehua is an elusive one because inanimate nominals are not obligatorily marked for plurality nor are inanimate arguments obligatorily co-indexed on the verb. Furthermore, though the pattern manifested itself in utterances that were spontaneously produced by my consultants, it did not always emerge from-or withstand the test of-elicited grammaticality judgments. I first found the split-intransitive pattern in sentences that were spontaneously produced by my consultants; when I tried to test the pattern during elicited grammaticality judgments, I found that in most cases, both patterns (a strictly accusative one and a split one) were acceptable. For example, my consultant had given me the example in (261a), in which the intransitive verb is marked with lak-. Later, I offered the example in (261b), in which the same verb is marked with ta-, and the example in (261c), in which the verb is marked with both $t a$ - and lak-. My consultant accepted both examples, and he told me that all three have the same meaning.

| juu jaak | lakchaay |
| :--- | :--- |
| juu jaak | lak-chaa-y |
| ART banana | PL-ripen(VI)-IMPFV |
| 'The bananas ripen.' |  |

[PDLMA2005]
b. juu jaak tachaay
juu jaak ta-chaa-y ART banana 3PL.SUB-ripen(VI)-IMPFV 'The bananas ripen.'
$\begin{array}{lll}\text { c. } & \text { juu jaak } & \text { talakchaay } \\ \text { juu jaak } & \text { ta-lak-chaa-y } \\ \text { ART banana } & \text { 3PL.SUB-PL-ripen(VI)-IMPFV } \\ \text { 'The bananas ripen.' }\end{array}$
The same consultant told me the sentence in (262a) when describing a drawing from Melissa Bowerman's Topological Picture Series. Here the intransitive verb is marked with lak-. When I changed the subject to 'rocks', my consultant produced the example in (262b), with the same verb again marked with lak-. When I tested the sentence in (262c), in which the same verb is marked with $t a$-, he rejected it. Of course, this set of examples raises the question of why the examples in (261b) and (261c) are grammatical while the example in (262c) is not. And, if I asked the same set of questions of the same consultant on a different day, would the answers still remain the same? These are questions for which I currently do not have answers.

| (262) a. | lajkilhtay | juu puumpu7 |
| :--- | :--- | ---: |
|  | lak-kilhta-y | juu puumpu7 |
|  | PL-hanging(VI)-IMPFV | ART clothing |
|  | 'The clothing is hanging (e.g., to dry).' |  |

[MB37-1]
b. lajkilhtay juu chiiwx juu laktalhpa lak-kilhta-y juu chiiwx juu lak-talhpa PL-hanging(VI)-IMPFV ART rock ART PREP-hill 'The rocks hang from the hill.'

| c. | *takilhtay | juu chiiwx | juu | laktalhpa |
| :--- | :--- | :--- | :--- | :--- |
| ta-kilhta-y | juu | chiiwx | juu | lak-talhpa |
| 3PL.SUB-hanging(VI)-IMPFV | ART rock | ART | PREP-hill |  | Target: 'The rocks hang from the hill.'

Third, as is pointed out in the literature on grammaticalization, polysemous morphemes may give rise to grammatical change in a language (e.g., Heine, Claudi, and Hünnemeyer 1991; Hopper and Traugott 2003). The prefix
lak- exhibits more polysemy than any other morpheme in Huehuetla Tepehua: this prefix is used (i) to indicate multiple plurality of the subject of an intransitive verb, as seen above in section 3.1.1.2, (ii) to indicate distributive action of a verb, also seen in section 3.1.1.2, (iii) to co-index a third person plural object, as seen in section 3.1.1.4, (iv) to mark plurality on inanimate and animate nouns (see Chapter 4), and (v) to marked plurality on adjectives (see Chapter 5).

Fourth, the use of the prefix lak- as a verbal plural marker overlaps with the use of $7 a$ - as a verbal plural marker. There is evidence from Watters 1988 that in Huehuetla Tepehua, the prefix $7 a$ - was the default prefix to co-index a third person plural object and that the prefix lak- sometimes co-occurred with $7 a$ - and sometimes did not. In my own data, the reverse is true in that (i) lak-co-indexes a plural third person object, (ii) $7 a$ - co-indexes an understood plural object on a detransitivized verb and an indirect object, (iii) the two co-occur to co-index a plural third person indirect object and/or a plural third person direct object if it outranks the subject in animacy, and (iv) the two frequently co-occur without any overt change in the meaning. Next, the use of lak- as a marker of distributivity overlaps with the meanings of two HT suffixes: -pala, which marks repetitive action of the verb (see Section 3.2.3.7) and -qoju, which indicates that the action of the verb is distributed equally over all members of either the subject or object argument, depending on the transitivity of the verb (see Section 3.2.3.9).

Finally, HT is a moribund language. The children are not learning it, their parents do not use it, and their grandparents address them in Spanish and speak Tepehua only amongst themselves. Once a language falls into disuse, the rate of
grammatical and phonological change escalates. I believe that this is what is happening in HT. Given the polysemy of the morpheme lak-, plus the fact that HT has other morphemes that provide similar (or the same) meanings as lak-, it is quite possible that HT is undergoing a grammatical change that might result in an unquestionable split in its alignment system.

### 3.1.1.9 Summary of Person Marking Inflection

The nominative person marking affixes are summarized in Table 13, and the accusative affixes are summarized in Table 14. Note that several of the affixes have one meaning when used for nominative inflection and a slightly different meaning when used as accusative inflection; these affixes are shown in bold in the tables.

Table 13: Nominative Affixes

| Nom Affix | Meaning(s) |
| :---: | :---: |
| k- | $1^{\text {st }}$ person singular subject, $1^{\text {st }}$ person plural exclusive subject |
| -w | $11^{\text {st }}$ person plural subject |
| -t'i | $2^{\text {nd }}$ person singular subject in the perfective aspect with $3^{\text {rd }}$ person or $1^{\text {st }}$ person singular object |
| -t' it | $2^{\text {nd }}$ person plural subject with $3^{\text {rd }}$ person object |
| -7i | $2^{\text {nd }}$ person plural subject in the future tense |
| ta- | $3^{\text {rd }}$ person plural (animate) subject |
| lak- | multiple plural subject of intransitive verb, $3^{\text {rd }}$ person plural (inanimate) subject |
| -kan | indefinite subject |

Table 14: Accusative Affixes

| Acc Affix | Meaning |
| :--- | :--- |
| kin- | $1^{\text {st }}$ person object |
| $-\mathbf{w}$ | $\mathbf{1}^{\text {st }}$ <br> $\mathbf{2}^{\text {nd }}$ <br> person plural object with $\mathbf{2}^{\text {nd }}$ <br> person plural object with $\mathbf{1}^{\text {st }}$ person subject, <br> person singular subject |
| -n | $2^{\text {nd }}$ <br> $1^{\text {st }}$ <br> person object, |
| laa- | SAP acting on SAP |

The affixal configurations for an intransitive verb are shown in Table 15. These affixal configurations are also used on a transitive verb that has a third person singular object, which is not overtly marked on the verb.

Table 15: Affix Configurations: Intransitive Verbs \& Transitive Verbs with Third Person Singular Objects ${ }^{81}$

| Subject | Singular | Plural |
| :---: | :---: | :---: |
| first | k-V | inclusive: V-w <br> exclusive: $\mathrm{k}-\mathrm{V}-\mathrm{w}$ |
| second | $\begin{aligned} & \hline \mathrm{V}^{\prime} \\ & \mathrm{V}^{\prime} \text {-t'i (perfective aspect) } \end{aligned}$ | $\begin{aligned} & \text { V'-t'it } \\ & \text { V'-7i-t'it (future tense) } \end{aligned}$ |
| third | V | ta-V (animate) <br> lak-V (inanimate) |
| indefinite | V-kan | --- |

The affix configurations for a transitive verb are shown in Table 16. Note that the configurations involving a third person singular object are included in this table as well as in Table 15.

Table 16: Transitive Verb Affix Configurations ${ }^{82}$

| Persons | Affixal Configuration |
| :---: | :---: |
| 1SG SUB > 3PL OBJ | k-lak-V |
| 1 PL INCL SUB $>3$ PL OBJ | (7a-)lak-V-w |
| 1PL EXCL SUB > 3PL OBJ | k-lak-V-w |
| 1 SG SUB $>2$ SG OBJ | k-V-n |
| 1 SG SUB $>2$ PL OBJ | k-laa-V-w |
| $1 \mathrm{PL} \mathrm{SUB}>2$ SG OBJ | k-laa-V-w |
| $1 \mathrm{PL} \mathrm{SUB}>2 \mathrm{PL}$ OBJ | k-laa-V-w |
| 1 SG SUB $>$ INO | k-V-nVn |
| 1 SG SUB $>$ PL.INO | k-7a-V-nVn |
| 1 PL INCL SUB $>$ INO | V-nVn-aw |
| 1 PL INCL SUB > PL INO | 7a-V-nVn-aw |
| 1 PL EXCL SUB $>$ INO | k-V-nVn-aw |
| 1 PL EXCL SUB > PL INO | k-7a-V-nVn-aw |
| 2 SG SUB $>1$ SG OBJ | ki-V'(-t'i) |
| $2 \mathrm{PL} \mathrm{SUB}>1 \mathrm{SG}$ OBJ | ki-laa-V-w |
| $2 \mathrm{SG} \mathrm{SUB}>1 \mathrm{PL}$ OBJ | ki-laa-V-w |
| $2 \mathrm{PL} \mathrm{SUB}>1 \mathrm{PL} \mathrm{OBJ}$ | ki-laa-V-w |

[^66]| 2SG SUB > 3PL OBJ | (7a-)lak-V' |
| :---: | :---: |
| $2 \mathrm{PL} \mathrm{SUB}>3 \mathrm{PL}$ OBJ | (7a-)lak-V'(-7i)-t'it |
| 2 SG SUB $>$ INO | V'-nVn(-t'i) |
| 2 SG SUB $>$ PL INO | $7 \mathrm{a}-\mathrm{V}^{\prime}-\mathrm{nVn}\left(-\mathrm{t}^{\prime} \mathrm{i}\right)$ |
| 2 PL SUB $>$ INO | V'-nVn(-7i)-t'it |
| 2 PL SUB $>$ PL INO | $7 \mathrm{a}-\mathrm{V}^{\prime}-\mathrm{nVn}(-7 \mathrm{i})$-t'it |
| 3 SG SUB $>1$ SG OBJ | kin-V |
| $3 \mathrm{SG} / \mathrm{PL}$ SUB > 1PL OBJ | kin-ta-V-n |
| 3 SG SUB $>2$ SG OBJ | V-n |
| $3 \mathrm{SG} / \mathrm{PL}$ SUB > 2PL OBJ | ta-V-n |
| 3 SG SUB $>3$ SG OBJ | V |
| $3 \mathrm{SG} \mathrm{SUB}>3$ PL OBJ | (7a-)lak-V |
| $3 \mathrm{PL} \mathrm{SUB}>3$ PL OBJ | ta-lak-V |
| 3 SG SUB $>$ INO | V-nVn |
| 3 SG SUB $>$ PL INO | 7a-V-nVn |
| 3 PL SUB $>$ INO | ta-V-nVn |
| 3 PL SUB > PL INO | ta-7a-V-nVn |
| INS $>1$ SG OBJ | k-V-kan |
| INS $>1$ PL OBJ | V-kan-aw |
| INS $>2$ SG OBJ | V'-kan(-t'i) |
| INS $>2$ 2PL OBJ | V'-kan(-7i)-t'it |
| INS $>3$ SG OBJ | V-kan |
| INS $>3$ PL OBJ | (7a-)lak-V-kan |

The HT system of person and number inflection allows for a remarkable about of ambiguity. At times, it seems that instead of clarifying or disambiguating the roles of verbal arguments, the inflectional system serves to confuse and ambiguate them. Normally, in such a situation, we would expect discourse pragmatics to disambiguate the argumental roles, and this is true of HT, in which the roles of the arguments are made clear by the discourse context of the utterances.

### 3.1.2 Tense, Aspect, and Mood

HT verbs may be inflected for tense (Section 3.1.2.1), aspect (Section 3.1.2.2), and/or mood (Section 3.1.2.3).

### 3.1.2.1 Tense

There are three tenses in HT: present, past, and future. All verb stems have inherent present tense, in that the present tense is not marked on the verb. Only the past and future tenses are discussed further here.

Past Tense Prefix $x$ - (xa-~7ix-)
In HT, past tense is marked on the verb by the prefix $x$ - and its allomorphs $x a$ - and 7ix-, shown below in example (263).
(263)a. maa jaantuch xlakaxk'in
maa jaantu+ch $\quad \mathbf{x}$-lakaxk'in
RPT NEG+ALD PAST-love(IMPFV)
'She didn't love it anymore.'
[T0003: 031]
b. xakjuntaw vecinos
xa-k-jun-ta-w vecinos
PAST-1 SUB-be-PF-1PL.SUB neighbors
'We were neighbors.'
[T0022: 046]
c. naa kan juu lhiiway 7ixjuuniita juu kutanch
naa kan juu lhiiway 7ix-jun-niita juu kutanch
very delicious ART meat PAST-be-PF ART yesterday
'Yesterday the meat was delicious.'
[ELIEX2: 038]
Of the three past tense allomorphs ( $x$-, $x a$-, and 7ix-), only $x a$ - occurs before the first person subject prefix $k$ - (shown in (263b)) and the first person object prefix kin-. In all other environments, the three allomorphs are in free variation, with $x$ - occurring the most frequently, and 7ix- occurring the least frequently. Usually, though not always, $x a$ - and $7 i x$ - occur in environments in
which the presence of $x$ - would create a consonant cluster that is difficult to produce or discern (e.g., before /s/, /lh/, /x/, /ch/, or /tz/).

The past tense prefix co-occurs with the imperfective, perfective, and perfect aspect markers. When the past tense occurs with the imperfective aspect, as in (264a), the implication is that the action of the verb was ongoing or habitual at some reference point in the past. When the past tense occurs with the perfect aspect, as in (264b), the implication is that the state indicated by the verb had already been entered into or accomplished at some past reference point.


The combination of the past tense and the perfective aspect produces an irrealis meaning similar to the Spanish past subjunctive, as seen below in (265). ${ }^{83}$

| (265) chach | xmilh | juu | kinati7an |
| :---: | :--- | :--- | :--- |
| cha-ch | x-min-li | juu | kin-nati-7an |
| DST-ALD | PAST-come-PFV | ART | 1POS-mother-PL.POS |

'If only our mother would have come.'
[T0066: 015]

## Future tense suffix $-\boldsymbol{y a} 7 \sim-a^{7}$

The future tense suffix $-y a 7$ has one allomorph $-a 7$. The allomorph $-y a 7$ occurs after a vowel, shown in (266a), and the allomorph $-a 7$ occurs after a consonant, as seen in (266b) and (266c). ${ }^{84}$

[^67](266) a. katat'alhnuuyaach
ka-ta-t'alhnuu-ya7+ch
IRR-3PL.SUB-jail-FUT+ALD
'They will put him in jail.'
[T0055: 030]
b. maa ka7anaach laqtz'ini7 juu xnati
maa ka-7an-a7+ch laqtz'in-nV7 juu x-nati

RPT IRR-go-FUT+ALD see-INF ART 3POS-mother
'It [the millipede] goes to see its mother.'
[T003: 010]
c. kchaqxa7 laqatam xmaqpu
k-chaqx-a7 laqa-tam x-maqpu
1SUB-cut.down-FUT CL:general-one 3POS-branch
'I will cut down one branch.'
[TPWDB]
When the subject is either third person or first person plural inclusive (i.e., not marked with the first person prefix $k$-), the future tense is accomplished through the combination of the future suffix $-y a 7(\sim-a 7)$ and the irrealis mood prefix $k a$-, as seen in (267).

| (267) a. | naa | k'uusch | katasuya7 |
| :--- | :--- | :--- | :--- |
|  | naa | k'uus+ch | ka-tasu-ya7 |
|  | very | pretty+ALD | IRR-look-FUT |
|  | 'It is going to be pretty.' |  |  |

[T0069: 275]
b. kalaqoxiyaawch lakapaaxpit
ka-laqoxi-ya7-w+ch laka-paaxpit
IRR-fix-FUT-1 PL.SUB+ALD PREP-jack.plane
'We will fix it with a jack plane.'
[T0069: 133]
However, when the subject is first person singular, first person plural exclusive (i.e., it is marked with $k$-), or second person (singular or plural), the irrealis prefix appears as $7 a$-, as seen in (268a), (268b), and (268c), respectively.

[^68](268)a. 7akpuutay7ulaayaach

7a-k-puu-tay7ulaa-ya7+ch
IRR-1 SUB-INST-begin-FUT+ALD
'I'm going to begin here.'
[T0069: 237]
b. waa tz'iisin 7akminaaw
waa tz'iisin 7a-k-min-a7-w
FOC early IRR-1SUB-come-FUT-1PL.SUB
'We are going to come early.'
[T0060: 241]
c. toqoxaay 7awayna7
toqoxaay $7 \mathbf{a}$-wajin-a7
later IRR-eat-FUT
'You (SG) will eat later.'
Furthermore, when the subject is first person singular, first person plural exclusive, or second person, the $7 a$ - allomorph frequently is omitted altogether, as seen in (269a), (269b), and (269c), respectively. One consultant told me that omission of the $7 a$ - prefix is the fast way of speaking, and that it is more correct to pronounce the prefix.
(269) a. wachu7 k7anchoqoya7
wachu7 k-7an-choqo-ya7
also 1SUB-go-AGAIN-FUT
'I'm going to go again, too.'
[T0055: 099]
b. klaat'alhnuuyaawch
k-laa-t'alhnuu-ya7-w+ch
1SUB-RCP-jail-FUT-1PL.SUB+ALD
'We are going to put you in jail.'
[T0055: 0038]
c. waa lhk'a7iiya7 juu 7anii
waa lhkan-7ii-ya7 juu 7anii
FOC measure(2SUB)-bring-FUT ART here
'Are you (SG) going to measure it from here?'
[T0069: 304]

Additionally, when the object is first person, the irrealis prefix does not occur, ${ }^{85}$ as seen in (270).

| (270) nii | k'i7uya7 | ka7uyaan | juu | Siiliiyaa |
| ---: | :--- | :--- | :--- | :--- |
| nii | kin-7u-ya7 | ka-7u-ya7-n | juu | Cecilia |
| COMP | 1OBJ(2SUB)-eat-FUT | IRR-eat-FUT-2OBJ | ART | Cecilia |
| 'If you eat me, Cecilia is going to eat you.' |  |  |  |  |

[T0058: 031]
A plural second person subject is always doubly marked for future tense by the suffix $-7 i$ that occurs after the future suffix $-y a 7(\sim-a 7)$ and before the second person plural subject suffix $-t^{\prime} i t$, as seen below in (271).

| (271)a. | 7inaa7it'it | juu lakxkaan |
| :--- | :--- | :--- | :--- |
|  | 7an-a7-7i-t'it | juu lakxkaan |
|  | go(2SUB)-FUT-2.PL.SUB.FUT-2PL.SUB | ART river |
|  | 'You all will go to the river.' |  |

b. toqoxaay 7awaynaa7it'it
toqoxaay 7a-wajin-a7-7i-t'it
later IRR-eat-FUT-2PL.SUB.FUT-2PL.SUB
'You all will eat later.'
The negative future is accomplished by means of the combination of the irrealis prefix $k a$-, the negative future prefix $t i-$, and the perfective aspect, as seen below in (272b). I have found no other construction in which the negative future prefix $t i-$ occurs.
(272) a.

| kachina7 | juu lhi7 | juu Xiiwan |
| :---: | :---: | :---: |
| ka-chin-a7 | juu lhi7 | juu Xiiwan |
| IRR-arrive.here-FUT | ART tomorrow | ART Juan |
| Juan will arrive he | omorrow. |  |

[Q3I]

[^69]| b. | jaantu katichilh | juu | lhi7 | juu |
| :--- | :--- | :--- | :--- | :--- |
| jaantu ka-ti-chin-li | juu | lhi | juu | Xiiwan |
| NEG IRR-NEG.FUT-arrive.here-PFV | ART | tomorrow | ART | Juan |
| 'Juan will not arrive here tomorrow.' |  |  | [Q3I] |  |

### 3.1.2.2 Aspect

There are three inflectional aspects in HT: the imperfective aspect, the perfective aspect, and the perfect aspect.

## Imperfective Aspect

According to Smith (1997), "the unmarked imperfective spans an interval that is internal to the situation" (p. 73). In HT, the imperfective aspect is used in a verbal predication that is unbounded, ongoing, incomplete, or habitual. The predication may refer to an event or a state.

The imperfective aspect suffix $-y$ has one allomorph, $-7 a$. The $-y$ allomorph occurs after a vowel-final stem as seen in (273a); the $-7 a$ allomorph occurs after a stop-final stem, shown in (273b) and (273c). Continuant-final stems are not overtly marked for imperfective aspect, as seen in (273d), where the stem ends in a nasal consonant, and in (273e), where the stem ends in a non-nasal continuant consonant.
(273) a. puus jaantuch tu7u7 xt'alay
puus jaantu+ch tu7u7 x-t'ala-y
well NEG+ALD something PAST-do-IMPFV
'Well, he didn't do anything.'
[T0054: 002]
b. ktasp'it'a
k-tasp'it-7a
1SUB-return- IMPFV
'I am returning.'
c. xtapaastak'ach juu kimpay7an
$\mathbf{x}$-tapaastak-7a+ch juu kin-pay-7an
PAST-remember-IMPFV + ALD ART 1POS-father-PL.POS
'They remembered Our Father.'
[T0063: 082]
d. lakak'aatanch xtalhii7anch
laka-k'aatan+ch x-ta-lhii7an+ch
PREP-festival+ALD PAST-3PL.SUB-take-IMPFV+ALD
'They took her to the festivals.'
[T0063: 023]
e. porque tuuka7 xta7aqpaax
porque tuu + ka 7 x-ta-7aq-paax
because NEG+JST PAST-3PL.SUB-bathe(IMPFV)
'because they still did not baptize.'
[T0059: 004]
Imperfective aspect may occur with or without the past tense prefix, as seen below in (274).
(274)a. juu doktornin jaantu tamispaay
juu doctor-nin jaantu ta-mispaa-y ART doctor-PL NEG 3PL.SUB-know-IMPFV
juu xlak'uch'un7an
juu x-lak-k'uch'u-n-7an
ART 3POS-PL-cure-DVB-PL.POS
'The doctors don't know their cures.'
[T0009: 014]
b. maa 7ixtaxtuy juu laktalhpa
maa $\quad$-taxtu-y juu laka-talhpa
RPT PAST-go.out-IMPFV ART PREP-hill
'It [an animal] would go out in the hills.'
[T0020: 004]

## Perfective Aspect

According to Smith (1997), "sentences with a perfective viewpoint present a situation as a whole. The span of the perfective includes the initial and final endoints of the situation: it is closed informationally" (p. 66). Furthermore, stative situations do not appear in the perfective viewpoint. In HT, only verbs that
refer to an event (and not a state) may be inflected for imperfective aspect, and these events are temporally bounded within an initial and a final endpoint.

The perfective aspect in Huehuetla Tepehua is morphologically marked by the suffix $-l i$ and its allomorph $-l h .{ }^{86}$ More importantly, however, perfective aspect is indicated phonologically by a stressed penultimate syllable, and I will return to this point below. The allomorph $-l h$ is phonologically derived from the allomorph $-l i$ by means of neutralization. ${ }^{87}$ The allomorph -li surfaces only when (i) it is followed by the temporal clitic + ch, and (ii) it follows a consonant or semi-vowel (-li never follows a vowel). Examples are shown in (275).
(275) a. kujlich
kuj-li+ch
wake.up-PFV+ALD
'He already woke up.'
[ELIEX2: 072]
b. ch'itlich juu 7alaxux juu Xiiwan
ch'it-li+ch juu 7alaxux juu Xiiwan squeeze-PFV+ALD ART orange ART John
'John squeezed the orange.'
[ELIEX1: 103]
c. ta7aqpaxlich
ta-7aqpax-li+ch
3PL.SUB-baptize-PFV+ALD
'They were baptized.'
[T0050: 023]
d. maa taqalhaputaylich
maa ta-qalhaputay-li+ch
RPT 3PL.SUB-intercept-PFV+ALD
'They intercepted it.'
[T0020: 018]

[^70]The allomorph - lh always occurs in the one environment in which -li does not: after a stem-final vowel, as seen in the examples in (276).
$\begin{array}{lllll}\text { (276)a. } & \begin{array}{ll}\text { jaantu7as } & \text { xtaqnilh }\end{array} & \text { juu } & \text { tuumiin } \\ \text { jaantu+7as } & \text { xtaq-ni-li } & \text { juu tuumiin } \\ & \text { NEG+TAGQ } & \text { give-DAT-PFV } & \text { ART money } \\ & \text { 'Didn't he give her the money?' }\end{array}$
[T0054: 015]
b. tzukulh maa laqaxqotnu7
tzuku-li maa laqaxqot-nV7
begin-PFV RPT unload-INF
'He began to unload it.'
[T0055: 095]
c. maa laqtz'ilh juu lapanak
maa laqtz'in-li juu lapanak
RPT see.PFV-PFV ART person
'He saw the person.'
[T0022: 028]
However, -li and -lh are not in complementary distribution because they both occur after consonants and semi-vowels. Examples of $-l i$ are shown above in (275), and examples in which -lh follows a consonant or semi-vowel are shown below in (277).

$$
\begin{array}{rlllll}
\text { (277)a. } & \begin{array}{l}
\text { taspitlh } \\
\text { taspit-li } \\
\text { return-PFV } \\
\\
\\
\text { 'He returned.' }
\end{array} \\
\text { b. } & \begin{array}{l}
\text { chachakxlh } \\
\\
\text { chachakx-li }
\end{array} \text { juu k'iw } & \text { juu k'iw } & \text { juu lapanak } \\
& \text { puncture-PFV ART tree } & \text { ART person } \\
& \text { 'The man tapped the tree.' }
\end{array}
$$

[T0022: 031]
[ELIEX1: 006]
c. lhiitamawlh laqatam xlaqpuutanuti
lhii-tamaju-li laqa-tam x-laqpuutanuti
APPL-buy-PFV CL-one 3POS-mask
'He bought himself a mask.'
[T0055: 048]
d. kalhtaylh juu lhasakminin kalhtay-li juu lhasakmin-in respond-PFV ART question-PL 'He responded to the questions.'
[ELIEX2: 032]
Furthermore, both $-l i$ and $-l h$ may be followed by the temporal clitic $+c h$, as seen above in (275) and below in (278).
(278) a. 7atz'alalhch y tanuuchalhch juu laktalhpa 7atz'ala-li+ch y tanuu-chaa-li+ch juu lak-talhpa run-PFV+ALD and enter-DST-PFV+ALD ART PREP-hill 'It ran and went into the cave.'
[T0020: 020]
b. ta7alhch
ta-7an-li+ch
3PL.SUB-go-PFV+ALD
'They left.'
[T0055: 079]
To complicate matters further, the overt perfective aspect marker -lh may optionally be omitted from a polysyllabic word when it follows a stem-final vowel and precedes a word boundary, as seen in the examples in (279) where the (a) example is marked with the perfective aspect suffix, while the (b) example is not. ${ }^{88}$ This omission seems to be age-graded in that the younger the speaker is, the more likely he or she is to omit the overt perfect aspect marker $-l i \sim-l h$.
(279) a.

| waa | maaqeswaalhch | juu 7 atzi7 |
| :--- | :--- | :--- |
| waa | maaqeswaa-li+ch | juu 7 atzi7 |
| FOC scare-PFV+ALD | ART girl |  |

'He scared the girl.'
[T0054: 003]
b. maa maaqeswaa juu pumatam papa7
maa maaqeswaa juu puma-tam papa7
RPT scare(PFV) ART CL.HUM-one gentleman
'It scared an old man.'
[T0022: 054]

[^71]However, loss of the perfective aspect marker does not correlate with a loss of distinction between the perfective aspect and the imperfective aspect (which is the unmarked aspect for a continuant-final stem) for two reasons: first, though continuant-final stems are unmarked in the imperfective aspect, they are marked in the perfective aspect, as seen below in the examples in (280).
(280)a. qex juu xpuumpu7 juu kiinati
qex juu x-puumpu7 juu kin-nati
rip(IMPFV) ART 3POS-cloth ART 1POS-mother
'My mother rips the cloth.'
b. waa qexlh juu xpuumpu7
waa qex-li juu x-puumpu7
FOC rip-PFV ART 3POS-clothing
'His clothing ripped.'
[TPWDB]
Second, the two aspects differ with respect to primary stress assignment in polysyllabic words. In the perfective aspect, the primary stress rule ${ }^{89}$ ensures that the primary stress always falls on the penultimate syllable of polysyllabic verbs with third person (singular or plural) or first or second person singular subjects. Similarly, the primary stress rule ensures that primary stress falls on the final syllable of these verbs in the imperfective aspect, as seen in (281). In the imperfective example in (a), the final syllable of the verb xtamaqniíy 'they would kill it' receives primary stress because the word ends in a sonorant consonant [j]. In the perfective example in (b), the penultimate syllable of the verb talaamáqnii 'they killed each other' receives primary stress because the word does not end in a sonorant consonant.

[^72](281)a. xtamaqníly xta7uych
$x$-ta-maqnii-y x-ta-7u-y+ch
PAST-3PL.SUB-kill-IMPFV PAST-3PL.SUB-eat-IMPFV+ALD
'They would kill it and they would eat it.'
[T0059: 041]
b. waa talaamáqnii
waa ta-laa-máqnii
FOC 3PL.SUB-RCP-kill(PFV)
'They killed each other.'
[TPWDB]
In the perfective aspect (irregardless of tense or mood or the person of the subject), nasal-final stems undergo deletion of the stem-final nasal, as seen below in (282). ${ }^{90}$ Frequently, this nasal-deletion is the only indication of perfective aspect, as seen in the (b) example below.
(282)a. maa milhch 7awilhchan nii lhiitajukalh
maa min-li+ch 7awilhchan nii lhiitaju-kan-li
RPT come-PFV+ALD day COMP find-INS-PFV
'The day came that they found it.'

| b. waa laaych | 7aklak7aw | paxnin |
| :--- | :--- | :--- |
| waa laa-y+ch | 7a-k-lak-7an-w | pax-nin |
| FOC can-IMPFV+ALD | IRR-1SUB-PL-go.PFV-1PL.SUBJ | bathe-INF |

'If only we were able to go bathe.'
c. nii laqtz'ínkalh lhtuj xaqatajíkalh
nii laqtz'in-kan-li lhtuj xaqataji-kan-li
COMP see-INS-PFV ID:pull pull.out-INS-PFV
'When they saw her, they pulled her out (of the fire).' [T0054: 080]
Second person singular is marked in two different ways in the perfective aspect. First, the suffix $-t$ ' $i$ marks second person singular subject in the perfective aspect when the root ends in a long vowel or non-nasal consonant, as seen in (283a) and (283b), respectively. The suffix $-t^{\prime} t$ is also used when a monosyllabic root ends in a short vowel, as seen in (283c). Note that in (283d), the stem-final

[^73]nasal consonant is deleted in the perfective aspect, leaving a stem-final long vowel to which $-t^{\prime} i$ is suffixed.
(283)a. k'imaaqeswaat'i
kin-maa-qeswaa-t'i
1OBJ-CAUS-be.scared-2SG.SUB.PFV
'You scared me.'
[T0054: 030]
b. tiis chawaych juu t'aa7ot'i?
tiis chaway+ch juu t'aa-qot-t'i
Q now+ALD REL COM-drink-2SG.SUB.PFV
'Who did you drink with now?'
[T0066: 292]
c. jaantu k'i7ut'i
jaantu ki-7u-t'i
NEG 1OBJ-eat-2SG.SUB.PFV
'Don't eat me!'
[T0058: 028]
d. lhk'aat'i
lhk'aan-t'i
measure.PFV-2SG.SUB.PFV
'You measured it.'
[TPWDB]
Second, when a polysyllabic root ends in a short vowel, there is no overt suffix that co-indexes a second person singular subject in the perfective aspect, as seen below in (284). Note that if there are plain stops or affricates in the root, they are glottalized, as seen in (284a). In (284b), the stem-final nasal consonant is deleted in the perfective aspect, leaving a stem-final short vowel, to which $-t^{\prime} i$ does not affix.

$\begin{array}{lll}\text { (284) a. } & \begin{array}{l}\text { ch'ap'ach } \\ \text { chapa+ch }\end{array} & \begin{array}{l}\text { juu 7anii } \\ \text { juu 7anii }\end{array} \\ & \text { 'You grab it here.' }\end{array}$
'You grab it here.'
[T0069: 082]
b. laqtz'i
laqtz'in(2SUB.PFV)
'You saw him.'
Perfective aspect is not overtly marked when the subject is either first or second person plural. The stress rule does not distinguish imperfective and perfective aspects when the subject is first person plural because the word-final suffix -(a)w that marks this person/number ends in a sonorant consonant that always attracts stress to a final syllable. Nor does the stress rule distinguish the two aspects when the subject is second person plural because this word-final suffix $-t$ 'it ends in a non-sonorant consonat, so the syllable preceding it always receives the primary stress.

A stem-final nasal is deleted in the perfective aspect, as seen in the examples below in (285), (286), and (287). Examples with a first person plural subject are shown in (285), examples with a second person plural subject are shown in (286), and examples with a third person plural subject are shown in (287). The (a) examples are imperfective aspect and the (b) examples are perfective aspect.
(285) a. laqtz'inaw
laqtz'in-aw
see(IMPFV)-1PL.SUB
'We see him.'
b. laqtz'iw
laqtz'in-w
see(PFV)-1PL.SUB
'We saw him.'
(286)a. laqtz'inat'it
laqtz'in-at'it
see(IMPFV)-2PL.SUB
'You (PL) see him.'
b. laqtz'it'it
laqtz'in-t'it
see(PFV)-2PL.SUB
'You (PL) saw him.'
(287) a. talaqtz'in
ta-laqtz'in
3PL.SUB-see(IMPFV)
'They see him.'
b. talaqtz'ilh
ta-laqtz'in-li
3PL.SUB-see(PFV)-PFV
'They saw him.'

## Perfect Aspect

Perfect aspect in HT corresponds to Smith's (1997) definition: "Perfect sentences locate a situation prior to Reference Time. ${ }^{91}$ They have a stative value, and they ascribe to the subject a property based on participation in the prior situation" (p. 186).

The perfect aspect in HT is marked on the verb by the suffix -ta. Examples are shown below in (288). This suffix has one allomorph -niita, whichaccording to Watters (1988)—occurs only with the verb jun 'be' and comes from the Totonac perfect aspect suffix -ni:ta (p. 57, ft. 7).
(288) a. puus kaa yuuch juu 7ixtaqnitach
puus kaa yuuch juu 7ix-xtaq-ni-ta+ch
well BLV PRN.3SG REL PAST-give-DAT-PF+ALD
'Well, I think it was he who she had given it to.'
[T0054: 016]

91 "Reference Time is the temporal standpoint of a sentence" (Smith 1997: 101).
b. juu yuuch waa xt'alalhwa7tach
juu yuuch waa $x$-t'alalhwa7-ta + ch ART PRN.3SG FOC PAST-distribute-PF+ALD
'She had divided it (the money) up.'
[T0054: 018]
c. maa xkiitasp'itach x7ast'aanta
maa x-kii-tasp'it-ta+ch x-7a-st'aa-nVn-ta
RPT PAST-RT-return-PF+ALD PAST-PL.OBJ-sell-INO-PF
juu pumatam xkumwarii
juu puma-tam x-kumwarii
ART CL:human-one 3POS-compadre
'One compadre had returned from selling.'
[T0055: 003-4]
Perfect aspect occurs in the present (morphologically unmarked) tense, as well as the past tense, as seen below in (289). It does not occur in the future tense.
(289)a. maa niita yaa juu laka7uun maa nii-ta yaa juu laka-7uun RPT die-PF standing ART PREP-air 'He has died/is dead in the air.'
[T0022: 010]
b. xniitach juu maqtili7
$\mathbf{x}$-nii-ta+ch juu maqtili7
PAST-die-PF+ALD ART wild.animal
'The wild animal had died/was dead.'
[T0020: 023]
The stative verb jun 'be' usually occurs in the perfect aspect when describing a past state, as seen below in (290). The allomorph -niita appears on the (b) and (c) examples.
$\begin{array}{lll}\text { (290)a. } & \text { xakjuntaw } & \text { vecinos } \\ & \text { xa-k-jun-ta-w } & \text { vecinos } \\ & \text { PAST-1SUB-be-PF-1PL.SUB } & \text { neighbors } \\ & \text { 'We were neighbors.' } & \end{array}$
[T0022: 046]
b. papaach wachu7 xjuuniita
papa7+ch wachu7 x-jun-niita old.man+ALD also PAST-be-PF
'He was already an old man.'
[T0022: 055]
c. 7ixjuuniita juu lapanak maa jaantu lhuu

7ix-jun-niita juu lapanak maa jaantu lhuu
PAST-be-PF ART person RPT NEG many
'The were not many people.'
[T0057: 054]

### 3.1.2.3 Mood

There are essentially two grammatical mood distinctions in HT, the realis mood and the irrealis mood. The realis mood is formally and functionally unmarked. The irrealis mood is indicated by the prefix $k a$ - and its one allomorph $7 a$-. 92 Different modalities (such as the imperative or the conditional) are accomplished by combining the irrealis prefix with different tense and/or aspectual markers.

Bybee, Perkins, and Pagliuca (1994) argue that the realis/irrealis distinction "is not cross-linguistically valid" (p. 238); however Chafe (1995) and Mithun (1995) have both taken the position that the distinction between realis and irrealis is arguably valid, and that the term 'irrealis' is descriptively useful. Even though the application of the term 'irrealis' varies from language to language (or author to author), nevertheless, there are certain constructions which tend to get labeled irrealis over and over again. Chafe lists the following contexts in which a language might employ the irrealis mood: yes-no questions, negations, futures, necessities (or obligations), possibilities, imperatives, prohibitions, and conditions (p. 350, 362). According to Mithun, counterfactual and conditional structures

[^74]show very little cross-linguistic variation in their use of irrealis modality, while imperatives, futures, questions, and negations show much more cross-linguistic variation with regard to irrealis mood (p. 376). Whereas counterfactuals and conditionals cross-linguistically fall into the realm of "nonactualization", languages vary with regard to whether or not they treat imperatives, futures, questions, and negation as actualized or nonactualized (384-6). ${ }^{93}$ Furthermore, Palmer (2001) acknowledges that "the idea that notional features of realis and irrealis are grammaticalized as the typological categories of Realis and Irrealis is a useful one" (p. 2).

In the following discussion of mood, I draw a mood distinction between realis and irrealis, and I use the term 'irrealis' for three reasons. First, there is only one particular prefix, $k a$ - and its allomorph $7 a$-, which is common to all but one of the contexts in which the "irrealis" mood occurs. Second, all of the contexts in which this prefix appears are included in both Chafe's (1995) and Mithun's (1995) lists of irrealis contexts, and all of the structures in which it occurs are contexts which are non-actualized in HT. Third and finally, "irrealis" is the name used most frequently for the cognate prefix in other Totonacan languages (e.g., MacKay 1999; Watters 1988). ${ }^{94}$

[^75]
## Realis Mood

The realis mood is morphologically unmarked; it is distinguished from the irrealis mood by the absence of the irrealis prefix. The realis mood includes such modalities as the indicative (factual, specific, or habitual action), desire (without a change in subject), ability, and strong possibility or belief. The realis mood cooccurs with present and past tenses, as well as imperfective, perfective, and perfect aspects. Not all realis events are actualized events: for example, negation of the realis modalities mentioned above is also part of the realis mood in HT; examples are shown below.

The indicative examples in (291) show the realis mood occurring with the present imperfective in (a), the past imperfective in (b), and the perfective aspect in (c).
(291)a. juu Xiiwaan saay juu lhiisaan
juu Xiiwaan saa-y juu lhiisaan
ART Juan play-IMPFV ART guitar
'Juan plays the guitar.'
$\begin{array}{lll}\text { b. } & \text { juu Xiiwaan 7isaay } & \text { juu lhiisaan } \\ \text { juu Xiiwaan 7i-saay } & \text { juu lhiisaan } \\ \text { ART Juan PAST-play-IMPFV } & \text { ART guitar } \\ \text { 'Juan played the guitar.' } & & \end{array}$
$\begin{array}{llll}\text { c. juu Xiiwaan saalh juu lhiisaan } \\ \text { juu Xiiwaan saa-li } & \text { juu } & \text { lhiisaan }\end{array}$ ART Juan play-PFV ART guitar 'Juan played the guitar.'
[QMMES]
Corresponding negative indicative examples are shown below in (292).
(292) a.

| juu Xiiwaan jaantu saay | juu lhiisaan |  |
| :--- | :--- | :--- | :--- |
| juu Xiiwaan jaantu saa-y juu lhiisaan |  |  |
| ART Juan NEG play-IMPFV ART guitar |  |  |
| 'Juan does not play the guitar.' |  |  |

b. juu Xiiwaan jaantu 7isaay juu lhiisaan juu Xiiwaan jaantu 7i-saa-y juu lhiisaan ART Juan NEG PAST-play-IMPFV ART guitar 'Juan did not play the guitar.'
c. juu Xiiwaan jaantu saalh juu lhiisaan juu Xiiwaan jaantu saa-li juu lhiisaan ART Juan NEG play-PFV ART guitar 'Juan did not play the guitar.'

The modality of desire, when there is no change in subject, is expressed by means of the desiderative suffix (see Section 3.2.3.6) and the realis mood. Similarly, negative desire also falls under the realm of the realis mood. Examples are shown in (293).
(293)a. juu Xiiwaan saaputun juu lhiisaan
juu Xiiwaan saa-putun juu lhiisaan ART Juan play-DESID(IMPFV) ART guitar 'Juan wants to play the guitar.'
b. juu Xiiwaan jaantu saaputun juu lhiisaan juu Xiiwaan jaantu saa-putun juu lhiisaan ART Juan NEG play-DESID(IMPFV) ART guitar 'Juan does not want to play the guitar.'

Ability is expressed by means of the auxiliary verb laa 'can' (Section 3.4.2). Both positive and negative ability are expressed by means of the realis mood, as seen below in (294).

| juu Xiiwaan laay | saay | juu lhiisaan |
| :--- | :--- | :--- | :--- | :--- |
| juu Xiiwaan laa-y | saay | juu lhiisaan |
| ART Juan can-IMPFV | play-IMPFV ART guitar |  |
| 'Juan can (is able to, knows how to) play the guitar.' |  |  |

b. juu Xiiwaan tuu laay saay juu lhiisaan
juu Xiiwaan jaantu laa-y saay juu lhiisaan ART Juan NEG can-IMPFV play-IMPFV ART guitar 'Juan can not (is unable to, does not know how to) play the guitar.' [QMMES]

Strong possibility also falls within the realm of the realis mood. Like ability, strong possibility is expressed by means of the auxiliary verb laa 'can', as seen in the examples in (295). Additionally, examples of strong possibility contain some sort of qualifying expressed such as taxniy 'probably' or klhuulay 'I think'.
(295) a.

| juu Xiiwaan taxniy laay | saaputun | juu lhiisaan |
| :--- | :--- | :--- | :--- | :--- |
| juu Xiiwaan taxniy laa-y | saa-putun | juu lhiisaan |
| ART Juan probably can-IMPFV play-DESID(IMPFV) | ART guitar |  |
| 'Juan probably wants to be able to play the guitar.' | [QMMES] |  |

b. taxniy klhuulay juu Xiiwaan taxniy k-lhuula-y juu Xiiwaan probably 1SUB-think-IMPFV ART Juan

| nii | laay | saay | juu | lhiisan |
| :--- | :--- | :--- | :--- | :--- |
| nii | laa-y | saa-y | juu | lhiisan |
| COMP | can-IMPFV | play-IMPFV | ART | guitar | 'I think that Juan can play the guitar.'

[QMMES]
c. taxniy klhuulay juu Xiiwaan taxniy k-lhuula-y juu Xiiwaan probably 1SUB-think-IMPFV ART Juan
nii tuu laay saay juu lhiisan nii jaantu laa-y saa-y juu lhiisan COMP NEG can-IMPFV play-IMPFV ART guitar 'I think that Juan can not play the guitar.'

## Irrealis Mood

In all modalities but one, the irrealis mood is morphologically marked by the prefix $k a$ - or its allomorph $7 a$-. According to Watters (1988), in Huehuetla

Tepehua, the irrealis prefix $k a$ - is used when the subject is third person or first person plural inclusive, and the allomorph $7 a$ - is used when the subject is first person singular, first person plural exclusive, and second person (p. 273). I, too, found that the allomorph $7 a$ - can be used when the subject is first person singular, first person plural exclusive, or second person; however it is frequently the case that no irrealis prefix at all occurs with these persons. My consultant, don Nicolás, told me that it is more correct to include the $7 a$ - prefix, but that it is usually omitted in fast speech. In fact, I found that it almost never occurs in naturally occurring speech, but that it is always accepted when presented during elicitation.

Irrealis modalities include the future tense (both positive and negative) and obligation, imperative and hortative commands, permission, the optative (wishes), the conditional, and the dubitative (doubt or uncertainty on the part of the speaker). The irrealis prefix does not occur on the verb when any of these modalities occur in the past; the past tense prefix $x$ - occurs on the verb instead.

The irrealis mood maker $k a$ - combines with the future suffix $-y a 7(\sim-a 7)$ to form the future tense (see the subsection on Future Tense in Section 3.1.2.1). Though the future tense is not necessarily a modality, obligation is, and it happens that the future tense and obligatory mood are the same in HT. Positive examples are shown in (296).
$\begin{array}{lllll}\text { (296) a. } & \text { juu Xiiwaan } & \text { kasaaya7 } & \text { juu lhiisaan } \\ & \text { juu Xiiwaan } & \text { ka-saa-ya7 } & \text { juu } & \text { lhiisaan } \\ & \text { ART Juan } & \text { IRR-play-FUT } & \text { ART guitar } \\ & \text { 'Juan will play the guitar.' } & & \\ & \text { 'Juan must play the guitar.' } & & \end{array}$
b. juu Xiiwaan kamina7
juu Xiiwaan ka-min-a7
ART Juan IRR-come-FUT
'Juan will come.'
'Juan must come.'
c. juu Xiiwaan laay katapasaya7 juu lakxkaan
juu Xiiwaan laay ka-tapasa-ya7 juu lakxkaan
ART Juan can IRR-pass-FUT ART river
'Juan is going to be able to cross the river.'
'Juan must be able to cross the river.'
[QMMES]
The negative future/obligation is not morphologically marked by the future suffix; instead it bears the perfective aspect suffix -lh. Additionally, it requires the irrealis prefix $k a$ - and the negative future prefix, ti-. Examples are shown in (297).
(297)a.

| juu Xiiwaan | jaantu katisaalh | juu lhiisaan |  |
| :--- | :--- | :--- | :--- |
| juu Xiiwaan | jaantu ka-ti-saa-li | juu | lhiisaan |
| ART Juan | NEG IRR-NEG.FUT-play-PFV | ART | guitar |
| 'Juan is not going to (will not) play the guitar.' |  | [QMMES] |  |

b. porque nii kata7uya7
porque nii ka-ta-7u-ya7
because COMP IRR-3PL.SUB-eat-FUT
jaantuch katitataxtulh
jaantu+ch ka-ti-ta-taxtu-li
NEG + ALD IRR-NEG.FUT-3PL.SUB-leave-PFV
'Because if they ate it, they would not be able to leave.'
[T0063: 066-067]
$\begin{array}{lllll}\text { c. } & \text { juu } & \text { Xiiwaan } & \text { tuu laay } & \text { katitapasalh } \\ \text { juu Xiiwaan } & \text { jaantu laa-y } & \text { ka-ti-tapasa-li } \\ \text { ART Juan } & \text { NEG } & \text { can-IMPFV } & \text { IRR-NEG.FUT-pass-PFV }\end{array}$
juu lakxkaan
juu lakxkaan
ART river
'Juan is not going to be able to cross the river.'
[QMMES]

The imperative, hortative, permissive, optative, conditional, potential, and dubitative modalities are all morphologically marked in the same way: they are prefixed with the irrealis marker $k a$ - and suffixed with the perfective aspect marker -lh. If they occur in the past tense, the irrealis prefix is replaced by the past tense prefix $x$-. Even though there is no grammatical difference in these modalities, there is a slight semantic difference. Examples of each modality follow.

As stated above, the imperative mood is formed by the combination of the irrealis prefix and the perfective suffix. The irrealis prefix occurs as $7 a$ - in the imperative (i.e., a second person command). The prefix is omitted frequently in regular speech, though (i) forms that bear the prefix are always accepted during elicitation, and (ii) these irrealis forms are considered to be more correct. Examples of second person singular commands are shown in (298), and examples of second person plural commands are shown in (299). Note that any stops or affricates in the stem are glottalized.
(298) a. maap'uup'uut'i
maa-puupuu-t'i
CAUS-boil(2SUB)-2SG.SUB.PFV
'Boil it!'
[TPWDB]
b. seq 7ulaat'i juu 7asqat'a
seq 7ulaa-t'i juu 7asqat'a
quiet put-2SG.SUB.PFV ART child
'Calm down the child!'
[TPWDB]
$\begin{array}{lll}\text { c. } & \text { 7asaat'i } & \text { chiniich } \\ \text { 7a-saa-t'i } & \text { chinii+ch } \\ & \text { IRR-play.instrument-2SG.SUB.PFV } & \text { like.this+ALD } \\ & \text { 'Play it like this.' } & \end{array}$
[T0066: 224]
d. 7asó7o

7a-so7o
IRR-be.quick(2SG.SUB.PFV) ${ }^{\mathbf{9 5}}$
'Be quick!'
[Q3I]
There is no overt aspect marking when the subject is second person plural. If there are stops or affricates in the stem, they are glottalized. As with the second person singular commands, the irrealis prefix is optionally omitted from the second person plural commands, as seen in the following examples.
(299)a. maamiixiit'it juu jip
maa-miixii(PFV)-t'it juu jip
CAUS-go.out-2PL.SUB ART fire
'Put out the fire, you all!'
[TPWDB]
b. maat'alhk'ut'it juu jip
maa-talhku-t'it juu jip
CAUS-stir(2SUB.PFV)-2PL.SUB ART fire
'You all stir the fire!'
[TPWDB]
c. 7aso7ot'it

7a-so7o-t'it
IRR-be.quick(PFV)-2PL.SUB
'Be quick, you all!'
Unfortunately, I have only one example of a first person hortative command, shown below in (300). The hortative is morphologically marked by the irrealis prefix and the perfective aspect suffix. In this example, perfective aspect is indicated by deletion of the stem-final nasal. Given the fact that the prefix $k a$ occurs on the verb, this is an example of the first person inclusive since the irrealis allomorph $7 a$ - occurs with first person prefix $k$ - [?ak-] to form the exclusive.

[^76]```
(300)ka7awch qotnin
    ka-7an-w+ch qot-nin
    IRR-go(PFV)-1PL.SUB+ALD drink-INF
    'Let's (INCL) go drink.'
```

A third person command appears in a subordinate clause, as seen in the examples in (301).

| (301)a. | lhiinajunkalh | nii | kataymaa |
| :--- | :--- | :--- | :--- |
|  | lhiinajun-kan-li | nii | ka-taymaa |
|  | command-INS-PFV | COMP | IRR-follow(PFV) |
|  | 'They commanded him to follow (them).' |  |  |

b. juunikalh nii jaantu kalaknaawlh
jun-ni-kan-li nii jaantu ka-lak-najun-li
tell-DAT-INS-PFV COMP NEG IRR-PL-say-PFV
'They told him not to talk.'
Permission (or the permissive modality) is indicated by means of the auxiliary verb laa 'can' plus a main verb that bears the irrealis prefix and the perfective aspect suffix, as seen in the examples below in (302).

| (302)a. | laay | kamilh | juu | Xiiwaan |
| :--- | :--- | :--- | ---: | :--- |
|  | laa-y | ka-min-li | juu | Xiiwaan |
|  | can-IMPFV | IRR-come-PFV | ART | Juan |
|  | 'Juan may come.' (permission) |  |  |  |

b. juu 7ixnati juu Xiiwaan najun
juu 7ix-nati juu Xiiwaan najun
ART 3POS-mother ART Juan say(IMPFV)

| nii laay | kamilh | juu | Xiiwaan |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nii | laa-y | ka-min-li | juu | Xiiwaan |
| COMP | can-IMPFV | IRR-come-PFV | ART |  |
| 'Juan |  |  |  |  |
| 'Juan's mother says that he may come.' (permission) | [QMMES] |  |  |  |

Negative permission is additionally marked with the negative future prefix $t i-$, as seen below in (303).
(303)tuulaay katilakchiwinpalaw
tuu+laa-y ka-ti-lak-chiwin-pala-w
NEG-can-IMPFV IRR-NEG.FUT-PL-talk(IMPFV)-REP-1PL.SUB
'We (INCL) may not talk.'
[T0066: 139]
The optative mood is used to express wishes or desires; the verb is marked by the irrealis prefix and the perfective aspect, as seen in the examples in (304). The past optative is formed by means of the past tense plus the perfective aspect, as seen in the example in (305).
(304) a. juu Xiiwaan kanawii
juu Xiiwaan ka-nawii
ART Juan IRR-do(VT)(PFV)
'If only Juan would do it.'
[QMMES]
b. waa lakask'ín nii
waa lakask'in nii
FOC wish/want(IMPFV) COMP

c. jaantu klakask'in nii 7amiilhp'at'i
jaantu k-lakask'in nii 7a-miilhpa-t'i
NEG 1SUB-want(IMPF) COMP IRR-sing(2SUB)-2SG.SUB.PFV
'I don't want you to sing.'
[QMMES]
(305)juu Xiiwaan 7ixnáwii
juu Xiiwaan 7ix-nawii
ART Juan PAST-do(VT)(PFV)
'If only Juan would have done it.'
[QMMES]
Conditional modality, too, is marked by the irrealis prefix and the perfective aspect, as seen in the examples in (306).

| (306)a. | porque <br> porque | nii | nai | maa | katamáqnii | maa | 7aks |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | ka-ta-maqnii | maa | 7aks |  |  |  |  |
| because | COMP | RPT | IRR-3PL.SUB-kill(PFV) | RPT | same |  |  |
|  |  |  |  |  |  |  |  |
|  | naa | naa | 7awilhcha maa | kaniilh | juu | 7anch | t'aku7 |
|  | naa | naa | 7awilhcha maa | ka-nii-li | juu | 7anch | t'aku7 |
|  | EMP EMP day | RPT | IRR-die-PFV ART | there | woman |  |  | 'Because if they kill it, that very same day the woman would die there.'


| b. maas | kamilh | juu | Xiiwaan |  |
| :--- | :--- | :--- | :--- | :--- |
|  | maas | ka-min-li | juu | Xiiwaan |
| although | IRR-come-PFV | ART | Juan |  |


| juu | ki7in | 7aktamokoona7 |
| :--- | :--- | :--- |
| juu | ki7in | 7a-k-tamakajun-a7 |
| ART | PRN.1SG | IRR-1SUB-remain-FUT |
| 'Even if Juan were to come, I will stay.' |  |  |

[QMMES]
c. nii kamilh kaa laay 7aktamakawlh
nii ka-min-li kaa laa-y 7a-k-tamakajun-li
COMP IRR-come-PFV BLV can-IMPFV IRR-1SUB-remain-PFV 'If he were to come, I think that I could stay.'

Like the past optative, the past conditional is expressed by means of the past tense plus the perfective aspect. Furthermore, the evidential particle kaa, which I gloss as BLV or 'belief', occurs in all of the examples of past conditional clauses in my database. Examples are shown in (307).

```
(307)a. nii xakmaamaa juu tuumin
    nii xa-k-maamaa juu tuumin
    COMP PAST-1SUB-have(PFV) ART money
    kaa laay xaktamawlh
    kaa laa-y xa-k-tamaw-li
    BLV can-IMPFV PAST-1 SUB-buy-PFV
    'If I had had the money, I think that I would have bought it.'
```

b. nii 7ixmilh kaa laaych
nii 7ix-min-li kaa laa-y+ch
COMP PAST-come-PFV BLV can-IMPFV +ALD
xaktamakawlh
xa-k-tamakajun-li
PAST-1 SUB-remain-PFV
'If he were to have come, I think I would have stayed.'
[QMMES]
Potential modality is similarly indicated by the irrealis prefix and the perfective aspect, as seen in the examples in (308) below.
(308) a.

| juu | Xiiwaan | laay | kanáwii |
| :--- | :--- | :--- | :--- |
| juu | Xiiwaan | laa-y | ka-nawii |
| ART Juan | can-IMPFV | IRR-do(VT)(PFV) |  |

'Juan could do it.'
[QMMES]
b.

| nii | waa | naa | laay | 7aknawiipaa |
| :--- | :--- | :--- | :--- | :--- |
| nii | waa | naa | laa-y | 7a-k-nawii-paa |
| COMP | FOC | EMP | can-IMPFV | IRR-1SUB-do-REP.PFV |
|  |  |  |  |  |
| ritmo | guaracha |  |  |  |
| ritmo | guaracha |  |  |  |
| rhythm guaracha |  |  |  |  |
| 'I could do it in the guaracha rhythm.' |  |  |  |  |

[T0066: 062]
The dubitative modality is grammatically marked using the same pattern that was seen above for the imperative, the optative, the conditional, and the potential modalities: the irrealis prefix and perfective aspect. The use of the dubitative modality reflects doubt or uncertainty on the part of the speaker about the veracity of the information. Examples are shown in (309).

| juu Xiiwaan | jaantu klhuulay |
| :--- | :--- |
| juu Xiiwaan | jaantu k-lhuula-y |
| ART Juan | NEG 1 SUB-think-IMPFV |


| nii laay | kasaalh | juu | lhiisaan |  |
| :--- | :--- | :--- | :--- | :--- |
| nii | laa-y | ka-saa-li | juu | lhiisaan |
| COMP | can-IMPFV | IRR-play-PFV ART | guitar |  |
| 'I don't know if (think that) Juan can play the guitar.' |  |  |  |  |

b. jaantu k'atzay nii kamaamaa juu tuumin
jaantu k'atza-y nii ka-maamaa juu tuumin NEG know-IMPFV COMP IRR-have(PFV) ART money 'I don't know (he doesn't know) if she has the money.' [QMMES]

The dubitative modality differs from the other irrealis modalities in one major way: it is optionally used based on the speaker's attitude toward the information being conveyed, as demonstrated by the examples in (310) and (311). In the example in (310a), the speaker is not sure if the person in question will come, and he uses the dubitative modality. In the example in (310b), the speaker is more confident that the person in question will come, which is reflected by his use of the future tense.
$\begin{array}{lll}\text { (310)a. } & \begin{array}{l}\text { kaa laay }\end{array} & \begin{array}{l}\text { kamilh } \\ \text { kaa laa-y } \\ \text { ka-min-li }\end{array} \\ & \text { BLV can-IMPFV } & \text { IRR-come-PFV } \\ & \text { 'I think he might be able to come.' }\end{array}$
[QMMES]
b. kaa laay kamina7
kaa laa-y ka-min-a7
BLV can-IMPFV IRR-come-FUT
'I think he will be able to come.'
[QMMES]
The examples in (311) are elicited examples based on Spanish subjunctive examples from Givón (1994: 296, ex. 70). In (311a), the Spanish prompt used the indicative mood, and the resulting Tepehua sentence is in the realis mood. In
(311b), the Spanish prompt used the subjunctive mood, and the resulting Tepehua sentence is in the irrealis mood. This does not mean that the Spanish subjunctive always corresponds to the Tepehua irrealis; instead these examples show that a choice of mood is available to the Tepehua speaker.
(311)katast'aaya7 juu puukapen
ka-ta-st'aa-ya7 juu puukapen
IRR-3PL.SUB-sell-FUT ART coffee.farm
'Venderán la finca de café . . .
'They will sell the coffee farm . . .
a. maas kaa jaantuch lakaskin juu xaatata7
maas kaa jaantu+ch lakaskin juu xaa-tata7
although BLV NEG+ALD want(IMPFV) ART IPOS-grandfather
aunque el abuelo se opone.'
even though the grandfather opposes it.'
b. maas kaa jaantuch kalakaskilh juu xaatata7
maas kaa jaantu+ch ka-lakaskin-li juu xaa-tata7
although BLV NEG+ALD IRR-want-PFV ART IPOS-grandfather aunque el abuelo se oponga.' even if the grandfather were to oppose it.'
[QMMES]

### 3.2 DERIVATION

Derivational operations in HT include operations that change the valency of the verb stem (Section 3.2.1) and verb compounding (Section 3.2.2).

### 3.2.1 Valency-Changing Affixes

Valency-changing derivational affixes either decrease or increase the valency of the verb. Valency-decreasing affixes in HT are the reflexive (3.2.1.1), and the reciprocal (3.2.1.2). Valency-increasing affixes in HT are the dative (3.2.1.3), the causative (3.2.1.4), the instrumental (3.2.1.5), the comitative (3.2.1.6), the applicative (3.2.1.7), and the body part prefixes (3.2.1.8).

### 3.2.1.1 Reflexive -kan

The reflexive suffix $-k a n$ is homophonous with the indefinite subject suffix -kan. However, the reflexive suffix decreases the valency of the verb, as seen below in (312). Both (312a) and (312b) have separate agent and patient arguments; however, the reflexive suffix -kan in the clause in (312c), indicates that the agent and the patient arguments have the same referent.
(312) a. kakalhkaayaawch
ka-ka-lhkaa-ya7-w+ch
IRR-TIP-measure-FUT-1PL.SUB+ALD
'We (INCL) are going to measure it.'
[T0069: 308]
b. klaklhkaayaw
k-lak-lhkaa-y-aw
1SUB-PL-measure-IMPFV-1PL.SUB
'We (EXCL) measure them.'
[TPWDB]
c. klakalhkaakan
k-laka-lhkaa-kan
1SUB-BODY-measure-RFL(IMPFV)
'I take my measurements.'
[TPWDB]
First and second person arguments of the reflexive verb are co-indexed on the verb stem with nominative morphology, as seen below in (313), while third person plural arguments are co-indexed with accusative morphology, as seen below in (314). This is the same pattern that is found with the indefinite suffix marker. ${ }^{96}$ In (313a) the verb stem is affixed with the first person subject prefix, the first person plural subject suffix, and the reflexive suffix. The verb in (313b) is affixed with the second person plural subject suffix, and the stop consonants are glottalized to indicate a second person subject. In (314a) the verb is affixed with

[^77]the reflexive suffix, but no person marking since the agent is third person singular. When the agent of the reflexive verb is third person plural, it is coindexed on the reflexive verb stem by the plural indefinite object prefix 7a-, as seen in (314b), and not by the third plural subject prefix ta-, as seen in (314c).
(313)a. klaqxtanxwiikaw
k-laqxtan-xwii-kan-aw
1SUB-CHEEK-shave-RFL(IMPFV)-1PL.SUB
'We shave ourselves.'
b. laqxt'anxwiik'at'it
laqxtan-xwii-kan-t'it
CHEEK-shave-RFL(IMPFV)-2PL.SUB
'You all shave yourselves.'
(314)a. laqxtanxwiikalhch juu lapanak
laqxtan-xwii-kan-li+ch juu lapanak
CHEEK-shave-RFL-PFV+ALD ART man
'The man shaved.'
[ELIEX4: 004]
b. 7alaqxtanxwí́kalh juu papanin

7a-laqxtan-xwii-kan-li juu papa-nin
PL.INO-CHEEK-shave-RFL-PFV ART man-PL
'The men shaved themselves.'
c. **talaqxtanxwíikalh juu papanin
ta-laqxtan-xwii-kan-li juu papa-nin
3PL.SUB-CHEEK-shave-RFL-PFV ART man-PL
Target: 'The men shaved themselves.'
The split in person marking between nominative and accusative morphology can be modeled using the person hierarchy that was presented in example (213) of Section 3.1.1.3, which is repeated below in (315)
(315) Person Hierarchy and the Reflexive
$1^{\text {st }}$ person $\& 2^{\text {nd }}$ person $\gg 3^{\text {rd }}$ person plural


### 3.2.1.2 Reciprocal laa-

The presence of the reciprocal prefix laa- indicates that two or more semantic participants are acting on each other. The addition of laa- to a transitive verb decreases the verb's valency by one argument, as seen below. The example in (316a), shows that the verb lhiitaju 'to meet, find' is normally a monotransitive verb with a patient object. In (316b), the same verb is prefixed with the reciprocal prefix, indicating that the subject and the object are acting on each other. In the following examples, the reciprocal prefix is in bold type, and the subject markers are underlined.
(316)a. xatalhiitajuych xa-ta-lhiitaju-y+ch PAST-3PL.SUB-meet(VT)-IMPFV+ALD 'They meet their little sister.'
juu xp'isaqa7an
juu 7ix-p'isaqa-7an
ART 3POS-little.sibling-PL
[T0063: 047]
b. maa soq talaalhiitajuu juu 7akumwarii
maa soq ta-laa-lhiitajuu juu 7akumwarii
RPT straight 3PL.SUB-RCP-meet(PFV) ART friend [T0055: 002]

The single argument of a reciprocal stem is always co-indexed on the verb by a plural subject prefix, as seen above in (316b) and below in (317).
(317) a. laalhiist'ak'aw
laa-lhiist'ak-7a-w
RCP-care.for-IMPFV-1PL.SUBJ
'We take care of each other.'
[TPWDB]

| b. | waa | tanajunch | kintata7 |
| :--- | :--- | :--- | :--- |
| waa | ta-najun+ch | kin-tata7 |  |
| FOC | 3PL.SUB-say(IMPFV)+ALD | 1POS-elder |  |
|  |  |  |  |
| nii | xtalaakilhun |  |  |
| nii | x-ta-laa-kilhun |  |  |
|  | COMP | PAST-3PL.SUB-RCP-chat(IMPFV) |  |

'My elders would say, when they were chatting with each other, . . .'
[T0022: 020-021]
The reciprocal prefix frequently co-occurs with the comitative $t^{\prime} a a$-; see Section 3.2.1.6 for details and examples.

The reciprocal prefix is used in a non-reciprocal manner when first and second person (speech act participant) arguments are acting on each other; see Section 3.1.1.6.

### 3.2.1.3 Dative -ni

The dative suffix -ni increases the valency of the verb by adding a benefactive (or malefactive) object argument. In all of the examples in this section, the dative suffix -ni is shown in bold type, the patient argument (be it an overt nominal, an affix, or both) is underlined twice, and the benefactive argument is underlined once.

Below, the transitive verb root lhiist'ak 'take care of', 'guard' appears in (318a) with a single patient object argument sasqat'a 'child'. In (318b), the same verb root is affixed with the dative suffix $-n i$, and in addition to the patient argument sasqat'a 'child', there is also an additional benefactive object argument t'aku7 'woman'.
(318) a. lhiist'ak'a juu sasqat'a
lhiist'ak-7a juu s-7asqat'a care.for-IMPFV ART 3POS-child '[She] takes care of the child.'
b. lhiist'akniy juu sasqat'a juu t'aku7
lhiist'ak-ni-y juu s-7asqat'a juu t'aku7
care.for-DAT-IMPFV ART 3POS-child ART woman
'[She] takes care of the child for the woman.'
[TPWDB]
The examples shown below in (319) and (320) all involve a transitive verb root that is made into a ditransitive verb stem by the addition of $-n i$.
(319)a. waa maach'ixtaqnikalhch juu tuumiin
waa maach'ixtaq-ni-kan-li+ch juu tuumiin
FOC loan-DAT-INS-PFV+ALD ART money
juu liijuuntoo Teewan Atarraya
juu liijuuntoo Teewan Atarraya
ART deceased Stephen Net
'They lent the money to the deceased Stephen Net.'
[T0054: 019]
b. tam maqali7 kamaach'ixtaqninch juu tuumiin
tam maqali7 ka-maach'ixtaq-ni-n+ch juu tuumiin
ART.IN rich.person IRR-loan-DAT(PFV)-2OBJ+ALD ART money
'A rich person could lend you the money.'
[T0054: 024]
(320)a. waa kintalhiijuunilh p'ulhnan
waa kin-ta-lhiijun-ni-li p'ulhnan
FOC 1OBJ-3PL.SUB-order-DAT-PFV first
'They ordered [a drink] for me first.'
[T0066: 052]
b. 7astan waa naa 7alaklhiijuuniy kit'in

7astan waa naa 7alak-lhiijun-ni-y kit'in afterwards FOC EMP PL-order-DAT-IMPFV PRN.1SG
'Afterwards, $I$ order [a drink] for them.'
[T0066: 056]
In the examples below in (321), the dative suffix $-n i$ is added to an intransitive verb root to derive a new verb stem. Again, the added benefactive/malefactive argument is underlined.

| (321) a. | qox | xa7aniyan |
| :--- | :--- | :--- |
|  | qox | xa-7an-ni-ya- $\underline{n}$ |
|  | well | PAST-go-DAT-IMPFV-2OBJ |
|  | 'It went well for you.' |  |

b. xpaatajuniy juu lajqay juu xakanit juu lapanák x-paataju-ni-y juu lajqay juu xa-7akanit juu lapanák PAST-fall-DAT-IMPFV ART huge ART IPOS-flesh ART people 'Huge chunks of flesh fell from the people.'
c. juu 7anuuch xkupu7 chiwinilh
juu 7anuu+ch xkupu7 chiwin-ni-li
ART DADJ+ALD crawdad speak-DAT-PFV
'That crawdad spoke to him.'
[T0058: 026-027]
Please see section 3.1.1.6 on Double Object marking for more examples of the dative suffix.

In certain examples the addition of the dative suffix -ni, encodes the affectedness of the possessor of the patient object. In the examples in (322), the possessor of the patient argument is the benefactive/malefactive verbal argument. This is a type of external possession in which the possessor of a verbal argument also acts as an argument of the same verb. More examples of external possession in HT are found in Section 3.2.1.8 on body part prefixes.

| (322) a. | kixkaniy | juu | kilakatunaa |
| :--- | :--- | :--- | :--- |
|  | kin-xka-ni-y | juu | kin-lakatunaa |
|  | lOBJ-hurt-DAT-IMPFV | ART | 1POS-body |
|  | 'My body hurts (쓰).' |  |  |

[ELIEX3: 021]
b. lhii7anilhch juu 7ispiiriituu
lhii7an-ni-li+ch juu $\mathbf{x}$-spiiriituu
take-DAT-PFV+ALD ART 3POS-spirit
'It [the devil] took his spirit from him.'
[T0054: 012]

### 3.2.1.4 Causative maa-

The causative prefix maa- increases the valency of the verb by adding a new agent argument, which is co-indexed by subject marking on the verb. The understood subject (either agent or patient) of the root verb is co-indexed by object marking on the verb stem. In the example in (323), the causative subject is second person, while the causative object (which is the argument that would be co-indexed by subject marking in a non-causative clause) is first person.
(323) k'imaaqeswaat'i
ki-maa-qeswaa-t'i
1OBJ(2SUB)-CAUS-be.scared-2SG.SUB.PFV
'You made me scared!'
'You scared me!'
[T0054: 030]
The causative prefix maa- may appear on both intransitive and transitive verbs. Examples of causative forms of intransitive verb roots are shown in (324) and (325); the causative form of a transitive root is shown in (326); and the causative form of a posture verb root is shown in (327).
(324)a. 7atz'alaalh juu Piitalu7

7atz'alaa-li juu Piitalu7
run-PFV ART Pedro
'Pedro ran.'
[TPWDB]
b. tamaa7atz'alaaych
ta-maa-7atz'alaa-y+ch
3PL.SUB-CAUS-run-IMPFV+ALD
'They ran off the crawdad.'
juu xkupu7
juu xkupu7
ART crawdad

[T0058: 066]
(325)a. juu Maalhtiin tz'anqaa juu lakak'iwin
juu Maalhtiin tz'anqaa juu laka-k'iw-in ART Martin get.lost(PFV) ART PREP-wood-PL
'Martin got lost in the woods.'
[MNB13: 40]
b. juu Maalhtiin maatz'anqaa
juu Maalhtiin maa-tz'anqaa
ART Martin CAUS-get.lost(PFV)
juu xpaatz'oq juu lakak'iwin
juu x-paatz'oq juu laka-k'iw-in
ART 3POS-pencil ART PREP-wood-PL
'Martin lost his pencil in the woods.'
[MNB13: 41]
(326) a. k'uk'ay juu xk'iw juu kinana7
k'uk'a-y juu x-k'iw juu kin-nana7
carry-IMPFV ART 3POS-wood ART 1POS-grandmother
'My grandmother carries her wood.'
[MNB13: 14]
b. juu Xiiwaan maak'uk'ay
juu Xiiwaan maa-k'uk'a-y
ART Juan CAUS-carry-IMPFV
$\begin{array}{llll}\text { juu } & \text { xk'iw } & \text { juu } & \text { xmaak'uk'a7 } \\ \text { juu } & \text { x-k'iw } & \text { juu } & \text { x-mak'uk'a7 }\end{array}$
juu x-k'iw juu x-maak'uk'a7
ART 3POS-wood ART 3POS-pack.animal
'Juan carries wood with his pack animal.'
'Juan makes his pack animal carry the wood.'
[MNB13: 13]
(327) a. maalh juu lapanak
maalh juu lapanak
lying(IMPFV) ART person
'The person is lying down.'
[TPWDB]
b. 7aqxt'uych kamaamaayaaw

7aqx-t'uy+ch ka-maa-maa-ya7-w
CL:flat-two+ALD IRR-CAUS-lying-FUT-1PL.SUB
'We're going to put down two [boards].'
[T0069: 064]
In the causative construction in which the added subject argument is indefinite (and, thus, is marked with -kan), there is a split in the person marking of the demoted subject; first and second person demoted subjects are co-indexed with subject marking-shown in (328), while third person demoted subjects are co-indexed with object marking-shown in (329). The first and second person
examples in (328) are doubly marked for subject: they are all marked with the indefinite subject suffix - kan (in bold type), as well as with first or second person subject marking (underlined twice). In (328a), the verb root nawii 'do' has a singular object faena 'labor', which is underlined once. In (328b) and (328c), the same verb root has a plural object, which is co-indexed on the verb stem by the plural prefix lak- (also underlined once).
(328) a. xakmaanawiinikan faena
xa-k-maa-nawii-ni-kan faena
PAST-1SUB-CAUS-do-DAT-INS(IMPFV) labor
'They made me do labor.'
'I was made to do labor.'
b. xakmaalaknawiinikan juu laklhiich'alhkat
xa-k-maa-lak-nawii-ni-kan juu lak-lhiich'alhkat
PAST-1SUB-CAUS-PL-do-DAT-INS(IMPFV) ART PL-job
'They made me do the jobs.'
'I ${ }^{\text {I }}$ was made to do the jobs.'
c. juu 7uxint'i xmaalak'nawiinik'an
juu 7uxint'i x-maa-lak-nawii-ni-kan
ART PRN.2SG PAST-CAUS-PL-do-DAT-INS(IMPFV)
juu laklhiich'alhkat
juu lak-lhiich'alhkat
ART PL-job
'They made you do the jobs.'
'You were made to do the jobs.'
[Q3D]
The third person demoted subject examples in (329) are singly marked for subject by the indefinite subject suffix -kan, while the demoted third person plural "subject" is co-indexed with third person plural object marking (underlined twice) in (329b) and (329c). Example (329d) shows that the third person plural subject marker $t a$ - is ungrammatical in this indefinite subject causative
construction. However, note that the third person plural marker ta-may co-occur with the causative prefix in other causative constructions, as seen above in example (324b).
(329) a. maalaknawiinikan
maa-lak-nawii-ni-kan
CAUS-PL-do-DAT-INS(IMPFV)
juu Xiiwaan juu laklhiich'alhkat
juu Xiiwaan juu lak-lhiich'alhkat
ART Juan ART PL-job
'They made Juan do the jobs.'
'Juan was made to do the jobs.'
b. 7alakmaanawiinikan

7alak-maa-nawii-ni-kan
PLINO.PL-CAUS-do-DAT-INS(IMPFV)
juu lapanák juu lhiich'alhkat
juu lapanák juu lhiich'alhkat
ART people ART job
'They made the people do the job.'
'The people were made to do the job.'
c. 7alakmaalaknawiinikan

7alak-maa-lak-nawii-ni-kan
PLINO.PL-CAUS-PL-do-DAT-INS(IMPFV)
juu lapanák juu laklhiich'alhkat
juu lapanák juu lak-lhiich' alhkat
ART people ART PL-job
'They made the people do the jobs.'
'The people were made to do the jobs.'
d. ${ }^{* *}$ xtamaanawiinikan faena
$x$-ta-maa-nawii-ni-kan faena
PAST-3PL.SUB-CAUS-do-DAT-INS(IMPFV) labor
Target: 'They made them do labor.'
Target: 'They were made to do the labor.'

Note that in all of the above examples in which the root verb has a plural objectthat is, examples (328b), (328c), (329a), and (329c), the object marker is closer to the root than the causative suffix maa- is; the causative suffix intervenes between "subject" and object marking.

The causative prefix can be used to form negative expressions that mean 'not to let someone do something' or 'to make someone not do something', as seen in (330).

| maa | jaantu maapaasaa | wachu7 |
| :--- | :--- | :--- |
| maa | jaantu maa-paasaa | wachu7 |
| RPT | NEG | CAUS-pass.by(PFV) |

juu liijuuntuu don Pedro Islas
juu liijuuntuu don Pedro Islas
ART deceased don Pedro Islas
'He did not let the deceased don Pedro Islas pass by either.' [T0022: 041]
There are many examples of lexemes that are frozen forms containing the causative prefix. In many of these lexicalized forms, the causative prefix is maq-, as seen below in (331) and (332), though maa- also occurs, as seen below in (333).
(331)a. sqoliy juu lapának
sqoli-y juu lapának
whistle-IMPFV ART person
'The person whistles.'
[TPWDB]
b. xakmaqsqoliyka7
xa-k-maqsqoli-y+ka7
PAST-1SUB-play-IMPFV+JST
'I still played (an instrument).'
[T0054: 052]

[TPWDB]
b. 7akmaqniiya7 juu p'aax juu chaway

7a-k-maqnii-ya7 juu p'aax juu chaway IRR-1SUB-kill-FUT ART pig ART today
'I am going to slaughter the pig today.'
[TPWDB]
(333) a. puus maa jaantuch 7alh
puus maa jaantu 7an-li
well RPT NEG go(PFV)-PFV
'Well, he didn't go.'
[T0022: 030]
b. maa waa tamaa7alhch
maa waa ta-maa7an-li+ch
RPT FOC 3PL.SUB-throw.away(PFV)-PFV+ALD
'They threw it away.'
[T0020: 036]

### 3.2.1.5 Instrumental puи-

The verbal prefix puu- adds an instrumental argument to a clause. In the example below in (334a), the root verb 7ii 'bring' is transitive, and there are two overt nominals in the clause-an agent kinati 'my mother' and a patient $t z^{\prime} a w$ 'quelite' (a type of greens). In (334b), the instrumental prefix puи- is affixed to the same root verb, creating a ditransitive stem, and the clause has three overt nominals-an agent Xiiwaan 'Juan', a patient xtaxtoqta 'stuff', and an instrument paatii 'boat'.
(334)a. 7iiy juu tz'aw juu kinati

7ii-y juu tz'aw juu kin-nati bring-IMPFV ART quelite ART 1POS-mother 'My mother brings the quelite.'
[MNB13: 18]
b. puu7iiy juu xtaxtoqta juu Xiiwaan juu paatii puu-7ii-y juu x-taxtoqta juu Xiiwaan juu paatii INST-bring-IMPFV ART 3POS-thing ART Juan ART boat 'Juan brings his stuff by boat.'

For any clause containing an instrumental argument which is co-indexed on the verb stem by the prefix puu-, there is a corresponding clause in which the verb is not affixed with puu- and the instrumental argument appears as an oblique object of a prepositional phrase. Examples are shown in (335), (336), and (337). The (a) examples show the instrumental verb stem, and the (b) examples show the corresponding prepositional phrase.

| (335)a. | juu | Susan | puu7aqalhoonalh | juu | paat'alan |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | juu | Susan | puu-7a-qalhaju-nVn-li | juu paat'alan |  |
|  | ART | Susan | INST-PL.INO-steal-INO-PFV ART | pistol |  |

b. juu Susan 7aqalhoonalh juu lakapaat'alan juu Susan 7a-qalhaju-nVn-li juu laka-paat'alan ART Susan PL.INO-steal-INO-PFV ART PREP-pistol 'Susan stole with a pistol.'
(336)a. puu7alht'ilitnin juu 7alhik juu 7uun
puu-7alht'ilitnin juu 7alhik juu 7uun
INST-fly(IMPFV) ART paper ART air
'The paper flies in the air.'
b. 7alht'ilitnin juu 7alhik juu laka7uun 7alht'ilitnin juu 7alhik juu laka-7uun fly(IMPFV) ART paper ART PREP-air 'The paper flies with the air.'
[MNB13: 8]
(337)a. puulakxixlh juu puumpu7 juu 7uun
puu-lak-xix-li juu puumpu7 juu 7uun INST-PL-dry-PFV ART clothing ART air 'The clothing dried in the air.'
b. lakxix juu puumpu7 juu laka7uun
lak-xix juu puumpu7 juu laka-7uun
PL-dry(IMPFV) ART clothing ART PREP-air
'The clothing dried in the air.'
[MNB13: 9]

### 3.2.1.6 Comitative t'aa-

The comitative prefix $t^{\prime} a a-$ (COM) increases the valency of verb by adding an animate comitative object argument to the verb's argument frame; ${ }^{97}$ the subject/agent performs the action of verb with someone else, as seen below in (338). In this example, the third person singular comitative argument appears as an overt nominal papa 7 'old man'.

```
xakt'aawiilhpaa juu papa7
xa-k-t'aa-wiilh-pala juu papa7
PAST-1SUB-COM-sitting-REP.PFV ART old.man
'I was sitting with the old man.'
```

[T0066: 025]
The person and number of the comitative argument are co-indexed on the verb with accusative morphology, as seen below in (339). In this example, the distributive prefix 7alak- (underlined) co-indexes a third person plural object on the comitative verb stem.
(339) maa 7alakt'aatoolay
maa 7alak-t'aa-toola-y
RPT DIS-COM-stay-IMPFV
'He stays with them.'
[T0055: 067]
However, given that third person plural objects are not obligatorily co-indexed on the verb stem in HT, a third person plural comitative object might or might not be co-indexed on the verb, as seen below in the examples in (340), where all

[^78]comitative arguments (both overt nominals and prefixes) are underlined. In these examples, the verb is affixed with the indefinite object suffix $-n V n$, which suppresses the direct object. ${ }^{98}$ The third person comitative object in (340a) is singular and, thus, not co-indexed on the verb stem. The plural third person comitative argument pumat'uy lapanak 'two people' in (340b) is co-indexed on the verb by the plural prefix lak-; however, the same plural comitative argument in (340c) is not co-indexed on the verb.

| (340) a. | juu ki7in | kt'aa7asaanan | juu | Weensis |
| :--- | :--- | :--- | :--- | :--- |
|  | juu ki7in | k-t'aa-7a-saa-nVn | Weensis |  |
|  | ART PRN.1SG | 1SUB-COM-PL.INO-play-INO(IMPFV) ART | $\underline{\text { Lawrence }}$ |  |
|  | 'I play [music] | with Lawrence.' |  |  |

b. juu ki7in klakt'aa7asaanan
juu ki7in k-lak-t'aa-7a-saa-nan
ART PRN.1SG 1SUB-PL-COM-PL.INO-play-INO(IMPFV)
pumat'uy lapanak
puma-t'uy lapanak
CLS-two person
'I play [music] with two people.'
c. juu ki7in kt'aa7asaanan
juu ki7in k-t'aa-7a-saa-nVn
ART PRN.1SG 1SUB-COM-PL.INO-play-INO(IMPFV)
pumat'uy lapanak
puma-t'uy lapanak
CLS-two person
'I play [music] with two people.'
When the comitative verb stem is transitive, only one object is co-indexed on the verb, as seen below in (341). The transitive, non-comitative verb stem in (341a) has a first person object (underlined), which is co-indexed on the verb by

[^79]kin-. The transitive comitative verb stem in (341b) has two objects-a first person singular patient argument and a third person plural comitative object, but only the first person patient object is co-indexed on the verb.

(341)a. $\quad \frac{\text { kimaapaayniy }}{\text { kin-maapaayni-y }} \quad \begin{aligned} & \text { juu } \\ & \text { juinati }]_{S U B}\end{aligned}$
kin-maapaayni-y juu kin-nati
1OBJ-love-IMPFV ART 1POS-mother
'My mother loves me.'
b. kint'aamaapaayniy [juu kinati] ${ }_{\text {SUB }}$
kin-t'aa-maapaayni-y juu kin-nati
1OBJ-COM-love-IMPFV ART 1POS-mother
[juu ki7amachaqa7 juu kintz'alh] ${ }_{\text {Сом овл }}$
juu kin-7amachaqa7 juu kin-tz'alh
ART 1POS-wife ART 1POS-son
'My mother, along with my wife and my son, loves me.'
The comitative prefix $t^{\prime} a a$ - may co-occur with the reciprocal prefix laa-, ${ }^{99}$ as seen below in the examples in (342). This combination of morphemes also occurs in Sierra Totonac, but it is not known to occur in any other Totonacan language (MacKay and Trechsel 2003). ${ }^{100}$ In (342b) the plural comitative argument xqooyun 'dogs' is co-indexed on the verb by the plural prefix lak(underlined twice).

| t'aalaataylaj7an | juu | xqooy | juu | maqtili7 |
| :--- | :--- | :--- | :--- | :--- |
| t'aa-laa-taylaj7an | juu | xqooy | juu | maqtili7 |
| COM-RCP-attack(IMPFV) | ART | dog | ART | wild.animal |

'The dog and the wild animal attack each other.'
[TPWDB]

[^80]b. juu maqtili7 lakt'aalaataylaj7alh
juu maqtili7 lak-t'aa-laa-taylaj7an-li

ART wild.animal PL-COM-RCP-attack-PFV

| juu laqat'uy | xqooyun |  |
| :--- | :--- | :--- |
| juu laqa-t'uy | xqooy-un |  |
| ART | CLS-two | dog-PL |

'The wild animal and the two dogs attacked each other.'

### 3.2.1.7 Applicative Ihii-

The applicative prefix lhii- (APPL) adds an additional argument to the clause. I have chosen the rather generic name of 'applicative' for this prefix because the additional argument that it licenses may play several different roles. ${ }^{101}$ First, there are examples in which lhii- co-indexes an inanimate comitative argument; ${ }^{102}$ these examples are shown below in (343) and (344). Next there are examples in which lhii- co-indexes a patient; these examples are shown below in (345). Finally, there are examples in which lhii- co-indexes the argument that provides the motivation for the action of the verb; these examples are shown below in (346).

In all of the examples below in (343) and (344), lhii- co-indexes an inanimate comitative argument. Both examples in (343) also have an overt nominal that corresponds to the applicative lhii-, and this overt nominal happens to be kapen 'coffee' in both examples. In (344), the (a) example shows applicative lhii- prefixed to the verb, as well as an overt corresponding nominal 7 asaqsi 7

[^81]'sugar'. The (b) example shows the corresponding clause in which the applicative argument 7asaqsi7 occurs as an oblique object of a prepositional phrase laka7asa7si7 'with sugar'.
(343)a. Ihiich'ampaxaa juu kapen
lhii-ch'an-paxaa juu kapen
APPL-FOOT-bathe(PFV) ART coffee

$\begin{array}{llll}\text { juu } & \text { Miikii } & \text { juu } & \text { xtzi7 } \\ \text { juu } & \text { Miikii } & \text { juu } & \text { x-7atzi7 }\end{array}$
ART Miguel ART 3POS-girl
'Miguel (accidentally) bathed his daughter's foot with coffee.'
[MNB13: 2]
b. Ihiikikchalh juu xkapen juu 7atzi7
lhii-kik-cha-li juu x-kapen juu 7atzi7
APPL-MOUTH-burn-PFV ART 3POS-coffee ART girl
'The girl burned her lip with the coffee.'
[ELIEX4: 051]
(344)a. Ihiiyajuy juu 7asaqsi7 juu xkaan juu Fidela

Ihii-yaju-y juu $\underline{\underline{7 a s a q s i 7}}$ juu xkaan juu Fidela
APPL-mix-IMPFV ART sugar ART water ART Fidela
'Fidela mixes the water with sugar.'
[MNB13: 5]
b. yajuy juu xkaan juu Fidela juu laka7asa7si7
yaju-y juu xkaan juu Fidela juu laka-7asa7si7
mix-IMPFV ART water ART Fidela ART PREP-sugar
'Fidela mixes the water with sugar.'
[MNB13: 5]
The examples shown below in (345) all have an applicative argument that corresponds to the patient of the action of the verb occurs. In the case of example (a), the intransitive verb root 7atz'ala 'run' is transitivized by the addition of the applicative lhii-. In the (b) example, the (lack of third person) morphology does not make it clear that there is an additional applicative object (that is, an applicative object in addition to the direct object laqpuutanuuta 'mask'), but the gloss does. What is especially interesting about these directional applicative
examples is that the language has other, more specific, morphemes that could have been used instead: the causative in the case of the (a) example and the reflexive in the case of the (b) example; however, the speakers chose to use the applicative morpheme.
(345) a. taas kinlhiisk'awatz'alat'i
taas kin-lhii-skaw-7atz'ala-t'i
since 1OBJ-APPL-rabbit-run-2SG.SUB.PFV
'Since you ran me off like a rabbit, . . .'
[T0054: 029]
b. lhiitamawlh laqatam xlaqpuutanuuta

Ihii-tamaju-li laqa-tam x-laqpuutanuuta
APPL-buy-PFV CL:general-one 3POS-mask
'He bought himself one mask.'
[T0055: 048]
Finally, there are examples in which the argument that is co-indexed by applicative lhii- is actually the motivation for the action of the verb, as seen in the examples below in (346).

| puus | yuuch | lhiijunkan | Huehuetla |
| :--- | :--- | :--- | :--- |
| puus | yuuch | lhii-jun-kan | Huehuetla |
| well | PRN.3SG | APPL-call-INS(IMPFV) | Huehuetla |

'Well, that is why they called it Huehuetla.'
[T0057: 040]
b. yuuch maa lhiitalhawaych juu qayxkaan
yuuch maa lhii-talhawa-y+ch juu qayxkaan
PRN.3SG RPT APPL-flood-IMPFV+ALD ART river
'That is why the river floods.'
[T0057: 085]
c. lhiitz'i7inawlhch
lhii-tz'i7in-aw-li+ch
APPL-laugh-1PL.SUB-PFV+ALD
'We laugh because of it.'
[T0066: 115]
There are many lexicalized examples of verb stems affixed with lhii-, three of which are shown below in (347).
(347) a. Ihiimaqniiy
lhii-maqnii-y
APPL-kill-IMPFV
'She poisons him.'
LIT: ‘She kills him with X.'
[TPWDB]
b. klhii7anta kimpuumpu7
k-lhii-7an-ta kin-puumpu7
1SUB-APPL-go-PF 1POS-clothing
'I'm wearing my clothing.'
LIT: 'I have gone with my clothes.'
[TPWDB]
c. Ihiimilh juu 7ixkuux juu lapának
lhii-min-li juu 7ix-kuux juu lapának
APPL-come-PFV ART 3POS-corn ART person
'The man brought his corn.'
LIT: 'The man came with his corn.'
[TPWDB]
There are some examples of compound verbs in which the applicative prefix lhii- intervenes between the two verb roots; all such examples have either tzuku 'begin' or t'ajun 'go around X-ing' ${ }^{103}$ as the second verb in the compound, as seen below in (348) and (349), respectively. It is clear that these are indeed compound verbs because the entire two-verb stem is enclosed by person- and TAM-marking prefixes and suffixes.
(348) a. puxkoolhiitzukukalh
puxkaju=lhii-tzuku-kan-li
search.for=APPL-BEGIN-INS-PFV
'They began to search for it.'
[T0020: 012]
b. nii xatalaqxaqalhiitzukuych juu 7anch
nii xa-ta-laqxaqa=lhii-tzuku-y+ch juu 7anch
COMP PAST-3PL.SUB-drag=APPL-BEGIN-IMPFV+ALD ART there
'When they began to drag her around there, . . ' [T0063: 058]

[^82](349)a. 7anch juu xtalaqxaqalhiit'ajunch

7anch juu x-ta-laqxaqa=lhii-t'ajun+ch
there REL PAST-3PL.SUB-drag=APPL-AMB(IMPFV)+ALD
'There where they went around dragging her.'
[T0063: 056]
b. maa waa talaqxaqalhiit'ajun
juu Maliyaa
maa waa ta-laqxaqa=lhii-t'ajun juu Maliyaa
RPT FOC 3PL.SUB-drag=APPL-AMB(IMPFV) ART María
'They just went around dragging María.'
[T0063: 071]

### 3.2.1.8 Body Part Prefixes

Huehuetla Tepehua has a set of lexical prefixes (Mithun 1997), the majority of which are reduced forms of nouns that refer to body parts or to metaphorical extensions of body parts. These body part prefixes (hereafter, BPPs) may be affixed to verbs, nouns, and adjectives. ${ }^{104}$ In HT, a body part may occur in a noun phrase separate from the verb, as in (350a) or it may occur as a verbal prefix, as in (350b). In all of the following examples, BPPs are shown in bold type, while corresponding body part nominals are underlined.
(350)a. ch'aqay juu xmaka7
ch'aqa-y juu x-maka7
wash-IMPFV ART 3POS-hand
'She washes her hands.'
b. makch'aqalh
mak-ch'aqa-li
HAND-wash-PFV
'She washed her hands.'
The BPP and the verb form a stem which is then inflected for person, tense, aspect, and mood, as seen below in (351).

[^83](351)a. waa kmakxakay
waa k-mak-xaka-y
FOC 1SUB-HAND-clean-IMPFV
'I clean my hands.'
[TPWDB]
b. waa xakmakxakay
waa xa-k-mak-xaka-y
FOC PAST-1SUB-HAND-clean-IMPFV
'I used to clean my hands.'
[TPWDB]
c. naa xakpiixtuxkapalata
naa xa-k-piixtu-xka-pala-ta
EMP PAST-1SUB-NECK-hurt-REP-PF
'My neck hurt.'
[T0054: 043]
A verb affixed with a BPP and a corresponding body part nominal may co-occur in the same clause; however, there are restrictions on the argument status of the full nominal when this happens. If the BPP corresponds exactly to the body part nominal (e.g., mak- and maka7 'hand'), then the overt nominal occurs as an oblique object of the preposition, as seen below in (352). In this construction, both the BPP and the nominal body part represent the whole, and neither represents the part in a part-whole relationship. The example in (353) demonstrates that the full nominal may not occur as a verbal argument.
(352)a. puukikch'aqay

$\begin{array}{ll}\text { juu } & \text { la7ixkilh } \\ \text { juu } & \text { laka- } 7 \mathrm{ix}-\text { kilh } \\ \text { ART } & \text { PREP-3POS-mouth }\end{array}$
[ELIEX1: 084]
b. waa kinkap'it'ikan
waa k-kinka-p'it'i-kan
FOC 1SUB-NOSE-rub-RFL(IMPFV)
'I rub my nose.'
juu lakínlhixín
juu laka-kin-lhiixín
ART PREP-1POS-nose
[TPWDB]
c. laqpuutaqanqay juu laxlaqchulh
laqpuu-taqanqa-y juu laka-x-laqchulh
EYE-sick-IMPFV ART PREP-3POS-eye
'He has an illness in his eyes.'
[ELIEX3: 071]
(353) waa lakpuuxakay **[juu xlaqchulh]
waa lakpuu-xaka-y [juu x-laqchulh]
FOC EYE-clean-IMPFV [ART 3POS-eye]
'S/he cleans his/her eyes.'
[TPWDB]
Similarly, if the nominal body part represents the part and the BPP represents the whole in a part-whole relationship, then the overt nominal must appear as an oblique object of the preposition, as seen below in (354). In this example, the overt nominal tz'anqesiit 'toenail' is a part of the whole BPP ch'an 'foot'. This type of construction in which the BPP is the whole and the nominal is the part in a part-whole relationship rarely occurs.

```
(354)juu Susan ch'anmaniy juu lastz'an7esiit
    juu Susan ch'an-mani-y juu laka-x-tz'anqesiit
    ART Susan FOOT-paint-IMPFV ART PREP-3POS-toenail
    'Susan paints her toenails.'
```

However, if the BPP is a part of a larger whole, then the nominal that represents the whole is an argument of the verb stem, as seen below in (355). In this construction, the BPP represents a part, and the full nominal represents the whole in a part-whole relationship. For example, in (a), the BPP laqapuu- 'surface' is a part of the larger whole miixaa 'table'. In (b), kik- 'mouth' indicates the blade part of the whole knife paalakch'uk'un. In (c) the BPP kilhtu- 'edge' is a part of the whole skumilh 'pot'.
$\begin{array}{lllll}\text { (355) a. } & \begin{array}{l}\text { laqqapuuch'aqalhch } \\ \text { laqqapuu-ch'aqa-li+ch }\end{array} & \begin{array}{l}\text { juu } \\ \text { juu }\end{array} & \frac{\text { miixaa }}{\text { miixaa }} & \text { juu } \\ \text { t'aku7 }\end{array}$
SURFACE-wash-PFV+ALD ART table ART woman
'The woman washed the table.'
[ELIEX3: 057]

| b. | nii laaych <br> nii laa-y+ch | kach'uk'ulh <br> ka-ch'uk'u-li | juu <br> juu |
| :--- | :--- | :--- | :--- |
| COMP | paalakch'uk'un |  |  |
| paalakch'uk'un |  |  |  |

[MNB13: 50]
c. kilhtusaamaay juu 7iskumilh juu laxmaka7 kilhtu-saamaa-y juu 7ix-skumilh juu laka-x-maka7
EDGE-smooth-IMPFV ART 3POS-pot ART PREP-3POS-hand
'She smoothes the edge of her pot with her hand.'
[MNB13: 44]
The addition of a BPP can increase the valency of the verb by one object argument if the BPP is a part of the whole nominal. Below in (356a), the verb is not affixed with a BPP, and pututunti 'ball' appears as the oblique object of the preposition. In (356b), the verb is prefixed with laka- 'body', and pututunti occurs as an object argument of the verb; the BPP laka- represents a part of the whole ball.
(356) a. lamuk'ay juu 7uulii juu laxpututunti
lamuk'a-y juu 7uulii juu lakax-pututunti
stick-IMPFV ART rubber ART PREP-3POS-ball
'He sticks the rubber on his ball.'
b. lakalamuk'ay juu 7uulii juu xpututunti
laka-lamuk'a-y juu 7uulii juu x-pututunti
BODY-stick-IMPFV ART rubber ART 3POS-ball
'He sticks the rubber on (the body of) his ball.'
[MNB13: 97]
In the example in (357a), the intransitive stative verb tanuun ${ }^{105}$ requires the prepositional phrase juи lakapaaloqoy 'in the cage' to indicate the location of the

[^84]subject skaw 'rabbit'. However, in (357b), the BPP puu- 'insides' is affixed to the verb, and paaloqoy 'cage' is a verbal object argument, rather than an oblique object of the preposition. In this example, the BPP puu- 'insides' is a part of the whole cage.

| (357)a. | juu skaw tanuun juu lakapaaloqoy |
| :--- | :--- |
| juu skaw tanuun juu laka-paaloqoy |  |
| ART rabbit inserted ART PREP-cage |  |
| 'The rabbit is in the cage.' |  |

[MB54-2]
b. juu skaw puutanuun juu paaloqoy
juu skaw puu-tanuun juu paaloqoy
ART rabbit INSIDES-inserted ART cage 'The rabbit is inside the cage.'
[MB54-3]
In the above example (357b), the 'rabbit' skaw is the patient/subject of the clause, and the 'cage' paaloqoy is a verbal argument by virtue of external possession, ${ }^{106}$ that is, it is an argument because (i) it is the possessor of the BPP that is affixed to the verb and (ii) it is the whole of which the BPP is a part. There are many such examples in which the possessor of the part that is co-indexed by the BPP is promoted to a verbal argument, some of which are shown in (358) and (359). In the example in (358a), the noun lapanak 'person' is a clausal argument because it is the external possessor of the BPP kilh- 'mouth'; in (358b) lapanák 'people' is a clausal argument because it is the external possessor of the BPP laka- 'body'; and in (358c) lapanak 'person' is a clausal argument because it is the external possessor of the BPP mak- 'hand'.

[^85]| (358) a. | kílhtanuun <br> kílh-tanuun | juu | 7 ix 7 ukx 7 uti | juu | $\underline{\text { lapanak }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | MOU | 7ix-7ukx7uti | juu | $\underline{\text { lapanak }}$ |  |
|  | MOUTH-inserted(IMPFV) | ART | 3POS-cigarette | ART | person |

'The cigarette is in the person's mouth.'
b. maa waa lakap'uch'ilh juu lapanák
maa waa laka-p'uch'i-li juu lapanak
RPT FOC 'The people's bodies rotted.'
[T0057: 010]
c. pumatam lapanak makchilikx7uta
puma-tam lapanak mak-chilikx7u-ta
CL:human-one person HAND-go.numb-PF
'One person's hand went to sleep.'
[ELIEX1: 033]
If the possessor of the body part that is co-indexed on the verb is first person, than it is co-indexed on the verb by subject (and not object) marking, as seen below in (359). ${ }^{107}$
(359)klakak'uunlh juu chaway
k-laka-k'uun-li juu chaway
1SUB-BODY-swell-PFV ART today
'I swelled up today.'
[ELIEX3: 012]
In many instances, however, the BPP does not actually change the valency of the verb; instead, it is in a part-whole relationship with an existing argument. In the following examples in (360), the BPP is in a part-whole relationship with the agent/subject; in these examples, the BPPs are shown in bold type and the agent/subjects are underlined. In (360a) the BPP 7aq- 'head' is a part of the whole, which is a first person agent/subject. In (360b), the BPP 7aqx- 'shoulder'

[^86]is a part of the whole, which is an unmarked, third person agent/subject. In (360c), the BPP katu- 'ear' is a part of the third person agent/subject lapának 'person'.

| (360) a. | k'aklht'unk'utach | juu | kimaleta ${ }^{108}$ |
| :--- | :--- | :--- | :--- |
|  | k-7aq-lht'unk'u-ta+ch | juu | kin-maleta |
|  | 1SUB-HEAD-carry-PF+ALD | ART | 1POS-suitcase |
|  | 'I carried my suitcase on my head.' |  |  |

[T0054: 040]
b. maamak'utulhch maa
maa-mak'utu-li+ch maa
CAUS-unload-PFV+ALD RPT
$\begin{array}{lcl}\text { 7aqxqoqatach } & \text { juu } & \text { xburruu } \\ \text { 7aqx-qoqa-ta }+ \text { ch } & \text { juu } & \text { x-burruu } \\ \text { SHOULDER-carry-PF }+ \text { ALD } & \text { ART } 3 \text { 3OS-donkey } \\ \text { 'He unloaded the donkey and threw it [the load] on his shoulder.' }\end{array}$
[T0055: 019]
c. katu7iilh juu lapanak $\begin{aligned} & \text { juu } 7 \text { 7ix7aay } \\ & \text { katu-7ii-li }\end{aligned}$

EAR-bring-PFV ART person ART 3POS-hair
'The man pulled a hair out of his ear.'
[ELIEX2: 050]
In the examples in (361), the BPPs are in a part-whole relationship with the patient/object of the clause. In these examples, the BPPs are shown in bold type and the patient/objects are underlined. In (a), the BPP katu- 'ear' is a part of the object waakax 'cow'; in (b) the BPP laqxtan- 'jaw' is a part of the first person object; in (c) the BPP tan- 'torso' is part of the plural third person object, which is co-indexed on the verb by the plural prefix lak-; and in (d), the BPPs $k a$ - 'tip' and tii- 'butt' are a part of the unmarked third person singular object.
(361)a. katuch'ilhch juu lapanak juu xwaakax
katu-ch'i-li+ch juu lapanak juu x-waakax
EAR-tie-PFV+ALD ART person ART 3POS-cow
'The person tied his bull by the horns.'
[ELIEX2: 084]
${ }^{108}$ The $/ \mathrm{q} /$ in the prefix $7 a q$ - harmonizes with the velar stop in the verb to produce [7ak-].
b. lootz kilaqxtansaa
lootz ki-laqxtan-saa
pow 1OBJ-JAW-hit(PFV)
'Pow! He hit me in the jaw.'
[ELIEX4: 020]
c. 7aksch juu xalaktantamakxtukan

7aks+ch juu xa-lak-tan-tamakxtu-kan
when+ALD ART PAST-PL-TORSO-take.out-INS(IMPFV)
'That is when someone took them outside.'
[T0063: 078]
d. kakatiilasoqnik'ayaaw
ka-ka-tii-lasoqnik'a-ya7-w
IRR-TIP-BUTT-straighten-FUT-1PL.SUB
'We are going to straighten it [a board] on the top and bottom.'
[T0069: 115]
Note that in the examples above in (360) and (361), all of the BPPs are glossed with prepositional phrases in the English free translations.

The BPPs may co-occur with other valency-increasing morphology, as seen in the examples in (362); in these examples, both the valency-increasing prefixes and the corresponding nominal arguments are underlined, while the BPPs are in bold type. Below in (a), the applicative prefix lhii- promotes the nominal kapen 'coffee' to the status of object argument. In (b), the causative prefix maaadds licenses the addition of the agent nominal Tziiku7 'Frank'.
(362) a. $\begin{array}{lllll}\text { lhiikikchalh } & \text { juu } & \text { xkapen } & \text { juu } & 7 \text { atzi7 } \\ \text { lhii-kik-cha-li } & \text { juu } & \text { x-kapen } & \text { juu } & 7 \text { atzi7 }\end{array}$
lhii-kik-cha-li juu x-kapen juu 7atzi7
APPL-MOUTH-burn-PFV ART 3POS-coffee ART girl
'The girl burned her lip with/on the coffee.'
[ELIEX4: 051]
b. maapuu7aqxt'i7uuy
maa-puu-7aqx-t'i7uu-y
CAUS-INSIDES-FLAT-assemble-IMPFV
juu lht'aqalak'iw
juu lht'aqala-k'iw
ART board-wood
juu Tziiku7
juu Francisco
ART Frank
'Frank joins the boards.'
[MNB13: 96]
A complete list of the BPPs appears below in Table 17.
Table 17: Huehuetla Tepehua Body Parts

| Reduced <br> Noun | Full <br> Noun | Gloss |
| :--- | :--- | :--- |
| 7aq- $\sim$ 7ak- $\sim$ lakapaa- | 7aqtzulh | head |
| 7aqx- $\sim$ 7akx- $\sim$ 'aqxp'in- | 7aqxp'un | shoulder, upper back, flat surface |
| 7aqxspuu | XXX | face (combo of 7aqx- and puu-) |
| ch'an- $\sim$ tz'an- | ch'aja7 | foot, leg, paw |
| kapii | kapiiya7 | hard-palate |
| katu- | 7aqaxqolh | ear |
| kik- kilhtu- $\sim$ qelh- | kilh | mouth, edge |
| kinka- $\sim$ ka- | kinkati7 | tip, point |
| kinka- $\sim$ kanka- $\sim$ kanqa | lhiixin | nose |
| laka- $\sim$ lak- $\sim$ laqa- $\sim$ laq- | lakatunaj | body |
| lakpuu- $\sim$ laq(a)puu- $\sim$ laq- $\sim$ lak- | 7ukxpu7 | face |
| lakpuu- $\sim$ laq(a)puu- $\sim$ laq- $\sim$ lak- | laqchulh | eye |
| laqxtii | 7aay | hair, on top of |
| mak- $\sim$ maq- | maka7 | hand, arm |
| maqaxtu- | maqaxtu7 | elbow |
| muuntz'a- $\sim$ muunti | muuntz'an | forehead |
| muusa- | muusan | groin |
| paka- | pakapu7 | armpit |
| piix- $\sim$ piixtu- | piixtu7 | neck |
| puu- | XXX | insides |
| qaq- $\sim$ kaq- $\sim$ laq(a)xtan | laqxtan | cheek |
| qaq- $\sim$ kaq- | kaalhtz'an | jaw |
| qaatu- $\sim$ 7aatu- | qaatu7 | thigh |
| staa- | puulakan | back |
| tamp'us- | tamp'uktz'ulh | belly button, navel |
| tan- | tampuu | stomach |
| tan- | tankilhak | chest |
|  |  |  |


| tasa- | tatzalat | tooth |
| :--- | :--- | :--- |
| tii- | tiimus | lower back, buttocks, and hips |
| tzoqot- | tzoqot | knee |

### 3.2.2 Compound Verbs

Two root verbs may be juxtaposed to form a compound verb, as seen in the examples below in (363) and (364). The most common compound verb involves a verb of motion (e.g., arrive, come, go, bring, take) as the second verb in the compound, as seen in the examples in (363); however, other action oriented verbs may occur, as seen in the examples in (364).
(363)a. milhpacha7alhch
milhpa=chaa7an-li+ch sing=arrive.there-PFV + ALD ART John 'John arrived there singing.'
b. milhpachilhch
milhpa=chin-li+ch
sing=arrive.here-PFV+ALD
'Yesterday, John arrived here singing.'
Yestas, John anived here singing.
[ELIEX1: 028]
[ELIEX1: 036]
c. juu 7anuuch lapanak juu maa xaqalhii7an
juu 7anu7+ch lapanak juu maa xaqa=lhii7an
ART that+ALD person REL RPT pull=take(IMPFV) 'that person who takes her.'
[T0063: 036-037]
kutanch juu Xiiwaan kutanch juu Xiiwaan yesterday ART John
d. ch'aqx7iiya7 juu lapanak juu k'iw ch'aqx=7ii-ya7 juu lapanak juu k'iw chop=bring-FUT ART person ART tree
'The man will chop down the tree.'
[ELIEX1: 087]
(364)a. juu 7axpitni7 lakch'uk'u7ulaa juu k'iw juu 7aspitni7 lak-ch'uk'u=7ulaa-y juu k'iw ART carpenter DIS-split=put-IMPFV ART wood 'The carpenter cuts the wood into pieces.'
[MNB13: 45]
b. jaantu waa ch'uk'uqalhtajukan
jaantu waa ch'uk'u=qalhtaju-kan
NEG FOC split=lower-INS(IMPFV)
'It can't be split downwards.' / 'No se corta para abajo.' [T0069: 145]
c. kaa 7akch'uk'up'uxnilhch
kaa 7a-k-ch'uk'u=p'ux-ni-li+ch
p'ulhnan
BLV IRR-1SUB-split=cut-DAT-PFV+ALD first
'I think that I have to cut it first.'
[T0069: 196]
d. laksak7uy juu xkuux juu chiila7
lak-sak=7u-y juu x-kuux juu chiila7
PL-lift=eat-IMPFV ART 3POS-corn ART chicken
'The chicken picks up its corn and eats it.'
[TPWDB]

### 3.2.3 Aspectual Derivational Affixes

In HT the aspectual derivational affixes include the inchoative (3.2.3.1), the imminent (3.2.3.2), the roundtrip (3.2.3.3), the ambulative (3.2.3.4), a second type of inchoative that I call 'begin' (3.2.3.5), the desiderative (3.2.3.6), two types of repetitive action affixes that I call 'repetition' (3.2.3.7) and 'again' (3.2.3.8), an affix that indicates a complete set that I call 'all' (3.2.3.9), and the distal and the proximal (3.2.3.10).

### 3.2.3.1 Inchoative ta-

The inchoative prefix $t a$ - indicates that the subject of the clause is entering into a state or beginning an action. It may occur on both transitive and intransitive verbs, and it occurs in all tenses, aspects, and moods, as seen in the examples below in (365).

[T0003: 031]
b. katalakpaxayaaw
ka-ta-lak-paxay-a7-w
IRR-INCH-DIS(?)-move-FUT-1PL.SUB
'We (INCL) are going to move.'
[T0057: 013]
c. waa tat'eqelh juu mimprensa
waa ta-t'eqe-li juu min-prensa
FOC INCH-break-PFV ART 2POS-vise
'Your vise broke?'
[T0069: 123]
d. nii katarresgalalhch
nii ka-ta-arresgala-li+ch
COMP IRR-INCH-risk-PFV+ALD
'if she will risk it.'
[T0069: 432]
According to Watters (1988), in Tlachichilco Tepehua, only stative verbs (and verbs of destruction) "may serve as the base for the inchoative prefix ta-" (p. 42). Though the majority of textual examples involving the inchoative prefix do occur on stative verbs in Huehuetla Tepehua as well, this prefix appears on the non-stative verb in (365b) above. However, according to Watters (p.c.), in Tlachichilco Tepehua, the root paxay is a stative verb meaning ' X is different, changed'. Further semantic testing needs to be done on this HT verb to confirm if it is or is not a stative.

When the inchoative prefix ta- precedes a body part prefix, as seen below in the examples in (366b) and (366c), it is acting as a fully productive morpheme. When it follows a body part prefix, as seen below in the examples in (367), the inchoative prefix and the verb root form a lexicalized frozen form that is no longer productive. In (367), tanuи 'insert' is a lexicalized stem, whereas tajuи 'insert' in (366), is a productive stem composed of ta- and the verb jun 'to be',
between which a lexical prefix may intervene. In all of these examples, the inchoative $t a$ - is in bold type and the BPPs are underlined.

| (366) a. | tajuulhch <br> ta-jun-li+ch | juu lapanak <br> juu lapanak | juu lakxkaan <br> juu lak-xkaan |  |
| :--- | :--- | :--- | :--- | :--- |
|  | INCH-be-PFV+ALD | ART person | ART | PREP-water |
|  | 'The man got into the water.' |  |  |  |

b. tatiijuulhch juu t'aku7 lakaxkaan
ta-tii-jun-li+ch juu t'aku7 laka-xkaan

INCH-BUTT-be-PFV+ALD ART woman PREP-water
'The woman sat down in the water.'
c. takaqjuulhch juu 7asqat'a lakaxaaluu
ta-qaq-jun-li+ch juu 7asqat'a laka-xaaluu
INCH-MOUTH-be-PFV+ALD ART child PREP-pitcher
'The child stuck his mouth in a pitcher.' [TPWDB]
(367)a. katutanuuputun juu 7ix7atusliyuti juu t'aku7
katu-tanuu-putun juu 7ix-atusliyuti juu t'aku7
ear-insert-DESID(IMPFV) ART 3POS-earring ART woman
'The woman wants to put in her earrings.'
b. piixtanuulhch juu 7ixmilhpu7uti juu t'aku7
piix-tanuu-li+ch juu 7ix-milhpu7uti juu t'aku7
neck-insert-PFV+ALD ART 3POS-necklace ART woman
'The woman put on her necklace.'
[TPWDB]
The inchoative prefix precedes other derivational prefixes, such as the causative prefix maa-, shown below in (368).
(368)lhiikilhch juu lapanak juu qayxkaan
lhiiki-li+ch juu lapanak juu qayxkaan
dam-PFV+ALD ART person ART river
juu tamaaxixikan
juu ta-maa-xixi-kan
REL INCH-CAUS-dry(VT)-RFL(IMPFV)
'The man dammed the river to dry it up.'
[ELIEX4: 042]

### 3.2.3.2 Imminent ti-

The imminent prefix $t i$ - is homophonous with the negative future prefix (see Section 3.1.2.3 on Mood), but the two prefixes have very different meanings. The imminent prefix indicates that the subject argument is about to perform the action of the verb. This prefix is relatively rare; examples are shown in (369).
(369)a. kti7anchoqoych
k-ti-7an-choqo-y+ch
1SUB-IMM-go-AGAIN-IMPFV+ALD
'I'm about to leave again.'
[T0066: 282]
b. chaa kti7iiy
chaa k-ti-7ii-y
over.there 1SUB-IMM-bring-IMPFV
'I'm about to go over there to get it.'
[T0069: 373]

### 3.2.3.3 Roundtrip kii-

The roundtrip prefix kii- indicates that the subject of the clause went somewhere else to perform the action of the verb and returned again. The cognate prefix in other Totonacan languages has been called the "regressive" (McQuown 1990: 184), the "intentional (MacKay 1999: 327), "return" (Watters 1988: 248), and "roundtrip" (Beck 2004: 77). As there is no consensus in the literature, I follow Beck because "roundtrip" is both descriptively accurate and easy to abbreviate as RT. Given that the notion of going and returning implies completion of the action, the roundtrip prefix occurs only in the past tense imperfective aspect, the perfect aspect, and the perfective aspect, as seen in the examples below in (370).

| (370) a. | tanch | xak'iilaay | jii | kumwarii |
| :--- | :--- | :--- | :--- | :--- |
|  | tanch | xa-kii-laa-y | jii | kumwarii |
|  | where | PAST-RT(2SUB)-can-IMPFV VOC compadre |  |  |

[T0055: 006]
b. juu tuumiin juu xtakii7alhajutach
juu tuumiin juu x-ta-kii-qalhaju-ta+ch ART money REL PAST-3PL.SUB-RT-steal-PF+ALD 'the money that they had (gone and) stolen'
[T0055: 055]
c. kintakiipuuxkoopaa juu tz'iisi kin-ta-kii-puuxkaju-pala juu tz'iisi 1OBJ-3PL.SUB-RT-search.find-REP.PFV ART last.night 'They went looking for me again last night.'
[T0066: 017]

### 3.2.3.4 Ambulative -t'ajun

The verb t'ajun is used in three different ways in HT: (i) it can be used as a main verb; (ii) it forms the ambulative by occurring as the second element of a verb-verb compound; and (iii) it forms the periphrastic progressive aspect. This last occurrence is covered in Section 3.4.1.2 on the Progressive Aspect.

As a main verb, t'ajun means 'be', 'live', or 'exist', as seen below in the example in (371).
(371)juu papaanin juu kaa waa lakak'iwin xtat'ajun
juu papa7-nin juu kaa waa lakak'iwin x-ta-t'ajun ART man-PL REL BLV FOC woods PAST-3PL.SUB-live(IMPFV)
'The men who lived in the woods.' [T0022: 002-003]
The verb t'ajun can occur as the second verb of a verb-verb compound, producing an ambulative reading of the first verb: 'go around X-ing', as seen in the examples in (372).

| (372)a. | maa | x7alhtanat'ajun | juu laxtaanqaa |
| :--- | :--- | :--- | :--- | :--- |
| maa | x-7alhtanan-t'ajun | juu | laka-x-taanqaa |

[T0022: 029]
b. talhiimukunt'ajun
ta-lhii-mukun-t'ajun
3PL.SUB-APPL-take.along-AMB(IMPFV)
'They go around carrying her along.'
[T0063: 017]
c. tiix laqxtuch juu lhiit'aqap'at'a7un
tiix laqxtu+ch juu lhii-t'aqap'a-t'ajun
why alone+ALD REL APPL-get.drunk-AMB(2SUB)(IMPFV)
'Why do you go around getting drunk?'
[T0066: 091]
I have chosen to analyze the ambulative $t^{\prime} a j u n$ as a verb-verb compound (rather than as a derivational suffix) because in the ambulative construction, the verbal applicative prefix lhii- may intervene between the two verbs, as if it were prefixed to the second verb $t^{\prime}$ ajun, as seen below in (373).
(373)7anch juu xtalaqxaqalhiit'ajunch

7 anch juu x-ta-laka-xaqa-lhii-t'ajun+ch
there REL PAST-3PL.SUB-BODY-pull-APPL-AMB(IMPFV)+ALD
'It was there that they went around pulling her.'
[T0063: 056]

### 3.2.3.5 Begin -tzuku

Like the verb t'ajun, the verb tzuku occurs alone as a main verb, as part of a verb-verb compound, and as part of a periphrastic construction. Interestingly, the verb-verb compound formed with $t z u k u$ and the periphrastic construction formed with $t z u k u$ both have the same meaning, which is one of inchoative aspect.

However, I label this verb as 'begin' so as not to confuse it with the inchoative prefix $t a$-. The periphrastic use of $t z u k u$ is discussed in Section 3.4.1.3.

When tzuku occurs alone as a main verb, it means 'to be born', as seen in the example below in (374).
(374)tzukulh juu 7asqat'a
tzuku-li juu 7asqat'a
be.born-PFV ART child
'The child was born.'
[TPWDB]
When tzuku occurs as the second verb in a verb-verb compound, the construction means 'begin to $X$ ', as seen in the examples below in (375). This is clearly a compound construction because the person and TAM marking enclose both verbs in (375b). Also, note that the applicative prefix lhii- intervenes between the two verbs in this same example.
(375) a. 7uksuntzukulh laqaxix

7uksun=tzuku-li laka-xix walk=begin-PFV PREP-dry 'It began to walk along in the dried [riverbed].'
[T0058: 039]
b. xatalaqxaqalhiitzukuchoqoych
xa-ta-laka-xaqa=lhii-tzuku-choqo-y+ch
PAST-3PL.SUB-BODY-pull=APPL-begin-again-IMPFV+ALD
'They began to pull her again.'
[T0066: 028]

### 3.2.3.6 Desiderative -putun

The desiderative suffix -putun is affixed to the stem of the verb, producing the meaning 'want to X '. The desiderative stem is inflected for person and TAM, as seen in the examples below in (376). The suffix -putun does not occur alone as a main verb.
(376)a. wachuuch waa ktamakoomputun 7ani7 wachuu+ch waa k-tamakajun-putun 7ani7 also+ALD FOC 1SUB-stay-DESID(IMPFV) here 'I want to stay here, too.'
[T0055: 063]
b. jaantu xaklaqtz'inputunan
jaantu xa-k-laqtz'in-putun-an
NEG PAST-1SUB-see-DESID(IMPFV)-2OBJ
'I did not want to see you.'
[TPWDB]
c. maa naa lhuu jaantuch xtaminputun maa naa lhuu jaantu+ch x-ta-min-putun RPT very many NEG+ALD PAST-3PL.SUB-come-DESID(IMPFV) 'Many [people] did not want to come.'
[T0057: 027]
In the perfective aspect, the final $/ \mathrm{n} /$ in - putun is deleted before the $-l h$ perfective suffix, as seen below in example (377).
(377)a. juu 7uputulhch
juu 7u-putun-li+ch kaa 7u-li+ch REL eat-DESID-PFV+ALD BLV eat-PFV+ALD 'Whoever wanted to eat it, he ate it, I think.'
[T0020: 034]
b. naa k'uputulh
naa k-7u-putun-li
FOC 1SUB-eat-DESID-PFV
'I wanted to eat it.'
In the perfective aspect, when the subject is second person singular, -putun is reduced to $-p^{\prime} u$, as seen below in (378).
(378) naa 7up'ut'i
naa 7u-putun-t'i
EMP eat-DESID(PFV.2SUB)-2SG.SUB.PFV
'You wanted to eat it.'

### 3.2.3.7 Repetitive -pala

The repetitive suffix -pala may be affixed to a verb root or stem, and it indicates repeated or repetitive action of the verb. It frequently is translated as
'again'; however it implies that the action of the verb is repeated frequently, either repetitively or on various occasions or regular intervals. The suffix -pala has two allomorphes, -paa and -palh. The full form -pala occurs in the imperfective and perfect aspects and the future tense, shown below in (379), and the two allomorphes -paa and -palh occur in the perfective aspect, shown in (381) and (382), respectively.
(379)a. nii yuuch jaantu lhiimimpalay juu 7ani7
nii yuuch jaantu lhii-min-pala-y juu 7ani7
COMP PRN.3SG NEG APPL-come-REP-IMPFVART here
'That is why I never come here.'
('That is why I repeatedly do not come here.')
[T0054: 033]
b. nii kaa waa p'atz'ik xqot'palata
nii kaa waa p'atz'ik x-qot'-pala-ta
COMP BLV FOC a.little PAST-drink-REP-PF
'I think that you were a little drunk.'
(Implying that addressee was frequently drunk)
[T0054: 032]
$\begin{array}{llll}\text { c. kasaapalaaw } & \text { juu } & \text { 7anuu laqatam } & \text { juu } \\ \text { ka-saa-pala-a7-w Bartolo } \\ \text { juu } & \text { 7anuu laqa-tam juu } & \text { San Bartolo }\end{array}$
IRR-play-REP-FUT-1PL.SUB ART DADJ CL-one ART San Bartolo
'We are going to play this one from San Bartolo.'
[T0066: 116]
(These are musicians practicing, so they will play the piece repeatedly)
The suffix - pala may co-occur with other aspectual derivational suffixes, as seen below in (380). When this occurs, -pala is the next-to-last suffix on the stem to which the person and TAM markers are affixed; the only suffixes that may follow it are the distal and proximal ones, an example of which is shown below in the example in (382a).
(380) a.

> juu 7asqat'a kalinchoqopala7
> juu 7asqat'a ka-7alin-choqo-pala-a7
> ART child IRR-there.is-AGAIN-REP-FUT
> 'There will be more children.'
[T0059: 014]

| b. | wachu7 | naa | xtipastakt'oonpalay | tachuu | 7 ani7 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| wachu7 | naa | x-ti-pastak-t'ajun-pala-y | tachuu | 7 7ani7 |  |
| also | EMP | PAST-IMM-think-AMB-REP-IMPFV like | DADJ |  |  |

'He (repeatedly) went around thinking like this, too.' [T0069: 041]
c. 7amputumpalay wachu7 juu Susan

7an-putun-pala-y wachu7 juu Susan
go-DESID-REP-IMPFV also ART Susan
'Susan wants to go, too.'
[T0069: 429]
The reduced form -paa, shown in the examples in (381) occurs only word-finally and only in the perfective aspect. It is derived phonologically and analogically from -pala. The word-final short vowel is deleted, the $/ 1 /$ nuetralizes to $/ A /$, which is then deleted by analogy with perfective lateral deletion (see chapter 2, sections 2.6.1.2, 2.6.2, and 2.7.6, respectively). The dilemna here is why this happens at all. Since this suffix precedes the aspectual suffixes (as seen above, we would expect for the perfective marker -li to occur after -pala, which would prevent -pala from undergoing final short-vowel deletion, which would bleed the other two rules. However, the perfective suffix-for reasons that I am unable to determine-does not co-occur with -pala.
(381)a. kilaqoxipaa juu doctor
kin-laqoxi-pala juu doctor
1OBJ-fix-REP.PFV ART doctor
'The doctor cured me.'
(Implying that it took several doctor visits to be cured.) [T0054: 044]
b. waa k'atzay nii maa 7ampaa Pachuca
waa k-k'atza-y nii maa 7an-pala Pachuca
FOC 1SUB-know-IMPFV COMP RPT go-REP.PFV Pachuca
'I know that he went to Pachuca again.'

The intermediate form -palh also occurs only in the perfective aspect, where perfective -li and -pala do not co-occur. I have only two examples of this allomorph, which are shown below in (382). In the (a) example, -palh is followed by the distal suffix -chaa, and in the (b) example it is followed by the temporal clitic $+c h$. There is a dilemna with respect to this form, too: why is the final $/ \mathrm{a} /$ of -pala deleted when it is not word final? ${ }^{109}$
(382) a. kt'aaweenpalhchaa
k-t'aa-wajin-pala-chaa
1SUB-COM-eat-REP.PFV-DST
'We ate there again.'
[T0069: 242]
a. milh 7awilhchan nii kaa
min-li 7awilhcha nii kaa
come-PFV day COMP BLV
lhii7ampalhch juu maa p'aax
lhii7an-pala + ch juu maa p'aax
take-REP.PFV+ALD ART RPT pig
'The day came when it carried off a pig again.'
[T0020: 016]
Watters (1988) quotes a personal communication from Dorothy Herzog regarding the use of -pala in Huehuetla Tepehua to indicate "an unexpected turn of events" (p. 242). Such examples of this use of -pala are rare in my own data, though they do occur. Examples are shown below in (383).

| (383)a. | waa | niipaa | juu | xnatich | juu | 7 atzi7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | waa | nii-pala | juu | x-nati+ch | juu | 7 atzi7 |
|  | FOC | die-REP.PFV | ART | 3POS-mother+ALD | ART | girl |
|  | 'The girl's mother died (unexpectedly).' |  | $[$ [T0 |  |  |  |

[T0054: 004]

109 The deletion of the final /a/ in -pala triggers liquid neutralization.

| b. maa toqlh | 7anpaa | juu lakajip |  |  |
| :--- | :--- | :--- | :--- | :--- |
| maa | toqlh | 7an-pala | juu laka-jip |  |
| RPT | ID:burning | go-REP.PFV | ART | PREP-fire |
|  | 'She (unexpectedly) | jumped into the fire.' |  |  |

[T0054: 074]
The cognate suffix has several different names in the Totonacan literature, including 'repetitive' (Aschmann and Wonderly 1952: 134; Beck 2004: 73), ‘again' (Watters 1988: 240), and 'reiterative’ (McQuown 1990: 183).

### 3.2.3.8 Again -choqo

The suffix -choqo may be affixed to a verb stem to produce the meaning 'do the action (or achieve the state) of the verb again' or 're-do the action (or reachieve the state) of the verb'. The new stem is then inflected for person and TAM. HT examples are shown in (384).
(384)a. maa minchoqolhch juu lakatii
maa min-choqo-li+ch juu laka-tii
RPT come-AGAIN-PFV+ALD ART PREP-road 'He returned (came again) by the road.'
[T0055: 049]
b. wachu7 k'anchoqoya7
wachu7 k-7an-choqo-ya7
also 1SUB-go-AGAIN-FUT
'I'm going to go again, too.'
[T0055: 099]
The suffix -choqo may co-occur with other aspectual derivational suffixes, as seen below in (385). In (385a), -choqo precedes the distal suffix chaa. In (385b), -choqo precedes the repetitive suffix -pala.

| (385)a. | nii | maa | taspitchoqochaa |
| :--- | :--- | :--- | :--- |
|  | nii | maa | taspit-choqo-chaa |

[T0055: 045]
b. 7entons maa pastakchoqopalakalh

7entons maa pastak-choqo-pala-kan-li
then RPT think-AGAIN-REP-INS-PFV
'Then they rethought it again.'
[T0057: 021]
Watters (1988) calls the cognate suffix in Tlachichilco Tepehua the 'repetition' suffix, and he says that it "is apparently a Tepehua innovation" (1988: 235).

The meaning of the suffix -choqo is very similar to that of the suffix -pala. ${ }^{110}$ However, while -choqo indicates that an action or state is repeated once, -pala indicates that the action is frequently or iteratively repeated. In fact, the two morphemes frequently co-occur, as seen above in (385b).

### 3.2.3.9 All -qoju

The suffix -qoju adds the meaning of 'all' or 'completely' to a clause. When it occurs on an intransitive verb, its presence indicates either that all members of a plural subject participated in the action of the verb, as seen in example (386a), or that the action of the verb was entirely completed, as seen in example (386b). When -qoju occurs on a transitive verb, it indicates that all members of a plural object were affected by the action of the verb, as seen in example (387). The full form -qoju occurs only in the imperfective aspect, shown in (388), while the reduced allomorph -qoo occurs in the perfective aspectshown in (386) and (387) - and in the future tense, shown in (389). Given its denotation of completion, this suffix tends to occur most frequently with the perfective aspect, though it does occur with other tenses and aspects, as well. This

[^87]suffix tends to surface as $-q o o$ because an intervocalic $/ \mathrm{h} /$ is deleted when the following vowel is unstressed (as it is in the perfective aspect), and the resulting diphthong $/ \mathrm{au} /$ is pronounced [o:]. ${ }^{111}$
(386) a.

| juu tatamokoonchalhch | 7anch |
| :--- | :--- |
| juu ta-tamakajun-chaa-li+ch | 7anch |
| REL | 3PL.SUB-remain-DST-PFV+ALD |
| there |  |

[T0057: 031]
b. lakpaatajuqoo
lak-paataju-qoju
DIS-fall.off-ALL.PFV
'It [her skin] fell completely off.'
[T0057: 079]
(387)lhaaqamanqoolh juu xtuumiin
laaqaman-qoju-li juu x-tuumiin waste-ALL-PFV ART 3POS-money 'He wasted all of his money.'
[ELIEX4: 038]
(388) juu xqatii naa naa xlaktanooqojuy
juu xqatii naa naa x-lak-tanuu-qoju-y
ART creek EMP EMP PAST-PL-enter-ALL-IMPFV
juu lakalakchaqa7 naa naa juu lapanák
juu laka-lak-chaqa7 naa naa juu lapanák
ART PREP-PL-house EMP EMP ART people
'The creek would flood all of the houses of the people.'
[T0057: 069]
(389)porque nii jaantu kaniiqooyaaw
porque nii jaantu ka-nii-qoju-ya7-w
because COMP NEG IRR-die-ALL-FUT-1PL.SUB
'Because if not, we're all going to die.'

111 Please see Chapter 2, section 2.6.9 for the $/ \mathrm{h} /$-deletion rule.

The cognate of this suffix has a variety of names in the Totonacan literature, including 'terminative' (McQuown 1990: 183), 'completive' (Watters 1988: 226; MacKay 1999: 335), and 'all, completely' (Beck 2004: 74).

### 3.2.3.10 Distal -chaa and Proximal -chii

Distal (distant from speaker, 'there') and proximal (close to speaker, 'here') location may be indicated on the verb by the suffixes -chaa and -chii, respectively. ${ }^{112}$ The distal -chaa historically comes from the verb chaa7an 'arrive there'. While the root verb chaa7an indicates motion away from the speaker or some reference point already established in the discourse, the suffix -chaa refers to a location distant from the speaker. Similarly, the proximal -chii historically comes from the verb chin 'arrive here'. The verb chin indicates motion towards the speaker or some reference point already established in the discourse, while the suffix -chii indicates a location close to the speaker.

There is conflicting data in HT regarding the morphological order of these suffixes. Some of HT examples indicate that -chaa and -chii follow the aspectual markers, as seen below in the examples in (390). Other examples indicate that chaa and -chii precede the perfective aspectual suffix, shown below in (391). In yet other examples, it is not possible to determine morpheme order because perfective aspect is not overtly marked, as seen below in (392). ${ }^{113}$

[^88](390)a. kt'aaweenpalhchaa
k-t'aa-wajin-pala-chaa
1SUB-COM-eat-REP.PFV-DST
'We ate there again.'
[T0069: 242]
b. maamaatachaa7as
maa-maa-ta-chaa+7as
CAUS-lying-PF-DST+TAGQ
'He has it over there, right?'
[T0069: 406]
(391) a. tanuuchaalhch juu lakatalhpa
tanuu-chaa-li+ch juu laka-talhpa
enter-DST-PFV+ALD ART PREP-hill
'It went into the cave.'
[T0020: 020]
b. pero 7aksnii maa tanuuchiilh juu comunismo
pero 7aksnii maa tanuu-chii-li juu comunismo
but then RPT enter-PRX-PFV ART communism
'But then communism came here.'
[T0057: 060]
c. juu pumatam lapanak kilaachiilh
juu puma-tam lapanak ki-laa-chii-li
ART CL:human-one person RT-can-PRX-PFV
7ani7 maa lakaMiikiixkaan
7ani7 maa laka-Miikii-xkaan
here RPT PREP-Miguel-water
'One person came here along Miguel's Water.' [T0058: 015-016]
d. juu lapanak juu 7ixajaachiilh
juu lapanak juu 7ix-xajaan-chii-li
ART person REL PAST-exit-PRX-PFV
'the person who came out of there'
[T0057: 060]
(392)a. juu kmukoonichaa juu Kosee
juu k-muku-ni-chaa juu Kosee
ART 1SUB-leave-DAT-DST(PFV?) ART José
'I left it with José.'
[T0069: 402]
b. nii maa taspitchoqochaa
nii maa taspit-choqo-chaa
COMP RPT return-AGAIN-DST(PFV?)
'When he returned there, . . .'
[T0055: 045]
There is one example in the database in which the verb chin 'arrive here' is suffixed with the distal suffix -chaa; this example is shown in (393). There are no examples in the database in which the verb chaa7an 'arrive there' is suffixed with the proximal suffix -chii. ${ }^{114}$
(393)nii maa tachinchaa
nii maa ta-chin-chaa
COMP RPT 3PL.SUB-arrive.there-DST(PFV?)
'when they arrived there . . .'
[T0022: 013]

### 3.3 Existentials, Posture and Location Verbs, and the Copula

This section is a sort of catch-all for topics that did not quite fit anywhere else in this chapter. Included here are the existential verbs (Section 3.3.1), the posture and location verbs (Section 3.3.2), and the copula (Section 3.3.3).

### 3.3.1 Existentials

There are two existential copulas in Tepehua. The first, 7alin, is equivalent to 'there is' or 'there are' in English or 'hay' in Spanish; examples are shown in (394). The second existential, t'ajun, is used to convey existence ('exist', 'be') and location (both temporary 'be' and more permanent 'live'); examples appear in (395).
(394)a. pero 7alin juu xa-k'uch'u but there.is(IMPFV) ART IPOS-cure 'There is a cure.'

114 This is also the situation in Tlachichilco Tepehua (Jim Watters p.c.)
b. waa 7alin talhpa

FOC there.is(IMPFV) hill
'There is a hill . . .'
[T0022: 051]
c. 7alilh laqatam 7awilhchan

7alin-li laqa-tam 7a-wilhchan
there.is-PFV CL:general-one CL:another-day
'There was one day . ..'
[T0055: 001]
d. nii talaklhtatalhch
nii ta-lak-lhtata-li+ch
COMP 3PL.SUB-DIS-sleep-PFV+ALD

| nii | naa | waa | x7alinch | juu | xqen |
| :--- | :--- | :--- | :--- | :--- | :--- |
| nii | naa | waa | x-7alin+ch | juu | xqen |
| COMP | EMP | FOC | PAST-there.is(IMPFV)+ALD | ART | fly |


| naach | maa | waa | kaw | x7alin | juu | xqen |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| naa+ch | maa | waa | kaw | x-7alin | juu | xqen |
| EMP+ALD | RPT | FOC | noise | PAST-there.is(IMPFV) | ART fly |  |

'When they fell asleep, there were a lot of flies, and the flies
made a lot of noise.'
[T0055: 069-71]
e. juu 7asqat'a kalinchoqopala7
juu 7asqat'a ka-7alin-choqo-pala-a7
ART child IRR-there.is-AGAIN-REP-FUT
'There will be another child again.'
[T0059: 014]
(395)a. maa xt'oonpalay juu maqtili7
maa x-t'ajun-pala-y juu maqtili7
RPT PAST-be-REP-IMPFV ART wild.animal
juu waa niinch laqachaqan tawii xkaan
juu waa niin+ch laqachaqan tawii xkaan
REL FOC near+ALD town seated water
'There was an animal that (repeatedly) was near the town, in the water.'
[T0020: 002]
b. juu papanin juu kaa waa
juu papa-nin juu kaa waa
lakak'iwin xtat'ajun
laka-k'iw-in x-ta-t'ajun
PREP-tree-PL PAST-3PL.SUB-be(IMPFV)
'the old people who lived in the woods.'
[T0022: 003]
c. pero maa tat'ajun
pero maa ta-t'ajun
but RPT 3PL.SUB-be(IMPFV)
'But, they do exist.'
[T0022: 024]
d. k'atzay juu Xiiwaan junt'aa t'ajun juu Kuulax
k'atza-y juu Xiiwaan junt'aa t'ajun juu Kuulax
know-IMPFV REL John where be(IMPFV) REL Nicholas
'John knows where Nicholas is.'
[ELIEX2: 086]

### 3.3.2 Posture and Location Verbs

Huehuetla Tepehua has what Grinevald (2005) calls the four basic posture verbs (sit, stand, lie, hang). The four posture verbs in HT are maa(lh) 'lying' (in a horizontal position), wii(lh) 'seated' (seated, hunched, or crouched), yaa 'standing' (in a vertical position), and juk'alh 'suspended' (up in the air, or simply above something else). Though the posture verbs indicate the posture or position of a person or thing, all four of them may be glossed simply by the English verb 'be'. The HT posture verbs have inherent imperfective aspect, and they occur only in present (unmarked) and past tenses. Examples of posture verbs are shown below in (396) through (399). Just as the perfective suffix -lh weakens to nothing word-finally after a vowel, so too does the final /lh/ of maalh and wiilh. It is quite possible that something similar happens with yaa; however, no instances of yaalh (nor environments in which it might occur) appear in my database.
(396) maa(lh) 'lying'
a. $\begin{aligned} & \text { maa (IMPFV) } \\ & \\ & \\ & \\ & \text { 'There are ashes.' }\end{aligned} \quad \begin{aligned} & \text { ART lhk'ak } \\ & \end{aligned}$
[ELIEX4: 083]
b. waa jaantu kijumpaa xmaa
waa jaantu kin-jun-pala x-maa
FOC NEG 1OBJ-tell-REP.PFV PAST-lying(IMPFV)
'He didn't tell me where it was.'
[T0069: 377]

lakapoolhokokmaalhch juu 7anu7 lapanak
laqapuu-lhoqoq=maalh + ch juu 7anu7 lapanak
EYE-hollow=lying(IMPFV)+ALD ART DADJ person
'They see that hollow-eyed person lying there.' [T0055: 075-076]
(397) wii(lh) 'seated'
a. 7ani7 kwii

7ani7 k-wii
here 1SUB-seated(IMPFV)
'I sit/live/am here.'
[ELIEX2: 079]
b. maa waa 7ixwii
maa waa 7ix-wii
RPT FOC PAST-seated(IMPFV)
'It was sitting down.'
[T0022: 036]
c. juntaa xwiilhch
juntaa $\quad \mathrm{x}$-wiilh+ch
where PAST-seated(IMPFV)+ALD
'where his compadre lived.'

```
juu xkumwarii
juu x-kumwarii ART 3POS-compadre
[T0055: 090]
```

(398)yaa 'standing'
a. nii jaantu yuuch juu 7anu7 yaachaa
nii jaantu yuuch juu 7anu7 yaa-chaa
COMP NEG PRN.3SG REL DADJ standing(IMPFV)-DIST
laqatam lhii7uwint'i
laqa-tam lhii-7uwint'i
CL:general-one APPL-over.there
'If not that one standing there, then the other one, over there.' [T0069: 328]
b. juu 7awilhchan yaa xpuulakan qay 7atapuutz
juu 7awilhchan yaa x-puulakan qay 7atapuutz
ART sun standing(IMPFV) 3POS-back big cloud
'The sun is behind a big cloud.'
[TPWDB]
c. maa niita yaa juu laka7uun
maa nii-ta yaa juu laka-7uun
RPT die-PF standing(IMPFV) ART PREP-air
'He was dead (vertical) in the air.'
[T0022: 010]
(399)juk'alh 'suspended', 'up high’
a. talaklhman juk'alh juu maalhiyuk
ceiling suspended(IMPFV) ART spider
'The spider is on the ceiling.'
[MB7-1] ${ }^{115}$
b. kikjuk'alh juu waayti juu kuchiiluu
kik-juk'alh juu waayti juu kuchiiluu EDGE-suspended(IMPFV) ART food ART knife
'The food is on the knife's blade.'

| c. | 7alin | laqatam | campana |
| :--- | :--- | :--- | :--- | :--- |
| 7alin | laqa-tam | campana | jani7 |
| there.is(IMPFV) | CL:general-one bell | ART here |  |

[T0057: 045]

[^89]The four posture verbs are somewhat irregular. The present tense conjugations of maa(lh) and wii(lh) are shown below in Table 18, and those of yaa and juk'alh are shown in Table 19.

Table 18: HT Posture Verbs, Present Tense: maalh and wiilh

|  | maa(lh) | wii(lh) |
| :--- | :--- | :--- |
| 1 SG | kmaa | kwii |
| 2 SG | maat'i | wiilht'i |
| 3 SG | maa | wii |
| 1 SIMPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 MULTIPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 SIMPLE PL EXCL | kmaaw | kwiilaw |
| 1 MULTIPLE PL EXCL | klakmaaw | klakwiilaw |
| 2 SIMPLE PL | maat'it | wiilat'it |
| 2 MULTIPLE PL | lakmaat'it | lakwiilat'it |
| 3 SIMPLE PL | tamaa | tawiilanalh |
| 3 MULTIPLE PL | talakmaa | talakwiilanalh |

Table 19: HT Posture Verbs, Present Tense: yaa and juk'alh

|  | yaa | juk'alh |
| :--- | :--- | :--- |
| 1 SG | kyaa | kjuk'alh |
| 2 SG | yaat'i | 7uk'a |
| 3 SG | yaa | juk'alh |
| 1 SIMPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 MULTIPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 SIMPLE PL EXCL | kyaaw | kjuk'aw |
| 1 MULTIPLE PL EXCL | klakyaaw | klakjuk'aw |
| 2 SIMPLE PL | yaat'it | 7uk''at'it |
| 2 MULTIPLE PL | lakyaat'it | lak'uk'at'it |
| 3 SIMPLE PL | tayaanalh | tajuk'alh |
| 3 MULTIPLE PL | talakyaanalh | talakjuk'alh |

The posture verbs may stand alone as main verbs, as seen in the examples above, or they may be compounded with another verb in order to add positional information to that verb, as seen in the examples below in (400) and (401). The
posture verb maa(lh) 'lying' occurs in more compounds than any of the others do, and I did not find any examples of juk'alh 'suspended' in a compound.
(400) a. k'ay k'ay kilhuumaa
k'ay k'ay kilhuu=maa
ID:moan ID:moan complain=lying(IMPFV)
'He is moaning, lying down.'
b. k'ay k'ay kilhuuyaa
k'ay k'ay kilhuu=yaa
ID:moan ID:moan complain=standing(IMPFV)
'He is moaning, standing up.'
[MNB13: 15]
c. k'ay k'ay kilhuuwii
k'ay k'ay kilhuu=wii
ID:moan ID:moan complain=seated(IMPFV)
'He is moaning, sitting down.'
[MNB13: 15]
(401) a. maa tatzukulh lakat'alhmaanin
maa ta-tzuku-li laka-t'alh=maa-nin
RPT 3PL.SUB-begin-PFV BODY-stone=lying-INF
'They began to stone it.'
[T0020: 019]
b. ch'imaalhch juu lapanak juu xtz'alh
ch'i=maa-li+ch juu lapanak juu x-tz'alh
tie=lying-PFV+ALD ART person ART 3POS-boy
'The man already tied up his son.'
[ELIEX1: 099]
c. 7anchach tanuumaachaa laktalhpa

7anch+ach tanuun=maa-chaa laka-talhpa
there+ALD inserted=lying(IMPFV)-DIST PREP-hill
'She is stuck in the hill, there.'
[T0063: 072]
d. muujuuyaa juu t'aku7 juu x7amaqpanti
muujuu-yaa juu t'aku7 juu x-7amaqpanti
wash-standing(IMPFV) ART woman ART 3POS-washing
'The woman washes clothes.'
[MNB13: 48]
The posture verbs frequently occur with body part prefixes as seen in the examples in (396c), (399b), and (401a) above, as well as in (402) below.
(402)a.

| yuuch | maa | tiiwii | juu | lakatalhpa |
| :--- | :--- | :--- | :--- | :--- |
| yuuch | maa | tii-wii | juu | laka-talhpa |
| PRN.3SG | RPT | BUTT-seated(IMPFV) | ART | PREP-hill |
| 'She is still sitting in the cave.' |  |  |  |  |

[T0054: 065]
b. 7uksjuk'alh juu 7aqtooloqontalhna7 juu luw 7uks-juk'alh juu 7aqtooloqontalhna7 juu luw SURFACE-suspended(IMPFV) ART tree.trunk ART snake
'The snake is on the tree trunk.'
When a posture verb is combined with the inchoative prefix $t a$-, the new stem means 'get into the position' or 'assume the posture', as seen below in (403). The inchoative stem may be marked for any tense or aspect.
(403) a. tamaalhch lhtatayach
ta-maa-li+ch lhtata-ya+ch
INCH-lying-PFV+ALD sleep-IMPFV+ALD
'He laid down and is sleeping.'
[ELIEX4: 102]
b. laqatayaalhch
laqa-ta-yaa-li+ch
BODY-INCH-standing-PFV+ALD
'He stood up in front of her.'
[T0054: 008]
c. ch'antayaay juu xqoop'aalh
ch'an-ta-yaa-y juu xqoop'aalh
FOOT-INCH-standing-IMPFV ART tick
juu laxch'aja7 juu lapanak
juu laka-x-ch'aja7 juu lapanak
ART PREP-3POS-foot ART person
'The tick stands up on the person's foot.'
[TPWDB]
d. tatawiilh juu papanin
ta-ta-wii-li juu papa-nin
3PL.SUB-INCH-seated-PFV ART man-PL
'The men sat down.'
[TPWLEX: tawii]
When the causative prefix maa- is combined with the posture verb maa 'lying', the meaning of the derived verb is 'lay something down', as seen in
(404a) and (404b), or 'have', as seen in (404c). The resulting causativized stem may be marked for any tense or aspect. I found no examples of the other posture verbs co-occurring with the causative prefix.
(404)a. 7aqxt'uych kamaamaayaaw

7aqx-t'uy+ch ka-maa-maa-ya7-w
CL:flat-two+ALD IRR-CAUS-lying-FUT-1PL.SUB
'We're going to place two [boards].'
[T0069: 064]
b. maamaalh juu 7ixasqat'a juu t'aku7
maa-maa-li juu 7ix-asqat'a juu t'aku7
CAUS-lying-PFV ART 3POS-child ART woman
'The woman laid down her child.'
[TPWDB]
c. xakmaamaatach juu laqatam
xa-k-maa-maa-ta+ch juu laqa-tam
PAST-1SUB-CAUS-lying-PF+ALD ART CL:general-one
'I had one.'
[T0069: 402]
HT has two additional stative verbs that behave syntactically like the posture verbs and that indicate location or position, tanuun 'inserted into (from the side or horizontally)' and tajun 'inserted into (from above or vertically)' or 'contained within'. ${ }^{116}$ Examples are shown below in (405) and (406), respectively. Like the posture verbs, the location verbs have inherent imperfective aspect, and they occur only in present (unmarked) and past tenses.

[^90](405) tanuии 'inserted horizontally'
a. laka7anii taa xtanuunch
laka-7anii taa x-tanuun+ch
PREP-here where PAST-inserted(IMPFV)+ALD
7ixchaqaach juu lhakatikuruu
7ix-chaqaa+ch juu lhakatikuruu
3POS-house+ALD ART devil
'There where she was stuck in the devil's house.'
[T0063: 051-2]
b. maktanuun juu laxqeliiliimaka7
mak-tanuun HAND-inserted(IMPFV)
juu laka-x-qeliilii=maka7
ART PREP-3POS-digit=hand
juu xmaktanuuti
juu $\quad$ x-mak-tanuu-ti
ART 3POS-HAND-insert-NOM
'Her ring is on her finger.'
[MB10]
c. xtaampuus miixaa tanuun juu miistu7
x-taampuus miixaa tanuun juu miistu7
3POS-middle table inserted(IMPFV) ART cat
'The cat is under the middle of the table.'
[MB31-1]
(406) tajun 'contained', 'inserted vertically'
a. xpuulakskuumilh tajun juu paamata
x-puulak-skuumilh tajun juu paamata
3POS-INSIDE-pot contained(IMPFV) ART fish
'The fish is inside the pot.'
b. maa kulhuk paatajunch juu xpuumpu7
maa kulhuk paa-tajun+ch juu x-puumpu7
RPT INSIDE LOC-contained(IMPFV)+ALD ART 3POS-clothing
'Inside there is her clothing.'
[T0020: 027]
c. juu lhii7ut tajun juu lakaqaax
juu lhii7ut tajun juu laka-qaax
ART fruit contained(IMPFV) ART PREP-bowl
'The fruit is in the bowl.'

The conjugations of tanuun and tajun are less irregular than the conjugations of the posture verbs. The present tense forms of each verb are shown below in Table 20.

Table 20: HT Location Verbs, Present Tense: tanuun and tajun

|  | tanuun | tajun |
| :--- | :--- | :--- |
| 1 SG | ktanuun | ktajun |
| 2 SG | t'anuun | ta7un |
| 3 SG | tanuun | tajun |
| 1 SIMPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 MULTIPLE PL INCL | MISSING DATA | MISSING DATA |
| 1 SIMPLE PL EXCL | ktanuumaw | ktajumaw |
| 1 MULTIPLE PL EXCL | klaktanuumaw | klaktajumaw |
| 2 SIMPLE PL | t'anuumat'it | t'a7umat'it |
| 2 MULTIPLE PL | lakt'anuumat'it | lakt'a7umat'it |
| 3 SIMPLE PL | tatanuun (animate) <br> laktanuun (inanimate) | tatajumanalh (animate) <br> laktajumanalh (inanimate) |
| 3 MULTIPLE PL | talaktanuun (both) | talaktajumanalh (both) |

Both tanuun and tajun have corresponding active verb forms, tanuu'enter' or 'insert' and taju- 'get into (water or a container)', respectively. Given that tajun in derived from ta-jun (INCH-be), it would follow that taju- is then derived from tajun; however this process of derivation (i.e., deleting an $-n$ from a stative verb to create an active stem) is not a productive one, and I have found no other examples in which it is used.

The location verb tanuun frequently co-occurs with body part prefixes, as seen above in (405b) and below in (407).

| (407) a. | ch'antanuun | juu laxch'aja7 | juu | xch'antanuuti |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | ch'an-tanuun | juu laka-x-ch'aja7 | juu | x-ch'antanuuti |  |
|  | FOOT-inserted(IMPFV) | ART | PREP-3POS-foot | ART | 3POS-shoe |
|  | 'The shoe is on his foot.' |  |  | $[$ MB21] |  |

b. juu lapanak $\quad$ 7aqtanuun juu xaqtanuuti juu lapanak jaq-tanuun juu x-7aqtanuuti ART person head-inserted(IMPFV) ART 3POS-hat 'The man wears his hat.'
[MB5-1]
c. kilhtanuun juu 7ix7ukx7uti juu lapanak kilh-tanuun juu 7ix-7ukx7uti juu lapanak mouth-inserted(IMPFV) ART 3POS-cigarette ART person
'The man has his cigarette in his mouth.'
'The man's cigarette is in his mouth.'
[MB39]
Though I have no examples in which tajun 'contained' co-occurs with a body part prefix, I do, however, have examples in which taju- 'get into' appears with BPPs. These examples appear in Section 3.2.3.1 example (366), and they are repeated below in (408). Interestingly, in these examples, the BPP intervenes between the inchoative $t a$ - and the stative verb jun 'be'.

| (408) a. | tajulhch | juu lapanak | juu | lakxkaan |
| :---: | :---: | :---: | :---: | :---: |
|  | taju-li+ch | juu lapanak | juu | lak-xkaan |
|  | get.into-PFV+ALD | ART person | ART | PREP-water |
|  | 'The man got into | water.' |  |  |

b. tatiijuulhch juu t'aku7 lakaxkaan
ta-tii-jun-li+ch juu t'aku7 laka-xkaan
INCH-BUTT-be-PFV+ALD ART woman PREP-water
'The woman sat down in the water.'
c. takaqjuulhch juu 7asqat'a lakaxaaluu
ta-qaq-jun-li+ch juu 7asqat'a laka-xaaluu
INCH-MOUTH-be-PFV+ALD ART child PREP-pitcher
'The child stuck his mouth in a pitcher.' [TPWDB]

### 3.3.3 Copula

In HT, present tense, imperfective aspect, singular subject predicate nominal, predicate adjectival, and predicate pronominal constructions are nonverbal constructions. However, when these constructions occur in any other tense
or aspect or have a plural subject, they require the copula jun 'be' to bear the tense, aspect, mood, and plural person marking morphology. A present tense paradigm is shown below in (409). In this present tense predicate nominal construction, the person-marking for first and second person singular is affixed directly to the nominal element, as seen in (a) and (b), respectively; the relevant person-marking affixes are underlined in the examples. There is no singular third person marking in Tepehua to affix to the nominal element in (c), nor is a copula used. However, a copula is present in the plural person examples in (d), (e), and (f). In all of these present (i.e., morphologically unmarked) tense examples, the copula appears in the perfect aspect, and it bears the appropriate person-marking morphology. In all examples in this section, the copula appears in bold type.

```
(409)a. juu ki7in kt'aku7
    juu ki7in k-t'aku7
    ART PRN.1SG ISUB-woman
    'I am a woman.'
b. juu 7uxint'i t'akuu7ata
juu 7uxint'i t'aku7-7ata
ART PRN.2SG woman-2SG.SUB
'You (SG) are a woman.'
c. juu yuuch t'aku7
juu yuuch t'aku7
ART PRN.3SG woman
'She is a woman.'
```

d. juu kijnan t'akuunin kjuntaw
juu kijnan t'aku7-nin k-jun-ta-w ART PRN.1PL woman-PL 1SUB-be-PF-1PL.SUB 'We (EXCL) are women.'

| e. juu 7uxijnan t'akuunin | 7unt'at'it |  |  |
| :--- | :--- | :--- | :--- |
| juu 7uxijnan | t'aku7-nin | jun-ta-t'it <br> but |  |
|  | ART PRN.2PL | woman-PL | be(2SUB)-PF-2PL.SUB |
|  | 'You (PL) are women.' |  |  |


| f. | juu yu7unch | t'akuunin | tajuuniita |
| :--- | :--- | :--- | :--- |
| juu yu7unch | t'aku7-nin | ta-jun-niita ${ }^{117}$ |  |
|  | ART | PRN.3PL | woman-PL | 3PL.SUB-be-PF 'They are women.'

[PDLMA2005]
It is important to note that the second person subject suffix -7ata that appears on the noun in example (409b) above occurs only on predicate nominal and adjectival constructions. It is not used anywhere else in the morphosyntax (that I have found). Furthermore, neither the $/ \mathrm{k} /$ nor the final $/ \mathrm{t} /$ are glottalized in this noun, which indicates that only verbs (and not nouns or adjectives) can undergo the process of glottalization of stops and affricates that occurs when the subject is second person. When there is no nominal or adjectival element to which the suffix -7ata may affix, the copula is used instead, as seen below in (410).

| (410) puus kaa | 7aqtz'iyanch | chunch |
| ---: | :--- | :--- |
| puus kaa | 7aqtz'iyan+ch | chun + ch |
| well BLV | always + ALD | like.so + ALD |

juu 7uuniit'a juu 7uxint'i
juu jun-niita juu 7uxint'i
REL be(2SUB)-PF(2SUB) ART PRN.2SG
'Well, I think that you have always been like that.'
[T0054: 028]
Below in example (411) is the past tense paradigm that corresponds to the present tense paradigm shown above in (409). Since a nominal element may not bear tense, aspect, or mood morphology, the copula is required for all persons and

[^91]numbers. Note that the copula bears all person-marking morphology as well as the TAM morphology, even in the first and second person singular examples shown in (a) and (b).
(411) a.

| juu | ki7in | t'aku7 |
| :--- | :--- | :--- |
| juu | ki7in | t'aku7 |
| ART | PRN.1SG | woman |
| 'I was a woman.' |  |  |

b.

| juu | 7uxint'i | t'aku7 |
| :--- | :--- | :--- |
| juu | 7uxint'i | t'aku7 |
| ART | PRN.2SG | woman |

'You (SG) were a woman.'
c. juu yuuch t'aku7 7ixjuuniita
juu yuuch t'aku7 7ix-jun-niita
ART PRN.3SG woman PAST-be-PF
'She was a woman.'
d. juu kijnan t'akuunin xajkuntaw
juu kijnan t'aku7-nin xa-k-jun-ta-w
ART PRN.1PL woman-PL PAST-1SUB-be-PF-1PL.SUB
'We (EXCL) were women.'
e. juu kijnan t'akuunin 7ixjuntaw
juu kijnan t'aku7-nin 7ix-jun-ta-w
ART PRN.1PL woman-PL PAST-be-PF-1PL.SUB
'We (INCL) were women.'
f. juu 7uxijnan t'akuunin 7ix7unt'at'it
juu 7uxijnan t'aku7-nin 7ix-jun-ta-t'it
ART PRN.2PL woman-PL PAST-be(2SUB)-PF(2SUB)-2PL.SUB
'You (PL) were women.'
g. juu yu7unch t'akuunin xtajuuniita
juu yu7unch t'aku7-nin x-ta-jun-niita ART PRN.3PL woman-PL PAST-3PL.SUB-be-PF
'They were women.'
xajkuuniita
xa-k-jun-niita
PAST-1 SUB-be- PF

7ix7uuniit'a
7ix-jun-niita
PAST-be(2SUB)-PF(2SUB)
[PDLMA2005]

The examples above in (411) show that the copula is used to bear past tense morphology. The examples below in (412) show that it is also used to bear future tense morphology.
(412) a. oculta kajuna7
oculta ka-jun-a7
hidden IRR-be-FUT
'It will be hidden.'
[T0069: 020]
b. naa naach soq kajuna7 tachuu juuniitach naa naa+ch soq ka-jun-a7 tachuu jun-niita+ch EMP EMP+ALD straight IRR-be-FUT like.so be-PF+ALD 'It will be straight like it is.'

According to Watters (1988), hun (which is imperfective) means 'become', while huniita (which is perfect aspect) means 'be' (p. 57). Because the majority of the copular examples in my database are in the perfect aspect and clearly mean 'be', as seen in the examples above in (409) through (411), I had to elicite examples of 'become' (using the Spanish se hizo 'he became X ' and se hicieron 'they became X '). This task successfully produced examples that were not in the perfect aspect and that mean 'become,' as seen in the examples in (413). The example in (413a) is in the perfective aspect, while the example in (413b) is in the past tense imperfective aspect. The aspectual contranst mirrors the chronological contrast: the process of becoming old is a long-term, on-going process, so it occurs in the imperfective aspect, while the process of becoming a mother is much more abrupt and less transitional.

| (413) a. | juu Xiiwaanaa | junlich | xaanati |
| :--- | :--- | :--- | :--- |
|  | juu Xiiwaanaa | jun-li+ch | xaa-nati |
|  | ART Juana | be-PFV+ALD | IPOS-mother |
|  | 'Juana became a mother.' |  |  |


| b. | juu pumakiis | lapanak papaaninch |
| :--- | :--- | :--- |
| juu puma-kiis | lapanak | papa7-nin+ch |
| ART CL:human-five | people | old.man-PL+ALD |

There are three textual examples in my database in which the copula appears in the imperfective aspect; these examples are shown below in (414), and either gloss ('was/were' or 'became') is appropriate for the gloss.
(414)a.

| nii | maa | qaych | xjun | juu | sasqat'a7an |
| :--- | :--- | :--- | :--- | ---: | :--- |
| nii | maa | qay+ch | x-jun | juu | x-7asqat'a-7an |
| COMP | RPT | big+ALD | PAST-be(IMPFV) ART | 3POS-child-PL.POS |  |
| 'When their child was/became big, ... |  |  |  |  |  |
| [T0059: 006] |  |  |  |  |  |

b.

| matiich | juu | xlhiich'alhkat7an | xajun |
| :--- | :--- | :--- | :--- |
| mati7+ch | juu | x-lhiich'alhkat-7an | xa-jun |
| nothing+ALD | ART | 3POS-job-PL.POS | PAST-be(IMPFV) |
| 'Their work became nothing.' |  |  |  |
| 'There was no work.' |  |  |  |

[T0063: 029]
c. maa xta7anch

7amaqpanin
maa $x-t a-7 a n+c h$
7a-maqpa-nin
RPT PAST-3PL.SUB-go xtajun +ALD
PL.INO-wash.clothes-INF

| porque | maa | lapanak juu | tajun |
| :--- | :--- | :--- | :--- |
| porque | maa | lapanak juu | ta-jun |
| because | RPT | lapanak | REL | 3PL.SUB-be(IMPFV)

juu tat'asaay juu maqalipni7
juu ta-t'asaa-y juu maqalipni7
REL 3PL.SUB-call-IMPFV ART lightening
'They went to wash because they were/became human, the ones who call the lightening.'

The copula jun has an irregular, suppletive form waa when it occurs in any irrealis modality other than the future tense or the conditional mood. ${ }^{118}$ This suppletive form is cognate with the Totonac copula wan 'become' (Watters p.c.). Examples in which the copula appears as waa in the irrealis mood appear in (415); examples in which the copula appears as $j u n$ in the irrealis mood appear in (416). ${ }^{119}$
(415) Copula waa, Irrealis Mood
a. Optative
klakaskin nii kawaa 7ukxtin juu Xiiwaan k-lakaskin nii ka-waa 7ukxtin juu Xiiwaan 1SUB-want COMP IRR-be(IRR) president ART John 'I want John to be president.'
[BeQ]
b. Negative Optative

| jaantu | talakask'in | juu lapanak |
| :--- | :--- | :---: | :--- |
| jaantu | ta-lakask'in | juu lapanak |
| NEG | 3PL.SUB-want | ART people |

nii kawaa 7ukxtin
nii ka-waa 7ukxtin
COMP IRR-be(IRR) president
'The people do not want him to be president.'
[ELIEX2: 008]
c. Negative Future
jaantu 7ukxtin katiwaa juu Xiiwaan
jaantu 7ukxtin ka-ti-waa juu Xiiwaan
NEG president IRR-NEG.FUT-be(IRR) ART John
'John will not be president.'
[BeQ2]

[^92]d. Dubitative

| jaantu | k'atz'ay | nii | 7ukxtin |
| :---: | :---: | :---: | :---: |
| jaantu | k-k'atz'a-y | nii | 7ukxtin |
| NEG | 1SUB-know-IMPFV | COMP | president |


| kawaa | juu | Xiiwaan |
| :--- | :--- | :--- |
| ka-waa | juu | Xiiwaan |
| IRR-be(IRR) | ART | John |

'I don't know if John is/will be president.'
'I doubt that John will be president.'
e. Permission, Possibility

| kaa | laay | kawaa | 7ukxtin | juu | Xiiwan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| kaa | laa-y | ka-waa | 7ukxtin | juu | Xiiwan |  |
| BLV | can-I | IRR-be(IRR) | president | ART | John |  |
| 'John may be president.' |  |  |  |  |  |  |
| 'John can be president.' |  |  |  |  |  |  |
| 'It is possible that John is president.' [BeQ2] |  |  |  |  |  |  |

(416) Copula jun, Irrealis Mood
a. Future

7ukxtin kajuna7 juu Xiiwaan
7ukxtin ka-jun-a7 juu Xiiwaan
president IRR-be-FUT ART John
'John will be president.'
[BeQ2]
b. Conditional

7ukxtin kajuna7 juu Xiiwaan nii kalhtajuya7
7ukxtin ka-jun-a7 juu Xiiwaay nii ka-lhtaju-ya7 president IRR-be-FUT ART John COMP IRR-win-FUT 'John will be president if he wins.'

Finally, there is one example in my database in which a aspectual derivational morpheme occurs on the copula; this example is shown below in (417). In this example, the repetitive suffix -pala is affixed to the root jun, creating a stem to which the perfect aspect suffix $-t a$ is attached. In this context, the use of the repetitive suffix implies that the action/occurrence was unexpected.
(417)jumpalata kaa waa cosa maalampalata
jun-pala-ta kaa waa cosa maalan-pala-ta
be-REP-PF BLV FOC thing bad-REP-PF
'It was (unexpectedly) like a bad thing.'
[T0054: 010]
In the following subsections, I discuss predicate pronominal (section 3.4.3.1), predicate nominal (section 3.3.3.2), and predicate adjective (section 3.3.3.3) constructions in more detail.

### 3.3.3.1 Predicate Nominals

As mentioned in the preceding discussion of the copula, the copular element is needed in a present tense predicate nominal construction only when the patient/subject is plural. If the patient/subject in a present tense predicate nominal construction is third person singular, then there is no person marking, nor is there a copula, as seen below in the examples in (418) and (419).
(418) a. t'aku7 'woman'
b. juu yuuch t'aku7
juu yuuch t'aku7 ART PRN.3SG woman
'She is a woman.'
[PDLMA2005]
c. maa waa t'aku7
maa waa t'aku7

RPT FOC woman
'It [a wild beast] is a woman.'
[T0020: 029]
(419) a. lapanak 'person'
b. juu yuuch lapanak juu yuuch lapanak ART PRN.3SG, person
'He is a person.'
[PDLMA2005]

| c. | maa | jaantu | ta7uputunpalay | juu |
| :--- | :--- | :--- | :--- | :--- | xaa7akanit

'They didn't want to eat any more meat because it was human.'
[T0020: 032]
d. jaantu lapanak

NEG person
'It is not human / a person.'
[T0054: 009]
If the patient/subject in a predicate nominal construction is first or second person singular, the person markers are affixed directly to the nominal, as seen in the examples above in (409a) and (409b) and below in (420) and (421). In the examples in (420), the first person prefix $k$ - is affixed to the nouns, and in the examples in (421), the second person singular suffix -7ata is affixed to the nouns. None of the stops in the nouns in the examples in (421) are glottalized, which indicates that only verbs-and not nouns-undergo glottalization of the stops and affricates when the subject is second person.
(420)a. juu ki7in kt'aku7
juu ki7in $\underline{\text { k-t'aku7 }}$
ART PRN.1SG 1SUB-woman
'I am a woman.'
b. juu ki7in klapának
juu ki7in k-lapának
ART PRN.1SG 1SUB-person
'I am a person.'
[PDLMA2005]
(421) a. juu 7uxint'i t'akuu7ata
juu 7uxint'i t'aku7-7ata
ART PRN.2SG woman-2SG.SUB
'You (SG) are a woman.'
b. juu 7uxint'i lapanak7ata
juu 7uxint'i lapanak-7ata
ART PRN.2SG person-2SG.SUB
'You (SG) are a person.'
[PDLMA2005]
The above predicate nominal constructions occur in the present (unmarked) tense only. In any other tense, a copula must occur to bear the tense and aspect markers, as seen below in (422). In these examples, the copula, which appears in bold type, bears the past tense prefix and the perfect aspect suffix, as well as the first and second person affixes.

[PDLMA2005]
Plural subject arguments do not affix directly to nominals; instead they require a copula, as seen in the examples below in (423) and (424). The examples in (423) have present tense copulas, while the examples in (424) have past tense copulas. Note, also, that in all of the examples, the noun is marked for plurality; since the noun may not bear plural verbal person-marking morphologypresumably because nouns have their own set of plural markers-the copula is required in the present tense to bear the plural verbal person-marking morphemes.

| juu | kijnan | t'akuunin | kjuntaw |
| :--- | :--- | :--- | :--- |
| juu | kijnan | t'aku7-nin | k-jun-ta-w |
| ART | PRN.1PL | woman-PL | 1SUB-be-PF-1PL.SUB |
| 'We (EXCL) are women.' |  |  |  |

b. juu kijnan t'akuunin juntaw juu kijnan t'aku7-nin jun-ta-w ART PRN.1PL woman-PL be-PF-1PL.SUB 'We (INCL) were women.'
c. juu 7uxijnan t'akuunin

## 7unt'at'it

juu 7uxijnan t'aku7-nin jun-ta-t'it ART PRN.2PL woman-PL be(2SUB)-PF(2SUB)-2PL.SUB 'You (PL) are women.'
d. juu yu7unch t'akuunin tajuniita juu yu7unch t'aku7-nin ta-jun-niita ART PRN.3PL woman-PL 3PL.SUB-be-PF 'They are women.'
[PDLMA2005]
(424)a. juu kijnan t'akuunin xajkuntaw
juu kijnan t'aku7-nin xa-k-jun-ta-w
ART PRN.1PL woman-PL PAST-1SUB-be-PF-1PL.SUB
'We (EXCL) were women.'
b. juu kijnan t'akuunin 7ixjuntaw
juu kijnan t'aku7-nin 7ix-jun-ta-w
ART PRN.1PL woman-PL PAST-be-PF-1PL.SUB
'We (INCL) were women.'
c. juu 7uxijnan t'akuunin 7ix7unt'at'it
juu 7uxijnan t'aku7-nin 7ix-jun-ta-t'it
ART PRN.2PL woman-PL PAST-be(2SUB)-PF(2SUB)-2PL.SUB
'You (PL) were women.'
d. juu yu7unch t'akuunin xtajuuniita
juu yu7unch t'aku7-nin x-ta-jun-niita
ART PRN.3PL woman-PL PAST-3PL.SUB-be-PF
'They were women.'
[PDLMA2005]

Interestingly, the first person prefix $k$ - does not occur on an inalienably possessed noun, as seen below in (425a), where the copula bears the first person prefix instead. Presumably the possessive prefix and the first person prefix occupy the same morphological slot, so a copula is required to bear the person-marking. However, when the argument is second person, as seen in (425b), the second person subject suffix does occur on the noun since is does not occupy the same slot as the possessive prefix.
(425)a. juu ki7in xaakin kjuuniita
juu ki7in xaa-kin k-jun-niita ART PRN.1SG IPOS-aunt 1SUB-be-PF
'I am an aunt.'
b. juu 7uxint'i xaakin7ata
juu 7uxint'i xaa-kin-7ata
ART PRN.2SG IPOS-aunt-2SG.SUB 'You (SG) are an aunt.'
[PDLMA2005]
When a nonverbal predicate nominal is negated, the negative particle jaantu precedes the nominal, as seen below in the examples in (426). In the example in (a), jaantu immediately precedes the noun, while in the example in (b), it precedes the noun phrase.
(426) a.

| juu | 7uxint'i | jaantu lapanak7ata |
| :--- | :--- | :--- |
| juu | 7uxint'i | jaantu lapanak-7ata |
| ART | PRN.2SG | NEG person-2SG.SUB |
| 'You are not a $[$ good] person.' |  |  |

[PDLMA2005]
b. porque jaantu [naa naa sii maqalhqama7 laqachaqan] $]_{\mathrm{NP}}$ porque jaantu naa naa sii maqalhqama7 laqachaqan because NEG EMP EMP pure Tepehua town 'Because this is not a pure Tepehua town.'

When two nominals are juxtaposed with each other, the copula is not required in the present tense, as shown below in (427a), but it is required in the past tense, as shown in (427b).

```
(427)a. maa [lapanák] mP1 maa [lakt'ikt'i lapanák] NP2
    RPT people RPT little people
    'The little people are Christians/humans/people'
```

b. pero waa [xch'ajaach chiila7] ${ }_{\text {NP } 1}$
pero waa $x$-ch'ajaa + ch chiila7
but FOC 3POS-foot+ALD chicken
xjuuniita [juu xch'aja7] ${ }_{\text {NP2 }}$
x-jun-niita juu x-ch'aja7
PAST-be-PF ART 3POS-feet
'But her feet were chicken feet.'
[T0063: 054-55]

### 3.3.3.2 Predicate Pronominals

An HT personal pronoun may stand alone as a present tense, nonverbal predicate, as seen below in the examples in (428). In both the (a) and (b) examples, the entire clause consists of a single personal pronoun. In (428c), the clause consists of a pronoun that is modified by a relative clause ${ }^{120}$
(428) a. ki7in ki7in

PRN.1SG PRN.1SG
'It is I! It is I!'
b. yuuchach
yuuch+ach
PRN.3SG+ALD
'It is she.'
[T0054: 063]

[^93]$\begin{array}{lllll}\text { c. maa yuuch [juu laay } & \text { kalhii7alh } & \text { ma7at }]_{\text {RC }} \\ \text { maa } & \text { yuuch juu laa-y } & \text { ka-lhii-7an-li } & \text { ma7at } \\ \text { RPT PRN.3SG REL can-IMPFV } & \text { IRR-APPL-go-PFV far } \\ \text { 'It is he who could take it far away.' } & \\ \text { [T0003 }\end{array}$
[T0003: 026]
In other tenses, a copula is required to bear the tense and aspect affixes, as seen below in (429), where the example in (a) is in the perfect aspect and the example in (b) is in the future tense.

| (429) a. | puus <br> puus <br> well | kaa <br> kaa <br> BLV | 7aqtz'iyanch 7aqtz'iyan+ch always+ALD | chunch <br> chun+ch <br> like.so+ALD |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 7uuniit' | juu | 7uxint'i |
|  | juu | jun-niita | juu | 7uxint'i |
|  | REL | be(2SUB) | )-PF(2SUB) ART | PRN.2SG |
|  | 'Well | ll, I think | you have alway | een like that.' |
| b. | yuuch | hach | chinich | kajuna7 |
|  | yuuch | h+ach | chini + ch | ka-jun-a7 |
|  | PRN. 3 | 3SG+ALD | as.is+ALD | IRR-be-FUT |
|  | 'It wil | ill be as is. |  |  |

### 3.3.3.3 Predicate Adjectives

The predicate adjective construction is almost identical to the predicate nominal construction with one exception: the copula is not needed in the present tense when the subject is third person plural, as seen below in $(430 \mathrm{~g})$. In the predicate nominal construction, the noun may not bear plural verbal morphology, which necessitates the presence of the copula in all of the plural person paradigms. However, given that the plural prefix lak- is the morpheme that is normally used to co-index plurality on adjectives (see Chapter 5, Section 5.1.2.1), a copula is not necessary to bear this particular verbal affix. A complete present tense paradigm is shown below in (430). The singular first and second person
affixes occur directly on the adjective in (430a) and (430b), respectively. Third person singular is not marked on the adjective, and no copula is required, as seen in (430c). In the first and second person plural forms, a copula is required to bear the person-marking affixes, as seen in (430d), (430e), and (430f). Finally, in $(430 \mathrm{~g})$, the plural prefix occurs directly on the adjective, as discussed above.

| (430)a. | naa | jk'usi | juu ki7in |
| :--- | :--- | :--- | :--- |
|  | naa | k-k'usi | juu ki7in |
|  | EMP | 1SUB-pretty | ART |
|  | 'I am very pretty.' |  |  |

b. juu 7uxint'i naa k'usi7ata
juu 7uxint'i naa k'usi-7ata
ART PRN.2SG EMP pretty-2SG.SUB
'You (SG) are very pretty.'
c. naa k'usi juu 7atzi7

EMP pretty ART girl
'The girl is very pretty.'
d. juu kijnan naa lajk'usin kjuntaw
juu kijnan naa lak-k'usi-n ${ }^{121}$ k-jun-ta-w
ART PRN.1PL EMP PL-pretty-PL 1SUB-be-PF-1PL.SUB
'We (EXCL) are very pretty.'
e. juu kijnan naa lajk'usin juntaw
juu kijnan naa lak-k'usi-n jun-ta-w
ART PRN.1PL EMP PL-pretty-PL be-PF-1PL.SUB
'We (INCL) are very pretty.'
f. juu 7uxijnan naa lajk'usin 7unt'at'it
juu 7uxijnan naa lak-k'usi-n jun-ta-t'it
ART PRN.2PL EMP PL-pretty-PL be(2SUB)-PF(2SUB)-2PL.SUB
'You (PL) are very pretty.'

[^94]```
g. juu 7atzi7in naa lajk'usin juu 7atzi7-in naa lak-k'usi-n ART girl-PL EMP PL-pretty-PL 'The girls are pretty.'
```

[PDLMA2005]
In the past tense, a copula is required to bear the tense and aspect affixes for all persons, as seen below in (431).

d. juu kijnan naa lajk'usin xajkuntaw juu kijnan naa lak-k'usi-n xa-k-jun-ta-w ART PRN.1PL EMP PL-pretty-PL PAST-1SUB-be-PF-1PL.SUB 'We (EXCL) were very pretty.'
e. juu kijnan naa lajk'usin 7ixjuntaw
juu kijnan naa lak-k'usi-n 7ix-jun-ta-w ART PRN.1PL EMP PL-pretty-PL PAST-be-PF-1PL.SUB 'We (INCL) were very pretty.'
f. juu 7uxijnan naa lajk'usin 7ix7unt'at'it juu 7uxijnan naa lak-k'usi-n 7ix-jun-ta-t'it ART PRN.2PL EMP PL-pretty-PL PAST-be(2SUB)-PF(2SUB)-2PL.SUB 'You (PL) were very pretty.'

| g. naa lajk'usin | xtajuuniita | juu | 7atzi7in |  |
| :--- | :--- | :--- | :--- | :--- |
|  | naa | lak-k'usi-n | x-ta-jun-niita | juu |
| 7atzi7-in |  |  |  |  |

'The girls were very pretty.'
[PDLMA2005]
When the nonverbal predicate adjective is negated, the negative particle jaantu precedes the modifier, as seen below in (432).
(432) a. jaantu k'usi juu 7atzi7

NEG pretty ART girl
'The girl is not pretty.'
[TPWDB]
b. 7ixjuuniita juu lapanak maa jaantu lhuu 7ix-jun-niita juu lapanak maa jaantu lhuu PAST-be-PF ART people RPT NEG many 'The people were few.'
[T0057: 054]
c. entoons tuuka7 laqlhuu 7ixjuuniita entoons tuu+ka7 laq-lhuu 7ix-jun-niita then $\quad$ NEG + JST CL:peso-many PAST-be-PF 'Then, it still was not expensive.'
[T0069: 389]
Two additional examples in which an adjective is juxtaposed with a nominal in a predicate adjective construction are shown below in (433). In these examples, the adjectives appear in bold type. In (433a), the clitic $+k a 7$ 'just' is attached to the adjective lakt'ikt'i 'little'. In (433b) the body part prefix laq- 'face' is affixed to the adjective lhman 'long', while the similar body part prefix laqpuu'face' is affixed to the noun.
(433) a. waa lakt'ikt'ika7 juu waakax
waa lakt'ikt'i+ka7 juu waakax
FOC small+JST ART cow
'The cows are still little.'
[T0020: 008]
b. maa laqlhman juu xlaqpuuch'awti
maa laq-Ihman juu x-laqpuu-ch'awti
RPT FACE-long ART 3POS-face-hair
'His beard is long.'
[T0022: 040]

### 3.4 Periphrastic Constructions

HT periphrastic verbal constructions consist of a two-verb predicate in which the two verbs are not compounded together. Two such constructions are covered here: infinitival phrases (Section 3.4.1) and constructions involving the generic verb laa- 'can', 'do' (Section 3.4.2).

### 3.4.1 Infinitival phrases

Three different constructions utilize the infinitive in HT: the periphrastic future (Section 3.4.1.1), progressive aspect (Section 3.4.1.2), and inchoative aspect (Section 3.4.1.3). The morphophonemics of infinitives are covered here, and the specifics of these three constructions are covered in the following subsections.

The infinitival suffix $-n V 7$ in HT is affixed to the second verb in a twoverb periphrastic construction. The vowel of the suffix harmonizes with the last vowel of the verb stem; examples are shown in (434).
(434)a. yuuchach xlhii7antach st'aana7
yuuch + ach $\quad$ x-lhii-7an-ta + ch $\quad$ st'aa-nV7
PRN.3SG+ALD PAST-APPL-go-PF+ALD sell-INF
'That's why he went to sell it.'
[T0055: 035]
b. waa t'ajun kujnu7
waa t'ajun kuj-nV7
FOC be(IMPFV) wake.up-INF
'He is waking up.'
[ELIEX2: 070]
c. kint'ajunch juunini7
kin-t'ajun+ch jun-ni-nV7
1OBJ-be(IMPFV)+ALD tell-DAT-INF
'He is telling me . . '
[T0066: 039]

The first verb in the infinitival construction bears the tense, aspect, and mood marking (as seen above in (434a), as well as the subject marking, as seen in the examples below in (436). Object marking, however, may occur on either verb. Above in (434c), the first person object marker is prefixed to the first (inflected) verb in the infinitival phrase, but below in (435), it is the infinitival (second) verb that is marked for a third person plural object by the plural prefix lak-.

| chinich <br> chinich | 7ixt'a7un | 7ix-t'ajun |
| :--- | :--- | :--- |
| like.this | PAST-be(IMPFV.2SUB) | laknawiini7 |
| 'Were you making them like this?' |  |  |

[T0069: 209]
When the subject of the verb phrase is plural, the form - nin occurs instead of $-n V 7$ on the infinitival verb. This form appears to be related to the plural nominal suffix -nin. ${ }^{122}$ In (436a), the subject is first person singular, and the infinitive bears the $-n V 7$ allomorph. In (436b), the subject is first person plural, and the infinitive bears the -nin allomorph. Examples of infinitive constructions in which the subject is third person plural are shown below in (437).

| (436)a. | waa laaych | 7ak'alh | paxna7 |
| :--- | :--- | :--- | :--- |
|  | waa laa-y+ch | 7a-k-7an-li | pax-nV7 |
|  | FOC can-IMPFV+ALD | IRR-1SUB-go-PFV | bathe-INF |
|  | 'If only I could go to bathe.' |  |  |


| b. waa laaych | 7aklak'aw | paxnin |
| :--- | :--- | :--- |
| waa laa-y+ch | 7a-k-lak-7an-w | pax-nin |
| FOC can-IMPFV+ALD | IRR-1SUB-DIS-go(PFV)-1PL.SUB | bathe-PL.INF |
| 'If only we all could go to bathe.' | [Q3I] |  |

[^95](437)a. tatzukuchoqolhch maa 7asaanin
ta-tzuku-choqo-li+ch maa 7a-saa-nin
3PL.SUB-begin-AGAIN-PFV+ALD RPT PL.INO-play-PL.INF
'They began to play [instruments] again.'
[T0063: 070]
b. tatzukulhch laqlhwaqnin
ta-tzuku-li+ch laq-lhwaq-nin
3PL.SUB-begin-PFV+ALD BODY-dismember-PL.INF
'They began dismembering it [the corpse of a beast].' [T0020:031]
c. maa xta7anch 7amaqpanin
maa $\mathrm{x}-\mathrm{ta}-7 \mathrm{an}+\mathrm{ch} \quad 7$ amaqpa-nin
RPT PAST-3PL.SUB-go(IMPFV)+ALD wash.clothes-INF
'They were going to wash.'
[T0022: 015]
d. ta7alhch 7asaanin
ta-7an-li+ch 7a-saa-nin
3PL.SUB-go-PFV+ALD PL.INO-play-INF
'They went to play.'
[T0063: 043]
In addition to object-marking affixes, other verbal morphology may occur on the infinitive. In (437b) above and in (438) below, the infinitival stems also bear body part prefixes. Above in (434c), the infinitival stem is affixed with the dative suffix.

| xtajuuniych |  | nii | maa | waa |
| :---: | :---: | :---: | :---: | :---: |
| x-ta-jun-ni-y+ch |  | nii | maa | waa |
| PAST-3PL.SUB-tell-DAT-IMPFV+ALD |  | COMP | RPT | FOC |
| $\begin{aligned} & \text { x7anch } \\ & \text { x-7an+ch } \end{aligned}$ | tanxt'ut'unu7 |  | juu | xqolit'i |
|  | tan-xt'ut'u-nV7 |  | juu | xqolit'i |
| PAST-go(IMPFV)+ALD | TORSO-nurse-INF |  | ART | millipede |
| 'They told her that the millipede was going to nurse.' |  |  |  | [T0003: 032] |

Finally, an adverbial element may intervene between the two verbs, as seen below in the examples in (439). In (439a) the adverb soqon 'fast' occurs between the inflected verb and the infinitive, while in (439b) the reportative particle maa occurs between the two verbs.

| (439) a. | 7inchich | soqon maqana7 |
| :--- | :--- | :--- |
|  | 7an-t'i+ch | soqon maqan-nV7 |
|  | go(IMPFV.2SUB)-2SG.SUB.PFV+ALD fast | throw.away-INF |

'Go to throw it out fast!'
[T0055: 037]
b. milhch maa tamoona7 $7^{123}$ laqatam xmascara
min-li+ch maa tamaju-nV7 laqa-tam x-mascara
come-PFV+ALD RPT buy-INF CL:general-one 3POS-mask
'He came to buy one mask.'
[T0055: 046]

### 3.4.1.1 Periphrastic Future

The periphrastic future consists of the verb 7an 'go' inflected for person, tense, and mood (but not aspect, because aspect is always imperfective in this construction), followed by the infinitival form of a main verb. Examples are shown in (440).
(440)a.

| xtajuuniych | nii | maa | waa |
| :--- | :--- | :--- | :--- |
| x-ta-jun-ni-y+ch | nii | maa | waa |
| PAST-3PL.SUB-tell-DAT-IMPFV+ALD | COMP | RPT | FOC |


| [x7anch | tanxt'ut'unu7] | juu | xqolit'i |
| :--- | :--- | :--- | :--- |
| x-7an+ch | tan-xt'ut'u-nV7 | juu xqolit'i |  |
| PAST-go(IMPFV)+ALD | TORSO-nurse-INF | ART millipede |  |

'They told her that the millipede was going to nurse.' [T0003: 032]
b. maa [xta7an 7amaqpanin]
maa $\quad$ x-ta-7an $\quad$ 7amaqpa-nin
RPT PAST-3PL.SUB-go(IMPFV) wash-INF
'They were going to wash.'
[T0022: 006]
c. [ka7awch qot'nin] jii t'aqap'an
ka-7an-w+ch qot'-nin jii t'aqap'an
IRR-go(IMPFV)-1PL.SUB+ALD drink-INF VOC drunk
'We're going to drink, you drunk.'
[T0066: 088]

[^96]
### 3.4.1.2 Progressive Aspect

According to Smith (1997), "Progressives focus on the internal stages of non-stative events" (p. 74). The periphrastic progressive aspect in HT focuses on an event as it is happening.

The verb $t^{\prime} a j u n^{124}$ is used periphrastically to form the progressive aspect. In this aspect, $t^{\prime}$ ajun is inflected for person, tense, aspect, and mood, and it occurs as the first verb in the two-verb construction; it is followed by the infinitival form of the main verb, as seen below in the examples in (441).
(441)a. [kint'ajunch juunini7]
kin-t'ajun+ch jun-ni-nV7
1OBJ-be(IMPFV)+ALD tell-DAT-INF
'He is telling me . . '
[T0066: 039]
b. maa [xt'ajunch ch'apana7] juu xkupu7
maa $\quad$ x-t'ajun+ch ch'apa-nV7 juu xkupu7
RPT PAST-be(IMPFV) +ALD grab-INF ART crawdad
'He was grabbing crawdads.'
[T0058: 018]
$\begin{array}{llll}\text { c. } & \text { laanij } & \text { waa } & \text { [t'oonaw }\end{array} \quad$ grawalanin] $]$
[T0069: 041]

### 3.4.1.3 Inchoative Aspect

The verb tzuku 'begin' may combine periphrastically with a matrix verb to form the inchoative aspect, 'begin to X '. In this aspect, tzuku is inflected for person and TAM, and it precedes the main verb, which is marked with the infinitival suffix $-n V 7$ ( $\sim$-nin). Examples are shown below in (442). Note that

[^97]this construction has the same meaning as the BEGIN construction discussed in Section 3.2.3.5.
(442)a. maa
maa ta-tzuku-li
lakat'alhmaanin]
laka-t'alh=maa-nin
RPT 3PL.SUB-begin-PFV BODY-stone=lying-INF
'They began to stone it.'
[T0020: 019]
b. [tzukulh trawajalana7] juu lakaropa tzuku-li trawajala-nV7 juu laka-ropa begin-PFV work-INF ART PREP-clothing
'He began to work in clothing [i.e., to sell clothing].'
[T0054: 022]
The reportative evidential clitic maa may intervene between the two verbs in the inchoative aspect, as seen below in the examples in (443). Furthermore, $t z u k u$ may be inflected with other verbal affixes, as seen in (443b), where -choqo 'again' is suffixed to the first verb.

| (443) a. | tzukulh | maa | laqaxqotnu7 |
| :--- | :--- | ---: | :--- |
|  | tzuku-li | maa | laqaxqot-nV7 |
|  | begin-PFV | RPT | unload-INF |
|  | 'He began to unload it.' |  |  |

[T0055: 022]
b. tatzukuchoqolhch maa 7asaanin
ta-tzuku-choqo-li+ch maa 7a-saa-nin
3PL.SUB-begin-AGAIN-PFV+ALD RPT PL.INO-play-INF
'They began to play again.'
[T0063: 070]

### 3.4.2 Can laa-

The verb laa-‘can' may stand alone as a main verb, or it may co-occur with a matrix verb in a periphrastic construction. When laa- acts as the main verb, it is inflected for person, plus tense, mood, and/or aspect, and it means 'can', 'do', or 'go', as seen in the examples below in (444).
(444)a. jaantuch chun xalaakan

| jaantu+ch | chun | xa-laa-kan |
| :--- | :--- | :--- |
| NEG+ALD | like.so | PAST-can-INS(IMPFV) |

'It was not done like that anymore.'
[T0059: 021]
b. juu 7ani7 naa qox laay juu kapen juu 7ani7 naa qox laa-y juu kapen ART here EMP good can-IMPFV ART coffee 'Around here coffee really does well.'
[MNB13: 45]
c. takiilaaqoolhch
ta-kii-laa-qoju-li+ch
3PL.SUB-RT-can-ALL-PFV+ALD
chuux juu 7anu7 ki7ananan7an
chuux juu 7anu7 kin-7a-nana-n-7an
all ART DADJ 1POS-PL-grandmother-PL-PL.POS
'All of our grandmothers went and returned.'
[T0058: 051]
d. kalaalh nii waa t'amak'oomp'ut'unch
ka-laa-li nii waa tamakajun-putun+ch
IRR-can-PFV COMP FOC stay(2SUB)-DESID(IMPFV.2SUB)+ALD
'Stay if you want to.' [T0055: 065]
When laa- is the main verb, it may be affixed with aspectual derivational morphemes, as seen above in (444c) and below in (445).
(445)kiilaachoqopaa juu kit'in
kii-laa-choqo-pala juu kit'in
RT-can-AGAIN-REP.PFV ART PRN.1SG
'I went again (and came back).'
[T0066: 021]
The verb laa- frequently occurs in certain adverbial constructions involving affect words (see Chapter 6, section 6.3.1 for more information on affect words). In such constructions, laa- either occurs as a free-standing-but essentially meaningless-verb, as seen below in (446), or it is suffixed to the end of the affect word to create a verb that means to perform the action of the affect word, as seen below in (447).
(446) a. lapaq lapaq laay juu skikluw
lapaq lapaq laa-y juu skikluw

ID:snake ID:snake can-IMPFV ART eel
'The eel snakes along.'
'The eel goes lapaq lapaq.'
[TPWDB]
b. lam lam laay juu maklhku

| lam | lam | laa-y | juu maklhku |
| :--- | :--- | :--- | :--- | :--- |
| ID:flicker | ID:flicker | can-IMPFV | ART light |

'The light flickers.'
'The light goes lam lam.'
[TPWDB]
(447)a. xaklhatlaay
xa-k-lhat-laa-y
PAST-1 SUB-biting(ID)-can-IMPFV
'I used to bite.'
[TPWDB]
b. xaklhululaay
xa-k-lhulu-laa-y
PAST-1 SUB-sweating.droplets(ID)-can-IMPFV
'I would sweat droplets.'
[TPWDB]
When laa- acts as an auxiliary verb, it is always inflected for imperfective aspect (i.e., it only manifests as laay), and it precedes a main verb, which is inflected for person, as well as tense, aspect, and mood, as seen in the examples below in (448).
(448) a. jaantuch laay xlakmaaxtukanta
jaantu+ch laa-y x-lak-maaxtu-kan-ta
NEG+ALD can-IMPFV PAST-PL-take.out-INS-PF
juu laktaxtoqta
juu lak-taxtoqta
ART PL-thing
'They could not take out the things.'
[T0018: 005]
b. waa jaantuch laay xtalhiitajuy
waa jaantu+ch laa-y x-ta-lhiitaju-y
FOC NEG+ALD can-IMPFV PAST-3PL.SUB-find-IMPFV
juu lhiich'alhkat
juu lhiich'alhkat
ART work
'They could not find work.'
[T0063: 009]
c. nii laaych kalaalh
nii laa-y+ch ka-laa-li
COMP can-IMPFV+ALD IRR-can-PFV
'If it can be done.'
[T0069: 067]
d. nii laaych kach'uk'ulh juu paalakch'uk'un
nii laa-y+ch ka-ch'uk'u-li juu paalakch'uk'un
COMP can-IMPFV+ALD IRR-cut-PFV ART knife

| kamaakikxtuuch | waa | tzaj |
| :--- | :---: | :---: |
| ka-maa-kik-xtuu+ch | waa | tzaj |
| IRR-CAUS-EDGE-be.sharp(PFV)+ALD | FOC frequently |  |
| 'He must sharpen the knife frequently so that it will cut.' |  |  |

[MNB13: 50]
In the periphrastic construction, laa- may or may not be inflected for person, as seen below in (449).
(449)a. klaay knawiiy
k-laa-y k-nawii-y
1SUB-can-IMPFV 1SUB-do-IMPFV
'I can do it.'
[ELIEX3: 001]
b. laay jaknawiiy juu kit'ín
laa-y xa-k-nawii-y juu kit'ín
can-IMPFV PAST-1SUB-do-IMPFV ART PRN.1SG
'I could do it.'
[ELIEX3: 004]
Adverbs may intervene between laa and the main verb, as seen below in (450). Note, also, in this example that the repetative suffix -paa occurs on the main verb, not on laa-

| 450)laaych | chunch | 7aklaqoxipaa | juu 7anu7 |
| :---: | :---: | :---: | :---: |
| laa-y+ch | chun+ch | 7a-k-laqoxi-pala | juu 7anu7 |
| can-IMPFV+ALD | like.so+ALD | IRR-1SUB-arrange-REP.PFV | ART DADJ |
| I can arrange | one [a song] | ke this.' | [T0066: 178] |

Finally, in certain constructions, such as the infinitival construction shown below in (451), laa- precedes two verbs.
(451) 7anch juu maa laaych 7anch juu maa laa-y+ch there REL RPT can-IMPFV+ALD 'That is where he can go to leave it.'

| 7anch | makoona7 |
| :--- | :--- |
| 7an+ch | makajun-nV7 |
| go(IMPFV)+ALD | leave.it-INF |

[T0003: 028]

## Chapter 4: Nouns and Nominal Morphology

This chapter describes the inflectional and derivational morphosyntactic processes that nouns may undergo (sections 4.1 and 4.2, respectively), noun phrases (section 4.3), relational nouns (section 4.4), and pronouns (section 4.5).

### 4.1 INFLECTION

Morphosyntactic processes that utilize nominal inflectional morphology include pluralization of nouns (section 4.1.1) and possession of nouns (section 4.1.2). There is no case, gender, or class marking on the nouns.

### 4.1.1 Pluralization

HT nouns are not obligatorily marked for plurality in either elicited or naturally occurring speech. If a verbal argument is indeed plural, this feature is made obvious either by person marking on the verb, ${ }^{125}$ by numerals or quantifiers, or by the context of the utterance. Each of these instances is addressed below.

It is frequently the case in both naturally occurring and elicited speech that the verb is inflected for a plural argument, even when the corresponding overt nominal is not inflected for plurality. In the following example in (452), the overt subject nominal kintata 7 'my elder' is singular, while both verbs are inflected for plural subjects.

[^98]
[T0022: 021]
In (453), the plural object is marked on the verb by the plural prefix, even though the object nominal is not marked for plurality.
(453)laklhii7alhch juu chaqa7
lak-lhii7an-li+ch juu chaqa7
PL-take-PFV+ALD ART house
'It [the flooded river] carried away the houses.' [T0057: 067]
Three variations on plural marking appear below in (454). In the (a) example, the plurality of the object 7aalaaxuux 'oranges' is marked only on the verb. In the (b) example, the plurality of the object is marked both on the verb and on the noun; interestingly, this causes a change in meaning from the clause in (a). In the (c) example, neither the verb nor the noun is marked for plurality; instead the object is understood to be plural because it is modified by a numeral.

| (454) a. | juu Susanita | lakp'uxlh | juu 7 7aalaaxuux |
| :--- | :--- | :--- | :--- | :--- |
|  | juu Susanita | lak-p'ux-li | juu 7 aalaaxuux |
|  | ART Suzie | PL-pick-PFV | ART orange |
|  | 'Suzie picked oranges.' |  |  |

b. juu Susanita lakp'uxlh juu lak7aalaaxuux juu Susanita lak-p'ux-li juu lak-7aalaaxuux ART Suzie PL-pick-PFV ART PL-orange 'Suzie picked oranges from several different orange trees.'

[NVP05]
In the clause in (455), the numeral-the classifier of which specifies the shape of the object, even though the object nominal is omitted ${ }^{126}$-is the only semantic indication that the object argument is plural.

```
(455)7aqxt'uych kamaamaayaaw
    7aqx-t'uy+ch ka-maa-maa-ya7-w
    CL:flat-two+ALD IRR-CAUS-lying-FUT-1PL.SUB
    'We're going to lay down two [boards]'
```

[T0069: 064]
Quantifiers are also used to indicate that a verbal argument is plural, as seen below in (456). In this example, neither the verb nor the object is marked for plurality, and the only indication that the object argument is plural is the presence of the quantifier lhuu 'many'. ${ }^{127}$
(456)maa naa naa lhuu juu xkupu7 lhii7alh
maa naa naa lhuu juu xkupu7 lhii7an-li
RPT EMP EMP many ART crawdad take-PFV
'He took a lot of crawdads.'
[T0058: 019]
There are many instances of naturally occurring speech in which, pragmatically, a noun is understood to be plural, even though there is no plural marking on the noun or the verb, nor are there numerals or quantifiers to modify the argument. Such an instance is seen below in (457). Even though the noun 7aqtzulh 'head' is singular, the noun's possessor is plural, which produces a pragmatically plural noun.

[^99]| (457) kaa waa | kach'apaniych | juu | ki7aqtzulh7an |
| ---: | :--- | :--- | :--- | :--- |
| kaa waa | ka-ch'apa-ni-y+ch | juu | kin-7aqtzulh-7an |
| BLV | FOC | IRR-grab-DAT-IMPFV+ALD |  |

'I think that he [the devil] touches our heads.'
[T0054: 050]
The example in (458) shows that the possessed noun does not have to be an obligatorily possessed one, ${ }^{129}$ as was the noun in (457). Below, the optionally possessed noun 'house' has a plural possessor; furthermore, the noun is understood to be plural because-normally-compadres (the possessors) do not live together, they each have their own house.

```
(458)maa soq
    maa soq
    itajuu
    ta-la-lhiitajuu
    RPT straight 3PL.SUB-RCP-meet(PFV)
        juu 7akumwarii
        juu 7akumwarii
ART compadre
    juu laxchaqa7an
    juu laka-x-chaqa7-7an
    ART PREP-3POS-house-PL.POS
    'The friends met in their houses.'
```

[T0055: 002]
Despite the fact that nouns are only optionally marked for plurality, there are a large number of affixes (lak-, 7a-, -nin, -nan, -ni, -n, -an, -in, and -un) that are used to mark a plural noun in HT, and the choice of affix revolves around both inherently semantic features of the noun (i.e., animacy) and phonological processes, as well as factors that I have not been able to discern. ${ }^{130}$ For the sake of

[^100]simplicity, clarity, and organization, I divide the affixes into prefixes (section 4.1.1.1) and suffixes (section 4.1.1.2) below.

### 4.1.1.1 Plural Prefixes

There are two prefixes that are used to mark plurality of nouns: lak- and $7 a$-. The plural prefix lak- is the default prefix used to mark plurality on an inanimate noun, as seen in the examples in (459). This prefix is quite likely related to the verbal prefix lak- that serves to co-index three similar concepts: a third person plural object, a multiply plural argument, and the distributive action of the verb. ${ }^{131}$ This prefix does not participate in primary stress assignment.
(459) a. laqchaqa7 ( $\sim$ lakchaqa7 $)^{132}$
lak-chaqa7
PL-house
'houses'
b. lakxqaam
lak-xqaam
PL-corn.husk
'corn husks'
c. laqmaqpu
lak-maqpu
PL-branch
'branches'
d. lak'uch'un
lak-k'uch'u-n
PL-cure-DVB
'cures', 'remedies', 'medicines'

[^101]Though most of the members of the class of nouns that are pluralized by means of the prefix lak- are inanimate, this class also includes some human nouns, shown below in (460).
(460)a. xalajkiin
xa-lak-kiin
IPOS-PL-aunt
'their aunts'
b. laklhii7aynaqmaqti
lak-lhii7aynaqmaqti ${ }^{133}$
PL-slave
'slaves'
The prefix $7 a$ - appears on only three nouns in my database, all of which are shown below in (461). This plural prefix is polysemous with the verbal prefix $7 a$ - that co-indexes a plural indefinite or indirect object on a transitive verb (see Chapter 3, section 3.1.1.5). Furthermore, it is most likely cognate with the prefix $h a:-$ in the Chintipán dialect of Tlachichilco Tepehua that marks both plurality of action on verbs and plurality of unpossessed potential kinship terms (Watters 1988: 402). In the examples in (461), both the (a) and (b) examples also bear the plural suffix $-n$, while the (c) example bears no other plural affix. I have not been able to determine why this affix is needed on the plural forms of the lexemes in (a) or (b), or why it is the only plural marker to appear on the lexeme in (c).
(461)a. ki7ananaan
kin-7a-nana7-n
1POS-PL-elder.woman-PL
'my (female) elders'
${ }^{133}$ Lhii7aynaqmaqti is a derived nominal: lhii-qay-naq-maa-ti (APPL-big-hit.it-lying-NOM1).
b. 7amaaxkawaniniin ${ }^{134}$

7a-maaxkawanini7-n
PL-hunter-PL
'hunters'
c. 7apapanti ${ }^{135}$

7a-papanti
PL-grandson
'grandsons'

### 4.1.1.2 Plural Suffixes

Almost all animate HT nouns-as well as many inanimate ones-are pluralized by means of one of the numerous plural suffixes: -nin, -nan, -ni, -n, -an, -in, and -un. It is immediately obvious that the common denominator in all of the plural suffixes is the phoneme $/ \mathrm{n} /$. Furthermore, all of the suffixes-with the exception on -ni-carry primary stress according to the stress assignment rule. ${ }^{136}$ These suffixes can be divided into two groups: the first group consists of -nin, $-n a n$, and $-n i$; the second group is comprised of allomorphs of $-(V) n$, (that is, $-n$, -an, -in, and -un).

The first group of suffixes includes -nin, -nan, and -ni. Of these three suffixes, -nin is by far the more commonly occurring. In fact, -nan and -ni are so rare, that I suspect that they are earlier forms of the plural that have been preserved on a very small number of lexemes, all of which are shown below in (462) and (463), respectively.

[^102]The only occurrence of -nan that appears in the dictionary is 7atapakxatnan 'animals', shown in (462a). The (b) and (c) examples, kijnan and 7uxijnan are both frozen plural forms of the personal pronouns.
(462) a. 7atapakxat-nan animal-PL
b. kijnan
'we', PRN.1PL
c. 7uxijnan
'you all', PRN.2PL
The only two examples I have found in which -ni forms the nominal plural are shown in (463). The plural form lapanakni in example (a) is being replace by lápanák. ${ }^{137}$ The native Tepehua word for 'bride', 7ask'inintij, in the (b) example is being replaced by the Spanish borrowing novia.
(463)a. lapanak-ni
person-PL
b. 7ask'ininti-ni
bride-PL
The plural suffix -nin is the most commonly occurring of all of the nominal plural suffixes. It may pluralize any kind of noun, including a human noun (464a), an animate, non-human noun (464b), an inanimate noun (464c), a derived noun (464d), and a human noun borrowed from Spanish (464e). The suffix - nin occurs on both vowel- and consonant-final roots and stems, as can be seen in the examples below.
${ }^{137}$ See the next section, 4.1.1.3.
(464) a. t'akuunin
t'aku7-nin
woman-PL
'women'
b. muux-nin
monkey-PL
'monkeys'
c. qaaxwaat-nin
egg-PL
'eggs'
d. puutayaanin
puu-tayaa-n-nin
LOC-stand.up-DVB-PL
'stirrups'
e. doctor-nin
doctor-PL
'doctors'
The suffix $-(\boldsymbol{V}) \boldsymbol{n}$, whose allomorphs are $-n$, $-a n$, $-i n$, and $-u n$, forms the plural on human, animate, and inanimate nouns, but not on derived nominals. The vowelless allomorph, $-n$ suffixes to a root ending in a vowel or a glottal stop that is deleted, ${ }^{138}$ as seen below in (465). The other allomorphs are suffixed to roots ending in consonants; the unspecified vowel of the suffix harmonizes with the preceding root vowel to produce $-a n$ (466), $-u n$ (467), and -in (468). Only the allomorph -in may occur after the approximant consonants, irregardless of the quality of the preceding root vowel. The allomorph -un occurs in only two examples, one of which is a frozen form.

[^103](465)-n
a. Ch'aqawaxt'i-n

Totonac-PL
'Totonacs'
b. chiilaan
chiila7-n
chicken-PL
'chickens’
c. kuuxtu-n
cornfield-PL
'cornfields'
(466)-an
a. tz'al-an
boy-PL
'boys'
b. laawaan-an

Spaniard-PL
'Spaniards'
c. ch'aaxpa7-an
waist-PL
'waists’
(467)-un
a. tz'oqon-un

Otomí-PL
'Otomís'
b. yu7unch

PRN.3PL
(468)-in
a. paamaalhik-in
nest-PL
'nests'
b. k'iw-in
tree-PL
'trees'
c. xalajqajin
xa-lakqay-in
IPOS-boss-PL
'bosses'
d. xa-laqaw-in

IPOS-sibling-PL
'siblings'
The question of how to determine which noun takes which plural affix remains unanswered. I suspect that at one time nouns belonged to different noun classes, each of which required a different plural affix. However, I believe that the use of the prefix lak- is becoming the norm for pluralization, and that the suffixes are slowly falling out of use. This hypothesis is supported by the fact that many nouns that form their plurals with - nin or $-(V) n$, may alternately form the plural by means of lak-, as seen below in the (a) and (b) examples of (469) and (470), or even by means of both affixes, as seen in (470c).
(469)a. kilhnin
kilh-nin
mouth-PL
'mouths'
b. lajkilh
lak-kilh
PL-mouth
'mouths'
(470)a. k'iw-in
tree-PL
b. lajk'iw
lak-k'iw
PL-tree
'trees'

$$
\begin{array}{ll}
\text { c. } & \text { lajk'iwin } \\
& \text { lak-k'iw-in } \\
& \text { PL-tree-PL } \\
\text { 'trees' }
\end{array}
$$

### 4.1.1.3 Stress Pattern Change

The commonly used plural form of the noun lapának [la.'pa.nak] 'person' is produced by means of a change in the stress pattern of the word: làpanák [,la.pa.'nak] 'people'. However, làpanák is likely a truncated form of the older plural form làpanákni [1a.pa.'nak.ni] (see example (471) below). In my database, làpanákni occurs only twice, and both occurrences are from a narrative about the history of Huehuetla.

| )lapának | [la.'pa.nak] | 'person' |
| :--- | :--- | :--- |
| làpanákni | [1a.pa.'nak] | 'people' |
| làpanák | [1a.pa.'nak.ni] | 'people' |

When the plural noun làpanák is co-indexed with a verbal argument, the verb may be marked for a plural subject, as see in (472a), or it may be unmarked, as seen in (472b).
(472) a. juu tachu làpanák toontakuj ta-7a-t'inin ART all people all.day.long PL.SUB-PL-dance(IMPFV)
'All of the people dance all day.'
[T0066: 161]
b. naa lhuu nii-li juu làpanák

EMP many die-PFV ART people
'Many people died.'

### 4.1.2 Possession

The pattern for possession in HT is head-marking (Nichols 1986): the possessive affixes appear on the head noun (the possessum) rather than on the
dependent noun (the possessor). When there is an overt nominal possessor, it follows the possessum, as seen in (473).

|  | PM | PR |
| :--- | :--- | :--- |
| juu | $[$ X-chaqá7 | Kú:lax] |
| ART | 3POS-house | Nicolás |
| 'Nicholas' house' |  |  |

[GN5: 53]
The possessive affixes are shown below in Table 21.
Table 21: HT Possessive Affixes

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | kin- | kin- -7an |
| 2 | min- | min- -7an |
| 3 | $7 i x-$ | 7ix- -7an |
| Impersonal <br> Possessor | xaa- | (not possible) |

The person of the possessor is marked by means of prefixes on the possessum (section 4.1.2.1 and 4.1.2.2) and the number of the possessor is marked by means of a suffix on the possessum (section 4.1.2.3). Certain Tepehua nouns are obligatorily possessed, while others are optionally possessed (section 4.1.2.4).

### 4.1.2.1 Person of the Possessor

First, second, and animate third person possessors (PR) are co-indexed on a possessed noun (PM) by means of the possessive prefixes kin-, min-, and 7ixrespectively.

A first person possessor is indicated by the possessive prefix kin- and its allomorphs ki- and kim-, and a second person possessor is indicated by the
possessive prefix min- and its allomorphs mi- and mim-. The distributions of both the first and second person allomorphs are exactly the same: ki- and mi- occur before nasals and glides (474); kim- and mim- occur before /p/ and /p'/ (475); and kin- and min- occur everywhere else (476). kin- and ki- are in free variation before /7/ and a lateral consonant as seen in example (477).
(474) a. kimaka7
ki-maka7
1POS-hand
'my hand'
b. minana7
mi-nana7
2POS-old.woman
'your elder', 'your old woman'
c. kiwayti
ki-wayti
1POS-food
'my food'
(475) a. mimpay
mim-pay
2POS-father
'your father'
b. kimp'isaqa
kim-p'isaqa
1POS-younger.sibling
'my younger brother/sister'
(476)a. kintata7
kin-tata7
1POS-old.man
'my elder', 'old man'

```
b. kint'uun
kin-t'uun 1POS-land
'my land'
c. minskumilh
min-skumilh
2POS-pot
'your pot'
d. mintz'alh
min-tz'alh
2POS-child
'your child'
e. kinkiin
kin-kiin
1POS-aunt
'my aunt'
(477) a. min7aqtzúlh ~ mi7aqtzúlh
min-7aqtzúlh
2POS-head
'your head'
b. kinlakch'aja7 ~ kilakch'aja7
kin-lak-ch'aja7
1POS-PL-foot
'my feet'
```

The third person human possessive prefix is 7ix-; its allomorphs are $x$-, $7 i s-, s$-, and $7 i$-. The prefixes $7 i x$ - and $x$ - are in free variation, as seen below in (478). If the noun contains an $/ \mathrm{s} /$, then 7ix- and $x$ - may optionally harmonize with that phoneme, as seen in (479). Finally, 7ix- reduces to $7 i$ - before $/ \mathrm{s} /$, as seen in (480). In one case, that of 7aqtzúlh 'head', there are two acceptable possessive prefixes: 7ix- and $t z$-, as seen in (481); I have found no other word for which $t z$ - is an acceptable indicator of third person possession.

| (478) a. | 7ix-chaqa7 3POS-house 'his/her house' | $\sim$ | x-chaqa7 |
| :---: | :---: | :---: | :---: |
| b. | 7ix-nati 3POS-mother 'his/her mother' | $\sim$ | x-nati |
| c. | 7ix-7ukxtin 3POS-boss 'his/her boss' | $\sim$ | x-7ukxtin |
| (479) a. | x7asqat'a7an <br> x-7asqat'a-7an <br> 3POS-child-PL.POS <br> 'their children' | $\sim$ | sasqat'a 7 an ${ }^{139}$ |
| b. | 7ix-tampuus 3POS-middle ‘his/her middle | $\sim$ | 7is-tampuus |
| (480) a. | 7isawaw <br> 7ix-sawaw <br> 3POS-muscle <br> 'his/her muscle' |  |  |
| b. | 7ispiiriituu 7ix-spiiriituu 3POS-spirit 'his/her spirit' |  |  |
| $\begin{array}{r} \text { (481) 7ix } \\ \text { 7ix- } \\ \text { 3PO } \\ \text { 'his } \end{array}$ | aqtzúlh <br> 7aqtzúlh <br> -head <br> her head' | tzaqtzúlh |  |

[^104]
### 4.1.2.2 Impersonal Possessor

The impersonal possessor prefix $x a a$ - is used instead of the third person possessor prefix under two circumstances: First, when an obligatorily possessed noun ${ }^{140}$ has no possessor, it is prefixed with xaa-. Second, when the possessor of an optionally possessed noun ${ }^{141}$ is inanimate, the possessum may be affixed with $x a a$ - instead of the third person possessive prefix, 7ix-.

The examples in (482) demonstrate that when an obligatorily possessed noun has no possessor, it bears the impersonal possessor prefix. The examples in (a) and (b) demonstrate that the noun pay must bear a possessive prefix. The (c) example is taken from a text in which the child of the father to which pay refers is deceased; since there is no longer an entity to possess the father, pay bears the unspecified possessor prefix.
(482) a.
**(juu) pay
(ART) father
Target: '(the) father'
b. lakmaapaayniy juu 7ixtz'alh juu 7ixpay lak-maapaayni-y juu 7ix-tz'alh juu 7ix-pay PL-love-IMPFV ART 3POS-boy ART 3POS-father 'The father loves his children.' [TPWDB: maapaayni]
c. juu xaapay maa jaantu xtalh7aman juu xaa-pay maa jaantu x-talh7aman ART IPOS-father RPT NEG PAST-get.mad(IMPFV) 'The father would never get mad.' [His child is deceased] [T0059: 029]

The examples in (483) demonstrate that when an optionally possessed noun's possessor is inanimate, the possessum may bear the impersonal possessor

[^105]prefix. In the (a) example, the noun 7ukxtin occurs without a possessive prefix and, thus, is not obligatorily possessed (i.e., it is optionally possessed). In the (b) example, $7 u k x t i n$ bears the third person possessor prefix $x$-, and the gloss indicates that the possessor is human. In the (c) example, the same noun bears the impersonal possessor prefix, and in this example, its possessor is inanimate.

| (483)a. | nii | paastaklich | juu 7 ukxtin |
| :--- | :--- | :--- | :--- |
|  | nii | paastak-li+ch | juu 7 ukxtin |
|  | COMP think-PFV+ALD | ART boss |  |
|  | 'Then the mayor thought . . |  |  |

b. maach'alhkatniy juu x7ukxtin
maa-ch'alhkat-ni-y juu 7ix-7ukxtin CAUS-work-DAT-IMPFV ART 3Pos-boss
'His boss makes him work.'
[TPWDB: 7ukxtin]
c. juu xaa7ukxtin juu xqatii
juu xaa-7ukxtin juu xqatii
ART IPOS-boss ART creek
'the boss of the creek'
[T0058: 047]

### 4.1.2.3 Plural Possessor

If a possessor is plural, this feature is indicated on the possessum by the addition of the suffix -7an, as seen below in (484). Person is indicated on the possessum as detailed above in section 4.1.2.1. The plural possessor suffix does not occur with the impersonal possessor prefix.
(484) a. kinchaqa7an
kin-chaqa7-7an
1POS-casa-PL.POS
'our house'
b. mintz'alh7an
min-tz'alh-7an
2POS-boy-PL.POS
'your (PL) boy'
c. sasqat'a7an

7ix-7asqat'a-7an
3POS-child-PL.POS
'their child'
When both the possessor and the possessum are plural, the possessive affixes are added to the stem of the possessum after the plural noun marker, as seen below in (485).
(485)a. kinchaqa7an
kin-lak-chaqa7-7an
1POS-PL-house-PL.POS
'our houses'
b. mintz'alan7an
min-tz'al-an-7an
2POS-boy-PL-PL.POS
'your (PL) boys'
c. sasqat'an7an

7ix-7asqat'a-n-7an
3POS-child-PL-PL.POS
'their children'
However, the possessum does not have to be marked for plurality to be understood to be plural, as seen below in (486).

(486) a. kin7aqtzulh7an<br>kin-7aqtzulh-7an<br>1POS-head-PL.POS<br>'our heads'

b. kín7aqtzulhnin7an
kin-7aqtzulh-nin-7an
1POS-head-PL-PL.POS 'our heads'

### 4.1.2.4 Obligatory Possession

A closed set of Tepehua nouns are obligatorily possessed, meaning that they never occur without one of the four possessive prefixes seen above in sections 4.1.2.1 and 4.1.2.2. These nouns are what Nichols (1988) calls 'bound nouns', in that they "must be formally possessed" (p. 563). What I am calling 'obligatory possession' has been called many things in the linguistic literature, including 'inalienable' and 'inherent' possession. ${ }^{142}$ I have chosen to use the term 'obligatory' instead of 'inherent' to describe this set of nouns in Tepehua because I use the term 'inherent' to describe a lack of overt person marking on verbs, ${ }^{143}$ while what is seen on the HT nouns is not a lack of person marking. I do not use the term 'inalienable' because the use of this term implies that 'inalienable' nouns are treated differently from 'alienable' nouns either syntactically or morphosyntactically, which is not the case in Tepehua.

Tepehua also has an open set of nouns that are optionally possessed; that is, they are free morphemes because they are not required to occur with the possessive morphology.

The same set of possessive affixes is used on both obligatorily and optionally possessed nouns. The difference is that the obligatorily possessed

[^106]nouns are bound and may only appear with the possessive morphology, while the optionally possessed nouns are free and may appear with or without the possessive morphology, depending on context.

The set of obligatorily possessed nouns in Tepehua includes kinship terms (487), honorifics (488), human body parts and excretions (489), plant and animal body parts and excretions (490), parts of a whole (491), and one of the two words meaning 'tortilla' (492).
(487)Kinship terms
$\begin{array}{lllll}\text { a. } & \begin{array}{l}\text { chach } \\ \text { cha+ch }\end{array} & \begin{array}{l}\text { xmilh } \\ \text { x-min-li }\end{array} & \begin{array}{l}\text { juu } \\ \text { juu }\end{array} & \text { kinati7an } \\ & \text { kin-nati-7an }\end{array}$
ABL+ALD PAST-come-PFV ART 1POS-mother-PL.POS
'If only our mother would come.'
[T0066: 015]
b. juu ki7asqat'ach maa kanoonaach
juu kin-7asqat'a+ch maa ka-najun-a7+ch
ART 1POS-child+ALD RPT IRR-say-FUT+ALD
'"My child?" he would say.'
[T0059: 012]
c. juu kinkuuk 7ixlaqaw juu kinati
juu kin-kuuk 7ix-laqaw juu kin-nati ART 1POS-uncle 3POS-brother ART 1POS-mother 'my maternal uncle' or 'my uncle, my mother's brother'
[ELIEX2: 076]
(488) Honorifics
$\begin{array}{llll}\text { a. } & \text { juu } 7 \text { 7anuuch } & \text { purowii } & \text { xkumwarii } \\ & \text { juu } 7 \text { 7anu7+ch } & \text { purowii } & \text { x-kumwarii } \\ \text { ART DADJ+ALD } & \text { pitiful } & \text { 3POS-compadre } \\ & \text { 'That pitiful compadre .... } & \end{array}$
[T0055: 010]
b. juu liijuntoo kintata7an Riik'ii
juu liijuntoo kin-tata7-7an Riik'ii
ART deceased 1POS-male.elder-PL.POS Enrique 'the deceased old man (elder) Enrique'
[T0066: 078]
(489) Human body parts and excretions
a. kixkaniy juu kilakatunaj
kin-xka-ni-y juu kin-lakatunaj
1OBJ-hurt-DAT-IMPFV ART 1POS-body
'My body hurts.'
[ELIEX3: 021]
b. maa waa lakaxajpalachiilh
xlakatz'itz'i
maa waa laka-xaj-pala-chii-li x-laka-tz'itz'i
RPT FOC body-break.out-REP-ADL-PFV 3POS-body-bump
'Supposedly she broke out in bumps.'
[T0069: 218]
c. laqat'uy lhk'awink'i 7ixtatzalat
laqa-t'uy lhk'awink'i 7ix-tatzalat
CL:general-two long 3POS-tooth
'two long teeth'
[ELIEX4: 084]
d. katu7iilh juu lapanak juu 7ix7aay
katu-7ii-li juu lapanak juu 7ix-7aay
ear-bring-PFV ART person ART 3POS-hair
'The man pulled the hair out of his ear.'
[ELIEX2: 050]
(490) Plant and animal parts

b. cha7iputun juu x7alhtukunu7 k'iw juu lapanak
cha7i-putun juu x-7alhtukunu7 k'iw juu lapanak
remove-DESID(IMPFV) ART 3POS-thorn tree ART person
'The man wants to remove the tree's thorns.'
[ELIEX1: 030]
c. 7ix7apamat juu tz'oq

7ix-7apamat juu tz'oq
3POS-feather/fur ART bird
'bird's feathers'
[TPWDB: 7apamat]
d. maa tzukulh maa maaxtoqnu7 juu x7ilht'i p'aax
maa tzuku-li maa maaxtoq-nV7 juu 7ix-7ilht'i p'aax
RPT begin-PFV RPT gather-INF ART 3POS-excrement pig
'He began to collect pig excrement.'
[T0055: 100]
(491) Parts of a whole
a. juu xmaalhka yuuch juu nimaa
juu x-maanka
'This one is the measurement.'
[T0069: 055]
b. waa yuuch juu xpuutawlan
waa yuuch juu x-puutawlan
FOC PRN.3SG ART 3POS-base
'This is the base [of a cabinet].'
[T0069: 279]
c. chinich ka7anaa juu xatornillo
chinich ka-7an-a7 juu xa-tornillo
like.so IRR-go-FUT ART IPOS-screw
'Will the screw go like this?'
[T0069: 030]
(492) tortilla (ni7 in (a) is obligatorily possessed, but waati in (b) is not)
a. $\begin{array}{lllll}\text { tz'alukulh } & \text { juu } & 7 \text { ixni7 } & \text { juu } & 7 \text { atzi7 }\end{array}$
tz'aluku-li juu 7ix-ni7 juu 7atzi7
make.tortilla-PFV ART 3POS-tortilla ART girl
'The girl made the tortilla(s).'
[TPWDB: tz'aluku]
b. tz'alukuy juu waati juu t'aku7
tz'aluku-y juu waati juu t'aku7
make.tortilla-IMPFV ART tortilla ART woman
'The woman makes the tortilla(s).' [TPWDB: tz'aluku]

### 4.2 DERIVATION

In HT, nouns may be derived from verbs by means of suffixation and from nominals or deverbal stems by means of prefixation. The deverbalizing processes include agent nominalization (section 4.2.1), non-agentive nominalization (section 4.2.2), and deverbalization (section 4.2.3). The prefixes involved in noun derivation include instrumentals (section 4.2.4), the locative (section 4.2.5), the applicative (section 4.2.6) the comitative (section 4.2.7), and the body part
prefixes (section 4.2.8). Finally noun-noun and adjective-noun compounding is covered in section 4.2.9.

### 4.2.1 Agent Nominalizer -nV7

When the agent nominalizing suffix $-n V 7$ (AGNM) ${ }^{144}$ is added to an action verb, the result is an agentive nominal that refers to the person or thing that performs the action of the verb, as seen in the examples in (493). The $/ \mathrm{n} /$ at the beginning of this suffix is most likely the deverbalizing suffix $-n$ (see section 4.2.3). The unspecified vowel of the suffix $-n V 7$ harmonizes with the right-most vowel of the stem. The process of agent nominalization is highly productive in HT.
(493)a. maak'uk'ana7
maak'uk'a-nV7
carry.on.back-AGNM
'porter, loader'
b. piixiiyalhna7
piixiiyalh-nV7
stroll-AGNM
'navigator'
c. 7amaqpana7

7amaqpa-nV7
wash.clothing-AGNM
'laundress'
d. lakxuknu7
lak-xuk-nV7
PL-carve-AGNM
'wood-carver'

[^107]e. laqchaqxna7
laq-chaqx-nV7
PL-chop-AGNM
'wood choppper' (a person)
f. 7iini7

7ii-nV7
bring-AGNM
'servant'
g. qaya7ana7
qaya7a-nV7
burn-AGNM
'embers'
h. maaxnapapana7
maaxnapapa-nV7
make.white-AGNM
'bleach'

### 4.2.2 Non-agentive Nominalizers $\boldsymbol{- t i}$ and $-n t i$

There are two nominalizing suffixes that are widely and productively used in HT to form non-agentive nouns from verbs: $-t i$ (NOM1) and $-n t i$ (NOM2). To summarize Watters (1988: 416-423), in Tlachichilco Tepehua, intransitive action verbs form nominals by means of the suffix $-t i$, while transitive action verbs form nominals by means of the suffix -nti (the indefinite object suffix $-n V n$, plus $-t i$ ). Though both suffixes are found in HT, as well, the conditioning factors in this language are not so cut-and-dried. While there are nominalizations of intransitive action verbs formed by means of $-t i$, as seen below in (494), there are also nominalizations of transitive action verbs formed by the same suffix, as seen below in (495); however, there are far fewer of the transitive examples than there are of the intransitive examples. Next, there are nominalizations of both transitive
and intransitive verbs formed by means of the suffix -nti, as seen below in (496) and (497), respectively. Furthermore, the verb does not have to be an action verb to participate in this type of nominalization, as demonstrated by the example in (497d). On the whole, $-t i$ is far more productive and occurs on many more nouns than -nti does; however, given the broad range of both nominalizing suffixes, the conditions that determine the use of one over the other have yet to be determined.
(494) intransitive verbs ending in - $t i$ NOM1
a. miilhpaati
miilhpaa-ti
sing- NOM1
'song'
b. mak-tanuu-ti
hand-enter- NOM1
'ring', 'glove'
c. ch'an-tanuu-ti
foot-enter- NOM1
'shoe'
d. 7aq-tanuu-ti head-enter- NOM1 'hat'
e. katu-tanuu-ti
ear-enter- NOM1
'earring'
f. taqanqa-ti
get.sick- NOM1
'illness'
g. talht'aja-ti
sweat- NOM1
'sweat'
h. 7ach'ananti

7a-ch'an-nVn-ti
PL-sow-INO- NOM1
'garden', 'plants'
i. 7ak'atzananti

7a-k'atza-nVn-ti
PL-know-INO- NOM1
'knowledge', 'intelligence'
j. laa-saa-ti

RCP-hit-NOM1 ${ }^{145}$
'fight', 'battle'
k. waati
wajin-ti
eat(vi)- NOM1
tortilla

1. wayti
wajin-ti
eat(vi)- NOM1
food, meal
m. tzulunti
tzulun-ti
urinate-NOM1
'urine'
n. qamanti
qaman-ti
play(VI)-NOM1
'game', 'Carnaval'
o. chiwinti
chiwin-ti
speak-NOM1
'word'
${ }^{145}$ The reciprocal prefix laa-reduces the valency of the verb by one argument.
p. 7asaanti

7asaanan-ti 7a-saa-nVn-ti
play.instrument- NOM1 PL-hit-INO-NOM1
'gig', 'tocada'
q. talhanti
talhanan-ti
be.afraid-NOM1
'fright', 'espanto'
(495)transitive verbs ending in $-t i$ NOM1
a. skititi
skiti-ti
grind-NOM1
'dough'
b. lhiimaap'aqa-ti
explode-NOM1
'explosives', 'firecracker'
(496) transitive verbs ending in -nti NOM2
a. x7amaqpanti
x-7amaqpa-nti
3POS-wash.clothes-NOM2
'her washing', 'her washed clothing'
b. maalaqch'ii-nti
dress(VT)-NOM2
traditional clothing
(497) intransitive verbs ending in $-n t i$ NOM2
a. tayaanti
tayaa-nti
stand.up(VI)-NOM2
'slope'
b. talhawanti
talhawa-nti
flood-NOM2
'flood'
c. 7a-xt'aja-nti
PL-melt-NOM2
'lead'
$\begin{array}{ll}\text { d. } & \text { lht'aqala-nti } \\ & \text { be.flat-NOM2 } \\ & \text { 'board' }\end{array}$

### 4.2.3 Deverbalizer -n

The deverbalizing suffix $-n(\mathrm{DVB})$ is used in the derivation of nouns from verbs and adjectives from unproductive, adverb-like roots. I follow Beck (2004: 83) in calling it a deverbalizer rather than a nominalizer. ${ }^{146}$ A derived noun that bears the deverbalizer suffix additionally always bears one of the following nominal derivational prefixes: the instrumental prefix paa- or lhaa- (section 4.2.4), the locative prefix puи- (section 4.2.5), or the applicative prefix lhii(section 4.2.6). Since a deverbalized noun never occurs without one of these prefixes, examples of derived nouns bearing the deverbalizer suffix are found in the above listed sections.

## 4.2 . Instrumental Prefixes paa- and lhaa-

Instrumental nouns in HT are derived by means of prefixation of one of two prefixes, paa- or lhaa-, to a deverbal form or to a verb. Derivation of an instrumental noun by means of the first instrumental suffix paa- (INST1) is highly productive. The prefix paa- almost always co-occurs with the deverbalizer suffix $-n$, as seen below in (498), but there are also a few-probably lexicalizedexamples in which the prefix occurs without the suffix, as seen in (499).

[^108](498) paa-Verb-n
a. paak'apin
paa-k'api-n
INST1-use.lever.on-DVB
'lever'
b. paalakch'uk'un
paa-lak-ch'uk'u-n
INST1-PL-cut-DVB
'saw'
c. paamuujuun
paa-muujuu-n
INST1-put.in-DVB
'saddlebag'
d. paamispaan
paa-mispaa-n
INST1-know- DVB
'sign', 'signal'
e. paamaaxt'uun tzaasnaat
paa-maaxt'uu-n tzaasnat
INST1-mine(VT)- DVB iron
'iron mine'
(499) paa-Verb
a. paalaqchaqx
paa-laq-chaqx
INST1-PL-cut.down
'axe'
b. paach'apa
paa-ch'apa
INST1-grab
'pincer'
c. paach'it
paa-ch'it
INST1-squeeze
'[sugarcane] press'
d. paalaktu7
paa-laktu7
INST1-XXX
'colander'
The following example demonstrates that there is some lexicalization of the instrumentals formed with paa-. In both examples in (500), paa- is prefixed to the intransitive verb 7alhtanan 'walk'. In both examples, the indefinite object suffix $-n V n$ has been dropped, and, in the (b) example only, the root 7alhtan ${ }^{147}$ has been further truncated to lhtan.
(500)a. paa7alhtan
paa-7alhtanan
INST1-walk
'motor'
b. paalhtan
paa-7alhtanan
INST1-walk
'vehicle' (e.g., car, bus, bicycle)
The second HT instrumental prefix lhaa- (INST2) is cognate with what MacKay (1999: 387) calls the comitative prefix laa- in Misantla Totonac. In HT lhaa- always co-occurs with the deverbalizing suffix $-n$. The process of instrumentalization of a verb by means of lhaa- is less productive than instrumentalization by means of paa-. Examples appear in (501).

(501)a. Ihaamanin<br>lhaa-mani-n<br>INST2-paint-DVB<br>'varnish', 'paint', 'ink', 'color'

147 The root 7alhtan does not occur as a transitive verb in HT.
b. Ihaasakminin

Ihaa-sakmin-i-n
INST2-ask-EPE-DVB
'question'
c. Ihaaqaman
lhaa-qaman-n
INST2-play-DVB
'toy'
d. Ihaak'uch'un
lhaa-k'uch'u-n
INST2-cure-DVB
'balm', 'ointment'
e. lhaalaqoxin

Ihaa-laqoxi-n
INST2-make.good-DVB
'spice'

### 4.2.5 Locative Prefix puи-

The locative prefix puи- (LOC) most likely comes from the body part prefix puи- meaning 'inside', ${ }^{148}$ and it is closely related to the verbal instrumental prefix puи-. ${ }^{149}$ I follow MacKay (1999: 388) in calling this the 'locative' prefix. ${ }^{150}$ This prefix may be affixed to a noun or a deverbal stem. When it is affixed to a noun, the resulting noun means "the place where the noun is found", as seen below in (502).
(502) a. puuni7
puu-ni7
LOC-tortilla
'guaje', 'tortilla holder'

[^109]```
b. puukapen
    puu-kapen
    LOC-coffee
    'coffee field'
    c. puustapu
    puu-stapu
    LOC-bean
    'bean plot'
d. puuchiila7
    puu-chiila7
    LOC-chicken
    'chicken coop'
e. puu7ukxtiin
    puu-7ukxtiin
    LOC-boss
    'municipal building'
f. puujip
    puu-jip
    LOC-fire
    'brazier'
g. puuskititi
    puu-skititi
    LOC-corn.dough
    'corn grinder'
```

When the locative prefix occurs on a verb, it is always accompanied by the deverbalizer suffix $-n$ (DVB). The resulting noun refers to the place where the action of the verb takes place. Examples appear in (503).

```
(503)a. puulajch'in
    puu-lak-ch'i-n
    LOC-PL-tie-DVB
    `jail'
```

b. puutayaan
puu-tayaa-n
LOC-stand.up-DVB
'stirrup', 'pedal'
c. puumaaskakan
puu-maa-skaka-n
LOC-CAUS-be.hot-DVB
'forge'
d. puutapalhun
puu-tapalhu-n
LOC-trap(VT)-DVB
'trap (N)'
The prefix puи- also occurs on deverbal stems that bear the indefinite subject suffix -kan, ${ }^{151}$ as seen below in (504). In these examples, it is debatable as to whether prefix puи- is the locative nominal prefix or the instrumental verbal prefix.
(504)a. puu7iikan
puu-7ii-kan-n
LOC-bring-INS-DVB
'bucket'
b. puumakxto7kan
puu-mak-xtoq-kan-n
LOC-hand-gather-INS-DVB
'rake'
c. puumanikan
puu-mani-kan-n
LOC-paint-INS-DVB
'paintbrush'
${ }^{151}$ See Chapter 3, section 3.1.1.3.
d. puumaqniikan
puu-maqnii-kan-n
LOC-kill-INS-DVB
'slaughter house'

### 4.2.6 Applicative Prefix Ihii-

The verbal applicative prefix ${ }^{152}$ lhii- may be used to derive a noun from a deverbal stem or a noun from a noun. When it functions to nominalize a deverbal form, it always co-occurs with some other deverbalizing/nominalizing morpheme, such as the deverbalizer suffix $-n$ (505) and (507), the nominalizer suffix $-t i$ (506), or the indefinite subject suffix -kan (507).
(505) a. lhiiniin

Ihii-nii-n
APPL-die-DVB
'poison'
b. Ihiisaan
lhii-saa-n
APPL-hit-DVB
'musical instrument', 'guitar'
(506) a. Ihiiqot'ati
lhii-qot'-a-ti
APPL-drink-EPE-NOM1
'a drink'
b. Ihiik'atzati
lhii-k'atza-ti
APPL-know- NOM1
'news'
c. Ihiist'aati
lhii-st'aa-ti
APPL-sell- NOM1
'merchandise'

152 See Chapter 3, section 3.2.1.7.
(507) a. Ihiimanikan
lhii-mani-kan-n
APPL-paint-INS-DVB
'coloring agent', 'paint'
b. Ihiik'uch'ukan

Ihii-k'uch'u-kan-n
APPL-cure-INS-DVB
'cure'
c. Ihiilakpaach'iikan
lhii-lakpaa-ch'ii-kan-n
APPL-head-tie-INS-DVB
'headscarf'
The applicative prefix lhii- also can be used to derive a new noun from a another noun. Specifically, it is used to derive a language name from the name of a group of people (508), in references to time, ${ }^{153}$ (509), in references to general location (510), and in one lexicalized kinship term (511).

(508) a. Ihiimaqalhqama7<br>lhii-maqalhqama7<br>APPL-Tepehua<br>'Tepehua language'<br>b. Ihiikachupin<br>lhii-kachupin<br>APPL-Gringo<br>'English language'<br>(509) a. lhiiyaxich<br>lhii-yaxi+ch<br>APPL-moment+ALD<br>'a little while ago.'

[T0066: 118]

[^110]b. Ihiituumiinku
lhii-tuumiinku
APPL-Sunday
'Sunday'
(510) a. Lhii7uwint'i
lhii-7uwint'i
APPL-there
'over there'
[T0069: 328]
b. Ihii7aniich
lhii-7ani7+ch
APPL-there + ALD
'around here'
[T0054: 54]
(511)lhiilaqaw
lhii-laqaw
APPL-sibling
'cousin'

### 4.2.7 Comitative Prefix $t^{\prime} a a$ -

The verbal comitative prefix $t^{\prime} a a$ - (COM) is affixed to a noun to derive a different noun. Though this is a productive process in Tlachichilco Tepehua (Watters 1988: 408), it is not in Huehuetla Tepehua. All of the forms in (512) are lexicalized.
(512) a. t'aalapanak
t'aa-lapanak
COM-person
'friend'
b. t'aatawlhna7
t'aa-tawii-li-nV:
COM-sit.down-PFV-AGNM
'neighbor'
c. t'aat'akuun
t'aa-t'akuu-n
COM-woman-PL
'witch'
d. t'aa7ulut
t'aa-7ulut
COM-XXX
'compadre', 'father-in-law'

### 4.2.8 Body-Part Prefixes

The same body part prefixes (BPPs) that are used on the verbs ${ }^{154}$ may also occur on noun roots. When a BPP occurs on a noun root, it may produce one of two results: (i) a different noun or (ii) a more specific noun.

In the first case, a different, derived noun results from the combination of a BPP and a noun root, as seen below in (513). These examples are mostly lexicalized, and-in some cases-their meanings cannot be easily discerned from their parts.
(513) a. 7akskítit ${ }^{155}$

7ak-skítit
head-dough
'cerebrum', 'brains'
b. 7aqaloqot

7aq-7alukut
head-bone
'horn', 'antler'

[^111]c. lakpaaxkaan
lakpaa-xkaan
head-water
'fontanel', 'soft spot'
d. lakapaalipípi
lakapaa-lipipi
head-bald
'bald spot'
e. xch'anpututunti
x-ch'an-pututu-nti
3POS-foot-round-NOM2
'paw pad'
f. lakapuuk'íw
lakapuu-k'íw
face-tree
'cheekbone'
g. xlaqapuutanuuti
x-laqapuu-tanuu-ti
3POS-face-put.on-NOM1
'his mask'
h. maktzaasnaat
mak-tzaasnaat
hand-iron
'horseshoe'
i. tasak'íw
tasa-k'iw
tooth-tree
'gums'
In the second case, the BPP is affixed to a body part root to create a more specific body part, as seen in the examples in (514) and (515).
(514) xlakatz'itz'i
x-laka-tz'itz'i
3POS-body-pimple
'bumps or rash on the body'
In each example in (515), the noun ch'awti 'hair' is prefixed with a different BPP to demonstrate that this is a productive process.
(515) a. 7akch'awti

7ak-ch'awti
head-hair
'tiny hairs (or filaments) on a small creature, such as an insect'
b. ch'anch'awti
ch'an-ch'awti
foot-hair
'leg or foot hair'
c. ch'anqésit
ch'an-qésit
foot-nail
'toenail', 'claw'
d. katuch'awti
katu-ch'awti
ear-hair
'hair in or around ears'
e. kikch'awti
kik-ch'awti
mouth-hair
'whisker', 'mustache', 'beard'
f. kinkach'awti
kinka-ch'awti
nose-hair
'nose hair'
h. makch'awti
mak-ch'awti
hand- hair
'hair on the hand'
The examples in (516) show two different words for 'pelvis', both of which are prefixed with the BPP puu- 'insides'. The (a) example is an older, lexicalized (and not necessarily transparent) form, and the (b) example is a productive form.
(516) a. puuqaax
puu-qaax
insides-gourd
'pelvis'
b. puulukut
puu-7alukut
insides-bone
'pelvis'

### 4.2.9 Compound Nouns

In a noun-noun compound, the two nouns are joined by an epenthetic /i/, as seen below in (517). The second (or right-most) element is the head.
(517) Noun-noun compounds
a. juukiluw
juuk-i-luw
deer-EPE-snake
'boa constrictor'
b. jiniluw
jin-i-luw
smoke-EPE-snake
'rat snake'
c. p'inik'uch'u
p'in-i-k'uch'u
chile-EPE-medicine
'ginger'
d. xkaanit'aaxkati
xkaan-i-t'aaxkati
water-EPE-honey
'maguey juice'
e. t'ini7ach'ananti
t'in-i-7ach'ananti
seed-EPE-garden
'seed bed'
Adjectives and nouns are also compounded to form nouns. The adjective precedes the noun, and the two elements are conjoined by an epenthetic vowel that harmonizes with the final vowel of the adjectival root. The noun (the rightmost element) is the head. Examples are shown in (518).
(518) Adjective-noun compounds
a. smarrawaluw
smarraw-V-luw
black-EPE-snake
'black-snake'
b. xnapapacha7aan
xnapap-V-cha7aan
white-EPE-ant
'white-ant' (a type of ant)
c. tz'uulikichiila7
tz'uulik-V-chiila7
striped-EPE-chicken
'striped chicken' (a type of chicken)
When the adjective simply modifies the noun, there is no epenthetic vowel that joins them, and they do not form a compound, as seen below in (519).
(519) Adjectives modifying nouns
a. smarraw luw
black snake
b. xnapáp cha7aan
white ant
c. tz'uulík chiila7
striped chicken

### 4.3 Noun Phrases

A noun phrase in HT consists minimally of a head noun (520a) and maximally of an article, a demonstrative pronoun, a modifier, ${ }^{156}$ and the head noun, as seen in (520b). The article is the left-most element of the noun phrase, and the head-the noun-is the right-most element.
(520)a. waa $[\text { lapanak }]_{\mathrm{NP}}$

FOC person
'it is human'
[T0020: 032]
b. [juu 7anuuch purowii xkumwarii] ${ }_{\mathrm{NP}}$ juu 7anu7+ch purowii x-kumwarii ART that+ALD pitiful 3POS-compadre 'that pitiful compadre'
[T0055: 010]
Generally speaking, overt NPs (both definite and indefinite) in HT are referential. Non-referential overt nouns appear in predicate nominal constructions, ${ }^{157}$ such as in (520a), and as body parts prefixed on verbs. ${ }^{158}$

[^112]
### 4.3.1 Definiteness and Specificity of Noun Phrases

A definite noun (or noun phrase) in HT is always preceded by the definite article juu; an indefinite, specific noun is preceded by a numeral; and an indefinite, non-specific noun is preceded by neither an article nor a numeral.

The examples in (521) demonstrate the difference between a definite and an indefinite, specific noun phrase. The first time the noun phrase pumatam lapanak 'a person' is mentioned in the narrative, it is indefinite, as seen in the (a) example. This NP refers to a specific, non-definite (unknown, at this point in the narrative) entity; thus, the NP has a number, but no definite article. The next time the same entity is mentioned, it is definite and is preceded by the definite article $j u u$, as seen in the (b) example.

| (521)a. | xminta | [pumatam | lapanak] |
| :--- | :--- | :--- | :--- |
|  | x-min-ta | puma-tam <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> PAST-come-PF A person came.' |  |

[T0022: 035]
b. maa maaqeswaa [juu pumatam papa7]
maa maa-qeswaa juu puma-tam papa7
RPT CAUS-scare(PFV) ART CL:human-one old.man
'It scared the one old man.'
[T0022: 054]
The examples in (522) demonstrate the difference between a specific noun phrase and a non-specific noun phrase. The NP in the (a) example is specific and definite, while the NP in the (b) example is indefinite and non-specific.
$\begin{array}{llcl}\text { (522) a. } & \text { niilh } & \text { [juu } & \text { lapanak] } \\ & \text { nii-li } & \text { juu } & \text { lapanak } \\ & \text { die-PFV } & \text { ART } & \text { person } \\ & & \text { 'The man died' } & \end{array}$
[T0009: 016]
b. [qox tachapun lapanak]
qox tachapun lapanak
good strong person
'a strong, healthy man.'
[T0009: 017]

### 4.3.1.1 Definite Article

As mentioned above, the definite article $j u u$ is always the first element in a definite noun phrase. The same particle is also used as a relativizer in a relative clause, as well as a marker of definiteness in locative and temporal adverbial phrases; these uses are covered in Chapter 8 (section 8.3.2.1) and Chapter 5 (sections 5.2.1 and 5.2.2), respectively. Examples of juu used as a definite article are seen in (523).
(523) a. [juu luw]

ART snake
'the snake'
b. [juu 7anu7 luw]

ART that snake
'that snake'
[T0003: 005]
c. [juu Teewanch] junkan
juu Teewan+ch jun-kan
ART Esteban+ALD call-INS(IMPFV)
'They call him Stephen.'
[T0054: 005]

### 4.3.1.2 Indefinite Article

The numeral tam 'one' serves as an indefinite article in HT, similar to the Spanish $u n(a)$. When the numeral acts as an indefinite article, it may occur with or without a numeral classifier. In the examples in (524), the classifier-tam combination acts as an indefinite article.
(524)a. lhiitamawlh [laqatam xlaqpuutanuti]
lhii-tamaw-li laqa-tam x-laqpuutanuti
APPL-buy-PFV CL:general-one 3POS-mask
'He bought himself a mask'
[T0055: 048]
b. milh [laqatam maa taqanqati]
min-li laqa-tam maa taqanqati come-PFV CL:general-one RPT illness
'An illness came.'
[T0057: 009]
c. maa chunch nawita [pumatam kintata7]
maa chun+ch nawi-ta puma-tam kin-tata7
RPT like.so+ALD do-PF CL:human-one 1POS-elder
'That is what an old man did.'
[T0003: 029]
The examples in (525), show that the numeral tam does not require a numeral classifier prefix when it acts as an indefinite article.
(525) a.

| waa | naa | ksk'in | [tam cartón] | wachu7 |
| :--- | :--- | :--- | :--- | :--- |
| waa | naa | k-sk'in | tam cartón | wachu7 |
| FOC | EMP | 1SUB-order(IMPFV) | one box | also |
| 'I order a box [of beer], too.' |  |  |  |  |

[T0066: 043]
b. [tam maqali7] kamaach'ixtaqniynch juu tuumiin
tam maqali7 ka-maach'ixtaq-ni-y-n+ch juu tuumiin
one rich.person IRR-loan-DAT-IMPFV-2OBJ+ALD ART money
'A rich person might loan you the money.'
[T0054: 024]
$\begin{array}{lllll}\text { c. } & \text { juu } & \text { x7 } 7 \text { laata } & \text { [tam } & \text { p'aqlati }\end{array}$ tuumiin $]$
[T0054: 060]
Not all noun phrases containing the numeral tam are indefinite. The examples in (526) show that when the classified tam is preceded by the definite article $j u u$, it acts as a numeral-not an indefinite article-and the noun phrase is definite.

| (526) a. | [juu laqatam | wilhchan] |
| :--- | :--- | :--- |
|  | juu laqa-tam | wilhchan |
|  | ART CL:general-one | day |
|  | 'one day' |  |

b. [juu 7alaqatam wilhchan]
juu 7a-laqa-tam wilhchan
ART CL:other- CL:general-one day
'the other day'
[T0058: 001]
Finally, the example in (527) contrasts the use of tam as a numeral with its use as an indefinite article. The first NP is definite, and tam is used as a numeral; the second NP is indefinite, and tam is used as an indefinite article.

```
(527)maa xkitasp'it'ach x7ast'aanta
    maa x-ki-tasp'it'-ta+ch x-7a-st'aa-nVn-ta
    RPT PAST-RT-return-PF+ALD PAST-PL-sell-INO-PF
    [juu pumatam xkumwarii] NP1
    juu puma-tam x-kumwarii
    ART CL:human-one 3POS-compadre
    [laqatam laqachaqan] NP2
    laqa-tam laqachaqan
    CL:general-one town
    'One friend had returned from selling in a town.'
```


### 4.3.1.3 Vocative Article

The vocative article jii precedes the noun that names or refers to the addressee, as seen in the examples in (528). In the (a) example, the addressee is a proper name; in the (b) example, it is a quasi-kinship term; in the (c) example, it is a kinship term; and in the (d) example, it is a noun. Neither Tlachichilco Tepehua nor Pisaflores Tepehua has a vocative article (J. Watters, p.c.).

| (528)a. | nii | k'i7uya7 | $[$ jii | Piitalu7] |
| :--- | :--- | :--- | :--- | :--- |
|  | nii | ki-7u-ya7 | jii | Piitalu7 |

COMP 1OBJ(2SUB)-eat-FUT VOC Pedro
'If you eat me, Pedro'
[T0066: 245]
b. kti7anch
[jii kintz'alh]
jii kin-tz'alh
k-ti-7an+ch
1SUB-IMM-go(IMPFV)+ALD VOC 1 POS-son
'I'm leaving now, son.'
[T0066: 289]
c. tanchach [jii kinkiin]
tancha-ch jii kin-kiin
where+ALD VOC 1POS-aunt
'Where, aunt?'
[T0054: 031, 035]
d. 7at'aych
[jii t'aqap'an]
7a-tayaa+ch
jii t'aqap'an
IRR(2SUB)-stand.up(2SUB.PFV)+ALD VOC drunkard
'Stand up, you drunk.'
[T0066: 084]

### 4.3.2 Modified Nouns

Modifiers that modify the head noun in an NP follow the article (if there is one) and precede the head noun, as seen in (529).
(529)a. juu saasti kinch'antanuuti
juu saasti kin-ch'antanuuti
ART new 1POS-shoe
'my new shoes.'
b. juu maqaniyaa lapanak

ART ancient people
'The people from before', 'the old people'
[T0057: 049]
c. qox tachapun lapanak
good strong person 'a healthy, strong person'
[T0009: 017]
d. jaantu naa naa [sii maqalhqama7 laqachaqan] jaantu naa naa sii maqalhqama7 laqachaqan NEG EMP EMP pure Tepehua town 'this is not a pure Tepehua town.'
[T0057: 035]
If the head noun is modified by both a demonstrative and an adjective, the demonstrative precedes the adjective, as seen in (530).
(530) juu 7anuuch purowii xkumwarii
juu 7anu7+ch purowii x-kumwarii
ART that + ALD pitiful 3POS-compadre
'That pitiful compadre . . .'
[T0055: 010]
For more information about modifiers, see Chapter 5.

### 4.4 RELATIONAL NOUNS

In HT, free noun roots that express locations or parts of a whole (including body parts) may form a relational noun construction with another noun, in which the location/part noun is possessed by the second noun, as seen below in (531). In these examples, the relational noun is indicated by bold face type, and the relational noun phrase is enclosed in brackets.

| [juu xlakaytat | laqachaqan] |
| :--- | :--- | :--- |
| juu $x$-lakaytat | laqachaqan |
| ART 3POS-middle | town |
| 'the middle of town' |  |

[T0057: 089]
b. [juu xtantiilakan tz'aqtzulh]
juu $x$-tantiilakan $x$-7aqtzulh ART 3POS-behind 3POS-head 'The back of his head.'
c. [juu xtanqaapu7 xch'aja7]
juu x-tanqaapu7 $x$-ch'aja7
ART 3POS-bottom 3POS-foot 'the bottom of its foot'
d. [juu xpaqaxti7 juu puutamaan] juu x-paqaxti7 juu puutamaan ART 3POS-side ART bed 'the side of the bed'
e. yaachaa [xpuulakan chaqa7] yaa-chaa x-puulakan chaqa7 standing-DST 3POS-behind house 'He is (standing) behind a house.'
[MNB8: 492]
Syntactically, the relational noun construction acts a locative adverbial modifier, much like a prepositional phrase. When the relational noun phrase modifies a non-positional verb, it generally is preceded by the preposition laka-; conversely, when the relational noun phrase modifies a positional or locational verb, ${ }^{159}$ it generally is not preceded by the preposition. Compare the examples in (532), which exhibit non-positional verbs and the truncated preposition la-, with the examples in (533), which exhibit positional verbs, but no preposition. ${ }^{160}$


[^113]b. juu 7awilhchan yaa
juu 7awilhchan yaa
ART sun standing(IMPFV)

| [xpuulakan | qay | 7atapuutz'i] |
| :--- | :--- | :--- |
| x-puulakan | qay | 7atapuutz'i |
| 3POS-behind | big | cloud |
| 'The sun is behind a big cloud.' |  |  |

[MNB8: 492]
c. [xtampuus miixaa] tanuun juu miistu7
x-tampuus miixaa tanuun juu miistu7
3POS-middle table inserted(IMPFV) ART cat
'The cat is in the middle of the table.'
[MB31-1]
d. [7ix7uksni7 k'iw] juk'alh juu luw

7ix-7uksni7 k'iw juk'alh juu luw
3POS-surface tree hanging(IMPFV) ART snake
'The snake is lying across the top of the tree trunk.'
[MB23]
e. [xpuulak skuumilh] tajun juu paamata
x-puulak skuumilh tajun juu paamata 3POS-inside pan inserted(IMPFV) ART fish
'The fish is inside the pan.'
[MB32]
However, this subcategorizational difference between the positional and nonpositional verbs seems to be in the process of leveling. In the examples in (534), the preposition laka- co-occurs with a positional verb.
(534)a. [laxtantu7 chaqa7] juk'alh juu paamaakilhtan laka-x-tantu7 chaqa7 juk'alh juu paamaakilhtan PREP-3POS-wall house hanging(IMPFV) ART hook 'The hook is (hanging) in the wall of the house.'
b. juu 7asqat'a wii [juu laxpaqaxti7 jip] juu 7asqat'a wii juu laka-x-paqaxti7 jip ART child sitting(IMPFV) ART PREP-3POS-beside fire 'The child is sitting beside the fire.'
c. $\begin{array}{lll}{[l a x t a n t u 7} & \text { k'iw] } \\ \text { laka-x-tantu7 } & \text { k'iw } & \text { tanuun }\end{array} \quad$ juu moqxnu7
PREP-3POS-wall tree inserted(IMPFV) ART owl
'The owl is in (a hole in) a tree.'
[MB67]
d. juu lhii7ut tajun [juu laxpuulak qaax] juu lhii7ut tajun juu laka-x-puulak qaax ART fruit inserted(IMPFV) ART PREP-3POS-inside gourd 'The fruit is inside the gourd.'
[MB2-2]
The HT relational nouns are not bound morphemes. Relational nouns frequently occur without possessive prefixes (or possessors) when they express more general locations, as seen in (535). In the (a) example, smaqspa7 'outside' is possessed by chaqa 7, while in the (b) example it is a free-standing word.
(535)a. [smaqspa7 chaqa7] wii juu xqooy
x-maqspa7 chaqa7 wii juu xqooy
3POS-outside house sitting(IMPFV) ART dog
'The dog is (sitting) outside of the house.'
[MB6-2]
b. maqspa7 wii juu xqooy
maqspa7 wii juu xqooy
outside sitting(IMPFV) ART dog
'The dog is (sitting) outside.'
[MB6-1]
The possessor of the relational noun may also be possessed, as seen below in (536). In this example, the noun chaqa 7 'house' bears the first person possessive prefix, and it is the possessor of the possessed relational noun smaqspa 7 'outside'.
(536)[smaqspa7 kinchaqa7] wii juu xqooy
x-maqspa7 kin-chaqa7 wii juu xqooy
3POS-outside 1POS-house sitting(IMPFV) ART dog
'The dog is (sitting) outside of my house.'
[MB6-3]
The relational noun and its possessor may form a discontinuous constituent, the parts of which are separated by other clausal elements, as seen in
the examples in (537). In the (a) example, the possessed relational noun 7ixtampuиs 'middle' and its possessor 7amuuntzaanaas 'apple' are side-by-side. In the (b) example, the two constituents are separated from each other by the rest of the clause.
(537)a. [7ixtampuus 7amuuntzaanaas] tanuun juu paqt'alan 7ix-tampuus 7amuuntzaanaas tanuun juu paqt'alan 3POS-middle apple inserted(IMPFV) ART arrow 'The arrow is stuck in the middle of the apple.'
[MB30-2]
b. 7ixtampuus tanuun juu paqt'alan 7amuuntzaanaas

7ix-tampuus tanuun juu paqt'alan 7amuuntzaanaas 3POS-middle inserted(IMPFV) ART arrow apple
'The arrow is stuck in the middle of the apple.' [MB30-1]
Given that the relational construction in HT is based on a part-whole relationship and that most body parts may be incorporated onto a verb in the form of body part prefixes, ${ }^{161}$ it should come as no surprise that a relational noun may appear prefixed to the verb, as seen below in (538). In the (a) example, the possessed relational noun xtantu7 'wall' and its possessor chaqa7 'house' form a constituent. In the (b) example, the relational noun is prefixed to the verb, and its possessor is a clausal argument. The presence of the plural verbal prefix lak- to the left of the relational noun is evidence of incorporation.

| (538) a. | [xtantu7 | chaqa7 | lakjuk'alh | ju | tzaapuuj |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | x-tantu7 | chaqa7 | lak-juk'alh | juu | tzaapuuj |
|  | 3 POS-wall | house | PL-hanging(IMPFV) | AR | T worm |
|  | 'The wor | are o | e wall of the house |  |  |

[MB52-2]

[^114]b. laktantujuk'alh juu tzaapuuj juu chaqa7 lak-tantu-juk'ah juu tzaapuuj juu chaqa7 PL-wall-hanging(IMPFV) ART worm ART house 'The worms are on the wall of the house.'

The HT relational nouns are shown below in Table 22.

Table 22: HT Relational Nouns

| Relational Noun | Gloss |
| :--- | :--- |
| 7aqsti7 | top, roof, crest |
| kinkati7 | tip, point |
| lakata | reason, topic, fault |
| lakaytat | center, middle |
| maqastu7 | corner |
| maqspa7 | outside |
| paqaxtu7, paqaxti7 | side, beside |
| puulak | behinde |
| puulakan | center, middle |
| tampuus | wall, side |
| tantu7 | below, underneath |
| tan7aapu7 | behind |
| tantiilakan | top, surface, face |
| $7 \mathrm{ukx} \sim 7 \mathrm{ukxni} 7 \sim 7 \mathrm{ukxpu} 7$ |  |

### 4.5 Pronouns

Topics covered in this section include the personal pronouns (section 4.5.1), possessive pronouns (section 4.5.2), reflexive pronouns (section 4.5.3), and demonstrative pronouns (section 4.5.4).

### 4.5.1 Personal Pronouns

Huehuetla Tepehua has only one set of personal pronouns, listed in Table 23. Syntactically, the personal pronouns behave as nominals, and they may coindex the subject or object of a verb, as well as the possessor of a noun; they do not distinguish case, class, or gender. Given that verbal participants are marked on every HT verb-either overtly or inherently-overt pronominal participants are not obligatory and are primarily used for emphasis.

Table 23: Huehuetla Tepehua Personal Pronouns

|  | Singular | Plural |
| :--- | :--- | :--- |
| 1 | ki7in $\sim$ kit'in | kijnan |
| 2 | 7uxint'i $\sim$ 7ixint'i | 7uxijnan |
| 3 | yuuch | yu7unch |

The variation in pronunciation of the first and second person singular pronouns is age-gradient. The "younger" speakers-that is, speakers who were younger than 70 years of age at the time of my fieldwork-invariably produced ki7in and 7uxint'i, while the older speakers-speakers who were older than 70 at the time of my fieldwork-produced $k t^{\prime}$ 'in and 7ixint'i.

The plural personal pronouns appear to have been derived from the singular forms, given that all three plural forms are phonologically similar to their corresponding singular forms and that they all bear a frozen form of the plural nominal suffixes (-nan and -un). ${ }^{162}$

The first person singular and plural personal pronouns and the second person singular personal pronoun bear some similarity to the verbal person marking affixes. A first person singular subject and a first person exclusive plural subject are marked on the verb by the prefix $k$-, and a first person object (singular or plural) is co-indexed by the prefix kin-. Clearly, both the $k$ - of the subject prefix and the first two phonemes, ki-, of the object prefix are reflected in the roots of both the singular and plural first person pronouns. The second person singular pronoun $7 u x i n t ' i$ bears the suffix $-t^{\prime} i$, which marks a second person singular subject on a verb in the perfective aspect. The third person pronouns bear no resemblance whatsoever to the third person verbal affixes.

The following are examples of all of the HT personal pronouns.
(539) 1SG ki7in ~kit'in
a. nii kaa naa waa xtaqalhiniyanch
nii kaa naa waa x-taqalhi-ni-y-a-n+ch
COMP BLV EMP FOC PAST-ruin-DAT-IMPFV-EPE-2OBJ+ALD

| juu mi7aqtzulh | knajun | juu | kit'in |
| :--- | :--- | :--- | :--- |
| juu min-7aqtzulh | k-najun | juu | kit'in |
| ART | 2POS-head | 1SUB-say(IMPFV) | ART | PRN.1SG

[T0054: 048]
b. ki7in ki7in

PRN.1SG PRN.1SG
'It is I! It is I!'

[^115](540) 2SG 7uxijnt'i ~ 7ixijnt'i
a. puus kaa 7aqtz'iyanch chunch
puus kaa 7aqtz'iyan+ch chun+ch
well BLV always+ALD like.so+ALD
juu 7uuniit'a juu 7uxijnt'i
juu 7un-niita juu 7uxijnt'i
REL be(2SUB)-PF(2SUB) ART PRN.2SG
'Well, I think that you have always been like that.'
[T0054: 028]
b. tachu 7ixijnt'i
like PRN.2SG
'like you'
[T0054: 023]
(541)3SG yuuch
a. maa yuuch juu laay kalhii7alh maqata
maa yuuch juu laa-y ka-lhii7an-li maqata
RPT PRN.3SG REL can-IMPFV IRR-take-PFV far
'It is he who can take it far away . . .'
[T0003: 026]
b. juu x7atz'akanti juu yuuch
juu 7ix-7a-tz'aka-nti juu yuuch
ART 3POS-PL-bite-NOM ART PRN.3SG
'its bite' [it = the snake]
[T0009: 015]
c. laqtz'ilh juu yuuch
laqtz'in-li juu yuuch see-PFV ART PRN.3SG
'He saw him.'
'Él lo vió.'
'Vió a él'
d. 7entons taas t'alaych juu yuuch

7entons taas t'ala-y+ch juu yuuch
then $\quad \mathrm{Q}$ do-IMPFV+ALD ART PRN.3SG
'Then what did he do?'
[T0054: 001]
(542)1PL kijnan
a. juu kij
juu kijnan (lak-)k-7u-y-aw manku
ART PRN.1PL (3PL.OJB-)1SUB-eat-IMPFV-1PL.SUB mango
'We are eating mangos.'
[NVP05]
b. kanaawch
ka-7an-a7-w+ch
IRR-go-FUT-1PL.SUB+ALD
juu kijnan juu sabado
'We will go on Saturday.'
juu sabado ART Saturday
[ELIEX2: 041]
(543)2PL 7uxijnan
a. 7uxijnan 7ínaa7it'it juu sabat

7uxijnan 7in-a7-7i-t'it juu sabat
PRN.2PL go(2SUB)-FUT-2PL.SUB.FUT-2PL.SUB ART Saturday
'You all will go on Saturday.'
[NVP05]
b. juu 7uxijnan 7oqoot'it chuux juu jaak juu 7uxijnan 7u-qoju.PFV-t'it chuux juu jaak ART PRN.2PL eat-all-2PL.SUB all ART banana 'You all ate all of the bananas.'
[NVP05]
(544)3PL yu7unch
a. juu yu7unch kata7ana7 juu sabat
juu yu7unch ka-ta-7an-a7 juu sabat
ART PRN.3PL IRR-PL.SUB-go-FUT ART Saturday
'They will go on Saturday.'
[NVP05]
b. juu yu7unch ta7ulh juu lhiiway
juu yu7unch ta-7u-li juu lhiiway
ART PRN.3PL PL.SUB-eat-PFV ART meat
'They ate the meat.'
[NVP05]

### 4.5.2 Possessive Pronouns

Possessive pronouns are formed by combining the possessive person prefixes and the possessive plural suffix with the demonstrative pronoun 7 anu7 'that', as seen in (545).
(545)a. ki(n)-7anu7 ' X is mine'
b. mi(n)-7anu7 ' X is yours $(\mathrm{SG})$ '
c. 7ix-7anu7 ' X is his/hers/its'
d. $\mathrm{ki}(\mathrm{n})-7 \mathrm{anu} 7-7 \mathrm{an}$ ' X is ours'
e. mi(n)-7anu7-7an ' X is yours (PL)'
f. 7is-7anu7-7an ' X is theirs'

If the possessum is plural, than the plural prefix lak- is optionally added to the possessive pronoun, as seen in (546b).
(546)a. ki7anu7 juu chaanaa
ki-7anu7 juu chaanaa
1POS-that ART planting.pole
'The planting pole is mine.'
b. kilak7anu7 juu chaanaa
ki-lak-7anu7 juu chaanaa 1POS-PL-that ART planting.pole
'The planting poles are mine.'
When both the possessor and the possessum are plural, as seen below in (547b), the pluarl prefix lak- co-indexes the possessum, and the plural suffix -7an coindexes the possessor.
(547)a. ki7anuu7an juu chaanaa
ki-7anu7-7an juu chaanaa
1POS-that-PL ART planting.pole
'The planting pole is ours.'
b. kilak7anuu7an juu chaanaa
ki-lak-7anu7-7an juu chaanaa
1POS-PL-that-PL ART planting.pole
'The planting poles are ours.'

### 4.5.3 Reflexive Pronouns

The reflexive pronouns are formed by adding the possessive prefixes to the adjective 7aqstu 'alone', as seen below in (548). Plurality of the pronoun is indicated by the plural suffix -7an.
(548)a. ki(n)-7aqstu
b. mi(n)-7aqstu
c. 7ix-7aqstu
d. ki(n)-7aqstu-7an
e. mi(n)-7aqstu-7an
f. 7ix-7aqstu-7an
'myself'
'yourself'
'himself'
'ourselves'
'yourselves’
'themselves'

When the reflexive pronoun is preceded by the focus particle waa, the resulting meaning is ' X is alone' or ' X is a widow(er)'.
(549) waa saqstu juu lapanak
waa 7ix-7aqstu juu lapanak
FOC 3POS-alone ART person
'The man is alone', 'The man is a widower.'
[TPWDB: 7aqstu]

### 4.5.4 Demonstratives

Huehuetla Tepehua has two demonstrative pronouns: nimaa 'this' or 'these' refers to items within the reach of the speaker, while 7 anu7 'that' or 'those' refers to items outside the speakers reach, and possibly even outside of the speaker's field of vision. The demonstrative pronouns are always preceded by the definite article $j u u$, as seen in the following examples. They may modify a noun, as seen in (550), or they may stand alone as a nominal, as seen in (551).
(550) a. naa qox [juu nimaa paamata]

EMP good ART this fish
'This fish is good.'
[NVP05]
b. [juu nimaa lapának] naa qox

ART this person EMP good
'This person is good.'
[NVP05]
c. [juu 7anu7 luw]

ART that snake 'that snake'
d. taspitlh nii laqtz'ilhch [juu 7anuuch lapanak]
taspit-li nii laqtz'in-li+ch juu 7anu7+ch lapanak
return-PFV COMP see-PFV+ALD ART that +ALD person
'He returned when he saw that person'
[T0022: 031]
(551) a

| [juu nimaa] laay | 7akch'uk'unilh | 7ani7 |
| :--- | :--- | :--- | :--- |
| juu nimaa laa-y | 7a-k-ch'uk'u-ni-li | 7ani7 |
| ART this can-IMPFV | IRR-1SUB-cut-DAT-PFV | here |
| 'I could cut this one here.' |  | [T0069: 337] |

b. [sii xlak7aparaatuuch] [juu nimaa]
sii 7ix-lak-7aparaatuu+ch juu nimaa
pure 3POS-PL-machine+ALD ART these 'These are all her machines.'
[T0066: 237]
c. pus [juu 7anu7] nii kaa x7anch
pus juu 7anu7 nii kaa x-7an+ch well ART that COMP BLV PAST-go(IMPFV) +ALD 'Well, that one, I believe that he went.'
[T0020: 038]
d. laklhkulh [juu 7anu7]?
lak-lhku-li juu 7anu7
DIS-burn-PFV ART that
'Did that one get burned?
[T0054: 066]
Frequently, the adverb 7anii 'here' is substituted for nimaa 'this/these', as seen below in (552).
(552)a. [juu 7ani7 x7ilht'i p'aax]
juu 7ani7 7ix-7ilht'i p'aax
ART this 3POS-excrement pig
'this pig excrement'
[T0055: 024]
b. kaa soqnik'a [juu 7ani7]
kaa soq-ni-k'a juu 7ani7
BLV btraight-DVB-ADJZ ART this
'This one is straight, I think.'
[T0069: 080]

## Chapter 5: Modifiers

Modifiers in Huehuetla Tepehua include adjectives, numbers, nonnumerical quantifiers, and adverbs. Adjectives and non-numerical quantifiers are covered in this chapter in sections 5.1 and 5.2 , respectively. Adverbs are discussed in Chapter 6, and numbers and the numeral classifiers are covered in Chapter 7.

### 5.1 AdJECTIVES

Adjectives in Huehuetla Tepehua occur in both predicative and modificational syntactic positions. They form a distinct word class from nouns, verbs, and adverbs, though they share features in common with members of each of these classes. When adjectives occur in a predicative position, they pattern like nouns; predication of adjectives is addressed in Chapter 3, section 3.3.3.3. Adjectives pattern like both nouns and verbs with regard to the inflectional and derivational affixes that they accept, ${ }^{163}$ though there is one derivational suffix that is unique to adjectives. Adjectives differ from adverbs in that adjectives may accept inflectional affixes, while adverbs never do. Thus, since adjectives are neither completely noun-like, completely verb-like, nor completely adverb-like, I analyze them as a separate word class.

When an adjective modifies a noun within a noun phrase (i.e., in a modificational position), the adjective immediately precedes the noun, as seen in

[^116]the examples below in (553). If the noun is possessed, the possessive marker occurs only on the noun, and not on the adjective, as seen in (553a).
(553)a. waa ktamawputun [juu saasti kinch'antanuti] ${ }_{\mathrm{NP}}$ waa k-tamaw-putun juu saasti kin-ch'antanuti
FOC 1SUB-buy-DESID(IMPFV) ART
'I want to buy the new shoes.'
new 1POS-shoe
[TPWDB: ch'antanuuta]
b. 7aks [juu maqaniyaa lapanak] $]_{\mathrm{NP}}$ tanajun

7aks juu maqaniyaa lapanak ta-najun
then ART old people 3PL.SUB-say(IMPFV)
'Then the people from before (the ancestors) say . . .' [T0057: 048]
c. porque juu maa noomputun juu Huehuetla
porque juu maa najun-putun juu Huehuetla
because REL RPT say-DESID(IMPFV) ART Huehuetla
[maqaniyaa laqachaqan] $]_{N P}$
maqaniyaa laqachaqan
old town
'Because "Huehuetla" means "old town".'
[T0057: 041]
d. juu ki7in

ART PRN.1SG
naa $\quad[\mathbf{k} \text { 'usi } 7 \text { atzi7] }]_{\mathrm{NP}}$
'I'm a very pretty girl.'
[PDLMA2005]
e. klaqtz'in [juu k'usi 7atzi7] ${ }_{\mathrm{NP}}$
k-laqtz'in juu k'usi 7atzi7
1SUB-see(IMPFV) ART pretty girl
'I see a/the pretty girl.'
[PDLMA2005]
f. klaqtz'in [juu slapulh paatz'oq] $]_{\text {NP }}$ k-laqtz'in juu slapulh paatz'oq 1SUB-see(IMPFV) ART red pencil
'I see the/a red pencil.'
[PDLMA2005]

```
g. [juu qay serrootii]}\mp@subsup{]}{\textrm{NP}}{}\mathrm{ ,
    juu qay serrootii
    ART big saw
```

| waa | kijuunilh | [juu liijuuntuu | mimpay $]_{\text {NP }}$ |
| :--- | :--- | :--- | :--- | :--- |
| waa | ki-jun-ni-li | juu |  |
| FOC | liijuuntuu | mim-pay |  |

'The big saw, your deceased father told me that the saw is/was good.'
[T0069: 383-5]
The sentence in $(553 \mathrm{~g})$ contains three adjectives. The first two-qay 'big' and liijuипtии 'deceased'-occur in the modificational position immediately before the head noun in their respective noun phrases. The third adjective-qoxi 'good'-occurs in a predicative position; note that in this example, the article juu intervenes between the predicative adjective qoxich and the noun serrootii 'saw'.

When a demonstrative pronoun modifies a noun phrase, it occurs immediately after the article, and it precedes all other modifiers, including both qualitative adjectives, as seen below in (554a), and numbers, as seen below in (554b). ${ }^{164}$
(554) a. 7entons juu 7anuuch purowii xkumwarii

7entons juu 7anu7+ch purowii x-kumwarii
then ART that + ALD pitiful 3POS-compadre

| nii | maa | naa | waa | xkilhpatiych |
| :--- | :--- | :--- | :--- | :--- |
| nii | maa | naa | waa | x-kilhpati-y+ch |
| COMP | RPT | EMP | FOC | PAST-be.poor-IMPFV+ALD |

'Well, that pitiful compadre, he was very poor.' [T0055: 010-11]

[^117]b. juu 7anu7 xt'iyun7an lapanák juu 7anu7 x-t'iyun-7an lapanák ART that 3POS-two-PL.POS people 'those two people'
[T0063: 004]
Only one adjective occurs in a noun phrase. If an additional descriptive adjective is used, is occurs in a complement clause, as seen above in (554a). In fact, the majority of adjectives occuring in narrative texts occur in predicative position; there are very few textual examples in which an attributive adjective modifies a noun within a noun phrase. The four predications (each of which occurs within brackets) shown below in (555) demonstrate how multiple nominal and adjectival predications can be strung together in HT without once making use of nominal modification within a noun phrase:

| (555) $[$ waa naa | papa7] |
| ---: | :--- |
| waa naa | papa7 |
| FOC EMP | old.man |
|  |  |
| [maa naa | kiklhman], |
| maa naa | kik-lhman |
| RPT EMP | mouth-long |


| [maa naa | naach | waa | lakpuulhalhaa], |
| :--- | :--- | :--- | :--- |
| maa naa | naa+ch | waa | lakpuu-lhalhaa |
| RPT EMP | EMP+ALD | FOC | face-hairy |

[maa laqlhman juu xlaqpuuch'awti] maa laq-lhman juu x-laqpuu-ch'awti RPT face-long ART 3POS-face-hair 'He was an old man, he was long-bearded, he was very, very long-bearded, his beard was long.'

A particle may intervene between an adjective and a head noun, as seen below in (556), in which the reportative particle maa intervenes between the numeral modifier laqatam 'one' and the noun taqanqati 'disease'.

| (556) maa waa | milh | [laqatam | $\underline{\text { maa }}$ | ta7an7ati] |
| ---: | :--- | :--- | :--- | :--- |
| maa waa | min-li | laqa-tam | $\underline{\text { maa }}$ | taqanqati |
| RPT FOC come-PFV | CL:general-one | $\underline{R P T}$ | disease |  |
| 'A disease came.' |  |  |  |  |

[T0057: 009]
Adverbs may precede and modify an adjective within a noun phrase, as seen in the examples in (557). In these examples, the adverbs are underlined, and the adjectives are in bold type.
(557)a. [qox tachapun lapanak]
good strong person
'a good and strong person’
'a very/really strong person'
[T0009: 017]
b. jaantu naa naa [sii maqalhqama7 laqachaqan]

NEG EMP EMP purely Tepehua town
'It is not a purely Tepehua town.'
(Meaning that not everyone in town is Tepehua)
[T0057: 035]
c. maa naa naa [qox qay maqtili7]

RPT EMP EMP good big wild.animal
'It was a very/really big animal.'
[T0020: 028]
Finally, adjectives may undergo the same sound symbolic alternations that are found elsewhere in the language. ${ }^{165}$ Examples are shown in (558).
(558) a. yuuch juu weeqeli/wiik'ili ${ }^{166}$ ingeniero

PRN.3SG ART wrinkled engineer
'Him, the wrinkled engineer.'
[T0066: 294]
b. lhoqoqo $\sim$ lhukuku 'hollow'

[^118]
### 5.1.1 Derivation

Derivational morphology on adjectives includes the deverbalizer -n (section 5.1.1.1), the adjectivizer $-k^{\prime} V$ (section 5.1.1.2), and body part prefixes (section 5.1.1.3).

### 5.1.1.1 Deverbalizer -n

As mentioned in Chapter 4, Section 4.2.3, the deverbalizing suffix $-n$ (DVB) appears on nouns and adjectives that have been derived from verbs. Additionally, the deverbalizer is used to derive an adjective from an adverb. When the deverbalizer $-n$ or its allomorph -ni is used to derive an adjective from a verb or adverb, it is usually followed by the adjectivizing suffix $-k$ ' $V$, which is discussed in the next section. The only example that I have found in which an adjective bears the dervabalizer without also being suffixed with the adjectivizer is shown below in example (559).

| (559) nii | waa | muujuukalhch | juu lapanak |  |
| :---: | :--- | :--- | :--- | :--- |
| nii | waa | muujuu-kan-li+ch | juu | lapanak |
| COMP | FOC | throw-INS-PFV+ALD | ART | person |

[juu xaaniin lapanak] ${ }_{\mathrm{NP}}$ juu lakxkaan juu xaa-nii-n lapanak juu laka-xkaan ART IPOS-die-DVB person ART PREP-water 'because the people threw the dead people into the river.'

However, the above example differs from examples that bear $-k$ ' $V$ in that here the derived adjective modifies an noun within a noun phrase, while the examples that bear the adjectivizer occur in a present tense predicative position only, as will be seen in the following section.

The $-n$ allomorph occurs after a vowel-final root as seen below in (560a); the $-n i$ allomorph occurs after a consonant-final root, as seen below in (560b).
(560) a. lakpaaswilink'i juu Weechii
lakpaa-swili-n-k'i juu Weechii
head-swirl(ADV)-DVB-ADJZ ART Laurencio
'Laurencio has a cowlick.'
LIT: 'Laurencio is cowlicked.'
[ELIEX3: 033]
b. naa qox p'oqotnik'a juu xkaan
naa qox p'oqot-ni-k'a juu xkaan
EMP good thickly(ADV)-DVB-ADJZ ART water
'The water is very densely colored.'
[MNB13: 94]
I have found two examples of adjectives derived by means of the deverbalizer and the adjectivizer in which the root is neither a verb nor an adverb; these examples are shown below in (561). The example in (561a) is derived from the noun matzat 'salt', and the example in (561b) is derived from the Spanish adjective morado 'purple'. Nevertheless, I continue to call the $-n \sim-n i$ suffix the deverbalizer since it is primarily used on verbs and adverbs.
(561)a. matzatnik'a
matzat-ni-k'a
salt-DVB-ADJZ
'salty', 'salted'
[TWPDB: matzatnik'a]
b. muuraaruunik'a
muuraaruu-ni-k'a
purple-DVB-ADJZ
'purple' from the Spanish 'morado'
[TPWDB: muuraaruunik'a]

### 5.1.1.2 Adjectivizer - $k^{\prime} V$

The adjectivizer (ADJZ) $-k^{\prime} V$ or its variant $-7 V\left(*^{*}-q\right.$ ' $V$ ) is combined with the derverbalizer $-n$ or its allomorph $-n i$ to derive a predicative adjective from a verb or adverb. When the adjectivizer occurs after the $-n$ allomorph of the
derverbalizer, the unspecified vowel of the suffix harmonizes with the final vowel of the stem, as seen in the examples below in (562), where the last vowel in the stem is underlined.
(562) a. k'ayannk'a
k'aya-n-k'a
painfully-DVB-ADJZ
'painful'
[TPWDB: k'ayank'a]
b. lhk'awink'i
lhk'awi-n-k'i
crossing-DVB-ADJZ
'long, crossing'
[TPWDB: lhk'awink'i]
c. 7at'ilhen7e

7at'ilhi-n-q'i
wear.out-DVB-ADJZ
'worn out, worn down' (e.g., a house in disrepair)
[TPWDB: 7at'inlhen7e]
d. spulunk'u
spulu-n-k'u
crunchy(ADV)-DVB-ADJZ
'crunchy'
[TPWDB: spulunk'u]
e. lhpupon7o
lhpupu-n-q'u
sparking(ADV)-DVB-ADJZ
'freckled'
[TWPDB: lhpuponq'o]
Given the phonetic similarity between the root spulu 'crunching' in (562d)—which is suffixed with $-k$ ' $u$-and the root lhpupu 'sparking' in (562e)which is suffixed with -70 , the two variations of this suffix do not seem to be in complementary distrubution. I did not explicitly test for this morpheme during my field work, so I do not have enough examples of either of the variants to be able to determine what conditions their variation. Also, I have a strong sense that many
of these adjectives are lexicalized because I cannot identify the root in the majority of the examples that I have. An obvious explanation for the variation between $-k^{\prime} V$ and and $-7 V\left(*-q^{\prime} V\right)$ is one of a symbolic phonemic variation between $/ \mathrm{k} /$ and $/ \mathrm{q} /$ (see Chapter 2, section 2.6.10), given the prevelant use of symbolic phonemic variation within the language; however, my database does not contain any instances of both variations being used on the same stem. The same variation between "allomorphs" of this cognate suffix is found in Papantla Totonac. While Levy does not offer an explanation for the variation, she has found contrasting lexical minimal pairs involving the two cognate variants (1992: 276), indicating that in PT, at least, the variants are not allomorphs and that symbolic phonemic variation alone can not explain the variation.

When the adjectivizer follows the $-n i$ allomorph of the derverbalizer, it always occurs as $-k^{\prime} a$, as seen in the examples in (563).
(563)a. paaqluut'ujnik'a
paaq-luut'uj-ni-k'a
armpit-oval-DVB-ADJZ
'oval-shaped’
[TPWDB: paaqluut'ujnik'a]
b. p'oqotnik'a
p'oqot-ni-k'a
thickly(ADV)-DVB-ADJZ
'thick, dense' (ADJ)
[MNB13: 94]
The following set of examples shown in (564) are all derived from the adverb soq 'straight', which is shown in (564a). The adjectival form, soqnik'a, and its derivation are shown in (564b). The example in (564c) shows soqnik'a as
a non-verbal predicate adjective. ${ }^{167}$ In example (564d), I attempted to use soqnik' $a$ as an attributive adjective modifying a head noun in a noun phrase; my consultant found this usage to be grammatically questionable, but he did not reject it outright. When I tried to inflect soqnik'a with the third person plural subject marker $t a$-, my consultant rejected the example, shown in (564e). The example in (564f) shows that the predicative adjective is pluralized by means of the plural prefix lak- when the subject of the predicate is plural. The examples in $(564 \mathrm{~g})$ and (564h) are interesting because they demonstrate that when the copula is used, the adverbial form soq is used instead of the adjectival form soqnik'a; this could be due to a restriction on the part of speech of words that may precede a verb given that the syntactic position immediately before the verb is normally occupied by an adverb, an adverbial particle, a noun, or a discourse marker.


[^119]$\begin{array}{ccr}\text { e. }{ }^{* *} \text { tasoqnik'a } & \text { juu } & \text { k'iw } \\ \text { ta-soqnik'a } & \text { juu } & \text { k'iw } \\ \text { 3PL.SUB-straight } & \text { ART } & \text { stick } \\ \text { Target: 'The sticks are straight' }\end{array}$
[PDLMA2005]
f. naa lajsoqnik'a juu paatz'oqni
naa lak-soqnik'a juu paatz'oqni
EMP PL-straight ART pencil
'The pencils are straight.'
[PDLMA2005]
g. naa naach waa soq kajuna7
naa naa+ch waa soq ka-jun-a7
EMP EMP+ALD FOC straightIRR-be-FUT
'It will remain straight.'
[T0069: 310]
h. kasoq xajunpalay
ka-soq xa-jun-pala-y
tip-straight PAST-be-REP-IMPFV
'It remained straight.'
[T0069: 254]

### 5.1.1.3 Body Parts

The use of body part prefixes on adjectives-both lexical and derived-is one of the most common ways of deriving new adjectives in HT. ${ }^{168}$ There is a very small subset of adjectives that are bound morphemes that must co-occur with a body part prefix; examples of body part prefixes occuring on the bound root t'ikst'i ${ }^{169}$ 'small' are shown below in (565). Note that the prefix $t z$ ' $a$ - in (565d) and the prefix 7aksa- in (565e) are prefixes that I have not found in any other context; I assume that they are body part prefixes given that they pattern like the other body part prefixes on this root.

[^120](565)a. juntaa waa puut'ikst'i laktalhpa
juntaa waa puu-t'ikst'i lak-talhpa
where FOC insides-small PL-hills
'where the hills are narrow.' [T0022: 052]
b. lakapuut'ikst'i
lakapuu-t'ikst'i
face-small
'narrow' (refers to the weave of cloth) [TPWDB: lakapuut'ikst'i]
c. lakat'ikst'i
laka-t'ikst'i
body-small
'small'
[TPWDB: lakat'ikst'i]
d. tz'at'ikt'i xkaan
tz'a-t'ikt'i xkaan
XXX-small water
'thin liquid'
[TPWDB: tz'at'ikt'i]
e. 7aksat'ikt'i xjuuniita juu xtuuch'iti

7aksa-t'ikt'i x-jun-niita juu x-tuuch'iti
XXX-small PAST-be-PF ART 3POS-skirt
'Her skirt was narrow.'
[TWPDB: 7aksat'ikt'i]
Body part prefixes also occur on free root adjectives, such as qay 'big', examples of which are shown below in (566). Once again, I have encountered two prefixes that I have not found in any other contexts, maqa- in (566e) and 7aqxain (566f). Note that 7aqxa- in (566f) and 7aksa- in (565e) are size-symbolic phonemic alternations of each other.
(566)a. paajqay
paaq-qay
armpit-big
'wide' (a type of weave)
[TPWDB: paajqay]
b. puuqay
puu-qay
insides-big
'wide', 'roomy', 'spacious', 'amplio' [TPWDB: puuqay]
c. puutanqay
puu-tan-qay
insides-torso-big
'tall'
[TPWDB: puutanqay]
d. qalhtanqay
qalh-tan-qay
edge-torso-big
'wide', 'grueso'
[TPWDB: qalhtanqay]
e. maqaqay
maqa-qay
xxx-big
'thick', 'grueso'
[TPWDB: maqaqay]
f. 7aqxaqay xjuuniita juu xtuuch'iti

7aqxa-qay $\quad x$-jun-niita juu $x$-tuuch'iti
XXX-big PAST-be-PF ART 3POS-skirt
'Her skirt is wide.'
[TPWDB: 7aqxaqay]
In the following examples in (567), lexical color terms are prefixed with body parts.
(567) a. 7aktzasan

7ak-tzasan
head-grey
'grey-haired'
[TPWDB: 7aktzasan]
b. lakpaasmarraw
lakpaa-smarraw
head-black
'black-haired'
[TPWDB: lakpaasmarraw]
c. laqxtiixqawaaw
laqxtii-xqawaaw
crown-yellow
'blond'
[TPWDB: laqxtiixqawaaw]
d. naa qox tanjuukspi 7asqat'a
naa qox $\boldsymbol{t a n}$-juukspi 7asqat'a
EMP good trunk-striped child
'The child's stomach is good and striped with dirt and sweat.'
[TPWDB: juukxpi]
The examples in (568) show that body part prefixes may be affixed to derived adjectives as well as to the lexical ones, which were seen in the previous examples.
(568) a. juu kiksmulunk'uch
juu kik-smulu-n-k'u+ch
ART mouth-thickly-DVB-ADJ+ALD
'the thick-lipped guy'
[T0066: 036]
b. lakpaaswilink'i
lakpaa-swili-n-k'i
head-swirl(ADV)-DVB-ADJ
'cowlicked'
[ELIEX3: 033]
The following example in (569) is interesting because the prefix laka- on the adjective $t$ 'ikst'i could be interpreted as the body part prefix meaning 'body' or as the classifier meaing 'place', given that the nominal laqachaqan that this adjective modifies means 'town'. However, since I have no other examples in which a classifier is prefixed to an adjective, I must assume that the correct analysis is that of the body part prefix.

| (569) porque | juu | 7ani7 | laqachaqan |
| ---: | :--- | :--- | :--- |
| porque | juu | 7 ani7 | laqachaqan |
| because | ART | here | town |


| waa lakat'ikst'i | xjuuniita, | lakat'ikst'i; |  |
| :--- | :--- | :--- | :--- |
| waa laka-t'ikst'i | xjuniita | laka-t'ikst'i |  |
| FOC | body-small | PAST-be-PF | body-small |
| CL:place-small |  | CL:place-small |  |


| juu chaway | naa | qaych |
| :--- | :--- | :--- |
| juu chaway | naa | qay+ch |
| ART now | EMP | big+ALD |

'Because here the town was small, very small; now it is very big'

### 5.1.2 Inflection

Adjectival inflection is limited to pluralization (section 5.1.2.1) and restriction (section 5.1.2.2).

### 5.1.2.1 Pluralization

HT adjectives are marked for plurality by the plural prefix lak-, which is also used to mark plurality on nouns (see Chapter 4, section 4.1.1.1), multiple plurality and distributive action (Chapter 3, section 3.1.1.2), and third person plural objects on verbs (see Chapter 3, section 3.1.1.4). Examples of plural adjectives are as seen below in (570), (571), and (572). ${ }^{170}$
(570)a. juu lakst'ak'alh chiiwx
juu lak-s'ak'alh chiiwx
ART PL-flat rock
'the flat rocks'
[MNB15: 40]

[^121]b. maa lakachiiwx maa
maa laka-chiiwx maa
RPT PREP-rock lying
naa lajqay xkupu7 juu x7aknuuy
naa lak-qay xkupu7 juu x-7ak-nuu-y EMP PL-big crawfish REL PAST-head-insert-IMPFV 'In the rocks were big crawfish whose heads were stuck in.'
[T0058: 020-1]
c. laqjenew xjuuniita juu 7ix7aay juu lapának lak-jenew x-jun-niita juu 7ix-7aay juu lapának PL-dark.brown PAST-be-PF ART 3POS-hair ART person 'The person's hair is dark brown.'
[TWPDB: jenew]
When the modified nominal is inanimate and plural, it is often the case that the only morphological indication of plurality occurs on the adjective given that an inanimate noun in Tepehua is not obligatorily marked for plurality, nor is an inanimate noun obligatorily coindexed on the verb. In the example in (571a), the plurality of the head noun is not indicated on either the noun or the verb; though it is indicated on the adjective. In (571b), the adjective again is marked for plurality, and so too is the verb, which also bears the prefix lak-, indicating a third person plural object.
(571)a. klaqtz'in juu laqslapulh paatz'oqo k-laqtz'in juu laq-slapulh paatz'oqo 1SUB-see(IMPFV) ART PL-red pencil
'I see the red pencils.'
[PDLMA2005]
b. klaqlaqtz'in juu laqslapulh paatz'oqo k-laq-laqtz'in juu laq-slapulh paatz'oqo 1SUB-PL-see(IMPFV) ART PL-red pencil 'I see the red pencils.'
[PDLMA2005]
One adjective in my database additionally takes the nominal plural suffix $-n$, as seen in the example below in (572). According to Beck (2000: 236), some
adjectives in Upper Necaxa Totonac that denote human characteristics also follow this double-plural marking pattern. It is possible that other HT adjectives that describe human charateristics follow this pattern as well; however, I cannot be sure of this since I have no other examples. ${ }^{171}$

| (572) naa | lajk'usin | xtajuuniita | juu 7 7atzi7in |
| :---: | :--- | :--- | :--- |
| naa | lak-k'usi-n | x-ta-jun-niita | juu 7atzi7-in |
| EMP | PL-pretty-PL | PAST-3PL.SUB-be-PF | ART girl-PL |

'The girls were very pretty.'
[PDLMA2005]

### 5.1.2.2 Restrictive Modification with xaa-

When the impersonal possessive prefix xaa- (IPOS) is affixed to an adjective, it serves to restrict the modification of the noun to a certain subset of that noun. Levy (1992) calls the cognate prefix in Papantla Totonac a "specifying determiner," and she argues that when it occurs on an adjective modifying a noun, it means "of X [the elements that are possible in a context], the one that Y" (p. 280). ${ }^{172}$ Beck (2000) seems to be the first to have called this "restrictive modification" in comparison to "qualificative modification" in which the adjective is not prefixed with $x a a-$ (p. 229).

While Levy and Beck both give examples of xaa- prefixed to lexical adjectives, I have found the prefix xaa- on derived adjectives only in my own data; however, I did not explicitly test for it on any adjectives-lexical or derived-during my fieldwork.

[^122]In the example below in (573), the derived adjective niin 'dead' is prefixed with $x a a$-, and the adjective modifies the head noun lapának 'person' within a noun phrase. The prefix restricts the set of people to just the dead ones.

| nii | waa | muujuukalhch | juu lapának |  |
| :--- | :--- | :--- | :---: | :--- |
| nii | waa | muujuu-kan-li+ch | juu | lapának |
| COMP | FOC | throw-INS-PFV+ALD | ART person |  |


| [juu xaaniin | lapának $]_{\mathrm{NP}}$ | juu lakxkaan |
| :--- | :--- | :--- | :--- |
| juu xaa-nii-n | lapának | juu laka-xkaan |
| ART IPOS-die-DVB | person | ART PREP-water |

'Because the people threw the dead people into the water.'
[T0057:083]
The prefix xaa- may occur on an adjective in a predicative position, as well as on an adjective in a modificational one. In the examples in (574), xaa- is prefixed to the derived adjective chaan 'ripe'. In (574a), the adjective xaachaan occurs in the predicative position, following the noun phrase juu t'aaxkati 'the honey' and preceding the copula. In (574b), xaachaan occurs within the noun phrase, after the article and before the head noun lhii7uti 'fruit', in a modificational position.

| [juu t''aaxkati $]_{\mathrm{NP}}$ | [xaachaan] | 7ixjuuniita |
| :--- | :--- | :--- |
| juu t'aaxkati | xaa-chaa-n | 7ix-jun-niita |
| ART honey | IPOS-ripe-DVB | PAST-be-PF |
| 'The honey was ripe/done/ready-to-eat.' |  |  |

[PDLMA2005]
b. klaqtz'in [juu xaachaan lhii7uti] ${ }_{\mathrm{NP}}$
k-laqtz'in juu xaa-chaa-n lhii7uti
1SUB-see(IMPFV) ART IPOS-ripe-DVB fruit
'I see the ripe fruit.'
[PDLMA2005]
Finally, the prefix $x a a$ - is found on an adjective that occurs in a lexicalized, idiomatic noun phrase, shown in the examples in (575). The combination of xaaqay 'big' with pay 'father' creates the lexeme 'grandfather',
shown in (575a), (575b), and (575c): of the fathers, the big (old?) ones. The combination of xaaqay with nati 'mother' creates the lexeme 'grandmother, shown in (575d): of the mothers, the big ones. Evidence that xaaqay is an adjective modifying pay and nati is seen in the placement of the possessive morphology on the noun.


### 5.2 QUANTIFIERS

There are three non-numeric quantifiers that appear with great frequency in texts, narratives, and conversations: chuux 'all', lakatz'unin 'few, a few, a little (bit)', and lhuu 'much, many'. Though quantifiers have features in common with adjectives, adverbs, and numbers, only the adjectival properties of quantifiers are treated here. A discussion of the adverbial use of quantifiers is included in

Chapter 6, Section 6.3.2, and the use of numeral classifiers on quantifiers is covered in Chapter 7, Section 7.3.

Unlike other adjectives, quantifiers may not be inflected for plurality or restricted modification, nor may they bear derivational affixes. Furthermore, when a quantifier modifies a noun, it precedes all other members of the noun phrase, including the definite article $j u u$, the demonstrative pronoun, and the head noun, as seen below in the examples in (576)..$^{173}$ This position is outside of (and anterior to) the noun phrase, which indicates that the quantifier has scope over the entire noun phrase, not just the head noun.

| (576) a. | taqayxtoqlich <br> taqayxtoq-li+ch | chuux <br> chuux | [juu lapanak $]_{\mathrm{NP}}$ <br> juu lapanak |
| :--- | :--- | :--- | :--- |
|  | gather.together-PFV+ALD | all | ART people |

[T0058: 049]
b. takilaqolhch
ta-ki-laqo-li+ch
3PL.SUB-GO.RETURN-end-PFV+ALD

| chuux | [juu 7anu7 | ki7ananaan7an $]_{\mathrm{NP}}$ |
| :--- | :--- | :--- |
| chuux | juu 7anu7 | kin-7a-nana7-n-7an |
| all | ART DADJ | 1POS-PL-old.woman-PL-PL.POS |
| 'All of our grandmothers went.' |  |  | (

[T0058; 051]
c. pero juu chaway nii naa lhuuch [juu lapanak] $]_{\mathrm{NP}}$
pero juu chaway nii naa lhuu+ch juu lapanak but ART now COMP EMP many+ALD ART person

| laay | chiwiinin | lhiilaawaan, <br> laa-y |
| :--- | :--- | :--- |
| chiwin-nin | lhii-laawaan |  |
| can-IMPFV | speak-PL.INF | APPL-Spanish |

'Now that many of the people can speak Spanish, . . .' [T0057: 097-98]

[^123]| d. maa | naa | naa | lhuu | [juu xkupu7] | lhii7alh |
| :--- | :--- | :--- | :--- | :--- | :--- |
| maa | naa | naa | lhuu | juu xkupu7 | lhii7an-li |
| RPT | EMP | EMP | many | ART crayfish | take-PFV |

'He took a lot of crayfish (crawdads).' [T0058: 019]
Quantifiers may act as predicate adjectives, as seen in the examples below in (577). The examples shown in (a) and (b) are unmarked for tense and do not have a copula, ${ }^{174}$ while the examples in (c) and (d) are marked for past tense and, therefore, must have a copula to bear the tense and aspect markers. ${ }^{175}$
(577) a. [waa lakatz'unin] $]_{\text {PREDADJ }}$ [juu maqalhqaman] $]_{\text {NP }}$
waa lakatz'unin juu maqalhqama-n
FOC few ART Tepehua-PL
'The Tepehua [people] were few.'
[T0057: 055]
b. puus [yuuch juu puutaxtulh
puus [yuuch juu puutaxtu-li
well [PRN.3SG REL survive-PFV

| waa | juu | 7anii | laqachaqan $]_{\text {NP }}$ |
| :--- | :--- | :--- | :--- |
| waa | juu | 7 anii | laqachaqan |
| FOC | ART | DADJ | town |

[waa lakatz'unin $]_{\text {PREDADJ }}$
waa lakatz'unin
FOC few
'Well, those who survived here in the town were few.'
[T0057: 053]
c. $[7 \mathrm{ixjuuniita}]_{\mathrm{COP}}$ [juu lapanak] $]_{\mathrm{NP}}$ maa [jaantu lhuu $]_{\text {PREDADJ }}$

7ix-jun-niita juu lapanak maa jaantu lhuu
PAST-be-PF ART person RPT NEG many
'The people were not many.'
[T0057: 054]

[^124]d. 7entoons [tuuka7 laqlhuu $]_{\text {PREDADJ }}[7 \mathrm{ixjuuniita}]_{\text {COP }}$

7entoons tuu+ka7 laq-lhuu 7ix-jun-niita
then/so NEG+JST CL:peso-many PAST-be-PF
'So it was not expensive (inexpensive).'
[T0069: 389]
Though a classified quantifier may stand alone as an anaphoric expression that refers to some previously mentioned noun, there is no conclusive evidence that an unclassified quantifier may do so. I have found only one clause that contains an unclassified quantifier that appears to act as an anaphoric expression, shown below in (578).
(578) maa naa lhuu jaantuch xtaminputun
maa naa lhuu jaantu+ch x-ta-min-putun+ch
RPT EMP many NEG+ALD PAST-3PL.SUB-come-DESID. (IMPFV)+ALD
'Many did not want to come.'
[T0057: 027]
If this were an anaphoric expression, there should be a corresponding clause that contains the omitted noun phrase, which would appear between the quantifier lhuu and the negative verb phrase jaantuch xtaminputun, as seen below in $(578) .{ }^{176}$

| $\left(578^{\prime}\right)$ maa naa | lhuu | $[$ juu | lapanak $]_{\mathrm{NP}}$ |
| ---: | :--- | :--- | :--- |
| maa naa | lhuu | luu <br> lapanak $]$ |  |
| RPT EMP | many | $[$ ART | people $]$ |

jaantuch xtaminputun
jaantu+ch x-ta-min-putun+ch
NEG+ALD PAST-3PL.SUB-come-DESID(IMPFV)+ALD
'Many did not want to come.'
[T0057: 027]
However, it is most often the case that a quantifier in the syntactic pre-verbal position is seperated from the noun phrase by the verb phrase, indicating that the quantifier acts as an adverbial modifier, rather than as an adjectival modifier.

[^125]Such an example is seen below in (579), and further discussion is found in Chapter 6, section 6.3.2.
(579) maa naa naa lhuu niilh maa naa naa lhuu nii-li RPT EMP EMP many die-PFV
[juu lapanak] $]_{\mathrm{NP}}$ juu 7aksnich juu lapanak juu 7aksnich ART person ART then 'Many people died then.'

## Chapter 6: Adverbs

The adverb class in Huehuetla Tepehua is a catch-all class of words and particles that (i) modify other words, (ii) may not be inflected, and (iii) do not fall into any of the other word classes. Adverbs may be loosely divided into three subclasses: temporal (section 6.1), locative (section 6.2), and manner (section 6.3). Manner adverbs may be further divided into those that are ideophonic or symbolic in nature (section 6.3.1) and those that are not (section 6.3.2). Other, more specific adverbs are treated in section 6.4; these include: the emphatic adverb naa (section 6.4.1), the evidential and the epistemic adverbs (section 6.4.2), temporal adverbial clitics (section 6.4.3), quantifiers used as adverbs (section 6.4.4). Prepositions are discussed in section 6.6. HT Adverbs form a distinct word class from nouns, verbs, and adjectives. Unlike the other words classes, adverbs may not be inflected; they do, however, accept the applicative derivational prefix lhii-, which may also appear on verbs and nouns (section 6.5). Finally, adverbs may undergo a phonological process of reduplication that does not apply to the other word classes; this process is addressed along with the ideophonic adverbs in section 6.3.1.

### 6.1 TEMPORAL ADVERBS

Temporal adverbs and temporal adverbial clauses are always clause- or sentence-level modifiers. ${ }^{177}$ They usually occur pre-verbally, either at the beginning of the sentence or immediately before the verb, as seen in the examples

[^126]in (580). In (580a), the adverbial phrase juu maqanchich 'a long time ago' occurs at the beginning of the sentence; it is separated from the verb by the subject juu xqatii and the emphatic adverbial particle naa, which is reduplicated. In (580b), the adverbial clause (juu chaway nii naa lhuuch juu lapanak laay chiwinin lhiilaawaan 'now that the people can speak Spanish') is sentence-initial, and it is separated from the verb phrase by the discourse marker puus 'well'. In (580c), the adverbial phrase juи p'ulhnan occurs immediately before the verb and at the beginning of the sentence. In (580d), the adverbial phrase chuux lhiituumiinku 'every Sunday' follows the subject and precedes the verb.

ART long.time + ALD ART creek EMP EMP

| $\left[\right.$ xlaktanooqojuy ${ }_{V}$ | juu | lakalakchaqa7 |
| :--- | :--- | :--- |
| x-lak-tanuu-qoju-y | juu | laka-lak-chaqa7 |
| PAST-3PL.OBJ-enter-ALL-IMPFV | ART | PREP-PL-house |


| naa | naa | juu lapanak |
| :--- | :--- | :--- | :--- |
| naa | naa | juu lapanak |
| EMP | EMP | ART people |

'Before, the creek flooded the houses of all the people.' [T0057: 069]
b. [juu chaway nii naa lhuuch juu lapanak laay juu chaway nii naa lhuu+ch juu lapanak laa-y ART now COMP EMP many+ALD ART people can-IMPFV
chiwiinin lhiilaawaan] $]_{\text {ADVCL }}$ puus [laaych qalhtayanan] ${ }_{\text {VP }}$ chiwin-nin lhii-laawaan puus laa-y+ch qalhtaya-nVn speak-PL.INFAPPL-Spanish well can-IMPFV+ALD defend-INO 'Now that many people can speak Spanish, well, they can defend themselves.'
c. [juu p'ulhnan] $]_{\text {ADVP }}$ [tuu laay 7ixchiwinin] ${ }_{V}$ juu p'ulhnan tuu laa-y 7ix-chiwin-nin ART first NEG can-IMPFV PAST-speak-PL.INF
[juu maqalhqama7]s ${ }_{\text {Sub }}$ [juu lhiilaawaan] $]_{\text {Oвנ }}$ naa qox juu maqalhqama7 juu lhii-laawaan naa qox ART Tepehuas ART APPL-Spanish EMP good
'At first, the Tepehua could not speak Spanish very well.'[T0057: 097]
d. [juu Miikii] Sub [chuux lhiituumiinku] $]_{\text {ADVP }}$ t'aqap'aych juu Miikii chuux lhii-tuumiinku t'aqap'a-y+ch ART Michael all APPL-Sunday get.drunk-IMPFV+ALD 'Michael gets drunk every Sunday.'

It is less common for a temporal adverb or adverbial clause to occur postverbally or post-predicatively, but examples do occur, as seen below in (581). In both (581a) and (581b), a single temporal adverb-chaway 'now' and tz'iisich 'last night', respectively-follows the verb. In (581c), the adverbial clause 7aksni soqch 7an 'when it goes straight' follows the verb; and in (581d), the adverbial clause 7aksni 7atz'akanan juи tzaapuj 'when the worm bites' follows the predicate nominal construction yuuchach juи xak'uch'u 'that is the cure'.

| (581) a. | $[\text { laktantamakxtuakalhch }]_{\mathrm{V}}$ | [chaway $]_{\mathrm{ADV}}$ |
| :--- | :--- | :--- |
|  | lak-tan-ta-makxtuu-kan-li+ch | chaway |
|  | PL-TORSO-INCH-take.out-INS-PFV+ALD |  |
|  | 'They were taken out then.' | now |

[T0063: 079]
$\begin{array}{lc}\text { b. } \quad\left[\mathrm{k} \mathrm{l}^{\prime} \text { ilaach'oqo7as }\right]_{\mathrm{V}} & \text { [tz'iisich }]_{\text {ADv }} ? \\ \text { ki-laa-choqo+7as } & \text { tz'iisich } \\ & \text { RT(2SUB)-can-AGAIN(2SUB.PFV)+TAGQ last.night } \\ & \text { 'Did you go out again last night?' }\end{array}$
[T0066: 020]
$\begin{array}{lll}\text { c. } & \text { jaa } & \text { chunchi7as } \\ \text { jaa } & \text { chun+chi+7as } \\ \text { Q } & \text { like.so+ALD+TAGQ }\end{array}$
[7aksni $\quad$ soqchi 7 an $]_{\text {ADVCL }}$
7aksni soq+chi 7an when straight+ALD go(IMPFV)
'Is this how they do it when it goes straight?'
[T0069: 168]
d. [yuuchach juu xak'uch'u] ${ }_{\text {PREDNOM }}$
yuuch+ach juu xa-k'uch'u
PRN.3SG+ALD ART IPOS-cure
[7aksni 7atz'akanan juu tzaapuj] ${ }_{\text {ADVCL }}$
7aksni 7a-tz'aka-nVn juu tzaapuj
when PL-bite-INO(IMPFV) ART worm
'That is the cure when the worm bites'
[T0009: 010-011]
When the temporal adverb refers to a specific chronological or sequential time, it may or may not be preceded by the definite article juu, as seen below in the examples in (582). In (582a), the specific adverb 7askniich 'then' is preceded by juu, while in (582b), it is not. Other examples of a specific adverb that is preceded by juu include (580a), (580b), and (580c); other examples of a specific adverb that is not preceded by juu include (581a) and (581b).

| (582) a. | maa <br> maa <br> RPT | naa naa EMP | naa <br> naa <br> EMP |  | lhuu lhuu many | niilh <br> nii-li <br> die-PFV |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | juu | lapanak |  | [juu | 7a | niich] ${ }_{\text {ADVP }}$ |
|  | juu | lapanak |  | juu | 7a | snii+ch |
|  | ART | people |  | ART | T the | +ALD |
|  |  | y people | e died | then. |  |  |

[T0057: 020]
b. [7aksniich] $]_{\text {ADv }}$ maa tanuuchilh juu comunismo

7aksnii+ch maa tanuu-chi-li juu comunismo
then+ ALD RPT enter-PROX-PFV ART communism
'Then communism entered [the village].'
[T0057: 060]

Conversely, when the time to which the temporal adverb refers is not specific, it is never preceded by the definite article juu, as seen above in (580d) and (581d).

### 6.2 LOCATIVE AdVERBS

Locative adverbs and locative adverbial phrases may be either clause-level or phrase-level modifiers, as seen in the examples below in (583). In (583a), the locative adverb juи 7anch 'there' and the locative prepositional phrase juи lakilaqachaqan 'in my village' both have scope over the entire clause, while in (583b) the locative adverb ma7at 'far away' has scope only over the verb phrase laay kalhii7alh 'can take it'.

| (583)a. | puus <br> pus <br> [juu 7anch $]_{\text {ADVP }}$ <br> juu 7anch | [juu <br> juu | lakilaqachaqan $]_{\text {ADVP }}$ <br> laka-ki-laqachaqan |
| :--- | :--- | :--- | :--- |
|  | ART there | ART | PREP-1POS-village |

[T0003: 001-2]
b. maa yuuch juu [laay kalhii7alh $]_{\mathrm{VP}}[\mathrm{ma} 7 \mathrm{at}]_{\mathrm{ADV}}$
maa yuuch juu laa-y ka-lhii7an-li ma7at
RPT PRN.3SG REL can-IMPFV IRR-take-PFV far.away
'He is (the one) who can take it far away.'
[T0003: 026]
The locative adverbial may occur pre- or post-verbally. Compare (583a) above, in which the two clause-level adverbial phrases occur before the predicate, to (584a) below, in which the same two clause-level adverbials occur after the predicate. Also compare (583b) above, in which the phrase-level adverb occurs post-verbally, to (584b) below, in which the phrase-level adverb occurs preverbally.

| (584)a. | puus | chunch | juu | $[\text { noonkan }]_{V}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | puus | chun+ch | juu | najun-kan |
|  | well | like.so+ALD | REL | say-INS(IMPFV) |

[juu 7anch] $]_{\text {ADVP }}$ [juu lakilaqachaqan] ${ }_{\text {ADVP }}$ juu 7anch juu laka-ki-laqachaqan ART there ART PREP-1POS-village 'Well, that is what they say there in my village.'
[T0003: 033]
b. puus juu 7 anu7 kweentuu waa [7anchach] ${ }_{\text {ADV }}[$ tamaktay] $\sqrt{ }$ puus juu 7anu7 kweentuu waa 7anch+ach tamakta-y well ART that story FOC there+ALD end-IMPFV 'Well, that story ends there.'
[T0058: 055]
A locative adverb may occur as a predicative element, as seen in the examples below in (585). In (585a), the locative adverb niin 'near' acts as a predicative adverb within the relative clause, which modifies the nominal maqtili7 'wild animal'. In (585b), the adverb 7anch 'there' is the predicative head of the following relative clause. ${ }^{178}$
(585)a. maa xt'oonpalay juu maqtili7 [juu waa
maa x-t'ajun-pala-y juu maqtili7 juu waa
RPT PAST-be-REP-IMPFV ART wild.animal REL FOC
niinch laqachaqan, taa wii xkaan] RELCL
niin+ch laqachaqan taa wii xkaan near+ALD town where seated(IMPFV) water 'There was a wild animal that was near the town, by the pond.'
[T0020: 002]
b. [7anch] $]_{\text {ADV }}$ [juu maa laaych mukoona7] $]_{\text {RELCL }}$

7anch juu maa laa-y+ch 7an+ch muku-nV7 there REL RPT can-IMPFV+ALD go+ALD leave-INF
'It is there that he can go to leave it.'
[T0003: 028]

[^127]When a locative adverb refers to a definite location, it usually is preceded by the definite article $j u u$, as seen below in the examples in (586).
(586)a. jaantu lhiiminpalay [juu 7ani7] ${ }_{\text {ADVP }}$
jaantu lhii-min-pala-y juu 7ani7

NEG APPL-come-REP-IMPFV ART here
'I never come here.'
[T0054: 033]
b. 7alin [juu 7ani7] $]_{\text {AdvP }}$ juu lhiistak'a lakatii

7alin juu 7ani7 juu lhiistak-7a laka-tii there.is(IMPFV) ART here REL guard-IMPFV PREP-road 'Here there is he/one who guards (in) the road.'
[T0022: 050]
c. laqtz'ilh wachu7 [juu 7anch] ${ }_{\text {ADVP }}$
laqtz'in-li wachu7 juu 7anch
see-PFV also ART there
taa kch'alhkatnanaw
taa k-ch'alhkat-nVn-aw
where 1SUB-work-INO-1PL.SUB
'He saw him, too, there where we worked.'
[T0022: 043-44]
However, it is not always the case that a definite locative adverb is preceded by the definite article, as can be seen in the examples below in (587). In the example in (587a), the adverb 7anch 'there' refers to a specific location (a cave); though this adverb occurs twice in the clause, only one occurrence (the second one) is preceded by juu. In (587b), the adverb 7ani7 'here' also occurs twice, and both occurrences are definite in that the speaker is referring to the exact location in which she is speaking; however neither of these instances are preceded by the definite article $j u u$.
(587) a.

| pero [7anch] $]_{\text {ADV }}$ | Maliyaa Senisyeentaach | xajunkan |
| :---: | :---: | :---: |
| pero 7anch | Maliyaa Senisyeentaach | xa-jun-kan |
| but there | Mary Cinderella | PAST-call-INS(IMPFV) |
| [juu 7anch] ${ }_{\text {ADVP }}$ | juu laka7ani7 taa |  |
| juu 7anch | juu laka-7ani7 taa |  |
| ART there | REL PREP-here where |  |
| xtanuunch |  |  |
| x-tanuun + ch |  |  |
| PAST-inserted(IMPFV)+ALD |  |  |
| But there, Mary w | as called Cinderella, there | ere she was.' |

[T0063: 049-050]
b. [7ani7] $]_{\text {Adv }}$ kimaaqeswaat'i, taa

7ani7 kin-maa-qeswaa-t'i taa
here 1OBJ-CAUS-be.scared-2SG.SUB.PFV where

| wii | minana7 | Seepaa |  |
| :---: | :---: | :---: | :---: |
| wii | min-nana7 | Seepee |  |
| seated(IMPFV) | 2POS-old.woman | Josefa |  |
| minkanch | [7ani7] $_{\text {ADV }}$ |  |  |
| min-kan+ch | $7 \mathrm{ani7}$ |  |  |
| come-INS+ALD | here |  |  |
| 'You scared me coming here.' | ere, where old lady | Joseph | [T0054: 036-037] |

In the following example in (588), 7anch 'there' refers to a figurative location: the end of the story. This phrase-or one very similar to it-occurs repeatedly in the stories that I recorded, and 7anch is never preceded by juu in this context.
(588) a. puus juu 7anu7 kweentuu waa [7anchach] $]_{\text {ADV }}$ tamaktay puus juu 7anu7 kweentuu waa 7anch+ach tamakta-y well ART that story FOC there+ALD end-IMPFV 'Well, that story ends there.'
b. [7anchach] $]_{\text {ADv }}$ 7aklay juu xkweentuu? 7anch+ach 7akla-y juu x-kweentuu there+ALD end-IMPFV ART 3POS-story 'Does the story end there?'
[T0054: 083]
Finally, a less specific locative adverb is not preceded by the definite article, as seen in the examples below in (589). In (589a), the locative adverb maqspa7 'outside' refers to a general location, as does the adverb ma7at 'far away' in (589b), which is repeated from (583b) above; neither adverb is preceded by the definite article juu.
(589) a. xakt'aawiilhpaa juu papa7 [maqspa7] ${ }_{\text {ADv }}$ xa-k-t'aa-wiilh-paa juu papa7 maqspa7 PAST-1SUB-COM-seated-REP.PFV ART old.man outside 'I was sitting outside with the old man.'
[T0066: 025]
b. maa yuuch juu laay kalhii7alh $[m a 7 a t]_{\text {ADV }}$ maa yuuch juu laa-y ka-lhii7an-li ma7at RPT PRN.3SG REL can-IMPFV IRR-take-PFV far.away 'He is (the one) who can take it far away.'
[T0003: 026]

### 6.3 MANNER ADVERBS

The class of manner adverbs is made up of two subclasses: the ideophonic adverbs (section 6.3.1) and the non-ideophonic adverbs (section 6.3.2).

### 6.3.1 Ideophonic Manner Adverbs

Many of the manner adverbs form a subclass of ideophonic words that I have called affect words elsewhere (Smythe Kung 2005a, 2005c, 2006), following England (2004) and Kaufman (1988); however, in keeping with recent work on ideophones in other Totonacan languages (Beck in press a, in press b; McFarland 2006, to appear), I now call them ideophones in order to maintain consistency within the Totonacan language family. HT ideophonic words are symbolic of
action, sound, taste, smell, and sensation. Though many ideophones are onomatopoeic, the majority are not. Some examples of ideophones are shown below in (590). The words loqo in (590a) and chalan in (590b) are onomatopoeic and symbolic of sound; lapaq in (590c) is symbolic of movement; lhulh in (590d) is symbolic of taste; chiix in (590e) is symbolic of smell; and chilili in (590f) is symbolic of sensation.

| (590) a. | loqo | loqq | najun | juu chiila7 |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | loqo | loqo | najun | juu chiila7 |
|  | ID | ID | say(IMPFV) | ART chicken |

'The chicken clucks.'
[loqo 'the cluck of a chicken']
[TPWDB: loqo]
b. chalan chalan makat'ajun juu kuux
chalan chalan makat'ajun juu kuux
ID ID sound(IMPFV) ART corn
'The (dried) corn goes chalan chalan.'
[chalan 'a ringing sound']
[TPWDB: chalan]
c. lapaq lapaq laay juu skikluw
lapaq lapaq laa-y juu skikluw
ID ID can-IMPFV ART eel
'The eel snakes along.'
[lapaq 'the motion of moving like a snake']
[TPWDB: lapaq]
d. lhulh lhulh 7uy juu lapanak juu 7aalaaxuux
lhulh lhulh 7u-y juu lapanak juu 7aalaaxuux

ID ID eat-IMPFV ART person ART orange
'The person savors his orange.'
[lhulh 'a sweet, savory flavor']
[TPWDB: lhulh]
e. chiix chiix 7akamin juu lapanak
chiix chiix 7akamin juu lapanak
ID ID smell(IMPFV) ART person
'The person smells of urine.'
[chiix 'the smell of urine']
[TPWDB: chiix]

| f. | chilili | k'atzalh | juu | Susana |
| :--- | :--- | :--- | :--- | :--- |
|  | chilili | k'atzan-li | juu | Susana |
|  | ID | know(PFV)-PFV | ART | Susan |

nii cha7alh juu Kuulaax
nii chaa7an-li juu Kuulaax
COMP arrive.there-PFV ART Nicholas
'Susan felt fear when Nicholas arrived there.'
[chilili 'sensation of fear']
[TPWDB: chilili]
Ideophones differ phonologically from non-expressive vocabulary in two important ways: stress and short vowel devoicing. The first syllable of an ideophone receives primary stress and all subsequent syllables (from left to right) receive secondary stress, as seen in (591a). The first syllable of non-ideophonic lexemes is not systematically stressed; instead the final syllable receives primary stress if it ends in a sonorant consonant, otherwise the penultimate syllable receives primary stress. Secondary stress in non-ideophonic lexemes is assigned to alternate syllables from right to left, as seen in (591b). ${ }^{179}$ Primary stress is indicated by an acute accent mark ('), and secondary stress is indicated by a grave accent mark ( ${ }^{\prime}$ ). Please see Chapter 2, section 2.5 for more information on stress.
(591) a. Primary and secondary stress in ideophones
chílilì 'sensation of fear'
kúlhùk 'action of entering'
k'áchùchù 'sound of walking through dry leaves'
lápàq 'the motion of moving like a snake'
7ót'ìt'ì, 7ót'ì 'sensation of being upset or bothered'
b. Primary and secondary stress in non-ideophonic lexemes
chawáy 'now'
p'ulhnán 'first'
xkulúk'u 'wart'
maqàlhqamá7 'Tepehua person'

[^128]lhìimaqàlhqamá7 'Tepehua language'

Next, word-final short vowels are devoiced in non-ideophonic lexemes, as seen in (592a), while in ideophones, word final short vowels are voiced, as seen in (592b).
(592) a. Word final short vowel devoicing in non-ideophonic lexemes

| juuki | ['hu:.ki] | 'deer' |
| :--- | :--- | :--- |
| xanchi | ['San.tfi] | 'hello, goodbye' |
| 7ach'enq'e | ['a.'tf'en.Re] | 'toasted' |
| talhpa | ['tał.pa] | 'hill' |
| tz'oqo | ['ts'o.Ro] | 'bird' |
| maklhku | ['mak.łku] | 'light' |

b. Word final short vowel voicing in ideophones

| kixixi | ['ki.,Ji.,Si] | ', 'sound a snake makes' |
| :---: | :---: | :---: |
| qeqe | ['ma.,Re., 2e] | 'sensation of being sick to the stomach' |
| taqaqa | ['ta.,1a., Ra] | 'the cry of a hen that is going to lay an egg' |
| qolo | ['1o.,lo] | 'the cry of a male turkey' |
| lhkuku | ['kku.,ku] | 'purring of a cat' |

Another common phonological feature of ideophones is their salient ability to be reduplicated. Other (non-ideophonic) adverbs may be reduplicated for emphasis, as seen below in the examples in (593). In (593a) the temporal adverb chaway 'now' is repeated, while in (593b), the entire adverbial phrase naa qox 'very good' is reduplicated. The only pattern of reduplication that is available for use with a non-ideophonic adverb is the pattern of complete reduplication. Also, it is important to note that non-ideophonic adverbs do not commonly appear in reduplicated form and that this reduplication is marked.
(593) a. [chaway] $]_{\text {ADv }}$ [chaway] $]_{\text {ADv }}$ k'ananta
chaway chaway k-7an-an-ta
now now 1SUB-go-XXX-PF
'I'm going now, now.' [TPWDB: chaway]
b. [naa qox $]_{\text {ADVP }}$ [naa qox $]_{\text {ADVP }}$ kixkaniy

| naa | qox | naa | qox | kin-xka-ni-y |
| :--- | :--- | :--- | :--- | :--- |
| EMP | good | EMP | good | 1OBJ-hurt-DAT-IMPFV |

'I hurt very, very badly.'
[TPWDB: naa qox]
Ideophones, on the other hand, appear in reduplicated form more often than they appear in non-reduplicated form. Furthermore, ideophones exhibit three different patterns of reduplication: (i) complete reduplication, (ii) a single reduplication of an open final syllable, and (iii) reiterative reduplication of an open final syllable. The example in (594a), in which the ideophone lapaq appears twice, is an example of complete reduplication. Single reduplication of the last syllable of an ideophone is shown in (594b), and reiterative reduplication of the final syllable is shown in (594c). In these examples, the reduplicated elements are underlined.
(594) a. lapaq lapaq laay juu xkaan
lapaq lapaq laa-y juu xkaan ID ID can-IMPFV ART water
'Lapaq lapaq goes the water.'
[lapaq 'snake-like (curved) motion']
[TPWDB: lapaq]
b. k'achuchu makat'ajun juu xaxqoy kapen
k'achuchu makat'ajun juu xa-xqoy kapen
ID sound(IMPFV) ART IPOS-leaf coffee
'The coffee leaves make the noise $k^{\prime}$ achuchu.'
[ $k^{\prime} a c h u$ 'the sound of dried leaves']
[TPWDB: k'achuchu]
c. lhk'ulululu maa juu xkaan

ID lying(IMPFV) ART water
'The water goes lhk'ulululu.'
[lhk'ulu 'sound of the creek']
[TPWDB: lhk'ululu]

Some, but not all, ideophones may exhibit more than one type of reduplication, as seen below in the examples in (595). In (595a) 7ot'i is fully reduplicated, and in (595b) only the final syllable is reduplicated.

| (595) a. | 7ot'i | 7ot'i | k'atz'an | juu | kimpajan |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7ot'i | 7ot'i | k'atz'an | juu | kim-pajan |
|  | ID | ID | know(IMPFV) | ART | 1POS-stomach |
|  | 'My | nac | pset.' |  |  |

b. 7ot'it'i k'atz'an juu kimpajan

7ot'it'i k'atz'an juu kim-pajan
ID know(IMPFV) ART 1POS-stomach
'My stomach is upset.'
[7ot'i 'sensation of being upset or bothered']
[PDLMA2005]
Regarding the semantics of reduplication, a single occurrence of the affect word corresponds to a single action, sound, or sensation, as seen in (596a), where one occurrence of la7a indicates one pop of the speaker's neck. Whole-word reduplication indicates that the sound, action, or sensation happened more than once, as seen in (596b), where la 7 a la7a indicates that the speaker's neck popped multiple times.

Final syllable reduplication indicates that the action, sound, or sensation is long or continuous, as in (594b), (594c), and (595b) above. Multiple reduplicants of the
final syllable are used emphatically to indicate a longer-lasting sound, as in (594c) above.

Ideophones interact semantically with the verb which they modify; for example, ideophones that refer to sounds frequently occur with the verb najun 'say', as seen above in (590a), or with the verb makat'ajun '(make a) sound', as seen in (590b) and (596). Ideophones that refer to tastes tend to occur with verbs that refer to eating, such as $7 u y$ 'eat', shown above in (590d). Ideophones that refer to smells tend to occur with the verb 7akamin 'smell' or '(give off an) odor', as seen in (590e). Ideophones that refer to sensations usually occur with the verb $k$ 'atz'an 'know', as seen in (590f) and (595). Ideophones that refer to actions frequently occur with the verb laay 'can', as seen above in (590c) and (594a), or with a verb whose meaning is very similar to that of the ideophone itself, as seen below in (597) and (598a).
(597)kalhi kalhi tz'i7in

ID ID laugh(IMPFV)
'He is laughing noiselessly.'
[kalhi 'laugh without sound']
[TPWDB: kalhi]
Ideophones have a very specific syntactic behavior: they always precede the verb that they modify, both when they are elicited, as seen in the examples above in (590), (594), (595), (596), and (597), and when they occur in texts, as seen in the examples below in (598).
(598)a. nii laqtz'inkalh, Ihtuj xaqatajikalh
nii laqtz'in-kan-li lhtuj xaqataji-kan-li
COMP see-INS-PFV ID pull.out-INS-PFV
'When they saw her, they pulled her out [of the fire].'
[lhtuj 'action of pulling something towards self']
[T0054: 080]
b. juu chunch naa naach waa qam qam kamakat'awlh juu chun + ch naa naa+ch waa qam qam ka-makat'ajun-li ART like.so + ALD EMP EMP + ALD FOC ID ID IRR-sound-PFV 'Like this, it would sound very deep.' [qam 'a deep or hollow sound']
[T0066: 137]
The evidential clitic maa may intervene between the ideophone and the verb, as seen in the example below in (599).
(599)Ihtoolhtoo maa 7atz'alatzukulhch

Ihtoolhtoo maa 7atz'ala-tzuku-li + ch
ID ID RPT run-begin-PFV+ALD
$\begin{array}{llll}\text { puuxkajuna7 } & \text { juu } & \text { x7ilht'i } & \text { p'aax } \\ \text { puuxkaju-nV7 } & \text { juu } & \text { x-7ilht'i } & \text { p'aax }\end{array}$
puuxkaju-nV7 juu x-7ilht'i p'aax
search-INF ART 3POS-excrement pig
'He began to run around searching for pig excrement.'
[lhtoo 'manner of running round frantically searching'] [T0055: 012-13]
Finally, two ideophones may occur side-by-side preceding the verb, as seen in the example below in (600).
(600)Ihkukun kulhuk tanuu juu laxpaamaalhik juu kuuyuu
lhkukun kulhuk tanuu juu laka-x-paamaalhik juu kuuyuu
ID ID enter(PFV) ART PREP-3POS-nest ART armadillo
'The armadillo ran and hid in its nest.'
[lhkukun 'the action of running']
[kulhuk 'action of entering']
[PDLMA 2005]
Ideophones themselves may not be inflected; however, they may act as roots for new verbal stems, which may then be inflected. I have found five productive morphological frames in HT in which an ideophone may act as the root; these five frames are shown in (601), and they are discussed in the following paragraphs.
(601)i. 7a-ID-nVn

PL.INO-ID-INO

```
ii. ID-laa
        ID-can
iii. ID-nawii
        ID-do
iv. ID-similar.verb
v. maa-ID-ni
CAUS-ID-DAT
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The first morphological frame derives an intransitive verb stem from an ideophone by means of affixation of the indefinite object suffix $-n V n$, plus the plural indefinite object prefix $7 a$ - ; the meaning of the derived verb is based on that of the affect word. The frame is shown above in (601i). Beck (in press b: 13) lists some examples of intransitive verbs comprised of affect words bearing the $-n V n$ suffix in Upper Necaxa Totonac, so this process is not unique to Huehuetla Tepehua. HT examples are shown below in (602) and (603). In example (602a), the ideophone jaw 'howl' appears in the adverbial position immediately preceding the verb najun 'say'; in example (602b) the same ideophone is used as the verb root, to which the indefinite object prefix and suffix are affixed.
$\begin{array}{llll}\text { (602) a. } & \text { jaw } & \text { jaw } & \text { najun } \\ & \text { ID } & \text { ID } & \text { juy } \operatorname{say} \text { (IMPFV) }\end{array} \begin{array}{ll}\text { ART } & \text { dog }\end{array}$
'The dog says, "howl howl."'
[jaw 'howling of an dog']
b. ta7ajawnan
ta-7a-jaw-nVn juu xqooy-un
3PL.SUB-PL.INO-ID-INO(IMPFV) ART dog-PL
'The dogs howl.'
[TPWDB: jaw]

Similarly, in example (603a), the ideophone p'uks 'stink' modifies the verb 7akamin 'smell' or 'have an odor', while in example (603b), the affect word is affixed with the indefinite object prefix and suffix.
(603)a. p'uks p'uks 7akamin juu lhiiway ID ID smell(IMPFV) ART meat
'The meat stinks.'
[ $p$ 'uks 'a strong and stinky odor, e.g., rotten meat']
b. 7ap'uksnun juu makxtalh

7a-p'uks-nVn juu makxtalh PL.INO-ID-INO(IMPFV) ART garbage
'The garbage stinks.'
[TPWDB: p'uks]
The second morphological frame creates a transitive or intransitive verb stem by compounding an ideophone and the auxiliary verb laa 'can'; the frame is shown above in (601ii). The resulting derived verb stem means to perform the action of the ideophone. The valency of the verb is dependent on pragmatic constraints of the ideophone. It is clear from the examples below in (604) and (605) that the ideophone and the auxiliary verb form a compound unit because they are prefixed with the past tense marker $x a-\sim x$ - and suffixed with the imperfective aspect marker $-y$.
(604)a. Ihat lhat 7atz'iy
lhat lhat 7atz'i-y
ID ID bite-IMPFV
'He bites and bites large chunks.'
[lhat 'action of biting large chunks or pieces']
b. xaklhatlaay
xa-k-lhat-laa-y
PAST-1SUB-ID-can-IMPFV
'I would bite (off chunks of) it.'
[TPWDB: lhat]

| (605) a. | lomp'a <br> lomp'a | lomp'a <br> lomp'a | laay | juu | 7uulii |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | laa-y | juu 7 uulii |  |  |  |
| ID | ID | can-IMPFV | ART | tarp |  |

'The tarp goes lomp'a lomp 'a.'
[lomp'a 'motion of something (e.g., tarp, sheets) flapping in the wind']
b. xlomp'alaay juu 7uulii juu laka7uun
x-lomp'a-laa-y juu 7uulii juu laka-7uun
PAST-ID-can-IMPFV ART tarp ART PREP-wind
'The tarp would move in the wind.'
[TPWDB: lomp'a]
In the third morphological frame, the ideophone is compounded with the verb nawii 'do' or 'make' to form either a transitive or an intransitive stem, according to the pragmatic constraints of the ideophone. The template is shown above in (601iii), and examples are shown in (606) and (607). The resulting $I D$ nawii stem has a meaning that is the same as or nearly the same as the meaning as the ID-laa stem (compare (606) to (604b) and compare (607) to (605b)). The verbs laa 'can' and nawii 'do, make' are both semantically general, and both can be described as 'light' or 'empty' verbs that have very little inherent meaning. Regardless of the semantics of laa and nawii, in all of these examples, the derived stem means to perform some sort of action based on the meaning of the ideophone. Furthermore, these two frames may be used only with ideophones that refer to actions.
(606) xaklhatnawiiy
xa-k-lhat-nawii-y
PAST-1SUB-ID-do-IMPFV
'I would bite it.'
[TPWDB: lhat]
(607)xlomp'anawiiy juu 7uulii juu 7uun
x-lomp'a-nawii-y juu 7uulii juu 7uun PAST-ID-do-IMPFV ART tarp ART wind 'The wind would move the tarp.'

The fourth morphological frame compounds an ideophone with a verb that is both semantically specific and semantically (though not phonologically) similar to the ideophone; the frame is shown above in (601iv). Examples are shown below in (608) and (609). In all of the examples, the HT ideophone corresponds to the direct object in the English translation.
$\begin{array}{crl}\text { (608) xakilhat'atz'iy } & \text { juu } & \text { xqooy } \\ \text { xa-ki-lhat-7atz'i-y } & \text { juu } & \text { xqooy } \\ \text { PAST-1OBJ-ID-bite-IMPFV } & \text { ART } & \text { dog } \\ \text { 'The dog would give me a bite.' }\end{array}$
(609) xlomp'asuunuuy juu 7uulii juu 7uun
x-lomp'a-suunuu-y juu 7uulii juu 7uun
PAST-ID-blow-IMPFV ART tarp ART wind
'The wind would blow the tarp.'
[TPWDB: lomp'a]

In the fifth and final morphological frame, an ideophone is affixed with the causative prefix maa- and the dative suffix $-n i$; the frame is shown above in (601v). The resulting meaning of the derived stem is to make something or someone else perform the action or sound of the ideophone. Examples are shown below in (610).
(610)a. maalomp'aniy juu 7uulii juu 7uun maa-lomp'a-ni-y juu 7uulii juu 7uun CAUS-ID-DAT-IMPFV ART tarp ART wind 'The wind moves the tarp.'
[TPWDB: lomp'a]
b. maalhkapakniy juu puutook'a juu Kuulaax
maa-lhkapak-ni-y juu puutook'a juu Kuulaax
CAUS-ID-DAT-IMPFV ART horse ART Nicholas
'Nicholas makes the horse rear up.'
[lhkapak 'action of rearing up on hind legs']
[PDLMA2005]
Though all five frames are productive processes, not all ideophones may participate in all of the frames due to pragmatic constraints. For example, an
ideophone that describes a sound may not be used in Frame 2 (ID-laa) or Frame 3 (ID-nawii), as seen in the examples below in (611). Furthermore, I found no corresponding morphological frame in which only sound-based (onomatopoeic) ideophones may be used. To date, I have not investigated the pragmatics of ideophones and their morphological frames beyond this rather general observation regarding the ideophones based on sound and action.
(611) t'oq 'the sound of a horse's hooves on concrete or rock'
a. t'oq t'oq xnawiiy juu puutook'a $\mathbf{t}^{\prime} \mathbf{o q}$ t'oq x -nawii-y juu puutook'a ID ID PAST-do-IMPFV ART horse 'The horse goes $t$ 'oq $t$ 'oq.'

[PDLMA2005]

### 6.3.2 Non-ideophonic Manner Adverbs

Like the ideophonic manner adverbs, non-ideophonic manner adverbs also precede the verb, as seen in the examples below in (612). Both the (a) and the (b) examples are acceptable word orders because the adverbial phrase naa k'us 'very pretty' precedes the verb; the (c) example is unacceptable because the adverbial phrase follows the verb without occurring clause-finally.
(612) a.

| $\left[\begin{array}{lll}\text { naa } & \text { k'us }\end{array}\right]_{\text {ADVP }}$ | $[\text { tasuy }]_{V}$ | [juu talhpa $]_{\text {SUBJ }}$ |  |
| :--- | :--- | :--- | :--- |
| naa | k'us | tasu-y | juu talhpa |

b. [juu talhpa] ${ }_{\text {SUBJ }}$ [naa k'us] $]_{\text {AdvP }} \quad[\text { tasuy }]_{V}$
'The hill looks very pretty.'
c. ${ }^{* *}[\text { tasuy }]_{\mathrm{V}}$ [naa $\left.\mathbf{k}^{\prime} \mathbf{u s}\right]_{\text {ADVP }}$ [juu talhpa] Subj (Intended reading: 'The hill looks very pretty.')
[MNB13: 40]
However, the pre-verbal word order of the non-ideophonic manner adverbs is not as strict as that of the ideophonic adverbs. If another adverb occurs in the position immediately preceding the verb, the manner adverb may occur at the end of the clause. The example in (613a) shows the manner adverbial phrase naa qox 'very well' in the pre-verbal position. In (613b) a temporal adverb, p'ulhnan 'first', occurs in this pre-verbal position, and the manner adverbial phrase naa qox occurs at the end of the clause.

| [naa qox] ${ }_{\text {A }}$ | [st'aakan] ${ }_{\text {V }}$ | [juu | x 7 ilht'i | p'aax] ${ }_{\text {Subj }}$ |
| :---: | :---: | :---: | :---: | :---: |
| naa qox | st'aa-kan | juu | x-7ilht'i | p'aax |
| EMP well | sell-INS(IMPFV) | ART | 3POS-ex | ment pig |
| The pig excr | t sells really w |  |  | T0055: 092-093] |

b. [juu p'ulhnan] $]_{\text {ADVP }}$ [tulaay 7ixchiwinin] ${ }_{\mathrm{VP}}$
juu p'ulhnan tuu + laa-y 7ix-chiwin-nin
ART first NEG+can-IMPFV PAST-speak-PL.INF
 juu maqalhqama7 juu lhii-laawaan naa qox ART Tepehuas ART APPL-Spanish EMP good 'At first, the Tepehua could not speak Spanish very well.' [T0057: 097]

A manner adverb may intervene between an auxiliary verb and a main verb, as seen below in (614).
(614) laaych
laa-y+ch
can-IMPFV+ALD
[chunch] $]_{\text {ADV }}$ 7aklaqoxipaa
chun+ch 7a-k-laqoxi-paa
like.so+ALD

IRR-1SUB-arrange-REP.PFV
juu 7anu7
juu 7anu7
ART that
'I can arrange that one like this.'
[T0066: 178]
Unlike temporal and locative adverbs, manner adverbs (both ideophonic and non-ideophonic) may never be preceded by the definite article $j u u$.

### 6.4 OTHER ADVERBS

Topics covered in this section include the emphatic adverb naa (section 6.4.1), the evidential and the epistemic adverbs (section 6.4.2), temporal adverbial clitics (section 6.4.3), and quantifiers used as adverbs (section 6.4.4).

### 6.4.1 Emphatic naa

The emphatic adverbial particle naa intensifies the meaning of the adverb, verb, or predicate that it modifies. In the examples in (615), naa modifies an adverb; in the examples in (616), naa modifies a verb; and in the examples in (617), it modifies a predicate adjective and a predicate nominal.

b.

| naa | qox | k'asníy | juu | kit'ín |
| :--- | :--- | :--- | :--- | :--- |
| naa | qox | k-7asni-y | juu | kit'ín |
| EMP | good | 1SUB-be.cold-IMPFV | ART | PRN.1SG |
| 'I'm really cold.' |  |  |  |  |

[TPWDB: 7asni]
(616) a.

| juu kuchíyuu | naa | kikxtúy |
| :--- | :--- | :--- |
| juu kuchíyuu | naa | kikxtu-y |
| ART knife | EMP | sharp-IMPFV |
| 'The knife is very | sharp.' |  |

[TPWDB: kikxtu]
b. 7astan waa naa 7alaklhiijuuniy kit'in

7astan waa naa 7alak-lhiijun-ni-y kit'in afterwards FOC EMP PL-order-DAT-IMPFV PRN.1SG 'Afterwards, $I$ ordered [drinks] for them.'
[T0066: 056]
c. waa naa maa laqapuutanuuy xlaqapuutanuuta
waa naa maa laqapuu-tanuu-y $x$-laqapuutanuuta
FOC EMP RPT FACE-insert-IMPFV 3POS-mask
'He puts on the mask.'
[T0055: 073]
(617) a. waa naa papa7
waa naa papa7
FOC EMP old.man
'He was a very old man.'
[T0022: 037]
b. naa kan juu lhiiway 7ixjuuniita juu kutanch
naa kan juu lhiiway 7ix-jun-niita juu kutanch
EMP delicious ART meat PAST-be-PF ART yesterday
'The meat was delicious yesterday.'
[ELIEX2: 038]
Like other adverbs, the adverbial particle naa may be reduplicated for added emphasis, as seen in the examples below in (618).

| maa | naa | naa | lhuu | niilh |
| :--- | :--- | :--- | :--- | :--- |
| maa | naa | naa | lhuu | nii-li |
| RPT | EMP | EMP | many | die-PFV |

[T0057: 017]
b. naa naa saqtzamanta juu xkaan
naa naa $x$-7aqtzaman-ta juu xkaan
EMP EMP PAST-fill-PF ART water
'The water filled it.'
c. jaantu naa naa sii maqalhqama7 laqachaqan NEG EMP EMP pure Tepehua town 'It is not a purely Tepehua town.' [T0057: 035]

Like other adverbs, the emphatic particle naa may not be inflected. However, it may be cliticized with the temporal clitic + ch, as seen in the examples below in (619).
(619)a. y luego waa naa maa 7alakt'aatoolay

| y | luego | waa | naa | maa | 7alak-t'aa-toola-y |
| :--- | :--- | :--- | :--- | :--- | :--- |
| and | then | FOC | EMP | RPT | PL-COM-stay-IMPFV |


| y | waa | naach | nii | talaklhtatalhch |
| :--- | :--- | :--- | :--- | :--- |
| y | waa | naa+ch | nii | ta-lak-lhtata-li + ch |
| and | FOC | EMP+ALD | COMP | 3PL.SUB-DIS-fall.asleep-PFV+ALD | 'And then he stayed with them, and they all fell asleep.'

[T0055: 067-68]
b. naa naach waa soq kajuna7
naa naa+ch waa soq ka-jun-a7
EMP EMP+ALD FOC straight IRR-be-FUT
'It will be very straight.'
[T0069: 310]
The focus particle waa and the evidential particle maa may intervene between the emphatic particle naa and the adverb, verb, or predicate that it modifies, as seen in the following examples in (620).
(620) a.

| porque | tuuka7 | naa | waa | maqan |
| :--- | :--- | :--- | :--- | :--- |
| porque | tuu + ka7 | naa | $\underline{\text { waa }}$ | maqan |
| because | NEG + JST | EMP | $\underline{\text { FOC }}$ | long.time |

'Because not very long ago . . .'
[T0022: 025]
b. naa naach maa waa kiklhalhaa
naa naa+ch maa waa kik-lhalhaa
EMP EMP+ALD RPT FOC MOUTH-bearded 'he was very bearded'
[T0022: 032]
c. nii kaa naa waa xtaqalhiniyanch
nii kaa naa waa $x$-taqalhi-ni-y-an+ch
COMP BLV EMP FOC PAST-spoil-DAT-IMPFV-2OBJ+ALD
juu mi7aqtzulh
juu min-7aqtzulh
ART 2POS-head
'It destroyed your head.'
[T0054: 048]
d. waa naa maa tarr talak7atz'alay
waa naa $\underline{\text { maa }}$ tarr . ta-lak-7atz'ala-y
FOC EMP RPT ID:running 3PL.SUB-DIS-run-IMPFV
'They took off running.'
[T0055: 077]

### 6.4.2 Evidential and Epistemic Adverbs

HT displays a lexical evidential and epistemic strategy (or information source) rather a grammatical one (Aikhenvald 2003). The system is comprised of two particles: the evidential maa (RPT) indicates reported speech (section 6.4.2.1), while the epistemic kaa (BLV) indicates the speaker's belief or opinon (section 6.4.2.2). No other source of information is grammatically marked in HT. The two particles do not co-occur.

### 6.4.2.1 Evidential 'Reportative' maa

The evidential particle maa (RPT) indicates that the speaker does not have first-hand knowledge of the information. Speakers use maa to recount events that they did not actually witness or to convey the information that they got from another source, such as events or stories that they heard from someone else. The addition of this particle is the equivalent of adding 'they say' to a statement in English or 'dicen que' or 'según' to a statement in Spanish. ${ }^{180}$ It is important to

[^129]note that the use of maa is not obligatory and that omission of maa does not imply first-hand knowledge of the information conveyed by the utterance.

The reportative particle is ubiquitous in narratives and in conversation. Though maa most frequently occurs in the slot immediately preceding a verb (the adverbial slot), it may occur anywhere in a clause or even in a phrase. In the example in (621a) maa precedes a verb phrase. The example in (621b) has two occurrences of maa in the same clause: the first one precedes a pronoun and the second one preceds a noun. The example in (621c) also has two occurrences of maa in the same clause: the first instance of maa precedes a prepositional phrase, and the second instance precedes the adverbial particle naa, which modifies the plural adjective lajqay 'big (ones)'.

| maa | tzúkulh | ch'apana7 |
| :--- | :--- | :--- |
| maa | tzuku-li | ch'apa-nV7 |
| RPT | begin-PFV | grab-INF |

maa laqtzamalhch juu xcubeta
maa laqtzaman-li+ch juu x-cubeta
RPT fill-PFV+ALD ART 3POS-bucket
'Supposedly, he began to grab, and he filled his bucket.'[T0058: 022-023]
b. puus juu 7anu7 luw maa yuuch laktitaymay
puus juu 7anu7 luw maa yuuch lak-titayma-y
well ART that snake RPT PRN.3SG PL-chase-IMPFV

| juu t'akunin | maa papaaninch | juu | mati7 | sasqat'a7an |
| :--- | :--- | :--- | :--- | :--- | :--- |
| juu t'aku-nin | maa papa7-nin+ch | juu | mati7 | x-7asqat'a-7an |
| ART woman-PL | RPT man-PL+ALD | REL | none | 3POS-child-PL | ART woman-PL RPT man-PL+ALD REL none 3POS-child-PL 'Well, that snake, it chases after the women and men who have no children.'

[T0003: 005-006]
c. maa lakachiiwx maa naa lajqay
maa laka-chiiwx maa naa lak-qay
RPT PREP-rock RPT EMP PL-big
'Supposedly, in the rocks, there were really big ones [crawdads].'
[T0058: 020]
Maa co-occurs with verbs in all tenses: the past is shown in the example in (622a); the present tense-which is formally unmarked-is shown in (621b); and the future tense is shown in (622b). Maa also occurs with verbs in all aspectsthe imperfective (621b), the perfective (623a), and the perfect (623b)—as well as with verbs in the irrealis mood (624).
(622)a. entonces 7aksnii maa xch'apaputunch
entonces 7aksnii maa $x$-ch'apa-putun+ch
then when RPT PAST-grab-DESID(IMPFV)+ALD
'Then when he wanted to grab it . . .'
[T0058: 024]
b. maa kakumpliilaya7 7ixk'aata juu 7ixtz'i7
maa ka-kumpliila-ya7 7ix-k'aata juu 7ix-tz'i7
RPT IRR-finish-FUT 3POS-year ART 3POS-daughter
'Supposedly, it will be her daughter's birthday.'
[T0069: 420]
(623)a. maa jaantu ch'apalh
maa jaantu ch'apa-li
RPT NEG grab-PFV
'He didn't grab it.'
[T0058: 042]
b. maa niita yaa juu laka7uun
maa nii-ta yaa juu laka-7uun
RPT die-PF standing ART PREP-air
'He was dead, standing in the air.'
[T0022: 010]

| (624) maa jaantu | qox | nii | maa | katamaqnii |
| :---: | :--- | :--- | :--- | :--- |
| maa jaantu | qox | nii | maa | ka-ta-maqnii |
| RPT | NEG | good | COMP | RPT | IRR-3PL.SUBJ-kill(PFV)


| juu | 7anuuch | lapanak | maa | laktitaymay |
| :---: | :---: | :---: | :---: | :---: |
| juu | 7anu7+ch | lapanak | maa | lak-titayma-y |
|  | that+ALD | people | RPT | PL-pursue-IMP |

porque nii maa katamaqniiy
porque nii maa ka-ta-maqnii-y because COMP RPT IRR-3PL.SUBJ-kill-IMPFV

| maa | 7aqstu | naa | naa | 7awilhchan | maa | kaniilh |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| maa | 7aqstu | naa | naa | 7awilhchan | maa | ka-nii-li |
| RPT | same | EMP | EMP | day | RPT | IRR-die-PFV |

juu 7anuuch t'aku7
juu 7anu7+ch t'aku7
ART that+ALD woman
'It is not good for the people who it chases to kill it because, if they kill it, that very same day the woman Would die.'
[T0003: 016-020]

### 6.4.2.2 Epistemic 'Believe’ kaa

The use of the epistemic particle kaa indicates that the statement expressed by a clause is the opinion of the speaker, e.g, 'I believe' or 'in my opinion'. It is only used in the first person context and never in the second or third person contexts. Kaa occurs quite commonly in both Tlachichilco Tepehua and Pisaflores Tepehua; in both varieties it means 'probably' (Jim Watters, p.c.)

The epistemic particle $k a a$ is not as ubiquitous as the evidential reported speech particle maa; in fact, it occurs in fewer than one-eighth of the clauses in the text database (whereas maa occurs in more than half of the clauses). Like maa, kaa occurs most frequently before verbs, though it may occur anywhere in the clause. Examples are shown below in (625). In (625a), kaa occurs before the
negative marker jaantu, which has scope over the verb; in (625b), kaa precedes the predicate nominal phrase waa maqtilich; in (625c) it occurs before the predicate pronominal yuuch, which is the head of the following relative clause; and in (625d) and (625e), kaa precedes the adverbs 7aqtz'iyanch and 7ani7, respectively.
(625)a. kaa jaantu xaktz'o7a
kaa jaantu xa-k-tz'o7-7a
BLV NEG PAST-1SUB-mark-IMPFV
'I think that I didn't mark it.'
[T0069: 107]
b. kaa waa maqtiliich
kaa waa maqtili7+ch
BLV FOC wild.animal+ALD
'I believe it was a wild animal.'
[T0020: 041]
c. puus kaa yuuch juu 7ixtaqnitach
puus kaa yuuch juu 7ix-xtaq-ni-ta+ch
well BLV PRN.3SG REL PAST-give-DAT-PF+ALD
'Well, I believe it is he who had given it to her.'
[T0054: 016]
d. puus kaa 7aqtz'iyanch chunch
puus kaa 7aqtz'iyan+ch chun+ch
well BLV always+ALD like.so+ALD
juu 7uuniit'a juu 7uxint'i
juu jun-niita juu 7uxint'i
ART be(2SUB)-PF(2SUB) ART PRN.2SG
'Well, I think you have always been like that.'
[T0054: 032]
e. 7ani7 juu xatz'o7a kaa 7ani7

7ani7 juu xa-tz'o7-7a kaa 7ani7
here REL PAST-mark-IMPFV BLV here
'It is here that you marked it, I think it is here.'
[T0069: 108]
The epistemic particle may co-occur with verbs in any tense or aspect. Examples of the (unmarked) present tense are shown above in (625b) and (625d);
examples of the past tense are shown above in (625a), (625c), and (625e); and an example of the future tense is shown below in (626a). Examples of the imperfective aspect are shown above in (625a) and (625e); examples of the perfect aspect are shown above in (625c) and (625d); and an example of the perfective aspect is shown below in (626b). Finally, the particle kaa may occur with both the realis and irrealis moods; examples of the realis mood are seen in (625) and (626), while examples of the irrealis mood are seen in (627).
(626)a. kaa waa chunchach ka7ana7
kaa waa chunch+ach ka-7an-a7
BLV FOC like.so+ALD IRR-go-FUT
'I think it will go like this.'
[T0069: 068]
b. juu 7uputulhch kaa 7ulhch
juu 7u-putun-li+ch kaa 7u-li+ch
REL eat-DESID-PFV+ALD BLV eat-PFV+ALD
'He who wanted to eat it, I believe he ate it.'
[T0020: 034]
(627)a.

| kaa | laay | xak7ampaalhchan | taymanaan |
| :--- | :--- | :--- | :--- |
| kaa | laa-y | xa-k-7an-paalh-chaa-n | tayma-nV7-n |
| BLV | can-IMPFV | PAST-1 SUB-go-REP.PFV-ABL-2OBJ | catch-INF-2OBJ |

'I think that I would have been able to catch you.'
[T0066: 023]
b. katast'aaya7
ka-ta-st'aa-ya7
IRR-3PL.SUB-sell-FUT

| juu | puukapen |
| :--- | :--- |
| juu | puukapen |
| ART | coffee.plantation |

maas kaa jaantuch 7ixlakaskilh juu xaatata7
maas kaa jaantu+ch 7ix-lakaskin-li juu xaa-tata7
although BLV NEG+ALD PAST-want-PFV ART IPOS-grandfather
'They will sell the coffee plantation even if the grandfather were to have opposed it.'
[QMMES]

### 6.4.3 Temporal Adverbial Clitics

There are two temporal adverbial clitics in HT: +ch (ALD) 'already' and $+k a 7$ (JST) 'just'. I analyze these two morphemes as clitics rather than affixes following criteria offered by Zwicky and Pullum (1983). First, these two clitics "exhibit a low degree of selection with respect to their hosts" (p. 503); they may affix to nouns, verbs, adjectives, adverbs, and negative particles. These clitics are affixed to words only after all morphosyntactic (derivational and inflectional) operations have applied. And unlike inflectional and derivational affixes, these clitics do not have a morphophonemic effect on the words to which they cliticize. The clitic $+c h$ (ALD) 'already' is discussed below in section 6.4.3.1, and $+k a 7$ (JST) 'just' is discussed in section 6.4.3.2.

### 6.4.3.1 'Already' +ch

The temporal adverbial clitic + ch (ALD) is used more frequently than any other clitic or affix in the language, occurring in approximately one-third of the clauses in the text database. It may cliticize onto verbs in any aspect, as well as onto adverbs, nouns, predicative adjectives, demonstrative pronouns, and the negative particle. However, its meaning is not transparent. Though I have labeled it (ALD) for 'already', it adds this temporal meaning to a verb only in the perfect aspect, as seen below in the examples in (628).
(628) Perfect Aspect
a. xniitach
x-nii-ta + ch maqtili7
PAST-die-PF+ALD wild.animal
'The wild animal had already died.'
b. juu yuuch waa $\mathbf{x t}$ 'alalhwaqtach
juu yuuch waa x-t'alalhwaq-ta + ch
ART PRN.3SG FOC PAST-distribute-PF+ALD
'He had already distributed it [the money].'
[T0054: 018]
c. maa naa xtamaaqantalhanantach
maa naa $x$-ta-maaqantalha-nVn-ta + ch
RPT EMP PAST-INCH-scare-INO-PF+ALD 'It had already scared her.'
[T0003: 031]
d. puus juu lapanak maa niitach
puus juu lapanak maa nii-ta + ch well ART person RPT die-PF+ALD 'Well, the person had already died.'
[T0022: 014]
When it occurs on a verb in the perfective aspect, + ch indicates that the action represented by that verb had already been completed by the time of the past which is being narrated. Examples are shown in (629).
(629) Perfective Aspect
$\left.\begin{array}{llll}\text { a. } & \begin{array}{l}\text { maa } \\ \text { maa }\end{array} & \begin{array}{l}\text { milhch } \\ \text { min-li+ch }\end{array} & \begin{array}{l}\text { 7awilhchan } \\ \text { RPT } \\ \text { come-PFV+ALD }\end{array} \\ & & \text { CLS:-wilhchan } \\ \text { CLS:-day }\end{array}\right]$
[T0020: 013]
b. laqaxuk'alhch maa tapaach'uk'ulhch
laqa-xuk'a-li+ch maa ta-paa-ch'uk'u-li+ch body-skin(VT)-PFV+ALD RPT 3PL.SUB-insides-open-PFV+ALD 'They skinned it and they opened it up.'
[T0020: 026]
The clitic $+c h$ may occur on both present and past tense verbs marked for the imperfective aspect. A narrative feature of HT is that the narrative past may be indicated by a combination of (i) the unmarked present tense or the past tense
marker $x$-, (ii) the imperfective aspect suffix, and (iii) the clitic $+c h$. Present tense exmples are shown below in (630), and past tense examples are shown in (631). The choice between past and present tense seems to be a stylistic, personal one. Note that for all of the examples in (630) and (631), we would expect these verbs to be marked for the perfective aspect.
(630) Imperfective Aspect, present tense
a. maa juuniych juu xkumwarii maa jun-ni-y+ch juu x-kumwarii RPT say-DAT-IMPFV+ALD ART 3POS-compadre ' . . . his compadre says [said] to him.'
[T0055: 007]
b. lakch'apayajuych
lak-ch'apayaju-y+ch
PL-detain-IMPFV+ALD
'He stops [stopped] them.'
[T0055: 084]
c. yuuch maa lhiitalhawaych juu qayxkaan
yuuch maa lhii-talhawa-y+ch juu qayxkaan PRN.3SG RPT APPL-flood-IMPFV+ALD ART river 'That is why the river floods [flooded].'
[T0057: 085]
d. tamaa7atz'alaych juu xkupu7 ta-maa-7atz'ala-y+ch juu xkupu7 3PL.SUB-CAUS-run-IMPFV+ALD ART crawdad 'They run [ran] off the crawdad.'
[T0058: 066]
(631)Imperfective Aspect, past tense
a. nii xaniiych juu sp'isaqa7an
nii xa-nii-y+ch juu x-p'isaqa-7an
COMP PAST-die-IMPFV+ALD ART 3POS-younger.sibling-PL.POS 'When their sister died, . . .'
[T0063: 012]
b. 7anch juu xatalhiitajuych

7anch juu xa-ta-lhiitaju-y+ch
there REL PAST-3PL.SUB-meet-IMPFV+ALD
juu xp'isaqa7an
juu $x$-p'isaqa-7an
ART 3POS-younger.sibling- PL.POS
'It was there that they met their little sister.'
[T0063: 047]
c. kaa x7uych juu yuuch juu lhiiway
kaa $x-7 u-y+c h \quad$ juu yuuch juu lhiiway
BLV PAST-eat-IMPFV+ALD ART PRN.3SG ART meat
'I think he ate the meat.'
[T0020: 038]
However, in some examples in which $+c h$ cliticizes onto a past tense imperfective aspect verb, it seems to indicate that the action or state of that verb began or was achieved prior to the past action of another verb in the clause. For example, in (632a), the compadre was already very poor before he began to run around; in (632b), the people already liked Zicatlán [place name] prior to the circumstance arising in which they did not want to come [to Huehuetla].
(632)a. 7entons juu 7anuuch puruwii xkuumwarii

7entons juu 7anu7+ch puruwii x-kuumwarii
then ART that+ALD pitiful 3POS-compadre

| nii | maa | naa | waa | xkilhpatiych |
| :--- | :--- | :--- | :--- | :--- |
| nii | maa | naa | waa | x-kilhpati-y $+\mathbf{c h}$ |
| COMP | RPT | EMF | FOC | PAST-be.poor-IMPFV+ALD |

lhtoo lhtoo maa 7atz'alatzukulhch
lhtoo lhtoo maa 7atz'ala-tzuku-li+ch
ID ID RPT run-begin-PFV+ALD
'Then, that pitiful compadre, who was very poor, began to run around lhtoo lhtoo.'
[T0055: 010-012]
b. maa naa lhuu jaantuch xtaminputun
maa naa lhuu jaantu+ch x-ta-min-putun
RPT EMF much NEG+ALD PAST-3PL.SUB-come-DESID(IMPFV)
porque maa naa xtaqachaniych
porque maa naa x-ta-qacha-ni-y+ch
because RPT EMF PAST-3PL.SUB-like-DAT-IMPFV+ALD
juu Siikalhan
juu Siikalhan
ART Zicatlán
'Many [people] did not want to come [to Huehuetla] because they liked Zicatlán.'

Finally, there are some examples in which + ch cliticizes to past tense imperfective aspect verbs without any apparent change in their past habitual meaning, as seen in the examples in (633).
(633)a. kaa naa waa xtaqalhiniyanch
kaa naa waa $x$-taqalhi-ni- $y$-an+ch
BLV EMP FOC PAST-mess.up-DAT-IMPFV-2OBJ+ALD
juu mi7aqtzulh
juu mi-7aqtzulh
ART 2POS-head
'I think it would mess up your head.'
[T0054: 048]
b. laaych xtamaqniiy
laa-y+ch x-ta-maqnii-y
can-IMPFV+ALD PAST-3PL.SUB-kill-IMPFV
xta7uych
$x-t a-7 u-y+c h$
PAST-3PL.SUB-eat-IMPFV+ALD
'They would kill it, and they would eat it.'
[T0059: 041]

```
    c. 7ixta7anch mat'iwninin
    7ix-ta-7an+ch maa-t'iwni-nin
    PAST-3PL.SUB-go(IMPFV)+ALD CAUS-dance-INF
    nii xtamaat'iwniych
nii x-ta-maa-t'iwni-y+ch
COMP PAST-3PL.SUB-CAUS-dance-IMPFV+ALD
maa x7alinch juu xlhiich'alhkat7an
maa x-7alin+ch juu x-lhiich'alhkat-7an
RPT PAST-there.is(IMPFV)+ALD ART 3POS-work-PL.POS
'They would take her to dance. When they would make her dance, then they would have work.'

When + ch occurs on a verb in the future tense, it marks the future within the narrative past, as seen in the examples below in (634).
(634)Future in the narrative past
a. puus juu 7anu7 luw maa taach juu paytatz'iisi
puus juu 7anu7 luw maa taach juu paytatz'iisi
well ART that snake RPT even ART midnight
\begin{tabular}{lllll} 
maa & ka7anaach & laqtz'ini7 & juu & xnati \\
maa & ka-7an-a7+ch & laqtz'i-nV7 & juu & x-nati \\
RPT & IRR-go-FUT+ALD & see-INF & ART & 3POS-mother
\end{tabular}
'Well, that snake, even at midnight, it was going to go to see
its mother.'
[T0003: 009-010]
b. porque nii jaantu katat'alhnuyaach
porque nii jaantu ka-ta-t'alhnu-ya7+ch
because COMP NEG IRR-3PL.SUB-jail-FUT+ALD
'Because if not, they were going to put him in jail.'
[T0055: 030]
c. y luego nii maa kachinaach juu xaapay, y luego nii maa ka-chin-a7+ch juu xaa-pay and then COMP RPT IRR-arrive-FUT+ALD ART IPOS-father maa ka7uyaach, kamaawaakanaach juu puulaq maa ka-7u-ya7+ch ka-maa-wajin-kan-a7+ch juu puulaq RPT IRR-eat-FUT+ALD IRR-CAUS-eat-INS-FUT+ALD ART tamale 'And later, when the father was going to arrive, he was going to eat it, she was going to make him eat the tamale.'
d. t'asanikalhch nii
t'asa-ni-kan-li+ch nii yell-DAT-INS-PFV+ALD COMP
\begin{tabular}{lcl} 
kaxtaqnikanaach & juu & lhiich'alhkat \\
ka-xtaq-ni-kan-a7+ch & juu & lhiich'alhkat \\
IRR-give-DAT-INS-FUT+ALD & ART & \\
'Theb & \\
The yelled that they were going to give him a job.' & [T0063: 042]
\end{tabular}

Additionally, the clitic + ch may cliticize to adverbs (635), nouns (636), predicate adjectives (637), demonstrative pronouns (638), and the negative particle (639). In the predicate nominal construction in (636b) and in the predicate adjective constructions in (637), the clitic adds the meaning of 'already' to the clause. In the other examples, the clitic does not seem to change the meaning of any of the clauses in any obvious way, and it seems to be used stylistically. Note that the temporal clitic does not cliticize to an attributive adjective in a modificational position within a noun phrase.
(635) Adverbs
a. maa xt'oonpalay juu maqtili7 juu
maa x-t'ajun-pala-y juu maqtili7 juu
RPT PAST-be-REP-IMPFV ART wild.animal REL
waa niinch laqachaqan taa wii xkaan
waa niin+ch laqachaqan taa wii xkaan
FOC near+ ALD town where seated(IMPFV) water
'There was a wild animal that was near the town, in the water.'
[T0020: 02]
\(\begin{array}{lllll}\text { b. } & \text { pero } & \text { naa } & \text { naach } & \text { maa } \\ \text { waa } \\ \text { pero } & \text { naa } & \text { naa+ch } & \text { maa } & \text { waa } \\ \text { but } & \text { EMF } & \text { EMP+ALD } & \text { RPT } & \text { FOC }\end{array}\)
talaqxaqalhiit'ajun juu Maliiyaa
ta-laqxaqa-lhii-t'ajun juu Maliiyaa
3PL.SUB-drag-APPL-AMB(IMPFV) ART Mary
'But they go around really dragging Mary.'
[T0063: 071]
c. 7aksch juu xalaktantamaakxtukan

7aks+ch juu xa-lak-tan-tamaakxtu-kan
when+ALD REL PAST-PL-TORSO-take.out-INS(IMPFV)
'That is when they were taken out.'
[T0063: 078]
d. chunch tapuu7afinalaych
chun + ch ta-puu-7afinala-y+ch
like.so+ALD 3PL.SUB-INST-tune-IMPFV+ALD
chuux juu 7anu7 maestro
chuux juu 7anu7 maestro
all ART that master
'All the masters tune like this.'
[T0066: 009]
(636) Nouns
\(\begin{array}{lll}\text { a. } & \text { juu } & \text { luwch } \\ \text { juu luw+ch } & \text { kjunaw } \\ & \text { k-jun-aw } \\ \text { ART snake+ALD } & \text { 1 SUB-say(IMPFV)-1PL.SUB } \\ & \text { 'We call it "snake".' }\end{array}\)
[T0009: 012]
b. papaach waachu7 xjuuniita
papa7+ch waachu7 x-jun-niita
old.man+ALD also PAST-be-PF
'He was already old.'
[T0022: 055]
c. waa niipaa juu xnatich juu 7atzi7
waa nii-paa juu x-nati+ch juu 7atzi7
FOC die-REP.PFV ART 3POS-mother+ALD ART girl
'The girl's mother died unexpectedly.'
[T0054: 004]
d. juu Teewanch junkan
juu Teewan+ch jun-kan
ART Stephen+ALD call-INS(IMPFV)
'He was named Stephen.'
[T0054: 005]
e. puus juu anu7 luw,
puus juu anu7 luw,
well ART that snake
maa yuuch laktiitaymay
maa yuuch lak-tiitayma-y
RPT PRN.3SG PL-follow-IMPFV
juu t'akuunin maa papaaninch
juu t'aku7-nin maa papa7-nin+ch
ART woman-PL RPT man-PL+ALD
juu mati7 sasqat'a7an
juu mati7 s-7asqat'a-7an
REL none 3POS-child-PL.POS
'Well, that snake, it follows women and men who have no children.'
[T0003: 005-007]
(637)Predicate Adjectives
\(\begin{array}{llll}\text { a. } & \text { pero } & \text { maa } & \text { xaaniinch } \\ & \text { pero } & \text { maa } & \text { xaa-nii-n+ch } \\ & \text { but } & \text { RPT } & \text { IPOS-die-DVB+ALD } \\ & \text { 'But it was already dead.' }\end{array}\)
[T0020: 022]
b. waa puu7aqstuch, tz'ink7a
waa puu-7aqstu+ch tz'ink-7a
FOC INST-alone+ALD be.heavy-IMPFV
'Alone, it is heavy.'
[T0069: 012]
c. juu chaway waa lakatz'uninch, jaantu?
juu chaway waa lakatz'unin+ch jaantu ART now FOC little.bit+ALD NEG
'Now there is a little bit, isn't there?'
[T0069: 151]
(638) Demonstrative Pronouns
a. juu 7anuuch 7amanawinin juu 7anu7+ch 7amanawin-nin ART that+ALD hill.owner-PL 'those hill-owners mythical people]'
[T0022: 011]
b. juu 7aniich xpaqaxti7 ka7ana7?
juu 7 ani \(7+\) ch x-paqaxti7 ka-7an-a7
ART this+ALD 3POS-side IRR-go-FUT
'This one will go on this side?'
[T0069: 025]
(639) Negative Particle
a. jaantuch laay xlakmaaxtukanta
jaantu + ch laa-y x-lak-maaxtu-kan-ta
NEG+ALD can-IMPFV PAST-PL-take.out-INS-PF
juu laktaxtoqta naa lhuu
juu lak-taxtoqta naa lhuu
ART PL-thing EMP much(ADV)
'They could not take out the things.'
[T0018: 005]
b. juu 7uputulhch kaa 7ulhch;
juu 7u-putun-li+ch kaa 7u-li+ch
REL eat-DESID-PFV+ALD BLV eat-PFV+ALD
juu jaantuch kaa jaantuch
juu jaantu + ch kaa jaantu + ch
REL NEG+ALD BLV NEG+ALD
'He who wanted to eat, I believe he ate; he who did not [want to eat],
I believe he didn't [eat].'
[T0020: 035]

The clitic \(+c h\) has two allomorphes: \(+a c h\) and \(+c h i\). The allomorph \(+a c h\) occurs when the clitic cliticizes to a word or particle that ends in /ch/, as seen in the examples below in (640). The allomorph + chi occurs before a following glottal stop, as seen in the examples below in (641).
(640)a. yuuchach juu xaak'uch'u
yuuch + ach juu xaa-k'uch'u PRN.3SG+ALD ART IPOS-cure
'That is the cure.'
[T0009: 010]
b. waa 7anchach juu seqjun juu maqtili7
waa 7anch+ach juu seqjun juu maqtili7
FOC there+ALD REL hide(IMPFV) ART wild.animal
'It was there that the wild animal hid.'
[T0020: 011]
(641)jaa chunchi7as
jaa chun + chi +7 as
Q like.so+ALD+TAGQ make-INS(IMPFV)+ALD

7aksni soqchi 7an
7aksni soq+chi 7an
when straight+ALD go
'Is this how they do it when it goes straight?'
[T0069: 168]
The use of the temporal clitic and expressions of time is discussed in Chapter 7, Section 7.5.

\subsection*{6.4.3.2 'Just' + ka7}

Whereas the clitic \(+c h\) is ubiquitous in HT, it's semantic counterpart \(+k a 7\) (JST) occurs very seldomly in comparison; in fact, it appears in only nine clauses in the text database. When combined with the perfective aspect, it carries the meaning of 'just' or 'barely', as seen below in (642a). When combined with the imperfective aspect, it means 'still', as seen below in (642b).
(642)a. waa milhka7
waa min-li+ka7
FOC come-PFV-JST
'He just arrived.'
[ELIEX2: 053]
b. xakmaqsqoliyka7
xa-k-maq-sqoli-y+ka7
PAST-1SUB-CAUS-whistle-IMPFV+JST
'I still played [music]'.
[T0054: 052]
The clitic \(+k a 7\) occurs most frequently on verbs, as seen above in (642), and the negative particle jaantu \(\sim t u u\), as seen below in (643a). When \(k a 7\) cliticizes to the negative particle, it means 'did not yet V ' or 'still did not V '. The clitic \(+k a 7\) occurs much less frequently on nouns, shown in (643b), and adjectives, shown in (643c).
(643)a. porque tuuka7 xta7aqpaax
porque tuu + ka7 x-ta-7aqpaax
because NEG+JST PAST-3PL.sub-baptize(IMPFV)
'because they still didn't baptize.' [T0059: 004]
b. nii matiika7 7ixjuuniita saantaaw
nii mati7+ka7 7ix-jun-niita saantaaw
COMP none+JST PAST-be-PF money
'because there was barely any money.'
[T0069: 396]
c. juu waa lakt'ikt'ika7 juu waakax
juu waa lakt'ikt'i+ka7 juu waakax
REL FOC small+JST ART cow
'The cows that are still small'
[T0020: 008]
The clitic \(+k a 7\) attracts primary stress because it ends in a sonorant consonant. \({ }^{181}\) When it cliticizes to a host, the stress pattern of the host changes so that the primary stress falls on the final syllable, as seen in the examples in (644).

181 Please see Chapter 2, section 2.5 on stress assignment.
(644) a. 7àtziiká7

7atzí7 +ka7
girl+JST
'unmarried (young) woman'
[TPWDB]
b. tz'alhká7
tz'ál + ka7
boy+JST
'unmarried (young) man'
[TPWDB]
c. milhká7
mílh +ka7
min-li+ka7
come-PFV-JST
'He just arrived.'
[ELIEX2: 053]
d. xàkmaqsqòliyká7
xakmàqsqolíy \(+\mathbf{k a} 7\)
xa-k-maq-sqoli-y+ka7
PAST-1SUB-CAUS-whistle-IMPFV+JST
'I still played [music]'.
[T0054: 052]

\subsection*{6.4.4 Quantifiers as Adverbs}

A quantifier may act as an adverb in Tepehua. The most commonly occurring adverbial quantifiers are lakatz'unin 'few, a little' and lhuu 'many, a lot'; examples are shown below in (645) and (646), respectively. Though these two adverbial quantifiers perform the same function in the clause, they occur in different locations within the clause: lakatz'unin occurs clause-finally, while lhuu occurs immediately before the verb. In the English free translations of several of these clauses-(646a) and (646c), in particular-"many" acts as an adjective modifying a noun; however, in the HT clauses, lhuu is separated from the nouns and occurs in an adverbial position within the clauses.
(645)a. 7anu7 p'in juu 7ulh lakatz'unin

7anu7 p'in juu 7u-li lakatz'unin that salsa REL eat-PFV a.little
'She ate a little of that salsa.'
Literally: 'That salsa, of which she ate a little.'
[T0069: 229]
b. 7akxp'it7ach

7a-k-xp'it-7a+ch
lakatz'unin
IRR-1SUB-sand-IMPFV+ALD a.little
'I'm going to sand it a little.'
[T0069: 076]
(646)a. 7alilh laqatam 7aqmuxtuti

7alin-li laqa-tam 7aqmuxtuti there.is-PFV CL:general-one flood
nii naa lhuu xalhii7an juu chaqa7
nii naa lhuu xa-lhii7an juu chaqa7
COMP EMP many PAST-carry(IMPFV) ART house
'There was a flood that carried away many houses.' [T0018: 002-3]
b. maa naa naa lhuu niilh
\begin{tabular}{lllll} 
maa & naa & naa & lhuu & nii-li \\
RPT & EMP & EMP & many & die-PFV
\end{tabular}
\(\begin{array}{lll}\text { juu lapanak } & \text { juu } & \text { 7aksniich } \\ \text { juu lapanak } & \text { juu } & 7 \text { aksnii+ch }\end{array}\)
ART person ART then+ALD
'Many people died then.'
[T0057: 020]
c. entonces juu 7aksniich maa
entonces juu 7aksnii+ch maa
then ART when+ALD RPT
\begin{tabular}{llll} 
naa & lhuu & 7aqxixta & maa \\
naa & lhuu & 7aqx-xix-ta & maa \\
EMP & much & FLAT-dry.up-PF & RPT
\end{tabular}
'Then when the river dried up, . . .'
[T0058: 012]
When a classified numeral behaves as an adverbial quantifier, it occurs either before the verb, as seen below in (647), or it occurs at the end of the clause, as seen below in (648).
\begin{tabular}{llll} 
7aqt'utuch & xaktapasay & juu chunch \\
7aq-t'utu+ch & xa-k-tapasa-y & juu chun+ch \\
CL:times-three+ALD & PAST-1SUB-pass-IMPFV & ART & thus+ALD \\
'I passed it like this three times.' & & [MNB15:
\end{tabular}
b. paqt'utuch xaktzantiilay
paq-t'utu+ch xa-k-tzantiila-y
CL:trips-three+ALD PAST-1 SUB-slip-IMPFV
'I slipped three times.'
[MNB15: 43]
(648) maalach'ap'ay juu 7alhik puu7aqxt'uy maa-lach'ap'a-y juu 7alhik puu-7aqx-t'uy CAUS-glue-IMPFV ART paper INST-CL:flat-two 'He glues the paper in two places.'
[MNB13: 96]

\subsection*{6.5 DERIVED DIRECTIONAL ADVERBS (APPLICATIVE LHII-)}

The applicative prefix lhii- may affix to a lexical adverb or adjective, in addition to nouns and verbs. When prefixed to an adverb or adjective, it derives a adverb with a directional meaning, as seen in the examples in (649) and (650). In the examples in (649a) and (649b), lhii- is prefixed onto the lexical locative adverbs 7ani7 'here' and 7uwiint'i 'there', respectively, resulting in derived adverbs with the meanings 'around here' and 'over there'.
(649) a. juu lhii7aniich
juu Ihii-7ani7+ch
ART APPL-here+ALD
'around here'
[T0054: 054]
b. Ihii7uwiint' \({ }^{\prime} 7\) 7as
lhii-7uwiinti+7as
APPL-there+TAGQ
'Over there, right?'
[T0066: 029]

In the example in (650), lhii- is prefixed to the adjective maqaqay 'wide', creating the adverb lhiimaqaqay, which roughly means 'width-wise' or 'in the direction of the width'.
(650)kaa laay 7atamaknuunilh waa chunch lhiimaqaqay
kaa laa-y 7a-tamaknuu-ni-li waa chun+ch lhii-maqaqay
BLV can-IMPFV IRR-insert-DAT-PFV FOC like.so+ALD APPL-wide 'I think it could go in this way, width-wise.' [T0069: 098]

Finally, the prefixation of lhii- to the third person singular pronoun yuuch derives the adverb lhiiyuuch 'therefore', as seen below in (651). This adverb is most likely lexicalized.
(651)lhiiyuuch
lhii-yuuch
APPL-PRN.3SG
'therefore', 'that is why'
[T0003: 022]

\subsection*{6.6 Prepositions}

There are only two prepositions in HT laka-, which expresses locative and comitative relationships (section 6.6.1), and tuus, which expresses relationships of extent (section 6.6.2). Other prepositional-like relationships are expressed by relational nouns in HT. \({ }^{182}\)

\subsection*{6.6.1 Locative/Comitative laka-}

The HT prepositional prefix laka- affixes to a head noun and marks locative and comitative noun phrases; examples appear below in (652). If the head noun is definite, the definite article \(j u u\) precedes the preposition. In the following examples, the prepositional phrase is enclosed in brackets, and the preposition

\footnotetext{
182 Please see Chapter 4, Section 4.4 for more information on the relational nouns.
}
appears in bold type. Locative relationships are shown in the examples in (652a) through \((652 \mathrm{~g})\), while comitative relationships are shown in the examples in (652h) and (652i). Watters (1988) analyzes this preposition as a clitic "that cliticizes onto the head noun of the NP" (p. 473). However, according to the criteria for clitics established by Zwicky and Pullum (1983) that I quoted above (see section 6.4.3), if laka-were a clitic, it would be able to cliticize to more than just the head noun in a noun phrase. I analyze it as a prefix rather than an independent particle because it participates phonologically in velar place assimilation, which occurs across morpheme boundaries but not across word or clitic boundaries (see Chapter 2, Section 2.6.5.2). In the example in (652g), the velar consonant of the preposition harmonizes with the uvular consonant in the noun chaqa 7 'house' to produce laqachaqa 7 'in the house'.
\begin{tabular}{lllll} 
(652) a. & maa toqlh & 7anpaa & [juu & lakajip \(]_{\text {PP }}\) \\
& maa & toqlh & 7an-paa & juu \\
laka-jip \\
& RPT burning & go-REP.PFV & ART & PREP-fire \\
& 'She jumped into the fire.' & &
\end{tabular}
[T0054: 074]
b. juu kilaachilh 7 ani7 maa \([\text { lakaMiikiixkaan }]_{P P}\)
juu ki-laa-chi-li 7ani7 maa laka-Miikii-xkaan
REL RT-can-ADL-PFV here RPT PREP-Miguel-water 'He who came along Michael's Water (place name).' [T0058: 016]
c. maa niita yaa [juu laka7uun] \({ }_{P P}\)
maa nii-ta yaa juu laka-7uun
RPT die-PF standing ART PREP-air
'He had died standing in the air.'
[T0022: 010]
d. maa 7alakjuuniych [juu lakatii] \({ }_{\text {PP }}\)
maa 7alak-jun-ni-y+ch juu laka-tii
RPT PL-say-DAT-IMPFV+ALD ART PREP-road '. . . he told them from the road.'
[T0055: 064]
e. waa xtalhii7anch
waa x -ta-lhii7an+ch
FOC PAST-3PL.SUB-take(IMPFV)+ALD
[juu lakawaylii] \({ }_{P P}\) juu 7 atzi7
juu laka-waylii juu 7atzi7
ART PREP-dance ART girl
'They would take the girl to the dance(s).'
[T0063: 021]
f. [lakak'aatanch] \(]_{\text {PP }} \quad\) xtalhii7anch laka-k'aata-n+ch \(\quad\)-ta-lhii7an+ch
PREP-party-PL+ALD PAST-3PL.SUB-take(IMPFV)+ALD
'They would take her to parties.'
[T0063: 023]
g. lhkutach juu puulhkuy juu laqachaqa7
lhku-ta+ch juu puulhkuy juu laka-chaqa7 burn-PF+ALD ART light ART PREP-house 'The light is lit in the house.'
[ELIEX4: 081]
h. [lakap'inkin] \(]_{\text {PP }}\) laaqoxikan laka-p'inkin laaqoxi-kan PREP-alcohol prepare-INS(IMPFV)
'They make it with alcohol.'
[T009: 008]
i. tzukulh trawajalana7 [juu lakaropa] 7 PP
tzuku-li trawajala-nV7 juu laka-ropa
begin-PFV work-INF ART PREP-clothing
'He began to work with/in clothing.'
[T0054: 022]
When the preposition laka- affixes to a possessed nominal, it is truncated to \(l a\) - and it precedes the possessive prefix, as seen in the examples below in (653).
(653)a. juu laxkuchiiluu
juu laka-x-kuchiiluu
ART PREP-3POS-knife 'with her knife.'
[ELIEX3: 011]
b. juu lakilaqachaqan
juu laka-kin-laqachaqan
ART PREP-1POS-town
'in my town'
[T0003: 013]
c. juu lakimpututunti
juu laka-kin-pututu-nti
ART PREP-1POS-round-NOM2
'on my ball'
[MNB13: 97]
d. juu laxlakaytat laqachaqan
juu laka-x-lakaytat laqachaqan
ART PREP-3POS-center town
'in the center of town'
[T0055: 021]
e. juu laxlakaytat qay k'iwin
juu laka-x-lakaytat qay k'iw-in
ART PREP-3POS-center big tree-PL
'in the middle of the woods'
[T0055: 051]
When the preposition laka- precedes a human proper name, it is truncated to lak-, as seen in (654). It does not truncate to lak- when it precedes a place name, as seen in the example above in (652b).
(654)a. 7aksnii maqalhtajuu lakdon Juaquin juu t'uun

7aksnii maqalhtajuu laka-don Juaquin juu t'uun when fall.down(PFV) PREP-mister Juaquin ART earth 'When the land came down at Don Juaquin's [place].' [T0058: 006]
b. waa lakJosé Pollo
waa laka- José Pollo
FOC PREP- José Pollo
'[I was] at José Pollo's [place].'
[T0066: 024]
Two prepositions may occur in the same clause, as seen below in the examples in (655).
(655)a. ch'ixt'aqlich
ch' \(\mathrm{i}=\mathrm{xt}\) 'aq-li+ch
tie \(=\) cover-PFV + ALD
\begin{tabular}{lll} 
laxchaqa7 & juu & lakalaasuu \\
laka-x-chaqa7 & juu & laka-laasuu \\
PREP-3POS-house & ART & PREP-rope
\end{tabular}
'The person tied up his house with rope.'
[ELIEX1: 108]
b. maa \(x\) 7alhtanant'ajun juu laxtaanqaa
maa x-7alhtanan-t'ajun juu laka-x-taanqaa
RPT PAST-walk-AMB(IMPFV) ART PREP-3POS-bottom
juu lakilakakapenan
juu laka-ki-lakakapen-an
ART PREP-1POS-coffee.field-PL
'He would go walking around down below in my coffee fields.' [T0022: 029]
There are PREP-N combinations that have been lexicalized, as seen in the following examples in (656). This is not an exhaustive list of lexicalizations formed on laka-
(656)a. lakakuuxtu
laka-kuuxtu
PREP-corn
'cornfield'
b. lakakapen
laka-kapen
PREP-coffee
'coffee field'
c. lakak'iwin
laka-k'iw-in
PREP-wood-PL
'forest'
d. lakamunutpa7
laka-munutpa7
PREP-XXX
'world'
```

e. lakxkaan
laka-xkaan
PREP-water
'river', 'pond'
f. laktalhpa
laka-talhpa
PREP-hill
'mountain'

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Note that the possessive prefix precedes the lexicalized form, as seen above in the second prepositional phrase in (655b), repeated below in (655b'). In this prepositional phrase, the preposition occurs twice: the truncated form laprecedes the possessive prefix ki-, which in turn precedes the lexicalized PREP-N form lakakapen 'coffee field'.
\begin{tabular}{ll}
\((655 b\) ') & juu lakilakakapenan \\
& juu laka-ki-lakakapen-an \\
& ART PREP-1POS-coffee.field-PL \\
& 'in my coffee fields.'
\end{tabular}

\subsection*{6.6.2 Extent tuus}

The preposition tuus is translated as English 'until' or 'up to' and Spanish 'hasta', as seen below in the examples in (657). Watters (1988) named this the "extent" preposition because it "marks its complement as the spatial or temporal extent of the state or event" (p. 478). Also, according to Watters, tuus differs from the preposition laka-, in that tuus is not a clitic, and it precedes its entire complement noun phrase, including articles and demonstratives. However, the only examples of tuus found in my Huehuetla Tepehua database occur before chaway 'now, today' (657a) and 7ani7 'here' (657b), both of which act a nouns
rather than adverbs in these examples, and both of which are the sole members of their respective noun phrases. Thus, I have no eveidence regarding the position of tuus within a larger noun phrase.
(657)a. [tuus chaway] \(]_{P p}\) jaantuch talhaway juu xqatii tuus chaway jaantu+ch talhawa-y juu xqatii PREP today NEG+ALD flood-IMPFV ART creek
'Up till now [until today], the creek does not flood.' [T0058: 057-58]
b. [tuus 7ani7] \(]_{\text {PP }}\) maalach'apakan juu serrote tuus 7ani7 maa-lach'apa-kan juu serrote PREP here CAUS-hit-INS(IMPFV) ART saw 'The saw hits it up to here.'

\section*{Chapter 7: Numbers}

Topics covered in this chapter include cardinal and ordinal numbers (sections 7.1 and 7.2, respectively), numeral classifiers and body parts used as classifiers (section 7.3), numeral inflection (section 7.4), and methods of counting units of days (section 7.5).

\subsection*{7.1 CARDINAL NUMBERS}

The Huehuetla Tepehua numeral system is vigesimal (i.e., it is based on the number twenty). A list of HT numbers from one to 111 appears in Table 24. Primary stress falls on the final syllable of the word unless marked otherwise. The numbers one through 39 are bound stems and cannot occur without a numeral classifier. \({ }^{183}\) Numbers greater than 39 may appear without a classifier, at least in the exercise of counting. At the time of my fieldwork (1999-2001), most Tepehua speakers could count from one to ten in HT, but almost no one could count higher than ten. There is evidence (Bower 1948) that HT speakers used to be able to count at least to 1000 , but no one that I met more than 50 years later was able to count above 111. In fact, I met only two men who could consistently count higher than ten; they both have since passed away. Fluent speakers use the HT numbers one through five daily, and they use Spanish borrowings for numbers greater than five. I never heard anyone use a number greater than ten except during elicitation tasks.

183 See section 7.3 for information on the numeral classifiers.

Table 24: HT Numerals 1-111
\begin{tabular}{|ll|}
\hline 1 & tam \\
\hline 2 & t'uy \\
\hline 3 & t'utu \\
\hline 4 & t'ati \\
\hline 5 & kiis \\
\hline 6 & chaaxan \\
\hline 7 & tujun \\
\hline 8 & tzajin \\
\hline 9 & \begin{tabular}{l} 
najátz \\
\hline 10
\end{tabular} \\
\hline 11 & \begin{tabular}{l} 
kaw \\
ten-one
\end{tabular} \\
\hline 12 & \begin{tabular}{l} 
kaw-t'uy \\
ten-two
\end{tabular} \\
\hline 13 & \begin{tabular}{l} 
kaw-t'utu \\
ten-three
\end{tabular} \\
\hline 14 & \begin{tabular}{l} 
kaw-t'ati \\
ten-four
\end{tabular} \\
\hline 15 & \begin{tabular}{l} 
kaw-kiis \(\sim\) koo-kiis \\
ten-five
\end{tabular} \\
\hline 16 & \begin{tabular}{l} 
kaw-chaaxan \\
ten-six
\end{tabular} \\
\hline 17 & \begin{tabular}{l} 
kaw-tujun \\
ten-seven
\end{tabular} \\
\hline 18 & \begin{tabular}{l} 
kaw-tzajin \\
ten-eight
\end{tabular} \\
\hline 19 & \begin{tabular}{l} 
kaw-najátz \\
ten-nine
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|ll|}
\hline 57 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-tujun \\
two-twenty-ten-seven
\end{tabular} \\
\hline 58 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-tzajin \\
two-twenty-ten-eight
\end{tabular} \\
\hline 59 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-najatz \\
two-twenty-ten-nine
\end{tabular} \\
\hline 60 & \begin{tabular}{l} 
t'utum-p'uuxam \\
three-twenty
\end{tabular} \\
\hline 61 & \begin{tabular}{l} 
t'utum-p'uuxam-tam \\
three-twenty-one
\end{tabular} \\
\hline 62 & \begin{tabular}{l} 
t'utum-p'uuxam-t'uy \\
three-twenty-two
\end{tabular} \\
\hline 63 & \begin{tabular}{l} 
t'utum-p'uuxam-t'utu \\
three-twenty-three
\end{tabular} \\
\hline 64 & \begin{tabular}{l} 
t'utum-p'uuxam-t'ati \\
three-twenty-four
\end{tabular} \\
\hline 65 & \begin{tabular}{l} 
t'utum-p'uuxam-kiis \\
three-twenty-five
\end{tabular} \\
\hline 66 & \begin{tabular}{l} 
t'utum-p'uuxam-chaaxan \\
three-twenty-six
\end{tabular} \\
\hline 67 & \begin{tabular}{l} 
t'utum-p'uuxam-tujun \\
three-twenty-seven
\end{tabular} \\
\hline 68 & \begin{tabular}{l} 
t'utum-p'uuxam-tzajin \\
three-twenty-eight
\end{tabular} \\
\hline 69 & \begin{tabular}{l} 
t'utum-p'uuxam-najatz \\
three-twenty-nine
\end{tabular} \\
\hline 70 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw \\
three-twenty-ten
\end{tabular} \\
\hline 71 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-tam \\
three-twenty-ten-one
\end{tabular} \\
\hline 72 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-t'uy \\
three-twenty-ten-two
\end{tabular} \\
\hline 73 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-t'utu \\
three-twenty-ten-three
\end{tabular} \\
\hline 74 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-t'ati \\
three-twenty-ten-four
\end{tabular} \\
\hline 75 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-kiis \\
three-twenty-ten-five
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|ll|}
\hline 20 & p'uuxam \\
\hline 21 & \begin{tabular}{l} 
p'uuxam-tam \\
twenty-one
\end{tabular} \\
\hline 22 & \begin{tabular}{l} 
p'uuxam-t'uy \\
twenty-two
\end{tabular} \\
\hline 23 & \begin{tabular}{l} 
p'uuxam-t'utu \\
twenty-three
\end{tabular} \\
\hline 24 & \begin{tabular}{l} 
p'uuxam-t'ati \\
twenty-four
\end{tabular} \\
\hline 25 & \begin{tabular}{l} 
p'uuxam-kiis \\
twenty-five
\end{tabular} \\
\hline 26 & \begin{tabular}{l} 
p'uuxam-chaaxan \\
twenty-six
\end{tabular} \\
\hline 27 & \begin{tabular}{l} 
p'uuxam-tujun \\
twenty-seven
\end{tabular} \\
\hline 28 & \begin{tabular}{l} 
p'uuxam-tzajin \\
twenty-eight
\end{tabular} \\
\hline 29 & \begin{tabular}{l} 
p'uuxam-najátz \\
twenty-nine
\end{tabular} \\
\hline 30 & \begin{tabular}{l} 
p'uuxam-kaw \\
twenty-ten
\end{tabular} \\
\hline 31 & \begin{tabular}{l} 
p'uuxam-kaw-tam \\
twenty-ten-one
\end{tabular} \\
\hline 32 & \begin{tabular}{l} 
p'uuxam-kaw-t'uy \\
twenty-ten-two
\end{tabular} \\
\hline 33 & \begin{tabular}{l} 
p'uuxam-kaw-t'utu \\
twenty-ten-three
\end{tabular} \\
\hline 34 & \begin{tabular}{l} 
p'uuxam-kaw-t'ati \\
twenty-ten-four
\end{tabular} \\
\hline 35 & \begin{tabular}{l} 
p'uuxam-kaw-kiis \\
twenty-ten-five
\end{tabular} \\
\hline 36 & \begin{tabular}{l} 
p'uuxam-kaw-chaaxan \\
twenty-ten-six
\end{tabular} \\
\hline 37 & \begin{tabular}{l} 
p'uuxam-kaw-tujun \\
twenty-ten-seven
\end{tabular} \\
\hline 38 & \begin{tabular}{l} 
p'uuxam-kaw-tzajin \\
twenty-ten-eight
\end{tabular} \\
\hline 39 & \begin{tabular}{l} 
p'uuxam-kaw-najátz \\
twenty-ten-nine
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|ll|}
\hline 76 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-chaaxan \\
three-twenty-ten-six
\end{tabular} \\
\hline 77 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-tujun \\
three-twenty-ten-seven
\end{tabular} \\
\hline 78 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-tzajin \\
three-twenty-ten-eight
\end{tabular} \\
\hline 79 & \begin{tabular}{l} 
t'utum-p'uuxam-kaw-najatz \\
three-twenty-ten-nine
\end{tabular} \\
\hline 80 & \begin{tabular}{l} 
t'ati-p'uuxam \\
four-twenty
\end{tabular} \\
\hline 81 & \begin{tabular}{l} 
t'ati-p'uuxam-tam \\
four-twenty-one
\end{tabular} \\
\hline 82 & \begin{tabular}{l} 
t'ati-p'uuxam-t'uy \\
four-twenty-two
\end{tabular} \\
\hline 83 & \begin{tabular}{l} 
t'ati-p'uuxam-t'utu \\
four-twenty-three
\end{tabular} \\
\hline 84 & \begin{tabular}{l} 
t'ati-p'uuxam-t'ati \\
four-twenty-four
\end{tabular} \\
\hline 85 & \begin{tabular}{l} 
t'ati-p'uuxam-kiis \\
four-twenty-five
\end{tabular} \\
\hline 86 & \begin{tabular}{l} 
t'ati-p'uuxam-chaaxan \\
four-twenty-six
\end{tabular} \\
\hline 87 & \begin{tabular}{l} 
t'ati-p'uuxam-tujun \\
four-twenty-seven
\end{tabular} \\
\hline 88 & \begin{tabular}{l} 
t'ati-p'uuxam-tzajin \\
four-twenty-eight
\end{tabular} \\
\hline 89 & \begin{tabular}{l} 
t'ati-p'uuxam-najatz \\
four-twenty-nine
\end{tabular} \\
\hline 90 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw \\
four-twenty-ten
\end{tabular} \\
\hline 91 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-tam \\
four-twenty-ten-one
\end{tabular} \\
\hline 92 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-t'uy \\
four-twenty-ten-two
\end{tabular} \\
\hline 93 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-t'utu \\
four-twenty-ten-three
\end{tabular} \\
\hline 94 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-t'ati \\
four-twenty-ten-four
\end{tabular} \\
\hline 95 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-kiis \\
four-twenty-ten-five
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|ll|}
\hline 40 & \begin{tabular}{l} 
t'u-p'uuxam \\
two-twenty
\end{tabular} \\
\hline 41 & \begin{tabular}{l} 
t'u-p'uuxam-tam \\
two-twenty-one
\end{tabular} \\
\hline 42 & \begin{tabular}{l} 
t'u-p'uuxam-t'uy \\
two-twenty-two
\end{tabular} \\
\hline 43 & \begin{tabular}{l} 
t'u-p'uuxam-t'utu \\
two-twenty-three
\end{tabular} \\
\hline 44 & \begin{tabular}{l} 
t'u-p'uuxam-t'ati \\
two-twenty-four
\end{tabular} \\
\hline 45 & \begin{tabular}{l} 
t'u-p'uuxam-kiis \\
two-twenty-five
\end{tabular} \\
\hline 46 & \begin{tabular}{l} 
t'u-p'uuxam-chaaxan \\
two-twenty-six
\end{tabular} \\
\hline 47 & \begin{tabular}{l} 
t'u-p'uuxam-tujun \\
two-twenty-seven
\end{tabular} \\
\hline 48 & \begin{tabular}{l} 
t'u-p'uuxam-tzajin \\
two-twenty-eight
\end{tabular} \\
\hline 49 & \begin{tabular}{l} 
t'u-p'uuxam-najatz \\
two-twenty-nine
\end{tabular} \\
\hline 50 & \begin{tabular}{l} 
t'u-p'uuxam-kaw \\
two-twenty-ten
\end{tabular} \\
\hline 51 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-tam \\
two-twenty-ten-one
\end{tabular} \\
\hline 52 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-t'uy \\
two-twenty-ten-two
\end{tabular} \\
\hline 53 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-t'utu \\
two-twenty-ten-three
\end{tabular} \\
\hline 54 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-t'ati \\
two-twenty-ten-four
\end{tabular} \\
\hline 55 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-kiis \\
two-twenty-ten-five
\end{tabular} \\
\hline 56 & \begin{tabular}{l} 
t'u-p'uuxam-kaw-chaaxan \\
two-twenty-ten-six
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|ll|}
\hline 96 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-chaaxan \\
four-twenty-ten-six
\end{tabular} \\
\hline 97 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-tujun \\
four-twenty-ten-seven
\end{tabular} \\
\hline 98 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-tzajin \\
four-twenty-ten-eight
\end{tabular} \\
\hline 99 & \begin{tabular}{l} 
t'ati-p'uuxam-kaw-najatz \\
four-twenty-ten-nine
\end{tabular} \\
\hline 100 & \begin{tabular}{l} 
kiis-p'uuxam \\
five-twenty
\end{tabular} \\
\hline 101 & \begin{tabular}{l} 
kiis-p'uuxam-tam \\
five-twenty-one
\end{tabular} \\
\hline 102 & \begin{tabular}{l} 
kiis-p'uuxam-t'uy \\
five-twenty-two
\end{tabular} \\
\hline 103 & \begin{tabular}{l} 
kiis-p'uuxam-t'utu \\
five-twenty-three
\end{tabular} \\
\hline 104 & \begin{tabular}{l} 
kiis-p'uuxam-t'ati \\
five-twenty-four
\end{tabular} \\
\hline 105 & \begin{tabular}{l} 
kiis-p'uuxam-kiis \\
five-twenty-five
\end{tabular} \\
\hline 106 & \begin{tabular}{l} 
kiis-p'uuxam-chaaxan \\
five-twenty-six
\end{tabular} \\
\hline 107 & \begin{tabular}{l} 
kiis-p'uuxam-tujun \\
five-twenty-seven
\end{tabular} \\
\hline 108 & \begin{tabular}{l} 
kiis-p'uuxam-tzajin \\
five-twenty-eight
\end{tabular} \\
\hline 109 & \begin{tabular}{l} 
kiis-p'uuxam-najatz \\
five-twenty-nine
\end{tabular} \\
\hline 110 & \begin{tabular}{l} 
kiis-p'uuxam-kaw \\
five-twenty-ten
\end{tabular} \\
\hline 111 & \begin{tabular}{l} 
kiis-p'uuxam-kaw-tam \\
five-twenty-ten-one
\end{tabular} \\
\hline & \\
\hline
\end{tabular}

Numbers may precede and modify a noun, as seen below in (658); they may stand alone as an anaphoric expression, as seen in (659); or they may stand alone as a complete predicate, as seen below in (660). In the first example, the number pumatam 'one' modifies the noun lapanak 'person'.
(658) [juu pumatam lapának] niilh
juu puma-tam lapanak nii-li
ART CL:human-one person die-PFV
'One person died.'
[T0009: 001]
In example (659), the number laqat'uy 'two' stands alone as the object of the verb, and it anaphorically refers to the beer that was mentioned earlier in the discourse.
(659) qotlich
qot-li+ch
drink-PFV+ALD CL:general-two
'I drank two (beers).'
laqat'uy
laqa-t'uy

In the present tense, a number can stand alone as a complete predicate, as seen in (660a). This example bears nominal morphology: \(x\) - 'third person possessor' and -7an 'plural possessor', indicating that it is a predicate nominal. \({ }^{184}\) The third person and plural possessive morphology co-index the argument of the predicate. As in other HT predicate nominal constructions, a copula is used for past tense constructions, as seen in (660b).
(660)a. xpumat'utu7an
x-puma-t'utu-7an
3POS-CL:human-three-PL.POS
'they are three (people)'
'there are three of them' [T0063: Notes, p. 1]
b. xpumat'utu7an
x-puma-t'utu-7an
xtajuuniita
x-ta-jun-niita
PAST-3PL.SUB-be-PF
3POS-CL:human-three-PL.POS
'They were three (people).'
'There were three of them.'

\footnotetext{
\({ }^{184}\) For more information on predicate nominals and predicate adjectives, see Chapter 3, section 3.3.3.
}

When the predicate's argument is first person, the copula is optional in the present tense, as demonstrated below in (661). The (a) example bears nominal possessive morphology and there is no copula, while the (b) example has a copula, but no possessive morphology.
(661)a. kimpumat'utu7an
kin-puma-t'utu-7an
1POS-CL:human-three-PL.POS
'We are three (people).'
'There are three of us.'
b. pumat'utu juntaw
puma-t'utu jun-ta-w
CL:human-three be-PF-1SUB.PL
'We are three (people).'
'There are three of us.'
An overt nominal may co-occur with the predicate constructions, as seen in (662). However, once a nominal head is added to the clause, the nominal possessive morphology is no longer required, as seen in (662b).
(662) a. xlaqat'utu7an chiila7
x-laqa-t'utu-7an chiila7
3POS-CL:general-three-PL.POS chicken
'There are 3 chickens.'
b. laqat'utu chiila7
laqa-t'utu chiila7
CL:general-three chicken
'(There are) 3 chickens.'
When the argument of the predicate nominal numeral construction is 'two people', a suppletive stem t'iyun is used, seen below in (663). This lexeme is unique in that there is no independent classifier, and the vowel and semi-vowel of the number two \(t^{\prime} u y\) are metathesized. Even though the human classifier puma-
does not occur, this stem can be used only to enumerate humans. Though the expected form-pumat'uy-is accepted during elicitation tasks (see (663d) below), it does not appear in naturally occurring speech.
(663)a. xt'iyun7an
x-t'iyun-7an
3POS-two-PL.POS
'They are two people.'
'There are two of them.'
[T0063: Notes, p. 1]
b. xt'iyun7an xtajuuniita
x-t'iyun-7an \(\quad x\)-ta-jun-niita
3POS-two-PL.POS PAST-3PL.SUB-be-PF
'They were two people.'
'There were two of them.'
c. juu 7anu7 xt'iyun7an lapanak
juu 7anu7 x-t'iyun-7an lapanak
ART that PAST-two-PL.POS people
waa xta7asaanan
waa x -ta-7asaanan
FOC PAST-3PL.SUB-play.instrument(IMPFV)
'Those two people played instruments.'
[T0063: 004]
d. kimpumat'uy7an
kim-puma-t'uy-7an
1POS-CL:human-two-PL.POS
'We are two people.'
'There are two of us.'

\subsection*{7.2 ORDINAL NUMBERS}

Ordinal numbers are quite difficult to elicite because they are not used very often (maybe not at all), and most people do not know them. Ordinal numbers other than 'first' are morphologically formed on classified numbers, as seen below in (664). The human classifier puma- is used in the (a) example, and
this number can refer only to human entities. The general classifier laqa- is used in the (b) example, and this number can refer to all entities, including humans.
(664)a. xlhiipumat'uych
x-lhii-puma-t'uy+ch
3POS-APPL-CL:human-two+ALD
'second (person)'
b. xlhiilaqat'uych
x-lhii-laqa-t'uy+ch
3POS-APPL-CL:general-two+ALD
'second'
The morphological pattern shown in (664) is used to derive the ordinal numbers 'second' through 'tenth'. I did not find an HT speaker who could form ordinal numbers higher than 'tenth', so I do not know if this pattern can be used to derive higher ordinals. A list of the HT ordinal numerals 'second' through 'tenth', formed with the general classifier laqa-, appears in (665). All of the these derived ordinal numbers may be used both adjectivally and adverbially, as seen in examples (666) and (667) below.
(665)a. xlhiilaqat'uych 'second'
b. xlhiilaqat'utuch 'third'
c. xlhiilaqat'atich 'fourth'
d. xliilaqakiisch 'fifth'
e. xlhiilaqachaxaanch 'sixth'
f. xlhiilaqatajuunch 'seventh'
g. xlhiilaqatz'ajinch 'eighth'
h. xlhiilaqanajatzich 'ninth'
i. xlhiilaqakawch 'tenth'

In the following examples in (666), the ordinal number is used as an adjective modifying the noun ki7asqat'a 'my child' in a predicate nominal construction.
(666)a. juu yuuch waa xlhiilaqat'uych ki7asqat'a juu yuuch waa x-lhii-laqa-t'uy+ch ki-7asqat'a ART 3PRN.SG FOC 3POS-APPL-CL:general-two+ALD 1POS-child ' \(\mathrm{S} / \mathrm{he}\) is my second child.'
\begin{tabular}{ll} 
b. juu yuuch waa xlhiilaqat'utuch & ki7asqat'a \\
juu yuuch waa x-lhii-laqa-t'utu+ch & ki-7asqat'a \\
ART 3PRN.SG FOC 3POS-APPL-CL:general-three+ALD & 1POS-child \\
'S/he is my third child,
\end{tabular} ' \(\mathrm{S} / \mathrm{he}\) is my third child.'

The ordinal number is used as an adverb in the examples in (667).
\begin{tabular}{llll} 
(667) a. & juu yuuch \(\quad\) xlhiipumat'uych & xachiiwinin \\
& juu yuuch x-lhii-puma-t'uy+ch & xa-chiiwinin \\
& ART 3PRN.SG 3POS-APPL-CL:human-two+ALD & PAST-speak(IMPFV) \\
& 'S/he spoke second.' &
\end{tabular}
b. juu yuuch xlhiipumat'utuch xachiiwinin
juu yuuch x-lhii-puma-t'utu+ch xa-chiiwinin
ART 3PRN.SG 3POS-APPL-CL:human-three+ALD PAST-speak(IMPFV) 'S/he spoke third.'

The concept of 'first' in HT is expressed by means of three different words: the derived form laqatamka7 may be used only adjectivally, while the lexical forms p'ulhnan and laqasii may be used only adverbially. Below in example (668), laqatamka7 'first (ADJ)' is used in the (a) example in which the ordinal number behaves as an adjective modifying the noun ki7asqat'a 'my child' in a predicate nominal construction. Note that there is no form meaning 'first' that is derived using the morphological template shown above in (664) and (665) that is used for the other ordinal numbers. The lexical form p'ulhnan 'first (ADV)' is used adverbially in the (b) example in (668).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{(668) a.} & juu & yuuch & waa & laqatamka7 & ki7asqat'a \\
\hline & juu & yuuch & waa & laqa-tam-ka7 & ki-7asqat'a \\
\hline & ART & 3PRN.SG & FOC & CL:general-one-JST & 1 POS-child \\
\hline & \multicolumn{5}{|l|}{'S/he is my first child.'} \\
\hline
\end{tabular}
b. juu yuuch p'ulhnan xachiiwinin juu yuuch p'ulhnan xa-chiiwinin ART 3PRN.SG first PAST-speak(IMPFV) 'S/he spoke first.'

Though the adjectival form laqatamka7 is derived (and easily analyzed), this form is lexicalized and the process that derived it is not a productive one in HT. Its morpheme breakdown is shown in (668a). Note that this morphological pattern is quite different from the pattern exemplified by the other derived ordinal numbers, shown above in (664); however both patterns include a numeral classifier and a cardinal number.

The two adverbial lexemes, p'ulhnan and laqasii, differ slightly in meaning: p'ulhnan can mean 'first' (669a), 'at first' (669b), and 'before' (669c), while laqasii can mean only 'first', shown in (670).
\begin{tabular}{lll} 
too waa & kintalhiijuunilh & p'ulhnan \\
too waa & kin-ta-lhiijun-ni-li & p'ulhnan \\
NEG FOC & 1OBJ-3PL.SUB-order-DAT-PFV & first \\
'No, they ordered (drinks) for me first.' &
\end{tabular}
[T0066: 052]
b. juu p'ulhnan tuulay 7ixchiwinin
juu p'ulhnan tuu+la-y 7ix-chiwin-nVn
ART first NEG-can-IMPFV PAST-speak-PL.INF
juu maqalhqama7 juu lhiilaawaan naa qox
juu maqalhqama7 juu lhii-laawaan naa qox
ART Tepehua ART APPL-Spanish EMP well
'Before (at first), the Tepehua could not speak Spanish very well.'
[T0057: 092]
c. jaantuch chun tachu p'ulhnan
jaantu+ch chun tachu p'ulhnan
NEG+ALD thus like first
'It's not like it was before.'
[T0059: 036]
\begin{tabular}{lllll} 
(670) a. & laqasii & 7 anu7 & 7anawiit'ich & juu wayti \\
& laqasii & 7 anu7 & 7a-nawii-t'i+ch & juu wayti \\
& first & um & PL-make-2SG.SUB.PFV+ALD & ART food \\
& 'First, um, make the food.' &
\end{tabular}
'First, um, make the food.'
[T0066: 245]
b. laqasii nawiiy laqasii nawii-y first make-IMPFV 'He does it first.'
[ELIEX3: 060]

\subsection*{7.3 NUMERAL ClaSSIFIERS}

Huehuetla Tepehua has a rich system of numeral classifiers; however, today the numeral classification system is falling into disuse, with more and more HT speakers using only the two most common classifiers: the general classifier laqa- and the human classifier puma-. The HT classifier system is prototypical (Aikhenvald 2000) in many respects: a classifier forms a constituent with a number or quantifier, and it serves to categorize the entity or action that the number or quantifier modifies according to its shape, humanness, or some other criteria; there is a 'generic' classifier that can be used instead of a more specific one; there is no obligatory plural agreement marking on nouns or verbs; and there are both sortal and mensurative classifiers.

In the exercise of counting, HT classifiers are obligatory on the numbers one through 39 , and they are optional beginning with the number 40 . According to Aikhenvald (2000), it is quite common for numeral classifier to be used obligatorily with "small" numbers and optionally with "larger" numbers (p. 100). Given that only the native HT numbers one through five occur in my field recordings, I am unable to determine if the classifiers are obligatory on numbers greater than five in contexts other than counting.

The HT numeral classifier system has been described previously by Bower (1948); however, I found the meanings associated with many of the classifiers to be slightly different than those given in Bower 1948. Additionally, I found several classifiers that Bower did not mention. \({ }^{185}\) I suspect that the numeral classifier system was once larger and more productive than either Bower or I found it to be. The classifiers and their usage are presented in section 7.3.1 and the use of body part prefixes as classifiers is discussed in section 7.3.2.

\subsection*{7.3.1 Numeral Classifiers and Their Usage}

The semantics and typology of the HT numeral classifier system is presented in section 7.3.1.1, the syntactic behavior of the classifiers is discussed in section 7.3.1.2, and the pragmatics of the use of classifiers is examined in 7.3.1.3.

\subsection*{7.3.1.1 Semantics and Typology of Numeral Classifiers}

Many researchers have made typologies of the classification of nouns, including Allan (1977), Aikhenvald (2000, 2004), and Grinevald (2000). I have not strictly adopted any one of these typologies, but rather I have been influenced by aspects of each of them in the categorization of the HT classifiers. The HT classifiers can be divided into five groups: (i) the general classifier laqa-, which can be used in place of any of the other classifiers; (ii) the human classifier puma-, which is the default classifier to use with any human entity; (iii) classifiers that measure entities (the Mensuratives); (iv) classifiers that sort entities based on their inherent characteristics (the Sortals); and (v) classifiers that function only

\footnotetext{
185 Bower (1948) lists only nine distinct numeral classifiers, while I have found 26 (see Table 2).
}
adverbially (the Adverbials). \({ }^{186}\) Figure 4 demonstrates the categorization of the classifiers. A complete, alphabetical list of the classifiers is given in Table 25.

Figure 4: Categorization of HT Numeral Classifiers


\footnotetext{
186 The name 'adverbial' is somewhat misleading because it implies that the other classifiers do not function adverbially, which is not the case. Rather, these three classifiers function only adverbially, and not adjectivally or anaphorically.
187 A bandeja is a unit of measure in Mexico that is used to weigh dry, pourable substances like coffee beans or black beans. It used to be a small, square box; today the box has been replaced by a large, oval-shaped tuna can that is believed to hold the same amount that the box did.
188 The monetary unit of Mexico.
}

Table 25: HT Numeral Classifiers, Alphabetical Listing
\begin{tabular}{|c|c|c|}
\hline Classifier & Gloss/Meaning & Categorization \\
\hline 7aklh- & horizontal division of N & Sortal \\
\hline 7alh- & immature plants or bushes; change(s) of clothing & Sortal \\
\hline qan- & rigid, cylindrical N & Sortal \\
\hline 7aq- & number of times action of verb was performed & Adverbial \\
\hline 7aqa- & mature trees, bushes, plants; vertical division & Sortal \\
\hline 7aqx- & flat N & Sortal \\
\hline kilhmak- & groups or teams of people & Mensurative \\
\hline laka- & places & Sortal \\
\hline laq- & pesos & Sortal \\
\hline laqa- & general, all-purpose classifier that can be used in place of any other classifier & General \\
\hline laqpuu- & piles of N (ADJ); places (ADV) & Mensurative \\
\hline maj7ata- & branch, armful & Mensurative \\
\hline maqa- & long, thin, flexible N & Sortal \\
\hline maqxapa- & a roll of N & Mensurative \\
\hline miix- & days & Adverbial \\
\hline muus- & cluster, bunch & Sortal \\
\hline paq- & number of trips made, completed outcome of verb & Adverbial \\
\hline piis- & handfuls of N or bundles of N tied with string & Mensurative \\
\hline
\end{tabular}
\begin{tabular}{|l|l|l|}
\hline puch'a- & plots or fields of N & Mensurative \\
\hline puma- & human N & Human, Sortal \\
\hline puukilh- & \begin{tabular}{l} 
gunny sack, \\
a measure of about 25 kg
\end{tabular} & Mensurative \\
\hline puumaqa- & sections, parts, or pieces of a whole N & Sortal \\
\hline puu7en- & \begin{tabular}{l} 
pitcher-sized (bandeja, jicarada) \\
container of N
\end{tabular} & Mensurative \\
\hline puux- & inside-out articles of clothing & Sortal \\
\hline \begin{tabular}{l} 
talaq- \\
\(\sim\) tantalaq-
\end{tabular} & floor, ford & Sortal \\
\hline tij- & different types or classes of N & Sortal \\
\hline
\end{tabular}

What follows is a brief discussion-with examples-of each of the classifiers listed in Table 25.

The sortal classifier 7aklh- refers to horizontal divisions or sections of a noun, as seen in the examples in (671). Bower (1948) transcribes this classifier as \(k^{\prime} a k l h-\) 'pieces' (p. 21). In the (a) and (b) examples, the classifier appears on a number; in the (c) example it appears on the quantifier chuux 'how many'; and in the (d) example, it appears on the quantifier lhuu 'many'.
(671) a.

7aklht'uy lht'aqálaak'íw
7aklh-t'uy lht'aqálaa-k'íw
CL:horizontal-two board-wood
'two pieces of a board, cut horizontally'
[MNB15: 42]
b. waa 7aklhtam lapanak 7akIhtam maqtili7
waa 7aklh-tam lapanak 7aklh-tam maqtili7
FOC CL:horizontal-one person CL:horizontal-one wild.animal
'It is half human, half animal.' [either the top half or the bottom half is human]
[MNB16: 50]
c. taas 7aklhchuuxch
taas 7aklh-chuux+ch
Q CL:horizontal-how.many+PUNT
juu 7alin juu lht'aqalaak'iw?
juu 7alin juu lht'aqalaa-k'iw
REL there.are(IMPFV) ART board-tree
'How many pieces of board are there?'
d. naa 7aklhuu juu lht'aqalaak'iw
naa 7aklh-lhuu juu lht'aqalaa-k'iw
EMP CL:horizontal-many ART board-tree
'There are a lot of pieces of board.'
The sortal classifier 7alh- refers to an immature plant or bush, as seen in (672), and it corresponds to Bower's (1948) galh- [qał-], "things that approximate a hill of growing things" (p. 21). This classifier has an antonym 7aqa-, which refers to mature plants, as seen in the examples in (677). The example in (672e) demonstrates that the replacement of 7alh- with the general classifier laqa- results in a change of meaning.
(672)a. 7alhtam jaak

7alh-tam jaak
CL:im.plant-one banana
'one immature banana tree'
[MNB15: 30]
b. 7alht'uy kapén

7alh-t'uy kapén
CL:im.plant-two coffee
'two immature coffee plants'
[MNB15: 30]
c. taas 7alhchuuxch juu 7alin
taas 7alh-chuux+ch juu 7alin
Q CL:im.plant-how.many+PUNT REL there.is(IMPFV)
juu jaak?
juu jaak
ART banana
'How many immature banana plants are there?'
d. naa 7alhuu juu 7alin juu jaak
naa 7alh-lhuu juu 7alin juu jaak
EMP CL:im.plant-many REL there.is(IMPFV) ART banana
'There are a lot of immature banana trees.'
e. laqatam jaak
laqa-tam jaak
CL:general-one banana
'one banana'
NOT: one immature banana plant
Strangely, the same classifier 7alh- is also used to indicate a change of clothing, as seen below in (673). Bower (1948) does not include this meaning.
(673) a. 7alhtam puumpu7

7alh-tam puumpu7
CL:change-one clothing
'one change of clothing'
b. 7alht'uy puumpu7

7alh-t'uy puumpu7
CL:change-two clothing
'two changes of clothing'
The sortal classifier qan- is used to count rigid, cylindrical nouns that are longer than they are wide, as seen in (674) and (675). Similarly, Bower (1948) says that gan- [qan-] is "used for round slender things" (p. 21).
(674)a. qant'uy k'iw
qan-t'uy k'iw
CL:cylinder-two tree
'two sticks'
b. qantam jaak
qan-tam jaak
CL:cylinder-one banana
'one banana'
c. qankiis makqeliilii
qan-kiis mak-qeliilii
CL:cylinder-five hand-digit
'five fingers'
[MNB15: 29]
(675)maa talaxtaqnilhch
\[
\begin{array}{ll}
\text { juu } & \text { xtaqanqat7an } \\
\text { juu } & \text { x-taqanqat-7an } \\
\text { ART } & \text { 3POS-illness-PL.POS }
\end{array}
\]
maa ta-laxtaqni-li+ch
RPT 3PL.SUB-contract-PFV+ALD
juu qantam qantam lapanak
juu qan-tam qan-tam lapanak
ART CL:cylinder-one CL:cylinder-one people
'The people, one-by-one, contracted the illness.'
[T0057: 019]
The adverbial classifier 7aq- refers to the number of times that the action of the verb was performed, though not necessarily completed (see paq- in examples (695) and (696)). Examples of 7aq- are shown below in (676); this classifier does not appear in Bower 1948. In the (b), (c), and (d) examples, the classified number modifies the verb. \({ }^{189}\)
(676)a. 7aqt'utu

7aq-t'utu
CL:times-three
'three times', 'thrice'
[MNB15: 43]

189 The syntactic behavior of the classifiers is presented in more detail in section 7.3.1.2.
b. 7aqt'uych xakmasqatiy

7aq-t'uy+ch xa-k-masqati-y
CL:times-two + ALD PAST-1SUB-try-IMPFV
'I tried twice'
[T0069: 005]
c. 7aksnii ktanuuya7 waa 7aqtam

7aksnii k-tanuu-ya7 waa 7aq-tam
when 1SUB-enter-FUT FOC CL:times-one
'When I start at the same time.'
[T0066: 072]
d. 7aqtami7an

7aq-tam-i-7an
CL:times-one-EPE-go
'Go one more time [referring to playing a song]'
[T0066: 101]
The sortal classifier 7aqa- indicates a fully-grown, mature tree or plant, as seen in the examples in (677). Its antonym 7alh- 'immature plant' is shown in example (672). The classifier 7aqa- is not listed in Bower 1948.
\begin{tabular}{ll} 
7aqatam & jaak \\
7aqa-tam & jaak \\
CL:mat.plant-one & banana \\
'one mature banana tree.'
\end{tabular}
b. 7aqakiis k'iw

7aqa-kiis k'iw
CL:mat.plant-five tree
'five mature trees.'
c. taas 7aqachuuxch
juu 7alin
taas 7aqa-chuux+ch
juu 7alin
Q CL:mat.plant-how.many+ALD REL there.is(IMPFV)
juu jaak?
juu jaak
ART banana
'How many mature banana trees are there?'
\begin{tabular}{llll} 
d. naa 7aqalhuu & juu 7 7alin & juu jaak \\
naa 7aqa-lhuu & juu & 7alin & juu jaak \\
EMP CL:mat.plant-many & REL there.is(IMPFV) & ART banana \\
& There are many mature banana trees.' & &
\end{tabular}

The classifier 7aqa- can also indicate a vertical division, as seen in (678). This is most likely a semantic extension from its 'mature tree' reading, since most mature trees are vertical.
(678) 7aklht'uy lht'aqalaak'iw

7aklh-t'uy lht'aqalaa-k'iw
CL:vertical-two board-tree
'two pieces of board, vertically cut from the same board'
The sortal classifier 7aqx-refers to flat entities, as seen in the examples in (679) and (680). This classifier is homophonous with the body part prefix 7aqxmeaning 'shoulder'. The example in (679f) demonstrates that 7aqx- cannot be used to count a non-flat noun. According to Bower (1948), the classifier Pagx-[Raqx-] refers to "complete, separate things" (p. 21).
(679) a. 7aqxt'utu chiiwx

7aqx-t'utu chiiwx
CL:flat-three rock \({ }^{190}\)
'three flat stones'
[MNB15: 40]
b. 7aqxam 7alhik

7aqx-tam 7alhik
CL:flat -one paper 'one piece of paper'
[MNB15: 31]
c. 7aqxt'utu lht'aqalaak'íw

7aqx-t'utu lht'aqalaa-k'íw
CL:flat-three board-wood
'three boards'
[MNB15: 31]

\footnotetext{
190 The word chiiwx refers to a stone or rock of any shape, but my consultant specifically said that he meant flat stones, like those used to make a walkway and that we know the stones referred to here are flat because of the classifier 7aqx-.
}
\(\begin{array}{lllll}\text { d. } & \text { taas 7aqxchuuxch } & \text { juu } & \text { 7alin } & \text { juu } \\ \text { taas 7alhik? } \\ \text { 7aqx-chuux+ch } & \text { juu } & \text { 7alin } & \text { juu } & \text { 7alhik } \\ \text { Q CL:flat-how.many+ALD } & \text { REL there.is(IMPFV) } & \text { ART } & \text { paper } \\ \text { 'How many sheets of paper are there?' } & & \text { [Q7] }\end{array}\)
e. naa 7aqxlhuu
naa 7aqx-lhuu
EMP CL:flat-many
'There are many.'
f. ** 7aqxt'utu jaak

7aqx-t'utu jaak
CL:flat-three banana
(Intended reading: 'three bananas')
In the example in (680), the classified number is prefixed with the locative prefix рии-, and it acts as an adverbial modifier.
(680)maalach'ap'ay juu 7alhik puu7aqxt'uy
maa-lach'ap'a-y juu 7alhik puu-7aqx-t'uy
CAUS-glue-IMPFV ART paper LOC-CL:flat-two
'He glues 2 pieces of paper together.'
[on top of each other or end to end]
[MNB13: 96, Q7]
The mensurative classifier kilhmak- refers to groups or teams of people as seen in (681). Bower (1948) transcribes this classifier as kiilhmaa- (p. 21).
(681) a. kilhmakt'uy
kilhmak-t'uy
CL:groups-two
'two groups of people', 'two teams'
[MNB15: 30]
b. kilhmakt'uy xataqamanan juu qamanti
kilhmak-t'uy xa-ta-qamanan juu qaman-ti
CL:groups-two PAST-PL.SUB-play(IMPFV) ART play-NOM
'Two teams would play the game.'
c. kilhmaklhuu t'aku7
kilhmak-lhuu t'aku7
CL:groups-many woman 'many groups of women.'

The sortal classifier laka- refers to a 'place' or 'location', as shown in the examples in (682); it is cognate with the Totonac classifier laka-, which also means 'places' or 'areas' (Beck 2004: 27; Levy 2004: 280; McQuown 1990: 136). This classifier is homophonous with the HT locative prepositional prefix laka(see Chapter 6, section 6.6.1). Bower (1948) does not include the classifier laka. \({ }^{191}\) Below in (682b) the classified number modifies the noun laqachaqan 'town', while in (682c), it modifies the verb toolay 'lives'.
(682) a. lakat'uy
laka-t'uy
CL:places-two
'two places', 'two locations'
[MNB14: 23]
\begin{tabular}{lll} 
b. & lakat'uy & laqachaqan \\
laka-t'uy & laqachaqan & wii \\
& CL:places-two & town
\end{tabular}
c. waa lakatam lakatam toolay
waa laka-tam laka-tam toola-y
FOC CL:place-one CL:place-one live-IMPFV
'He goes living in one place after another.'
[MNB13: 12]
According to Bower (1948), the classifier laq-, was used only for counting pesos or reales, an older monetary unit that was still used by the Tepehua at the

\footnotetext{
191 The locative preposition in most of the Totonacan languages is nak (Beck 2004: 13; McQuown 1990: 125; Reid and Bishop 1974: 100) or naka (MacKay 1999: 435), but it is laka- in HT, laka: in Tlachichilco Tepehua (Watters 1988: 473), and [laka] in the Yecuatla dialect of Misantla Totonac (MacKay 1999: 435). The question is this: is the preposition laka(a) an innovation in these languages based on a Proto-Totonacan classifier laka-, or does the preposition laka(a) reflect the Proto-Totonacan locative preposition, while the Totonac nak is the innovation?
}
time that she published her article. More than 50 years later, I did not encounter any use of reales, but I did find the sortal classifier laq- to be used specifically to count pesos, as seen in the examples in (683).
(683) a. laqp'úuxamkáw péexuu
laq-p'uuxam-kaw péexuu
CL:peso-twenty-ten peso
'thirty pesos'
[MNB15: 39]
b. waa naa maa xtaqnikan
\(\begin{array}{ll}\text { laqkiis } & \text { peexuu } \\ \text { laq-kiis } & \text { peexuu } \\ \text { CL:peso-five } & \text { peso }\end{array}\)
FOC EMP RPT give-DAT-INS(IMPFV) CL:peso-five peso
'Then they gave him five pesos.'
[T0055: 043]
The classifier laqa-, shown in the examples in (684), (685), and (686), functions as a general classifier that can be used with any noun. It is the most commonly occurring classifier in my database, and it is the classifier that is normally used during the exercise of counting. Furthermore, laqa- (along with puma-, the human classifier) is one of the only two classifiers that is regularly used by younger speakers. Bower (1948) calls this classifier the "general prefix" (p. 20).
\begin{tabular}{lll} 
(684)a. & laqat'uy & 7amaaxtaqnuuti \\
& laqa-t'uy & 7amaaxtaqnuuti \\
& CL:general-two & pile \\
& 'two piles' &
\end{tabular}
[MNB15: 30]
b. lhiitamawlh laqatam xlaqpuutanut
lhii-tamaw-li laqa-tam x-laqpuutanut
APPL-buy-PFV CL:general-one 3POS-mask
'He bought himself a mask.'
[T0055: 048]
c. laqat'uy walhtiilaa kapen
laqa-t'uy walhtiilaa kapen
CL:general-two cuartillo coffee
'two cuartillos of coffee'
[MNB15: 30]
d. laqat'uy maalhkiyu7
laqa-t'uy maalhkiyu7
CL:general-two month
'(in) two months'
[MNB15: 35]
The general classifier laqa-may be used with human entities, as seen in (685), even though there is a more specific human classifier puma- (see example (699) below).
\(\left.\begin{array}{lll}\text { (685)a. } & \text { talaqachuux } & \text { lápanák } \\
\text { ta-laqa-chuux } & \text { lápanák }\end{array}\right]\)\begin{tabular}{ll} 
& 3PL.SUB- CL:general-how.many \\
people
\end{tabular}
[ELIEX1: 055]
b. laqat'utu lápanák
laqa-t'utu lápanák
CL:general-three people
'three people'
The general classifier laqa- may be used to classify other, non-human nouns for which a more specific classifier exists. For example, laqa- is used in (686a) even though laq- is the classifier that is used specifically for counting pesos (see examples (683) above), and laqa- is used in (686b) even though qan- is the classifier typically used with cylindrical nouns (see example (674) above).
\begin{tabular}{lll} 
(686) a. & \begin{tabular}{l} 
laqatam \\
laqa-tam
\end{tabular} & peexuu \\
& \begin{tabular}{l} 
peexuu \\
CL:general-one \\
'one peso'
\end{tabular} &
\end{tabular}
[MNB15: 30]
b. laqat'utu jaak laqa-t'utu jaak CL:general-three banana 'three bananas'

The mensurative classifier laqpuu- is homophonous with the body part prefix meaning 'face' or 'eye'. The classifier laqpuи- refers to a 'place' when it is used as an adverb, as seen in example (687a), but it refers to 'piles' of a noun when it is used as an adjective, as seen in example (687b). \({ }^{192}\)
(687) a. tuulay waa laqpuutam xtoolay
tuu+la-y waa laqpuu-tam x-toola-y
NEG+can-IMPFV FOC CL:pile-one PAST-stay-IMPFV
'He could not stay (live) in one place.'
[MNB13: 12]
b. laqpuut'uy lhii7ut
laqpuu-t'uy lhii7ut
CL:pile-two fruit 'two piles of fruit'

The mensurative classifier maj7ata- indicates a 'branch' or an 'armful' of a particular noun, as seen in the examples in (688). \({ }^{193}\) Though the (b) example might lead one to believe that this is a sortal classifier, it is clear from the (a) example that it is actually mensurative. Comparison of the (c) example with the (b) example demonstrates how the meaning changes if the general classifier laqais used instead of maj7ata-.

\footnotetext{
192 See section 7.3.1.2 for more information on the syntactic behavior of the classified numerals.
\({ }^{193}\) Given the phonological rule of velar spirantization before a uvular (see Chapter 2, section 2.4.5), I propose that this classifier was either *makqata- or *makq'ata- at an earlier stage (i.e., before the loss of the uvular stops).
}
\begin{tabular}{lll} 
lhii7iiych & maj7atatam & 7atz'in \\
lhii7ii-y+ch & maj7ata-tam & 7atz'in \\
take-IMPFV+ALD & CL:branch-one & tall.grass \\
'He takes an armful of tall grass.' &
\end{tabular}
b. maj7atat'uy kapen
maj7ata-t'uy kapen
CL:branch-two coffee
'two branches of (a) coffee (bush)'
c. laqat'uy kapen
laqa-t'uy kapen CL:general-two coffee
'two coffee beans'
The sortal classifier maqa- is used to categorize nouns that are long, thin, and flexible, such as snakes, rope, thread, hair, cables, intestines, worms, and the like. Examples are shown in (689). This classifier is not listed in Bower 1948.
\begin{tabular}{|c|c|c|}
\hline (689) a. & \begin{tabular}{l}
maqatam \\
maqa-tam \\
CL:flexible-one 'one rope'
\end{tabular} & \begin{tabular}{l}
xuunuuk \\
xuunuuk \\
rope
\end{tabular} \\
\hline b. & \begin{tabular}{l}
maqatam \\
maqa-tam CL:flexible-one 'one thread', 'one
\end{tabular} & \begin{tabular}{l}
siijunti \\
siijunti \\
thread \\
fiber'
\end{tabular} \\
\hline c. & \begin{tabular}{l}
maqat'uy \\
maqa-t'uy \\
CL:flexible-two 'two snakes'
\end{tabular} & luw luw snake \\
\hline
\end{tabular}

The mensurative classifier maqxapa- refers to things that are rolled or bundled up, as seen in the examples in (690). This classifier is not mentioned in Bower 1948.
(690) a. maqxapatam k'iw
maqxapa-tam k'iw
CL:roll-one tree
'one roll of firewood'
b. maqxapat'uy 7alhik
maqxapa-t'uy 7alhik
CL:roll-two paper
'two rolls of paper'
c. maqxapat'uy paatz'oqo
maqxapa-t'uy paatz'oqo
CL:roll-two pencil
'two rolls of pencils'
d. taas maqxapachuuxch juu puumpu7 juu 7alin?
taas maqxapa-chuux+ch juu puumpu7 juu 7alin
Q CL:roll-how.many+ALD ART clothing REL there.is(IMPFV) 'How many rolls of clothing are there?'
e. maqxapat'uy puumpu7 maqxapa-t'uy puumpu7
CL:roll-two clothing
'Two rolls of clothing.'
The adverbial classifier miix-, which Bower (1948) transcribes as mix-, is used for counting days. When used alone with a number, the resulting meaning is 'in X days', as seen in (691a). When combined with the temporal clitic + ch(ich), the meaning is ' X days ago', as seen in (691b).

\section*{(691)a. miixkí́s}
miix-kiis
CL:days-five
'in five days'
b. miixkíischich
miix-kiis+chich
CL:days-five-+ALD
'five days ago'

My younger consultants ( \(<70\) years old) would accept the use of miix- only with numbers that correspond to weeks for them, i.e., 'seven days' for 'one week' (692a) and 'fifteen days' for 'two weeks' (692b). They rejected the use of this classifier with other numbers, as seen in (692c), saying that this usage was strange, but that the meaning was understandable.
(692)a. miixtujún
miix-tujun
CL:days-seven
'in seven days' \(\approx\) 'in one week'
b. miixkookiis
miix-kaw-kiis
CL:days-ten-five
'in fifteen days' \(\approx\) 'in two weeks'
c. ?? miixkí́s
miix-kiis
CL:days-five
(Intended reading: 'in five days')
(Rejected by younger speakers; accepted by older speakers.)
Nevertheless, older speakers (>70 years old) readily accepted miix- followed by any number except the number one (693b), presumably because the lexical items lhi7 'tomorrow' and kutanch 'yesterday' are used instead. For more information on counting days, see section 7.5.
(693)a. miixt'uy (wilhchan)
miix-t'uy (wilhchan)
CL:days-two (day)
'in two days'
(Rejected by younger speakers; accepted by older speakers.)
[MNB15: 34]
b. \({ }^{* *}\) miixtam
miix-tam
CL:days-one
(Intended reading: 'in one day')
[MNB15: 35]
The sortal classifier muus- refers to 'clusters' or 'bunches' of fruit or flowers growing together, as seen in the examples in (694). This classifier is not mentioned in Bower 1948.
(694)a. muustam jaak
muus-tam jaak
CL:cluster-one banana
'one bunch of bananas'
b. muustati kapen
muus-tati kapen
CL:cluster-four coffee
'four clusters of coffee (beans)'
The adverbial classifier paq- refers to the number of completed trips or tasks indicated by the action of the verb, for example the number of trips someone makes to carry water (695), the number of times a fire was lit (696a), or the number of cleared plots of land (696b). Like the classifier 7aq- in example (676), the classifier paq- behaves as an adverb, modifying a verb rather than a noun. These two classifiers are so similar, both phonologically and semantically, that it is possible that they are variants of each other. In fact, one speaker used them interchangeably and claimed that they were the same.
paqt'utuch
paq-t'utu+ch
CL:trips-three+ALD
xalaay
xa-laa-y
PAST-can-IMPFV
juu 7atzi7 juu 7ixkaan
juu 7atzi7 juu 7ix-xkaan
ART girl ART 3POS-water
'The girl would make three water trips.'
'The girl would get water three times.'
b. taas paqchuuxch
taas paq-chuux+ch xa7iiy

Q CL:trips-how.many+ALD PAST-bring-IMPFV
juu 7ixkaan juu 7atzi7
juu 7ix-xkaan juu 7atzi7
ART 3POS-water ART girl
'How many water trips would the girl make?'
'How many times would the girl bring water?'
c. naa paqlhuuch xalaay
naa paq-lhuu+ch xa-laa-y
EMP CL:trips-many+ALD PAST-can-IMPFV
'She would make many trips.'
(696)a. paqt'utuch xaxaway juu jip
paq-t'utu+ch xa-xawa-y juu jip
CL:trips-three+ALD PAST-light-IMPFV Art fire
'He would light the fire three times.'
[MNB15: 43]
b. juu lapanak paqt'uych xamaaxtuy
juu lapanak paq-t'uy+ch xa-maaxtu-y
ART person CL:trips-two+ALD PAST-take.out-IMPFV
juu xlhiitay
juu x-lhiitay
ART 3POS-plot
'The man would clear two plots.'
The mensurative classifier piis- categorizes either a handful of loose entities (e.g., beans) or a handful of an entity that is bundled together and tied
with string, as in (697). Bower (1948) provides virtually the same meaning: "bundles or bunches tied up" (p.21). There is some overlap in meaning between piis- and maqxapa-, as seen in comparison of (697c) with (690a).
(697)a. piistam stapu
piis-tam stapu
CL:bundle-one bean
'one bundle of beans (in pods)'
'one handful of loose beans'
[MNB15: 30]
b. piistam xaanti
piis-tam xaanti
cL:bundle-one flower
'one nosegay of flowers'
[MNB15: 30]
c. piist'uy k'iw
piis-t'uy k'iw
CL:bundle-two tree
'two bundles of firewood'
d. taas piischuuxch juu xalhiit'an
taas piis-chuux+ch juu xa-lhiit'an
Q CL:bundle-how.many+ALD REL PAST-bring(2SUB.IMPFV)
juu stapu?
juu stapu
ART bean
'How many bundles/handfuls of beans would you bring?'
e. naa piislhuu
naa piis-lhuu
EMP CL:bundle-many
'A lot.'
The mensurative classifier puch'a- refers to a field or plot, as seen below in (698). According to Bower (1948), puuch'aa- is used when counting "pieces put together," and she gives the example "puuch'aat'uy k'iw two pieces of wood nailed together" (p.21). My informants rejected this example and all others like
it that I tried. The (c) and (e) examples show that puch'a- cannot be used with a lexical noun that refers specifically to a tree; instead it occurs with nouns that refer to a cultivated field or plot of land, as seen in the other examples in (698).
(698)a. púch'at'úy lhiitáy
puch'a-t'uy lhiitay
CL:plot-two plot
'two plots'
b. púch'at'úy xalhiitáy 7aláxux
puch'a-t'uy xa-lhiitay 7aláxux
CL:plot-two IPOS-plot orange
'two plots of orange trees'
c. ** púch'at'úy 7aláxux
puch'a-t'uy 7aláxux
CL:plot-two orange
(Intended reading: 'two plots of orange trees')
[MNB15: 29]
d. puch'at'uy xalhiitay k'iw
puch'a-t'uy xalhiitay k'iw
CL:plot-two IPOS-plot tree
'two plots of trees'
e. **puch'at'uy k'iw
puch'a-t'uy k'iw
CL:plot-two tree
(Intended reading: 'two plots of trees')
f. puch'akiis xaawti
puch'a-kiis xaawti
CL:plot-five cornfield
'five cornfields’
g. taas puch'achuuxch xaawti juu 7alin?
taas puch'a-chuux+ch xaawti juu 7alin
Q CL:plot-how.many+ALD cornfield REL there.is(IMPFV)
'How many cornfields are there?'

The sortal, human classifier puma- is used only to count human entities, as seen in (699). It is the second most commonly occurring numeral classifier in my database, after the general classifier laqa-. According to Bower (1948), it can be used to count animals as well as humans; however, my consultants rejected the use of puma- with any noun that was not human, as seen in examples (699b) and (699c).
(699)a. púmat'utu lápanák
puma-t'utu lápanák
CL:human-three people
'three people'
[MNB15: 30]
b. ** pumat'uy maqtili 7
puma-t'uy maqtili7
CL:human-two wild.animal
(Intended reading: 'two wild animals')
c. **pumakiis 7atapakxat
puma-kiis 7atapakxat
CL:human-five animal
(Intended reading: 'five animals')
d. taas pumachuux lapanák katamina7?
taas puma-chuux lapanák ka-ta-min-a7
Q CL:human-how.many people IRR-PL.SUB-come-FUT
'How many people will come?'
e. naa pumalhuu katamina7
naa puma-lhuu ka-ta-min-a7
EMP CL:human-many IRR-PL.SUB-come-FUT
'Many people will come.'
f. taas pumachuuxch lapanak
taas puma-chuux+ch lapanak
Q CL:human-how.many person
juu jaantu xatamin?
juu jaantu xa-ta-min
REL NEG PAST-PL.SUB-come(IMPFV)
'How many people would not come?'
The mensurative classifier puukilh- measures 'arrobas', a measure of about 25 kilograms that is typically measured using a gunny sack or burlap bag. Examples are shown in (700). The noun that is measured must be a pourable solid, which explains the ungrammaticality of (700d). This classifier can be analyzed as puu-kilh (LOC-mouth) 'inside the mouth' or 'via the opening'. Bower 1948 does not list this classifier.
(700)a. puukilht'uy t'uun
puukilh-t'uy t'uun
CL:sack-two dirt
'two sacks (arrobas) of dirt'
[MNB15: 37]
b. puukilhkiis kapen
puukilh-kiis kapen
CL:sack-five coffee
'five sacks (arrobas) of coffee'
[MNB15: 36]
c. puukilhkiis xaanti
puukilh-kiis xaanti
CL:sack -five flower
'five sacks of (dried) flowers'
[MNB15: 37]
d. ** puukilhkiis puumpu7
puukilh-kiis puumpu7
CL:sack-five clothing
'five sacks of clothing'
[MNB15: 37]
The sortal classifier puumaqa-classifies parts or pieces of a whole noun, as seen below in (701). Bower (1948) specifies that puumaga- [pu:maqa-] refers
to "sections of a whole round noun" (p. 21). \({ }^{194}\) However, example (701d) indicates that the noun does not have to be round. According to my consultants, the main criteria for the use of this classifier is that the parts come from the same whole.
(701)a. puumaqat'uy xapawáti
puumaqa-t'uy xapawáti
CL:piece-two bread
'two pieces of bread (from the same loaf)'
[MNB15: 30]
b. puumaqat'utu jaak
puumaqa-t'utu jaak
CL:piece-three banana
'three pieces of a banana'
[MNB15: 30]
c. puumaqakíis 7aláxux
puumaqa-kís 7aláxux
CL:piece-five orange
'five sections of orange'
[MNB15: 30]
d. puumaqat'uy lhtaqálaak'íw
puumaqa-t'uy lhtaqálaa-k'íw
CL:piece-two board-tree
'two boards cut from the same original board'
[MNB15: 42]
The mensurative classifier puu7en- measures pourable solids, as seen in the examples in (702). It is semantically similar to puukilh-, shown in example (700), and some speakers used these two classifiers interchangeably. Bower (1948) says that puug'in- [pooq'in-] is "used for counting multiples of three cuartillas of corn" (p. 21). My consultants called the containers that correspond to puu7en- 'bandejas' and 'jicaradas', both of which are roughly the size of a halfgallon pitcher.

194 Emphasis mine.
(702) a. puu7entam sakán
puu7en-tam sakán
CL:bandeja-one nixtamal
'one bandeja of boiled corn'
[MNB15: 30]
b. puu7enkiis kapén
puu7en-kiis kapén
CL:bandeja-five coffee
'five containers of coffee beans'
[MNB15: 38]
The sortal classifier puux- refers to articles of clothing that are turned inside-out, as see below in (703). Bower (1948) does not mention this classifier.
(703) a. puuxt'uy
puux-t'uy
CL:reversed-two
'two articles of clothing inside-out'
b. puuxt'uy 7ay7uun
puux-t'uy 7ay7uun
CL:reversed-two traditional.pants
'two pairs of inside-out pants'
c. puuxt'uy tuuch'iti
puux-t'uy tuuch'iti
CL:reversed-two traditional.skirt
'two inside-out skirts'
The sortal classifier talaq- and its free variant tántalaq- categorize 'floors' or 'levels' of a building and 'fords' of a river, seen below in (704a). The presence of an overt noun clarifies the usage, as seen in (704b) and (704c). Comparison of the examples in (704) with those in (705) demonstrates that there is an extreme change in meaning if talaq- is replaced by the general classifier laqa-. The classifier tantalaq- has exactly the same meaning as talaq-, as seen in (706), and neither classifier is mentioned in Bower 1948.
(704) a. talaqt'uy
talaq-t'uy
CL:floor/ford-two
'two fords (of a river)', 'two floors'
[MNB13: 41]
b. talaqt'uy xkaan
talaq-t'uy xkaan
CL:ford-two water
'two fords of a river'
c. talaqt'uy chaqa7
talaq-t'uy chaqa7
CL:floor-two house
'two-story house'
(705)a. laqat'uy xkaan
laqa-t'uy xkaan
CL:general-two water
'two rivers', 'two bodies of water'
b. laqat'uy chaqa7
laqa-t'uy chaqa7
CL:general-two house
'two houses'
(706) a. tantalaqt'uy xkaan
tantalaq-t'uy xkaan
CL:ford-two water
'two fords of a river'
b. tantalaqt'uy chaqa7
tantalaq-t'uy chaqa7
CL:floor-two house
'two-story house'
The sortal classifier tij- indicates that the classified nouns are of different types or classes, as seen in (707). Bower (1948) transcribes this classifier as tiihand states that it is "used for things different from others as to color and class" (p. 21).
(707)a. tijt'utu puumpú7
tij-t'utu puumpú7
CL:type-three clothing
'three (different) types of clothing'
[MNB15: 29]
b. tijt'úy 7atapákxat
tij-t'uy 7atapákxat
CL:type-two animal
'two types of animal'
[MNB15: 29]
c. tijttúy xqooy
tij-t'uy xqooy
CL:type-two dog
'two types of dog' (can refer to breeds, sizes, colors, etc.)
d. taas tijchuuxch xqooy juu 7alin?
taas tij-chuux+ch xqooy juu 7alin
Q CL:type-how.many+ALD dog REL there.is(IMPFV)
'How many types of dog are there?'
e. naa tijlhuu xqooy
naa tij-lhuu xqooy
EMP CL:type-many dog
'[There are] many types of dog.'

\subsection*{7.3.1.2 Morphosyntax of Numeral Classifiers}

When a classifier categorizes its prototypical referent, the noun may be omitted, as seen in example (708), where both pumat'uy lapanák and pumat'uy mean 'two people'.
(708)a. puma-t'uy lapanák

CL:human-two people
'two people'
b. puma-t'uy

CL:human-two
'two people'

However when a classifier categorizes a noun that is not its prototype, omission of the noun results in a change in meaning, as seen in example (709), where 7ant'uy lapanák means 'two people', but 7ant'uy does not.
(709) a. \(\quad \begin{aligned} & \text { qan-t'uy }\end{aligned} \quad\) lapanák

CL:cylinder-two people
'two people'
b. qan-t'uy

CL:cylinder-two
'two cilindrical things'
NOT: 'two people'
Similarly, omission of the noun when the classifier is the general classifier laqacan result in a lack of meaning, as seen in example (710). While laqat'uy lapanák means 'two people', laqat'uy does not.
(710) a. laqa-t'uy lapanák

CL:general-two people
'two people'
b. laqa-t'uy

CL:general-two
'two X'
NOT: 'two people'
Classified numerals and quantifiers play three different syntactic roles: they may behave as (i) an adjective, (ii) an anaphoric expression, or (ii) an adverb. Three of the classifiers (7aq-, miix-, and paq-) occur only as adverbs. All of the other classifiers may occur in any of the three syntactic positions.

When the classified numeral or quantifier behaves as an adjective, it precedes the head noun of a noun phrase, as seen below in (711). \({ }^{195}\) In (711a), the

\footnotetext{
\({ }^{195}\) For more information on adjectives and quantifiers, see Chapter 5, sections 5.1 and 5.2, respectively.
}
classified numeral laqkiis modifies the head noun peexuи. In (711b) the classified quantifier pumachuих modifies the head noun lapanák.
\begin{tabular}{lll} 
waa naa maa xtaqnikan & {\([\) laqkiis } & peexuu \(]_{\mathrm{NP}}\) \\
waa naa maa xtaq-ni-kan & laq-kiis & peexuu \\
FOC EMP RPT give-DAT-INS(IMPFV) & CL:peso-five & peso \\
'Then they gave him five pesos.' & & {\([\) [T0055: }
\end{tabular}
[T0055: 043]
b. taas [pumachuux lapanák] \({ }_{\mathrm{NP}}\) katamina7?
taas puma-chuux lapanák ka-ta-min-a7
Q CL:human-how.many people IRR-PL.SUB-come-FUT
'How many people will come?'
[Q7]
Classified numerals and quantifiers can occur as anaphors that refer to some previously mentioned noun. According to Aikhenvald (2004), "all classifiers are used anaphorically, that is, as proforms, for tracking referents in discourse" (p. 110). In (712c), the classified quantifier pumalhuи is an anaphoric expression that refers back to the noun lapanák that was mentioned in the question in (711b); in (712b), the classified number laqat'uy anaphorically refers to the beer that is the topic of the conversation from which this example is taken; and in (712c), laqlhuu (a predicate adjective) anaphorically refers back to some pesos (money) that were previously mentioned in the discourse.
(712)a. naa pumalhuu katamina7
naa puma-lhuu ka-ta-min-a7
EMP CL:human-many IRR-PL.SUB-come-FUT
'Many people will come.'
b. qot'lich laqat'uy
qot'-li+ch laqa-t'uy
drink-PFV+ALD CL:general-two
'I drank two [beers].'
[T0066: 055]
\begin{tabular}{lllll} 
c. & 7entoons & tuuka7 & laqlhuu & 7ixjuuniita \\
7entoons & tuu+ka7 & laq-lhuu & 7ix-jun-niita \\
& then/so & NEG+JST & CL:peso-many & PAST-be-PF \\
& 'So it was not expensive (inexpensive).' &
\end{tabular}
[T0069: 389]
When the classified numeral or quantifier behaves as an adverb, it occurs either immediately before the verb [CL-NUM V], as seen in (713), or at the end of the sentence [V . . . CL-NUM], as seen in (714). \({ }^{196}\)
\begin{tabular}{llcl} 
7aqt'utuch & xaktapasay & juu & chunch \\
7aq-t'utu-ch & xa-k-tapasa-y & juu & chun+ch \\
CL:times-three-ALD & PAST-1SUB-pass-IMPFV & ART & thus+ALD
\end{tabular}
'I would pass it like this three times.'
[MNB15: 43]
b. paqt'utuch xaktzantiilay
paq-t'utu+ch xa-k-tzantiila-y
CL:trips-three+ALD PAST-1SUB-slip-IMPFV
'I would slip three times.'
[MNB15: 43]
(714)maalach'ap'ay juu 7alhik puu7aqxt'uy maa-lach'ap'a-y juu 7alhik puu-7aqx-t'uy CAUS-glue-IMPFV ART paper LOC-CL:flat-two 'He glues the paper in two places.'
[MNB13: 96]
Finally, when counting mensurative nouns for which there is no classifier that corresponds to the container, a specific word order is used in which the nominal that refers to the container occurs in the adjectival position between the number and the noun, as seen below in (715). Examples of this word order are shown in (716).
(715) NUMBER \(\left\{\begin{array}{l}\text { CONTAINER } \\ \text { ADJECTIVE }\end{array}\right\}\) HEAD NOUN

196 See Chapter 6 for more information on adverbs.
\begin{tabular}{lll} 
NUMBER & CONTAINER & HEAD NOUN \\
laqakiis & puuwaaqaax & kapen \\
laqa-kiis & puuwaaqaax & kapen \\
CL:general-five & guaje197 & coffee \\
'five guajes of coffee' &
\end{tabular}
[MNB15: 38]
b.
\begin{tabular}{lllll} 
& & NUMBER & CONTAINER & HEAD NOUN \\
juu & x7ulaata & tam & p'aqlati & tuumiin \\
juu & x-7ulaa-ta & tam & p'aqlati & tuumiin \\
REL & PAST-put-PF & one & chest & money \\
'The one who had a chest of money' &
\end{tabular}
[T0054: 060]
In a similar construction, a descriptive adjective occurs in the adjectival position between the number and the head noun. The numeral classifier may be either the general classifier, as seen in (717a), or a more specific classifier that describes the form of the head noun, as seen in (717b).
\begin{tabular}{rlll} 
(717)a. & \begin{tabular}{l} 
laqat'uy \\
laqa-t'uy \\
CL:general-two \\
'two flat rocks'
\end{tabular} & \begin{tabular}{l} 
lakst'ak'alh \\
lak-st'ak'alh
\end{tabular} & \begin{tabular}{l} 
chiiwx \\
chiswx
\end{tabular} \\
b. & rock
\end{tabular}
[MNB15: 40]

\subsection*{7.3.1.3 Pragmatics of Numeral Classifiers}

HT nouns are not rigidly divided into different classes; instead, different classifiers can be used to highlight different characteristics of the noun that are relevant to a given context. Aikhenvald (2000) notes that when differernt classifiers are used with the same noun, the resulting noun phrases show varying degrees of semantic similarity, as will be seen in the HT examples below.

\footnotetext{
\({ }^{197}\) A guaje is a round container that is used to store tortillas. In the past, the Tepehua made guajes from hollow, dried gourds (qaax), but today most guajes are made of plastic.
}

In (718) the noun is lapanak 'person'. \({ }^{198}\) The classifier in example (a), puma-, is the default human classifier. Although the same noun lapanak also appears in (b), the classifier qan- modifies a long, cylindrical noun; here the use of qan- instead of puma- communicates the fact that the people are lying down, more dead than alive. The example in (c) also contains the human noun lapanak, and here it is modified by the classifier 7aklh-, which indicates that the noun is divided along a horizontal axis. The use of the classifier 7aklh- indicates that the division between the human half and the animal half is horizontal, not vertical, and this information is more important to the context than the fact that the noun lapanak is human.
\begin{tabular}{llll} 
(718) a. & juu pumatam lapának & niilh \\
& juu puma-tam lapának & nii-li \\
& ART CL:human-one person & die-PFV \\
& 'One person died.'
\end{tabular}
[T0009: 001]
\begin{tabular}{llll} 
b. maa & talaxtaqnilhch & juu & xtaqanqat'an \\
maa & ta-laxtaqni-li+ch & juu & x-taqanqat-7an \\
RPT & 3PL.SUB-contract-PFV+PUNT & ART & 3POS-illness-PL.POS
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline juu & qantam & qantam & lap \\
\hline juu & qan-tam & qan-tam & lapanak \\
\hline \multicolumn{3}{|l|}{ART CL:cylinder-one CL:cylinder-one perso} & perso \\
\hline \multicolumn{3}{|l|}{} & \\
\hline
\end{tabular}
[T0057: 019]
c. waa 7aklhtam lapanak 7aklhtam maqtili7
waa 7aklh-tam lapanak 7aklh-tam maqtili7
FOC CL:horizontal-one person CL:horizontal -one wild.animal
'It is half person, half wild animal.'
[MNB16: 50]

\footnotetext{
198 The only difference between lapának 'person' and lapanák 'people' is in the stress of the two words.
}

The six examples in (719) demonstrate the use of various classifiers that describe arrangements or measurements of the noun \(k\) 'iw 'tree'. All of these examples are of sortal classifiers with the exception of examples (e) and (f), which are mensurative. The examples in (a) and (b) use the general classifier laqa- and the cylindrical classifier qan-, respectively, in order to form the noun phrase 'two trees'. The classifier in (c), tij-, indicates 'types' of trees, and kinkain (d) indicates that the trees are pointy. \({ }^{199}\) The classifiers in examples (e) and (f)—puch'a- and maqxapa-, respectively-measure the noun by 'plots' and 'rolls'.
(719) a. laqa-t'uy k'iw

CL:general-two tree
'two trees'
b. qan-t'uy k'iw

CL:cylinder-two tree
'two trees'
c. tij-t'uy k'iw

CL:types-two tree
'two types of tree'
d. kinka-t'uy k'iw

CL:point-two tree
'two pointy trees'
e. puch'a-t'uy k'iw

CL:plot-two tree
'two plots of trees'
f. maqxapa-t'uy k'iw

CL:roll-two tree
'two rolls of firewood'

\footnotetext{
199 The prefix kinka- is a body part prefix. The use of parts as classifiers is discussed in section 7.3.2.
}

The examples in (720) form a set using the compound noun lht'aqalaa\(k^{\prime} i w\), meaning 'board'. In (a) the classifier 7aqx- simply indicates that the board is flat, while the classifiers in (b), (c), and (d) indicate the form of the division between the parts of the board. In (b) puumaqa-indicates that the parts all come from the same board, though it does not actually specify information about the shape of the division. The arrows in the drawing in Figure 5 indicate that the division can be in any part of the retangle. The classifier 7aqa- in example (c) indicates that the division in the board is vertical, as seen in the drawing in Figure 6. Finally, the classifier 7aklh- in (d) indicates that the division is horizontal, as seen in the drawing in Figure 7.
\(\begin{array}{lll}\text { (720) a. } & \begin{array}{l}\text { 7aqx-t'uy } \\ \text { CL:general-two }\end{array} & \text { lht'aqaala-k'iw } \\ \text { flat-tree }\end{array}\)
'two boards'
b. puumaqa-t'uy lht'aqalaa-k'iw

CL:pieces-two flat-tree
'two parts of a board' (cut from the same board)
c. 7aqa-t'uy lht'aqalaa -k'iw

CL:vertical-two flat-tree
'two vertical sections of board' (cut from the same board)
d. 7aklh-t'uy lht'aqalaa-k'iw

CL:horizontal-two flat-tree
'two horizontal sections of board' (cut from the same board)
Figure 5: puumaqa-


Figure 6: 7aqa-

Figure 7: 7aklh-


The examples in (721) are all based on the noun kapen 'coffee'. Here the classifiers in examples (a) through (e) are sortal, while the example in (f) is mensurative. The general classifier is shown in (a), laqat'ati kapen 'four coffee beans'. In (b) 7alh-referes to an immature plant that is just beginning to grow; in (c) 7aqa- refers to a mature plant that is already fully grown and ready for harvesting; in (d) máj7ata- refers to a branch of the plant, and in (e), muusindicates a cluster of the fruit of the plant. The classifier puи7en- in (f) measures the coffee beans by bandejas, which is the unit used to measure coffee (and other pourable, dry, non-count nouns) in the Mexican market place.
(721)a. laqa-t'ati kapen

CL:general-four coffee
'four coffee beans'
\(\begin{array}{lll}\text { b. } & \begin{array}{l}\text { 7alh-t'ati }\end{array} & \text { kapen } \\ & \text { CL:im.plant-four } & \text { coffee }\end{array}\),
'four immature coffee bushes'
c. 7aqa-t'ati kapen

CL:mat.plant-four coffee
'four mature coffee bushes'
d. makqata-t'ati kapen

CL:branch-four coffee
'four branches of a coffee bush'
e. muus-t'ati kapen

CL:cluster-four coffee
'four clusters of coffee beans'
f. puu7en-t'ati kapen

CL:bandeja-four café
'four bandejas of coffee beans'

\subsection*{7.3.2 Body Parts and Numeral Classifiers}

Body part prefixes \({ }^{200}\) can and do occur on numerals in HT. When this happens, the meaning is a literal combination of the body part and the number, as seen in the examples in (722). However, for any part-numeral construction, there is a corresponding analytical construction involving a classified numeral and a lexical body part, as seen in (723). I cannot say which expression is the more commonly occurring in natural speech, but I did find the analytical expressions to be more readily accepted during elicitation tasks.

\section*{(722) a. lakpuu-tam}
eye-one
'one eye' or 'one-eyed'
[MNB13: 13]
b. lakpuu-t'uy
eye-two
'two eyes'
[MNB13: 13]

\footnotetext{
\({ }^{200}\) The HT class of Body Part Prefixes is discussed in detail in Chapter 3 (section 3.2.1.8) and Chapter 4 (section 4.2.8).
}
c. ch'an-t'ati
foot-four
'four feet'
(723)a. laqa-tam laqchulh

CL:general-one eye
'one eye' or 'one-eyed'
b. laqa-t'uy laqchulh

CL:general-two eye
'two eyes'
c. laqa-t'ati ch'aja7

CL:general-four foot
'four feet'
According to Levy (2004), all of the classifiers in Papantla Totonac historically come from the class of parts, and the two classes (classifiers and parts) are semantically distinct. The situation in HT is not so cut-and-dried because there is very little clear semantic overlap between the classifiers and the HT body part prefixes, even though there is a great deal of homophony due to the sound symbolic phonemic alternations to which the body parts are subject. \({ }^{201}\) Thus, there are far more examples of dissimilarity between the HT classifiers and body parts than there are examples of similarity. The dissimilarities are shown in Tables 26, 27, and 28. Table 26 is a list of HT classifiers that bear no similarities (either homophonously or semantically) to any of the members of the parts class. The classifiers in Table 27 are homophonous with members of the class of body parts, but have different, unrelated meanings. Finally, the body part prefixes in Table 28 bear no similarities to any of the classifiers.

\footnotetext{
\({ }^{201}\) All of the body part prefixes that have \(\mathrm{a} / \mathrm{k} /\) or \(/ \mathrm{q} /\) and some of the parts that have a/R/ participate in phonemic alternations that are symbolic of size and/or affection, e.g. 7aq-~7ak'head' ~ 'small head' or 'head (spoken affectionately)' (Smythe Kung 2006c).
}

Table 26: Prefix is a Classifier, Not a Part
\begin{tabular}{|l|l|l|}
\hline Prefix & Part Meaning & Classifier Meaning \\
\hline 7aklh- & --- & horizontal division of N \\
\hline 7alh- & --- & immature plant; change of clothing \\
\hline 7aqa- & --- & mature plant; vertical division \\
\hline kilhmak- & -- & group or team of people \\
\hline maj7ata- & --- & branch \\
\hline maqa- & --- & long, thin, flexible N \\
\hline maqxapa- & --- & roll of N \\
\hline miix- & --- & day or week \\
\hline paq- & --- & trip \\
\hline piis- & --- & handful of N \\
\hline puch'a- & --- & plot of N \\
\hline puma- & --- & human \\
\hline puumaqa- & --- & part of N \\
\hline puu7en- & --- & bandeja of N \\
\hline puux- & --- & inside-out clothing \\
\hline qan- & --- & cylindrical N \\
\hline talaq- \(\sim\) tatanlaq- & --- & floor of a building; ford of a river \\
\hline tij- & --- & type of N \\
\hline
\end{tabular}

Table 27: Homophonous Prefix, but Different Meaning
\begin{tabular}{|l|l|l|}
\hline Prefix & Part Meaning & Classifier Meaning \\
\hline 7 aq- & head & \# times action of V completed \\
\hline laka- & body & place \\
\hline laq- & body & peso \\
\hline laqa- & body & general \\
\hline laqpuu- & face, eye & pile of N \\
\hline
\end{tabular}

Table 28: Prefix is a Part, Not a Classifier
\begin{tabular}{|l|l|l|}
\hline Prefix & Part Meaning & Classifier Meaning \\
\hline 7 ak- & head & --- \\
\hline ka- & nose, tip & --- \\
\hline lak- & body & --- \\
\hline lakpuu- & face, eye & --- \\
\hline muuntz'a- & forehead & --- \\
\hline tamp'us- & belly & --- \\
\hline tzoqot- & knee & --- \\
\hline
\end{tabular}

Though there are many semantic differences between the classifiers and the class of parts, there are some similarities, shown in Tables 29 and 30. Table 29 lists three instances in which phonologically identical or similar body parts and classifiers have transparently related meanings. Table 30 is a list of body parts which may be used as classifiers while still retaining their part meaning.

Table 29: Part \& Classifier Have Related Meanings
\begin{tabular}{|l|l|l|}
\hline Prefix & Part Meaning & Classifier Meaning \\
\hline \hline 7aqx- & shoulder, upper back & flat \\
\hline muusa-, muus- & groin & cluster \\
\hline puu-, puukilh- & innards, insides & gunny sack, abt 25 kg \\
\hline
\end{tabular}

Table 30: Part Can Be Used as Classifier
\begin{tabular}{|l|l|}
\hline Part Prefix & Part \& Classifier Meaning \\
\hline ch'an- & foot, paw \\
\hline kapii- & palate (of mouth) \\
\hline katu- & ear \\
\hline kik- & mouth, beak, edge \\
\hline kilhtu- & edge \\
\hline lakapaa- & head \\
\hline laqxtan & cheek, jaw \\
\hline laqxtii- & crown of the head \\
\hline mak- \(\sim\) maq- & hand \\
\hline maqaxtu- & elbow, corner \\
\hline
\end{tabular}
\begin{tabular}{|l|l|}
\hline muunti- & forehead \\
\hline paaka- & armpit, wing \\
\hline piixtu- & neck \\
\hline qaatu- & thigh \\
\hline staa- & back \\
\hline tampuu- & belly \\
\hline tan- & front of trunk of body \\
\hline tasa- & tooth \\
\hline tii- & tail, butt, hip \\
\hline
\end{tabular}

\subsection*{7.4 NUMERAL INFLECTION}

Numeral inflection includes a prefix to indicate '(an)other' (section 7.4.1) and a suffix to indicate 'each' (section 7.4.2).

\subsection*{7.4.1 (An)other 7a-}

A classified number can be prefixed with \(7 a\) - to indicate 'the other \# N,' '\# other N,' or 'another \# N' as seen below in (724). This prefix is likely related to the plural nominal prefix \(7 a\) - and the plural verbal prefix \(7 a-{ }^{202}\)
(724)a. 7apumakaw

7a-puma-kaw
CL:other-CL:human-ten
lapának
lapának
person
'another ten people', 'ten other people', 'the other ten people'
[MNB15: 38]
b. 7aqant'uy
k'íw
7a-qan-t'uy
k'iw
CL:other-CL:cylinder-two tree
'another two sticks', 'two other sticks', 'the other two sticks'
[MNB15: 38]
c. 7amíixkookíis

7a-miix-kaw-kiis
CL:other-CL:days-ten-five 'another 15 days'
[MNB15: 39]

\footnotetext{
202 Please see Chapter 4, section 4.1.1.1 and Chapter 3, section 3.1.1.5, respectively.
}
d. puus juu 7alaqatam wilhchan
puus juu 7a-laqa-tam wilhchan
well ART CL:other-CL:general-one day
'Well, the other day . . .'
[T0058: 001]

\subsection*{7.4.2 Each -(V)n}

When numbers are used to refer to a situation in which each person receives a quantity of the noun, the number is affixed with the plural nominal suffix \(-(V) n .{ }^{203}\) In this instance, the suffix has three allomorphs: \(-n,-a n\), and \(-i n\). If the number ends in a vowel, it is suffixed with \(-n\); if it ends in the consonant \(/ \mathrm{n} /\), it is suffixed with -an; and if it ends in a consonant other than \(/ \mathrm{n} /\), it is suffixed with -in. Examples are shown in (725).

\({ }^{203}\) See Chapter 4, section 4.1.1.2 for more information on this plural nominal suffix.


\subsection*{7.5 COUNTING UNITS OF DAYS}

In HT there are two ways to count units of days (i.e., 'days from now'). The first method involves the use of the adverbial classifier miix- that was described above in section 7.3.1.1 (see the discussion above examples (691), (692), and (693)). An additional example appears below in (726).
(726) miixchaaxan
miix-chaaxan
CL:days-six
'in 6 days'
[MNB 15: 34]
The second method for counting 'days from now' involves the use of the general classifier laqa- and the lexical noun wilhchan 'day', as seen below in (727). This construction seems to be replacing the miix-construction, given that it is more commonly used by the younger speakers ( \(<70\) years old) than the miixconstruction is. The laqa-\# wilhchan construction appears to be modeled on the construction that is used to express other units of time, such as 'months' and 'years', as seen in (728).
(727)a. laqat'ati wilhchan
laqa-t'ati wilhchan
CL:general-four day
'in 4 days'
\begin{tabular}{lll} 
b. & laqakiis & wilhchan \\
laqa-kiis & 7aklaqtz'inaan \\
& wilhchan & 7a-k-laqtz'in-a7-n \\
CL:general-five day & IRR-1SUB-see-FUT-2OBJ \\
& 'I'll see you in 5 days' &
\end{tabular}
(728) a. laqat'ati maalhkiyu7
laqa-t'ati maalhkiyu7
CL:general-four month
'in 4 months'
b. laqat'ati k'aata
laqa-t'ati k'aata
CL:general-four year
'in 4 years'
The primary means of expressing of the passage of days (i.e., 'days ago') is by the addition of the temporal clitic \(+c h(i c h)\) ALD to either of the two constructions listed above. The allomorph + chich occurs on the miix-construction,
which is shown in (729), and the allomorph + ch occurs on the laqa-construction, which is shown in (730).
(729)a. miixkiischich
miix-kiis+chich
CL:days-five+ALD
'five days ago'
[MNB15: 34]
(accepted by older speakers, rejected by younger speakers)
b. míxtujunchich
miix-tujun+chich
CL:days-seven+ALD
'one week ago', 'seven days ago’
[MNB15: 34]
(730)a. laqat'utuch wilhchán
laqa-t'utu+ch wilhchán
CL:general-three+ALD day
'three days ago.'
b. laqat'atich wilhchán
laqa-t'ati+ch wilhchán
CL:general-four+ALD day
'four days ago.'
In the laqa-construction, the copula jun 'be' can be used instead of the temporal clitic \(+c h\), as shown below in (731).
(731)a.
\begin{tabular}{lll} 
laqakiis & wilhchan & xajun \\
laqa-kiis & wilhchán & xa-jun \\
CL:general-five & day & PAST-be.IMPFV \\
'five days ago' & &
\end{tabular}
b. laqat'uy k'aata xajun
laqa-t'uy k'aata xa-jun
CL:general-two year PAST-be.IMPFV
'two years ago'
HT has lexemes to express the concepts of yesterday (kutanch ~ kutanchich), tomorrow (lhi7), and three days (t'uихаm). Note that when \(t^{\prime}\) uихат
occurs alone, it means 'in three days' or 'the day after tomorrow', but when it occurs with the temporal clitic + chich, it means 'three days ago' or 'the day before yesterday', as seen in (732).
(732) a. t'uuxam
'in three days', 'the day after tomorrow'
[MNB15: 30]
b. t'uxaamchich
t'uxaam+chich
three.days+ALD
'three days ago', 'the day before yesterday'
[MNB15: 34]

\section*{Chapter 8: Syntax}

This chapter discusses the syntax of Huehuetla Tepehua, including the following topics: the word order of the major clausal constituents (section 8.1), focus (section 8.2), interrogation or question formation (section 8.3), negation (section 8.4), comparative and superlative constructions (section 8.5), and complex clauses (section 8.6).

\subsection*{8.1 Word Order of Major Clausal Constituents}

In this section, I examine the word order of the major clausal constituents-subject, object, and verb-in HT. The order of the words in specific types of phrase are discussed in the relevant chapters on verbs, nouns, modifiers, adverbs, and numbers-chapters 3 through 7, respectively (e.g., the word order within a noun phrase is discussed in Chapter 4: Nouns and Nominal Morphology).

While in the field, I found that during elicitation, the word order of my probe clause-be it in Spanish or Tepehua-would influence the word order of the HT clause of my consultant's response. Thus, when I elicited the example shown in (733a) with SVO word order, my consultant gave me an HT clause with SVO word order. When I then tested all six possible word orders, my consultant accepted all of them and claimed there was no difference in meaning. The example is shown in its entirety below in (733).
(733) Variable WO
a. SVO
\(\begin{array}{lll}\text { [juu 7anu7 lapanak] }]_{\text {SUB }} & {[\text { jaantu 7uy }]_{\text {VERB }}} & \text { [juu qajin] } \text { libs } \\ \text { juu 7anu7 lapanak } & \text { jaantu 7u-y } & \text { juu qajin } \\ \text { ART that person } & \text { NEG eat-IMPFV } & \text { ART turtle } \\ \text { 'That person does not eat the turtle.' } & \text { [NVP99/MNB7: 469] }\end{array}\)
b. SOV
[juu 7anu7 lapanak] \(]_{\text {Sub }}[j u u \text { qajin] }]_{\text {OBJ }} \quad[j a a n t u 7 u y]_{\text {verb }}\)
c. VSO
[jaantu 7uy] \({ }_{\text {verb }}\) [juu 7anu7 lapanak] Sub [juu qajin] \({ }_{\text {OBJ }}\)
d. VOS
[jaantu 7uy] \({ }_{\text {Verb }}\) [juu qajin] \({ }_{\text {obs }}\) [juu 7anu7 lapanak] \({ }_{\text {Sub }}\)
e. OSV
[juu qajin] \(]_{\text {Obs }}\) [juu 7anu7 lapanak] \({ }_{\text {Sub }}\) [jaantu 7uy] \({ }_{\text {VERB }}\)
f. OVS
[juu qajin] \({ }_{\text {OBJ }} \quad\) [jaantu 7uy] \({ }_{\text {VERB }}\) [juu 7anu7 lapanak] \(]_{\text {SUB }}\)
'That person does not eat the turtle.' [NVP99/MNB7: 469]
The fact that all of the word orders shown in (733) are acceptable is problematic given that case is not marked on nouns in HT. However, given the pragmatics of the clausal constituents, it is not difficult to determine that juu 7 anu 7 lapanak 'that person' must be the subject and juu qajin 'the turtle' must be the object since it highly improbable that a turtle would eat a person. Word order is not needed to determine the syntactic roles in this example.

However, the pragmatics of clausal constituents are not always so enlightening, and it is easy to find a clause in which the meaning of the constituents does not pragmatically or culturally influence the assignment of syntactic roles. Two such clauses are shown below in (734). I want to point out that the clauses in (734) were volunteered by a speaker with whom I did not
perform word order tests; I elicited the verb and requested that he give me an example clause using the verb. In each of these examples, the verb saa 'hit' cooccurs with two nominals that are culturally equal. \({ }^{204}\) It is neither more nor less likely that John would hit a man than it is that a man would hit John. The clausal pragmatics do not help to determine the syntactic roles of subject and object; therefore a fixed word order is needed, and this word order is VSO.
(734) Fixed VSO WO
a. [saalhch] \({ }_{\text {VERB }}\) [juu lapanak] [jub \(^{\text {[juu Xiiwaan] }}{ }_{\text {Obs }}\)
saa-li+ch juu lapanak juu Xiiwaan hit-PFV+ALD ART person ART John
'The person hit John.'
[AVH00]
b. [lakasaamaa] \(]_{\text {VERB }} \quad[j u u \text { Xiiwaan }]_{\text {SUB }}\) [juu Piitalu7] \(]_{\text {OBJ }}\)
laka-saa=maa juu Xiiwaan juu Piitalu7
BODY-hit=lying(PFV) ART John ART Pedro
'John hit Pedro.'
[NVP05]
To further check the word order, I took the clause in (734a), and I rearranged its constituents to create six different clauses; I read all six HT clauses to a native speaker and asked him to translate them into Spanish. The results are shown in (735). When the verb was clause-initial, the clause-final nominal was interpreted to be the object, as seen in (735) a) and (735b). When the verb was in

\footnotetext{
\({ }^{204}\) By culturally equal, I mean that one nominal is not expected to hit the other, unlike the examples shown here in (i) and (ii) in which it is culturally expected that an adult would hit a child, but not that a child would hit an adult. Note that the word order is VSO in (i), but VOS in (ii).
(i) [tiitalaalh \(]_{\text {VERB }}\) [juu lapanak \(]_{\text {SUB }}\) [juu 7ixasqat'a \(]_{\text {OBJ }}\) tii-ta-laa-li juu lapanak juu 7ix-7asqat'a BUTT-INCH-can-PFV ART person ART 3POS-child 'The man hit his child on the bottom.'
(ii) \([\text { saanilh }]_{\text {VERB }} \quad[j u u ~ 7 i x t z i 7 \quad \text { Loolaa }]_{\text {OBJ }} \quad[j u u \text { lapanak }]_{\text {SUB }}\) saa-ni-li juu 7ix-tzi7 Loolaa juu lapanak hit-DAT-PFV ART 3POS-girl Lola ART person 'The man hit Lola's daughter.'
}
medial position, the clause-final nominal again was interpreted to be the object, as seen in (735c) and (735d). However, when the verb was in clause-final position, either nominal could be interpreted as the object, as seen in the pair of clauses shown in (735e) and (735f).
(735) a. VSO
\(\begin{array}{llll}{[\text { saalhch }]_{\text {Verb }}} & \text { [juu lapanak }]_{\text {SUB }} & \text { [juu Xiiwaan] }]_{\text {Obj }} & \\ \text { saa-li+ch } & \text { juu lapanak } & \text { juu Xiiwaan } & \\ \text { hit-PFV+ALD ART person } & \text { ART John } & \\ \text { 'The person hit John.' } & & \text { [WOQ] }\end{array}\)
b. VSO
[saalhch] \(]_{\text {Verb }} \quad[\text { juu Xiiwaan }]_{\text {Sub }} \quad\) [juu lapanak] \(]_{\text {Obj }}\)
'John hit the person.'
[WOQ]
c. SVO
[juu lapanak] \(]_{\text {Sub }} \quad[\text { saalhch }]_{\text {VERB }} \quad[j u u \quad \text { Xiiwaan }]_{\text {OBJ }}\)
'The person hit John.' [WOQ]
d. SVO

e. OSV/SOV
[juu lapanak] [juu Xiiwaan] [saalhch] \({ }_{\text {VERB }}\)
'John hit the person.'
'The person hit John.'
[WOQ]
f. SOV/OVS
[juu Xiiwaan] [juu lapanak] [saalhch] \(]_{\text {VERB }}\)
'John hit the person.'
'The person hit John.'
[WOQ]
In analyzing the statistical frequency of various word order possibilities in Huehuetla Tepehua, I looked only at clauses from natural discourse (i.e., clauses from the text database), and I did not include any of the examples that came from elicitation sessions. Of the 1393 entries in the text database, only 940 predications
were used to determine basic word order. The remaining entries were not used because they were clausal fragments, one-word questions or answers, nonverbal predicates (i.e., present tense predicate nominal or adjectival constructions that do not require a copula), incomprehensible utterances, or solitary discourse markers, or they were uttered entirely in Spanish.

Of the 940 usable clauses, 371 were intransitive and 569 were transitive. Since there were so few samples with which to work, I looked at word order in both transitive and intransitive clauses. Tables 31 through 34 describe the statistical frequency of the word orders that I found.

Table 31 shows the various possible word orders in an intransitive clause. The first column shows the possible word order combinations in an intransitive clause: V-only, VS, and SV. The second column shows the statistical frequency of all three types of intransitive clause. Of the 371 intransitive clauses \(61.7 \%\) consisted of a verb only. The subject followed the verb in \(30.5 \%\) of the clauses, and it preceded the verb in only \(7.8 \%\) of the clauses. The third column subtracts the V-only examples, and shows the frequency of the VS and SV examples. Of the 142 intransitive clauses that contain an overt subject, \(79.6 \%\) show the VS word order, while only \(20.4 \%\) show the SV word order. Thus, there is a strong tendency for a subject nominal to follow an intransitive verb.

Table 31: Word Order in Intransitive Clauses
Total intransitive clauses: 371
Total intransitive clauses with 1 argument: 142
\begin{tabular}{|l|l|l|}
\hline WO & \begin{tabular}{c} 
\% of Intransitive \\
Clauses
\end{tabular} & \begin{tabular}{c} 
\% of Intransitive Clauses \\
with 1 nominal argument
\end{tabular} \\
\hline V only & \(229 / 371=61.7 \%\) & \\
\hline V S & \(113 / 371=30.5 \%\) & \(113 / 142=79.6 \%\) \\
\hline S V & \(29 / 371=7.8 \%\) & \(29 / 142=20.4 \%\) \\
\hline
\end{tabular}

Table 32 shows the various possible word orders in a transitive clause, including verb-only clauses, clauses with just one other constituent (either the subject or the object), and clauses with two constituents (both the subject and the object). The first column shows all of the possible word order combinations in a transitive clause: V-only, VO, OV, VS, SV, SVO, VSO, OVS, VOS, OSV, and SOV. The second column shows the statistical frequency of all 11 types of transitive clause. Out of 569 transitive clauses of naturally occurring speech, \(45.7 \%\) consisted of a verb only. The next most frequently occurring transitive clause type consisted of a verb followed by an object; this word order occurred in \(31.1 \%\) of the sample. In comparison, none of the other word orders represented in Table 32 is statistically significant, and the frequencies of clauses with two overt arguments are extremely low. The contents of this table are broken down further in Tables 33 and 34 below.

Table 32: Word Order in Transitive Clauses
Total transitive clauses \(=569\)
\begin{tabular}{|l|l|}
\hline WO & \% Transitive Clauses \\
\hline V only & \(260 / 569=45.7 \%\) \\
\hline V O & \(177 / 569=31.1 \%\) \\
\hline O V & \(49 / 569=8.6 \%\) \\
\hline V S & \(28 / 569=4.9 \%\) \\
\hline S V & \(17 / 569=3 \%\) \\
\hline S V O & \(15 / 569=2.6 \%\) \\
\hline V S O & \(13 / 569=2.3 \%\) \\
\hline O V S & \(5 / 569=0.9 \%\) \\
\hline V O S & \(4 / 569=0.7 \%\) \\
\hline O S V & \(1 / 569=0.2 \%\) \\
\hline S O V & 0 \\
\hline
\end{tabular}

Table 33 shows the percentages of transitive clauses with one overt constituent in addition to the verb. The possible word order combinations are shown in the first column: VO, OV, VS, SV. The numbers in the second column are the same as the ones in Table 32 for these word orders; these percentages show the statistical frequency of these transitive clause types compared to all other transitive clause types. The third column shows the statistical frequency of transitive clauses with just two constituents compared to other two-constituent transitive clauses, of which there are 271. These numbers show that when just one argument co-occurs with the verb, it is usually the object, not the subject. As for the word order in these single-argument transitive clauses, there is a strong tendency towards the VO order, which occurs in \(65.3 \%\) of the clauses. The other orders occur much less frequently: the OV order occurs in only \(18.1 \%\) of the clauses, the VS order occurs in only \(10.3 \%\), and the SV order occurs in only \(6.3 \%\) of the clauses. The fact that there are many more two-constituent clauses
containing an object than there are clauses containing a subject is not surprising since, cross-linguistically, it is typically the case that a nominal representing new information is introduced into the discourse as an object.

Table 33: WO in Transitive Clauses with One Additional Constituent
Total transitive clauses: 569
Total transitive clauses with 1 argument: 271
\begin{tabular}{|l|l|l|}
\hline WO & \begin{tabular}{l} 
\% of Transitive \\
Clauses
\end{tabular} & \begin{tabular}{l} 
\% of Transitive \\
Clauses with 1 \\
Nominal Argument
\end{tabular} \\
\hline V O & \(177 / 569=31.1 \%\) & \(177 / 271=65.3 \%\) \\
\hline O V & \(49 / 569=8.6 \%\) & \(49 / 271=18.1 \%\) \\
\hline V S & \(28 / 569=4.9 \%\) & \(28 / 271=10.3 \%\) \\
\hline S V & \(17 / 569=3 \%\) & \(17 / 271=6.3 \%\) \\
\hline
\end{tabular}

Table 34 shows the percentages of transitive clauses with two overt arguments; of the 569 transitive clauses, only 38 contain two overt arguments. The possible word order combinations are shown in the first column: SVO, VSO, OVS, VOS, OSV, and SOV. The numbers in the second column are the same as the ones in Table 32 for these word orders; these percentages show the statistical frequencies of these transitive clause types compared to all other transitive clause types. The third column shows the statistical frequencies of only transitive clauses with two additional arguments. Again there is a strong tendency for the object to follow the verb, as seen in the SVO (39.5\%), VSO (34.2\%), and VOS (10.5\%) orders; the object precedes the verb in the OVS order in \(13.2 \%\) of the clauses. Note that of the two possible verb-final word orders, OSV occurs only once and SOV does not occur at all.

Table 34: Major Constituent WO in Transitive Clauses
Total transitive clauses: 569
Total transitive clauses with 2 arguments: 38
\begin{tabular}{|l|l|l|}
\hline WO & \% Transitive Clauses & \begin{tabular}{l} 
\% Transitive Clauses \\
with 2 Nominal \\
Arguments
\end{tabular} \\
\hline S V O & \(15 / 569=2.6 \%\) & \(15 / 38=39.5 \%\) \\
\hline V S O & \(13 / 569=2.3 \%\) & \(13 / 38=34.2 \%\) \\
\hline O V S & \(5 / 569=0.9 \%\) & \(5 / 38=13.2 \%\) \\
\hline V O S & \(4 / 569=0.7 \%\) & \(4 / 38=10.5 \%\) \\
\hline O S V & \(1 / 569=0.2 \%\) & \(1 / 38=2.6 \%\) \\
\hline S O V & 0 & 0 \\
\hline
\end{tabular}

After considering the statistics shown above in Tables 31 through 34, it is clear that, (i) given the high percentage of clauses in which the only major constituent is a verb, the other constituents (i.e., the subject and object) are not obligatory in HT; (ii) when there is only one nominal constituent (be it subject or object) there is a strong tendency for it to follow the verb, (i.e., there is a strong tendency for the verb to occur in a non-final position in the clause with an overt nominal); (iii) there is also a strong tendency for the object to follow the verb; and (iv) when there are two nominal constituents in addition to the verb, there is a strong tendency for the object to occur in clause-final position.

Pragmatically neutral clauses collected during elicitation follow the VSO word order; word order tests indicate that both VSO and SVO are dominant orders; and statistical analysis indicates a slight preference for the SVO word order, followed closely by the VSO order. Thus, HT has VX word order, where X may be a subject or an object. Furthermore, it is clear that HT is strongly influenced by pragmatics, including focus, which is the topic of the following section (8.2). In the rest of this section, I first discuss examples of the five three-
constituent word orders found in HT natural discourse, then I examine the order of pronouns in HT discourse.

The example in (736) shows the most statistically frequent narrative word order: SVO. This story is about a poor man who tries to sell pig excrement in a neighboring town. This is the first reference in the text to the townspeople juu lapanak. Pragmatically, word order is not necessary to disambiguate the grammatical roles.
(736) SVO
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
pero [juu \\
pero juu \\
but ART
\end{tabular}} & \multirow[t]{3}{*}{lapanak \(_{\text {SUB }}\) lapanak people} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{[tzukulhch tzuku-li+ch begin-PFV+ALD}} & \multirow[t]{3}{*}{\begin{tabular}{l}
7utaynin] \({ }_{\text {VERB }}\) \\
7utay-nin smell-PL.INF
\end{tabular}} \\
\hline & & & & \\
\hline & & & & \\
\hline [juu xaaka & miti juu & 7ani7 & x7ilht'i & \(\left.\mathrm{p}^{\prime} \mathrm{aax}\right]_{\text {OBJ }}\) \\
\hline juu xa-7ak & amiti juu & 7ani7 & x-7ilht'i & p'aax \\
\hline ART IPOS-0 & dor ART & um & 3POS-excr & ent pig \\
\hline
\end{tabular}
[T0055: 023-24]
The example in (737) shows the second most frequent narrative word order: VSO. This narrative is about a flood that occurred in the village the year before the time of telling. Once again the pragmatics of the clause influence the determination of the syntactic roles of the constituents.
(737) VSO
\begin{tabular}{lclll}
{\([\text { [tamaqatz'anqaa }]_{\text {VERB }}\)} & [juu & lapanak \(]_{\text {SUB }}\) & [juu & xlaktaxtoqta] \({ }_{\text {OBJ }}\) \\
ta-maqatz'anqaa & juu & lapanak & juu & x-lak-taxtoqta \\
3PL.SUB-lose(PFV) & ART & people & ART & 3POS-PL-thing \\
'The people lost their things.' & & & [T0018: 006]
\end{tabular}

The clause in example (738) shows the third most frequent word order: OVS. Again, there is only one possible interpretation of the grammatical roles; while a donkey can take two sacks, the reverse is not possible. Furthermore, the
sacks are more important to the context than the donkey because they illustrate the quantity of pig excrement that the poor man took to sell.
(738) OVS

The example in (739) shows the fourth most frequent word order: VOS. This narrative tells how the Tepehua people came to live in Huehuetla. Again, word order is not necessary to determine the grammatical roles of the constituents because people can wash clothes, but clothes cannot wash people.
(739) VOS
\begin{tabular}{lllcl} 
maa & {\([\) laay } & katamaqpaya7] \(]_{\text {VERB }}\) & [juu & xpuumpu7an] \(]_{\text {OBJ }}\) \\
maa & laa-y & ka-ta-maqpa-ya7 & juu & x-puumpu7-7an \\
RPT & can-IMPFV & IRR-3PL.SUB-wash-FUT & ART & 3POS-clothes-PL.POS
\end{tabular}
[juu lapanak] \({ }_{\text {Sub }}\)
juu lapanak
ART people
'The people would be able to wash their clothes.'
The example in (740) shows the only textual example of the OSV word order. I should note that when I transcribed and translated this text with the help of don Nicolás, he claimed that this clause was somewhat awkward. Furthermore, the pragmatics of the constituents once again influence the determination of their syntactic roles.
(740) OSV
\begin{tabular}{ll}
\begin{tabular}{ll} 
[juu xburruu \(]_{\text {OBJ }}\) & [juu yuuch] \(]_{\text {SUB }}\) \\
juu x-burruu
\end{tabular} \\
\begin{tabular}{lll} 
ART 3POS-donkey yuuch
\end{tabular} & \begin{tabular}{l} 
ART PRN.3SG
\end{tabular} \\
\begin{tabular}{lll} 
tzakaach & maa & maak'uk'aa \(]_{\text {VERB }}\) \\
tzakaa+ch & maa & maak'uk'aa \\
heavily+ALD & RPT & load(PFV)
\end{tabular}
\end{tabular}
'He heavily loaded his donkey.'
[T0055: 088]
With respect to the order of pronouns, elicited examples indicate that they may occur pre- or post-verbally, as seen in the examples below in (741).
(741)a. [juu yuuch] \(]_{\text {SUB }}\) [kaana7] \(]_{\text {VERB }}\) [juu sabat] \(]_{\text {ADV }}\) juu yuuch ka-7an-a7 juu sabat ART PRN.3SG IRR-go-FUT ART Saturday
b. [kaana7] \(]_{\text {VERB }}\) [juu yuuch] \(]_{\text {SUB }}\) [juu sabat \(]_{\text {ADV }}\)
c. [juu sabat] \(]_{\text {ADV }}\) [kaana7] \(]_{\text {VERB }}\) [juu yuuch \(]_{\text {SUB }}\) 'He will go on Saturday.'
[PDLMA05]
Statistical analysis of the pronouns occurring in natural discourse is summarized in Tables 35 through 38. Table 35 shows the occurrence of all pronouns, including those acting as subjects, objects, and pronominal predications. Out of 107 total pronominal clauses, the pronoun precedes some other clausal element (be it a verb, copula, noun, adjective, adverb, or relative clause) in \(61.7 \%\) of them. In \(28 \%\) of the clauses, the pronoun followed some other clausal element, and \(10.3 \%\) of the clauses consisted of a pronoun only. These percentages show a strong tendency for the pronoun to precede the predicate.

Table 35: Pronominal Order (Pronoun \(=\) Predicate, Subject, or Object \()\)
\begin{tabular}{|l|l|}
\hline WO & Total Clauses =107 \\
\hline Prn X & \(66 / 107=61.7 \%\) \\
\hline X Prn & \(30 / 107=28 \%\) \\
\hline Prn Only & \(11 / 107=10.3 \%\) \\
\hline
\end{tabular}

Table 36 shows the word order of pronouns acting in the grammatical role of subject of a verb (but not a copula). When acting as the subject, the pronoun precedes the verb in \(55.6 \%\) of the clauses, and it follows the verb in \(44.4 \%\) of the clauses. Here, the difference in statistical frequencies is not as dramatic as that found in Table 35, though there is a slight tendency for the pronoun to occur preverbally.

Table 36: Pronominal Order when Pronoun is Subject
\begin{tabular}{|l|l|}
\hline WO & Total Clauses =27 \\
\hline Prn V & \(15 / 27=55.6 \%\) \\
\hline V Prn & \(12 / 27=44.4 \%\) \\
\hline
\end{tabular}

However, the opposite word order is found when the pronoun acts as object of the clause. Table 37 below shows the word order frequencies when the pronoun is the object of a transitive verb. It precedes the verb in only \(43.7 \%\) of the clauses, and it follows the verb in \(56.3 \%\) of them. Thus, when the pronoun is an object, there is a slight tendency for it to follow the verb.

Table 37: Pronominal Order when Pronoun is Object
\begin{tabular}{|l|l|}
\hline WO & Total Clauses =16 \\
\hline Prn V & \(7 / 16=43.7 \%\) \\
\hline V Prn & \(9 / 16=56.3 \%\) \\
\hline
\end{tabular}

Finally, the statistical word order frequencies of pronominal predications are shown in Table 38. In these clauses, the pronoun precedes the other clausal element (which may be a noun, adjective, adverb, relative clause, or copula) in \(83 \%\) of the examples, while it follows the other element in only \(17 \%\). Thus, there is a strong tendency for the pronoun to precede its predication when the predication is nonverbal.

Table 38: Pronominal Order in Nonverbal Pronominal Predications and Copular Constructions
X = noun, adjective, adverb, relative clause, copula
\begin{tabular}{|l|l|}
\hline WO & Total Clauses \(=\mathbf{5 3}\) \\
\hline Prn X & \(44 / 53=83 \%\) \\
\hline X Prn & \(9 / 53=17 \%\) \\
\hline
\end{tabular}

The word order of the major constituents in a matrix clause is summarized as follows: when there is neither context nor pragmatic cues (e.g., elicited data), the volunteered word order is VSO, and the order SVO is readily accepted by speakers. All other orders are problematic in such situations. However, in texts that have ample context and pragmatic cues, the order SVO is somewhat more
frequent than the order VSO, and all other word orders (except SOV) are possible, though considerably less frequent than SVO or VSO.

\subsection*{8.2 Focus}

Huehuetla Tepehua has two strategies by which a clausal element may be focused. I use the term 'focus' here to mean prominence rather than contrastive emphasis. The first strategy involves syntactic focus constructions, specifically left-dislocation and clefting (section 8.2.1). The second strategy is morphosyntactic, involving the use of the focus particle waa (section 8.2.2).

\subsection*{8.2.1 Focus Constructions}

In HT, when a clausal constituent is focused, it occurs in the clause-initial position. Several different constructions in HT may be analyzed as focus constructions, including left-dislocation, topicalization, clefting, and answers to questions. The first three constructions are addressed in this section, and focused answers are discussed in sections 8.2 .2 and 8.3 below.

In an HT left-dislocation construction, a focused noun or noun phrase occurs in the clause initial position, and it is co-referential with a pronoun in the matrix clause. Examples are shown in (742); here the clause-initial noun (phrase) is enclosed in square brackets, and subscripted \(<\mathrm{i}>\) indicates co-reference. In all of the examples of left-dislocation that I have found, the clause-initial noun (phrase) is co-referential with the subject of the clause. I have found no examples in which it is co-referential with the object of the clause.
a. [juu xmaalhka]i, yuuch \(_{i}\) juu niimaa juu x-maalhka yuuch juu niimaa ART 3POS-measure PRN.3SG ART this
'Its measurement, it is this.' \({ }^{205}\)
[T0069: 055]
b. puus, [juu 7anu7 luw] \(]_{i}\), maa yuuch \(_{\mathbf{i}}\) laktiitaymay
puus, juu 7anu7 luw, maa yuuch lak-tiitayma-y well ART that snake RPT PRN.3SG PL-chase-IMPFV
juu t'akuunin maa papaaninch juu mati7 sasqat'a7an juu t'aku7-nin maa papa7-nin+ch juu mati7 s-7asqat'a-7an ART woman-PL RPT man-PL+ALD REL none 3POS-child-PL.POS 'Well, that snake, it chases women and men who have no children.'
[T0003: 005-6]
\(\begin{array}{llll}\text { c. } & \begin{array}{ll}\text { juu laay } & \text { ch'apay } \\ \text { juu laa-y } & \text { ch'apa-y }\end{array} & \begin{array}{l}\text { juu } \\ \text { juu }\end{array} & \text { luw } \mathrm{i} \\ \text { ART can-IMPFV }\end{array}\),
\(\begin{array}{lllll}\text { yuuch }_{i} & \text { juu } & \text { kintata7, } & \text { juu tam tapopaan } \\ \text { yuuch } & \text { juu } & \text { kin-tataa } & \text { juu tam tapopaan }\end{array}\)
PRN.3SG ART 1POS-old.man ART one male.witch
'The one who can grab the snake, he is an old man, a witch.'
[T0003: 024-025]
In an HT topicalized construction, a noun, noun phrase, or pronoun that is the topic of the clause occurs in clause-initial position. When the topic is also the subject of the matrix clause, it is separated from the rest of the clause by the complementizer nii, as seen below in the examples in (743). I assum that nii intervenes between the subject and the verb in order to distinguish a topicalized construction from a normal clause with SVO word order. In these examples, the topicalized element is enclosed in square brackets, and the complementizer appears in bold type.
\({ }^{205}\) I would like to thank Jim Watters for suggesting this analysis to me.
(743) Subject Topicalization
a. 7entons [juu 7anuuch purowii xkumwarii]

7entons juu 7anu7+ch purowii x-kumwarii
then ART that+ALD pitiful 3POS-compadre
\(\begin{array}{lllll}\text { nii } & \text { maa } & \text { naa } & \text { waa } & \text { xkilhpatiych } \\ \text { nii } & \text { maa } & \text { naa } & \text { waa } & \text { x-kilhpati-y }+ \text { ch }\end{array}\)
COMP RPT EMP FOC PAST-be.poor-IMPFV+ALD
'Well, that pitiful compadre, he was very poor.'
[T0055: 010-11]
b. [juu maqtili7] nii waa xlhii7an juu p'aax
juu maqtilii nii waa x-lhii7an juu p'aax
ART wild.animal COMP FOC PAST-take(IMPFV) ART pig
'The wild animal, it would take pigs.'
[T0020: 006]
c. [waa yuuch] nii lhuuch kalhii7ana7 juu k'iw
waa yuuch nii lhuu+ch ka-lhii7an-a7 juu k'iw
FOC PRN.3SG COMP much+ALD IRR-take-FUT ART wood
'This one, it will take a lot of wood.'
[T0069: 276]
I have found only one clear instance in which an object is topicalized, shown below in (744). Here there is no morphosyntactic indicator of topicalization; instead intonation in the form of a pause after 7ani7, as well as object-initial word order, indicates that the object has been topicalized.
(744) Object Topicalization
\(\begin{array}{lllll}\text { [yuuch } & \text { juu } & \text { 7ani7], } & \text { kch'uk'upaklht'iyuta } & \text { p'ulan } \\ \text { yuuch } & \text { juu } & \text { 7ani7 } & \text { k-ch'uk'u=paklht'iyu-ta } & \text { p'ulhnan } \\ \text { PRN } & \text { ART } & \text { this } & \text { 1SUB-cut.open=XXX }{ }^{206} \text {-PF } & \text { first }\end{array}\)
'This one here, I cut open first.'
[T0069: 057]
Finally, a subject, object or adverb may be clefted in HT. The clefted element occurs in clause-initial focus position, and it is followed by the main predication in the form of a relative clause. Examples of clefted subjects are shown in (745), examples of clefted objects are shown in (746), and examples of

\footnotetext{
\({ }^{206}\) XXX indicates that the meaning of this morpheme is not know. Please see the List of Abbreviations at the beginning of this grammar.
}
clefted adverbs are shown in (747). In these examples, the relative clause is enclosed in square brackets, and subscripted \(<\mathrm{i}>\) indicates co-reference between the focused element and the following relative clause. Note that in all of the examples in (746), the clefted object is preceded by the focus particle waa, which is discussed in the next section.
(745) Cleft Constructions Relativized on a Subject
\(\begin{array}{lllll}\text { a. maa yuuch } & \text { [juu laay } & \text { kalhii7alh } & \text { ma7ata]RC } \\ \text { maa yuuch } & \text { juu laa-y } & \text { ka-lhii7an-li } & \text { maqata }\end{array}\) RPT PRN.3SG REL can-IMPFV IRR-take-PFV far ' He is the one [who can take it far away].'
[T0003: 026]
b. 7ani7, yuuch \({ }_{\mathbf{i}}\) [juu palaych lhiijun] \(\mathrm{RC}_{\mathbf{i}}\) 7 ani7 yuuch juu palay+ch lhiijun this PRN.3SG REL better+ALD order(IMPFV) 'This, it is [what makes it (a snake bite) better].'
[T0009: 013]
(746) Cleft Constructions Relativized on an Object
a. 7anu7 p'in \(\quad\) [juu 7ulh lakatz'unin] \(\mathrm{RC}_{\mathbf{i}}\) 7anu7 p'in juu 7u-li lakatz'unin that salsa REL eat-PFV a.little 'She ate a little of that salsa.'
Literally: 'It was that salsa [that she ate a little bit of].'
[T0069: 229]
b. naach waa yuuch \(_{i}\)
naa + cch waa yuuch
EMP+ALD FOC PRN.3SG
\begin{tabular}{llll} 
[juu & x7amaapalhkan & juu & lakalhiisaan] \(R_{i}\) \\
juu & x-7a-maapala-kan & juu & laka-lhiisaan \\
REL & PAST-PL.INO-pay-INS(IMPFV) & ART & PREP-gig \\
'It is & [what they were paid at (music) & gigs].
\end{tabular}
c. waa yuuch \(_{i}\) wachu7 [juu talakask'inpalay] \(\mathrm{RC}_{\mathbf{i}}\)
waa yuuch wachu7 juu ta-lakask'in-pala-y
FOC PRN.3SG also REL 3PL.SUB-want-REP-IMPFV
'It, also, is [what they want].'
[T0066: 045]
d. waa lhiiway \({ }_{i}\) [juu \(7 u_{\text {upaa }}\) RC \(_{\mathbf{i}}\)
waa lhiiway juu 7u-paa
FOC meat REL eat-REP.PFV
'Meat is [what she ate again].'
[T0069: 226]
e. waa lhiiwaych \(_{i}\) [juu x7uy] \(\mathrm{RC}_{\boldsymbol{i}}\)
waa lhiiway+ch juu x-7u-y
FOC meat+ALD REL PAST-eat-IMPFV
'Meat is [what it would eat].'
[T0020: 040]
(747) Cleft Constructions Relativized on an adverb
a. Temporal Adverb
\(7^{7 a k s c h}{ }_{\mathbf{i}}\) [juu xalaktantamaakxtukan] \(\mathrm{RC}_{\mathbf{i}}\)
7aks+ch juu xa-lak-tan-tamaakxtu-kan when+ALD REL PAST-PL-TORSO-take.out-INS(IMPFV)
'Then is [when they were taken out.]'
'It was then [that they were taken out.]'
[T0063: 078]
b. Manner Adverb
puus kaa 7aqtz'iyanch chunch \(_{\text {i }}\)
puus kaa 7aqtz'iyan + ch chun+ch
well BLV always+ALD like.so+ALD
[juu 7uuniit'a juu 7uxint'i] \(\mathrm{RC}_{\mathbf{i}}\)
juu jun-niita juu 7uxint'i
REL be(2SUB)-PF(2SUB) ART PRN.2SG
'Well, I think like that is [how you have always been].'
'Well, I think it is like that [that you have always been].' [T0054: 028]

\section*{d. Manner Adverb}
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
puus \\
puus \\
well
\end{tabular}} & \multicolumn{2}{|l|}{chunch \(_{\text {i }}\)} & [juu noonkan \\
\hline & \multicolumn{2}{|l|}{chun+ch} & juu najun-kan \\
\hline & like.s & & REL say-INS(IMPFV) \\
\hline juu & 7 anch & juu & lakilaqachaqan] \(\mathrm{RC}_{\mathbf{i}}\) \\
\hline juu & 7anch & juu & laka-ki-laqachaqan \\
\hline & there & ART & PREP-1POS-village \\
\hline
\end{tabular}
'Well, like that is [how they talk there in my village].'
'Well, it is like that [that they talk in my village].'
[T0003: 033]

\section*{d. Locative Adverb}
\(7^{\text {ani7 }} \mathbf{i}_{\mathbf{i}}\) [juu xatz'o7a]RC \(\mathbf{i}_{\mathbf{i}}\)
7 ani7 juu xa-tz'o7-7a
here REL PAST-mark-IMPFV
'Here is [where you marked it].'
'It is here [that you marked it].' [T0069: 108]

\section*{e. Locative Adverb}
\begin{tabular}{llllll} 
waa & 7anchach \(_{\mathbf{i}}\) & [juu & seqjun & juu & maqtili7] \(R_{i}\) \\
waa & 7anch \(_{\mathbf{i}}\) \\
FOCh & juu & seqjun & juu & maqtili7
\end{tabular}
'There is [where the wild animal hides.]'
'It is there [that the wild animal hides.]'

\subsection*{8.2.2 Focus Particle wa}

The HT focus particle waa precedes a pragmatically emphasized element in a clause without directly influencing the element's location within the clause. It serves to highlight or draw attention to a clausal constituent. It most commonly occurs before a verb, before a predicate nominal or adjective, and before the answer to a wh-word question. However, it also occurs before other clausal elements, as will be seen below.

The most obvious place in which one finds a focused element is in the answer to a \(w h\)-word question. The focused constituent of the answer is the part of the clause or phrase that plays the same grammatical role as the \(w h\)-word in the corresponding question, as seen in the examples below in (748) through (751). \({ }^{207}\) These answers are actually doubly focused because they are preceded by waa and they occur in clause-initial focus position. In the question in (748a), one person asks another where he was. The answer in (748b), lak José Pollo 'at José Pollo's

\footnotetext{
207 Please see Section 8.3 of this chapter for more information on interrogative structures.
}
place', is preceded by the focus particle waa, which appears in bold type. In this question and answer pair, the \(w h\)-word of the question corresponds to the focused locative adverb of the answer.
(748) a. tanchach juu xt'anuun?
tanch + ach juu x-tanuun
where+ALD REL PAST-inserted(IMPFV)
'Where were you?'
[T0066:022]
b. waa lak José Pollo
waa laka-José Pollo
FOC PREP-José Pollo
'At José Pollo's [place].'
[T0066: 024]
In the question in (749a), the speaker asks what someone did. In the answer in (749b), the predicate that answers the question is preceded by the focus particle waa.
(749)a. 7entons taas t'aalaaych juu yuuch?

7entons taas t'aa-laa-y+ch juu yuuch
then how COM-can-IMPFV+ALD ART PRN.3SG
'Then what did he do?'
[T0054: 001]
b. waa maaqeswaalhch juu 7atzi7
waa maa-qeswaa-li+ch juu 7atzi7
FOC CAUS-be.scared-PFV+ALD ART girl
'He scared the girl.'
[T0054: 003]
In the question in (750a), one compadre asks another where he went. The second compadre's answer in (750b) does not actually answer where he went, but rather what he did; again the predicate that answers the question is preceded by the focus particle waa.
(750) a. tanch xak'ilaay, jii kumwarii
tanch xa-ki-laa-y jii kumwarii
where PAST-RT(2SUB)-can-IMPFV VOC compadre
\begin{tabular}{llll} 
maa & juuniych & juu & xkumwarii \\
maa & jun-ni-y+ch & juu & x-kumwarii \\
RPT & say-DAT-IMPFV+ALD & ART & 3POS-compadre \\
""Where did you go, compadre?" his compadre says to him.'
\end{tabular}
[T0055:006-7]
b. waa kist'aa juu x7ilht'i p'aax
waa k-ki-st'aa juu x-7ilht'i p'aax
FOC 1SUB-RT-sell(PFV) ART 3POS-excrement pig
'I went and sold pig excrement.'
[T0055: 008]
The question in (751a) asks what a group of people is doing. The answer in (751b) has two parts: first the group answers 'nothing', but then the group answers the question with a predication. The focus particle precedes the predicate, the second part of the answer.
(751)a. tiijuuch juu nawiiyat'it?
tiijuu + ch juu nawii-y-at'it
what+ALD REL do-IMFPV-2PL.SUB
'What are you all doing?'
[T0055: 058]
b. jaantuch tu7u7, waa k7astaknantawch
jaantu+ch tu7u7 waa k-7astaknan-ta-w+ch
NEG+ALD something FOC 1SUB-rest-PF-1PL.SUB+ALD
'Nothing, we are resting.'
[T0055: 059]
Though most answers to wh-word questions include the focus particle waa, it is not a requirement of the grammar, as can be seen in the examples below in (752) and (753). Even though the focus particle does not occur in the clause in (752b), the adverbial answer to the question does occur in the clause-initial focus position.
```

(752) a. tanch jii kinkiin?
tanch jii kin-kiin
where VOC 1POS-aunt
'Where, aunt?'

```
[T0054: 035]
b. 7ani7 kimaaqeswaat'i

7 ani7 ki-maa-qeswaa-t'i
here 1OBJ-CAUS-be.scared-2SG.SUB.PFV
'Here you scared me.'
[T0054: 036]
\begin{tabular}{lllll} 
(753) a. & tiis & junkanch & juu & yuuch? \\
& tiis & jun-kan+ch & juu & yuuch \\
& how & say-INS(IMPFV)+ALD & ART & PRN.3SG \\
& 'What is this one called?' & &
\end{tabular}
[T0066: 123]
b. xaachoola7
xaa-choola7
IPOS-turkey
'The turkey.'
[T0066: 124]
The use of the focus particle waa is not limited to focusing the answer of a wh-word question. It can be used to pragmatically focus any constituent or adjunct in any declarative clause that introduces new information or a new idea to the discourse. When it appears in a clause that is not an answer to a question, it precedes the clausal element in situ; that is, a focused clausal constituent is not required to occur in clause-initial focus position in this construction if it is not the answer to a question. The following examples demonstrate that waa may focus in situ a predicate (754); a noun or a predicate nominal (755), a predicate adjective (756), an adverb (757), a prepositional phrase (758), and a number (759).
(754) Predicate Focus
a. waa takiknawiin
7uu waa lajk'ik'nawii?
waa ta-kiknawii-n 7uu waa lak-kiknawii
FOC 3PL.SUB-flatter(PFV)-2OBJ or FOC PL-flatter(PFV)
'Did they flatter you or did you flatter them?'
[T0066:051]
b. juu 7aks maa waa xminta pumatam lapanak juu 7aks maa waa x-min-ta puma-tam lapanak ART then RPT FOC PAST-come-PF CL:human-one person 'Then one person had come . . ' [T0022: 035]
d. kalaalh nii waa t'amak'oomp'ut'unch ka-laa-li nii waa tamakajun-putun+ch IRR-can-PFV COMP FOC stay(2SUB)-DESID(IMPFV)+ALD 'You can if you want to stay.' [T0055: 065]
e. entonces juu Sireenaa waa talhqamalhchi entonces juu Sireenaa waa talhqaman-li+ch then ART goddess FOC get.angry-PFV+ALD 'Then the goddess got angry.'
[T0057: 084]
(755) Nominal Focus
a. maa waa t'aku7
maa waa t'aku7
RPT FOC woman
'It was a woman.'
[T0020:029]
b. maa waa xaakanit lapanak
maa waa xaa-7akanit lapanak
RPT FOC IPOS-flesh person
'It was human flesh.'
[T0020: 037]
c. waa xukxpu7?
waa \(x\)-7ukxpu7
FOC 3POS-face
'Her face?'
d. pero waa xch'ajaach chiila7
pero waa \(x\)-ch'aja7+ch chiila7
but FOC 3POS-foot+ALD chicken
xjuuniita juu xch'aja7
x-jun-niita juu x-ch'aja7
PAST-be-PF ART 3POS-foot
'But her feet were chicken feet.'
(756) Adjectival Focus
a. waa lakt'ikt'ika7 juu waakax
waa lakt'ikt'i-ka7 juu waakax
FOC small-JST ART cow
'The cows were still small.'
[T0020:008]
b. juntaa waa puut'ikst'i laktalhpa
juntaa waa puut'ikst'i lak-talhpa
where FOC narrow PL-hill
'Where the hills are narrow.'
[T0022: 052]
c. waa lakatz'unin juu maqalhqamaan.
waa lakatz'unin juu maqalhqamaa-n
FOC few ART Tepehua-PL
'The Tepehua people were few.'
[T0057: 055]
d. porque juu 7 ani 7 laqachaqan waa lakat'ikst'i,
porque juu 7 ani 7 laqachaqan waa lakat'ikst'i, because ART here village FOC small
xjuuniita lakat'ikst'i
x-jun-niita lakat'ikst'i
PAST-be-PF small
'Because the town here was small, it was small.'
[T0057: 086]
(757) Adverbial Focus
a. Locative Adverb
\(\begin{array}{llll}\text { maa } & \text { xt'oonpalay } & \text { juu } & \text { maqtili7 } \\ \text { maa } & \text { x-t'ajun-pala-y } & \text { juu } & \text { maqtili7 } \\ \text { RPT } & \text { PAST-be-REP-IMPF } & \text { ART } & \text { wild.animal }\end{array}\)
juu waa niinch laqachaqan, taa wii xkaan
juu waa niin+ch laqachaqan taa wii xkaan
REL FOC near+ALD town where sitting(IMPFV) water
'There was an animal that was near the town, by the water.'
[T0020:002]
b. Non-ideophonic Manner Adverb
\begin{tabular}{llllll} 
waa & chunch & 7anawiit'i, & tachu & nawiiy & sexta \\
waa & chunch & 7a-nawii-t'i & tachu & nawii-y & sexta \\
FOC & like.so & IRR-do-2SG.SUB.PFV & how & do-IMPFV & guitar
\end{tabular}
'Do it like this, the way you do the sexta guitar.'
[T0066: 134]
c. Ideophonic Manner Adverb
\begin{tabular}{lllll} 
waa & xk'ululu & xukxumaa & juu & xkaan \\
waa & xk'ululu & x-7ukxu=maa & juu & xkaan \\
FOC & ID:trickle & PAST-go.down=lying(PFV) & ART & water
\end{tabular}
'The water trickled down.'
[T0057: 059]
d. Temporal Adverb
waa tz'iisin 7akminaaw
waa tz'iisin 7a-k-min-a7-w
FOC early IRR-1SUB-come-FUT-1PL.SUB
'We will come early.'
[T0069: 241]
(758) Prepositional Focus
a. maa xta7amaqpanan juu papaanin
maa x-ta-7a-maqpa-nVn juu papa7-nin
RPT PAST-3PL.SUB-PL.INO-wash-INO(IMPFV) ART men-PL
juu kaa waa lakak'iwin xtat'ajun
juu kaa waa laka-k'iw-in x-ta-t'ajun
REL BLV FOC PREP-tree-PL PAST-3PL.SUB-live(IMPFV)
'The men who were living in the woods would wash.' [T0022: 002-3]
b. waa laktalhpa taa xaqamanuukan.
waa laka-talhpa taa xaqama=nuu-kan
FOC PREP-hill where drag=insert-INS(IMPFV)
'They are dragged into the cave.'
LIT: 'Into a hill is where they are dragged.'
[T0063: 044]
(759) Number Focus
a. waa laqatam juu 7ixwootoon
waa laqa-tam juu 7ix-wootoon
FOC CL:general-one ART 3POS-knot
'It has only one knot.'
LIT: 'Its knot is only one.'
[T0069: 353]
b. waa laqat'uy lht'aqalak'iw kaa wachu7 palata
waa laqa-t'uy lht'aqalak'iw kaa wachu7 palata
FOC CL:general-two board BLV also more
'There are two more boards also, I think.' [T0069: 070]

Though the HT particle waa serves to focus a particular member of a clause, it does not occur in every clause. In fact, only \(17 \%\) of the 1393 records (including questions and answers) in the HT text database include the focus particle.

Above I mentioned that the focus particle does not influence the word order of the clause. Though it is possible to find examples of clauses that both contain the focus particle waa and deviate from the standard VO word order, such as the clause in (760a), these examples are less numerous than those which contain the focus particle and exhibit the standard word order, as in (760b).
(760) CF WO
a.

OBJ
juu maa x7asqat'a7an waa xta7uy
juu maa \(x\)-7asqat'a-7an waa \(x-t a-7 u-y\)
ART RPT 3POS-child-PL.POS FOC PAST-3PL.SUB-eat-IMPFV
'They would eat their children.'
[T0059: 003]
b.

VERB
maa waa x7ukanch
maa waa \(\mathrm{x}-7 \mathrm{u}-\mathrm{kan}+\mathrm{ch}\)
OBJ juu ki-7asquan

RPT FOC PAST-eat-INS(IMPFV)+ALD ART 1POS-child-PL.POS
'They would eat our children.'
[T0059: 028]
According to Jim Watters (p.c.), the Tepehua focus particle waa is most likely cognate with the Totonac copula wan 'become'. Typologically, it is not unusual for a focus particle to be historically derived from a copula (Drubig 2000), \({ }^{208}\) and the HT focus particle does indeed seem to act like a copula in predicate nominal and adjectival constructions, such as those shown above in the examples in (755a), (755b), and (756). Furthermore, there are a two examples,

208 I must thank Jim Watters for pointing this reference out to me.
shown below in (761), in which the focus particle occurs clause-finally and not preceding a focused element. In these examples waa seems to behave more like a copula than like a focusing element.
(761) Focus Particle in Clause-final Position
a. juu xqatii naa naa lhuu waa. ART creek EMP EMP much FOC
'The creek rose a lot.'
[T0058: 003]
b. pero juu 7anu7 lapanak juu xaqalhii7an
pero juu 7anu7 lapanak juu x-xaqa-lhii7an
but ART that person REL PAST-pull=take(IMPFV)
jaantu qoxiyaa lapanak waa.
jaantu qoxiyaa lapanak waa
NEG good person FOC
'But that person who was pulling them along is not a good person.'
[T0063: 038-39]
Further evidence that the HT focus particle is derived from an older form of the copula is found in third person examples in the irrealis mood. In all irrealis modalities except the conditional modality and the future tense, the copula is waa (phonetically identical to the focus particle waa). Examples are shown below in (762). In these examples, waa is prefixed with the irrealis prefix \(k a\)-, and in the case of (762c), the negative future prefix \(t i-\). However, when the copula is used in the future tense of the irrealis mood or in the conditional modality, it occurs as the standard form jun, as seen below in (763). \({ }^{209}\)

\footnotetext{
\({ }^{209}\) For more information on the irrealis mood, please see Section 3.1.2.3 of Chapter 3.
}
(762) Copula waa, Irrealis Mood
a. Optative
klakaskin nii kawaa 7ukxtin juu Xiiwaan
k-lakaskin nii ka-waa 7ukxtin juu Xiiwaan 1SUB-want COMP IRR-be(IRR) president ART John
'I want John to be/become president.'
b. Negative Optative
\begin{tabular}{llll} 
jaantu & talakask'in & juu lapanak \\
jaantu & ta-lakask'in & juu lapanak \\
NEG & 3PL.SUB-want(IMPFV) & ART people
\end{tabular}
\begin{tabular}{lll} 
nii & kawaa & 7ukxtin \\
nii & ka-waa & 7ukxtin \\
COMP & IRR-be(IRR) & president
\end{tabular}
'The people do not want him to be/become president.' [ELIEX2: 008]
c. Negative Future
\begin{tabular}{|c|c|c|c|c|}
\hline jaantu & 7ukxtin & katiwaa & juu & Xiiwaan \\
\hline jaantu & 7ukxtin & ka-ti-waa & juu & Xiiwaan \\
\hline NEG & president & IRR-NEG.FUT-be(IRR) & ART & John \\
\hline oh & ll not be & esident.' & & \\
\hline
\end{tabular}
d. Dubitative
\begin{tabular}{|c|c|c|c|}
\hline tu & k'atz'ay & nii & 7ukxtin \\
\hline jaantu & k-k'atz'a-y & nii & 7ukxtin \\
\hline NEG & 1SUB-know-IMPFV & COM & preside \\
\hline
\end{tabular}
\begin{tabular}{lll} 
kawaa & juu & Xiiwaan \\
ka-waa & juu & Xiiwaan \\
IRR-be(IRR) & ART & John
\end{tabular}
'I don't know if John is/will be president.'
'I doubt that John will be president.'
e. Permission, Possibility
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline kaa & laay & kawaa & 7ukxtin & juu & Xiiwaan & \\
\hline kaa & laa-y & ka-waa & 7 ukxtin & juu & Xiiwaan & \\
\hline BLV & can-IMPFV & IRR-be(IRR) & president & ART & John & \\
\hline \multicolumn{7}{|l|}{'John may be president.'} \\
\hline \multicolumn{7}{|l|}{'John can be president.'} \\
\hline \multicolumn{7}{|l|}{'It is possible that John is president.' [BeQ2]} \\
\hline
\end{tabular}
(763) Copula jun, Irrealis Mood
a. Future
\begin{tabular}{llll} 
7ukxtin & kajuna7 & juu & Xiiwaan \\
7ukxtin & ka-jun-a7 & juu & Xiiwaan \\
president & IRR-be-FUT & ART & John \\
'John will be president.' & &
\end{tabular}
[BeQ2]
b. Conditional

7ukxtin kajuna7 juu Xiiwaan nii kalhtajuya7
7ukxtin ka-jun-a7 juu Xiiwaay nii ka-lhtaju-ya7
president IRR-be-FUT ART John COMP IRR-win-FUT
'John will be president if he wins.'

\subsection*{8.3 InTERROGATIVE STRUCTURES}

All questions in HT are characterized by rising intonation. In addition, there are various interrogative pronouns and tags that are used in the formulation of questions.

\subsection*{8.3.1 Yes/No Questions}

A yes/no question in HT is always formed using rising intonation. Additionally, there is an interrogative pronoun jaa that occurs in the focus position at the beginning of a clause, as seen below in the examples in (764) and (765). The example in (764a) shows a declarative clause, and the example in (764b) shows the corresponding interrogative version of the same clause.
(764)a. laktamaqstalh juu kinkúuxtaa juu Karmeeluu.
lak-tamaqsta-li juu kin-kuuxtaa juu Karmeeluu PL-load.up-PFV ART 1POS-sack ART Carmelo
Carmelo loaded up my sacks.
b. jaa laktamaqstalh juu kinkuuxtaa juu Karmeeluu?
jaa lak-tamaqsta-li juu kin-kuuxtaa juu Karmeeluu
Q PL-load.up-PFV ART 1POS-sack ART Carmelo Did Carmelo load up my sacks?
[MNB15: 51]
(765)a. jaa laay k'alakt'aatamakajuu?
jaa laa-y k-7a-lak-t'aa-tamakajun
Q can-IMPFV 1SUB-PL.INO-DIS-COM-stay(PFV)
'May I stay with them?'
[T0055: 061]
b. jaa chunchi7as nawiikanch
jaa chun+chi+7as nawii-kan+ch
Q like.so+ALD+TAGQ do-INS+ALD
7aksni soqchi 7an?
7aksnii soq+chi 7an
when straight+ALD go(IMPFV)
'Is this how they do it when they straighten it?'
[T0069: 168]
\(\begin{array}{lllll}\text { c. } & \text { jaa } & \text { yuuch } & \text { juu } & \text { niimaa? } \\ & \mathbf{Q} & \text { PRN.3SG } & \text { ART } & \text { this }\end{array}\)
'Is it this one?'
[MNB15: 41]
More often than not, there is no interrogative pronoun in a yes/no question at all. In these cases, the question is identical to a declarative clause except for the intonation. Examples of yes/no questions without jaa are shown below in (766).
\begin{tabular}{llll} 
(766) a. & yuuch \(\quad\) juu & maqtili7? \\
& PRN.3SG ART & wild.animal \\
& 'Is he the devil?'
\end{tabular}
b. laklhkulh juu t'aku7?
lak-lhku-li juu t'aku7
DIS-burn-PFV ART woman
'Did the woman burn (to death)?'
[T0054: 067
c. jaantu p'aast'ak'a?
jaantu paastak-7a
NEG remember(2SUB)-IMPFV
'Don't you remember?'
[T0058: 007]
d. takipuuxkajuun?
ta-ki-puuxkajun-n
3PL.SUB-RT-look.for(PFV)-2OBJ
'They went looking for you?'
[T0066: 018]
\[
\begin{array}{lll}
\text { e. } & \text { 7alaklhii7unch } & \text { wachu7? } \\
\text { 7a-lak-lhiijun+ch } & \text { wachu7 } \\
& \text { PL.INO-PL-order(2SUB.IMPFV)+ALD } & \text { also } \\
\text { 'Do you order, too?' } &
\end{array}
\]
[T0066: 057]
f. t'i7inch?
ti-7an+ch
IMM(2SUB.IMPFV)-go(2SUB)+ALD
'Are you leaving?'
[T0066: 280]
g. juu 7aniich xpaqaxti7 ka7ana7?
juu 7ani7+ch x-paqaxti7 ka-7an-a7
ART this+ALD 3POS-side IRR-go-FUT
'Does this one go on the side?'
[T0069: 025]
The idiomatic expression laqen introduces a rhetorical yes/no question that appears as a complement clause introduced by nii. The order is always laqen nii clause. In all of the examples of this expression, the verb of the subordinate clause is najun or jun 'say'. I do not know if this co-occurrence is a coincidence, or if this is the only verb that is licensed to appear in this rather idiomatic expression. Examples are shown below in (767).
(767)a. laqen nii tanoompalay nii 7ani7 juu
laqen nii ta-najun-pala-y nii 7ani7 juu
Q:RHET COMP 3PL.SUB-say-REP-IMPFV COMP HERE Rel
\begin{tabular}{lllll} 
xtalakasuy & juu & maqtili7 & juu & lhii7aniich? \\
x-talakasu-y & juu & maqtili7 & juu & lhii-7ani7+ch \\
PAST-appear-IMPFV & ART & devil & ART & APPL-here+ALD
\end{tabular}
'Don't you know that they say that the devil used to appear around here?'
[T0054: 054]
b. Chiikoonlhaa, laqen nii tanoommpalay?

Chiikoonlhaa laqen nii ta-najun-pala-y
Chicontla Q:RHET COMP 3PL.SUB-say-REP-IMPFV
'Chicontla, don't you know that they say it?'
[T0054: 054]
\begin{tabular}{llllll} 
c. & laqen & nii & tantz'iktz'ik & jumpalhkan & juu \\
xqawaw? \\
laqen & nii & tantz'iktz'ik & jun-pala-kan & juu & xqawaw
\end{tabular} Q:RHET COMP yellow.breast say-REP-INS(IMPFV) ART yellow 'Don't you know that 'yellow breast' [type of bird] is called 'yellow'?'

\subsection*{8.3.2 Wh-Questions}

All of the interrogative pronouns (i.e., wh-words) are listed in Table 39. The interrogative pronoun always occurs in the focus position at the beginning of a clause. The different pronouns have different restrictions regarding what type of clause may follow; therefore, I discuss each interrogative word below.

Table 39: Interrogative Pronouns
\begin{tabular}{|l|l|l|}
\hline \begin{tabular}{l} 
Interrogative \\
Pronoun
\end{tabular} & Gloss & Following Clause \\
\hline jaa & what, did, pardon & matrix clause \\
\hline tawanánch & when & matrix clause \\
\hline taamálh & which & missing data \\
\hline taanch & how & \begin{tabular}{l} 
relative clause, \\
matrix clause
\end{tabular} \\
\hline taas & what, why & \begin{tabular}{l} 
matrix clause, \\
relative clause
\end{tabular} \\
\hline tíjuuch & relative clause \\
\hline tiis & matrix clause \\
\hline tiischawaych & who, whom & relative clause \\
\hline tiichii \(\sim\) tuuchii & why & relative clause \\
\hline tiix & & \\
\hline
\end{tabular}

In addition to occurring as the generic interrogative pronoun in a yes/no question, \(j a a\) is also used to introduce an open-ended question whenever there is no more specific interrogative pronoun that may be used. It is followed by a matrix clause. Jaa is also the word that is used to ask someone to repeat him- or herself. Examples are shown below in (768).
(768) a.
\begin{tabular}{lllll} 
jaa & mílhiik'átzach & tanch & juu & kti7án? \\
jaa & mi-lhii-k'atza+ch & tanch & juu & k-ti-7an \\
Q & 2OBJ-APPL-know(IMPFV)+ALD & Q:where & REL & 1SUB-IMM-go
\end{tabular} 'What does it matter to you where I'm going?'
[MNB14: 29]
\(\begin{array}{llll}\text { b. } & \text { jaa } & \text { ktz'oqlh } & \text { laanii? } \\ & \text { jaa } & \text { k-tz'oq-li } & \text { laanii } \\ & \mathbf{Q} & \text { 1SUB-mark-PFV } & \text { really } \\ & \text { 'Did I really mark it?' } & \end{array}\)
c. jaa?
'Pardon?', 'What?'
The question word tawananch 'when' may be analyzed as tawanan+ch 'never+ALD'. It does not appear in any examples in the text database, and I have only one elicited example, shown below in (769). In this example, tawananch is followed by a main clause.
(769)tawananch xat'an?
tawananch xa-min
when PAST-come(2SUB.IMPFV)
'When would you (habitually) come (here)?'
[MNB5: 307]
Similarly, I have only one example of the interrogative pronoun taamálh 'which', shown below in (770). Because this is not a full clause, I do not know if this interrogative word is followed by a matrix or subordinate clause.
(770)taamálh chaqa7?
which house
'Which house?'
[MNB5: 308]
The interrogative pronoun tanch 'where' is always followed by a subordinate clause that is introduced by the relativizer juu. Examples are shown below in (771). In one example-shown below in (772)—there is no relativizer; this is possibly a performance error.
(771)a. taanchach [juu xtanuun] ReLCL ?
taanch+ach juu x-tanuun-n
where + ALD REL PAST-put.in(PFV)-2OBJ
'Where did he put you?'
[T0066: 088]
b. taanch [juu wii juu papa7] ReLCL?
where REL seated(IMPFV) ART old.man
'Where is the old man?'
[MNB3: 75]
\(\left.\begin{array}{llll}\text { c. } & \text { taanch } & \text { [juu } & \left.t^{\prime} \text { 'i7ín }\right]_{\text {RELCL }} \text { ? } \\ & \text { taanch } & \text { juu } & \text { ti-7an }\end{array}\right]\)
[MNB14: 12, 13 (NVP)]
(772) taanch xak'ilaay, jii kumwaarii?
taanch xa-ki-laa-y jii kumwaarii
where PAST-RT-can-IMPFV VOC compadre
'Where did you go, compadre?'
[T0055: 006]
The interrogative pronoun taas 'how' is used in two contexts: (i) to question the manner in which an action is performed, and (ii) when followed by a quantifier, to question a quantity, as in 'how much' or 'how many'. In the first context-that of questioning an action-taas is followed by a matrix clause, as seen in the examples in (773).
\begin{tabular}{lllll} 
(773)a. & taas & 7ak'omp'anyalaaych & juu & niimaa? \\
& taas & 7akompanya-laa-y+ch & juu & niimaa \\
& how acompany(2SUB)-can-IMPFV+ALD ART & this.one
\end{tabular}
[T0066: 061]
b. 7entons, taas t'alaaych juu yuuch?

7entons, taas t'alaa-y+ch juu yuuch
then, how do-IMPFV+ALD ART PRN.3SG
'Then, how does he do it?'
[T0054: 001]
In the second context in which taas occurs-that of questioning a quantity-taas is immediately followed by a quantifier, as seen in the examples below in (774) and (775). However, there is some variation regarding the type of clause that it introduces. Though taas is usually followed by a subordinate clause that is introduced by the relativizer \(j u u\), as seen in the examples in (774), there are some examples in which the relativizer is omitted, making the following clause a matrix clause, as seen in the examples in (775).
(774)a. taas piischuuxch [juu xalhiit'an
taas piis-chuux+ch juu xa-lhiit'an

QUAN CL:bundle-how.many+ALD REL PAST-bring(2SUB.IMPFV)
juu stapu] \(]_{\text {ReLCL }}\) ?
juu stapu
ART bean
'How many bundles/handfuls of beans would you bring?'
b. taas 7aqxchuuxch
taas 7aqx-chuux+ch
QUAN CL:flat-how.many+ALD
\(\left.\begin{array}{lll}{[\text { juu }} & \text { 7alin } & \text { juu } 7 \text { alhik }\end{array}\right]_{\text {ReLCL }}\) ?
c. taas maqxapachuuxch [juu puumpu7 juu 7alin] ReLCL?
taas maqxapa-chuux+ch juu puumpu7 juu 7alin
QUAN CL:roll-how.many+ALD ART clothing REL there.is(IMPFV)
'How many rolls of clothing are there?'
d. taas pumachuuxch lapanak
taas puma-chuux+ch lapanak
QUAN CL:human-how.many person
\begin{tabular}{ll} 
[juu jaantu & xatamin] \(]_{\text {ReLCL }} ?\) \\
juu jaantu & xa-ta-min \\
REL NEG & PAST-PL.SUB-come(IMPFV) \\
'How many people did not come?'
\end{tabular}
(775)a. taas paqchuuxch xa7iiy
taas paq-chuux+ch xa-7ii-y
QUAN CL:trips-how.many+ALD PAST-bring-IMPFV
juu 7ixkaan juu 7atzi7
juu 7ix-xkaan juu 7atzi7
ART 3POS-water ART girl
'How many water trips would the girl make?',
'How many times would the girl bring water?'
b. taas pumachuux lapanák katamina7?
taas puma-chuux lapanák ka-ta-min-a7
QUAN CL:human-how.many people IRR-PL.SUB-come-FUT
'How many people will come?'
The interrogative pronoun tiijuuch corresponds to both 'what' and 'why', and it is always followed by a subordinate clause introduced by the relativizer \(j u u\).

Examples appear below in (776).
(776)a. tiijuuch [juu kanawiiya7 juu chaway] \(]_{\text {RELCL }}\) ?
tiijuuch juu ka-nawii-ya7 juu chaway
what REL IRR-do-FUT ART now
'What will he do now?'
[TPWDB]
b. tiijuuch [juu lakask'in juu 7ixnati juu 7atz'i7] Relcl ?
tiijuuch juu lakask'in juu 7ix-nati juu 7atz'i7
why REL want(IMPFV) ART 3POS-motherART girl
'Why did the girl want her mother?'
[TPWDB]
c. tiijuuch [juu 7ulh] ReLCL ?
tiijuuch juu 7u-li
what REL eat-PFV
'What did she eat?'
[T0069: 225]
The interrogative pronoun tiis is used specifically when asking what something or someone is called, as seen in the examples below in (777), in which the interrogative pronoun is followed by a matrix clause. I have one example, shown in (778), in which it is used to ask the time.
(777)a. tiis xjunkanch?
tiis \(\quad \mathrm{x}\)-jun-kan+ch
what PAST-say-INS(IMPFV)+ALD
'What was he called?'
'What was his name?'
[T0054: 061]
b. tiis junkan juu lhiimaqalhqama7?
tiis jun-kan juu lhii-maqalhqama7
what say-INS(IMPFV) ART APPL-Tepehua
'How is it said in Tepehua?'
[T0066: 204]
c. tiis junkanch juu yuuch?
tiis jun-kan+ch juu yuuch
what say-INS(IMPFV) ART PRN.3SG
'What is this one [a song] called?'
[T0066: 123]
(778)tiis 7ooraach?
tiis 7ooraa + ch
what hour + ALD
'At what time?'
[T0066: 285]
There are two distinct interrogative pronouns that correspond to 'who': (i)
tiischawaych and (ii) tiichii \(\sim\) tuuchii. I do not have a sense of what determines
the use of one over the other. Tiischawaych 'who' can be analyzed as tiis=chaway+ch 'what=now+ALD'. It is followed by a subordinate clause introduced by the relativizer. Examples appear in (779).
(779)a. tiischawaych [juu xachin juu tz'iis] \(]_{\text {ReLCL }}\) ?
tiischawaych juu xa-chin juu tz'iis
who REL PAST-arrive(IMPFV) ART night
'Who arrived last night?'
[TPWDB]
b. tiischawaych [juu t'aaqot'i] ReLCL ?
tiischawaych juu t'aa-qot-t'i
who REL COM-drink-2SG.SUB.PFV
'With whom did you drink?'
[T0066: 292]
c. tiischawaych-7ata?
who-2SG.SUB
'Who are you?'
[MNB5: 308]
The second interrogative pronoun meaning 'who' is tiichii, and it has an alternate form: tuuchii. I have only one example in which tuuchii appears, so it might be a simple speech error. Examples appear in (780). The interrogative pronoun is followed by a subordinate clause, as seen in (780c).
(780)a. tiichii [juu lapanak] ReLCL ?
who REL man
'Who is the man?'
[TPWDB]
b. juu 7atz'i7 jaantu mispaay tiichii [juu lapanak] ReLCL
juu 7atz'i7 jaantu mispaa-y tiichii juu lapanak
ART girl NEG know-IMPFV who REL man 'The girl does not know who the man is.'
[TPWDB]
c. tuuchiich [juu lhiit'aqap'aych] \(]_{\text {ReLCL }}\) ?
tuuchii + ch juu lhii-t'aqap'a-y+ch
who+ALD REL APPL-get.drunk-IMPFV+ALD
'For whom are you getting drunk?'

\footnotetext{
210 This clause is a lyric from a Spanish song that the speakers translated into HT.
}

I have only one example of the interrogative pronoun tiix 'why', shown below in (781). This interrogative word is followed by a subordinate relative clause.
```

(781)tiix laqxtuch [juu lhiit'aqap'at'a7un] ReLCL?
tiix laqxtu+ch juu lhii-t'aqap'a-tajun
why alone+ALD REL APPL-get.drunk-AMB(2SUB.IMPFV)
'Why do you go around getting drunk all alone?'
'Why are you alone when you go around getting drunk?' [T0066: 090] ${ }^{211}$

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\subsection*{8.3.3 Omission of Interrogative Pronouns}

The omission of the interrogative word jaa from yes/no questions is quite common, as discussed above in Section 8.3.1. However, omission of the interrogative pronoun is not limited to yes/no questions; it also occurs to a much lesser extent in either/or, quantity, and open-ended questions, as seen in the examples in (782), (783), and (784), respectively. In all examples, the interrogative nature of the clauses is indicated by rising intonation.
(782) Either/or
\(\begin{array}{lll}\text { a. waa takiknawiin } & \text { 7uu waa laqk'ik'nawii? } \\ \text { waa ta-kiknawii-n } & \text { 7uu waa lak-kiknawii }\end{array}\)
waa ta-kiknawii-n 7uu waa lak-kiknawii
FOC 3PL.SUB-flatter(PFV)-2OBJ or FOC PL-flatter(2SUB.PFV)
'Did they flatter you or did you flatter them?'
[T0066: 051]
b. p'aax 7uu waakax?
pig or cow
'Pork or beef?'
[T0069: 228]
(783) Quantity
a. talaqachuux
lapanák xtamin?
ta-laqa-chuux
lapanák x-ta-min
3PL.SUB-CL:general-how.manypeople PAST-3PL.SUB-come(IMPFV)
'How many people came?'
[ELIEX1: 055]
\({ }^{211}\) This clause is a lyric of a Spanish song that the speakers translated into HT.
(784) Open-ended
a. 'juu ki7asqat'achi?' maa kanoonaach
juu ki-7asqat'a+chi maa ka-najun-a7+ch
ART 1POS-child RPT IRR-say-FUT+ALD
'"My child?" he will say.'
[T0059: 012]
b. talaaniych?
ta-lani-y+ch
INCH-read-IMPFV+ALD
'How does it (a tune) go?'
[T0066: 117]

\subsection*{8.3.4 Tag Questions}

A tag question may be formed in one of three ways: (i) using the tag particle ta7as, (ii) using the tag clitic \(+7 a s\), or (iii) using the negative particle jaantu. The full form of the tag question ta7as occurs only clause-finally, as seen below in the examples in (785), and it adds a tag question onto the end of the clause.
(785) a. tataqoxchoqoy ta7as
ta-ta-qox-choqo-y ta7as
3PL.SUB-INCH-bad-AGAIN-IMPFV TAGQ
'They mess up, don't they?'
[T0066: 236]
b. juu 7ani7 ta7as

ART this.one TAGQ
'This one, right?'
[T0069: 111]
c. kinana7 juu laqxawlh ta7as?
ki-nana7 juu lak-xaju-li ta7as
1POS-old.lady REL DIS-burn-PFV TAGQ
'The old lady who burned (to death), right?'
[T0054: 059]
d. Pero sí se escuchaba bien, ta7as?
'But, yes, it sounded good, didn’t it?'
[T0066: 195-6]

Though the tag question clitic \(+7 a s\) is a reduced form of the full tag ta7as, its distribution is different. Whereas ta7as occurs only clause-finally, +7as cliticizes onto the end of verbs (786), adverbs (787), and the negative particle jaantu (788) regardless of their positions within the clause. When the tag question cliticizes onto a verb or adverb, it may be translated as a tag question, e.g., 'didn't it?', 'doesn't it?', or as 'right?' in English and '¿verdad?' in Spanish. When +7as cliticizes onto the negative particle, the result is a negative question, 'didn't + clause'. Neither variant (ta7as or \(+7 a s\) ) is used more frequently than the other, and the choice of which to use seems to lie with the speaker.
(786) Verb \(+7 a s\)
a. k'ilaach'oqoo7as juu tz'iisich?
ki-laa-choqo+7as juu tz'iisich
RT-can-AGAIN.PFV-TAGQ ART last.night
'You went again last night, didn't you?'
[T0066: 020]
b. naa laay7as ch'uk'uy?
naa laa-y+7as ch'uk'u-y
EMP can-IMPFV-TAGQ cut-IMPFV
'It can really cut, can't it?'
[T0069: 436]
c. maamaatacha7as?
maa-maa-ta-chaa+7as
CAUS-lying-PF-DIST+TAGQ
'He has it over there, doesn't he?'
[T0069: 406]
(787)Adverb \(+7 a s\)
a. chunchi7as nawiikanch
chun+chi+7as nawii-kan+ch
like.so + ALD + TAGQ make-INS(IMPFV)+ALD
\begin{tabular}{lll} 
7aksni & soqch & 7an \\
7aksni & soqch & 7an \\
when & straight + ALD & go(IMPFV)
\end{tabular}
[T0069: 168]
b. juu 7ani7 wachuu7as
juu 7ani7 wachu7+7as
ART this.one also+TAGQ
'This one, too, right?'
[T0069: 249]
c. lhii7uwiint'i7as
lhii-7uwiinti+7as
APPL-there+TAGQ
'Over there, right?'
[T0066: 029]
(788) Negative +7 as
\begin{tabular}{llll} 
jaantu7as & xtaqnilh & juu & xtuumiin? \\
jaantu+7as & xtaq-ni-li & juu & x-tuumiin \\
NEG+TAGQ & give-DAT-PFV & ART & 3POS-money \\
'Didn't he give her his money?'
\end{tabular}

The negative particle jaantu, or its reduced form too, may be used as a negative tag, 'no', as seen in the examples below in (789). It always occurs clause-finally when it is used in this capacity. \({ }^{212}\)
(789) a. maa taminqoolhch chuux, jaantu?
maa ta-min-qoju-li+ch chuux jaantu
RPT 3PL.SUB-come-ALL-PFV+ALD all NEG
'They all went, no?'
[T0058: 045]
b. juu yuuch, kaa waa chunchach kakana7, jaantu?
juu yuuch kaa waa chunch-ach ka-7an-a7 jaantu ART PRN.3SG BLV FOC like.so+ALD IRR-go-FUT NEG 'This one, I think it will go like this, no?'
c. Laklhiimaacha7, too?

Laklhiimaacha7 jaantu
San Guillermo NEG
'San Guillermo (place name), no?'
[T0066: 206]
\({ }^{212}\) For more information on negation, please see Section 8.4.

\subsection*{8.4 NEGATION}

The HT negative particle jaantu ['ha:n.tu] is used to negate both clauses and phrases. The full form jaantu may be truncated to tuu. Examples are shown in (790). The two variants occur in free variation.
\begin{tabular}{llllll} 
(790) a. & maa & jaantu & laay & 7alin & sasqat'a7an \\
& maa & jaantu laa-y & 7alin & s-7asqat'a-7an \\
& RPT & NEG can-IMPFV & there.is(IMPFV) & 3POS-child-PL.POS \\
& 'He/she can not have children.'
\end{tabular}
'He/she can not have children.'
[T0003: 007]
b. juu p'ulhnan tuu laay 7ixchiwinin
juu p'ulhnan tuu laa-y 7ix-chiwin-nin
ART first NEG can-IMPFV PAST-speak-PL.INF
\(\begin{array}{lllll}\text { juu maqalhqama7 } & \text { juu lhiilaawaan } & \text { naa qox } \\ \text { juu maqalhqama7 } & \text { juu lhii-laawaan } & \text { naa qox } \\ \text { ART } & \text { Tepehuas } & \text { ART } & \text { APPL-Spanish } & \text { EMP good } \\ \text { 'At first, the Tepehua could not speak Spanish very well.' }\end{array}\)
[T0057: 097]
When jaantu has scope over the verb phrase, it occurs in the adverbial position immediately preceding the verb, as seen in the examples above in (790) and below in (791).
(791)a. juu doktornin jaantu tamispaay
juu doktor-nin jaantu ta-mispaa-y ART doctor-PL NEG 3PL.SUB-know-IMPFV
juu xlak'uch'un7an
juu x-lak-k'uch'u-n-7an
ART 3POS-PL-cure-DVB-PL.POS
'The doctors do not know their cures.'
[T0009: 014]
b. pero juu xaapay maa jaantu xtalh7aman
pero juu xaa-pay maa jaantu x-talh7aman
but ART IPOS-father RPT NEG PAST-get.angry(IMPFV)
'But the father would not get angry.'
[T0059: 029]

If the verb is modified by a manner adverb, jaantu precedes the adverb, which in turn occurs immediately before the verb. Examples are shown in (792); adverbs are underlined.
(792)a. jaantuch qox qaasmatkan
\begin{tabular}{lll} 
jaantu+ch & \(\underline{\text { qox }}\) & qaasmat-kan \\
NEG + ALD & \(\underline{\text { well }}\) & hear-INS(IMPFV)
\end{tabular}
'They can not hear well.'
[T0066: 059]
b. jaantuch chun xalaakan
jaantu+ch chun xa-laa-kan
NEG+ALD like.so PAST-can-INS(IMPFV)
'They would not do it like that.'
[T0059: 021]
\(\begin{array}{llllll}\text { c. } & \begin{array}{llll}\text { jaantu } \\ \text { jaantu }\end{array} & \text { waa } & \underline{\text { lhtuku }} & \underline{\text { lhtuku }} & \text { 7anawiit'i } \\ \text { NEG } & \text { FOC } & \underline{\underline{l h t u k u}} & \underline{\underline{\text { hhtuku }}} & \text { 7a-nawii-t'i } \\ & \underline{I D} & \underline{I D} & \text { IRR-do-2SG.SUB.PFV }\end{array}\)
juu mimaka7
juu mi-maka7
ART 2POS-hand
'Don't tense up your hand.'
[lhtuku 'tense or rigid motion']
[T0066: 130]
The focus particle waa may follow jaantu, as seen in the example in (793a), or it may precede jaantu, as seen in the example in (793b). Waa is underlined.
(793)a. xakijuuniy
xa-ki-jun-ni-y
PAST-1OBJ-tell-DAT-IMPFV
\begin{tabular}{llllll} 
"jaantu & waa & 7a7it'i & juu & waa & tz'iisi" \\
jaantu & \(\underline{\text { waa }}\) & 7a-7an-t'i & juu & waa & tz'iisi \\
NEG & \(\underline{\text { FOC }}\) & IRR-go-2SG.SUB.PFV & ART & FOC & night
\end{tabular}
'He would say to me, "Don't go at night.""
[T0022: 049]
b. porque maa waa jaantu xta7aqpaaxta porque maa waa jaantu x-ta-7aqpaax-ta because RTP FOC NEG PAST-3PL.SUB-baptize-PF 'Because they had not been baptized.'

The negative particle may also have scope over a predicate nominal or adjective, as seen in the examples below in (794). If the predication requires a copula, the negative particle precedes the predicated element, rather than the copula, as seen in the example in (794c).
(794)a. jaantu lapanak
jaantu lapanak
NEG person
'He was not a person/human.'
[T0054: 009]
b. maa jaantu qox
maa jaantu qox
RPT NEG good
nii maa katamaqnii
nii maa ka-ta-maqnii
COMP RPT IRR-3PL.SUB-kill(PFV)
'It is not good for them to kill it.'
[T0003: 016]
c. 7ixjuuniita juu lapanak maa jaantu lhuu

7ix-jun-niita juu lapanak maa jaantu lhuu
PAST-be-PF ART person RPT NEG many
'The people were not numerous.'
[T0057: 054]
When the negative particle has scope over the entire clause, it occurs at the beginning of the clause, as seen below in the examples in (795). Both the full form and the truncated form may be used in this context; however, when either of the two forms occurs as the first element of the clause, the final high-back vowel [u] or [u:] becomes [o:]. Note that the underlying form [jantu] occurs as the
second negative in (795c), presumably because it does not occur as the first element in the clause.
(795)a. jantoo, 7akxp'it'achi lakatz'unin
jaantu 7a-k-xp'it-7a+ch lakatz'unin

NEG IRR-1SUB-sand-IMPFV+ALD a.little
'No, I should sand it a little bit.'
[T0069: 076]
b. too, waa kintakiknawii
jaantu waa kin-ta-kiknawii
NEG FOC 1OBJ-3PL.SUB-flatter(PFV)
'No, they flattered me.'
[T0066: 048]
c. too, jaantu, juu yuuch xlakaytat jaantu jaantu juu yuuch x-lakaytat NEG NEG ART PRN.3SG 3POS-middle 'No, no, this one [goes in] the middle.'
[T0069: 026]
When a subordinate clause-but not its matrix clause-is negated, the negative particle occurs after the complementizer and before the subordinate verb and the adverb if there is one, as seen in the examples below in (796).
(796) a. juunikalh [nii jaantu kalaknawlh \(]_{\text {COMPCL }}\) jun-ni-kan-li nii jaantu ka-lak-najun-li
tell-DAT-INS-PFV COMP NEG IRR-PL-say-PFV
'They told him not to talk.'
[QMMES]
b. [nii jaantuch soq kajuna7] \(]_{\text {CoNDCL }}\)
nii jaantu+ch soq ka-jun-a7
COMP NEG+ALD straight IRR-be-FUT
\(\begin{array}{ll}\text { kalaqoxiyaawch } & \text { lakapaaxpit } \\ \text { ka-laqoxi-ya7-w+ch } & \text { laka-paaxpit } \\ \text { IRR-fix-FUT-1PL.SUB+ALD } & \text { PREP-jack.plane } \\ \text { 'If it does not straighten out, we can fix it with a jack plane.' }\end{array}\)
[T0069: 132-133]
When the matrix clause is negated, the negative particle precedes the matrix verb, as seen in the example below in (797).
(797)a. jaantu klakask'in [nii 7amiilhp'at'i] \(]_{\text {COMPCL }}\)
jaantu k-lakask'in nii 7a-miilhpa-t'i
NEG 1SUB-want(IMPFV) COMP IRR-sing(2SUB)-2SG.SUB.PFV
'I don't want you to sing.'
[QMMES]
b. jaantu k'atzay [nii kamaamaa juu tuumiin \(]_{\text {COMPCL }}\) jaantu k'atza-y nii ka-maamaa juu tuumiin
NEG know-IMPFV COMP IRR-have(PFV) ART money
'He doesn't know if she has the money.'
[QMMES]
The negative particle may be used as a tag question, as seen below in the examples in (798). It always occurs at the end of the clause when it is used for this purpose.
(798) a. maa taminqoolhch chuux jaantu?
\begin{tabular}{llll} 
maa & ta-min-qoju-li+ch & chuux & jaantu \\
RPT & 3PL.SUB-come-ALL-PFV+ALD & all & NEG
\end{tabular}
'Everybody came, no?'
[T0058: 045]
b. Laklhiimaacha7, too?

San Guillermo NEG
'San Guillermo (place name), no?'
[T0066: 206]
A negative question is formed by means of the negative particle jaantu plus the tag question clitic \(+7 a s\), as seen below in (799). \({ }^{213}\) Note that the negative particle precedes the verb. I found no examples in the texts in which the truncated form tuu is cliticized with the tag question clitic +7as.
(799) jaantu7as xtaqnilh juu xtuumiin?
jaantu+7as xtaq-ni-li juu x-tuumiin
NEG+Q give-DAT-PFV ART 3POS-money
'Didn't he give her his money?'
[T0054: 015]
\({ }^{213}\) Please see Section 8.3.4 for more information on tag questions.

The temporal adverbial clitic \(+k a 7\) (JST) may occur on either jaantu or tuu, producing the translation 'not yet' in English and 'todavía no' in Spanish, as seen in the examples in (800).
(800)a. pero juu p'ulhnan nii jaantuka7 xaqpaaxkan
pero juu p'ulhnan nii jaantu+ka7 x-7aqpaax-kan
but ART first COMP NEG+JST PAST-baptize-INS(IMPFV)
'But at first they did not yet baptize.'
b. porque tuuka7 xta7aqpaax
porque tuu+ka7 x-ta-7aqpaax
because NEG+JST PAST-3PL.SUB-baptize(IMPFV)
'Because they did not yet baptize.'
[T0059: 004]
The temporal clitic \(+c h\) may occur on the untruncated form jaantu, as seen below in (801), but it does not cliticize to the truncated form tuu.
(801)tuus chaway jaantuch talhaway
tuus chaway jaantu+ch talhawa-y
PREP now NEG+ALD flood-IMPFV
'Up to now, it does not flood.'
[T0058: 057]
Finally, the negative particle is used to form certain lexical items, for which there are no more specific lexemes in HT. For example in (802a), jaantu combined with \(t u 7 u 7\) 'something' forms the translational equivalent of 'nothing'. Evidence that these negative polarity items are not fused lexemes in seen in (802b), where the temporal clitic occurs on the end of jaantu.
(802)a. jaantu tu7u7

NEG something 'nothing'
[TPWDB: jaantu tu7u7]
b. pero juu 7ani7 juu chaway
pero juu 7ani7 juu chaway
but ART here ART now
jaantuch tu7u7 7amaaqesqaanan
jaantu+ch tu7u7 7a-maaqesqaa-nVn
NEG+ALD something PL.INO-scare-INO(IMPFV)
'But around here nowadays nothing scares.'
[T0054: 058]
c. jaantu laqlhuu

NEG expensive
'cheap, inexpensive'
[TPWDB: jaantu laqlhuu]
d. jaantu k'usi

NEG pretty
'ugly, unattractive'

\subsection*{8.5 COMPARATIVE AND SUPERLATIVE CONSTRUCTIONS}

Comparative and superlative constructions are formed in the same way in HT, using the marker palay 'more', 'better'. The only comparative or superlative examples that I found in natural discourse are from a continuous passage of conversation, shown below in example (803). In these examples, the marker palay is shown in bold type, and the quality being compared is shown in italics. The marker of comparison always precedes the quality being compared. Note that none of these examples contains a standard to which the object in question (in this case, a wooden board) is being compared. All other examples in this section are from elicitation.
(803) a. Speaker 1:
juu 7 ani 7 waa palay \(s t^{\prime} a k^{\prime} a k^{\prime} a\), juu 7 ani 7 waa palay \(s t^{\prime} a k^{\prime} a k^{\prime} a\) ART this FOC more thin
\(\begin{array}{lll}\text { juu } & \text { 7anu7 } & \text { yaachaa } \\ \text { juu } & \text { 7anu7 } & \text { yaa(IMPFV)-chaa } \\ \text { ART } & \text { that } & \text { standing-DIST }\end{array}\)
'This one is thinner, that one standing over there.'
[T0069: 325]
b. Speaker 2:
jaa palay \(s t^{\prime} a k^{\prime} a k^{\prime} a\) ?
Q more thin
'Is it thinner?'
[T0069: 326]
c. Speaker 1:
palay \(s t^{\prime} a k^{\prime} a k^{\prime} a\)
more thin
'It is thinner.'
[T0069: 327]
d. Speaker 1:
nii jaantu yuuch juu 7anu7 yaachaa,
nii jaantu yuuch juu 7 anu7 yaa-chaa
COMP NEG PRN.3SG REL that standing(IMPFV)-DST
\(\begin{array}{ll}\text { laqatam } & \text { lhii7uwint'i } \\ \text { laqa-tam } & \text { lhii-7uwint'i } \\ \text { CL:general-one } & \text { APPL-over.there }\end{array}\)
'If not that one that is standing there, then the other one over there.'
[T0069: 328]
e. Speaker 2:
saalaa, kaa palay qoxi
really BLV more good
'Really, I think it is better.'
[T0069: 329]
f. Speaker 1:
saalaa, \(\quad \begin{aligned} & \text { palay } \\ & \text { really } \\ & \text { more }\end{aligned}\)
'Really, it is better'
[T0069: 330]

\section*{g. Speaker 2:}
palay \(q o x\) juu 7ani7, yuuch juu 7ani7
more good ART this PRN.3SG ART this one
'This one is better, this one is.'
[T0069: 331]
When a standard for comparison is included, one of two possible constructions may be used. In the first construction, two complete clauses are juxtaposed with each other, as seen below in (804a). The second construction, shown in (804b), includes a standard of comparison, which is preceded by kuиуиисh 'than'. Together kuиуиисh and the standard (which are underlined) follow the marker and quality being compared. If a copula is needed to bear tense and aspect morphology, it intervenes between the qualitative adjective and the standard of comparison, as seen below in (804c).
(804)a. juu Weensis palay qonta, ART Laurencio more fat
juu Kuulaax palay lakamakat'ikt'i. ART Nicholas more thin
'Laurencio is fatter than Nicholas.'
'Nicholas is thinner than Laurencio.'
[MNB15: 53, QComp]
b. juu Kuulaax palay lakamakat'ikt'i
juu Kuulaax palay lakamakat'ikt'i
ART Nicholas more thin
kuuyuuch juu Weensiis.
kuu-yuuch juu Weensiis
than ART Lawrence
'Nicholas is thinner than Lawrence.'
\begin{tabular}{llll} 
c. \begin{tabular}{ll} 
juu Kuulaax \\
juu Kuulaax & palay lakamakat'ikt'i \\
palay lakamakat'ikt'i
\end{tabular} & \begin{tabular}{l} 
7ixjuuniita \\
7ix-jun-niita
\end{tabular} \\
ART Nicholas & more thin & PAST-be-PF
\end{tabular}
'Nicholas was thinner than Lawrence.'
[QComp]
To form the superlative, the standard of comparison is simply omitted, as seen below in (805).
(805)juu Kuulaax palay lakamakat'ikt'i (7ixjuuniita)
juu Kuulaax palay lakamakat'ikt'i (7ix-jun-niita)
ART Nicholas more thin (PAST-be-PF)
[QComp]
The form kuuyuuch may be substituted with the Spanish que 'than', as seen below in (806)..\(^{214}\)
(806)a. juu xqooy palay qay que miistu7

ART dog more big than cat
'The dog is bigger than the cat.'
[QComp]
b. juu Kuulaax palay jaantu 7ixqonta que Weensiis juu Kuulaax palay jaantu 7ix-qon-ta que Weensiis ART Nicholas more NEG PAST-fat-PF than Lawrence 'Nicholas was less fat than Lawrence.'
[QComp]
Finally, when two items are considered to be equal, the adjective st'alakatz'un 'equal' acts as marker and quality, and it is followed by que 'than'. Examples appear in (807). Note that this adjective-unlike lakamakat'ikt'i shown above in examples (804) and (805) -may bear tense and aspect morphology, so a copula is not needed.

\footnotetext{
\({ }^{214}\) I assume that kuиyuuch can be analyzed as kuu-yuuch, where yuuch is the singular third person pronoun. I suspect that kuu- is a harmonized borrowing of Spanish que [ke], but I do not have concrete evidence to support this suspicion.
}
\begin{tabular}{lllllll} 
(807) a. & juu & xchaqa7 & Kuulaax & waa & naa & st'alakatz'un \\
& juu & x-chaqa7 & Kuulaax & waa & naa & st'alakatz'un \\
& ART & 3POS-house & Nicholas & FOC & EMP & equal
\end{tabular}
\begin{tabular}{llll} 
que & juu & xchaqa7 & Weensis \\
que & juu & x-chaqaa & Weensis \\
than & ART & 3pos-house & Lawrence \\
\hline
\end{tabular}
'Nicholas' house is the same size as Lawrence's house.' [MNB15: 54]
b. juu xqooy xt'alakatz'unta que miistu7
juu xqooy \(x\)-st'alakat'zun-ta que miistu7 ART dog PAST-equal-PF than cat
'The dog is the same size as the cat.' [QComp]

\subsection*{8.6 Complex Clauses}

A complex clause in HT may involve subordination (section 8.6.1) or coordination (section 8.6.2) of clauses.

\subsection*{8.6.1 Subordination}

Subordinate clauses in HT have in common three features: (i) the subordinate clause is always introduced by a complementizer, relativizer, or adverbial relative pronoun, \({ }^{215}\) (ii) the verb of the subordinate clause is always finite, and (iii) no particular or special morphology is associated with subordination, either on the matrix or the subordinate verb. Types of subordinate clause found in HT and covered in this section include relative clauses (8.6.1.1), complement clauses (8.6.1.2), adverbial clauses (8.6.1.3), and conditional clauses (8.6.1.4). The word order of the major constituents is the same in the subordinate clause as it is in the matrix clause; that is, the two preferred word orders are VSO and SVO.

\footnotetext{
\({ }^{215}\) Except when a direct quotation functions as a complement of the matrix verb.
}

\subsection*{8.6.1.1 Relative Clauses}

Before discussing HT relative clauses, I want to first explain the notational conventions that I use in the examples in this section. The external head of the relative clause is underlined, the relativizer appears in bold type, and the relative clause is enclosed in square brackets. Note that in HT there is no overt relativized noun or pronoun within the relative clause that is co-referential with the external head noun. In order to avoid confusion, I model this absent relativized element using a zero. In a post-nominal relative clause, the zero is co-indexed with the external head of the relative clause. The schematic shown in (808) of a relative clause in English demonstrates these notational conventions.


HT has both post-nominal and headless relative clauses. The post-nominal relative clause always follows the noun that it modifies, as seen below in (809a). The headless relative clause does not modify a nominal, but itself acts as a verbal complement, as seen below in (809b); it may occur either clause-initially or clause-finally. A relative clause is usually introduced by the relativizer juu, \({ }^{216}\) but it may also be introduced by the locative relative pronoun juntaa 'where' or its truncated form taa.

216 The relativizer juu is homophonous with the definite article \(j u u\).
(809) a. Post-nominal Relative Clause
maa xta7amaqpanan juu papaanin \({ }_{i}\)
maa x-ta7amaqpan-nVn juu papa7-nin
RPT PAST-3PL.SUB-wash.clothes-INO(IMPFV) ART man-PL
\begin{tabular}{clllll}
{\([\) juu } & kaa & waa & lakak'iwin & xtat'ajun & \(\left.\emptyset_{i}\right] R C\) \\
juu & kaa & waa & lakak'iwin & x-ta-t'ajun \\
REL & BLV & FOC & woods & PAST-3PL.SUB-live(IMPFV)
\end{tabular} 'The men [that were living in the woods] would wash.'[T0022: 002-003]
b. Headless Relative Clause
[juu 7uputulhch \(\quad \emptyset_{\mathrm{i}}\) ] \(\mathrm{RC}_{\mathrm{i}} \quad\) kaa 7ulhch;
juu 7u-putun-li+ch kaa 7u-li + ch
REL eat-DESID-PFV+ALD BLV eat-PFV+ALD
\begin{tabular}{lllll} 
[juu & jaantuch & \(\left.\emptyset_{i}\right] \mathrm{RC}_{i}\) & kaa & jaantuch \\
juu & jaantu+ch & & kaa & jaantu+ch \\
REL & NEG+ALD & & BLV & NEG+ALD
\end{tabular}
'[Whoever wanted to eat it] ate it; [whoever did not] didn't.'
[T0020: 034-035]
In (809a), papaanin 'men' is the head of the relative clause; it is the noun that is being modified by the relative clause. The head is co-indexical with the non-overt subject of the dependent verb, 'live', and this grammatical relationship is marked on the dependent verb by the third person plural subject prefix \(t a-\). The relativizer \(j u u\) introduces the relative clause.

In (809b), there are actually two relative clauses-juu 7uputulhch 'whoever wanted to eat it' and juu jaantuch 'whoever did not'—neither of which modifies a head noun or noun phrase; instead the relative clause juи 7uputulhch 'whoever wanted to eat it' acts as the subject argument of the matrix verb 7ulhch 'ate it' and the relative clause juи jaantuch 'whoever did not' acts as the subject of the elided verb of the negative verb phrase jaantuch 'did not'. There are no
distinct relative pronouns in HT, and the relativizer juu introduces both relative clauses. \({ }^{217}\)

The Relativization Hierarchy in (810) shows the hierarchy of grammatical roles (in a subordinate clause) that may be relativized in the world's languages. \({ }^{218}\) All languages that have relative clauses allow relativization of the subordinate subject. Different languages allow different grammatical roles to be relativized. The grammatical roles in this hierarchy are ordered such that if a languages allows relativization of a particular role, it will also allow relativization of all of the roles to the left of it on the hierarchy. For example, if the possessor in a subordinate clause (in a particular language) may be relativized, then all grammatical roles to the left of the possessor on the hierarchy may also be relativized in that language.
(810) Relativization Hierarchy


POST-
NOMINAL

HEADLESS
In HT, the two types of relative clause (the post-nominal and the headless) behave differently with respect to which grammatical role within the relative (i.e., subordinate) clause may be relativized. In the HT post-nominal relative clause, an oblique argument - and all argument types to the left of it on the hierarchy-may be relativized as a post-nominal relative clause. Of all of the post-nominal relative

\footnotetext{
\({ }^{217}\) The headless relative clause is a subtype of both relative clauses and complement clauses. For more information on complement clauses, please see the next section.
\({ }^{218}\) Hierarchy proposed by Keenan and Comrie (1977), as cited in Payne (1997: 335).
}
clauses, those that are relativized on subjects of the subordinate verb occur far more frequently than those that are relativized on direct objects of the subordinate verb, which in turn occur more frequently than those that are relativized on indirect or oblique objects within the relative clause. I have found no instances of a possessor being relativized in HT. With respect to the headless type of relative clause, these may be relativized only on subjects of the subordinate verb in HT.

I am not aware of any type of hierarchy that ranks the grammatical roles of the head of the relative clause (i.e., the argument in the matrix clause that is coindexical with the relativized argument in the subordinate clause). The determination of such a hierarchy would require cross-linguistic comparison of many different languages from diverse language families and, thus, is outside the scope of this analysis of the HT relative clause. Suffice to say that in HT, only the subject or the object of the matrix clause may be the head of a relative clause.

Examples of different types of post-nominal relative clause appear in the following examples. These examples are ordered with respect to the grammatical role of the relativized element (i.e., the grammatical role of the "relativized" zero element in the matrix clause). Relativized subjects of subordinate verbs are shown in the examples in (811), relativized objects in (812), relativized indirect objects in (813), and relativized oblique objects in (814). Further examples of headless relativized subjects are shown below in (815).

In each of the examples in (811), the non-overt relativized element is the subject of its relative clause. In the examples in (811a) and (811b), the heads of the relative clauses, maqtili7 and yuuch, respectively, are the subjects of their
respective matrix clauses, as well as the subject of their relative clauses. In (811c), the head of the relative clause lapanak 'person' is the object of the matrix clause and the subject of the relative clause. The matrix clause in (811d) is a fragment in which the speaker cut himself off after the relative clause and began a new clause with the discourse marker entonces 'then'; however, since the head of the relative clause, juи pumatam lapanak 'one person', occurs in clause-initial position, it would most likely have been the grammatical subject of the clause, given the VSO and SVO word order tendencies in this language.
(811) Post-nominal Relativized Subjects
\(\begin{array}{lllll}\text { a. maa } & \text { xt'oonpalay } & \text { juu } & \frac{\text { maqtili7 }}{\text { it }} \mathrm{i} \\ \text { maa } & \text { x-t'ajun-pala-y } & \text { juu } & \text { maqtili7 } \\ & \text { RPT } & \text { PAST-be-REP-IMPFV } & \text { ART } & \text { wild.animal }\end{array}\)
\begin{tabular}{llllll} 
[juu \(\emptyset_{i}\) & waa & niinch & laqachaqan & taa & wii
\end{tabular} xkaan]RC
'There was a wild animal [that was near the town, by the pond].'
[T0020: 002]
b. maa yuuch \({ }_{i}\) [juu \(\varnothing_{i}\) laay kalhii7alh maqata]RC maa yuuch juu laa-y ka-lhii7an-li maqata RPT PRN.3SG REL can-IMPFV IRR-take-PFV far 'It is he [who could take it far away].' \({ }^{219}\)
[T0003: 026]

219 This is a clefted focus construction. Please see section 8.2.1.
\begin{tabular}{llll} 
c. & tanajunch & juu & kintata7 \\
ta-najun+ch & juu & kin-tata7 & nii \\
3PL.SUB-say(IMPFV)+ ALD & ART & 1POS-elder & COMP \\
& & & \\
xtalaakilhun & toolay & \\
x-ta-laa-kilhun & toola-y & \\
PAST-3PL.SUB-RCP-chat(IMPFV) & stay-IMPFV & \\
& & & \\
nii & xtalaqtz'in & & \\
nii & x-ta-laqtz'in & \\
COMP & PAST-3PL.SUB-see(IMPFV) &
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline ju & \(\underline{\text { lapanak }}_{\text {i }}\) & [juu & 7ixajaachiilh & \(\emptyset_{\mathrm{i}}\) ]RC \\
\hline juu & lapanak & juu & 7ix-xajaan-chii-li & \\
\hline ART & person & REL & PAST-exit-DST-PFV & \\
\hline \begin{tabular}{l}
'My e \\
that
\end{tabular} & \begin{tabular}{l}
ders woul \\
ey would
\end{tabular} & \begin{tabular}{l}
, wh \\
pe
\end{tabular} & they sat around on [that came out & \begin{tabular}{l}
tting, \\
there]
\end{tabular} \\
\hline
\end{tabular}
d. juu pumatam lapának \({ }_{i}\)
juu puma-tam lapanak
ART CL:human-one person
\(\begin{array}{lllll}\text { [juu kilaachilh } & Ø_{\mathrm{i}} & 7 \text { ani7 } & \text { maa } & \text { lakaMiikiixkaan]RC } \\ \text { juu ki-laa-chi-li } & 7 \text { ani7 } & \text { maa } & \text { laka-Miikii-xkaan } \\ \text { REL RT-can-ADL-PFV } & \text { here } & \text { RPT } & \text { PREP-Miguel-water } \\ \text { 'One person [that came along Michael's Water (place name)] ... }\end{array}\)
[T0058: 015-6]
In each of the examples in (812), the non-overt relativized element is the object of its relative clause. In the first two examples in (812), the head of each relative clause, kustumwree 'ritual' in (812a) and tuumiin 'money' in (812b), is the object of the matrix clause. In (812c), the head of the relative clause, p'in 'salsa', is the subject of the predicate nominal construction that makes up the matrix clause.
(812) Post-nominal Relativized Objects
a. juu 7ali7 jaantu talaka7iiy
juu 7ali7 jaantu ta-laka7ii-y

ART others NEG 3PL.SUB-believe-IMPFV
juu kustumwree \(_{i} \quad\) [juu talaknawiiy juu kustumwree juu ta-lak-nawii-y ART ritual REL 3PL.SUB-PL-make-IMPFV
juu tz'oq'onun juu maqalhqamaan \(\left.\quad Ø_{i}\right] R C\)
juu tz'oq'on-un juu maqalhqamaa-n ART Otomi-PL ART Tepehua-PL 'the others do not believe (in) the rituals [that the Otomi and Tepehua do].'
[T0058: 060-61]
b. tzakaank'a talak7ulaatach juu lhuu
tzakaank'a ta-lak-7ulaa-ta+ch juu lhuu
heavily 3PL.SUB-PL-lie-PF+ALD ART much
juu tuumiin \(_{\text {i }}\) [juu xtakii7alhajutach \(\left.\quad \emptyset_{i}\right]\) RC
juu tuumiin juu x-ta-kii-qalhaju-ta+ch
ART money REL PAST-3PL.SUB-RT-steal-PF+ALD
'Heavily they had placed the large amount of the money
[that they had gone and stolen].'
[T0055: 054-55]
c. 7anu7 \(\mathrm{p}^{\prime} \mathrm{in}_{\mathrm{i}} \quad\left[\mathrm{juu}\right.\) 7ulh lakatz'unin \(\left.\emptyset_{\mathrm{i}}\right] \mathrm{RC}\)

7anu7 p'in juu 7u-li lakatz'unin
that salsa REL eat-PFV a.little
'She ate a little of that salsa.' \({ }^{220}\)
Literally: 'It was that salsa [that she ate a little bit of].' [T0069: 229]
In the example in (813), too, the matrix clause consists of a predicate pronominal construction. The head of the relative clause yuuch 'he' is the subject of the predicate nominal.

220 This is also a clefted focus construction. Please see section 8.2.1.
(813) Post-nominal Relativized Indirect Object
puus kaa yuuch \({ }_{i}\left[j u u \quad\right.\) 7ixtaqnitach \(\left.\quad \emptyset_{\mathrm{i}}\right] R C\)
puus kaa yuuch juu 7ix-xtaq-ni-ta+ch
well BLV PRN.3SG REL PAST-give-DAT-PF+ALD
'Well, I think it was he [to whom she had given it].'
[T0054: 016]
In the example in (814), the non-overt relativized element is an oblique object within its subordinate clause. The matrix clause consists only of a question word, which is the head of the relative clause and which is co-indexed with the oblique comitative argument that is licensed by the comitative morpheme \(t\) ' \(a a\) - on the subordinate verb within the relative clause.
(814) Post-nominal Relativized Oblique Object
a. \(\underline{\text { tiischawaych }}_{i} \quad\) [juu t'aa7ot'i \(\left.\quad \varnothing_{i}\right] R C\) ?
tiischawaych juu t'aa-qot-t'i
Q:who REL COM-drink-2SG.SUB.PFV
'With whom was it [that you drank]?'
[T0066: 292]
Examples of headless relative clauses appear in (815). As mentioned above, only a subordinate subject may be relativized in a headless relative clause. Furthermore, the headless relative clause, which is also a complement clause, may act only as the subject of the matrix verb, as seen in the examples in (815a) and (815b). The example in (815c) is a fragment in which the speaker is trying to establish the identity of a ghost that used to scare people in the vicinity of his home.
(815) Headless Relativized Subjects
\begin{tabular}{llll} 
a. \begin{tabular}{lll} 
[juu & tatamokoonchalhch & \(Ø_{i}\) \\
juu & ta-tamakajun-chaa-li+ch & \begin{tabular}{l} 
7anch \(] R_{i}\) \\
7anch
\end{tabular} \\
REL & 3PL.SUB-stay-DIST-PFV+ALD & there
\end{tabular} \\
& & \\
maa & taniiqoo & \\
maa & ta-nii-qoju & \\
RPT & 3PL.SUB-die-ALL.PFV &
\end{tabular}
[juu tamilhch \(\quad Ø_{\mathrm{i}} \quad 7\) ani7 laqachaqan] \(\mathrm{RC}_{\mathrm{i}}\)
juu ta-min-li+ch 7ani7 laqachaqan
REL 3PL.SUB-come-PFV+ALD here village
tapuutaxtulhch
ta-puutaxtu-li+ch
3PL.SUB-survive-PFV+ALD
'[Those who stayed there] all died. [Those who came to the village here] were saved.'
[T0057: 031-32]
b. 7alin juu 7ani7 [juu lhiistak'a \(\emptyset_{\mathrm{i}}\) lakatii] \(\mathrm{RC}_{\mathrm{i}}\) 7alin juu 7ani7 juu lhiistak-7a laka-tii there.is ART here REL guard-IMPFV PREP-road 'Here there is (someone) [who guards (in) the road].' [T0022: 050]
c. [juu x7ulaata \(\emptyset_{i}\) tam p'aqlati tuumiin] \(\mathrm{RC}_{\mathrm{i}}\) juu x-7ulaa-ta tam p'aqlati tuumiin REL PAST-put-PF one chest money '(The one) [who had a chest of money]'

A locative element within the subordinate/relative clause may be relativized to modify a noun in the matrix clause; examples are shown in (816). In this type of relative clause, the relativizing element is not the relativizer \(j u u\), but rather the locative relative pronoun juntaa 'where' or its truncated form taa. The relative pronoun (juntaa or taa) is also co-referential with the noun that is being modified. In this construction juntaa/taa fulfills two roles: (i) it introduces the relative clause and (ii) it is the relativized element. In the example in (816a), the relative clause juntaa ktapaasayaw 'where we pass' modifies the noun talhpa
'hill', which is the subject of the matrix clause. In the example in (816b), the relative clause juntaa xwiilhch juи xkumwarii 'where his compadre lived' modifies the noun laqachaqan 'town'. The matrix verb chin 'arrive there' is a transitive verb that takes a location as its object; laqachaqan is the object of the matrix clause. In the example in (816c), taa kch'alhkatnanaw 'where we worked' modifies the locative demonstrative pronoun 7anch 'there'. And in the example in (816d) the relative clause taa wii miinana7 Josefa 'where old lady Josephine lives' modifies the locative demonstrative pronoun 7ani7 'here'. In this example, the relative clause does not immediately follow the pronoun that it modifies; I believe this is an afterthought construction.

\section*{(816) Locative relative clause}

d. 7ani7 kimaaqeswat'i, 7ani7 kin-maa-qeswa-t'i here 1OBJ-CAUS-be.scared-2SG.SUB.PFV
\begin{tabular}{llll}
{\([\) taa } & wii & miinana7 & Seepaa \(]_{\text {ADVCL }}\) \\
taa & wii & min-nana7 & Seepee \\
where & seated(IMPFV) & 2POS-old.woman & Josefa
\end{tabular}
\begin{tabular}{ll} 
minkanch & 7 ani7 \\
min-kan+ch & 7 ani7 \\
come-INS+ALD & here \\
'You scared me here, [where old lady Josephine lives],
\end{tabular} coming here.'
[T0054: 036-037]

\subsection*{8.6.1.2 Complement Clauses}

In HT, a finite complement clause may act as an argument of a matrix clause. In general, complement clauses are introduced by the generic complementizer nii, and they almost always occur clause-finally, as seen in the examples below in (817). In these examples, the complementizer that introduces the complement clause is in bold type and the complement clause is enclosed in square brackets. The only example that I have found in which the complement clause does not occur at the end of matrix clause is shown below in (817e). Unfortunately, I did not test these clauses to see if they could be moved or not.
(817)a. lhiiyuuch jaantu qox
lhii-yuuch jaantu qox
APPL-PRN.3SG NEG good
\begin{tabular}{llccl}
{\([\) nii } & katamaqniiy & juu & 7anu7 & luw \(]_{\text {COMPCL }}\) \\
nii & ka-ta-maqnii-y & juu & 7anu7 & luw \\
COMP & IRR-3PL.SUB-kill-IMPFV & ART & that & snake \\
'Therefore, & [that they kill that snake] & is not good.' & [T0003: 022]
\end{tabular}
b. waa tza tza xtajuuniych
waa tza tza x-ta-jun-ni-y+ch

FOC repeatedly PAST-3PL.SUB-tell-DAT-IMPFV+ALD
\begin{tabular}{lclll} 
[nii & maa & waa & x7anch & tanxt'ut'unu7 \\
nii & maa & waa & x-7an+ch & tan- xt'ut'u-nV7 \\
COMP RPT & FOC & PAST-go(IMPFV) +ALD & torso-nurse-INF
\end{tabular}
juu xqolit'i] \({ }_{\text {COMPCL }}\)
juu xqolit'i
ART millipede
'They repeatedly told her [that the millipede was going to nurse].'
[T003: 032]
c. talakask'inch [nii 7alaqkiknawii] \({ }_{\text {COMPCL }}\)
ta-lakask'in+ch nii 7a-lak-kiknawii
3PL.SUB-want(IMPFV)+ALD COMP PL.INO-PL-flatter(PFV)
'They want [to be flattered].'
[T0066: 046]
d. nii yuuch lhiitak'inipalay
nii yuuch lhii-tak'ini-pala-y
COMP PRN.3SG APPL-need-REP-IMPFV
[nii \(\quad\) 7ak7ensayalaa \(]_{\text {COMPCL }}\)
nii 7a-k-7ensayalaa
COMP IRR-1SUB-practice(PFV)
'Therefore, it is necessary [that I practice].'
[T0066: 073]
e. waa lakask'ín [nii
waa lakask'in nii
FOC wish/want(IMPFV) COMP

The majority of the complement clauses that appear in the text database are the direct objects of speech and cognition verbs, as seen in the examples
below in (818) and (819), respectively. The matrix verbs are underlined. However, complement clauses can also function as subjects, as in (817a).

The direct object complement of a verb of speaking is always introduced by the complementizer nii, as seen in the examples in (818). Note that the clause in (818c) contains an adverbial clause that modifies the matrix clause, a complement clause that acts as the direct object of the matrix verb, and a relative clause within the complement clause.
(818) a. t'asanikalhch
t'asa-ni-kan-li+ch
call-DAT-INS-PFV+ALD
[nii kaxtaqnikanaach juu lhiich'alhkat] \(]_{\text {COMPCL }}\)
nii ka-xtaq-ni-kan-a7+ch juu lhiich'alhkat
COMP IRR-give-DAT-INS-FUT+ALD ART job
'Someone yelled to them [that he would give them a job].'
[T0063: 42]
b. waa kijuunilh juu liijuuntuu mimpay
waa ki-jun-ni-li juu liijuuntuu mim-pay

FOC 1OBJ-say-DAT-PFV ART deceased 2POS-father
[nii naa qoxich juu serrootii] \(]_{\text {COMPCL }}\)
nii naa qoxi+ch juu serrootii
COMP EMP good+ALD ART saw
'Your deceased father told me [that it was a good saw].'
[T0069: 384-385]
\begin{tabular}{llll} 
c. & tanajunch & juu & kintata7
\end{tabular} \begin{tabular}{l} 
nii \\
ta-najun+ch
\end{tabular} \begin{tabular}{lll} 
juu & kin-tata7 & nii \\
3PL.SUB-say(IMPFV)+ALD & ART & 1POS-elder
\end{tabular} COMP
\begin{tabular}{ll} 
[nii & xtalaqtz'in \\
nii & x-ta-laqtz'in \\
COMP & PAST-3PL.SUB-see(IMPFV)
\end{tabular}
\begin{tabular}{|c|c|c|c|}
\hline juu & lapanak & [juu & 7ixajaachiilh] \(\left.]_{\text {ReLCL }}\right]_{\text {COMPCL }}\) \\
\hline juu & lapanak & juu & 7ix-xajaan-chii-li \\
\hline ART & person & REL & PAST-exit-DST-PFV \\
\hline
\end{tabular} [that they would see the person that came out of there].'[T0022: 020-022]
d. lhiinajunkalh [nii kataymaa \(]_{\text {COMPCL }}\)
lhiinajun-kan-li nii ka-taymaa
command-INS-PFV COMP IRR-follow(PFV)
'They commanded him to follow (them).'
[QMMES]
The direct object complement of a verb of cognition may be introduced by the complementizer nii, as seen in (819a), or by a more specific adverb acting as a relative pronoun, as seen in the examples in (819b), (819c), and (819d). The example in (819b) contains two complement clauses; in the first one, the speaker began the clause with the adverb 7aksnii 'when', then started again and replace it with the generic complementizer nii. He then began the second complement clause with 7aksnii. In (819c) the complement clause begins with the adverb juntaa 'where'. In (819d) the complement clause begins with the adverb tanch
that also means 'where'; this example is interesting because the complement clause consists of a relativized adverbial. \({ }^{221}\)
(819)a. 7entons tapaastaklich

7entons ta-paastak-li+ch
then 3PL.SUB-remember-PFV+ALD
\begin{tabular}{|c|c|c|c|c|c|}
\hline [nii & 7anu7 & nii & 7alin & juu & Dios \(]_{\text {ComPCL }}\) \\
\hline nii & 7 anu 7 & nii & 7alin & juu & Dios \\
\hline COMP & um & COMP & there.is(IMPFV) & ART & God \\
\hline
\end{tabular}
[T0063: 076-077]
b. waa kpaastak'ach
\(\begin{array}{ll}\text { waa } & \text { k-paastak-7a+ch } \\ \text { FOC } & \text { 1SUB-remember-IMPFV+ALD }\end{array}\)
\begin{tabular}{llllll} 
nii & naa & lhuu & xminta & juu & t'uun \(]_{\text {COMPCL }}\) \\
nii & naa & lhuu & x-min-ta & juu & t'uun \\
COMP & EMP & much & PAST-come-PF & ART & earth
\end{tabular}
[7aksnii maqalhtajuu lak don Juaquin juu t'uun] \(]_{\text {COMPCL }}\) 7aksnii maqalhtajuu lak don Juaquin juu t'uun when slide.down(PFV) PREP don Juaquin ART earth 'I remember [when, um, that a lot of mud had come down], [when the land slid down at don Juaquin's place].'
[T0058: 004-006]
c. k'atz'ay juu Xiiwaan [juntaa t'ajun juu Kuulax] \({ }_{\text {СомPCL }}\) k'atz'a-y juu Xiiwaan juntaa t'ajun juu Kuulax know-IMPFV ART John where be(IMPFV) ART Nicholas 'John knows [where Nicholas is].'
[ELIEX2: 086]
d. jaantuxk'atz'akan [tanch [juu minaachaa \(\left.]_{\text {RELCL }}\right]_{\text {COMPCL }}\) jaantu x-k'atz'a-kan tanch juu min-a7-chaa NEG PAST-know-INS(IMPFV) where REL come-FUT-DIST 'They did not know [where it was that (the animal) would come out].'
[T0020: 005]

\footnotetext{
\({ }^{221}\) Please see the previous section on relative clauses for more information about relativized adverbs.
}

It is quite common in HT for a headless relative clause to be used as a complement clause. \({ }^{222}\) This type of complement clause is introduced by the relativizer juи instead of the complementizer nii. Examples are shown below in (820). The headless relative/complement clause occurs clause-finally, as seen in (820a), or clause-initially, as seen in (820b).
(820)a.

[T0055: 025-026]
b. [juu tatamokoonchalhch 7anch] \(]_{\text {COMPCL/RELCL }}\)
juu ta-tamakajun-chaa-li+ch 7anch
REL 3PL.SUB-remain-DST-PFV+ALD there
maa taniiqoo
maa ta-nii-qoju
RPT 3PL.SUB-die-ALL.PFV
'[Those who stayed there] all died.'
[T0057: 031]
Another type of complement clause that occurs quite frequently in HT narratives is the direct quotation that occurs as the direct object of a verb of speech. A direct quotation is not introduced by any kind of complementizing or adverbializing element. Examples are shown below in (821). In (821a), the quotation occurs at the end of the clause, and in (821b) it occurs at the beginning of the clause.

\footnotetext{
222 Headless relative clauses are discussed in the previous section on relative clauses.
223 The complementizer nii is also used to link sequential clauses; see the following section on adverbial clauses.
}


\subsection*{8.6.1.3 Adverbial Clauses}

For the purpose of this analysis, an adverbial clause is any non-conditional subordinate clause that acts as an adjunct-and not as a complement-to the matrix verb. In HT, adverbial clauses are those adjunct clauses that express time, location, and motive or purpose. I found no examples of adverbial clauses expressing manner in the texts; I suspect that this is because most of the manner adverbs are ideophonic.

A temporal adverbial clause is introduced either by the generic complementizer nii or by the temporal relative pronoun 7aksnii 'when', as seen in the examples below in (822). Given the phonetic similarity between 7aksnii and nii, it is possible either that the nii is a truncation of 7aksnii or that 7aksnii may be analyzed as 7aks+nii. However, while nii is used to introduce various types of
complement, adverbial, and conditional clause-and, thus, can be translated in various ways, including 'that', 'when', 'because', and 'if'—7aksnii introduces only temporal adverbial clauses and is translated only as 'when'. A temporal adverbial clause may follow its matrix clause, as seen in (822a), (822b), and (822c); it may precede its matrix clause, as seen in (822d); or it may intervene between major clausal constituents, as seen in (822e), where the adverbial clause follows the subject kintata7 'my elders' and precedes the direct object complement clause. Subordinating elements appear in bold, and the adverbial clauses are enclosed in square brackets.
(822) Temporal adverbial clauses
\(\begin{array}{llll}\text { a. } \begin{array}{lll}\text { juu } & \text { pumatam } & \text { lapanak }\end{array} & \text { niilh } \\ \text { juu puma-tam } & \text { lapanak } & \text { nii-li } \\ & \text { ART } & \text { CL:human-one } & \text { person }\end{array}\)
[nii tz'akalh juu luw \(]_{\text {ADVCL }}\) nii tz'aka-li juu luw COMP bite-PFV ART snake
'A person died [when a snake bit him].'
[T0009: 001-002]
b. yuuchach juu xaak'uch'u yuuch+ach juu xaa-k'uch'u PRN.3SG+ALD ART IPOS-cure
[7aksnii 7atz'akanan juu juu tzaapuj] \({ }_{\text {ADVCL }}\)
7aksnii 7a-tz'aka-nVn juu juu tzaapuj
when PL.INO-bite-INO(IMPFV) ART ART worm
'That is the cure [when the worm bites].'
[T0009: 010-011]
\begin{tabular}{llllll} 
c. & maa & naa & naa & qox & qay \\
maqtili7 \\
maa & naa & naa & qox & qay & maqtili7 \\
RPT & EMP & EMP & good & big & wild.animal \\
& & & & & \\
y & maa & waa & t'aku7 & \\
y & maa & waa & t'aku7 & \\
and & RPT & FOC & woman &
\end{tabular}
[7aksnii tapaach'uk'ulhch] \(]_{\text {ADVCL }}\)
7aksnii ta-paa-ch'uk'u-li+ch
when 3PL.SUB-INSIDE-cut.open-PFV+ALD
'It was a great big wild animal, and it was a woman inside
[when they cut it open].'
[T0020: 028-030]
d. [nii maa tachinchaa \(]_{\mathrm{ADVCL}}\)
\(\begin{array}{lll}\text { nii } & \text { maa } & \text { ta-chin-chaa } \\ \text { COMP } & \text { RPT } & \text { 3PL.SUB-arrive-DIST(PFV?) }\end{array}\)
\begin{tabular}{llll} 
puus & juu lapanak & maa & niitach \\
puus & juu lapanak & maa & nii-ta+ch \\
well & ART person & RPT & die-PF+ALD
\end{tabular}
'[When they arrived there], well, the man had already died.'
[T0022: 013-014]
e. tanajunch juu kintata7 [nii
ta-najun+ch juu kin-tata7 nii
3PL.SUB-say(IMPFV)+ALD ART 1POS-elder COMP
xtalaakilhun
x-ta-laa-kilhun
PAST-3PL.SUB-RCP-chat(IMPFV)
toolayl \(_{\text {AdvCL }}\)
toola-y
stay-IMPFV
\begin{tabular}{ll} 
[nii & xtalaqtz'in \\
nii & x-ta-laqtz'in \\
COMP & PAST-3PL.SUB-see(IMPFV)
\end{tabular}
juu lapanak [juu 7ixajaachiilh \(\left.]_{\text {ReLCL }}\right]_{\text {ComPCL }}\)
juu lapanak juu 7ix-xajaan-chii-li
ART person REL PAST-exit-DST-PFV
'My elders would say, [when they sat around chatting], that they
would see the person that came out of there.'
[T0022: 020-022]

A locative adverbial clause is introduced by the locative relative pronoun juntaa 'where', as seen in the examples below in (823). All of the locative adverbial clauses in the database occur at the end of the matrix clause; I did not test the adverbial clauses to see if they could occur in other locations. Note that the adverbial clause juntaa waa puut'ikst'i laktalhpa 'where the hills are narrow' in \((823 \mathrm{c})\) is actually modifying the relative clause juntaa ktapaasayaw 'where we pass' that is modifying the noun talhpa 'hill'.
(823) Locative adverbial clauses
a. maa xta7amaqpanan maa \(x\)-ta-7a-maqpa-nVn juu papa7-nin RPT PAST-3PL.SUB-PL.INO-wash.clothes-INO(IMPFV) ART man-PL
\begin{tabular}{lllll} 
juu & kaa & waa & lakak'iwin & xtat'ajun \\
juu & kaa & waa & laka-k'iw-in & x-ta-t'ajun \\
REL & BLV & FOC & PREP-tree-PL & PAST-3PL.SUB-be(IMPFV)
\end{tabular}
[juntaa junkan Lakaxaqax] \(]_{\text {ADVCL }}\)
juntaa jun-kan Lakaxaqax
where say-INS(IMPFV) Flint
'The old people who lived in the woods washed
[where it is called Flint].'
[T0022: 002-4]
b. juu maqanchich maa
juu maqanchi+ch maa
ART long.time + ALD RPT
xta7amaqpanan
x-ta-7a-maqpa-nVn
PAST-3PL.SUB-PL.INO-wash.clothes-INO(IMPFV)
\begin{tabular}{llll} 
juu lakxkaan & [juntaa & Lakaxaqax & xjunkan] \({ }_{\text {ADVCL }}\) \\
juu laka-xkaan & juntaa & Lakaxaqax & x-jun-kan \\
ART & PREP-water & where & Flint
\end{tabular}
'A long time ago, they washed in the river where they called it Flint.'
[T0022: 019]
\begin{tabular}{llllll} 
c. & waa & 7alin & talhpa & [juntaa & ktapaasayaw]RC \\
waa & 7alin & talhpa & juntaa & k-tapaasa-y-aw \\
FOC & there.is & hill & where & 1SUB-pass-IMPFV-1PL.SUB
\end{tabular}
\(\left.\begin{array}{llll}{[\text { juntaa }} & \text { waa } & \text { puut'ikst'i } & \text { laktalhpa] }]_{\text {ADVCL }} \\
\text { juntaa waa } & \text { puu-t'ikst'i } & \text { lak-talhpa }\end{array}\right]\)\begin{tabular}{l} 
where FOC INSIDE-small PREP-hill \\
'There is a hill where we pass, where it is narrow in the mountains.'
\end{tabular}
[T0022: 051-52]
An adverbial clause that expresses motive or purpose is introduced by the generic complementizer nii, as seen in the examples below in (824). This type of adverbial clause always occurs at the end of the matrix clause.
(824) Motive/Purpose with nii
a. maa jaantu ta7uputunpalay \(\quad\) juu xa7akanit
\(\begin{array}{llll}\text { maa } & \text { jaantu ta-7u-putun-pala-y } & \text { juu } & \text { xa-7akanit } \\ \text { RPT } & \text { NEG } & \text { 3PL.SUB-eat-DESID-REP-IMPFV } & \text { ART } \\ \text { IPOS-flesh }\end{array}\)
[nii waa lapanak] \(]_{\text {ADVCL }}\)
nii waa lapanak
COMP FOC person
'They did not want to eat the meat anymore [because it was human].'
[T0020: 032]
b. kaa x7uych juu yuuch juu lhiiway
kaa \(x-7 u-y+c h\) juu yuuch juu lhiiway
BLV PAST-eat-IMPFV+ALD ART PRN.3SG ART meat
[nii waa lhiiwaych juu x7uy] \(]_{\text {ADVCL }}\)
nii waa lhiiway+ch juu \(x-7 u-y\)
COMP FOC meat+ALD ART PAST-eat-IMPFV
[nii kaa waa maqtiliich] \(]_{\text {ADVCL }}\)
nii kaa waa maqtili7+ch
COMP BLV FOC wild.animal+ALD
'I think he ate the meat [because it was meat that it ate],
[because it was a wild animal].'
[T0022: 039-041]
\begin{tabular}{llll} 
c. maa & talhqamalh & juu & sireenaa \\
maa & talhqama-li & juu & sireenaa \\
RPT & get.angry-PFV & ART & goddess
\end{tabular}
\begin{tabular}{lllll}
{\([\) nii } & waa & muujuukalhch & juu & lapanak \\
nii & waa & muujuu-kan-li+ch & juu & lapanak \\
COMP & FOC & throw-INS-PFV+ALD & ART & people
\end{tabular}
juu xaaniin lapanak juu lakxkaan] \(]_{\text {ADVCL }}\)
juu xaa-nii-n lapanak juu lak-xkaan

ART IPOS-die-DVB people ART PREP-water 'The goddess got angry [because the people threw the dead people into the river].'
d. naa \(x 7\) alinch juu xlhiich'alhkat'an
naa \(x\)-7alin+ch juu x-lhiich'alhkat-7an
EMP PAST-there.is(IMPFV)+ALD ART 3POS-job-PL.POS
[nii maa waa xtalhii7anch] \(]_{\text {ADVCL }}\)
nii maa waa x-ta-lhii7an+ch
COMP RPT FOC PAST-3PL.SUB-take(IMPFV)+ALD
'They had (musical) gigs [because they would take her along].'
[T0063: 026-27]
\(\begin{array}{llll}\text { e. } & \text { tz'iink'a } & \text { [nii } & \text { waa }\end{array}\) k'aks \(]_{\text {ADVCL }}\)
[T0069: 014]
f. 7awayna7 [nii laaych 7atz'uk'u] \({ }_{\text {ADVCL }}\)

7a-wajin-a7 nii laa-y+ch 7a-tzuku
IRR-eat-FUT COMP can-IMPFV+ALD IRR-live(2SUB.PFV)
'You must eat in order to live.'
[QMMES]
It is quite common for the Spanish conjunction porque 'because' to be used either in place of or in addition to the HT complementizer nii in order to express purpose or motive, as seen in the examples below in (825). In (825a), porque is used instead of the native nii to introduce the adverbial clause; in
(825b), porque is used with of nii; and in (825c), porque introduces the first two adverbial clauses, and nii introduces the third one.

\section*{(825) Motive/Purpose with porque}
a. maa xta7anch 7amaqpanin
maa x -ta-7an+ch 7a-maqpa-nin
RPT PAST-3PL.SUB-go(IMPFV)+ALD PL.INO-wash.clothes-PL.INF
\begin{tabular}{lllll} 
[porque & maa & lapanak & juu & tajun \(]_{\text {ADVCL }}\) \\
porque & maa & lapanak & juu & ta-jun \\
because & RPT & person & REL & 3PL.SUB-be(IMPFV) \\
'They would go to wash because they were human.' & [T0022: 015-16]
\end{tabular}
b. maa waa tamaqalhch
maa waa ta-maqan-li+ch
RPT FOC 3PL.SUB-throw.out-PFV+ALD
\begin{tabular}{|c|c|c|c|c|c|}
\hline [porque & nii & maa & aa & xaak & lap \\
\hline & nii & m & waa & xaa-7ak & lap \\
\hline e & COMP & PT & FOC & IPOS-flesh & person \\
\hline
\end{tabular}
'They threw it out [because it was human flesh].'
\begin{tabular}{lllll} 
c. puus & juu maa tataxtuchaalhch & juu & 7anch \\
puus & juu & maa ta-taxtu-chaa-li+ch & juu & 7anch \\
well & REL & RPT & 3PL.SUB-leave-DIST-PFV+ALD & ART there
\end{tabular}
\begin{tabular}{clll} 
[porque & maa & naa & lhuu \\
porque & maa & naa & lhuu \\
because & RPT & EMP & many
\end{tabular}
jaantuch xtaminputun jaantu+ch x-ta-min-putun NEG+ALD PAST-3PL.SUB-come-DESID(IMPFV)
\begin{tabular}{clll} 
[porque & maa & naa & xtaqachaniych \\
porque & maa & naa & x-ta-qacha-ni-y+ch \\
because & RPT & EMP & PAST-3PL.SUB-like-DAT-IMPFV+ALD
\end{tabular}
juu Siikalhan [nii maa 7alheeqaych juu 7anch] \(]_{\text {ADVCL }}\) juu Siikalhan nii maa 7alheeqay+ch juu 7anch ART Zicatlán COMP RPT spacious+ALD ART there 'Well, those who left there, [because many didn't want to come [because they liked Zicatlán [because it was spacious there]]].'
[T0057: 026-29]

\subsection*{8.6.1.4 Conditional Clauses}

In HT a conditional clause is a subtype of a subordinate clause in that (i) the conditional clause is introduced by a complementizer, (ii) the subordinate verb is fully inflected for person, number, tense, aspect, and mood, and (ii) there is no special morphology that marks subordination. However, a conditional clause differs from the other types of subordinate clause in that the conditional clause is always inflected for irrealis mood, whether hypothetical or counter-factual (93e). A conditional clause may be introduced by the complementizer nii, as seen in the examples in (826), or by the conjunction maas 'even if', as seen in the examples in (827). The resulting clause has no special structure. In HT, the conditional clause tends to occur at the beginning of the sentence, as seen in most of the
following examples; however, the example in (827b) shows that the conditional clause may follow the matrix clause as well. \({ }^{224}\)
(826) a. porque [nii kata7uya7] \(]_{\text {CoNDCL }}\)
porque nii ka-ta-7u-ya7
because COMP IRR-3PL.SUB-eat-FUT
jaantuch katitataxtulh
jaantu+ch ka-ti-ta-taxtu-li
NEG+PUNC IRR-NEG.FUT-3PL.SUB-leave-PFV
'Because [if they ate it], they would not be able to leave.'
[T0063: 066-067]
b. [nii kamilh] \(]_{\text {ConDCL }}\) kaa laay 7aktamakawlh nii ka-min-li kaa laa-y 7a-k-tamakajun-li COMP IRR-come-PFV BLV can-IMPFV IRR-1SUB-remain-PFV 'If he were to come, I think that I could stay.'
[QMMES]
c. \(\begin{array}{llll}\text { nii } & \text { k'i7uya7 } & \text { jii } & \text { Piitalu7 }]_{\text {CONDCL }}\end{array}\)
nii ki-7u-ya7 jii Piitalu7
COMP 1OBJ(2SUB)-eat-FUT VOC Peter
ka7uyaan juu Siliiyaa maa juuniych
ka-7u-ya7-n juu Siliiyaa maa jun-ni-y+ch
IRR-eat-FUT-2OBJ ART Cecilia RPT say-DAT-IMPFV+ALD
'"'[If you eat me, Peter], Cecilia will eat you," it says to him.'
[T0058: 031]

\footnotetext{
\({ }^{224}\) For more information on the irrealis mood and the conditional, please see Chapter 3, Section 3.1.2.3.
}
d. [nii maa katamaqnii] \(]_{\text {CONDCL }}\)
nii maa ka-ta-maqnii
COMP RPT IRR-3PL.SUB-kill(PFV)
\begin{tabular}{lllll} 
maa & 7aqstu & naa & naa & 7awilhchan \\
maa & 7aqstu & naa & naa & 7awilhchan \\
RPT & same & EMP & EMP & day
\end{tabular}
\begin{tabular}{lllll} 
maa & kaniilhch & juu & 7anuuch & t'aku7 \\
maa & ka-nii-li+ch & juu & 7anu7+ch & t'aku7
\end{tabular}

RPT IRR-die-PFV+ALD ART that+ALD woman
'[If they kill it], that same day the woman will die.' [T0003: 018-020]
e. [nii xakmaamaa juu tuumiin \(]_{\text {CONDCL }}\)
nii xa-k-maamaa juu tuumiin
COMP PAST-1SUB-have(PFV) ART money
kaa laay xaktamawlh
kaa laa-y xa-k-tamaw-li
BLV can-IMPFV PAST-1SUB-buy-PFV
'[If I had had the money], I think that I would have bought it.'
[QMMES]
(827) a. [maas kamilh juu Xiiwaan] \(]_{\text {CONDCL }}\)
maas ka-min-li juu Xiiwaan
although IRR-come-PFV ART Juan
juu ki7in 7aktamokoona7
juu ki7in 7a-k-tamakajun-a7
ART PRN.1SG IRR-1SUB-remain-FUT
'Even if Juan were to come, I will stay.'
[QMMES]
b. katast'aaya7 juu puukapen [maas kaa
ka-ta-st'aa-ya7 juu puukapen maas kaa
IRR-3PL.SUB-sell-FUT ART coffee.farm although BLV
jaantuch kalakaskilh juu xaatata7] \(]_{\text {CoNDCL }}\)
jaantu+ch ka-lakaskin-li juu xaa-tata7
NEG+ALD IRR-want-PFV ART IPOS-grandfather
'They will sell the coffee farm [even if the grandfather
were to oppose it].'
[QMMES]

\subsection*{8.6.2 Coordination}

Coordination in HT is accomplished by means of juxtaposition of clauses or phrases, with or without a coordinator. The coordinators used in HT include the reportative particle maa, the complementizer nii, and the borrowed Spanish coordinators \(y\) 'and' and pero 'but'. Examples and discussion follow.

A common way to coordinate clauses in HT is to juxtapose two clauses without using a coordinator, as seen in the examples below in (828) and (829). In these examples, each independent clause appears within square brackets. In all of the examples in (828), the two clauses have the same subject, and this subject is marked on each matrix verb. However, in the examples in (829), each clause has a different subject, which is also marked on each matrix verb.
(828) Juxtaposition of 2 clauses with the same subject:
a. [ta7alhch]
ta-7an-li+ch
3PL.SUB-go-PFV+ALD
[tamuku7ulaaqoolhch juu xtuumiin7an]
ta-muku=7ulaa-qoju-li+ch juu x-tuumiin-7an
3PL.SUB-leave=put-ALL-PFV+ALD ART 3POS-money-PL.POS
'[They went off] and [left behind all of their money].' [T0055: 079]
b. [xtamaqniiy] [xta7uych]
\(x\)-ta-maqnii-y \(\quad x-t a-7 u-y+c h\)
PAST-3PL.SUB-kill-IMPFV PAST-3PL.SUB-eat-IMPFV+ALD
'[They would kill it], and [they would eat it].'
c. [chaqe7ilh juu xqapawati juu tz'alh] chaqayi-li juu x-qapawati juu tz'alh divide-PFV ART 3POS-bread ART boy
[kaxtaqnilhch juu xp'isaqa]
ka-xtaq-ni-li+ch juu x-p'isaqa TIP-give-DAT-PFV+ALD ART 3POS-younger.sibling '[The boy divided his bread], and [he gave some to his younger sibling].'
[ELIEX1: 021]
(829) Juxtapositon of 2 clauses with different subjects:
a. puus [waa maqniilhch] [ka7uyaawch]
puus waa k-maqnii-li+ch ka-7u-ya7-w+ch
well FOC 1SUB-kill-PFV+ALD IRR-eat-FUT-1PL.SUB+ALD
'Well, [I killed it], and [we are going to eat it].'
[T0059: 013]
b. [juu Susanita p'uxlh laqat'uy 7aalaaxuux] juu Susanita p'ux-li laqa-t'uy 7aalaaxuux ART Suzie pick-PFV CL:general-two orange
[juu Otaña waachu7 p'uxlh laqat'uy 7aalaaxuux] juu Otaña waachu7 p'ux-li laqa-t'uy 7aalaaxuux ART Otaña also pick-PFV CL:general-two orange '[Suzie picked two oranges], and [Otaña also picked two oranges].'[Q3I]
c. [tam maqali7 kamaach'ixtaqninch juu tuumiin] tam maqali7 ka-maa-ch'ixtaq-ni-n+ch juu tuumiin one rich.person IRR-CAUS-loan-DAT-2OBJ+ALD ART money
[jaantu qoxiyaa tuumiin palata] jaantu qoxiyaa tuumiin palata NEG good money better '[A rich person could loan you money], but [it isn't good money].'
[T0054: 024-025]
I have only one clear example in which juxtaposition is used to coordinate two verbs, shown below in (830). Only the first verb is marked for person. Either this is a speech error, or it is not necessary to mark the second (or third) verb in a conjoined verb phrase for person.
(830) taxkoyawlich maasoqoch kamaqalh
ta- xkoyaw-li+ch maa-soqon+ch ka-maqan-li
3PL.SUB-pull-PFV+ALD CAUS-hurry(PFV)+ALD IRR-throw.away-PFV
'They pulled him and made him hurry to throw it away.' [T0055: 028] Juxtaposition is also used to coordinate two nouns, as seen in the examples below in (831). Each noun is preceded by the definite article juu.
(831) Juxtapositon of 2 nouns
a. juu Xiiwaan juu Piitalu7 taqasmatniy juu Xiiwaan juu Piitalu7 ta-qasmat-ni-y art John art Peter 3PL.SUB-hear-DAT-IMPFV
juu 7ixlaktataa7an
juu 7ix-lak-tata7-7an
ART 3POS-PL-old.man-PL.POS
'John and Peter listen to their grandparents.'
b. ka7awch waynin juu 7ixint'i juu ki7in ka-7an-w+ch wajin-nin juu 7ixint'i juu ki7in IRR-go(PFV)-1PL.SUB+ALD eat-PL.INF ART PRN.2SG ART PRN.1SG
'You and I are going to eat.'
c. kawaynaaw juu ki7in juu Aantuun
ka-wajin-a7-aw juu ki7in juu Aantuun IRR-eat-FUT-1Pl.SUB art PRN.1SG art Anthony
'Anthony and I will eat later.'
According to Herzog (no date), the HT conjunction is chay, and it is used between nouns and between clauses. I did not specifically test this particle. However, chay appears only once in my textual database, and my consultant translated it as también 'also'. This example is shown below in (832).
(832) waa soq paaxtoqpaa juu 7ani7 Antonio Sevilla
waa soq paaxtoq-pala juu 7 ani 7 Antonio Sevilla
FOC straight meet-REP.PFV ART um Antonio Sevilla
chaych juu ingeniero 7ani7 Pulido
chay + ch juu ingeniero 7 ani7 Pulido
also+ALD ART engineer um Pulido
'I met um Antonio Sevilla, also the engineer um Pulido.' [T0066: 030-031]
In my own data, HT clauses are frequently coordinated by means of what appears to be the evidential reportative particle maa. \({ }^{225}\) Nora England (p.c.) suggests to me that this instance of maa is actually a conjunction that is similar to the evidential clitic maa due either to homophony or to some historical change that is not clear from a synchronic point of view. This could be the case because when my consultant loosely translated passages that contained the particle maa, he would translate maa as either \(y\) 'and' or segun 'according to'. However, when I asked for a specific translation of maa, he always translated it as segun. When I explicitly tried to elicit a conjunction using conjoined clauses or phrases in Spanish, my consultant would either use the Spanish conjunction \(y\) in the HT clause or he would juxtapose the two clauses or phrases. He never used maa in elicited examples. For this reason, I continue to gloss maa as the evidential particle RPT in the examples that appear below in (833) and (834).

Setting aside the question of whether or not the particle maa is or is not the evidential clitic, examples in which maa is used to coordinate two clauses with the same subject are shown below in (833), and examples in which it is used to coordinate two clauses with different subjects are shown below in (834). In all

\footnotetext{
225 Please Chapter 6, Section 6.4.2.1 for more information on the evidential reportative particle maa.
}
of these examples, separate clauses are enclosed in square brackets, and maa appears in bold face. The particle maa intervenes between the two clauses in all examples. Depending on the context, maa may be translated as 'and' or 'but'.
(833) maa used to coordinate 2 clauses with the same subject:
\begin{tabular}{lllll} 
a. & [lhiiminkalh] & maa & [tz'ukukalhch & laqaxuk'a.] \\
& lhiimin-kan-li & maa & tz'uku-kan-li+ch & laqaxuk'a \\
& bring-INS-PFV & RPT & begin-INS-PFV+ALD & skin \\
& '[They brought it back], and [they began to skin it].'
\end{tabular}
[T0020: 025]
b. [maamak'utulhch] maa [7aqxqoqatach]
maa-mak'utu-li+ch maa 7aqx-qoqa-ta+ch
CAUS-unload-PFV+ALD RPT SHOULDER-carry-PF+ALD
'[He unloaded it], and [he threw it over his shoulder].' [T0055: 019]
c. [chiwinilh] maa [najunch]
chiwin-ni-li maa najun+ch
speak-PFV RPT say(IMPFV)+ALD
'[It spoke to him], and [it says, "...".]'
[T0058: 027]
(834) maa used to coordinate 2 clauses with different subjects:
a. [laqaxuk'alhch] maa [tapaach'uk'ulhch.] laqaxuk'a-li+ch maa ta-paa-ch'uk'u-li+ch skin-PFV+ALD RPT 3PL.SUB-INSIDE-cut.open-PFV+ALD '[He skinned it], and [they cut it open].'
[T0020: 026]
b. [milh 7awilhchan nii kaa
min-li 7a-wilhchan nii kaa
come-PFV CLS:other-day COMP BLV
\begin{tabular}{llll} 
lhii7ampaalhch & juu & maa & p'aax \(]\) \\
lhii7an-palh+ch & juu & maa & p'aax \\
take-AGAIN.PFV+ALD & ART & RPT & pig
\end{tabular}
\(\begin{array}{lll}\text { maa } & \text { [tataymaa } & \text { lhii7alhch.] } \\ \text { maa } & \text { ta-taymaa } & \text { lhii-7an-li+ch } \\ \text { RPT } & \text { 3PL.SUB-follow(PFV) } & \text { APPL-go-PFV+ALD }\end{array}\)
'[Another day came when it carried off a pig again], and [they followed it.]'
[T0020: 016-017]

> c. [waa naa papa7] maa [naa kiklhman]
> '[He was an old man], and [(he had a) very long beard], and [(he had a) very long beard], and [his facial hair was long.]'
[T0022: 037-040]
d. [tatzukulhch laqlhwaqnin]
ta-tzuku-li+ch lak-lhwaq-nin
3PL.SUB-begin-PFV+ALD PL-dismember-PL.INF
maa [jaantu ta7uputunpalay]
maa jaantu ta-7u-putun-pala-y
RPT NEG 3PL.SUB-eat-DESID-REP-IMPFV
'[They began to dismember it], but [they did not want to eat it.]'
[T0020: 031-032]
e. [lakch'apayajuych] maa [jaantu tataspitlh] lak-ch'apayaju-y+ch maa jaantu ta-taspit-li PL-stop-IMPFV+ALD RPT NEG 3PL.SUB-return-PFV '[He (tried to) stop them], but [they didn't return.]' [T0055: 084-085]

I have found only one example-shown below in (835)—in which maa is used to coordinate two nouns. In this example, maa intervenes between the two nouns. Note that the first noun t'akuunin 'women' is preceded by the definite article juи while the second noun papaaniin 'men' is not.
(835) maa used to coordinate two nominals:

[T0003: 005-6]
In some examples from the text database, the complementizer nii is used to conjoin two clauses that have a common argument. The clauses conjoined by nii fall into one of two types: (i) the second clause sequentially follows the first clause or (ii) the second clause expresses some sort of exception to the first clause. Examples of sequential coordination appear in (836) below, and examples of exceptional coordination appear in (837). The complementizer intervenes between the conjoined clauses, which are enclosed in square brackets.
(836) Complementizer nii used to conjoin 2 sequential clauses:
a. [kimaaqeswaat'i]
kin-maa-qeswaa-t'i
1OBJ-CAUS-get.scared-2SG.SUB.PFV
nii [kaa waa p'atz'ik xqotp'alata]
nii kaa waa p'atz'ik x-qot-pala-ta
COMP BLV FOC a.little PAST-drink-REP-PF
'You scared me, and I think that you were a little drunk.'
[T0054: 032]
b. [chiniich waa klaalh]
chinii+ch waa k-laay-li
like.so+ALD FOC 1SUB-can-PFV
nii [naa xakpiixtuxkapalata]
nii naa xa-k-piixtu-xka-pala-ta
COMP EMP PAST-1SUB-NECK-hurt-REP-PF
'That's what I did, and then my neck hurt badly.'
[T0054: 043]
c. lhiitamawlh laqatam xlaqpuutanuti
lhii-tamaw-li laqa-tam x-laqpuutanuti
APPL-buy-PFV CL:general-one 3POS-mask
nii maa minchoqolhch juu lakatii
nii maa min-choqo-li+ch juu laka-tii
COMP RPT return-AGAIN-PFV+ALD ART PREP-road
'He bought himself a mask, and then he returned along the road.'
[T0055: 048049]
d. y luego waa naa maa 7alakt'aatoolay
y luego waa naa maa 7a-lak-t'aa-toola-y and then FOC EMP RPT PL.INO-PL-COM-stay-IMPFV
\begin{tabular}{lllll} 
y & waa & naach & nii & talaklhtatalhch; \\
y & waa & naa+ch & nii & ta-lak-lhtata-li+ch \\
and & FOC & EMP+ALD & COMP & 3PL.SUB-DIS-sleep-PFV+ALD
\end{tabular}
nii talaktlhtatalhch
nii ta-lak-lhtata-li+ch
COMP 3PL.SUB-DIS-sleep-PFV+ALD
\begin{tabular}{lllll} 
nii & naa & waa & x7alinch & juu \(x q e n\) \\
nii & naa & waa & x-7alin+ch & juu \(x\) xqen \\
COMP & EMP & FOC & PAST-there & is(IMPFV) + ALD \(A R T ~ f l y ~\)
\end{tabular}

COMP EMP FOC PAST-there.is(IMPFV) + ALD ART fly
'And then he stayed with them, and soon they all fell asleep; when they had fallen asleep, then there were a lot of flies.'
(837) Complementizer nii used to conjoin 2 "exceptional" clauses:
a. [naa k'uusch katasuya7, waa yuuch,] naa k'uus+ch ka-tasuy-a7 waa yuuch EMP pretty+ALD IRR-look-FUT FOC PRN.3SG
nii [lhuuch kalhii7ana7 juu k'iw]
nii lhuu+ch ka-lhii7an-a7 juu k'iw
COMP much+ALD IRR-take-FUT ART wood
'It is going to look pretty, it is, but it is going to take a lot of wood.'
[T0069: 275-276]
b. [juu 7aks juu k'aatan nii xkilaalh juu Gavino], juu 7aks juu k'aatan nii x-ki-laa-li juu Gavino REL when ART festival COMP PAST-RT-go-PFV ART Gavin
nii [waa jaantu kijumpaa]
nii waa jaantu ki-jun-paa COMP FOC NEG 1POS-say-REP.PFV
'It was during the festival that Gavin went to, but he didn't tell me.'
[T0069: 378-379]
The Spanish conjunctions \(y\) 'and' and pero 'but' may be used to conjoin two clauses that have the same subject. Examples appear in (838) below.
(838)y, pero used to coordinate 2 clauses with the same subject:
\[
\left.\begin{array}{lll}
\text { a. } & \begin{array}{l}
\text { [7atz'alalhch] } \\
\text { 7atz'ala-li+ch }
\end{array} & \begin{array}{l}
\text { y } \\
\text { yun-PFV+ALD }
\end{array} \\
\text { and }
\end{array} \begin{array}{l}
\text { [tanuuchaalhch } \\
\text { tanuu-chaa-li+ch } \\
\text { enter-DIST-PFV+ALD }
\end{array}\right]
\]
[T0020: 020]
b. \(\begin{array}{lll}{[\text { juu ki7in }} & \text { klaqtz'in] } & \mathbf{y} \\ \text { juu ki7in } & \text { k-laqtz'in-n } & \mathbf{y}\end{array}\)
\begin{tabular}{llll} 
juu & ki7in & k-laqtz'in-n & \(\mathbf{y}\) \\
ART & PRN.1SG & 1SUB-see(PFV)-2OBJ & and
\end{tabular}
[jaantu xaklaqtz'inputunan]
jaantu xa-k-laqtz'in-putun-an
NEG PAST-1SUB-see-DESID(IMPFV)-2OBJ
I saw you, and I didn't want to see you.
c. [saksayooputunch juu lakalaasoo]
xa-k-sayaw-putun(IMPFV)+ch juu laka-laasoo
PAST-1SUB-lift-DESID+ALD ART PREP-rope
pero [ktask'inipalay vigas]
pero k-task'in-ni-pala-y vigas
but 1SUB-need-DAT-REP-IMPFV beams
'I wanted to lift it with rope, but I need beams.'
[T0069: 008-009]
The Spanish conjunction pero 'but' may also be used to conjoin two clauses that have different subjects, as seen below in the examples in (839). However, I have found no examples in which \(y\) is used to conjoin two clauses that have different subjects.
(839) pero used to coordinate two clauses with different subjects:
\begin{tabular}{lll} 
7anch & juu & kixaqaxtukalhch \\
7 7anch & juu & ki-xaqaxtu-kan-li+ch \\
there & REL & RT-take.out-INS-PFV+ALD
\end{tabular}
pero maa xaaniinch
pero maa xaa-nii-n+ch
but RPT IPOS-die-DVB+ALD
'It was there where they went and removed it [the animal], but it [the animal] was already dead.'

The Spanish conjunction \(y\) 'and' is used to conjoin nouns within a noun phrase, as seen below in the examples in (840). Note that in these examples, when the noun phrase is definite, only the first noun is preceded by the definite article juи.
(840) Nouns coordinated by \(\boldsymbol{y}\) :
a. de Muuniixkaan, Pisaflores, San Francisco y from Mecapalapa Pisaflores, San Francisco and

7ani7+ch laqachaqan Huehuetla
here+ALD town Huehuetla
'from Mecapalapa, Pisaflores, San Francisco y here, the town of Huehuetla.'
[T0057: 039]
b. waa 7anchach tamaktay
waa 7anch+ach tamakta-y
FOC there+ALD end-IMPFV
\(\begin{array}{llllll}\text { juu } & \text { xkweentuu } & \text { juu } & \text { Piitalu7 } & \text { y } & \text { Siliiyaach } \\ \text { juu } & \text { x-kweentuu } & \text { juu } & \text { Piitalu7 } & \text { y } & \text { Siliiyaa }+ \text { ch } \\ \text { ART } & \text { 3POS-story } & \text { ART } & \text { Peter } & \text { and } & \text { Cecilia }+ \text { ALD }\end{array}\)
'There ends the story of Peter and Cecilia.'
[T0058: 055-056]
c. juu Xiiwaan \(\mathbf{y}\) Kuulaax ta7aqlhteyjuuy
juu Xiiwaan \(\mathbf{y}\) Kuulaax ta-7aqlhteyjuu-y
ART John and Nick 3PL.SUB-help-IMPFV
juu 7ixpay7an
juu 7ix-pay-7an
ART 3POS-father-PL.POS
John and Nick help their father.
d. juu ki7in \(y\) Aantuunch
juu ki7in \(y\) Aantuun + ch
ART PRN. 1 SG and Anthony+ALD
k'anaw juu lakxkaan
k-7an-aw juu laka-xkaan
1SUB-go(IMPFV)-1PL.SUB ART PREP-water
'Anthony and I go to the river.'
e. taantuu como t'akuunin \(\mathbf{y}\) papaanin
taantuu como t'aku7-nin \(\mathbf{y}\) papa7-nin
as.much as woman-PL and man-PL
'women as well as men.'
[T0003: 0008]

\section*{Appendix: Huehuetla Tepehua Texts}

\section*{Text 1: The Millipede (T0003)}

This text was narrated by Micaela Santiago Plata on June 29, 1999 in Catemaco, Veracruz, Mexico. It recorded and transcribed by Susan Smythe Kung, translated by Micaela Santiago Plata and don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is to be archived with the Archive of the Indigenous Languages of Latin America \({ }^{226}\) under the language name "Tepehua de Huehuetla".

T0003: 001
\begin{tabular}{lllll} 
puus & juu & 7anch & juu & lakilaqachaqan \\
puus & juu & 7 anch & juu & laka-kin-laqachaqan \\
well & DET there & DET & PREP-1POS-town \\
Well, in my town & &
\end{tabular}

T0003: 002
wachu7 talaknajun
wachu7 ta-lak-najun
also 3PL.SUB-DIS-say(IMPFV)
they talk
T0003: 003
juu xlakata 7anii
juu xlakata 7anii
DET about this
about

226 http://www.ailla.utexas.org

T0003: 004
\begin{tabular}{llllll} 
juu & luw & juu & maa & junkan & xqolit'i \\
juu & luw & juu & maa & jun-kan & xqolit'i \\
DET & snake & REL & RPT & say-RFL(IMPFV) & millipede
\end{tabular} a snake called millipede.

T0003: 005
\begin{tabular}{llllll} 
Puus & juu & 7anu7 & luw, & maa & yuuch \\
puus & juu & 7 anu7 & luw & maa & yuuch \\
well & DET & that & snake & RPT & PRN.3SG
\end{tabular}
\begin{tabular}{lll} 
laktiitaymay & juu & t'akuunin \\
lak-tiitayma-y & juu & t'aku7-nin
\end{tabular}

3PL.OBJ-chase-IMPFV DET woman-PL
Well, that snake, it chases after the women
T0003: 006
maa papaaninch juu mati7 sasqat'a7an
maa papa7-nin+ch juu mati7 x-7asqat'a-7an
RPT man-PL+ALD REL nothing 3POS-child-PL.POS
and men who don't have children;
T0003: 007
\begin{tabular}{llll} 
maa & jaantu laay & 7alin & sasqat'a7an \\
maa & jaantu laa-y & 7alin & x-7asqat'a-7an \\
RPT & NEG can-IMPFV & there_is & 3POS-child-PL.POS \\
whoever can't have children
\end{tabular}

T0003: 008
\begin{tabular}{lllll} 
tantuu & como & t'akuunin & y & papaanin. \\
tantuu & \begin{tabular}{l} 
como \\
c'aku7-nin
\end{tabular} & \begin{tabular}{l} 
y \\
as_much
\end{tabular} & as & woman-PL
\end{tabular} and \(\quad\) man-PL.
the women as well as the men.
T0003: 009
Puus juu 7anu7 luw matach juu paytatz'iisi puus juu 7anu7 luw mata+ch juu paytatz'iisi well DET that snake XXX+ALD DET midnight Well, at midnight that snake

\section*{T0003: 010}
\begin{tabular}{lllll} 
maa & ka7anaach & laqtz'ini7 & juu & xnati \\
maa & ka-7an-a7+ch & laqtz'in-nV7 & juu & x-nati \\
RPT & IRR-go-FUT+ALD & see-INF & DET & 3POS-mother \\
goes to see its mother, & & &
\end{tabular}

\section*{T0003: 011}
juu 7anuuch t'aku7 tiichiichawaych
juu 7anu7+ch t'aku7 tiischawaych
DET that+ALD woman who
juu maa tiitaymaych
juu maa tiitayma-y+ch
REL RPT chase-IMPFV+ALD
that woman who it chases
T0003: 012
maa tanxt'ut'uych.
maa tan-xt'ut'u-y+ch
RPT torso-nurse-IMPFV+ALD
and it nurses.
T0003: 013
Puus juu 7anu7 chunch juu laknoonkanch
puus juu 7anu7 chun + ch juu lak-najun-kan+ch
well DET that thus+ALD REL PL-say-INS(IMPFV)+ALD
juu lakilaqachaqan porque
juu laka-kin-laqachaqan porque
DET PREP-1POS-town because
Well, that's what they say in my town because
T0003: 014
laqlaqtz'in maa laqtz'inkanka7
lak-laqtz'in maa laqtz'in-kan+ka7
PL-see(IMPFV) RPT see-INS(IMPFV)+JST
they have seen it.

T0003: 015
Puus juu 7anu7 luw puus juu 7anu7 luw well DET that snake Well, that snake

T0003: 016
\begin{tabular}{llllll} 
maa & jaantu & qox & nii & maa & katamaqnii \\
maa & jaantu & qox & nii & maa & ka-ta-maqnii \\
RPT & NEG & good & COMP & RPT & IRR-3PL.SUB-kill(PFV) \\
it is not good for
\end{tabular}

T0003: 017
\begin{tabular}{lllll} 
juu & 7anuuch & lapanak & maa & laktiitaymay \\
juu & 7anu7+ch & lapanak & maa & lak-tiitayma-y \\
DET & that + ALD & person & RPT & 3PL.OBJ-chase-IMPFV
\end{tabular}
the people who it chases to kill it
T0003: 018
\begin{tabular}{llll} 
porque & nii & maa & katamaqnii \\
porque & nii & maa & ka-ta-maqnii \\
because & COMP & RPT & IRR-3PL.SUB-kill(PFV) \\
because if they kill it, & &
\end{tabular}

T0003: 019
\begin{tabular}{lllll} 
maa & 7akstu & naa & naa & 7awilhchan \\
maa & 7aqstu & naa & naa & 7a-wilhchan \\
RPT & same & EMP & EMP & CL:another-day
\end{tabular}
maa kaniilh juu 7anuuch
maa ka-nii-li juu 7anu7+ch
RPT IRR-die-PFV DET that+ALD
that very same day, the woman will die
T0003: 020
juu 7anch t'aku7
juu 7anch t'aku7
DET there woman
that woman

T0003: 021
\(\begin{array}{lll}\text { juu } & \text { 7ixnatich } & \text { nawiiy. } \\ \text { juu } & \text { x-nati }+ \text { ch } & \text { nawii-y } \\ \text { REL } & \text { POS-mother+ALD } & \text { make-IMPFV } \\ \text { who it has made its mother. }\end{array}\)

T0003: 022
lhiiyuuch jaantu qox nii
lhiiyuuch jaantu qox nii
therefore NEG good COMP
\begin{tabular}{lcll} 
katamaqnii & juu & 7anu7 & luw \\
ka-ta-maqnii & juu & 7anu7 & luw \\
IRR-3PL.SUB-kill(PFV) & DET & that & snake \\
Therefore, it is not good to kill that snake.
\end{tabular}

T0003: 023
Puus juu laay
puus juu laa-y
well REL can-IMPFV
Well, the one who can
T0003: 024
juu laay ch'apay juu luw
juu laa-y ch'apa-y juu luw
REL can-IMPFV grab-IMPFV DET snake
the one who can grab the snake,
T0003: 025
yuuch juu kintata7 juu tam tapopan
yuuch juu kin-tata 7 juu tam tapapaan
PRN.3SG DET 1POS-old_man DET one witch
he is an old man, a witch.
T0003: 026
Maa yuuch juu laay kalhii7alh ma7ata
maa yuuch juu laa-y ka-lhii7an-li ma7ata

RPT PRN.3SG REL can-IMPFV IRR-take-PFV far
It is he who can carry it away

T0003: 027
\begin{tabular}{llll} 
taa & kamaa7anantach & juu & taa \\
taa & ka-maa7an-nVn-ta+ch & juu & taa \\
where & IRR-throw-INO-PF+ALD & REL & where \\
& & & \\
taqay7iixt'oq7ach & juu & tii \\
ta-qay7iixt'oq-7a+ch & juu & tii \\
INCH-join-IMPFV+ALD & DET & road \\
where he is going to throw it, where the roads meet (at the crossroads).
\end{tabular}

T0003: 028
7anch juu maa laaych 7anch mukoona7
7anch juu maa laa-y+ch 7an+ch makajun-nV7
there REL RPT can-IMPFV+ALD go(IMPFV)+ALD leave-INF
That is where he can go to leave it.
T0003: 029
\begin{tabular}{|c|c|c|c|}
\hline Maa & chunch nawiita & pumatam & kintata7 \\
\hline maa & chun+ch nawii-ta & puma-tam & kin-tata7 \\
\hline RPT & thus+ALD do-PF & CL:human-one & 1POS-old_man \\
\hline That & at an old man did & & \\
\hline
\end{tabular}

T0003: 030
porque juu 7anu7 kinana7
porque juu 7anu7 kin-nana7
because DET that 1POS-old_woman
because that old woman
T0003: 031
maa jaantuch xlakask'in,
maa jaantu+ch x-lakask'in
RPT NEG+ALD PAST-want(IMPFV)
maa naa xtamaaqantalhanantach,
maa naa \(x\)-ta-maaqantalha-nan-ta + ch
RPT EMP PAST-INCH-frighten-INO-PF+ALD
maa jeqs x7uy
maa jaqs x-7u-y
RPT bore PAST-eat-IMPFV
did not want it, she was afraid, she was fed up

T0003: 032
\begin{tabular}{lllll} 
nii & maa & waa & tza tza & \begin{tabular}{l} 
xtajuuniych \\
nii
\end{tabular} \\
maa & waa & tza tza & x-ta-jun-ni-y+ch
\end{tabular}

T0003: 033
Puus chunch juu noonkan
puus chun+ch juu najun-kan
well thus+ALD REL say-INS(IMPFV)
juu 7anch juu lakilaqachaqan.
juu 7anch juu laka-kin-laqachaqan
DET there DET PREP-1POS-town
Well, that's what they say in my town.

\section*{Text 2: The Shape-Shifter is a Woman Tiger (T0020)}

This text was narrated by don Antonio Vigueras Huerta on July 8, 2000, in Catemaco, Veracruz, Mexico. It was recorded and transcribed by Susan Smythe Kung, translated by don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is to be archived with the Archive of the Indigenous Languages of Latin America under the language name "Tepehua de Huehuetla".

\section*{T0020: 001}
\begin{tabular}{lllll} 
juu laqatam & wilhchan & juu & maa & maqanchich \\
juu laqa-tam & wilhchan & juu & maa & maqanch+ich \\
DET CL:general-one day & DET & RPT & long_time+ALD \\
One day, a long time ago,
\end{tabular}

T0020: 002
\begin{tabular}{lllllll} 
maa & xt'oonpalay & juu & maqtili7 & juu & waa & niinch \\
maa & x-t'ajun-pala-y & juu & maqtili7 & juu & waa & niin+ch \\
RPT & PAST-be-REP-IMPFV & DET & animal & REL & FOC & near+ALD
\end{tabular}
\begin{tabular}{lccc} 
laqachaqan & taa & wii & xkaan. \\
laqachaqan & taa & wii & xkaan \\
town & where & seated.IMPFV & water \\
there was an animal that was near the town by the water,
\end{tabular}

T0020: 003
Lakalhpaw junkan
Lakalhpaw jun-kan
Pagua say-RFL(IMPFV)
It's called the Pagua.
T0020: 004
\begin{tabular}{llll} 
maa & 7ixtaxtuy & juu & laktalhpa \\
maa & x-taxtu-y & juu & laka-talhpa \\
RPT & PAST-leave-IMPFV & DET & PREP-mountain \\
It went out in the mountain(s), &
\end{tabular}

T0020: 005
jaantu xk'atz'akan tanch juu minachaa.
jaantu x-k'atz'a-kan tanch juu min-chaa
NEG PAST-know-INS(IMPFV) where REL come-DST.PFV
but it was not known where the animal came out.
T0020: 006
\begin{tabular}{lllllll} 
juu & maqtili7 & nii & waa & xlhii7an & juu & p'aax, \\
juu & maqtili7 & nii & waa & x-lhii7an & juu & p'aax \\
DET animal & COMP & FOC & PAST-take(IMPFV) & DET & pig \\
The animal would take pigs,
\end{tabular}

T0020: 007
xlhii7an juu borrego waakax.
x-lhii7an juu borrego waakax
PAST-take(IMPFV) DET sheep cow
it would take sheep, cows,

T0020: 008
\begin{tabular}{lllll} 
juu & waa & lakt'ikt'ika7 & juu & waakax \\
juu & waa & lakat'ikst'i+ka7 & juu & waakax \\
DET & FOC & small+JST & DET & cow
\end{tabular}

The cows were little,
T0020: 009
juu maa xlhii7an.
juu maa x-lhii7an
REL RPT PAST-take(IMPFV)
the ones that would take.
T0020: 010
juu tanch maqanch maqanch
juu tanch maqanch maqanch
DET where long_time long_time
Little by little
T0020: 011
\begin{tabular}{lllll} 
maa & talhiitajuu & maa & waa & 7anchach \\
maa & ta-lhiitajuu & maa & waa & 7anch+ach \\
RPT & 3PL.SUB-find(PFV) & RPT & FOC & there+ALD
\end{tabular}
juu seqjun juu maqtili7.
juu seqjun juu maqtili7
REL hide(IMPFV) DET animal
they found out that the animal was hiding there.
T0020: 012
puuxkoolhiitz'ukukaalh puuxkoolhiitz'ukukaalh
puuxkaju=lhii-tzuku-kan-li puuxkaju=lhii-tzuku-kan-li
look_for=APPL-begin-INS-PFV look_for=APPL-begin-INS-PFV
They began to search and search for it.

\section*{T0020: 013}
\begin{tabular}{llll} 
y & maa & milhch & 7awilhchan \\
y & maa & min-li+ch & 7a-wilhchan \\
and & RPT & come-PFV+ALD & CL:another-day
\end{tabular}
nii lhiitajuukaalh tanch juu tanuun
nii lhiitajuu-kan-li tanch juu tanuun
COMP find-INS-PFV where DET inserted(IMPFV)
But the day came when they found where it was.
T0020: 014
\begin{tabular}{llll} 
kaa & x7alinch & juu & 7aksnii \\
kaa & x-7alin+ch & juu & 7aksnii \\
BLV & PAST-there_is(IMPFV)+ALD & REL & when
\end{tabular}
laaych xat'alanan.
laa-y+ch xa-t'ala-nVn
can-IMPFV+ALD PAST-shoot-INO
Then there was a lot of shooting.
T0020: 015
puus tap'akxan taylhiitzukulhch
puus ta-p'akxan ta-lhii-tzuku-li+ch
well 3PL.SUB-spy.on(IMPFV) 3PL.SUB-APPL-begin-PFV+ALD
Well, they began to wait for it.
T0020: 016
milh 7awilhchan nii kaa lhii7ampaalhch
min-li 7a-wilhchan nii kaa lhii7an-pala-li+ch
come-PFV CL:another-day COMP BLV take-REP-PFV+ALD
juu maa p'aax
juu maa p'aax
DET RPT pig
Another day came when it carried off another pig,
T0020: 017
maa tataymaa lhii7alhch.
maa ta-taymaa lhii-7an-li+ch
RPT 3PL.SUB-follow(PFV) APPL-go(PFV)-PFV+ALD
and they followed it.

\section*{T0020: 018}
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maa taqalhaputaylich
maa ta-qalhaputay-li+ch
RPT 3PL.SUB-intercept-PFV+ALD
They intercepted it.

```
T0020: 019
maa tatz'ukulh lakat'alhmaanin.
maa ta-tzuku-li laka-t'alh=maa-nin
RPT 3PL.SUB-begin-PFV body-stone=lying-PL.INF
They began to stone it.

T0020: 020
7atz'alalhch y tanuuchaalhch juu laktalhpa.
7atz'ala-li+ch y tanuu-chaa-li+ch juu laka-talhpa run-PFV+ALD and enter-DST-PFV+ALD DET PREP-mountain
It ran into the cave.
T0020: 021
7anch juu kiixaqaxtukaalhch,
7anch juu kii-xaqaxtu-kan-li+ch
there REL RT-pull_out-INS-PFV+ALD
They went and pulled it out of there,
T0020: 022
pero maa xaaniinch
pero maa xaa-nii-n+ch
but RPT IPOS-die-DVB+ALD
but it was already dead.
T0020: 023
xniitach juu maqtili7.
x-nii-ta+ch juu maqtili7
PAST-die-PF+ALD DET animal
The animal had died.

T0020: 024
7aksnii lhiiminkaalhch
7aksnii lhiimin-kan-li+ch
when bring-INS-PFV+ALD
\begin{tabular}{llll} 
nii & kaa & lhiilhuuch lapanak \\
nii & kaa & lhiilhuu+ch lapanak
\end{tabular}

T0020: 025
juu kaa lhiiminkaalh, maa
juu kaa lhiimin-kan-li maa
DET BLV bring-INS-PFV RPT
tz'ukukaalhch laqaxuk7a
tzuku-kan-li+ch laka-xuk-7a
begin-INS-PFV+ALD body-carve-IMPFV
they brought it back and they began skinning it.
T0020: 026
laqaxuk'alhch maa tapaach'uk'ulhch.
laqaxuk'a-li+ch maa ta-paa-ch'uk'u-li+ch
skin-PFV+ALD RPT 3PL.SUB-inside-split_open-PFV+ALD
They skinned it and they cut it open.

\section*{T0020: 027}
\begin{tabular}{|c|c|c|c|c|}
\hline maa & kulhuk & paatajunch & juu & xpuumpu7. \\
\hline aa & kulhuk & paa-tajun+ch & juu & x-puumpu7 \\
\hline RPT & inside & INST1-inser & DET & 3POS-clothing \\
\hline
\end{tabular}

Inside there was clothing.
T0020: 028
\begin{tabular}{llllll} 
maa & naa & naa & qox & qay & maqtili7 \\
maa & naa & naa & qox & qay & maqtili7 \\
RPT & EMP & EMP & good & big & wild_animal \\
It was & a very big animal, & &
\end{tabular}

\section*{T0020: 029}
\begin{tabular}{llll} 
y & maa & waa & t'aku7 \\
y & maa & waa & t'aku7 \\
and & RPT & FOC & woman \\
and it was a woman
\end{tabular}

\section*{T0020: 030}

7aksnii tapaach'uk'ulhch.
7aksnii ta-paa-ch'uk'u-li+ch
when 3PL.SUB-inside-split_open-PFV+ALD
when they cut it open.
T0020: 031
tatzukulhch laqlhwaqnin,
ta-tzuku-li+ch lak-lhwaq-nin
3PL.SUB-begin-PFV+ALD DIS-dismember-PL.INF
They began to dismember it,
T0020: 032
maa jaantu ta7uputunpalay
maa jaantu ta-7u-putun-pala-y
RPT NEG 3PL.SUB-eat-DESID-REP-IMPFV
juu xaa7akanit nii waa lapanak.
juu xaa-7akanit nii waa lapanak
DET IPOS-flesh COMP FOC person
but they didn't want to eat the meat because it was human flesh.
T0020: 033
puus takaa tanawiilhch.
puus takaa ta-nawii-li+ch
well I_don't_know 3PL.SUB-do-PFV+ALD
Well, I don't know what they did.
T0020: 034
juu 7uputulhch kaa 7ulhch
juu 7u-putun-li+ch kaa 7u-li+ch
REL eat-DESID-PFV+ALD BLV eat-PFV+ALD
I think that whoever wanted to eat it, ate it,

T0020: 035
\begin{tabular}{llll} 
juu & jaantuch & kaa & jaantuch. \\
juu & jaantu+ch & kaa & jaantu+ch \\
REL & NEG+ALD & BLV & NEG+ALD \\
and whoever didn't, didn't.
\end{tabular}

T0020: 036
maa waa tamaa7alhch
maa waa ta-maa7an-li+ch
RPT FOC 3PL.SUB-throw-PFV+ALD
Some threw it out
T0020: 037
\begin{tabular}{llllll} 
porque & nii & maa & waa & xaakanit & lapanak. \\
porque & nii & maa & waa & xaa-7akanit & lapanak \\
because & COMP & RPT & FOC & IPOS-flesh & person \\
becuase it was human flesh.
\end{tabular}

T0020: 038
\begin{tabular}{llllll} 
puus & juu & 7anu7 nii & kaa & x7anch & nii \\
puus & juu & 7anu7 & nii & kaa & x-7an+ch \\
well & DET & that & COMP & BLV & PAST-go(IMPFV)+ALD COMP
\end{tabular}
waa yuuch nii jkii7iiych juu lhiiway.
waa yuuch nii x-kii-7ii-y+ch juu lhiiway

FOC PRN.3SG COMP PAST-RT-bring-IMPFV+ALD DET meat
Well, everybody who went only went to get meat.
T0020: 039
\begin{tabular}{llllll} 
kaa & x7uych & juu & yuuch & juu & lhiiway \\
kaa & x-7u-y + ch & juu & yuuch & juu & lhiiway
\end{tabular}

BLV PAST-eat-IMPFV+ALD DET PRN.3SG DET meat
I think that he ate the meat
T0020: 040
nii waa lhiiwaych juu x7uy
nii waa lhiiway+ch juu x-7u-y
COMP FOC meat+ALD REL PAST-eat-IMPFV
because it was meat that she (the animal) would eat

T0020: 041
nii kaa waa maqtiliich.
nii kaa waa maqtili7+ch
COMP BLV FOC animal+ALD
because she was an animal.
Text 3: The Two Friends (T0055)
This text was narrated by don Laurencio Vigueras Patricio on November 8, 2000, in Huehuetla, Hidalgo, Mexico. It was recorded and transcribed by Susan Smythe Kung, translated by don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is archived with the Archive of the Indigenous Languages of Latin America under the language name "Tepehua de Huehuetla" and the identifier number TPW001R055.

T0055: 001
7alilh laqatam 7awilhchan
7alin-li laqa-tam 7a-wilhchan
there_is-PFV CL:general-one CL:another-day
One \(\bar{d} a y\)
T0055: 002
\begin{tabular}{llll} 
maa & soq & talaalhiitajuu & juu 7akumwarii \\
maa & soq & ta-laa-lhiitajuu & juu 7akumwarii \\
RPT & straight & 3PL.SUB-RCP-find(PFV) & DET friend \\
& & \\
juu & laxchaqa7an & \\
juu & laka-x-chaqa7-7an & \\
DET & PREP-3POS-house-PL.POS & \\
two friends met in their houses. &
\end{tabular}

T0055: 003
maa 7anii maa xkiitasp'it'ach x7ast'aanta
maa 7ani7 maa x-kii-taspit-ta+ch x-7a-st'aa-nVn-ta
RPT here RPT PAST-RT-return-PF+ALD PAST-PL-sell-INO-PF
Now, one of the friends had

T0055: 004
\begin{tabular}{lllll} 
juu & pumatam & xkumwarii & laqatam & laqachaqan \\
juu & puma-tam & x-kumwarii & laqa-tam & laqachaqan \\
DET & CL:human-one & 3POS-friend & CL:general-one & town \\
returned from selling in another town. & &
\end{tabular}

T0055: 005
y luego nii 7ani talaapaaxtoqlich
y luego nii 7 ani ta-laa-paaxtoq-li+ch and then COMP here 3PL.SUB-RCP-meet-PFV+ALD
And then when they met,
T0055: 006
"tanch xak'iilaay, jii kumwarii?"
tanch x-kii-laa-y jii kumwarii
where PAST-RT(2SUB)-can-IMPFV VOC friend
"Where did you go, Friend?"
```

T0055:007
maa juuniych juu xkumwarii
maa jun-ni-y+ch juu x-kumwarii
RPT say-DAT-IMPFV+ALD DET 3POS-friend
his friend said to him.

```
T0055: 008
"waa kiist'aa juu x7ilht'i p'aax,"
waa k-kii-st'aa juu x-7ilht'i p'aax
FOC 1SUB-RT-sell(PFV) DET 3POS-excrement pig
"I went to sell pig excrement,"

T0055: 009
maa juuniych juu xkumwaree.
maa jun-ni-y+ch juu x-kumwarii
RPT say-DAT-IMPFV+ALD DET 3POS-friend his friend said to him.

T0055: 010
7entons juu 7anuuch purowii xkumwarii
7entons juu 7anu7+ch purowii x-kumwarii
then DET that+ALD pitiful 3POS-friend
Well, that pitiful friend,

\section*{T0055: 011}
\begin{tabular}{lllll} 
nii & maa & naa & waa & xkilhpatiych \\
nii & maa & naa & waa & x-kilhpati-y+ch \\
COMP & RPT & EMP & FOC & PAST-be_poor-IMPFV+ALD
\end{tabular}
he was very poor.
T0055: 012
\begin{tabular}{llll} 
lhtoo & lhtoo & maa & 7atz'alatzukulhch \\
lhtoo & lhtoo & maa & 7atz'ala-tzuku-li+ch \\
ID:running & ID:running & RPT & run-begin-PFV+ALD
\end{tabular}
xpuuxkajuk'a
x-puuxkaju-k'a
PAST-search_find-ADJZ
He ran around and around here looking for
T0055: 013
\begin{tabular}{lllll} 
juu & 7 ani7 & juu & x7ilht'i & p'aax \\
juu & 7ani7 & juu & x-7ilht'i & p'aax \\
DET here & DET & 3POS-excrement & pig \\
pig excrement & & &
\end{tabular}

\section*{T0055: 014}
maa mak'uk'alhch juu xburruu
maa maak'uk'a-li+ch juu x-burruu
RPT load-PFV+ALD DET 3POS-donkey
and he loaded his donkey.
T0055: 015
7alhch mak'uk'alhch laqat'uy kuxtaa.
7an-li+ch maak'uk'a-li+ch laqa-t'uy kuxtaa
go-PFV+ALD load-PFV+ALD CL:general-two burlap_sack
He left carrying two sacks

\section*{T0055: 016}
lhii7alhch juu xpurruu
lhii7an-li+ch juu x-purruu
take-PFV+ALD DET 3POS-donkey
The donkey took them.

T0055: 017
\begin{tabular}{llll} 
7alhch & sast'aanta & juu & laqachaqan \\
7an-li+ch & x-st'aa-nVn-ta & juu & laqachaqan \\
go-PFV+ALD & PAST-sell-INO-PF & DET & town \\
He went selling in the town. & &
\end{tabular}

T0055: 018
\begin{tabular}{llll} 
nii & chaa7anch & juu & laqachaqan \\
nii & chaa7an+ch & juu & laqachaqan
\end{tabular}

COMP arrive_there(IMPFV)+ALD DET town
And when he arrived in the town,
T0055: 019
\begin{tabular}{llll} 
maa & maak'utulhch & maa & 7aqxqoqatach \\
maa & maak'utu-li+ch & maa & 7aqx-qoqa-ta + ch \\
RPT & unload-PFV+ALD & RPT & shoulder-carry-PF+ALD
\end{tabular}
juu xburruu jii
juu x-burruu jii
DET 3POS-donkey VOC
he unloaded the burro and threw the load on his shoulder
T0055: 020
kulhunch 7ulaa
kulhun+ch 7ulaa
pile+ALD put(PFV)
and he piled it
T0055: 021
juu laxlakaytati laqachaqan
juu laka-x-lakaytati laqachaqan
DET PREP-3POS-middle town
in the middle of the town
T0055: 022
tzukulhch maa 7ast'aana7.
tzuku-li+ch maa 7a-st'aa-nV7
begin-PFV+ALD RPT PL-sell-INF
and he began to sell it.

\section*{T0055: 023}
\begin{tabular}{lllll} 
pero & juu & lapanak & tzukulhch & 7utaynin \\
pero & juu & lapanak & tzuku-li+ch & 7utay-nin \\
but & DET & people & begin-PFV+ALD & smell-PL.INF \\
But the people began to smell it &
\end{tabular}

\section*{T0055: 024}
\begin{tabular}{llllll} 
juu xaakamiti & juu & 7anii & x7ilht'i & p'aax \\
juu & xaa-7akamiti & juu & 7anii & x-7ilht'i & p'aax \\
DET & IPOS-odor & DET & this & 3POS-excrement & pig \\
the odor of the pig excrement.
\end{tabular}

T0055: 025
nii ta7utaynilh
nii ta-7utay-ni-li
COMP 3PL.SUB-smell-DAT-PFV
And it smelled really horrible
T0055: 026
\begin{tabular}{lllll} 
nii & maa & naa & qox & 7akamin \\
nii & maa & naa & qox & 7akamin \\
COMP & RPT & EMP & good & smell(IMPFV)
\end{tabular}
juu 7anuuch juu 7ulaata
juu 7anu7+ch juu 7ulaa-ta
DET that+ALD REL place-PF
juu porowii juu lapanak
juu purowii juu lapanak
DET pitiful DET person
that which the pitiful person had put there.
T0055: 027
puwanaa tachaa7an juu pulasiyaa
puwanaa ta-chaa7an juu pulasiyaa
but_then 3PL.SUB-arrive_there(IMPFV) DET police
But later the police arrived,

\section*{T0055: 028}
nii 7ani7 taxkoyawlich
nii 7 ani7 ta-xkoyaju-li+ch
COMP here 3PL.SUB-pull-PFV+ALD
```

maasoqoch kamaa7alh
maa-soqon+ch ka-maa7an-li
CAUS-hurry(IMPFV)+ALD IRR-throw-PFV
and they pulled him and made him hurry to discard

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T0055: 029
\begin{tabular}{llllll} 
juu & 7anu7 & t'ajun & st'aana7 & juu & 7ani7 \\
juu & 7anu7 & t'ajun & st'aa-nV7 & juu & 7ani7 \\
REL that & be(IMPFV) & sell-INF & DET & here \\
what he was selling here
\end{tabular}

T0055: 030
\begin{tabular}{llll} 
porque & nii & jaantu, & katat'alhnuyaach. \\
porque & nii & jaantu & ka-ta-t'alhnu-ya7+ch \\
because & COMP & NEG & IRR-3PL.SUB-jail-FUT+ALD \\
because if he didn't, they would throw him in jail.
\end{tabular}

\section*{T0055: 031}
luego juu purowii lapanak
luego juu purowii lapanak
then DET pitiful person
Then the pitiful person
T0055: 032
\begin{tabular}{|c|c|c|c|c|}
\hline waa & naa & 7alakjuuniy & juu & pulasiyaa \\
\hline waa & naa & 7a-lak-jun-ni-y & juu & pulasiyaa \\
\hline FOC & EMP & PL-3PL.OBJ-say & DET & police \\
\hline \multicolumn{5}{|l|}{told the police} \\
\hline
\end{tabular}

T0055: 033
\begin{tabular}{lcclll} 
nii & 7anii & waa & xjuunita & juu & xkumwarii \\
nii & 7anii & waa & x-jun-ni-ta & juu & x-kumwarii \\
COMP & um & FOC & 3POS-say-DAT-PF & DET & 3POS-friend \\
that his friend had told him & & &
\end{tabular}

T0055: 034
\begin{tabular}{lllllll} 
maa & naa & qox & st'aakan & juu & x7ilht'i & p'aax \\
maa & naa & qox & st'aa-kan & juu & x-7ilht'i & p'aax \\
RPT EMP & good & sell-RFL(IMPFV) & DET & 3POS-excrement & pig \\
that pig excrement sold very well. & & &
\end{tabular}

\section*{T0055: 035}
\begin{tabular}{lll} 
yuuchach & xlhii7antach & st'aana7. \\
yuuch+ch & x-lhii7an-ta+ch & st'aa-nV7 \\
PRN.3SG+ALD & PAST-take-PF+ALD & sell-INF \\
That was why he had brought it to sell. &
\end{tabular}

T0055: 036
7entons juu pulasiyaa p'aas xtajuuniy
7entons juu pulasiyaa p'aas x-ta-jun-ni-y
then DET police hard PAST-3PL.SUB-say-DAT-IMPFV
Then the police demanded,
T0055: 037
\begin{tabular}{lll} 
"7int'ich & \begin{tabular}{l} 
soqon
\end{tabular} & maa7ana7! \\
7an-t'i + ch & soqon & maa7an-nV7 \\
go(2SUB)-2SG.SUB.PFV+ALD & hurry & throw-INF \\
"Hurry up and throw it out! & &
\end{tabular}

T0055: 038
\begin{tabular}{lll} 
nii & jaantu, & klaat'alhnuuyaawch! \\
nii & jaantu & k-laa-t'alhnuu-ya7-w+ch \\
COMP & NEG & 1SUB-RCP-jail-FUT-1PL.SUB+ALD \\
If you don't, we're going to throw you in jail!
\end{tabular}

T0055: 039
\begin{tabular}{lllll} 
nii & jaantu, & waa & 7aniich & t'amuk'oona7!" \\
nii & jaantu & waa & 7ani7+ch & tamakajun-a7 \\
COMP & NEG & FOC & here+ALD & stay(2SUB)-FUT \\
If you don't, you can't stay around here!"
\end{tabular}

\section*{T0055: 040}
maa tajuuniych
maa ta-jun-ni-y+ch
RPT PL.SUB-say-DAT-IMPFV+ALD
they told him.

T0055: 041
\begin{tabular}{llll} 
entonces & nii & najunch & wachu7 \\
entonces & nii & najun+ch & wachu7 \\
then & COMP & say(IMPFV)+ALD & also \\
Then they also told him that
\end{tabular}

T0055: 042
\begin{tabular}{lllll} 
juu & lapanak & juu & waa & xoqxchoqota \\
juu & lapanak & juu & waa & x-7oqxchoqo-ta \\
DET & person & REL & FOC & PAST-trick-PF
\end{tabular}
juu xkumwarii.
juu x-kumwarii
DET 3POS-friend
the person who had tricked him was his friend.
T0055: 043
\begin{tabular}{llllll} 
waa & naa & maa & xtaqnikan & laqkiis & peexuu. \\
waa & naa & maa & xtaq-ni-kan & laq-kiis & peexuu \\
FOC & EMP & RPT & give-DAT-INS & CL:money-five & peso
\end{tabular}

Then they gave him five pesos.

\section*{T0055: 044}
y luego 7alhch maa7ana7 juu x7ilht'i p'aax.
\(y\) luego 7an-li+ch maa7an-V7 juu x-7ilht'i p'aax
and then go-PFV+ALD throw-INF DET 3POS-excrement pig
And then he went to throw out the pig excrement.
T0055: 045
nii maa taspitchoqochaa,
nii maa tasp'it-choqo+chaa
COMP RPT return-REP-DST.PFV
And when he returned again,
T0055: 046
\begin{tabular}{lllll} 
milhch & maa & tamoona7 & laqatam & xmaaskaraa \\
min-li+ch & maa & tamaju-nV7 & laqa-tam & x-maaskaraa \\
come-PFV+ALD RPT & buy-INF & CL:general-one & 3POS-mask \\
he came to buy a mask & & &
\end{tabular}

\section*{T0055: 047}
\begin{tabular}{llll} 
juu & laqkiis & peexuu & xtaqnikaalh. \\
juu & laq-kiis & peexuu & xtaq-ni-kan-li \\
DET & CL:money-five & peso & give-DAT-INS-PFV \\
with the five pesos that they gave him.
\end{tabular}

T0055: 048
\begin{tabular}{lll} 
lhiitamawlh & laqatam & xlaqpuutanuti \\
lhii-tamaw-li & laqa-tam & x-laqpuutanuti \\
APPL-buy-PFV & CL:general-one & 3POS-mask \\
And he bought himselfa mask &
\end{tabular}

\section*{T0055: 049}
\begin{tabular}{lllll} 
nii & maa & minchoqolhch & juu & lakatii. \\
nii & maa & min-choqo-li+ch & juu & laka-tii \\
COMP & RPT & come-AGAIN-PFV+ALD & DET & PREP-road \\
and he returned along the road. & &
\end{tabular}

\section*{T0055: 050}
nii chilhch juu qayk'iwin,
nii chin-li+ch juu qayk'iwin

COMP arrive-PFV+ALD DET mountain
When he arrived at the mountain,
T0055: 051
laxlakaytat qayk'iwin
laka-x-lakaytat qayk'iwin
PREP-3POS-middle mountain
in the middle of the mountain
T0055: 052
\begin{tabular}{lllll} 
topenqe & maa & tawiilanalhch & juu & 7aqalhoonin. \\
topenqe & maa & ta-wiilanalh+ch & juu & 7aqalhoona7-nin \\
bunch & RPT & 3PL.SUB-seated.PL(IMPFV)+ALD & DET & thief-PL \\
was a bunch of thieves. & &
\end{tabular}

T0055: 053
tzakaa ta7ulaatach juu tuumiin laxmaletin7an, tzakaa ta-7ulaa-ta+ch juu tuumiin laka-x-maletin-7an heavily 3PL.SUB-put-PF+ALD DET money PREP-3POS-suitcase-PL.POS They had a suitcase heavy with money,

T0055: 054
\begin{tabular}{lllll} 
tzakaank'a & talak7ulaatach & juu lhuu & juu & tuumiin \\
tzakaank'a & ta-lak-7ulaa-ta+ch & juu lhuu & juu & tuumiin \\
heavy & 3PL.SUB-3PL.OBJ-put-PF+ALD & DET many & DET & money \\
heavy with all the money & & &
\end{tabular}

\section*{T0055: 055}
juu xtakii7alhajutach.
juu x-ta-kii-qalhajun-ta + ch
REL PAST-3PL.SUB-RT-steal-PF+ALD
that they had stolen.
T0055: 056
\(\begin{array}{llll}\text { waa } & \text { xta7astaknantach } & \text { juu } & \text { 7aqalhoonin } \\ \text { waa } & \text { x-ta-7astaknan-ta+ch } & \text { juu } & \text { 7aqalhoona7-nin } \\ \text { FOC } & \text { PAST-3PL.SUB-rest-PF+ALD } & \text { DET } & \text { thief-PL }\end{array}\)
The thieves were resting

\section*{T0055: 057}
maa 7alakxaqalaych.
maa 7a-lak-xaqala-y+ch
RPT PL-3PL.OBJ-talk_to-IMPFV+ALD
and he spoke to them.
T0055: 058
"tiijuuch juu nawiiyat'it,"
tiijuuch juu nawii-y-at'it
what REL make-IMPFV-2PL.SUB
maa 7alakjuuniych.
maa 7a-lak-jun-ni-y+ch
RPT PL-3PL.OBJ-say-DAT-IMPFV+ALD
"What are you all doing?" he asked them.

\section*{T0055: 059}
"jaantuch tu7u7, waa k7astaknantawch."
jaantu+ch tu7u7 waa k-7astaknan-ta-aw+ch
NEG+ALD something FOC 1SUB-rest-PF-1PL.SUB+ALD
"Nothing, we are resting."

\section*{T0055: 060}
maa 7alaksakmich,
maa 7a-lak-sakmin+ch
PRT PL-3PL.OBJ-ask(IMPFV)+ALD
And he asked them,
\begin{tabular}{ll} 
T0055: \(\mathbf{0 6 1}\) & \\
"jaa laay & k7alakt'aatamakajuu? \\
jaa \(\quad\) laa-y & k-7a-lak-t'aa-tamakajuun \\
Q & can-IMPFV \\
"Can I stay with you all?
\end{tabular}

T0055: 062
naa waa taqoxalhch.
naa waa taqoxa-li+ch
EMP FOC get_late-PFV+ALD
It got late on me.
T0055: 063
wachuuch waa ktamakoomputun 7ani7,"
wachu7+ch waa k-tamakajun-putun 7ani7
also+ALD FOC 1SUB-stay-DESID(IMPFV) here
I want to stay here, too,"
T0055: 064
maa 7alakjuunich juu lakatii.
maa 7a-lak-jun-ni-y+ch juu laka-tii
RPT PL-3PL.OBJ-say-DAT-IMPFV+ALD DET PREP-road he told them from the road.

T0055: 065
\begin{tabular}{llll} 
"7aa & kalaalh & nii & waa \\
7aa & ka-laa-li & nii & waa \\
Oh & IRR-can-PFV & COMP & FOC
\end{tabular}
t'amak'oomp'ut'unch,"
tamakajun-putun+ch
stay(2SUB)-DESID(2SUB.IMPFV)+ALD
"Oh, stay if you want to,"

\section*{T0055: 066}
maa tajuuniych.
maa ta-jun-ni-y+ch
RPT 3PL.SUB-say-DAT-IMPFV+ALD
they told him.
T0055: 067
\begin{tabular}{lllll} 
y luego & waa & naa & maa & 7alakt'aatoolay \\
y luego & waa & naa & maa & 7a-lak-t'aa-toola-y \\
and then & FOC & EMP & RPT & PL-3PL.OBJ-COM-stay-IMPFV \\
And then he stayed with them
\end{tabular}

\section*{T0055: 068}
\begin{tabular}{lllll} 
y & waa & naach & nii & talaklhtatalhch \\
y & waa & naa+ch & nii & ta-lak-lhtata-li + ch \\
and & FOC & EMP+ALD & COMP & 3PL.SUB-DIS-sleep-PFV+ALD
\end{tabular}
and soon they all went to sleep.

\section*{T0055: 069}
nii talaklhtatalhch,
nii ta-lak-lhtata-li+ch
COMP 3PL.SUB-DIS-sleep-PFV+ALD
And when they all had fallen asleep,
T0055: 070
\begin{tabular}{llllll} 
nii & naa & waa & x7alinch & juu & xqen, \\
nii & naa & waa & x-7alin+ch & juu & xqen \\
COMP & EMP & FOC & PAST-there_is(IMPFV)+ALD & DET & fly
\end{tabular}
there were a lot of flies,
T0055: 071
\begin{tabular}{lllllll} 
naach & maa & waa & kaw & x7alin & juu & xqen. \\
naa + ch & maa & waa & kaw & x-7alin & juu & xqen \\
EMP+ALD & RPT & FOC & noise & PAST-there_is(IMPFV) & DET & fly \\
and the flies made a lot of noise. & & &
\end{tabular}

T0055: 072
y luego maa 7ani7 jaqs 7amaawaay juu xqen. y luego maa 7 ani7 jaqs 7amaawaa-y juu xqen and then RPT here bother bother-IMPFV DET fly And then the flies bothered him a lot.

T0055: 073
\begin{tabular}{lllll} 
waa & naa & maa & laqapuutanuuy & xlaqapuutanuuti. \\
waa & naa & maa & laqpuu-tanuu-y & x-laqpuutanuuti \\
FOC & EMP & RPT & face-insert-IMPFV & 3POS-mask \\
He put on the mask. & &
\end{tabular}

\section*{T0055: 074}
y luego nii takujchaalhch juu 7aqalhoonin,
y luego nii ta-kuj-chaa-li+ch juu 7aqalhoona7-nin and then COMP 3PL.SUB-wake_up-DST-PFV+ALD DET thief-PL
And then when the thieves woke up,
T0055: 075
talaqtz'inch
ta-laqtz'in+ch
3PL.SUB-see(IMPFV)+ALD
they saw
T0055: 076
nii maa lakapoolhokok maalhch
nii maa laqpuu-lhoqoq maalh+ch
COMP RPT eye-hollow lying(IMPFV)+ALD
juu 7anu7 lapanak,
juu 7anu7 lapanak
DET that person
that hollow-eyed person lying down
T0055: 077
\begin{tabular}{lllll} 
waa & naa & maa & tarr & talak7atz'alay \\
waa & naa & maa & tarr & ta-lak-7atz'ala-y \\
FOC & EMP & RPT & ID:running & 3PL.SUB-DIS-run-IMPFV
\end{tabular}
xtalhanti7an,
x-talhanti-7an
3POS-fright-PL.POS
and they began to run in fright,

\section*{T0055: 078}
juu 7aqalhoonin, jaantu.
juu 7aqalhoona7-nin jaantu
DET thief-PL NEG
the thieves, no.
T0055: 079
ta7alhch tamukuu7ulaaqoolhch
ta-7an-li+ch ta-makajun=7ulaa-qoju-li+ch
3PL.SUB-go(PFV)-PFV+ALD
juu xtuumiin7an.
juu x-tuumiin-7an
DET 3POS-money-PL.POS
They went off and left all of their money.

\section*{T0055: 080}
y luego juu 7anuuch purowii lapanak, y luego juu 7anu7+ch purowii lapanak and then DET that+ALD pitiful person
And then the pitiful person,
T0055: 081
"jaantuch waa 7atz'alat'it!
jaantu+ch waa 7atz'ala-t'it
NEG+ALD FOC run(PFV)-2PL.SUB
"Don't run away!
T0055: 082
kit'in! kit'in!
ki7in ki7in
PRN.1SG PRN.1SG
It's me! It's me!"
T0055: 083
maa 7alakjuuniych
maa 7a-lak-jun-ni-y+ch
RPT PL-3PL.OBJ-say-DAT-IMPFV+ALD
he said to them.

T0055: 084
lakch'apayajuych,
lak-ch'apayaju-y+ch
3PL.OBJ-stop-IMPFV+ALD
He wanted to stop them,
T0055: 085
maa jaantu tataspitlh.
maa jaantu ta-taspit-li
RPT NEG 3PL.SUB-return-PFV
but they didn't return.
T0055: 086
\begin{tabular}{llll} 
maa & tamukoo7ulaa & juu & xtuumiin7an \\
maa & ta-makajun=7ulaa & juu & x-tuumiin-7an \\
RPT & 3PL.SUB-leave=put(PFV) & DET & 3POS-money-PL.POS
\end{tabular}

The left their money.
T0055: 087
waa naa maa tzakaa tamak'uk'ay.
waa naa maa tzakaa ta-mak'uk'a-y
FOC EMP RPT heavily 3PL.SUB-carry-IMPFV
They left their heavy load.
T0055: 088
\begin{tabular}{llll} 
juu & xburruu & juu & yuuch \\
juu & x-burruu & juu & yuuch \\
DET & 3POS-donkey & DET & PRN.3SG
\end{tabular}
tzakaach maa maak'uk'aa.
tzakaa+ch maa maak'uk'aa
heavily+ALD RPT load(PFV)
He loaded his donkey heavily.

\section*{T0055: 089}
\begin{tabular}{llll} 
juu & xburruu & juu & tuumiin \\
juu & x-burruu & juu & tuumiin \\
DET & 3POS-donkey & DET & money
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline chilhch & juu & laqachaqan \\
\hline chin-li+ch & juu & laqachaqan \\
\hline arrive-PFV+ALD & DET & town \\
\hline he donkey & mo & y arrived in \\
\hline
\end{tabular}

T0055: 090
juntaa xwiilhch juu xkumwarii.
juntaa x -wiilh+ch juu x-kumwarii
where PAST-seated(IMPFV)+ALD DET 3POS-friend where his friend lived.

T0055: 091
\begin{tabular}{llllll} 
waa naa & maa & juuniy & juu & xkumwarii \\
waa & naa & maa & jun-ni-y & juu & x-kumwarii \\
FOC EMP & RPT & say-DAT-IMPFV & DET & 3POS-friend \\
He said to his friend, & &
\end{tabular}

T0055: 092
"waa salh7as, jii kumwarii, naa qox st'aakan
waa salh7as jii kumwarii naa qox st'aa-kan

FOC really VOC friend EMP good sell-RFL(IMPFV)
"Really, friend, pig excrement
T0055: 093
juu x7ilht'i p'aax
juu x-7ilht'i p'aax
DET 3POS-excrement pig
sells very well.
T0055: 094
naa qox xakist'aay."
naa qox xa-ki-st'aa-y
EMP good PAST-1OBJ-sell-IMPFV
It sold well for me."

T0055: 095
\begin{tabular}{lcl} 
tzukulh & maa & laqaxqotnu7, \\
tzuku-li & maa & laqaxqot-nV7 \\
begin-PFV & RPT & unload-INF \\
He began to unload, &
\end{tabular}

T0055: 096
qaqmixqaa juu maletin.
qaqmixqaa juu maletin uncover(PFV) DET suitcase he uncovered the suitcase.

T0055: 097
\begin{tabular}{lllll} 
maa & naa & naa & sii & tuumiin \\
maa & naa & naa & sii & tuumiin \\
RPT & EMP & EMP & pure & money
\end{tabular}
juu tzakaa kalhii7anta.
juu tzakaa ka-lhii7an-ta
REL heavily IRR-take-PF
It was full of money.

\section*{T0055: 098}
\begin{tabular}{llllll} 
y & \begin{tabular}{l} 
luego, waa
\end{tabular} & naa & \multicolumn{2}{l}{ 7ani7, cabrón, }
\end{tabular}
qox xa7aniyan.
qox xa-7an-ni-y-n
good PAST-go-DAT-IMPFV-2OBJ
And then, "Damn, honestly, friend, it really it went well for you.
T0055: 099
wachu7 k7anchoqoya7."
wachu7 k-7an-choqo-ya7
also 1SUB-go-AGAIN-FUT
I'm going to go back, too. "

T0055: 100
\begin{tabular}{lllllll} 
maa & tzukulh & maa & maaxtoqnu7 & juu & x7ilht'i & p'aax \\
maa & tzuku-li & maa & maaxtoq-nV7 juu & x-7ilht'i & p'aax
\end{tabular}

RPT begin-PFV RPT gather-INF DET 3POS-excrement pig He began to collect pig excrement.

T0055: 101
waach 7anqalhiiy jaantuch
waa + ch 7 anqalhii-y jaantu+ch
FOC+ALD return-IMPFV NEG+ALD
He still hasn't returned,
T0055: 102
tawanan taspitlh
tawanan taspit-li
never return-PFV
he never returned.

\section*{Text 4: The History of Huehuetla (T0057)}

This text was narrated by don Nicolás Vigueras Patricio on January 27, 2001, in Huehuetla, Hidalgo, Mexico. It was recorded and transcribed by Susan Smythe Kung, translated by don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is archived with the Archive of the Indigenous Languages of Latin America under the language name "Tepehua de Huehuetla" and the identifier number TPW001R057.

T0057: 001
\begin{tabular}{llllll} 
pues & juu maa & maqanchich & maa & 7anuu \\
pues & juu maa & maqanch+ich & maa & 7 7anuu \\
well & DET RPT long_time+ALD & RPT & um \\
Well, a long time ago, um, & &
\end{tabular}

T0057: 002
\begin{tabular}{lllll} 
maa & waa & tamilh & juu & lapanak \\
maa & waa & ta-min-li & juu & lapanak \\
RPT & FOC & 3PL.SUB-come-PFV & DET & people
\end{tabular}
de Pisaflores, Muuniixkaan,
de Pisaflores Muuniixkaan
from Pisaflores Mecapalapa
the people came from Pisaflores, Mecapalapa,

\section*{T0057: 003}
\begin{tabular}{llll} 
maa & 7anuu & maachaqanch & Pisaflores. \\
maa & 7anuu & maachaqan+ch & Pisaflores \\
RPT & um & town+ALD & Pisaflores
\end{tabular}
that town Pisaflores.
T0057: 004
7entons maa de San Franciscoch wachu7
7entons maa de San Francisco+ch wachu7
then RPT from San Francisco+ALD also
Then from San Francisco, too.
T0057: 005
\begin{tabular}{llll} 
maa & naa & lhuu & tataqayxtoqlh \\
maa & naa & lhuu & ta-taqayxtoq-li \\
RPT & EMP & many & 3PL.SUB-gather-PFV
\end{tabular}
juu lapanak juu Siikalhan.
juu lapanak juu Siikalhan
DET people DET Zicatlán
Many people gathered together in Zicatlán.
T0057: 006
maa 7anch xtawiilanalh juu lapanak maa 7anch x-ta-wiilanalh juu lapanak RPT there PAST-3PL.SUB-seated.PL(IMPFV) DET people The people lived there.

T0057: 007
\begin{tabular}{lllll} 
pero & maa & milh & laqatam & wilhchan \\
pero & maa & min-li & laqa-tam & wilhchan \\
but & RPT & come-PFV & CL:general-one & day
\end{tabular}

But there came a day [when]
T0057: 008
\begin{tabular}{lllllll} 
juu & maa & naa & lhuj & niilh & juu & lapanak. \\
juu & maa & naa & lhuu & nii-li & juu & lapanak \\
DET & RPT & EMP & many & die-PFV & DET & people \\
many people died. & & & &
\end{tabular}

T0057: 009
\begin{tabular}{llllll} 
maa & waa & milh & laqatam & maa & taqanqati \\
maa & waa & min-li & laqa-tam & maa & taqanqati \\
RPT & FOC & come-PFV & CL:general-one & RPT & sickness
\end{tabular}

There was an illness,
T0057: 010
\begin{tabular}{lllll} 
maa & waa & lakap'uch'ilh & juu & lapanak. \\
maa & waa & laka-p'uch'i-li & juu & lapanak \\
RPT & FOC & body-rot-PFV & DET & people \\
the bodies of the people rotted.
\end{tabular}

T0057: 011
\begin{tabular}{llll} 
maa & naa & naa & xpatajuniy \\
maa & naa & naa & x-pataju-ni-y \\
RPT & EMP & EMP & PAST-fall-DAT-IMPFV
\end{tabular}
juu lajqay juu xaakanit juu lapanak.
juu lak-qay juu xaa-7akanit juu lapanak
DET PL-big DET IPOS-flesh DET people
Large chunks of flesh fell off of the people.

T0057: 012
\begin{tabular}{lll} 
entonces & maa & tapastaklich \\
entonces & maa & ta-pastak-li + ch \\
then & RPT & 3PL.SUB-think-PFV+ALD
\end{tabular}
\begin{tabular}{llll} 
juu maqaniyaa & lapanaknich & nii & maa \\
juu maqaniyaa & lapanak-ni+ch & nii & maa \\
DET old & person-PL+ALD & COMP & RPT \\
Then the people from before thought that & &
\end{tabular}

\section*{T0057: 013}
\begin{tabular}{lll} 
nii & maa & "katalakpaxayaaw \\
nii & maa & "ka-ta-lak-paxay-a7-w \\
COMP & RPT & IRR-INCH-PL-move-FUT-1PL.SUB
\end{tabular}
that "We are going to move
T0057: 014
\begin{tabular}{llll} 
porque & nii & jaantu, & kaniiqooyaaw," \\
porque & nii & jaantu & ka-nii-qoju-ya7-aw \\
because & COMP & NEG & IRR-die-ALL-FUT-1PL.SUB
\end{tabular}
maa tanajunch.
maa ta-najun+ch
RPT 3PL.SUB-say(IMPFV)+ALD
because if not, we're all going to die," they said.

\section*{T0057: 015}
entonces maa talhiipastaklichi
entonces maa ta-lhii-pastak-li+ch
then RPT 3PL.SUB-APPL-think-PFV+ALD
Then they thought about

\section*{T0057: 016}
maa tatoolhpaa
maa ta-tawiilh-paa
RPT 3PL.SUB-sit_down-REP.PFV
maa laka Sqatan junkan.
maa laka Sqatan jun-kan
RPT PREP Ciruelo say-RFL(IMPFV)
settling down in Ciruelo, it was called.

T0057: 017
maa waa naa waa chun.
maa waa naa waa chun
RPT FOC EMP FOC thus
But the same thing happened.

T0057: 018
\begin{tabular}{lllll} 
maa & t'ajun & niini7 & juu & lapanakni \\
maa & t'ajun & nii-nV7 & juu & lapanak-ni \\
RPT & be(IMPFV) & die-INF & DET & person-PL \\
The people were dying.
\end{tabular}

T0057: 019
\begin{tabular}{llll} 
maa & talaxtaqnilhch & juu & xtaqanqat7an \\
maa & ta-laxtaqni-li + ch & juu & x-taqanqat-7an \\
RPT & 3PL.SUB-contract-PFV+ALD & DET & 3POS-sickness-PL.POS
\end{tabular}
\begin{tabular}{llll} 
juu & qantam & qantam & lapanak. \\
juu & qan-tam & qan-tam & lapanak \\
DET & CL:long-one & CL:long-one & person \\
The people one by one contracted the disease.
\end{tabular}

T0057: 020
\begin{tabular}{lllll} 
maa & naa & naa & lhuu & niilh \\
maa & naa & naa & lhuu & nii-li \\
RPT & EMP & EMP & many & die-PFV
\end{tabular}
juu lapanak juu 7aksniich.
juu lapanak juu 7aksnii+ch
DET person DET then+ALD
Many people died then.
T0057: 021
7entons maa pastakchoqopalakaalh.
7entons maa pastak-choqo-pala-kan-li
then RPT think-AGAIN-REP-INS-PFV
Then, they thought about it again

\section*{T0057: 022}
\begin{tabular}{lll} 
entonces & maa & tanajunch \\
entonces & maa & ta-najun+ch \\
then & RPT & 3PL.SUB-say(IMPFV)+ALD \\
then they said &
\end{tabular}

T0057: 023
\begin{tabular}{llllll} 
nii & maa & 7anii & katanawiiya7 & juu & laqachaqan \\
nii & maa & 7ani7 & ka-ta-nawii-ya7 & juu & laqachaqan
\end{tabular}

COMP RPT here IRR-3PL.SUB-make-FUT DET town that they would make the town here

T0057: 024
\begin{tabular}{llllllll} 
porque & juu & 7anii & maa & waa & niin & juu & lakxkaan \\
porque & juu & 7ani7 & maa & waa & niin & juu & lakxkaan \\
because & DET & here & RPT & FOC & near & DET & river
\end{tabular}
because this place was near the river.
T0057: 025
maa laay katamaqpaya7
maa laa-y ka-ta-maqpa-ya7
RPT can-IMPFV IRR-3PL.SUB-wash_clothes-FUT
juu xpuumpu7an juu lapanak.
juu x-puumpu7-7an juu lapanak
DET 3POS-clothing-PL.POS DET people
The people could wash their clothes.
T0057: 026
\begin{tabular}{llllll} 
puus & juu & maa & tataxtuchaalhch & juu & 7anch \\
puus & juu & maa & ta-taxtu-chaa-li+ch & juu & 7anch \\
well & REL & RPT & 3PL.SUB-leave-DST-PFV+ALD & DET & there
\end{tabular} Well, those who left there,

T0057: 027
\begin{tabular}{llll} 
porque & maa & naa & lhuu \\
porque & maa & naa & lhuu \\
because & RPT & EMP & many
\end{tabular}
jaantuch xtaminputun
jaantu+ch x-ta-min-putun
NEG+ALD PAST-3PL.SUB-come-DESID(IMPFV)
because many didn't want to come,
T0057: 028
\(\begin{array}{llll}\text { porque } & \text { maa } & \text { naa } & \text { xtaqachaniych } \\ \text { porque } & \text { maa } & \text { naa } & \text { x-ta-qacha-ni-y+ch } \\ \text { because } & \text { RPT } & \text { EMP } & \text { PAST-3PL.SUB-like-DAT-IMPFV+ALD }\end{array}\)
juu Siikalhan
juu Siikalhan
DET Zicatlán
because they liked Zicatlán
T0057: 029
nii naa 7alheeqaych juu 7anch.
nii naa 7alheeqay+ch juu 7anch
COMP EMP spacious+ALD DET there
becuase it was very spacious there.
T0057: 030
puus maa 7 anch xtanawiiputunch
puus maa 7anch x-ta-nawii-putun+ch
well RPT there PAST-3PL.SUB-make-DESID(IMPFV)+ALD
juu xlaqachaqan7an.
juu x-laqachaqan-7an
DET 3POS-town-PL.POS
Well, they wanted to build their town there.

T0057: 031
pero juu tatamokoonchaalhch
pero juu ta-tamakajun-chaa-li+ch
but REL 3PL.SUB-stay-DST-PFV+ALD
7anch maa taniiqoo.
7 anch maa ta-nii-qoju
there RPT 3PL.SUB-die-ALL.PFV
But the ones who stayed there all died.
T0057: 032
juu tamilhch 7anii laqachaqan
juu ta-min-li+ch 7 ani 7 laqachaqan
REL 3PL.SUB-come-PFV+ALD here town
tapuutaxtulhch.
ta-puutaxtu-li+ch
3PL.SUB-survive-PFV+ALD
The ones who came here to the town survived.
T0057: 033
\begin{tabular}{lllllll} 
entonces & 7anuu & chunchach & kaa & 7anuu & lakatz'unin & 7anuu. \\
entonces & 7anuu & chunch+ach & kaa & 7anuu & lakatz'unin & 7anuu \\
then & um & thus + ALD & BLV & um & a_little & um
\end{tabular}

Then, well, there were very few, um.
T0057: 034
waa lhiiyaa juu maqalhqama7 juu lhiich'aqawaxt'i
waa lhii-yaa juu maqalhqama7 juu lhii-ch'aqawaxt'i

FOC APPL-standing(IMPFV) DET Tepehua DET APPL-Totonac
The Tepehuas are mixed in with the Totonacs
T0057: 035
\begin{tabular}{lllll} 
porque & jaantu & naa & naa & sii \\
porque & jaantu & naa & naa & sii \\
because & NEG & EMP & EMP & pure
\end{tabular}
maqalhqama7 laqachaqan
maqalhqama7 laqachaqan
Tepehua town
because it is not a pure Tepehua town,

T0057: 036
\begin{tabular}{lll} 
waa lhiiyaa & juu & lapanak \\
waa & lhii-yaa & juu
\end{tabular} lapanak

T0057: 037
juu 7anuu
juu 7anuu
DET um
um
T0057: 038
lakatamin laqachaqan
laka-tamin laqachaqan
PREP-each town
They came from different towns,
T0057: 039
de Muuniixkaan, Pisaflores, San Francisco y
de Muuniixkaan Pisaflores San Francisco y
from Mecapalapa Pisaflores San Francisco and
7aniich laqachaqan Huehuetla.
7ani7+ch laqachaqan Huehuetla
here+ALD town Huehuetla
from Mecapalapa, Pisaflores, San Francisco and from here, the town of Huehuetla.

T0057: 040
\begin{tabular}{lllll} 
entonces & puus & yuuch & lhiijunkan & Huehuetla \\
entonces & puus & yuuch & lhii-jun-kan & Huehuetla \\
then & well & PRN.3SG APPL-say-RFL(IMPFV) & Huehuetla \\
Then, well, that is why it is called Huehuetla &
\end{tabular}

T0057: 041
\begin{tabular}{llllll} 
porque & juu & maa & noomputun & juu & Huehuetla \\
porque & juu & maa & najun-putun & juu & Huehuetla \\
because & DET & RPT & say-DESID(IMPFV) & DET & Huehuetla
\end{tabular}
\begin{tabular}{ll} 
"maqaniyaa & laqachaqan." \\
maqaniyaa & laqachaqan \\
old & town
\end{tabular}
because Huehuetla means "old town."

\section*{T0057: 042}

7entoons kaa maa 7intach quinientos años
7entoons kaa maa 7intach quinientos años
7entoons BLV RPT like five_hundred years
o trescientos años.
o trescientos años
or three_hundred years
So the town has been here about 500 or 300 years,
T0057: 043
pakxaanta juu 7aniich laqachaqan
pakxaan-ta juu 7ani7+ch laqachaqan
have-PF DET here+ALD town
[see line 042]
T0057: 044
maqanchich
maqanch+ich
long_time+ALD
a long time.
T0057: 045
\begin{tabular}{llllll} 
porque & 7alin & laqatam & kampaanaa & juu & 7ani7 \\
porque & 7alin & laqa-tam & kampaanaa & juu & 7ani7 \\
because & there_is(IMPFV) & CL:general-one & bell & REL & here
\end{tabular}
juk'alh juu lakapuujitat
juk'alh juu laka-puujiitati
be_above(IMPFV) DET PREP-church
Because there is a bell that hangs here in the church

T0057: 046
\begin{tabular}{lllllll} 
maa & de & año & dieciseis, & año & siglo & dieciseis. \\
maa & de & año & dieciseis & año & siglo & dieciseis \\
RPT from & year & sixteen & year & century & sixteen \\
from the year & 16, the & 16th century. & &
\end{tabular}

T0057: 047
\begin{tabular}{llll} 
juu & laqatam & siglo & dieciocho. \\
juu & laqa-tam & siglo & dieciocho \\
DET & CL:general-one & century & eighteen \\
Another one from the eighteenth century.
\end{tabular}

T0057: 048
7aks juu maqaniyaa lapanak tanajun
7aks juu maqaniyaa lapanak ta-najun
then DET old people 3PL.SUB-say(IMPFV)
Then the people from before said
T0057: 049
nii maa nii maqanchich
nii maa nii maqanch+ich

COMP RPT COMP long_time+ALD
that the bells
T0057: 050
\begin{tabular}{llll} 
juu & lakjuk'alh & juu & 7anuu \\
juu & lak-juk'alh & juu & 7 anuu \\
REL & PL-be above(IMPFV) & DET & um
\end{tabular}
juu lakapuujitat juu kampaanaa.
juu laka-puujiitati juu kampaanaa
DET PREP-church DET bell
have hung in the church for a long time.
T0057: 051
Hace como trescientos años. \({ }^{227}\)
it_makes about three-hundred years
It's been about 300 years.

227 This line is entirely in Spanish.

\section*{T0057: 052}
\begin{tabular}{lll} 
entonces & juu & \multicolumn{1}{l}{ laka7iilhchi } \\
entonces & juu & \begin{tabular}{l} 
laka7ii-li+ch \\
then
\end{tabular} \\
& REL & believe-PFV+ALD
\end{tabular}

\section*{T0057: 053}
puus yuuch juu puutaxtulh
puus yuuch juu puutaxtu-li
well PRN.3SG REL survive-PFV
\begin{tabular}{lllll} 
waa & juu 7 anii laqachaqan & waa & lakatz'unin. \\
waa & juu 7 ani7 laqachaqan & wa & lakatz'unin \\
FOC & DET here town & FOC few \\
Well, those who survived here in the town were few.
\end{tabular}

T0057: 054
7ixjuuniita juu lapanak maa jaantu lhuu.
x-jun-niita juu lapanak maa jaantu lhuu
PAST-be-PF DET person RPT NEG many
There weren't many people.
T0057: 055
waa lakatz'unin juu maqalhqaman.
waa lakatz'unin juu maqalhqama7-(V)n
FOC few DET Tepehua-PL
The Tepehuas were very few.
T0057: 056
entonces nii tzukulh talhawana7 juu lapanak.
entonces nii tzuku-li talhawa-nV7 juu lapanak
then COMP begin-PFV increase-INF DET person
Then the population began to grow.

T0057: 057
puus juu xqatii maa jaantu xtalhaway,
puus juu xqatii maa jaantu x-talhawa-y
well DET creek RPT NEG PAST-increase-IMPFV
\(\left.\begin{array}{llll}\text { nii } & \text { yuuch } & \text { juu } & \text { qayxkaan. } \\ \text { nii } & \text { yuuch } & \text { juu } & \text { qayxkaan }\end{array}\right] \begin{aligned} & \text { COMP } \\ & \text { PRN.3SG }\end{aligned}\) DET river
T0057: 058
waa lakt'ikt'i.
waa lakt'ikt'i
FOC little
They stayed small.
T0057: 059
\begin{tabular}{lllll} 
waa & sk'ululu & xukxumaa & juu & xkaan \\
waa & sk'ululu & x-7ukxun=maa & juu & xkaan \\
FOC & ID:trickle & PAST-move=lying(IMPFV) & DET & water \\
The water trickles along. & &
\end{tabular}

T0057: 060
pero 7aksnii maa tanuuchiilh juu comunismo, pero 7aksnii maa tanuu+chii-li juu comunismo but then RPT insert-PRX-PFV DET communism
But then communism came,
T0057: 061
chuux juu guerrilla juu 7alilh juu laasata. chuux juu guerrilla juu 7alin-li juu laasata all DET war REL there_is-PFV DET fight then the war, there was the fighting.

T0057: 062
\begin{tabular}{lllll} 
puus & juu & 7anuu & tzukukaalh & maqniiy \\
puus & juu & 7anuu & tzuku-kan-li & maqnii-y \\
well & DET & um & begin-INS-PFV & kill-IMPFV
\end{tabular}
\begin{tabular}{lll} 
maa7ank'a & juu lapanak \\
maa7an-k'a & juu & lapanak \\
throw-ADJZ & DET & person \\
Well, then, they began to killing and throwing out the people,
\end{tabular}

\section*{T0057: 063}
\begin{tabular}{llll} 
maa & xmuujuukanch & juu & lakxkaan. \\
maa & x-muujuu-kan+ch & juu & lakxkaan \\
RPT & PAST-throw-INS(IMPFV)+ALD & DET & river \\
and they were thrown into the river. & &
\end{tabular}

T0057: 064
\begin{tabular}{llll} 
entonces & juu & tachu & tanajunch \\
entonces & juu & tachu & ta-najun+ch \\
then & REL & how & 3PL.SUB-say(IMPFV)+ALD
\end{tabular}
juu maqaniyaa lapanak,
juu
maqaniyaa lapanak

DET old people
Well, like the old people say,

\section*{T0057: 065}
juu xaa- xaa7ukxtinch 7anuu xkaan
juu xaa- xaa-7ukxtin+ch 7anu7 xkaan
DET IPOS IPOS-boss+ALD that water
juu 7alamaa maa waa talhqamalhchi.
juu 7alamaa maa waa talhqaman-li+ch
DET sea RPT FOC get_mad-PFV+ALD
the god of the water, of the sea, got angry.

\section*{T0057: 066}
y luego milhch 7awilhchan
y luego min-li+ch 7a-wilhchan
and then come-PFV+ALD CL:another-day
And then, there came a day (when)

T0057: 067
\begin{tabular}{lll} 
talhawalhch & juu & qayxkaan \\
talhawa-li+ch & juu & qayxkaan \\
flood-PFV+ALD & DET & river
\end{tabular}
\begin{tabular}{llll} 
lhii7alhch & laklhii7alhch & juu & chaqa7. \\
lhii7an-li+ch & lak-lhii7an-li+ch & juu & chaqa7 \\
take-PFV+ALD & 3PL.OBJ-take(PFV)-PFV+ALD & DET & house \\
the river flooded and it carried away the houses. & &
\end{tabular}

T0057: 068
7anuu lhii7alhch lapanak
7anuu lhii7an-li+ch lapanak
um take(PFV)-PFV+ALD
people
juu 7ali7 chun juu xqatii.
juu 7ali7 chun juu xqatii
DET others thus DET creek
It carried away the people, and the creek (carried off) the rest.
T0057: 069
\begin{tabular}{llllll} 
juu & maqanchich & juu & xqatii & naa & naa \\
juu & maqanch+ich & juu & xqatii & naa & naa \\
DET & long_time+ALD & DET & creek & EMP & EMP
\end{tabular}
\begin{tabular}{lll} 
xlaktanooqojuy & juu & lakalakchaqa7 \\
x-lak-tanuu-qoju-y & juu & laka-lak-chaqa7 \\
PAST-DIS-insert-ALL-IMPFV & DET & PREP-PL-house
\end{tabular}
naa naa juu lapanak.
naa naa juu lapanak
EMP EMP DET people
Before, the creek flooded the houses of all the people.
T0057: 070
juu 7aqtam paastak
juu 7aq-tam paastak
DET CL:times-one remember(IMPFV)
I remember one time

T0057: 071
\begin{tabular}{llll} 
jaantuka7 & naa & waa & maqan, \\
jaantu + ka7 & naa & waa & maqan \\
NEG + JST & EMP & FOC & long_ago \\
not so long ago & &
\end{tabular}

T0057: 072
kaa 7intach veinte años
kaa 7intach veinte años
BLV like twenty years
it's been about twenty years,
T0057: 073
\begin{tabular}{lllll} 
7aksnii & laqmuuxtukaalh & waa & naa & juu \\
7aksnii & lak-7aqmuuxtu-kan-li & waa & naa & juu \\
when & DIS-flood-INS-PFV & FOC & EMP & DET
\end{tabular}
\begin{tabular}{llll} 
7anii & laqxqatii & Arroyo & Negro \\
7ani7 & laka-xqatii & arroyo & negro \\
here & PREP-creek & creek & black \\
when it flooded here in Black Creek,
\end{tabular}

T0057: 074
Agua de Miguel junkan
agua de Miguel jun-kan
water of Michael say-RFL(IMPFV)
maa bueno juu lhiimaqalhqama7 Miikiixkaan.
maa bueno juu lhii-maqalhqama7 Miikiixkaan
RPT okay DET APPL-Tepehua Michael's_water it's called Michael's Water; well, in Tepehua, Michael's water.

T0057: 075
\begin{tabular}{lllll} 
7entons & nii & paastaklich & juu & 7ukxtin \\
7entons & nii & paastak-li+ch & juu & 7ukxtin \\
then & COMP & think-PFV+ALD & DET & boss
\end{tabular}

Then the mayor thought

T0057: 076
\begin{tabular}{llll} 
nii & kanawiiya7 & juu & barda. \\
nii & ka-nawii-ya7 & juu & barda \\
COMP & IRR-make-FUT & DET & wall \\
that he was going to build \(a\) wall.
\end{tabular}

T0057: 077
puus 7ulaakaalhch juu qex.
puus 7ulaa-kan-li+ch juu qex
well put-INS-PFV+ALD DET wall
Well, they built the wall.
T0057: 078
\begin{tabular}{lll} 
entonces & juu & chaway \\
entonces & juu & chaway \\
then & DET & today \\
Well, until today,
\end{tabular}

T0057: 079
\begin{tabular}{lllll} 
puus & chaway & matich & tu7u7 & 7aqmuuxtuta, \\
puus & chaway & mati7+ch & tu7u7 & 7aqmuuxtu-ta \\
well & today & nothing+ALD & something & flood-PF
\end{tabular}
there haven't been any floods,
T0057: 080
palaych 7astaknanta.
palay+ch 7astaknan-ta
more+ALD rest-PF
it has been very calm.
T0057: 081
yuuch talhiinajunch juu maqaniyaa lapanak
yuuch ta-lhii-najun+ch
PRN.3SG 3PL.SUB-APPL-say(IMPFV)+ALD juu maqaniyaa lapanak

That's why the old people say
T0057: 082
\begin{tabular}{lllll} 
nii & maa & talhqamalh & juu & sireenaa \\
nii & maa & talhqaman-li & juu & sireenaa \\
COMP & RPT & get mad-PFV & DET & goddess
\end{tabular}
that the goddess got angry

T0057: 083
\begin{tabular}{lllll} 
nii & waa & muujuukaalhch & juu & lapanak \\
nii & waa & muujuu-kan-li+ch & juu & lapanak \\
COMP & FOC & throw-INS-PFV+ALD & DET & people
\end{tabular}
juu xaaniin lapanak juu lakxkaan.
juu xaa-nii-n lapanak juu laka-xkaan
DET IPOS-die-DVB people DET PREP-water because the people threw the dead into the river.

\section*{T0057: 084}
\begin{tabular}{lllll} 
entonces & juu & \begin{tabular}{l} 
Sireenaa \\
entonces
\end{tabular} & waa & talhqamalhchi. \\
sireenaa & waa & talhqaman-li+ch \\
then & DET & goddess & FOC & get_mad-PFV+ALD \\
So the goddess got mad. & &
\end{tabular}

So the goddess got mad.
T0057: 085
yuuch maa lhiitalhawaych juu qayxkaan.
yuuch maa lhii-talhawa-y+ch juu qayxkaan
PRN.3SG RPT APPL-flood-IMPFV+ALD DET river
That's why the river floods.
T0057: 086
\begin{tabular}{llllll} 
porque & juu & 7anii & laqachaqan & waa & lakat'ikst'i, \\
porque & juu & 7ani7 & laqachaqan & waa & lakat'ikst'i \\
because & DET & here & town & FOC & small
\end{tabular}
xjuuniita lakat'ikst'i.
x-jun-niita lakat'ikst'i
PAST-be-PF small
Because here the town is small, it was small.

\section*{T0057: 087}
\begin{tabular}{llllll} 
juu & chaway & naa & qaych & ya & naa \\
juu & chaway & naa & qay+ch & ya & naa \\
DET & today & EMP & big+ALD & now & EMP
\end{tabular}
\begin{tabular}{lll} 
lhuuch & juu & 7ix-7anuu \\
lhuu + ch & juu & x-7anuu \\
many + ALD & DET & 3POS-um \\
Now it is very big with its . . .
\end{tabular}

T0057: 088
\begin{tabular}{lllll} 
laqachaqan & barrio & nii & Barrio & Atzlan, \\
laqachaqan & barrio & nii & barrio & Atzlan, \\
town & neighborhood & COMP & neighborhood & Atzlan
\end{tabular}
\begin{tabular}{llll} 
Barrio & Cuautemoc, & Barrio & Mirasol, \\
barrio & Cuautemoc, & barrio & Mirasol, \\
neighborhood & Cuautemoc & neighborhood & Mirasol
\end{tabular}
\begin{tabular}{|c|c|c|c|c|}
\hline Barrio & El Carril & y & Arroyo & Negro. \\
\hline barrio & el Carril & y & arroyo & negro \\
\hline neighborhood & the Carril & and & creek & black \\
\hline wns, neigh & hood At & n, Cu & moc, & sol, el \\
\hline
\end{tabular}

T0057: 089
\begin{tabular}{llll} 
entonces & juu & 7anuu & juu \\
entonces & juu & 7anuu & juu \\
then & DET & um & DET
\end{tabular}
\begin{tabular}{lllll} 
xlakaytat & laqachaqan & 7anchach & juu & 7 anii, \\
x-lakaytat & laqachaqan & \begin{tabular}{l} 
7anch+ch
\end{tabular} & \begin{tabular}{l} 
juu
\end{tabular} & 7 ani7 \\
3POS-center & town & there+ALD & DET & here \\
Well, the center of town is there, & &
\end{tabular}

T0057: 090
taa tawiilanalh juu laawaanan,
taa ta-wiilanalh juu laawaan-(V)n
where 3PL.SUB-live.PL(IMPFV) DET Spanish-PL
juu palaych maqaliinin.
juu palay+ch maqali7-nin
DET more+ALD rich person-PL
Where the Spanish people live, the richest people.
T0057: 091
\begin{tabular}{lllll} 
maqanchich & \(y\) & luego & maa & naa \\
maqanch+ich & y & luego & maa & naa \\
long_time+ALD & and & then & RPT & EMP
\end{tabular}

Before, and then...

T0057: 092
\begin{tabular}{lllllll} 
bueno naa & juu & p'ulhnan & tuu & laay & 7ixchiwinin \\
bueno naa & juu & p'ulhnan & tuu & laa-y & x-chiwin-nin \\
well & EMP & DET & first & NEG & can-IMPFV & PAST-speak-PL.INF
\end{tabular}
juu maqalhqama7 juu lhiilaawaan naa qox.
juu maqalhqama7 juu lhii-laawaan naa qox
DET Tepehua DET APPL-Spanish EMP good
Well, at first, the Tepehua people couldn't speak Spanish very well.

\section*{T0057: 093}
lakmaamaqalhqajnikan,
lak-maa-maqalhqaj-ni-kan
3PL.OBJ-CAUS-suffer-DAT-INS(IMPFV)
They were punished
T0057: 094
xlakmaanawiinikan faena
x-lak-maa-nawii-ni-kan faena
PAST-3PL.OBJ-CAUS-do-DAT-INS(IMPFV) labor
they were forced to do labor,

\section*{T0057: 095}
xlakmaalhii7anikan
x-lak-maa-lhii7an-ni-kan
PAST-3PL.OBJ-CAUS-take-DAT-INS(IMPFV)
\begin{tabular}{lll} 
maa & xwayti7an & xaalajqajin \\
maa & x-wayti-7an & xaa-lak-qay-(V)n \\
RPT & 3POS-food-PL.POS & IPOS-PL-big-PL \\
they were made to bring food for the chiefs
\end{tabular}

T0057: 096
juu tachu governador tachu xaa7ukxtin Tenaanku, juu tachu governador tachu xaa-7ukxtin Tenaanku, DET how governor how IPOS-boss Tenango
xaa7ukxtin 7anuu San Bartolo.
xaa-7ukxtin 7anuu San Bartolo
IPOS-boss um San Bartolo
like the governor, like the mayor of Tenango, the mayor of San Bartolo.

T0057: 097
\begin{tabular}{llllllll} 
pero & juu & chaway & nii & naa & lhuuch & juu & lapanak \\
pero & juu & chaway & nii & naa & lhuu + ch & juu & lapanak \\
but & DET & now & COMP & EMP & many+ALD & DET & people
\end{tabular}
laay chiwinin lhiilaawaan,
laa-y chiwinin-nin lhii-laawaan
can-IMPFV talk-PL.INF APPL-Spanish
But now that many people can speak Spanish,
T0057: 098
puus laaych qalhtayanan
puus laa-y+ch qalhtaya-nVn
well can-IMPFV+ALD defend-INO
well, they can defend themselves,
T0057: 099
jaantuch waa lhiilaqa7iiy.
jaantu+ch waa lhiilaqa7ii-y
NEG+ALD FOC be_humiliated-IMPFV
they are not humiliated.
T0057: 100
\begin{tabular}{lllllr} 
puus & waa & 7anchach & 7aklaay & juu & xaa- \\
puus & waa & 7anch+ch & 7aklaa-y & juu & xaa- \\
well & FOC & there+ALD & end-IMPFV & DET & IPOS-
\end{tabular}
juu xaa7istooryaa laqachaqan
juu xaa-7istooryaa laqachaqan
DET IPOS-history town
Well, there ends the story of the town
T0057: 101
7aksnii naa kilhpatini7 7ixjuuniita juu lapanak 7aksnii naa kilhpatini7 x-jun-niita juu lapanak when EMP poor PAST-be-PF DET people when the people were very poor.

\section*{Text 5: Peter and The Crawdad (T0058)}

This text was narrated by don Nicolás Vigueras Patricio on January 27, 2001, in Huehuetla, Hidalgo, Mexico. It was recorded and transcribed by Susan Smythe Kung, translated by don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is archived with the Archive of the Indigenous Languages of Latin America under the language name "Tepehua de Huehuetla" and the identifier number TPW001R058.

T0058: 001
\begin{tabular}{lll} 
puus juu & 7alaqatam & wilhchan \\
puus juu & 7a-laqa-tam & wilhchan \\
well & DET & CL:other-CL:general-one \\
day
\end{tabular}

T0058: 002
7anuu waa milh juu xtalhawanti
7anuu waa min-li juu xtalhawanti um FOC come-PFV DET flood
there was a flood,
T0058: 003
juu xqatii naa naa lhuu waa.
juu xqatii naa naa lhuu waa
DET creek EMP EMP many FOC
the creek rose a lot.

\section*{T0058: 004}
waa kpaastak'ach 7aksnii
waa k-paastak-7a+ch 7aksnii
FOC 1SUB-remember-IMPFV+ALD when
I remember when

T0058: 005
\begin{tabular}{llllll} 
7anuu nii & naa & lhuj & xminta & juu & t'uun \\
7anuu nii & naa & lhuu & x-min-ta & juu & t'uun \\
um COMP & EMP & many & PAST-come-PF & DET & earth \\
a bunch of mud came, & & & &
\end{tabular}

\section*{T0058: 006}

7aksnii maqalhtajuu lak don Joaquín t'uun.
7aksnii maqalhtajuu laka-don Joaquín juu t'uun when come down(IMPFV) PREP-don Joaquin DET earth when the land came down at don Joaquin's [place].

T0058: 007
jaantu p'aast'ak'a?
jaantu paast'ak-7a
NEG remember(2SUB)-IMPFV
Don't you remember?
T0058: 008
\begin{tabular}{llll} 
naa & naa & lhuj & xminta \\
naa & naa & lhuu & x-min-ta \\
EMP & EMP & many & PAST-come-PF
\end{tabular}
juu t'uun waa naach
juu t'uun waa naa+ch
DET earth FOC EMP+ALD
A lot of ground came at that
T0058: 009
\(\begin{array}{llllll}\text { 7aks } & \text { waa } & \text { naa } & \text { laklhii7alh } & \text { juu } & \text { chaqa7. } \\ \text { 7aks } & \text { waa } & \text { naa } & \text { lak-lhii7an-li } & \text { juu } & \text { chaqa7 }\end{array}\)
then FOC EMP 3PL.OBJ-take-PFV DET house time, it carried away the houses.

\section*{T0058: 010}
pero taaxtu7u7 7anuu sii pulhqom,
pero taaxtu7u7 7anuu sii pulh7um
but something um pure mud
But . . . something . . . pure mud,

T0058: 011
\begin{tabular}{llll} 
jaantu & jaantu & qoxiyaa & t'uun. \\
jaantu & jaantu & qoxiyaa & t'uun \\
NEG & NEG & good & earth
\end{tabular}
but it wasn't good earth.
T0058: 012
\begin{tabular}{llll} 
entonces & juu & 7aksniich & maa \\
entonces & juu & 7aksnii+ch & maa \\
then & DET & when+ALD & RPT
\end{tabular}
\begin{tabular}{lll} 
naa & lhuu & 7aqxixta, \\
naa & lhuu & 7aqx-xix-ta
\end{tabular}

EMP many flat-dry-PF
Well, this time the river also dried up,
T0058: 013
maa
mau
mau paamata 7anuu \begin{tabular}{l} 
paamata 7anuu
\end{tabular} \begin{tabular}{l} 
xkupuch. \\
skupu7+ch
\end{tabular}

T0058: 014
\begin{tabular}{lllll} 
y & luego & milh & laqatam & wilhchan \\
y & luego & min-li & laqa-tam & wilhchan \\
and & then & come-PFV & CL:general-one & day
\end{tabular}

And then a day came
T0058: 015
juu 7anii juu pumatam lapanak
juu 7ani7 juu puma-tam lapanak
DET here DET CL:human-one person
that a person
T0058: 016
juu kiilaachiilh 7anii maa lakaMiikiixkaan.
juu kii-laa-chii-li 7ani7 maa laka-Miikii-xkaan
REL RT-can-PROX-PFV here RPT PREP-Michael-water
came along Michael's Water.

T0058: 017
\begin{tabular}{lllll} 
entonces & maa & soq & lhiitajuu & laqatam \\
entonces & maa & soq & lhiitajuu & laqa-tam \\
then & RPT & straight & find(PFV) & CL:general-one \\
Then he met \(a\). . & & &
\end{tabular}

T0058: 018
\begin{tabular}{lllll} 
bueno maa & xt'ajunch & ch'apana7 & juu & xkupu7. \\
bueno maa & x-t'ajun+ch & ch'apa-nV7 & juu & skupu7 \\
well RPT & PAST-be(IMPFV)+ALD & grab-INF & DET & crawdad \\
Well, he was grabbing crawdads. & & &
\end{tabular}

T0058: 019
\begin{tabular}{lllllll} 
maa & naa & naa & lhuj & juu & xkupu7 & lhii7alh. \\
maa & naa & naa & lhuu & juu & skupu7 & lhii7an-li \\
RPT & EMP & EMP & many & DET & crawdad & take-PFV
\end{tabular}

And he took a lot of crawdads.
T0058: 020
\begin{tabular}{lllllll} 
maa & lakachiiwx & maa & naa & lajqay & juu & xkupu7 \\
maa & laka-chiiwx & maa & naa & lak-qay & juu & xkuupu7 \\
RPT & PREP-stone & lying(IMPFV) EMP & PL-big & DET & crawdad
\end{tabular}

In the rocks there were big crawdads
T0058: 021
juu x7aknuuy.
juu x-7ak-nuu-y
REL PAST-head-insert-IMPFV
whose heads were stuck in (the rocks).
T0058: 022
\begin{tabular}{llll} 
entonces & maa & tzukulh & \begin{tabular}{l} 
ch'apana7, \\
entonces \\
maa
\end{tabular} \\
tzuku-li & ch'apa-nV7 \\
then & RPT & begin-PFV & grab-INF
\end{tabular}

T0058: 023
maa laqtzamalhch juu xkuweetaa.
maa laqtzaman-li+ch juu x-kuweetaa
RPT fill-PFV+ALD DET 3POS-bucket
and he filled his bucket.

\section*{T0058: 024}
\begin{tabular}{llll} 
entonces & 7aksnii & 7anuu & maa \\
entonces & 7aksnii & 7anuu & maa \\
then & when & um & RPT
\end{tabular}
\begin{tabular}{lll} 
xch'apaputunch & maa & laqatam, \\
x-ch'apa-putun+ch & maa & laqa-tam \\
PAST-grab-DESID(IMPFV)+ALD & RPT & CL:general-one \\
Then when he wanted to grab one, &
\end{tabular}

\section*{T0058: 025}
\begin{tabular}{lllll} 
maa & naa & naa & qox & qay. \\
maa & naa & naa & qox & qay \\
RPT & EMP & EMP & good & big
\end{tabular}
it was a really big one.
T0058: 026
entonces juu 7anuuch xkupu7
entonces juu 7anu7+ch skupu7
then DET that+ALD crawdad
then that crawdad
T0058: 027
chiwinilh maa najunch,
chiwin-ni-li maa najun+ch
talk-DAT-PFV RPT say(IMPFV)+ALD
spoke to him and told him
T0058: 028
maa xa7alalhch, "jaantu k'i7ut'i!
maa xaqala-li+ch jaantu ki-7u-t'i
RPT talk_to-PFV+ALD NEG 1OBJ(2SUB)-eat-2SG.SUB.PFV
It said, "Don't eat me!
T0058: 029
jaantu k'i7ut'i!" maa juuniych.
jaantu ki-7u-t'i maa jun-ni-y+ch
NEG 1OBJ(2SUB)-eat-2SG.SUB.PFV RPT say-DAT-IMPFV+ALD
Don't eat me!" it told him.
```

T0058: 030
"jaantu k'i7ut'i
jaantu ki-7u-t'i
NEG 1OBJ(2SUB)-eat-2SG.SUB.PFV
"Don't eat me!
T0058:031
nii k'i7uya7, ka7uyaan juu Siliyaa,"
nii ki-7u-ya7 ka-7u-ya7-n juu Siliiyaa
COMP 1OBJ(2SUB)-eat-FUT IRR-eat-FUT-2OBJ DET Cecilia
maa juuniych.
maa jun-ni-y+ch
RPT say-DAT-IMPFV+ALD
If you eat me, Cecilia is going to eat you," it told him.
T0058: 032
juu 7anu7 7anu7 xkupu7 7anuu
juu 7anu7 7anu7 skupu7 7anuu
DET that that crawdad um
maa x7alin 7ix7ukxtin
maa x-7alin x-7ukxtin
RPT PAST-there_is(IMPFV) 3POS-boss
That crawdad had a boss
T0058: 033
juu maa Siliiyaa junkan.
juu maa Siliiyaa jun-kan
REL RPT Cecilia say-RFL(IMPFV)
that was named Cecilia.
T0058: 034
"nii k'i7uya7, jii Piitalu7,
nii ki-7u-ya7 jii Piitalu7
COMP 1OBJ(2SUB)-eat-FUT VOC Peter
"If you eat me, Peter,

```

T0058: 035
\begin{tabular}{lllll} 
ka7uyaan & juu & Siliiyaa," & maa & juuniych. \\
ka-7u-ya7-n & juu & Siliiyaa & maa & jun-ni-y+ch \\
IRR-eat-FUT-2OBJ & DET & Cecilia & RPT & say-DAT-IMPFV+ALD
\end{tabular}

Cecilia is going to eat you," it told him.
T0058: 036
luego juu 7anu7 xkupu7 juu 7anuu
luego juu 7anu7 skupu7 juu 7anuu
then DET that crawdad DET um
Then that crawdad,
T0058: 037
puus, maa jaantu 7atz'alay.
puus maa jaantu 7atz'ala-y
well RPT NEG run-IMPFV
well, it didn't run away.
T0058: 038
maa 7uksuntz'ukulh, maa lhkapapa.
maa 7ukxun-tzuku-li maa lhkapapa
RPT walk-begin-PFV lying(IMPFV) ID:crawling
It began to walk like this, crawling.
T0058: 039
7uksuntz'ukulh laqaqxix taach tu7uch 7anuu
7ukxun-tzuku-li laka-7aqx-xix taach tu7u7+ch 7anuu
walk-begin-PFV PREP-flat-dry like something+ALD um
It walked that way along the dry river bed like something . . .
T0058: 040
bueno waa maaqeswaaputunch
bueno waa maaqeswaa-putun+ch
well FOC scare-DESID(IMPFV)+ALD
Well, it wanted to scare
T0058: 041
juu 7anu7 lapanak.
juu 7anu7 lapanak
DET that person
that person.

T0058: 042
\begin{tabular}{llll} 
7anuu puus & maa & jaantu & ch'apalh, \\
7anuu puus & maa & jaantu & ch'apa-li \\
um well & RPT & NEG & grab-PFV
\end{tabular} Well, he didn't grab it,

T0058: 043
\begin{tabular}{llll} 
maa & 7alh & juu & xkupu7 \\
maa & 7an-li & juu & \begin{tabular}{l} 
skupu7
\end{tabular} \\
RPT & go-PFV & DET & crawdad \\
and the crawdad left.
\end{tabular}

\section*{T0058: 044}
\begin{tabular}{lllllll} 
y & luego & maa & 7alh & 7awisalaana7 & juu & lapanak \\
y & luego & maa & 7an-li & 7awisalaa-nV7 & juu & lapanak \\
and & then & RPT & go-PFV & warn-INF & DET & people
\end{tabular}

And then he (Peter) went to warn the people.
T0058: 045
maa taminqoolhch chuux, jaantu?
maa ta-min-qoju-li+ch chuux jaantu
RPT 3PL.SUB-come-ALL-PFV+ALD all NEG
Everybody went, didn't they?

\section*{T0058: 046}
y luego juu 7anuu "xalaqtz'in sireenaa y luego juu 7anuu xa-laqtz'in sireenaa and then DET um PAST-see(IMPFV) goddess And then, "You saw the goddess,

T0058: 047
\begin{tabular}{lllll} 
yuuchach & juu & xaa7ukxtin & juu & xqatii \\
yuuch+ch & juu & xaa-7ukxtin & juu & xqatii \\
PRN.3SG+ALD & DET & IPOS-boss & DET & creek \\
who is the boss of the creek. & &
\end{tabular}

T0058: 048
\begin{tabular}{llll} 
yuuch & talhiilaaych & juu & xqatii \\
yuuch & talhiilaa-y+ch & juu & xqatii \\
PRN.3SG & flood-IMPFV+ALD & DET & creek
\end{tabular}

Because of her the creek rises," (the people said to Peter).

T0058: 049
\begin{tabular}{lllll} 
7entons & taqayxtoqlich & chuux & juu & lapanak \\
7entons & taqayxtoq-li & chuux & juu & \begin{tabular}{l} 
lapanak
\end{tabular} \\
then & gather-PFV all & DET & people \\
Then all the people gathered
\end{tabular}

T0058: 050
nawiinikaalhch juu 7ixkustumwree.
nawii-ni-kan-li+ch juu x-kustumwree
make-DAT-INS-PFV+ALD DET 3POS-ritual
and they performed her ritual for her.
T0058: 051
takiilaaqoolhch chuux juu 7anu7
ta-kii-laa-qoju-li+ch chuux juu 7anu7
3PL.SUB-RT-can-ALL-PFV+ALD all DET that
ki7ananaan7an
kin-7a-nana7-(V)n-7an
1POS-PL-grandmother-PL-PL.POS
All of our grandmothers went, well

7anuu
7anuu
um

T0058: 052
\begin{tabular}{llll} 
juu & tanawiiy & juu tatiich'iiy & xaanti \\
juu & ta-nawii-y & juu ta-tii-ch'ii-y & xaanti \\
REL & PL.SUB-make-IMPFV & REL & 3PL.SUB-butt-tie-IMPFV \\
flower \\
the ones who make the floral wreaths. &
\end{tabular}

T0058: 053
\begin{tabular}{lll} 
juu brujos & 7alakjunkan, & jaantu? \\
juu & brujos & 7a-lak-jun-kan
\end{tabular}

T0058: 054
tatapayninilhch juu sireenaa.
ta-tapaynin-ni-li+ch juu sireenaa
3PL.SUB-ask_forgiveness-DAT-PFV+ALD DET goddess
They asked the goddess for forgiveness.

T0058: 055
\begin{tabular}{lllllll} 
puus & juu & 7anu7 & kweentuu & waa & 7anchach & tamaktay \\
puus & juu & 7anu7 & kweentuu & waa & 7anch+ch & tamakta-y \\
well & DET & that & story & FOC & there+ALD & end-IMPFV
\end{tabular}

Well, that story ends there,
T0058: 056
juu xkweentuu juu Piitalu7 y Siliiyaach
juu x-kweentuu juu Piitalu7 y Siliiyaa + ch
DET 3POS-story DET Peter and Cecilia+ALD
the story of Peter and Cecilia.
T0058: 057
tuus chaway jaantuch talhaway juu xqatii
tuus chaway jaantu+ch talhawa-y juu xqatii
since today NEG+ALD flood-IMPFV DET creek
Until today, the creek does not flood
T0058: 058
juu naa waa lhuuch kawaa.
juu naa waa lhuu+ch ka-waa
DET EMP FOC much+ALD IRR-be(IRR)
as much as before.
T0058: 059
\begin{tabular}{lllll} 
talhawaych, & pero & waa & laktz'uninch & kiitalhaway \\
talhawa-y+ch & pero & waa & lakatz'unin+ch & kii-talhawa-y \\
flood-IMPFV+ALD & but & FOC & a_little+ALD & RT-flood-IMPFV \\
It floods, but it just floods a little bit and goes back down.
\end{tabular}

T0058: 060
porque tachu noonkanch
porque tachu najun-kan + ch
because como say-INS(IMPFV)+ALD
juu 7ali7 jaantu talaka7iiy
juu 7ali7 jaantu ta-laka7ii-y
DET others NEG 3PL.SUB-believe-IMPFV
Because like they say, the others don't believe in

\section*{T0058: 061}
\(\begin{array}{llll}\text { juu } & \text { kostumwree } & \text { juu } & \text { talaknawiiy } \\ \text { juu } & \text { kustumwree } & \text { juu } & \text { ta-lak-nawii-y } \\ \text { DET ritual } & \text { REL } & \text { 3PL.SUB-3PL.OBJ-do-IMPFV } \\ \text { the rituals done by } & & \end{array}\)
T0058: 062
juu tz'oq'onun maqalhqamaan
juu tz'oq'on-(V)n maqalhqama7-(V)n
DET Otomí-PL Tepehua-PL
the Otomí and Tepehua.
T0058: 063
pero 7aqtamixnin kalhitapalay porque
pero 7aqtamix-nin kalhita-pala-y porque
but sometimes-PL work-REP-IMPFV because
But sometimes it works because
T0058: 064
\begin{tabular}{llll} 
tuus & chaway & jaantuch & talhaway \\
tuus & chaway & jaantu + ch & talhawa-y \\
since & today & NEG + ALD & flood-IMPFV \\
until today the creek has not flooded
\end{tabular}

T0058: 065
\begin{tabular}{llllll} 
juu & xqatii & naa & waa & lhuu & kawaa. \\
juu & xqatii & naa & waa & lhuu & ka-waa \\
DET creek & EMP & FOC & many & IRR-be(IRR) \\
like before. & & & &
\end{tabular}

T0058: 066
\begin{tabular}{|c|c|c|c|c|}
\hline y & 7 anchach & 7aklaay & juu & taa \\
\hline y & \(7 \mathrm{anch}+\mathrm{ch}\) & 7aklaa-y & juu & taa \\
\hline and & there+ALD & end-IMPFV & REL & where \\
\hline tama & atz'alaych & & juu & xkupu7 \\
\hline ta-m & -7atz'ala-y+ch & & juu & skupu7 \\
\hline 3PL. & UB-CAUS-run & IMPFV+ALD & DET & crawdad \\
\hline And & e ends the story & \(y\) where they & an off & he crawd \\
\hline
\end{tabular}

\section*{Text 6: The Two Brothers (T0063)}

This story was told primarily by doña Josefa Tolentino Aparicio, with some interjections made by her daughter, doña Elena Barragán Tolentino. All utterances made by doña Elena are marked with \([\mathrm{H}]\) at the beginning of the line. The text was recorded on April 2, 2001, in Huehuetla, Hidalgo, Mexico. It was recorded and transcribed by Susan Smythe Kung, translated by don Nicolás Vigueras Patricio, and interlinearized by Susan Smythe Kung. The audio recording is to be archived with the Archive of the Indigenous Languages of Latin America under the language name "Tepehua de Huehuetla".

T0063: 002 \({ }^{228}\)
\begin{tabular}{lllll} 
waa & xmaa & 7 anii & waa & klaajunawch \\
waa & x-maa & 7 ani7 & waa & k-laa-jun-aw+ch \\
FOC & PAST-RPT & here & FOC & 1SUB-RCP-say(IMPFV)-1PL.SUB+ALD \\
Here I'm going to tell you all
\end{tabular}

T0063: 003
\begin{tabular}{llll} 
maa taas & 7ixlaaych & juu & lapanak \\
maa & taas & x-laa-y+ch & juu
\end{tabular} lapanak

T0063: 004
\begin{tabular}{llll} 
juu & 7anu7 & xt'iyun7an & lapanak \\
juu & 7anu7 & xt'iyun-7an & lapanak \\
DET & that & two-PL.POS & people
\end{tabular}
waa xta7asaanan.
waa \(x\)-ta-7asaanan
FOC PAST-3PL.SUB-play(instrument)(IMPFV)
those two people who played instruments.

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T0063: 005
\begin{tabular}{lll} 
waa xta7asaanan & y & luego \\
waa & x-ta-7asaanan & y
\end{tabular} \begin{tabular}{l} 
luego \\
FOC
\end{tabular} PAST-3PL.SUB-play(instrument)(IMPFV) \begin{tabular}{l} 
and \\
they
\end{tabular}

T0063: 006
jaantuch laay jaantu+ch laa-y NEG+ALD can-IMPFV
they couldn't. . .
T0063: 007
7aaj jaantuch 7aknawlh juu yuuch?
7aaj jaantu+ch 7a-k-najun-li juu yuuch
oh NEG+ALD IRR-1SUB-say-PFV DET PRN.3SG
Oh, I'm not going to say that?
T0063: 008
waa xta7asaanan
waa x-ta-7asaanan
FOC PAST-3PL.SUB-play(instrument)(IMPFV)
They played (instruments)
T0063: 009
\begin{tabular}{llll} 
waa & jaantuch & laay & xtalhiitajuuy \\
waa & jaantu+ch & laa-y & x-ta-lhiitajuu-y \\
FOC & NEG+ALD & can-IMPFV & PAST-3PL.SUB-find-IMPFV
\end{tabular}
juu 7anuu juu lhiich'alhk'at.
juu 7anuu juu lhiich'alhkat
DET um DET work
because they couldn't find work.
T0063: 010
Y luego waa niilhch juu sp'isaqa7an.
y luego waa nii-li+ch juu x-p'isaqa-7an
and then FOC die-PFV+ALD DET 3POS-younger_sibling-PL.POS And then their little sister died.

T0063: 011
\begin{tabular}{lllll} 
7aaj waa & niilhch & juu & sp'isaqa7an. \\
7aaj & waa & nii-li+ch & juu & x-p'isaqa-7an \\
oh & FOC & die-PFV+ALD & DET & 3POS-younger_sibling-PL.POS \\
Oh, their sister died. & &
\end{tabular}

T0063: 012
nii xaniiych juu sp'isaqa7an
nii \(\quad x-n i i-y+c h \quad\) juu \(x-p\) 'isaqa-7an
COMP PAST-die-IMPFV+ALD DET 3POS-younger_sibling-PL.POS And when their sister was dead . . .

T0063: 013
[H] jaantu chun puutay7ulaay
[H] jaantu chun puu-tay7ulaa-y
[H] NEG like_that INST-begin-IMPFV
[H] It doesn't start like that.
T0063: 014
jaantu chun?
jaantu chun?
NEG like_that
Not like that?
T0063: 015
[H] 7a7aj.
[H] 7a7aj
[H] yes
[H] Yes.
T0063: 016
\begin{tabular}{lllll} 
waa & waa & niilh & juu & xlaqaw7an \\
waa & waa & nii-li & juu & x-laqaw-7an \\
FOC & FOC & die-PFV & DET & 3POS-sibling-PL.POS
\end{tabular}
juu sp'isaqa7an.
juu x-p'isaqa-7an
DET 3POS-younger_sibling-PL.POS
Their sister, their little sister died.

T0063: 017
[H] talhiimukunt'ajun.
[H] ta-lhiimukun-t'ajun
[H] 3PL.SUB-take-AMB(IMPFV)
[H] They always took her.

\section*{T0063: 018}

7um7um 7aaj maa p'uulan
7um7um 7aaj maa p'uulan
yes oh RPT first
Yes. Oh, first
T0063: 019
xtalhiimukunt'ajun
x-ta-lhiimukun-t'ajun
PAST-3PL.SUB-take-AMB(IMPFV)
they would take her
T0063: 020
nii maa waa xta7asaanan.
nii maa waa \(x\)-ta-7asaanan
COMP RPT FOC PAST-3PL.SUB-play(instrument)(IMPFV)
when they played.
T0063: 021
nii waa xtalhii7anch
nii waa x-ta-lhii7an+ch
COMP FOC PAST-3PL.SUB-takE(IMPFV)+ALD
juu lakawaylii juu 7atzi7.
juu laka-waylii juu 7atzi7
DET PREP-dance DET girl
Because they would take the girl to the dances.
T0063: 022
[H] lakak'aatan.
[H] laka-k'aatan
[H] PREP-party
[H] To the parties.

T0063: 023
lakak'aatanch xtalhii7anch.
laka-k'aatan+ch x-ta-lhii7an+ch
PREP-party+ALD PAST-3PL.SUB-take(IMPFV)+ALD
They would take her to the festivals.
T0063: 024
7ixta7anch maat'iwninin.
x-ta-7an+ch maa-t'inin-nin
PAST-3PL.SUB-go(IMPFV)+ALD CAUS-dance-PL.INF
They would go to dance.
T0063: 025
nii nii xtamaat'iwniych
nii nii x-ta-maa-t'inin-y+ch
COMP COMP PAST-3PL.SUB-CAUS-dance-IMPFV+ALD
They would make her dance and
T0063: 026
naa \(x\) 7alinch juu xlhiich'alhkat7an
naa \(x\)-7alin+ch juu x-lhiich'alhkat-7an
EMP PAST-there_is(IMPFV)+ALD DET 3POS-work-PL.POS
they would get a lot of work
T0063: 027
nii maa waa xtalhii7anch.
nii maa waa \(x\)-ta-lhii7an+ch
COMP RPT FOC PAST-3PL.SUB-take(IMPFV)+ALD
because they would take her.
T0063: 028
pero nii xaniiych,
pero nii xa-nii-y+ch
but COMP PAST-die-IMPFV+ALD
But after she was dead,
T0063: 029
matiich juu xlhiich'alhkat7an xajun.
mati7+ch juu x-lhiich'alhkat-7an xa-jun
nothing+ALD DET 3POS-work-PL.POS PAST-be(IMPFV)
there was no more work.

T0063: 030
waa ta7astaknalhch.
waa ta-7astaknan-li+ch
FOC 3PL.SUB-rest-PFV+ALD
They rested.
T0063: 031
nii xata7astaknanchi,
nii xa-ta-7astaknan+ch
COMP PAST-3PL.SUB-rest(IMPFV)+ALD
When they rested,
T0063: 032
\begin{tabular}{lllll} 
matiich & juu & kata7ulh & maa & wachu7 \\
mati7+ch & juu & ka-ta-7u-li & maa & wachu7 \\
nothing+ALD & DET & IRR-3PL.SUB-eat-PFV & RPT & also
\end{tabular}
they didn't eat anything either
T0063: 033
\begin{tabular}{llll} 
nii & naach & waa & yuuch \\
nii & naa+ch & waa & yuuch \\
COMP & EMP+ALD & FOC & PRN.3SG
\end{tabular}
juu x7amaapalhkan juu lakalhiisaan.
juu x-7a-maapala-kan juu laka-lhiisaan
REL PAST-PL-pay-INS(IMPFV) DET PREP-gig
because they lived off of what they earned from their gigs.
T0063: 034
\begin{tabular}{llll} 
ta7alhch & puuxkoonin & juu & lakxkaan \\
ta-7an-li+ch & \begin{tabular}{l} 
puuxkaju-nin
\end{tabular} & \begin{tabular}{l} 
juu \\
lakxkaan
\end{tabular} \\
3PL.SUB-go-PFV+ALD & look_for-PL.INF & DET & river \\
They went to look in the river, & &
\end{tabular}

T0063: 035
maa ta7alhch paxnin.
maa ta-7an-li+ch pax-nin
RPT 3PL.SUB-go-PFV+ALD bathe-PL.INF
they went to bathe.

T0063: 036
\begin{tabular}{lllll} 
tapaaxtoqlich & juu & juu & 7anuuch & lapanak \\
ta-paaxtoq-li & juu & juu & 7anu7+ch & lapanak \\
3PL.SUB-meet-PFV & DET & DET & that+ALD & person \\
They met that person & & & &
\end{tabular}

T0063: 037
juu maa xaqalhii7an.
juu maa xaqa=lhii7an
REL RPT pull=take(IMPFV)
who took them.
T0063: 038
pero juu 7 anu7 lapanak xaqalhii7an
pero juu 7anu7 lapanak xaqa-lhii7an
but DET that person pull-take(IMPFV)
But that person who took them
T0063: 039
jaantu qoxiyaa lapanak waa.
jaantu qoxiyaa lapanak waa
NEG good person FOC
was not a good person
T0063: 040
waa maqtili7.
waa maqtili7
FOC evil
He was evil.
T0063: 041
ta7alhch.
ta-7an-li+ch
3PL.SUB-go-PFV+ALD
They left,

T0063: 042
t'asanikaalhch nii
t'asa-ni-kan-li+ch nii
call-DAT-INS-PFV+ALD COMP
kaxtaqnikanaach juu lhiich'alhkat.
ka-xtaq-ni-kan-a7+ch juu lhiich'alhkat
IRR-give-DAT-INS-FUT+ALD DET work
They were told that they would be given work.
T0063: 043
ta7alhch
ta-7an-li+ch
7asaanin,
3PL.SUB-go-PFV+ALD
7a-saa-nin
They went to play,
T0063: 044
y waa laktalhpa taxaqamanuukan.
y waa laka-talhpa ta-xaqama=nuu-kan and FOC PREP-mountain INCH-drag=insert-INS(IMPFV) and they were dragged into a cave.

T0063: 045
tacha7alhch juu 7anch
ta-chaa7an-li+ch juu 7anch
3PL.SUB-arrive_there-PFV+ALD DET there
They arrived there
T0063: 046
tatzukulhch 7asaanin.
ta-tzuku-li+ch 7a-saa-nin
3PL.SUB-begin-PFV+ALD PL-play-PL.INF
and began to play.

T0063: 047
7 anch juu xatalhiitajuuych
7 anch juu xa-ta-lhiitajuu-y+ch
there REL PAST-3PL.SUB-find-IMPFV+ALD
juu xp'isaqa7an, juu Maliiyaa.
juu x-p'isaqa-7an juu Maliiyaa
DET 3POS-younger_sibling-PL.POS DET Mary
There they found their little sister, Mary.
T0063: 048
Maliiyaa xjunkan.
Maliiyaa x -jun-kan
Mary PAST-say-RFL(IMPFV)
Her name was Mary.
T0063: 049
Pero 7anch Maliiyaa Senisyeentaach xajunkan,
pero 7anch Maliiyaa Senisyeentaa+ch xa-jun-kan
but there Mary Cinderella+ALD PAST-say-RFL(IMPFV)
But there Mary was called Cinderella,
T0063: 050
juu 7anch juu laka7anii,
juu 7anch juu laka-7ani7
DET there DET PREP-here
there where she was,
T0063: 051
laka7anii taa xtanuunch,
laka-7ani7 taa \(x\)-tanuun+ch
PREP-here where PAST-inserted(IMPFV)+ALD
in there where she was stuck,

T0063: 052
\(\begin{array}{ll}\text { taa } & \text { xtanuunch } \\ \text { taa } & \text { x-tanuun }+ \text { ch } \\ \text { where } & \text { PAST-inserted(IMPFV)+ALD }\end{array}\)
7ixchaqaach juu lhakatikuuruu.
\(x\)-chaqa \(7+\) ch juu lhakatikuuruu
3POS-house+ALD DET devil
where she was stuck in the devil's house.
T0063: 053
7anchach xtamaat'uniych,
7anch+ch x-ta-maa-t'uni-y+ch
there+ALD PAST-3PL.SUB-CAUS-dance-IMPFV+ALD
There they made her dance,
T0063: 054
pero waa xch'ajaach chiila7
pero waa \(x\)-ch'aja7+ch chiila7
but FOC 3POS-foot+ALD chicken
but her feet
T0063: 055
xjuuniita juu xch'aja7.
x-jun-niita juu x-ch'aja7
PAST-be-PF DET 3POS-foot
were chicken feet.
T0063: 056
7anch juu xtalaqxaqalhiit'ajunch
7anch juu x-ta-laqxaqa-lhii-t'ajun+ch
there REL PAST-3PL.SUB-drag-APPL-AMB(IMPFV)+ALD
There they went around dragging her
T0063: 057
juu puulak nii laktalhpa.
juu puulak nii laka-talhpa
DET inside COMP PREP-mountain
inside the cave.

T0063: 058
\begin{tabular}{llll} 
nii & xatalaqxaqalhiitzukuych & juu & 7anch, \\
nii & xa-ta-laqxaqa=lhii-tzuku-y+ch & juu & 7 anch \\
COMP & PAST-3PL.SUB-drag=APPL-begin-IMPFV+ALD & DET & there \\
When they began to drag her around there, & &
\end{tabular}

\section*{T0063: 059}

7alakmaawaputunkanch juu xaalaqawin, 7a-lak-maa-wajin-putun-kan+ch juu xaa-laqaw-(V)n PL-3PL.OBJ-CAUS-eat-DESID-INS(IMPFV)+ALD DET IPOS-sibling-PL they wanted to feed the brothers,

T0063: 060
nii maa waa katawaylich.
nii maa waa ka-ta-wajin-li+ch
COMP RPT FOC IRR-3PL.SUB-eat-PFV+ALD so that they would eat.

\section*{T0063: 061}
lak7ulaanikaalhch juu 7anuu p'in lak-7ulaa-ni-kan-li+ch juu 7anuu p'in 3PL.OBJ-put-DAT-INS-PFV+ALD DET um chile
They were served salsa,

\section*{T0063: 062}
juu 7 alaqoxintich lhiiway choola7.
juu 7alaqoxintich lhiiway choola7
DET mole
meat turkey
turkey mole.
T0063: 063
pero maa xachilhch juu Maliiyaa
pero maa xa-chin-li+ch juu Maliiyaa
but RPT PAST-arrive-PFV+ALD DET Mary
But Maria arrived,
T0063: 064
nii maa xajuuniych juu xlaqaw
nii maa xa-jun-ni-y+ch juu x-laqaw
COMP RPT PAST-say-DAT-IMPFV+ALD DET 3POS-sibling and told her brothers

T0063: 065
\begin{tabular}{lll} 
nii & jaantuch & kata7ulh \\
nii & jaantu+ch & ka-ta-7u-li \\
COMP & NEG+ALD & IRR-3PL.SUB-eat-PFV \\
not to eat it
\end{tabular}

T0063: 066
porque nii nii kata7uya7,
porque nii nii ka-ta-7u-ya7
because COMP COMP IRR-3PL.SUB-eat-FUT
because if they ate it,
T0063: 067
jaantuch katitataxtulh.
jaantu+ch ka-ti-ta-taxtu-li
NEG+ALD IRR-IMM-3PL.SUB-leave-PFV
they wouldn't be able to leave.
T0063: 068
jaantuch xata7uy.
jaantu+ch xa-ta-7u-y
NEG+ALD PAST-3PL.SUB-eat-IMPFV
They didn't eat it.
T0063: 069
nii jaantuch xata7uy.
nii jaantu+ch xa-ta-7u-y
COMP NEG+ALD PAST-3PL.SUB-eat-IMPFV
They didn't eat it.
T0063: 070
tatzukuchoqolhch maa 7asaanin.
ta-tzuku-choqo-li+ch maa 7a-saa-nin
3PL.SUB-begin-AGAIN-PFV+ALD RPT PL-play-PL.INF
They began to play again.

T0063: 071
\begin{tabular}{lllll} 
pero & naa & naach & maa & waa \\
pero & naa & naa+ch & maa & waa \\
but & EMP & EMP+ALD & RPT & FOC
\end{tabular}
talaqxaqalhiit'ajun juu Maliiyaa
ta-laqxaqa-lhii-t'ajun juu Maliiyaa
3PL.SUB-drag-APPL-AMB(IMPFV) DET Mary
But they just went around dragging Maria,
T0063: 072
7anchach tanuumaachaa laktalhpa.
7anch+ch tanuu-maa-chaa laka-talhpa
there+ALD insert-lying(IMPFV)-DST PREP-mountain
there where she is stuck in the cave.
T0063: 073
nii xatalaqxaqalhiitzukuchoqoych,
nii xa-ta-laqxaqa=lhii-tzuku-choqo-y+ch
COMP PAST-3PL.SUB-drag=APPL-begin-AGAIN-IMPFV+ALD
When they began to drag her again,
T0063: 074
t'asalhchi juu chiila7.
t'asa-li+ch juu chiila7
cry-PFV+ALD DET chicken
the cock crowed.
T0063: 075
t'asalhchi juu chiila7.
t'asa-li+ch juu chiila7
cry-PFV+ALD DET chicken
The cock crowed.
T0063: 076
7entons tapaastaklich nii 7anuu
7entons ta-paastak-li+ch nii 7anuu
then 3PL.SUB-remember-PFV+ALD COMP um
Then they remembered that

T0063: 077
\begin{tabular}{llll} 
nii & 7alin & juu & Dios. \\
nii & 7alin & juu & Dios \\
COMP & there_is(IMPFV) & DET & God \\
that there is aGod. & &
\end{tabular}

T0063: 078
7aksch juu xalaktantamaakxtukan.
7 aks+ch juu xa-lak-tan-ta-maaxtu-kan when+ALD REL PAST-3PL.OBJ-torso-INCH-take_out-INS(IMPFV) That is when they were taken outside.

T0063: 079
laktantamakxtuukaalhch
lak-tan-ta-maxtu-kan-li+ch
3PL.OBJ-torso-INCH-take_out-INS-PFV+ALD
\begin{tabular}{lll} 
chaway & jaantuch & 7anuu \\
chaway & jaantu+ch & 7anuu \\
now & NEG+ALD & um \\
They were & taken outside then; oh, no . .
\end{tabular}

T0063: 080
jaantuch xalakask'inkan nii katatanuu jaantu+ch xa-lakask'in-kan nii ka-ta-tanuu NEG+ALD PAST-want-INS(IMPFV) COMP IRR-3PL.SUB-enter(PFV)
they weren't wanted inside
T0063: 081
nii waa xtapaastak'ach juu Dios.
nii waa x-ta-paastak-7a+ch juu Dios

COMP FOC PAST-3PL.SUB-remember-IMPFV+ALD DET God because they remembered God.

T0063: 082
7anii xtapaastak'ach
7anii x-ta-paastak-7a+ch
this PAST-3PL.SUB-remember-IMPFV+ALD
juu kimpay7an.
juu kin-pay-7an
DET 1POS-father-PL.POS
They remembered Our Father.
T0063: 083
vaya juu lhiimaqalhqamaach.
vaya juu lhii-maqalhqama7+ch
it_goes DET APPL-Tepehua+ALD
It goes like that in Tepehua.
T0063: 084
\begin{tabular}{lll} 
noonkanch & nii & kimpay7an \\
najun-kan+ch & nii & kin-pay-7an \\
say-INS(IMPFV)+ALD & COMP & 1POS-father-PL.POS
\end{tabular}
juu kintalhiist'aktan.
juu kin-ta-lhiistak-ta-n
REL 1OBJ-3PL.SUB-care_for-PF-2OBJ
They say that it is Our father who watches over us.
T0063: 085
7alaktantamakxtuukaalhch.
7a-lak-tan-ta-maxtu-kan-li+ch
PL-3PL.OBJ-torso-INCH-take_out-INS-PFV+ALD
They were taken outside.
T0063: 086
puus 7aksniich xatalaqp'aqx7ulaay
puus 7aksnii+ch x-ta-lak-p'aqx7ulaa-y
well when+ALD PAST-3PL.SUB-3PL.OBJ-shatter-IMPFV
juu xlhiisaan7an
juu \(x\)-lhiisaan-7an
DET 3POS-musical_instrument-PL.POS
Well, after that they broke their musical instruments

T0063: 087
porque waa takiilaqtz'ilhch
porque waa ta-kii-laqtz'in-li + ch
because FOC 3PL.SUB-RT-see-PFV+ALD
juu xlaqaw7an,
juu x-laqaw-7an
DET 3POS-sibling-PL.POS
because they went to see their sister,
T0063: 088
juu xp'isaqa7an juu taa tanuun.
juu x-p'isaqa-7an juu taa tanuun
DET 3POS-younger_sibling-PL.POS DET where inserted(IMPFV)
their little sister, where she was stuck.
T0063: 089
talaqp'aqx7ulaalhch
ta-lak-p'aqx7ulaa-li+ch
3PL.SUB-3PL.OBJ-shatter-PFV+ALD
juu xlhiisaan7an.
juu x-lhiisaan-7an
DET 3POS- musical_instrument-PL.POS
They broke their instruments.
T0063: 090
laaqoolhch.
laa-qoju-li+ch
can-all-PFV+ALD
The end.

\section*{Bibliography}

Acsni patajulh ju t'iyan. 1958. México, D.F.: Instituto Lingüístico de Verano.
Agustín Santiago Cuervo, Carolyn J. MacKay, and Frank R. Trechsel. 2005. An kuchú (La cotorra). Muncie, Indiana: Ball State Printing Service.

Agustín Santiago Cuervo, Carolyn J. MacKay, and Frank R. Trechsel. 2005. ¿Chu ajín an mináti? (¿Es una tortuga tu mamá?). Muncie, Indiana: Ball State Printing Service.

Agustín Santiago Cuervo, Carolyn J. MacKay, and Frank R. Trechsel. 2005. ¿Dáni da’úncha, mistú? (¿Dónde estás, gatito?). Muncie, Indiana: Ball State Printing Service.

Aikhenvald, Alexandra Y. 2000. Classifiers: A typology of noun categorization devices. Oxford: Oxford University Press.

Aikhenvald, Alexandra Y. 2003. Evidentiality in typological perspective. In Alexandra Y. Aikhenvald and R. M. W. Dixon (eds.), Evidentiality (pp. 131). Amsterdam: John Benjamins Publishing Co.

Aikhenvald, Alexandra Y. 2004. Nominal classification: Towards a comprehensive typology. Sprachtypologie und Universalienforshung 57 (2/3), 105-116.

Aissen, Judith. 1987. Tzotzil Clause Structure. Dordrecht: D. Reidel Publishing Co.

Allan, Keith. 1977. Classifiers. Language, 53 (2), 285-311.
Allot, Robin. 1995. Sound symbolism. Retrieved November 5, 2004, from http://www.percepp.demon.co.uk/soundsmb.htm

An malhe 'nij burroj (Un burro flojo). 2004. México, D.F.: Instituto Lingüístico de Verano.

Arana Osnaya, Evangelina. 1953. Reconstrucción del proto-totonacano. In Ignacio Bernal and Eusebio Dávalos Hurtado (eds.), Huastecos, totonacos y sus vecinos. Revista mexicana de estudios antropológicos 13 (2/3), 123130. México, D.F.: Sociedad Mexicana de Antropología.

Aschmann, Herman P. 1946. Totonaco phonemes. International Journal of American Linguistics, 12 (1), 34-43.

Aschmann, Herman P. 1973. Diccionario totonaco de Papantla. México D.F.: Instituto Lingüístico de Verano.

Aschmann, Herman P. 1983 [1962]. Vocabulario totonaco de la Sierra. México D.F.: Instituto Lingüístico de Verano.

Aschmann, Herman, and William L. Wonderly. 1952. Affixes and implicit categories in Totonac verb inflection. International Journal of American Linguistics, 18 (3), 130-145.

Aschmann, Pedro. 1953. Los dos niveles de composición en el verbo totonaco. In Ignacio Bernal and Eusebio Dávalos Hurtado (eds.), Huastecos, totonacos y sus vecinos. Revista mexicana de estudios antropológicos 13 (2/3), 119122. México, D.F.: Sociedad Mexicana de Antropología.

Beck, David. 1999. The typology of parts of speech systems: The markedness of adjectives. Doctoral Dissertation, University of Toronto.

Beck, David. 2000. The Syntax, semantics, and typology of adjectives in Upper Necaxa Totonac. Linguistic Typology 4, 213-250.

Beck, David. 2002. The typology of parts of speech system. New York: Routledge.

Beck, David. 2003. Person-hierarchies and the origin of asymmetries in Totonac verbal paradigms. Linguistica Atlantica 23, 35-68.

Beck, David. 2004. Upper Necaxa Totonac. Munich: Lincom.
Beck, David. 2006a. Control of agreement in multi-object constructions in Upper Necaxa Totonac. In Atsushi Fujimori and Maria Amelia Reis Silva (eds.), Proceedings of the \(11^{\text {th }}\) Workshop on Structure and Constituency in the Languages of the Americas. Vancouver: UBC Working Papers in Linguistics.

Beck, David. 2006b. The emergence of ejective fricatives in Upper Necaxa Totonac. In Robert Kirchner (ed.), University of Alberta Working Papers in Linguistics 1.

Beck, David. 2006c. Voice and agreement in multi-object constructions in Upper Necaxa Totonac. Paper presented at the IX Encuentro Internacional de Lingǘstica en el Noroeste, Universidad de Sonora, November 15-17, 2006.

Beck, David. 2007. Argument quantification and qualification in Upper Necaxa Totonac. Paper presented at the \(33^{\text {rd }}\) Annual Meeting of the Berkeley Linguistic Society, University of California, Berkeley, February 9-11, 2007.

Beck, David. To appear a. Ideophones, adverbs, and predicate qualification in Upper Necaxa Totonac. International Journal of American Linguistics.

Beck, David. To appear b. What to do with the ideophones? A problem in lexical classification from Upper Necaxa Totonac. In L. Wanner (ed.), Festschrift for Igor Mel'čuk. Amsterdam: John Benjamins Publishing Co.

Beck, David, and Yvonne Lam. In press. Language loss and linguistic suicide: A case study from the Sierra Norte de Puebla, México. In Sarah Cummins, Brigit Janoski, and Patricia A. Shaw (eds.), All the things you are: A festschrift for Jack Chambers. Toronto: Toronto Working papers in Linguistics.

Bessell, Nicola. 1998. Local and non-local consonant-vowel interaction in Interior Salish. Phonology, 15,1-40.

Bishop, Ruth. 1984. Consonant play in lexical sets in Northern Totonac. SIL Working Papers in Linguistics 5, 24-31.

Bloomfield, Leonard. 1984 [1933]. Language. Chicago: University of Chicago Press.

Boas, Franz. 1911. Introduction: Handbook of American Indian Languages. Bureau of American ethnology, Bulletin 40, (pp. 1-85). Washington: Smithsonian Institution.

Boilés, Charles L. 1967 [1990]. Tepehua thought-song: A case of semantic signaling. Originally published in 1967 in Ethnomusicology 11 (3), 267292. Reprinted in 1990 in Kay Kaufman Shelemay (ed.), The Garland library of readings in ethnomusicology, vol. 7 (pp. 171-196). New York: Garland.

Bouquiaux, Luc, and Jacqueline M. C. Thomas (eds.). 1971. Etnolingüística: Metodología y encuestas para el trabajo de campo (Perla Petrich and Jesús García Ruíz, Trans.). Paris: Selaf-Peeters.

Bower, Bethel. 1948. Stems and affixes in Tepehua numerals. International Journal of American Linguistics, 14 (1), 20-21.

Bower, Bethel, and Barbara Erickson. 1967. Tepehua sentences. Anthropological Linguistics, 9, 25-37.

Bowerman, Melissa. No date. Melissa Bowerman's Topological Picture Series. Ms. Max-Planck Institute for Psycholinguistics, Nijmegen.

Brown, Roger. 1958. Words and Things. New York: Free Press.
Bybee, Joan, Revere D. Perkins, and William Pagliuca. 1994. The evolution of grammar: Tense, aspect, and modality in the languages of the world. Chicago: University of Chicago Press.

Carochi, Horacio. 1645. Arte de la lengva mexicana con la declaracion de los adverbios della. México: Iuan Ruyz.

Chafe, Wallace. 1995. The realis-irrealis distinction in Cado, the Northern Iroquoian languages, and English. In Joan Bybee and Suzanne Fleischman (eds.), Modality and grammar in discourse (Typological studies in language 32 (pp. 349-365). Amsterdam: John Benjamins Publishing Co.

Childs, G. Tucker. 1994. African ideophones. In Leanne Hinton, Johanna Nichols, and John Ohala, (eds.). Sound symbolism (pp. 178-204). Cambridge: Cambridge University Press.

Coe, Michael D. 1994. Mexico: From the Olmecs to the Aztecs (4th ed.). London: Thames and Hudson, Ltd.

Comrie, Bernard and Norval Smith. 1977. Lingua descriptive series: Questionnaire. Lingua, 42, 1-72.

Cowan, George M. 1952. El idioma silbado entre los mazatecos de Oaxaca y los tepehuas de Hidalgo, México. Tlatoani 1, 31-33.

Cowan, George M. 1972. Segmental features of Tepehua whistle speech. In A. Rigault and R. Charbonneau (eds.), Proceedings of the Seventh

International Congress of Phonetic Sciences, Montreal, 1971 (pp. 695698). Janua Linguarum, series maior, 57. The Hague: Mouton.

Cowan, George M. 1976. Whistled Tepehua. In Thomas A. Sebeok and Donna Jean Umiker (eds.), Speech surrogates: A reader; vol. 1 Drum and whistle systems (pp. 1400-9). Approaches to Semiotics, 23. The Hague: Mouton.

Cowan, George M. 1981. Whistled communication. Notes on Linguistics 20, 2224.

Craig, Colette. 1986. Introduction. In Colette Craig, (ed.), Noun classes and categorisation (pp. 1-10). Amsterdam: John Benjamins Press.

Diffloth, Gerard. 1972. Notes on expressive meaning. In Paul M. Peranteau, Judith N. Levi, and Gloria C. Phares (eds.), Papers from the Eighth Regional Meeting Chicago Linguistic Society (pp. 440-7). Chicago: Chicago Linguistic Society.

Diffloth, Gerard. 1976. Expressives in Semai. In Philip N. Jenner, Laurence C. Thompson, and Stanley Starosta (eds.), Austroasiatic Studies: Part I, Vol. 1 (pp. 249-264). Honolulu: University Press of Hawaii.

Dixon, R. M. W. 1994. Ergativity. Cambridge: Cambridge University Press.
Doke, Clement M. 1935. Bantu linguistic terminology. London: Longmans, Green, y Co.

Drubig, Hans Bernhard. 2000. Towards a typology of focus and focus constructions, MS.

Dryer, Matthew S. 1986. Primary objects, secondary objects, and antidative. Language, 62 (4), 808-845.

Edmonson, Barbara W. 1988. A Descriptive Grammar of Huastec (Potosino Dialect). Doctoral Dissertation, Tulane University.

England, Nora. 1983. A grammar of Mam, a Mayan language. Austin: University of Texas Press.

England, Nora. 2004. Entrando y saliendo de una posición: Palabras afectivas en Mam. Paper presented at Lengua y Mantenimiento Cultural en Mesoamérica: Un Simposio. The University of Texas at Austin.

England, Nora. 2006. El papel de palabras afectivas en la narración en Mam (Maya). In María del Carmen Morúa (ed.), Memorias del VIII Encuentro Internacional de Lingüística en el Noroeste (pp. 157-171). Hermosillo, Sonora, México: Editorial UniSon.

Enríquez, Héctor. 2004. La categorización de los olores en totonaco. Dimensión Antropológica, Año 11, Vol. 30 enero/abril, 103-128.

Fudge, Erik. 1970. Phonological structure and 'expressiveness'. Journal of Linguistics, 6 (2), 161-188.

García Ramos, Crescencio. 2000. Vocabulario bilingüe totonaco castellano. Jalapa, Veracruz: Ediciones Cultura de Veracruz.

García Vidal, Félix, and Fernando Augusto García García. 1981 [1972]. Manuel del dialecto totonacao de la región de Papantla, Veracruz ( \(\left.2^{\text {nd }} \mathrm{ed}.\right)\). México, D.F.: Unknown publisher.

Gerdts, Donna B. 1998. Incorporation. In Andrew Spencer and Arnold M. Zwicky (eds.), The handbook of morphology (pp. 84-100). Malden, Mass.: Blackwell.

Gessain, Robert. 1938. Contribution a l'étude des cultes et des cérémonies indigènes de la région de Huehuetla (Hidalgo): les <<muñecos>> figurines rituelles. Société des Américanistes (Reconnue d'utilité publique). Nouvelle série, Tome \(X X X\) (pp. 343-369). Paris: Au Siège de la Société.

Givón, Talmy. 1994. Irrealis and the subjunctive. Studies in Language 18 (2), 265-337.

Gordon, Raymond G., Jr. (ed.). 2005. Ethnologue: Languages of the World ( \(15^{\text {th }}\) ed.). Dallas, Tx.: SIL International.

Greenberg, Joseph. 1987. Languages of the Americas. Palo Alto: Stanford University Press.

Grenoble, Lenore, and Lindsay J. Whaley (eds.). 1998. Endangered languages: Current issues and future prospects. Cambridge: Cambridge University Press.

Grinevald, Colette. 2000. A morphosyntactic typology of classifiers. In Gunter Senft, (ed.), Systems of nominal classification (pp. 50-92). Cambridge: Cambridge University Press.

Grinevald, Colette. 2005. The expression of static location in a typological perspective: A perspective from American languages. Presentation delivered to the University of Texas at Austin, Department of Linguistics Colloquium, Austin, May 5, 2005.

Guerrero Domínguez, Francisco, and Dorotea Herzog S. 1983. Tuchi ju iclact'atapasata ju quin'amigojni ju lakt'ict'i atapacxat (Mis aventuras con algunos animales amigos). México, D.F.: Instituto Lingüístico de Verano.

Guerrero Domínguez, Francisco, and Dorotea Herzog S. 1984. Tas lhi'aklhtaijui ju quinlacatuna'an ju uyau. México, D.F.: Instituto Lingüístico de Verano.

Guerrero Domínguez, Francisco, and Dorotea Herzog S. 1985. Ixcuento ju venk'en ju ixtapalai atsi' (El cuento de la rana que se convertía en una muchacha). México, D.F.: Instituto Lingüístico de Verano.

Guerrero Domínguez, Francisco, and Dorotea Herzog S. 1986. Acsni tataclh ju Mexico: Cuando México tembló. México, D.F.: Instituto Lingüístico de Verano.

Haas, Mary. 1970. Consonant symbolism in Northwestern California: A problem in diffusion. In Earl H. Swanson, Jr. (ed.), Languages and cultures of western North America: Essays in honor of Sven S. Liljeblad (pp. 86-96). Pocatell, ID: Idaho State University Press.

Hayes, Bruce. 1989. Compensatory lengthening in moraic phonology. Linguistic Inquiry 20 (2), 253-306.

Hayes, Bruce. 1995. Metrical stress theory: Principles and case studies. Chicago: University of Chicago Press.

Heine, Bernd. 1997. Possession: Cognitive sources, forces, and grammaticalization. Cambridge: Cambridge University Press.

Heine, Bernd, Ulrike Claudi, and Friederike Hünnemeyer. 1991. Grammaticalization: A conceptual framework. Chicago: University of Chicago Press.

Hengeveld, Kees. 1992. Non-verbal predication: Theory, typology, diachrony. Functional Grammar Series 15. Berlin: Mouton de Gruyter.

Hernández Sierra, Guadalupe Trinidad. 1986. Los tepehuas a traves de la historia y su sistema fonémico (Pisaflores, Veracurz). Bachelors thesis, Escuela Nacional de Antropología e Historia, México, D.F.

Herzog, Dorothy. 1974. Person, number, and tense in the Tepehua verb. SIL Mexico Workpapers 1, 45-52.

Herzog, Dorothy. 1987. Ideophones in Huehuetla Tepehua. Ms., Summer Institute of Linguistics.

Herzog, Dorothy. No date. Tepehua Dictionary. Ms., Summer Institute of Linguistics.

Hinton, Leanne. 1994. Flutes of fire: Essays on California Indian languages. Berkeley: Heyday Books.

Hinton, Leanne, Johanna Nichols, and John Ohala. 1994. Introduction: Soundsymbolic processes. In Leanne Hinton, Johanna Nichols, and John Ohala, (eds.). Sound symbolism (pp. 1-12). Cambridge: Cambridge University Press.

Hoogshagen, Searle, and Hilda Hoogshagen. 1993. Diccionario mixe de Coatlán. Serie de vocabularios y diccionarios indígenas "Mariano Silva y Aceves", 32. México, D.F.: Instituto Lingüístico de Verano.

Hopper, Paul J., and Elizabeth Closs Traugott. 2003. Grammaticalization (2 \({ }^{\text {nd }}\) ed.). Cambridge: CUP.

Hornberger, N. H. 1998. Language policy, language education, language rights: Indigenous, immigrant, and international perspectives. Language in Society, 27, 439-458.

Huerta Santiago, Antonio, and Dorotea Herzog S. 1982. Calaktz'iu (Leamos). México, D.F.: Instituto Lingüístico de Verano.

Huerta Santiago, Antonio, and Dorotea Herzog S. 1983. Lakat'ui cuento junta ta'alhajanan ju lact'icst'i atapacxat (Dos cuentos en los que los animales pequeños ganan). México, D.F.: Instituto Lingüístico de Verano.

Huerta Santiago, Antonio, and José Refugio Victoriano. 1981. Ixcuento'an ju mak'aniya lapanakni (Cuentos de los antepasados). México, D.F.: Instituto Lingüístico de Verano.

Instituto Nacional de Estadística, Geografía e Informática. 2005. Principales resultados por localidad, como parte del programa de divulgación de resultados del II Conteo de Población y Vivienda 2005. México, D.F.: Author.

Instituto Nacional de Lenguas Indígenas. 2006. Talleres de análisis de la diversidad lingüística para la elaboración del Catálogo de las lenguas indígenas mexicanas: Foro de análisis totonaco-tepehua. Papantla, Veracruz, México, September 11-12, 2006.

Instituto Nacional de Lenguas Indígenas. To appear. Catálogo de las lenguas indígenas mexicanas. México, D.F.: Author.

Itô, Junko. 1989. A prosodic theory of epenthesis. Natural Langauge and Linguistic Theory 7, 217-260.

Jespersen, Otto. 1922. Language: Its nature, development and origin. London: Allen and Unwin.

Ju Anita (Ana). 1957. México, D.F.: Instituto Lingüístico de Verano.
Ju chila' chai ju xat'in cux. 1956. México, D.F.: Instituto Lingüístico de Verano.
Ju k'avi va is'akstu ixt'ajun (El ratoncito huerfanito). 1955. México, D.F.: Instituto Lingüístico de Verano.

Ju scau chai ju lhvakna' (El conejo y el lobo). 1957. México, D.F.: Instituto Lingǘstico de Verano.

Justeson, John, and Terrence Kaufman. 1993. A decipherment of Epi-Olmec hieroglyphic writing. Science, 259 (5102), 1703-1711.

Kaufman, Terrence. 1988. Seminar notes from Sound Symbolism. University of Pittsburgh.

Kaufman, Terrence. 2003. The linguistic prehistory of Teotihuacan. Lecture delivered at the University of Texas at Austin, March 5, 2003.

Kaufman, Terrence. 2005. Sound symbolism in Mesoamerica. Presentation delivered at the Symposium on Mesoamerican Indigenous Languages, University of Texas at Austin.

Kaufman, Terrence. No date. The long list, Ms., University of Pittsburgh.

Keenan, Edward L., and Bernard Comrie. 1977. NP accessibility and universal grammar. Linguistic inquiry, 8, 63-100.

Kouwenberg, Silvia, and Eric Murray. 1994. Papiamentu. München: Lincom Europa.

Krauss, Michael. 1992. The world's languages in crisis. Language, 68 (1), 4-10.
Kryder, Nancy J. 1987. A phonological and morphological sketch of Tepehua. Masters thesis, University of Montana.

Ladefoged, Peter. 1993. A course in phonetics (3 \({ }^{\text {rd }}\) ed.). Fort Worth: Harcourt Brace Jovanovich College Publishers.

Langdon, Margaret. 1971. Sound symbolism in Yuman languages. In Jesse Sawyer (ed.), Studies in American Indian languages. University of California publications in linguistics vol. 65 (pp. 149-173). Berkeley: University of California Press.

Levy, Paulette. 1987. Fonología del totonaco de Papantla, Veracruz. México, D.F.: Universidad Nacional Autónoma de México.

Levy, Paulette. 1990. Totonaco de Papantla, Veracruz. Archivo de lenguas indígenas de México. México, D.F.: Colegio de México.

Levy, Paulette. 1992. Adjectives in Totonac: Descriptive statement and typological considerations. International Journal of American Linguistics, 53 (3), 269-298.

Levy, Paulette. 1994. La base verbal en totonaco. In Carolyn J. MacKay and Verónica Vázquez (eds.), Investigaciones lingüísticas en Mesoamérica (pp. 227-262). México, D.F.: Universidad Nacional Autónoma de México.

Levy, Paulette. 1999a. From 'part' to 'shape': Incorporation in Totonac and the issue of classification by verbs. International Journal of American Linguistics, 65 (2), 127-175.

Levy, Paulette. 1999b. "Where" rather than "what": Incorporation of 'parts' in Totonac. In Doris L. Payne and Immanuel Barshi (eds.), External possession (pp. 325-338). Amsterdam: John Benjamins Publishing Co.

Levy, Paulette. 2002a. El aplicativo dativo/benefactivo en totonaco de Papantla. In Zarina Estrada Fernández and Rosa María Oriz Ciscomani (eds.),

Memorias del VI Encuentro Internacional de Lingüística en el Noroeste (pp. 175-194). Hermosillo, Sonora, México: Departamento de Letras y Lingǘstica, Universidad de Sonora.

Levy, Paulette. 2002b. Cuando un especificador funciona como determinante: El caso del totonaco. In Paulette Levy (ed.), Del cora al maya yucateco: Estudios lingüísticos sobre algunas lenguas indígenas mexicanas (pp. 403-436). México, D.F.: Universidad Nacional Autónoma de México.

Levy, Paulette. 2003. Traduttore, tradittore: La construcción lingüística de espacio en totonaco de Papantla. Paper presented at the Conference on Indigenous Languages of Latin America, University of Texas at Austin.

Levy, Paulette. 2004. Parts in Papantla Totonac and the genesis of systems of numeral classification. Sprachtypologie und Universalienforshung 57 (2/3), 280-299.

Levy, Paulette. 2006. Los sustantivos relacionales en el totonaco de Papantla. Paper presented at the IX Encuentro Internacional de Lingüística en el Noroeste, Universidad de Sonora, November 15-17, 2006.

Liga Bíblica Mundial del Hogar. 1976. El nuevo testamento en el idioma tepehua de Huehuetla, Hidalgo. México, D.F.: United Bible Society.

MacKay, Carolyn J. 1991. A grammar of Misantla Totonac. Doctoral dissertation, University of Texas at Austin.

MacKay, Carolyn J. 1994a. Dyadic structure in a Totonac narrative. In Carolyn J. MacKay and Verónica Vázquez (eds.), Investigaciones lingüísticas en Mesoamérica (pp. 263-299). México, D.F.: Universidad Nacional Autónoma de México.

MacKay, Carolyn J. 1994b. A sketch of Misantla Totonac phonology. International Journal of American Linguistics, 60 (4), 199-248.

MacKay, Carolyn J. 1999. A grammar of Misantla Totonac. Salt Lake City: The University of Utah Press.

MacKay, Carolyn J., and Frank R. Trechsel. 2003. Reciprocal /laa-/ in Totonacan. International Journal of American Linguistics, 69 (3), 275-306.

MacKay, Carolyn J., and Frank R. Trechsel. 2005a. Symmetrical objects in Totonacan: A comparative perspective. Paper presented at the Annual

Meeting of the Society for the Study of Indigenous Languages of the Americas, Oakland, CA.

MacKay, Carolyn J., and Frank R. Trechsel. 2005b. Totonaco de Misantla, Veracruz. Archivo de lenguas indígenas de México. México, D.F.: Colegio de México.

MacKay, Carolyn J., and Frank R. Trechsel. 2006. Panorama preliminar de las lenguas simétricas totonaco-tepehuas. Paper presented at the IX Encuentro Internacional de Lingüística en el Noroeste, Universidad de Sonora, November 15-17, 2006.

MacKay, Carolyn J., and Frank R. Trechsel. To appear a. The phonology of Pisaflores Tepehua. In Thomas Smith-Stark and Roberto Zavala (eds.), Festschrift for Terrence Kaufman.

MacKay, Carolyn J., and Frank R. Trechsel. To appear b. Symmetrical objects in Misantla Totonac. International Journal of American Linguistics.

MacKay, Carolyn J., and Frank R. Trechsel. To appear c. Tepehua de Pisaflores, Veracruz. Archivo de Lenguas Indígenas de México. México D.F.: Colegio de México.

Maffi, Louisa. 1990. Tzeltal Maya affect words: Psychological salience and expressive functions of language. In D. J. Costa (ed.), Proceedings of the Sixteenth Annual Meeting of the Berkeley Linguistics Society: Special Session on General Topics in American Indian Linguistics (pp. 61-72). Berkeley: Berkeley Linguistics Society.

McFarland, Teresa. 2005. The inflectional system of Totonaco de Filomeno Mata. Paper presented at the annual meeting of the Linguistic Society of America, Oakland, CA, January 2005.

McFarland, Teresa. 2006. Ideophones and templatic morphology in Totonac: Páks páks tamakawán. Paper presented at the annual meeting of the Linguistic Society of America, Albuquerque, NM, January 2006.

McFarland, Teresa. To appear. Ideophones and templatic morphology in Filomeno Mata Totonac. Proceedings of the Rara and Rarissima Conference, Leipzig, Germany.

McFarland, Teresa. In progress. Topics in the morphology of Filomeno Mata Totonac. Doctoral dissertation, University of California, Berkeley.

McQuown, Norman A. 1940. A Totonac grammar. Doctoral dissertation, Yale University.

McQuown, Norman A. 1942. Una posible síntesis lingüística macro-mayence. Mayas y Olmecas 2 (pp. 37-38). Tuxtla Gutierrez, Chiapas: Sociedad Mexicana de Antropología.

McQuown, Norman A. 1955. The indigenous languages of Latin American. American Anthropologist 57, 501-570.

McQuown, Norman A. 1956. Evidence for a synthetic trend in Totonacan. Language, 31 (1), 78-80.

McQuown, Norman A. (ed). 1990a. Arte de la lengua totonaca, unknown author. Faccimile edition of the original manuscript. México, D.F.: Universidad Nacional Autónoma de México.

McQuown, Norman A. 1990b. Gramática de la lengua totonaca (Coatepec, Sierra Norte de Puebla). México, D.F.: Universidad Nacional Autónoma de México.

Mel'čuk, Igor A. 1993. The inflectional category of voice: Towards a more rigorous definition. In Bernard Comrie and María Polinsky (eds.), Causatives and transitives (pp. 1-46). Amsterdam: John Benjamins Publishing Co.

Merlan, Francesca. 1985. Split intransitivity: Functional oppositions in intransitive inflection. In Johanna Nichols and Anthony C. Woodbury (eds.), Grammar inside and outside the clause (pp. 324-362). Cambridge: CUP.

Miqui. 1956. México, D.F.: Instituto Lingüístico de Verano.
Mithun, Marianne. 1982. The synchronic and diachronic behavior of plops, squeaks, croaks, sighs, and moans. International Journal of American Linguistics, 48 (1), 49-58.

Mithun, Marianne. 1984. The evolution of noun incorporation. Language 60 (4), 847-894.

Mithun, Marianne. 1991. Active/agentive case marking and its motivations. Language, 67 (3), 510-546.

Mithun, Marianne. 1992. 'Is basic word order universal?’ In Doris L. Payne, (ed.), Pragmatics of word order flexibility (pp. 15-61). Amsterdam: John Benjamins Publishing Co.

Mithun, Marianne. 1995. On the relativity of irreality. In Joan Bybee and Suzanne Fleischman (eds.), Modality and grammar in discourse. Typological studies in language 32 (pp. 367-388). Amsterdam: John Benjamins Publishing Co.

Mithun, Marianne. 1997. Lexical affixes and morphological typology. In Joan Bybee, John Haiman, and Sandra A. Thompson, (eds.), Essays on language function and language type (pp. 357-371). Amsterdam: John Benjamins Publishing Co.

Molina, Alonso de. 1571. Vocabvlario en lengva castellana y mexicana; Vocabvlario en lengva mexicana y castellana (augmented and corrected version of the first edition of 1555). México: Casa de Antonio de Spinosa.

Newman, Stanley S. 1946. The Yawelmani dialect of Yokuts. In Harry Hoijer (ed.), Linguistic structures of native America. Viking fund publications in anthropology number 6 (pp. 222-248). New York: Wenner-Gren.

Nichols, Johanna. 1971. Diminutive consonant symbolism in western North America. Language, 47 (4), 826-848.

Nichols, Johanna. 1986. Head-marking and dependent-marking grammar. Language, 62 (1), 56-119.

Nichols, Johanna. 1988. On alienable and inalienable possession. In William Shipley (ed.), In honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics (pp. 557-609). Berlin: Mouton de Gruyter.

Nichols, Johanna, and D. A. Peterson. 1996. The Amerind personal pronouns. Language, 72 (2), 336-371.

Nida, Eugene A. 1946. Morphology: The descriptive analysis of words. Ann Arbor: University of Michigan Press.

Nuckolls, Janis B. 1999. The case for sound symbolism. Annual Review of Anthropology, 28, 225-252.

Olmos, Andrés de. 1547. Arte para aprender la lengva mexicana. Ms. First published version appeared in 1875 as Grammaire de la langue nahuatl ou
mexicaine, composée, en 1547, par le franciscain André de Olmos, et publiée avec notes, éclaircissements, etc. par Rémi Siméon. Paris: Imprimerie Nationale.

Palacios Jiménez, Elsa (ed.). 1993. Monografía del estado de Hidalgo, primera edición, tomo I. México, D.F.: Instituto Hidalguense de la Cultura.

Palmer, F. R. 2001. Mood and Modality (2 \({ }^{\text {nd }}\) ed.). Cambridge: Cambridge University Press.

Payne, Doris L., and Immanuel Barshi. 1999. External possession: What, where, how, and why. In Doris L. Payne and Immanuel Barshi (eds.), External possession (pp. 3-29). Amsterdam: John Benjamins Publishing Co.

Payne, Thomas E. 1997. Describing morphosyntax: A guide for field linguists. Cambridge: Cambridge University Press.

Pitalu' scau (Pedro conejo). 1957. México, D.F.: Instituto Lingüístico de Verano.
Reid, Aileen A. 1991 Gramática totonaca de Xicotepec de Juárez, Puebla. México D.F.: Instituto Lingüístico de Verano.

Reid, Aileen A., and Ruth G. Bishop. 1974. Diccionario totonaco de Xicotepec de Juárez. México D.F.: Instituto Lingüístico de Verano.

Ríos López, Gulmaro, Liesa Allen, and Juanita Watters. 2004. An ch'e'lhi yu kikxixa (El tordo que tenía sed, first edition). México, D.F.: Instituto Lingǘstico de Verano.

Romero, Eugenio. 1st third of 17th century. Arte de la lengua totonaca. Published as Norman A. McQuown, introduction, transliteration corrected and normalized, and indices of lexical and grammatical content, 1990, Arte de la lengua totonaca by unknown author, facsimile of the original manuscript and with an opinion on a possible author by Miguel LeónPortillo. Bibliotheca classica. Centro de Lingüística Hispánica, Instituto de Investigaciones Filológicas, Universidad Nacional Autónoma de México, México, D. F.

Samarin, William J. 1967. Field linguistics: A guide to linguistic field work. New York: Holt Rinehart and Winston.

Santiago Barragán, Juan, and Dorotea Herzog S. 1985. Ixcuento ju ixlanini’ ixt'aca tacos (El cuento del que aprendió a vender tacos). México, D.F.: Instituto Lingüístico de Verano.

Santiago Barragán, Juan, and Dorotea Herzog S. 1986. Mak'aniya xa'atxucunti Huehuetla, Hgo. (Como vivían antiguamente en Huehuetla, Hgo.). México, D.F.: Instituto Lingüístico de Verano.

Santiago Barragán, Juan, Cristina García de Santiago, and Dorotea Herzog S. 1983. Ixcuento'an ju purru chai ju p'axni (El cuento del burro y el cerdo). México, D.F.: Instituto Lingüístico de Verano..

Santiago Barragán, Juan, Cristina García de Santiago, and Dorotea Herzog S. 1984. Tas ju laich k'ox catsucucalh ju ak'atam chaka'. México, D.F.: Instituto Lingüístico de Verano.

Sapir, Edward. 1911. Diminutive and augmentative consonant symbolism in Wishram. In Franz Boas (ed.), Handbook of American Indian languages: Bureau of American Ethnography, Vol. Bull. 40, Part 1 (pp. 638-646). Washington, D.C.: Smithsonian.

Saussure, Ferdinand de. 1966. Course in General Linguistics. [Wade Baskin, Trans.]. New York: McGraw-Hill.

Schultze-Berndt, E. 2001. Ideophone-like characteristics of uninflected predicates in Jaminjung (Australia). En F. K. Erhard Voeltz y Christa Kilian-Hatz (eds.). Ideophones. Typological studies in language 44 (pp. 355-373). Amsterdam: John Benjamins Publishing Co.

Selkirk, Elisabeth. 1984. On the major class features and syllable theory. In Mark Aronoff and Richard Oehrle with Frances Kelley and Bonnie Wilker Stephens (eds.), Language sound structure: Studies in phonology. Presented to Morris Halle by his teacher and students (pp. 107-136). Cambridge, Mass.: MIT Press.

Sherzer, Joel. 1987. A discourse-centered approach to language and culture. American Anthropologist, 89, 295-309.

Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R. M. W. Dixon (ed.), Grammatical categories in Australian languages (pp. 112171). Canberra: Australian Institute for Aboriginal Studies.

Smith, Carlota S. 1997 [1991]. The parameter of aspect ( \(2^{\text {nd }}\) ed.). Dordrecht: Kluwer Academic Publishers.

Smith, Carlota S. 2004. The domain of tense. In Jacqueline Guéron and Jacqueline Lacarme (eds.), The syntax of time. Cambridge, Mass.: MIT Press.

Smith, Carlota S. 2005. Aspectual entities and tense in discourse. In Paula Kempchinsky and Roumyana Slabakova (eds.), Aspectual inquiries. Studies in natural language and linguistic theory, Vol. 62. Dorcrecht: Springer.

Smith Stark, Thomas C. 2005. Phonological description in New Spain. In Otto Zwartjes and Maria Cristina Salles Altman (eds.), Missionary linguistics II = Lingüística misionera II: Orthography and phonology. Selected papers from the Second International Conference on Missionary Linguistics, Sao Paulo, 10-13 March 2004 (pp. 3-64). Amsterdam/Philadelphia: John Benjamins Publishing Co.

Smythe, Susan. 2000. Vocalic and uvular phonemes in Huehuetla Tepehua: The acoustic evidence. Ms, University of Texas at Austin.

Smythe, Susan. 2002. 'The loss of uvular stops in Huehuetla Tepehua.' Presentation at the Annual Meeting of the Society for the Study of Indigenous Languages of the Americas, San Francisco, CA.

Smythe, Susan. 2003. Reconstructing lost phonemes in Huehuetla Tepehua using "affectionate speech". In Inger Mey, Ginger Pizer, Hsi-Yao. Su, and Susan Szmania, (eds.), Texas Linguistic Forum 45: SALSA 10 (pp. 167-176). Austin: University of Texas Linguistics Dept.

Smythe Kung, Susan. 2004. External Possession in Huehuetla Tepehua. In Lea Harper and Carmen Jany (eds.), Proceedings from the Seventh Workshop on American Indigenous Languages: Santa Barbara Papers in Linguistics, vol. 15 (pp. 25-39). Santa Barbara: Department of Linguistics, University of California, Santa Barbara.

Smythe Kung, Susan. 2005a. Entre el simbolismo sonoro y las palabras afectivas: El lenguaje expresivo en el tepehua de Huehuetla. Paper presented at the VIII Congreso Nacional de Lingǘstica Asociación Mexicana de Lingüística Aplicada y la Universidad de las Américas - Puebla, Cholula, Puebla, México, May 2005.

Smythe Kung, Susan. 2005b. Préstamos del castellano en el tepehua de Huehuetla, Hidalgo. Paper presented at the Loanwords Workshop, Project for the Documentation of the Languages of MesoAmerica, Catemaco, Veracruz, July 22, 2005.

Smythe Kung, Susan. 2005c. Sound symbolism and expressive langauge in Huehuetla Tepehua. Paper presented at the Annual Meeting of the Society for the Study of the Indigenous Languages of the Americas, Oakland, Ca., January 2005.

Smythe Kung, Susan. 2006a. Clasificadores numerales en lhiimaqalhqama' (el tepehua de Huehuetla). Memorias del Congreso de Idiomas Indígenas de Latinoamérica - II, University of Texas at Austin, October 2005. Available from http://www.ailla.utexas.org/site/cilla2_toc.html.

Smythe Kung, Susan. 2006b. La intransitividad mixta en el Tepehua de Huehuetla (familia Totonacana). Paper presented at the IX Encuentro Internacional de Lingüística en el Noroeste, Universidad de Sonora, November 15-17 2006.

Smythe Kung, Susan. 2006c. Simbolismo sonoro y lenguaje expresivo en el tepehua de Huehuetla. In María del Carmen Morúa (ed.), Memorias del VIII Encuentro Internacional de Lingüística en el Noroeste (pp. 331-354). Hermosillo, Sonora, México: Editorial UniSon.

Smythe Kung, Susan. 2007. Numeral classifiers in Lhiimaqalhqama'. In Douglas S. Bigham, Frederick Hoyt, Nikki Seifert, Alexandra Teodorescu, Jessica White (volume eds.), and Stephen Wechsler (series ed.), Topics in the Morphosyntax of Underrepresented Languages: Papers from the \(9^{\text {th }}\) Texas Linguistics Society Conference, Austin, Texas, November 4-6, 2005. Stanford, Ca.: CSLI Publications. Available from http://cslipublications.stanford.edu/TLS/.

Tellez Guzmán, Juan, Cecilia Cruz Vigueras, Gulmaro Ríos López, Mario Rodríguez San Juan, and Juanita Watters. 2004. Pumatam lapanak yu junkan Sini' (Un hombre llamado Sini’). México, D.F.: Instituto Lingǘstico de Verano.

Tellez Guzmán, Juan, Gulmaro Ríos López, Cecilia Cruz Vigueras, Cathy Marlett, and Juanita Watters. 2004. Yu sawalh s'alalh jas'at'a borregoj (El borreguito muy inteligente). México, D.F.: Instituto Lingüístico de Verano.

Tellez Guzmán, Juan, Gulmaro Ríos López, Cecilia Cruz Vigueras, Mario Rodríguez San Juan, and Juanita Watters. 2004. An skaw yu alhawnikalh ix'a'alo'ot (El conejo al que le robaron sus cuernos). México, D.F.: Instituto Lingüístico de Verano.

Tellez Guzmán, Juan, Gulmaro Ríos López, Cecilia Cruz Vigueras, and Juanita Watters. 2004. An jakilhpatinij vakaj (Una vaca pobre). México, D.F.: Instituto Lingüístico de Verano.

Tellez Guzmán, Juan, Gulmaro Ríos López, Mario Rodríguez San Juan, and Juanita Watters. 2004a. T'aku yu ixtapalay ch'ot'o' (La mujer que se convertía en cigüeña). México, D.F.: Instituto Lingüístico de Verano

Tellez Guzmán, Juan, Gulmaro Ríos López, Mario Rodríguez San Juan, and Juanita Watters. 2004b. Xakwentoj la'atam ja'o'xcho'onuj skaw (Un cuento de un conejo engañador). México, D.F.: Instituto Lingüístico de Verano.

Varela, Vianey. 2006. Entre espaldas, cabezas y panzas: Adquisición de construcciones locativas básicas en totonaco del Río Necaxa. Paper presented at the IX Encuentro Internacional de Lingüística en el Noroeste, Universidad de Sonora, November 15-17, 2006.

Voeltz, Friedrich Karl Erhard and Christa Kilian-Hatz. 2001. Introduction. En F. K. Erhard Voeltz y Christa Kilian-Hatz (eds.), Ideophones (pp. 1-8). Amsterdam: John Benjamins Publishing Co.
von Fintel, Kai, and Sabine Iatridou. 2005. Anatomy of a modal. Ms, Massachusetts Institute of Technology.
von Fintel, Kai, and Sabine Iatridou. To appear. Anatomy of a modal construction. Linguistic Inquiry.

Watahomigie, Lucille J., Jorigine Bender, Philbert Watahomigie, Sr., and Akira Y. Yamamoto with Elnor Mapatis, Malinda Powskey, and Josie Steele. 2001. Hualapai reference grammar (Revised and expanded edition). Osaka, Japan: Endangered Languages of the Pacific Rim.

Watters, James K. 1980. Aspects of Tlachichilco Tepehua (Totonacan) phonology. SIL Mexico Workpapers 4, 85-129.

Watters, James K. 1984. Notas sobre el aspecto en Tepehua. SIL Mexico Workpapers 5, 130-145.

Watters, James K. 1987. Underspecification, multiple tiers, and Tepehua phonology. In Anna Bosch, Barbara Need, and Eric Schiller (eds.), CLS 23: Papers from the 23rd Annual Regional Meeting of the Chicago Linguistic Society. Part 2: Parasession on autosegmental and metrical phonology (pp. 388-402). Chicago: Chicago Linguistic Society.

Watters, James K. 1988. Topics in Tepehua grammar. Doctoral dissertation, University of California, Berkeley.

Watters, James K. 1994. The form and function of second person verb morphology in Tepehua. In Carolyn J. MacKay and Verónica Vázquez (eds.), Investigaciones lingüísticas en Mesoamérica (pp. 211-226). México, D.F.: Universidad Nacional Autónoma de México.

Watters, James K. 1996a. Frames and the semantics of applicatives in Tepehua. In Eugene H. Casad (ed.), Cognitive linguistics in the redwoods: The expansion of a new paradigm in linguistics (pp. 971-996). New York: Mouton.

Watters, James K. 1996b. The interpretation of deverbal nouns in Tepehua. In Masayoshi Shibatani and Sandra A. Thompson (eds.), Grammatical constructions: Their forms and meaning (pp. 321-339). Oxford: Clarendon Press.

Wilkins, David. 1992. Linguistics research under aboriginal control: A personal account of fieldwork in central Australia. Australian Journal of Linguistics, 12, 171-200.

Woodbury, Anthony C. 1993. A principled defense of the proposition, "When a language dies, a culture dies". Texas Linguistic Forum 33: Proceedings of the First Annual Symposium About Language and Society Austin (pp. 101129). Austin: University of Texas Linguistics Dept.

Woodbury, Anthony C. 1997. Seminar notes from the Native Languages of North America. The University of Texas at Austin.

Woodbury, Anthony C. 1998. Documenting rhetorical, aesthetic, and expressive loss in language shift. In Lenore Grenoble and Lindsay J. Whaley (eds.), Endangered languages: Current issues and future prospects. Cambridge: Cambridge University Press.

Zambrano Bonilla, Joseph. 1752. Arte de la lengua totonaca. Published with D. Francisco Domínguez.

Zavala, Roberto. 1999. External possessor in Oluta Popoluca (Mixean): Applicatives and incorporation of relational terms. In Doris L. Payne and Immanuel Barshi (eds.), External possession (pp. 339-372). Amsterdam: John Benjamins Publishing Co.

Zec, Draga. 1995. Sonority constraints on syllable structure. Phonology, 12 (1), 85-129.

Zepeda, Ofelia, and Jane H. Hill. 1991. The condition of Native American languages in the United States. In Robert H. Robins and Eugenius M. Uhlenbeck (eds.), Endangered languages, (pp. 135-156). New York: Berg.

Zwicky, Arnold M., and Geoffrey K. Pullum. 1983. Cliticization vs. inflection: English n't. Language, 59 (3), 502-513.

\section*{Vita}

Susan Smythe Kung was born and raised in western North Carolina. She attended the University of North Carolina at Greensboro, where she graduated Magna Cum Laude with a Bachelor of Arts degree in Spanish and a minor in German. Thereafter, she entered the graduate school at the University of Texas at Austin, where she received a Master of Arts degree in Linguistics before beginning work on her Ph.D. She has worked as a Teaching Assistant and as an Assistant Instructor (Instructor of Record) in both the Linguistics Department and the Spanish and Portuguese Department at the University of Texas at Austin.

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This dissertation was typed by Susan Smythe Kung.```


[^0]:    ${ }^{1}$ Two versions of the Totonacan family tree are shown in Figures 1 and 2 in section 1.3.

[^1]:    ${ }^{2}$ See also the INEGI Archivo Histórico de Localidades: Huehuetla, Hidalgo. Downloaded from: http://mapserver.inegi.gob.mx/dsist/ahl2003/general2.cfm?clavegeo=140024.

[^2]:    ${ }^{3}$ Please see Chapter 2, section 2.1.3 for an explanation of the practical orthography.

[^3]:    ${ }^{4}$ Unfortunately, I was not able to database or interlinearize the collected data while I was in Huehuetla because of frequent power-outages and a faulty computer that overheated in the hot, humid climate.

[^4]:    5 Tree compiled based on INALI 2006

[^5]:    ${ }^{6}$ Tree compiled based on MacKay 1999; Beck 2003; and McFarland 2005.

[^6]:    ${ }^{7}$ See Chapter 6, section 6.3.1 for more information on HT ideophones.

[^7]:    ${ }^{8}$ See section 2.3 for more information on this merger.

[^8]:    ${ }^{9}$ Of course, $<$ ch $>$ still represents $/ \mathrm{t} \mathrm{f} /$ in modern Spanish orthography, while, $<\mathrm{x}>$ is now used only for the consonant cluster $/ \mathrm{k} /+/ \mathrm{s} /$.

[^9]:    ${ }^{10}$ The pronunciation of $/ \mathrm{q} /$ varies greatly, dependent on the speaker's age (see section 2.3 on the merger of $/ q /$ and $/ R / /$. However, in the speech of the older speakers who still retain the phoneme $/ \mathrm{q} /$, its distribution mirrors that of its class (i.e., the plain stops $/ \mathrm{p} /$, $\mathrm{t} /$, and $/ \mathrm{k} /$ ).

[^10]:    ${ }^{11}$ The ideophones seen here in (9), (10), and (11) were the only ideophones that I found that contained these phonemes. It is possible that these particular ideophones were borrowed from Spanish; however, I cannot be sure.
    ${ }^{12}$ In native HT words, a syllable final liquid lateral is neutralized to a voiceless lateral fricative, as discussed in section 2.6.2.

[^11]:    13 The syllabification rules favor onset consonant clusters and disfavor coda consonant clusters at syllable boundaries. Please see section 2.2.4.

[^12]:    ${ }^{14}$ I suspect that this ideophone is borrowed from Spanish because its stress pattern mirrors that of Spanish and not that of the native HT ideophones. Please see sections 2.5.2 and 2.5.3 on stress. ${ }^{15}$ I have no examples of a [lhn] syllable initial consonant cluster, but I think that this is an accidental gap in the data.

[^13]:    ${ }^{16}$ Arana was not the only researcher to propose a three-vowel system for proto-Totonac. Watters (1988) writes, "Proto-Totonacan and even Proto-Tepehua clearly had only three vowel positions" (p. 497).

[^14]:    ${ }^{17}$ I have a very difficult time distinguishing the short and long vowels in isolated words, and I cannot distinguish vowel length at all in fast, connected speech. I spent many long hours in the phonetics lab measuring vowel length, and I found that a vowel that receives primary stress is long, regardless of its phonemic length.

[^15]:    18 The Spanish loanwords shown in (38) and (41) show varying levels of phonemic integration into the HT sound system. While some mid vowels have been raised, others have not. The history of Spanish loanwords and their integration into HT is a fascinating topic that is outside the scope of this description.

[^16]:    ${ }^{19}$ This ideophone is most likely borrowed from Spanish because its stress pattern mirrors that of Spanish, not HT. See sections 2.5.2 and 2.5.3.

[^17]:    ${ }^{20}$ I did this work as a conference course directed by Scott Myers. The final lab report appears in Smythe 2000.

[^18]:    ${ }^{21}$ This lexeme qaay 'hog plum' was pronounced with a uvular stop only in the speech of my eldest consultants ( $>76$ ) at the time of my fieldwork. Younger speakers pronounced it [?aii], making it homophonous with 7 aay 'hair'. See section 2.3 on the sound change in progress. ${ }^{22}$ Younger speakers pronounced this as [?ai], and older speakers pronounced it [qai].

[^19]:    ${ }^{23}$ The stress pattern in this pair of ideophones indicates that both ideophones are probably

[^20]:    ${ }^{27}$ Younger speakers pronounced this as [Pai], while older speakers pronounced it as [qai] at the time of my fieldwork.

[^21]:    28 The abbreviations in this table are the following: cons=consonant, son=sonorant, cont=continuant, strid=strident, nas=nasal, lat=lateral, lab=labial, cor=coronal, ant=anterior, dist=distributed, dor=dorsal, $\mathrm{vd}=$ voiced, sprd glot=spread glottis, and cnstr glot=constricted glottis.

[^22]:    ${ }^{29}$ The lexemes in this column come from my own field notes. The spellings are phonemic, using IPA. Multiple entries represent different pronunciations given to me by different speakers.
    ${ }^{30}$ The following abbreviations are used for the sources: (A)=Arana 1953, (H)=Herzog no date, $(\mathrm{K})=$ Kryder 1987. Arana does not mark stress. Herzog does not mark vowel length or stress. ${ }^{31}$ Because the transcriptions differ in each of these sources, I have used IPA, instead of the original transcription, to phonemically (not phonetically) represent each lexeme.

[^23]:    ${ }^{32} \mathrm{The} / \mathrm{k} /$ in this transcription is most likely the result of a sound symbolic phonemic alternation that occurs in certain discourse contexts, including "affectionate speech". Please see section 2.6.10 for more information.
    ${ }^{33}$ Pinole is toasted, sweetened ground corn that is eaten dry or mixed into a beverage.

[^24]:    ${ }^{34}$ In the speech of the "younger" speakers: ['\$a.6ait].
    ${ }^{35}$ In the speech of the "younger" speakers: [ [ $\$ a . p a . '$ 'ßa.tit].
    ${ }^{36}$ In the speech of the "younger" speakers: [s?ah].

[^25]:    ${ }^{37}$ The constraint *[+lat $][+$ lat $]$ discussed in the previous section prevents combinations of the lateral fricative followed by the liquid.

[^26]:    ${ }^{38}$ This is the only clear example of [ai] ~ [e:] that I found in my database, and I did not test this in the field.

[^27]:    ${ }^{39}$ Glottal stop differs from the glottalized consonants in that it is [+son] while they are [-son]. When a glottal stop occurs in word-final position, it attracts primary stress to the ultimate syllable, as do the other sonorant consonants. Non-sonorant consonants do not attract stress. Please see section 2.5.

[^28]:    ${ }^{40}$ From /kaw-tam/.

[^29]:    ${ }^{41}$ From /t $\int$ awla?/,

[^30]:    42 If a root is vowel initial, a glottal stop is inserted as the onset. See section 2.6.3.

[^31]:    ${ }^{43}$ Please see section 2.6.7.1 on identical consonant deletion at morphophonemic boundaries.

[^32]:    ${ }^{44}$ Of all of the uvular-initial verb stems in the database, almost none of them include first person subject examples. The ones that do where uttered by younger speakers who do not retain the uvular stop; I transcribed these examples with $/ \mathrm{k}$ '/, e.g. [k'onlitf] from /k-qo:nlitf/ 'I got fat'.

[^33]:    45 These were their ages at the time of elicitation.

[^34]:    ${ }^{46}$ Occasionally, the past tense marker $x$ - is omitted in the narrative past, much like it is in English, e.g. "So I say to him . . ." instead of "So I said to him . . .". This is a narrative style that is independent of syllabification.

[^35]:    ${ }^{47}$ Recall from section 2.4 that the sonorant consonants are moraic when they occur at the end of a syllable.
    ${ }^{48}$ Though the rhotics $/ \mathrm{r}, \mathrm{r} /$ are included in the group of sonorants, I do not have any evidence that they do or do not attract stress. They occur only in a few ideophones and in Spanish loan words, both of which have different stress patterns from the pattern discussed here. Please see sections 2.5.2 and 2.5.3. respectively.

[^36]:    ${ }^{49}$ S stands for 'sonorant' and O stands for 'obstruent', following Zec (1995).
    50 Please see section 2.6.9 for more information on /h/-deletion.

[^37]:    ${ }^{51}$ A double asterisk $\left({ }^{* *}\right)$ indicates an ungrammatical or unattested form; a single asterisk (*) indicates a reconstruction.

[^38]:    52 Please see section 2.7.6.1 on perfective lateral neutralization.

[^39]:    ${ }^{53}$ Please see Chapter 6, section 6.3.1 for information on ideophonic adverbs.

[^40]:    54 The goat is not native to the Americans; it was introduced after the Spanish Conquest.

[^41]:    ${ }^{55}$ In the examples in (105) and (106), the first line is written in practical orthography, and the square brackets indicate constituency, not phonetic representation. The second and third lines are phonetic and phonemic representations, respectively.

[^42]:    ${ }^{56}$ See footnote 55.

[^43]:    57 The unspecified vowel of the suffix harmonizes with the last vowel of the noun root. Please see Chapter 4, section 4.1.1.2.
    ${ }^{58}$ See footnote 55.

[^44]:    ${ }^{59}$ See the onset constraint in example (51) in section 2.4 on the syllable.

[^45]:    ${ }^{60}$ Please see sections 2.4 and 2.5 for discussion of the moraicity of sonorant consonants.

[^46]:    ${ }^{61}$ Stress here is not a distinctive feature. Here [-stress] is simply an abbreviation to indicate that this vowel must not bear stress.

[^47]:    ${ }^{62}$ A double asterisk ** indicates an ungrammatical form (whereas a single asterisk indicates a reconstructed form).

[^48]:    ${ }^{63}$ Sound symbolic phonemic alternations have also been called consonant ablaut (Langdon 1971; Sapir 1911), consonant symbolism (Haas 1970), and consonant- and vowel-shifts (Nichols 1971).

[^49]:    ${ }^{64}$ The word paqachu 'wing' is pronounced as [paqatfu] by the older speakers who still retain a uvular stop and as [paPatfu] by the younger speakers who do not.

[^50]:    ${ }^{65}$ A single asterisk indicates a reconstructed form.

[^51]:    ${ }^{66}$ The word $t z^{\prime}$ oqon is pronounced as [ts'o'qon] by the older speakers and as [ts'o'?on] by the younger speakers.

[^52]:    ${ }^{67}$ The abbreviation XXX indicates an unknown root. Please see the list of abbreviations.

[^53]:    ${ }^{68}$ Please see section 2.6 .9 of this chapter.

[^54]:    ${ }^{69}$ The penultimate stress is a salient features of the perfective aspect; see Chapter 3, section 3.1.2.2

[^55]:    70 Please see Chapter 2, Section 2.4 on HT syllable structure.

[^56]:    ${ }^{71} \mathrm{Jim}$ Watters (p.c.) brought it to my attention that this form is unique to HT and that the cognate is $p$ ' $i n$ in other varieties of Totonac and Tepehua.

[^57]:    72 The same suffix is used to indicate the reflexive; however, since the reflexive is a separate operation, its use is covered in Section 3.2.1.1.

[^58]:    ${ }^{73}$ The plural indefinite object (PL.INO) prefix $7 a$ - is discussed in more detail in Section 3.1.1.5.

[^59]:    74 Watters (1988: 203) calls this construction 'passive' in Tlachichilco Tepehua.

[^60]:    ${ }^{75}$ See also Section 3.1.1.7 on speech act participant marking.

[^61]:    ${ }^{76}$ There is yet another (fourth) gloss for example (224): the purely reciprocal interpretation 'We love each other'.

[^62]:    ${ }^{77}$ For information on ideophones, please see Chapter 6, Section 6.3.1.

[^63]:    ${ }^{78}$ The unspecified vowel of the suffix harmonizes with the final vowel of the stem; the morphophonemics are discussed below.

[^64]:    ${ }^{79}$ Remember that a singular third person object is never co-indexed on the verb.

[^65]:    ${ }^{80}$ See section 3.2.1.2 for information on the reciprocal use of laa-.

[^66]:    ${ }^{81} \mathrm{~V}$ stands for 'verb'.
    82 V stands for 'verb'.

[^67]:    83 Please see Section 3.1.2.3 for more discussion of the irrealis mood.

[^68]:    ${ }^{84}$ Note that there is a phonological rule that deletes a word- or suffix-final glottal stop when it is followed by a suffix or enclitic; after the glottal stop is deleted, the preceding vowel undergoes compensatory lengthening (see Chapter 2, section 2.6.7.2 and 2.6.8).

[^69]:    ${ }^{85}$ According to Watters (1988), the irrealis prefix $k a$ - and the first person object prefix kin- have the same morphological order and may not co-occur (p. 265).

[^70]:    ${ }^{86}$ The suffix - $l i$ is cognate with the perfective aspect marker in most of the other Totonacan languages; see for example, Beck 2003; MacKay 1999; Watters 1988.
    ${ }^{87}$ Please see Chapter 2, section 2.7.6.2.

[^71]:    ${ }^{88}$ Please see Chapter 2, section 2.7.6.3.

[^72]:    ${ }^{89}$ Please see Chapter 2, section 2.5 for more information on stress in HT.

[^73]:    90 Please see Chapter 2, section 2.7.6.1.

[^74]:    92 There is one irrealis form that is not marked by either $k a$ - or $7 a$-; it will be dealt with below.

[^75]:    ${ }^{93}$ However, following Givón's (1994) explication of the irrealis, all of the above mentioned researchers-Bybee et al (1994), Chafe (1995), and Mithun (1995)—are mistaken in their association of 'realis' with 'real' and 'irrealis' with 'unreal'. He writes, "One unfortunate legacy of the logic-bound approach to modality is the definition of the contrast between realis and irrealis as a contrast between, respectively, 'real' and 'unreal events" (p. 268-9). For Givón, the difference between realis and irrealis is a cognitive difference in "subjective certainty" and a communicative difference in "socially-negotiated meaning" (p. 269).
    ${ }^{94}$ I should note that the grandfather of Totonacan linguistics, Norman McQuown, did not actually give this prefix a name in his grammar of Coatepec Totonac (1990: 156).

[^76]:    ${ }^{95}$ When the stem ends in a short vowel, the second person perfective prefix -t' $i$ does not occur (see the subsection on Second Person in Section 3.1.1.1 and the subsection on Perfective Aspect in Section 3.1.2.2).

[^77]:    ${ }^{96}$ This is also the split between first and second person nominative marking versus third person absolutive marking to which I refer in footnote Error! Bookmark not defined..

[^78]:    ${ }^{97}$ An inanimate comitative argument is co-indexed by the applicative lhii-; see the next section, Section 3.2.1.7.

[^79]:    ${ }^{98}$ In these examples, I have included the direct object [music] in the glosses for clarity.

[^80]:    ${ }^{99}$ See Section 3.2.1.2 for more information on the reciprocal prefix.
    ${ }^{100}$ According to Watters (1988), this combination of prefixes is not productive in Tlachichilco Tepehua, though there is a lexicalized form meaning 'enemy' in which these prefixes co-occur: t'a:-la:-xkay (COM-REC-hate) (p. 444).

[^81]:    101 Watters calls the Tlachichilco cognate prefix lhii- the 'directional' (1988: 157). McQuown (1990: 185), MacKay (1999: 273), and Beck (2004: 60) all call the Totonac cognate prefix lii- the 'instrumental'.
    102 An animate comitative argument is co-indexed on the verb by the comitative prefix $t$ 'aa-; see Section 3.2.1.6.

[^82]:    103 Please see Sections 3.2.3.4 and 3.2.3.5 for more information on the ambulative $-t$ 'ajun and 'begin' -tzuku, respectively.

[^83]:    104 Please see Chapter 4, Section 4.2.8 for information on BPPs affixed to nouns, and see Chapter 5, Section 5.1.3 for information on BPPs affixed to adjectives.

[^84]:    105 Please see section 3.3.2 on Posture and Location Verbs.

[^85]:    ${ }^{106}$ External possession constructions are those constructions in which (i) a possessor of a possessed nominal (the possessum) is a core argument of the clause, not simply a dependent of the possessum, and (ii) the possessor is not included in the argument frame of the lexical verb root. External Possession has also been referred to as possessor raising and possessor ascension (Payne and Barshi 1999).

[^86]:    ${ }^{107}$ I presume that the same would be true for a second person possessor, too, given the personmarking hierarchy in (247) in which SAP objects outrank third person objects with respect to double object marking on the verb. Also, see Chapter 6, Section 6.1 on Predicate Nominals and Section 6.3 on Predicate Adjectives, where a split in person-marking is discussed.

[^87]:    ${ }^{110}$ Note that my names for the suffixes -choqo and -pala are the opposite of those used for the cognate Tlachichilco Tepehua suffixes found in Watters 1988.

[^88]:    112 Interestingly, distal -chaa occurs more frequently in my data than proximal -chii does.
    113 Jim Watters has suggested to me that the distal and proximal suffixes follow the perfect aspect marker ( $-t a$ ), the imperfective aspect marker $\left(-y \sim-{ }^{\prime} a\right)$, and the future tense marker ( $-y a 7 \sim-a 7$ ). Though I would tend to agree with him, I do not have the necessary data to back this analysis up. The example in (390a) has the morpheme -palh, which is an allomorph of -pala REP that occurs only in the perfective aspect. However, this morpheme is not an aspect marker, and it is most likely the case that this example reflects the order of the distal suffix -chaa with respect to the repetitive marker -pala and not with respect to perfective aspect.

[^89]:    ${ }^{115}$ In the drawing that generated this clause, the spider is on the ceiling, not suspended from or on a web.

[^90]:    116 The location verb tajun is derived from ta-jun (INCH-be). Please see example (366) in the Inchoative section, 3.3.1.

[^91]:    117 According to Watters (1988), the perfect aspect allomorph - niita occurs only on this verb jun, and it comes from the Totonac perfect suffix -ni:ta (p. 57, ft 7). In my own notes, the -niita suffix appears on the verb jun only in the first and second person singular and third person singular and plural forms; it does not co-occur with first or second person plural.

[^92]:    118 The relationship between the copula jun and the focus particle waa as discussed further in Chapter 8, section 8.2.2. The examples here are the same as the examples there.
    ${ }^{119}$ For more information on the irrealis mood, please see Section 3.1.2.3.

[^93]:    120 See section 8.4.1.1 for more information about relative clauses

[^94]:    ${ }^{121}$ The adjective $k$ ' $u s i$ ' 'pretty' is unusual in that it is marked for plural by both the distributive prefix lak- and the nominal plural suffix $-n$. Most adjectives do not take the $-n$ suffix.

[^95]:    122 See Chapter 4, section 4.1.1.2 on plural suffixes on nouns.

[^96]:    123 With root verbs containing the phonemic string -aju-, the infinitival suffix harmonizes with the $/ \mathrm{a} /$, not the $/ \mathrm{u} /$ of the root. Another example is shown in (451).

[^97]:    124 See Section 3.2.3.4.

[^98]:    125 See chapter 3, section 3.1 for more information on verbal inflection.

[^99]:    ${ }^{126}$ See Chapter 7, section 7.3 for more information on numeral classifiers.
    127 See Chapter 5, section 5.4 for more information on quantifiers.

[^100]:    ${ }^{128}$ This verb is not marked for a first person object, and it seems to be a performance error. My consultant had a difficult time translating this clause.
    ${ }^{129}$ See section 4.1.2.4 of this chapter for more information on obligatory possession.
    ${ }^{130}$ I am not the first Totonacanist to be puzzled by the myriad of plural nominal affixes; to quote the grandfather of Totonacan linguistics, Norman A. McQuown, "Son numerosos los afijos de plural de los nombres, de varios tipos, con especializaciones de significado para cada tipo que aún no hemos ilucidado cabalmente" [The plural noun affixes are numerous, of various types, with specializations in meaning for each type that we still have not fully elucidated] (1990: 105).

[^101]:    ${ }^{131}$ See Chapter 3, sections 3.1.1.2 and 3.1.1.4.
    ${ }^{132}$ See Chapter 2, section 2.6.5.2 and 2.6.10 for information on the alternation between $/ \mathrm{k} /$ and /q/.

[^102]:    134 Maaxkawaninii is a derived noun: maa-xkawa-ni-nV7 (CAUS-hunt-DAT-AGNM).
    135 Papanti is also a derived noun: papa-nti (man-NOM2)
    ${ }^{136}$ See Chapter 2, section 2.5.

[^103]:    ${ }^{138}$ See Chapter 2, section 2.6.7.2 on glottal-stop deletion.

[^104]:    ${ }^{139}$ Please see Chapter 2, section 2.6 .3 on stem-initial glottal stop insertion, which must happen before inflection; if it does not happen before inflection, it does not happen at all.

[^105]:    ${ }^{140}$ See section 4.1.2.4 on obligatory possession.
    ${ }^{141}$ Again, see section 4.1.2.4.

[^106]:    ${ }^{142}$ See Nichols 1988 (pp. 568-576) for a discussion of the semantics of what she calls the 'alienability opposition'; and see Nichols 1988 (p. 561) and Heine 1997 (pp. 10-16) for a discussion of the various terminology used in the linguistic literature to denote this phenomenon. ${ }^{143}$ See Chapter 3, section 3.1.1.

[^107]:    144 This suffix is homophonous with the infinitival suffix. See Chapter 3, section 3.4.1 on infinitives.

[^108]:    ${ }^{146}$ See Chapter 5 section 5.1.1.1 for information on the use of the deverbalizer on adjectives.

[^109]:    ${ }^{148}$ See Chapter 3, section 3.2.1.8.
    ${ }^{149}$ See Chapter 3, section 3.2.1.5.
    ${ }^{150}$ Jim Watters points out to me that MacKay is not the only Totonacanist to call this the 'locative prefix and that this name goes all the way back to Zambrono (1752).

[^110]:    ${ }^{153}$ Not coincidentally, the HT word that means 'tomorrow' is lhi7. When a word or stem ends in a glottal stop, the glottal stop is deleted and the vowel is lengthened before a suffix or clitic. See Chapter 2, section 2.6.7.2

[^111]:    154 See Chapter 3, section 3.2.1.8.
    155 All BPPs that contain a/k/ or /q/ exhibit a size-symbolic phonemic alternation between these two phonemes, dependent on the size of the noun (see Chapter 2, section 2.6.10).

[^112]:    156 Only one modifier (either quantitative or qualitative) may occur in a noun phrase; see Chapter 5, section 5.1.
    ${ }^{157}$ See Chapter 3, section 3.3.3.1.
    158 See Chapter 3, section 3.2.1.8.

[^113]:    159 Please see Chapter 3, section 3.3.2 for more information on postional and locational verbs.
    ${ }^{160}$ For more information on the preposition laka- $\sim l a$-, see Chapter 6, section 6.6.1.

[^114]:    ${ }^{161}$ See Chapter 3, section 3.2.1.8 for more information on body part prefixes and verbs.

[^115]:    ${ }^{162}$ See section 4.1.1 for information on plural nominal affixes.

[^116]:    ${ }^{163}$ Nouns, verbs, and adjectives may all be suffixed with the body part prefixes and the plural prefix lak-. Verbs and adjectives may be suffixed with the deverbalizer -n.. Nouns and adjective may be prefixed with the impersonal possessor prefix xaa-.

[^117]:    164 For more information on demonstrative pronouns and numbers, please see Chapter 4, Section 4.5.4 and Chapter 7, respectively.

[^118]:    165 Please see Chapter 2, Section 2.4.11.
    166 The forms weeqeli and wiik'ili alternate with weeqelh and wiik'ilh; the former occur phraseinternally and the latter occur phrase-finally (see Chapter 2, section 2.6.2). The forms weeqeli ~ weeqelh are considered to be quite rude (and, thus, provoke laugher), while the forms wiik'ili ~ wiik'ilh are not rude and do not provoke laughter.

[^119]:    167 A copula is not needed in the present tense. See Chapter 3, section 3.3.3 on copular and nonverbal predicate constructions.

[^120]:    168 Please see Chapter 3, Section 3.2.1.8 and Chapter 4, Section 4.2.8 for discussion of body part prefixes used on verbs and nouns, respectively.
    ${ }^{169}$ The bound root $t^{\prime} i k s t^{\prime} i$ has serveral alternations, including $t^{\prime} i k s, t^{\prime} i k$, and $t^{\prime} i k t^{\prime} i$.

[^121]:    170 Note that the usual morphophonemic rules apply at this morpheme boundary; see Chapter 2, Section 2.4.

[^122]:    ${ }^{171}$ Unfortunately, I overlooked this pattern during my fieldwork.
    172 Beck (2000) quotes an unpublished, undated manuscript of Levy to which I do not have access: "of the Ns, the Adj one" (p. 229)

[^123]:    173 I have found no examples in which a quantifier modifies a noun phrase which contains a qualitative or quantitative adjective, nor did I test this possibility during my fieldwork.

[^124]:    ${ }^{174}$ The English free translations for the (a) and (b) examples in (577) are in the past tense even though the HT clauses are unmarked for tense because the past tense context was already established in previous clauses.
    ${ }^{175}$ See Chapter 3, Section 3.3.3 for more information on predicate adjectives and copulas.

[^125]:    ${ }^{176}$ I have modeled the clause in $\left(578^{\prime}\right)$ after the one in (576c); I want it to be clear that I did not test this clause with a native speaker.

[^126]:    177 Please see Chapter 8, Section 8.6.1.3 for information on the internal structure of adverbial clauses.

[^127]:    178 Please see Chapter 8, Section XXX for more information on relative clauses.

[^128]:    179 Please see Chapter 2, section 2.5.

[^129]:    180 The reportative particle maa is also used to coordinate two clauses; please see the section 8.6.2 on "Coordination" in Chapter 8 for more information on this use of maa.

