

PREDICATION IN RARÓMURI (URIQUE TARAHUMARA)

by

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DISSERTATION ABSTRACT

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Title: Predication in Rarómuri (Urique Tarahumara)

The Rarómuri, or Urique Tarahumara (UT), language belongs to the Taracahitian sub-branch of the Uto-Aztecan family. There are five major linguistics variants called Tarahumara, all spoken in Chihuahua state in northern Mexico. This dissertation is an introduction to how both verbal and nonverbal predicates are formed in the language of the Rarómuri people, as spoken in Urique, Chihuahua.

The central contribution of this dissertation is found in Chapter IV on nonverbal predication and Chapter V on verbal predication, and the work opens with three chapters: Chapter I is the introduction, Chapter II introduces the orthography and some of the most common morphophonological processes, and Chapter III sketches the morphology and syntax of the Noun Phrase. Chapter VI concludes the dissertation with a discussion of directions for future research.

This dissertation is based on a combination of recorded texts and elicited material. The texts provided the natural language where the constructions in question occur in actual use, providing the motivation and signaling directions for elicitation, which then allowed the understanding of the intricate morphological patterns. Both types of data material are invaluable for the researcher, and I include examples of both when possible.

One point of typological interest in UT is the verbal indexation system for subjects in the past tense, which includes suffixes for 3SG/PL and 1PL, zero marking (fused with the tense suffix) for 2PL, and verbal enclitics for 1SG and 2SG. The verbal enclitics also occur marking future tense verbs. The verbal enclitics for 1SG and 2SG can also mark object, and alone among core arguments, the 1SG free pronoun object must take a locative suffix. Looking at person marking and object case, it appears that UT has an incipient hierarchical system, with 1SG > 2SG > 1PL/2PL/3.

Another of the most salient features of UT is the morphophonology. It is common in UT for a morpheme to present several allomorphs, and some, like the Potential Future, can have up to 9 allomorphs. Some of this allomorphy is phonologically conditioned, other allomorphy is lexically conditioned, and other allomorphy is clearly suppletive. The interaction of these conditioning factors is possible.

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CHAPTER I

INTRODUCTION: GENERAL DESCRIPTION OF THE LANGUAGE

1.1. Tarahumara as a Uto-Aztecan language and its variants

The Tarahumara language is a member of the Uto-Aztecan family. The Uto-Aztecan family is one of the largest languages families in the Americas, with somewhere between three and eight major internal branches (Miller 1983: 117-121). According to Miller's (1983: 121) classification, Tarahumara belongs to the Taracahitan subgroup within the Sonoran Branch of Southern Uto-Aztecan. Figure 1.1 shows Miller's Sonoran subgroup, with its three subgroups Tepiman, Taracahitan and Corachol.¹ The four languages of the Tepiman subgroup are spoken either to the north (Upper and Lower Piman) or to the south (Northern and Southern Tepehuan) of Tarahumara, and the two languages of the Corachol subgroup are spoken ell to the south of Tarahumara. Regarding the other members of the Taracahitan subgroup, Guarijío and Yaqui are spoken due west of Tarahumara and Opata to the northwest.

¹ In Figure 1.1 I only include languages that are still spoken. Miller (1983:121) mentions one subgroup of the Sonoran group that is extinct, Tubar, and also another extinct language, Eudeve (a.k.a Heve, Dohema), that once made a subgroup with Opata.

Figure 1.1. Sonoran subgroup of the Uto-Aztecan family (adapted from Miller 1983)

Sonoran	Tepiman	Upper Piman Lower Piman Northern Tepehuan Southern Tepehuan
	Taracahitan	Tarahumara Guarijío Opata Yaqui
	Corachol	Cora Huichol

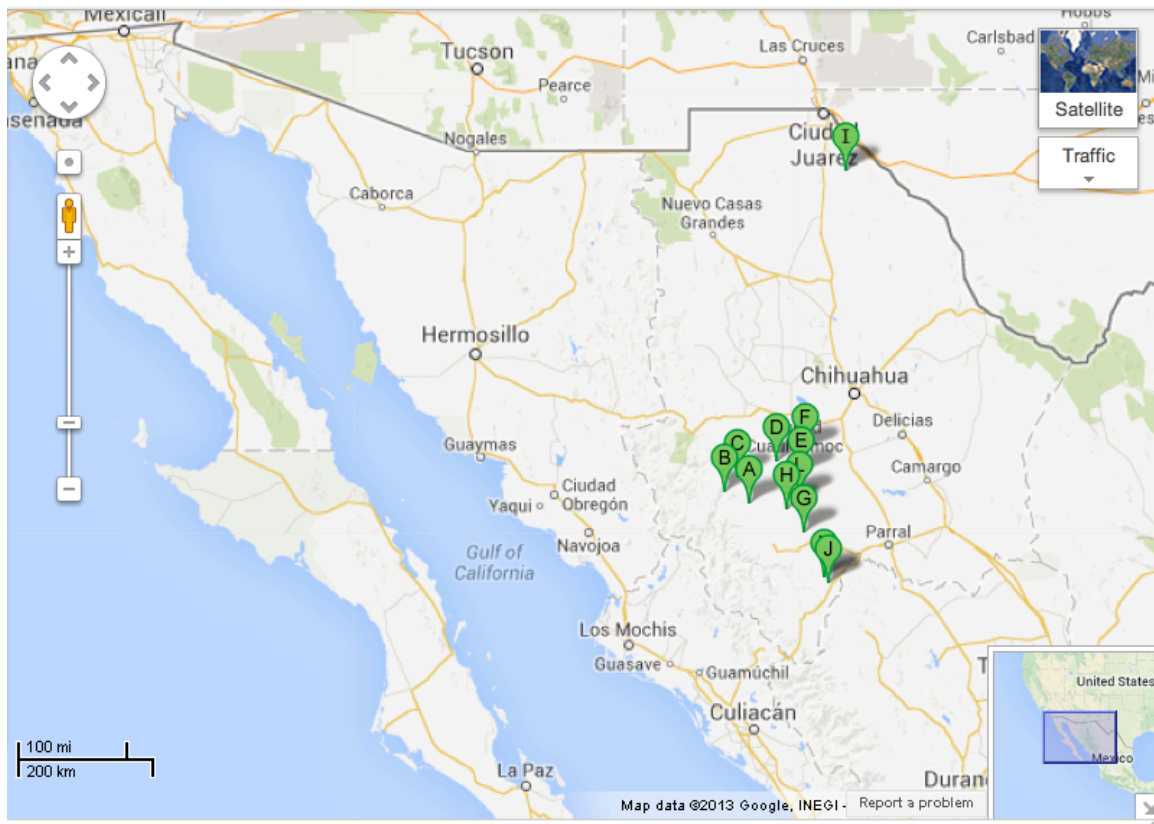
The name Tarahumara has been associated with from two to five major variants. The first division into two variants is a traditional geographical division, distinguishing lowland Tarahumara from the highland Tarahumara. Miller (1983: 121) divides the Tarahumara varieties into Eastern Tarahumara, Western Tarahumara and Southern Tarahumara. The Board of Education of the State of Chihuahua divides the varieties into five: West, North, Center, Mountain and South Tarahumara (Table 1.1); although the Board does not specifically place Urique in its list of locations, the towns named in the West variant are geographically the closest to Urique. The *Ethnologue* (Lewis *et al*, eds, 2013) also divides the Tarahumara into five variants, placing Urique Tarahumara into Western Tarahumara (Table 1.2).² Although both the *Ethnologue* and the Board of Education recognize a five-way classification of Tarahumara, they differ in the name of the variants and the towns that are included in each. Figure 1.2 shows a close-up of a map of Urique, Chihuahua.

² This web edition of the *Ethnologue* may be cited as: Lewis, M. Paul, Gary F. Simons, and Charles D. Fennig (eds.). 2013. *Ethnologue: Languages of the World, Seventeenth edition*. Dallas, Texas: SIL International. Online version: <http://www.ethnologue.com>.

Table 1.1. Tarahumara variants according to the Board of Education

Variant	Towns
West (<i>Oeste</i>)	Rocoroibo, Guazapares (B), Monterde (C) and Basagota
North (<i>Norte</i>)	Sisoguichi (D), Narárachi (E), Carichi (F), Ocórare, Pasigóchi and Norogachi (L)
Center (<i>Centro</i>)	Guachochi (G) and Aboréachi (H)
Highland (<i>Cumbre</i>)	Samachique (I)
South (<i>South</i>)	Turuachi (J), Chinatu (K)

Figure 1.2. Locations of Tarahumara variants (according to Board of Education)³

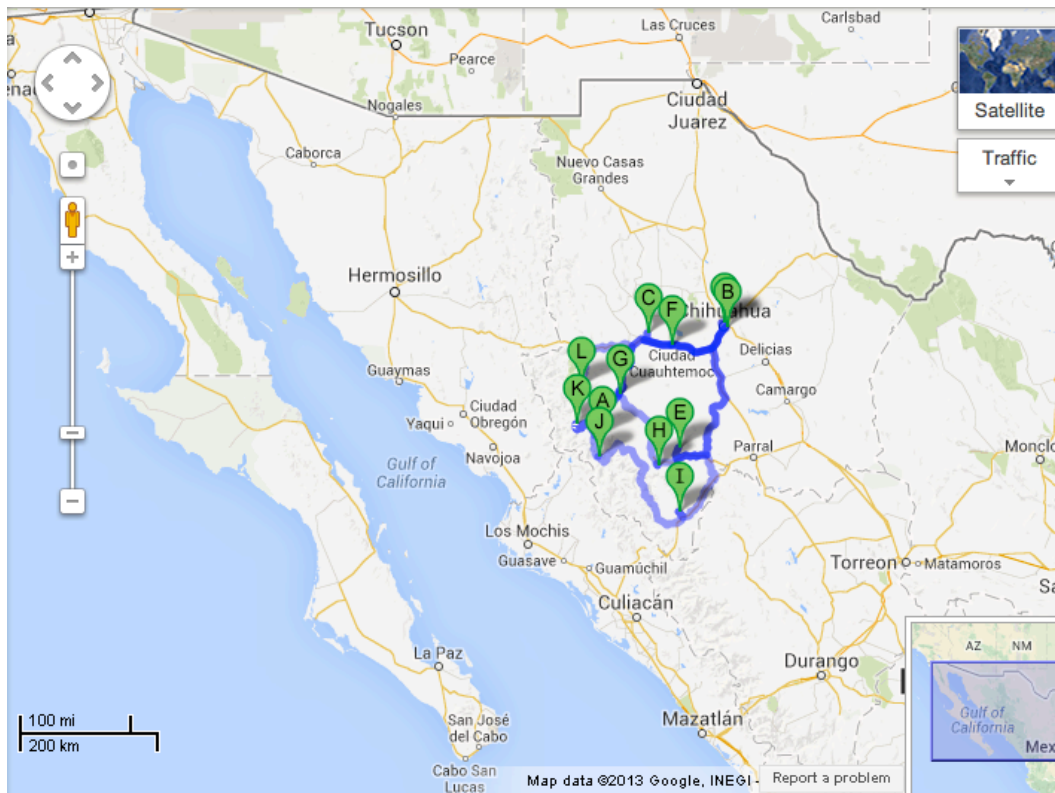


³ Map taken and adapted from <https://maps.google.com/>, November 30, 2013.

Table 1.2. Tarahumara variants according to *Ethnologue*⁴

Variant	ISO 639-3	population speakers	Towns
Northern Tarahumara	thh	1 ⁵	Santa Rosa Ariseachi (B), Agua Caliente Ariseachi (C), Bilaguichi, Tomochi (D), La Nopalera (E).
Central Tarahumara	tar	30,000	Cuauteemoc, Creel (F), Urique river, Sinforosa Canyon (H), Southeast Chinantu, North Balleza.
Southeastern Tarahumara	tcu	5,410	Chinatú (I)
Southwestern Tarahumara	twr	100	Tubare (J)
Western Tarahumara	tac	10,000	Guazapares (k), Urique (A), Uruachi (L)

Figure 1.3. Locations of Tarahumara variants (according to *Ethnologue*)



⁴ Map taken and adapted from <https://maps.google.com/>, November 30, 2013.

⁵ *Ethnologue* reports 1,500 speakers in 1993, but only 1 speaker in 1998.

According to the *Ethnologue*, all the variants of Tarahumara combined are spoken by about 45, 500 people; the 2010 Mexican Census reports just over 60,000 speakers above the age of 12.⁶ The majority of Tarahumara speakers live in the Sierra Tarahumara, which is located in the Sierra Madre Occidental mountain range in the State of Chihuahua in Mexico (see the maps in Figures 1.2 and 1.3). The variety of Tarahumara studied in this work is spoken in Urique, Chihuahua, which is why I call it Urique Tarahumara (UT). Urique belongs to the municipality of the same name, Urique, and is indicated by the letter A in both maps.⁷ Each town is represented in the map for a letter. In figure 1.2, Chinatu (K) is behind Turuachi (J). The towns that are not in Google Maps do not appear in the map.

Tarahumara speakers from Urique call themselves and their language *rarómuri* or *ralómuli* ‘people’; while in the rest of the Tarahumara territories, Tarahumara speakers call themselves *rarámuri* ‘people’. In the municipality of Urique, people from the Tarahumara community live in settlements scattered across a mountainous landscape, often with several kilometers from one neighbor's house to another. Contact among people from the same community takes place when they get together to do community work, such as planning or building a house, or to conduct religious ceremonies. Due to natural barriers, such as high mountains and deep canyons that separate one community from another, contact between people from different communities is limited, and in some cases does not occur.

⁶ Source: Instituto Nacional de Estadística y Geografía (National Institute of Statistics and Geography, Mexico): www.inegi.org.mx

⁷ The towns of Sisoguichi and Aboréachi appear in Google Maps as Sisoguichic and Aboréachic. It is common that the spelling of the name of the towns change from author to author.

Given the isolation of the different variants of Tarahumara, there are questions about the degree of differentiation between the different variants of Tarahumara, that is, whether they might be better considered dialects of a single language or distinct languages that belong to a single low-level sub-group. The label of choice in many works, such as those by Mexican institutions and by some linguists (e.g., Miller, 1983), is “variants”, presumably because everyone knows they are different, but nobody is sure whether they are mutually intelligible. Several scholars (Lionnet, 1972; Brambila, 1976; Burgess, 1984) have pointed out that the variant of Tarahumara spoken in Urique is the one with the most “notable differences” from the rest of the Tarahumara variants. Unfortunately, these authors do not describe the nature of these “notable differences”, nor do they indicate the extent to which these differences might interfere with mutual intelligibility.

I can add two anecdotes that support the idea that some of the variants of Tarahumara might be different languages, perhaps very closely related languages, but still different languages. Gabriela Caballero (p.c.) mentioned that in one of the periods while she was doing field work in Choguita, a group of people from Urique, native speakers of Ralómuli, were visiting Choguita and they could not communicate with the native speakers of Rarámuri from Choguita. By the end of the visit, all the people involved were using Spanish as a lingua franca. A personal experience is my difficulty using the dictionary and grammar by Brambila (1953) to find UT vocabulary and grammatical information. When I was comparing my data with Brambila’s grammar or dictionary, on many occasions I was unable to decide if a given UT form was “the same”, merely cognate, or probably not even related, because the form, the function, or both are so

different. Of course, these are both just anecdotes. To decide for sure, we need comparative studies and rigorous intelligibility testing between the different variants of Tarahumara, especially at the morphosyntactic level. For the purposes of this thesis, I will follow my intuition and treat UT as separate from, but closely related to, other Tarahumara variants.

1.2. History and methodology of the current project

The present study is based on discourse data and on elicited material from my fieldwork in the Urique Tarahumara language. The texts total approximately six hours of audio recordings, recorded from six native speakers. Part of those recordings were transcribed in *Transcriber*, then glossed and translated to Spanish and English in *Toolbox*. The translation to Spanish and subsequent elicitation was done with the help of primarily a single consultant, Juana Moreno Caraveo. The database consists of twelve texts (2422 intonational units),⁸ including personal histories, narratives, folk stories, recipes, and spontaneous conversations. Table 1.3 shows the name of the contributors, all from the Caraveo family.

Table 1.3. Contributors

Speakers
Juana Moreno Caraveo
Martina Moreno Caraveo
Felicitas Delgado
Raymundo Moreno Caraveo
Miguel Moreno Caraveo
Lucía Moreno Caraveo

⁸ I use the term INTONATIONAL UNIT following Chafe (1987:22) for “a sequence of words combined under a single, coherent intonation contour, usually preceded by a pause”.

An important part of the database for this work comes from elicitation sessions with my teacher, Juana Moreno Caraveo. The elicitation of paradigms was crucial to find verb classes, the paradigm of subject indexation in the verb for these verb classes, and the intricate allomorphy in UT morphemes. Most of this elicitation was done in Mexico in person, the rest using Skype. The Skype sessions happened once a week from July to mid-September 2012, then April to October 2013, for an approximate total of 8 months. Different types of elicitation were used. One type of elicitation was giving the language teacher a sentence in Spanish to translate into UT, seeking new lexical items or targeted semantic information. Another type of elicitation was giving the language teacher a construction in UT that contained the target morpheme or sequence of morphemes. The speaker would back-translate into Spanish, where possible, and make comments sometimes about the acceptability of each construction. When the construction was not accepted, the speaker usually gave an option, or some times several options, that would be acceptable to her.

The data presented in this work are presented in three or four lines: first line is in the language, Ralómuli. The second line contains the morpheme-by-morpheme gloss. The third line (which is not always present) has the free translation into Spanish, and the fourth line gives the free translation in English. When space allows, the Spanish and English translations sometimes come on the same line. Juana Moreno, my main language teacher, and I worked together to make the translation to Spanish, my teacher from the Ralómuli perspective and me from the Spanish perspective.

1.3. The present work in context

This section reviews the literature on linguistic works about Tarahumara with the purpose of contextualizing the present dissertation and its relevance to Tarahumara studies. Despite the work that many researchers have done with Tarahumara, there are still gaps in all the areas of the grammar. Especially morphology in Tarahumara has proved to be an intricate area, and still there is a lot of work to do and a lot of questions to answer.

In understanding the context for this dissertation, it is important to remember that the name “Tarahumara” does not necessarily indicate a single unit, so in this section, as much as possible I indicate the variant of Tarahumara that each author is documenting. The earliest works on the Tarahumara language do not specify the name of the town or the region where the authors collected the information for grammars and dictionaries. This piece of information would be important to know to have some idea how close those variants were spoken geographically to Urique Tarahumara. More detailed research with historical archives might be a possible source of information to know where the earlier authors worked and collected their data.

The earliest published work of which I am aware on the Tarahumara language is the *Compendio del arte de la lengua de los tarahumares y guasapares*, written by the Jesuit Thomas de Guadalaxara (1683). The original manuscript can only be found at the British Library, however, a copy of manuscript plus another unsigned manuscript found by at the *Archivo histórico de Zapopan*⁹ were both collected and made available in Rodríguez López (2010). Rodríguez López compares the two manuscripts and concludes that the Zapopan manuscript was also written by Thomas Guadalaxara, and probably is a

⁹ Historical Archive of Zapopan

previous draft of the manuscript held by the British Library. Both documents contain notes about the noun, pronouns, and the verb.

The work of the Jesuit Matthäus Steffel (1791) is a German-Tarahumara, Tarahumara-German wordlist. It contains an introduction (pages 297-300), the German-Tarahumara dictionary (pages 301-353), the Tarahumara-German dictionary (pages 353-368), an appendix with notes about the numbers (page 369), and four pages of phrases in Latin, German and Tarahumara (pages 371-374).

The priest Miguel Tellechea (1826) wrote the *Compendio gramatical para la inteligencia del idioma tarahumar: Oraciones, doctrina cristiana, pláticas, y otras cosas necesarias para la recta aplicación de los santos sacramentos en el mismo idioma.*¹⁰ This document contains notes about the noun, numerals, pronouns, interrogatives, prepositions and the verb as well as prayers, doctrines and talks in Spanish and in Tarahumara.

Thord-Gray (1955) published a Tarahumara-English, English-Tarahumara dictionary. This work contains notes on Tarahumara grammar (pages 28-51), a Tarahumara-English dictionary (pages 59-504), an English-Tarahumara dictionary (505-1144), and seven appendices: particles, place-names, kinship terms, anatomical terms, English-Tarahumara-Varohio, a brief comparative vocabulary of Yaqui-Mayo, and a brief comparative vocabulary of English-Sanskrit-Oceanic-Tarahumara.

The work by the Jesuit David Brambila (1953, 1976) is among the most extensive in the Tarahumara language. In collaboration with José Vergara Bianchi (1953), Brambila published the *Gramática Raramuri* ‘Raramuri grammar’. Brambila (1976) also published the *Diccionario Raramuri-Castellano (Tarahumar)*. Brambila points out that

¹⁰ Grammatical compendium for the understanding of the tarahumar language: Prayers, Christian doctrines, talks, and other necessary things for the right application of the holy sacraments in the same (tarahumar) language.

the purpose of the grammar is not to be a method to learn the language. It is instead a description of the language. Brambila is also clear that the examples come from spontaneous conversations from native speakers and letters written by native speakers, although the letters are not included in the grammar. Brambila also points out that this method of describing the language based on spontaneous conversations made the description work go slowly, but he can be assured that the grammar represents the way native speakers of Tarahumara speak. It took Brambila 10 years to complete the grammar. Brambila describes some parts of the language based in Latin and Spanish. Throughout the Raramuri grammar we can find that some part of the grammatical description is based and compared with Latin and Spanish. The introduction page of the grammar is signed in Norogachi and that of the dictionary in Sisoguichi, so I assume that he collected the data of the variants spoken in these two towns. A last observation about the relationship between Brambila's work and Urique Tarahumara is that sometimes it is difficult (or impossible) to recognize a word or a morpheme as being the same morpheme in both variants. This might be due to different reasons, such as confusion caused by differential vowel harmony, multiple allomorphy, or just differences that are so great they may be different languages rather than dialects of a single language (see section 1.1).

Simon Hilton (1959, second edition 1993) published the *Diccionario Tarahumara* 'Tarahumara dictionary' based on the Samachique variant from the municipality of Guachochi. This dictionary contains a Tarahumara-Spanish dictionary (1-83) as well a Spanish-Tarahumara dictionary (83-154). It also contains grammatical notes, the numbers in Tarahumara and kinship terms (155-166).

Don Burgess has published several articles about Western Tarahumara. Burgess covers topics such as Tarahumara phonology (1970), verbal suffixes of prominence (1979), a text ‘Domingo Morillo and the fox’ (1970), Tarahumara color modifiers (1983), and a grammatical sketch of Western Tarahumara (1984) edited by Ronald W. Langacker. This grammatical sketch follows a format used by other publications in a series of grammatical sketches for Uto-Aztecan languages, keeping a focus on morphological description, with syntax only mentioned briefly.

Burgess and Velasquillo Tria (1970) published a book with phrases in Rarámuri-Spanish based in the Rocoroibo dialect. Burgess and Mares published a book on how to learn Ralámuli from the low lands (2002). Burgess’ (1983) article about color modifiers is based in data collected in Samachique, Huichochi and Rocoroibo. The text Domingo Morillo and the red fox (Burgess, 1979), the article on verbal suffixes of prominence (Burgess 1979), and the grammatical sketch (Burgess, 1984) are based on Western Tarahumara, without specifying which towns were sites for data. The article on Tarahumara phonology (Burgess 1970), and the book to learn Tarahumara (Burgess 2002) are based on the Rocoroibo variant.

Lionnet also has published different articles about the variant of Tarahumara from Norogachi, including *Los elementos de la lengua Tarahumara* (1972)¹¹, and *un dialecte meridional du tarahumar* (1982)¹².

James Copeland published several articles about Tarahumara, covering topics such as the comparison of similarity in Tarahumara (1988), intensification, contrast, and metaphor in Tarahumara (1990), discourse prerequisites for phonological analysis and

¹¹ ‘The elements of the Tarahumara language

¹² ‘a southern dialect of Tarahumara’

free alternation in Tarahumara (1992), Tarahumara reduplication, the grammaticalization of iconic intensification (1993), variation and constancy of patterning in language and culture, using Tarahumara as an example (1994), and lexical incorporation and grammaticalization of the Uto-Aztecan word for ‘hand’ in Tarahumara (1998).

Gabriela Caballero’s (2008) dissertation provides a description and analysis of the phonology and morphology of Choguita Rarámuri. The reader can compare a number of characteristics of Choguita and UT morphology by noting the similarities and the differences between that work and the present dissertation.

Beyond Tarahumara proper are works on other Taracahitan languages, like those on Yaqui by Lindenfeld (1971, 1973), Escalante (1990), Demers, Escalante and Jelinek (1999), Dedrick and Casad (1999), and Guerrero Valenzuela (2004). Works from Guarijío are Félix Armendáriz (2005) and Miller (1996). Very little has been published on the Opata language, just Lombardo (2009) and Shaul (1990). Finally, for the extinct language Eudeve, the only publication is by Shaul (1991).

1.4. Contribution of this work

UT has really interesting morphology, with a high degree of irregularity. Authors like Copeland (1992, 1994) and Brambila (1953, 1976) mentioned this irregularity as unpredictable and unmotivated. Certainly the irregularity in UT has sometimes appeared unmotivated to me, and I still cannot predict how a verb paradigm is going to look based on the verb root. But once that we know the paradigm of a verb, it is consistent and the shapes of the individual morphemes do not alternate with other shapes — that is, the entire paradigm is invariant. One of the contributions of this work is finding those paradigms that allow us to see the organization of the system, which then allows us to

sort the allomorphs into categories, so it no longer looks “unmotivated” or “free”. This is discussed in Chapter II, where I introduce the verb classes that condition fortis versus lenis allomorphs, as well as the stress patterns that correlate with variation in vowels.

A second important contribution of this work is a detailed description in Chapter V of the subject indexation system in the past tense in UT, which is, to my knowledge, the only system of its kind reported in the Sonoran Branch of Uto-Aztecan.

A third relevant contribution for the description of Tarahumara and the Uto-Aztecan family, and possibly also for Typology, is the description in chapters III and V of the innovative hierarchical verbal indexation system in UT, which also, to my knowledge, has not been reported in any other hierarchical system for a Uto-Aztecan language.

CHAPTER II

ORTHOGRAPHY AND PHONOLOGICAL NOTES

This chapter lays out the orthography used in the examples in this dissertation. The orthography follows from a simple phonemic analysis, based on complementary and contrastive distribution. It is useful for speakers, as it captures the sounds that they feel need to be represented. However, the linguist reading examples will notice that one consequence of this orthography is that a single morpheme may have different orthographic representations in different examples. In UT, this morphophonological variation is extreme, especially in verbal paradigms. This raises larger theoretical issues in the representation of phonology and morphology, as to which is the most appropriate level at which to represent such variation. While I expect to explore this question in future research, this dissertation is not the place to attempt to solve the mysteries of the interactions between phonology and morphology in UT. The purpose of this chapter is only to orient the reader to the choices I have made in orthography, and to prepare the reader to recognize the more common allomorphic alternations that will be seen in examples throughout this dissertation. A complete list of abbreviations used in this dissertation is given in Appendix A.

2.1. The consonant phonemes / graphemes

Like most orthographies, this one follows from phonemic analysis, which separates sounds into phonemes, the contrastive sounds that must be represented in an orthography, and allophones, conditioned variants of the phonemes that occur in specified environments, and so do not need to be represented in an orthography. The most basic criterion for distinguishing between phonemes and allophones is distributional: phonemes occur in CONTRASTIVE DISTRIBUTION and allophones occur in COMPLEMENTARY DISTRIBUTION. In UT, contrastive distribution, as seen in both minimal pairs and near-minimal pairs, distinguishes 15 consonants, which are presented in Table 2.1.

Table 2.1. Consonant Phonemes in Urique Tarahumara

POINT MANNER	Bilabial	Alveolar	Alveo- palatal	Palatal	Velar	Glottal
<i>Plosive</i>	p b	t			k g	'
<i>Fricative</i>		s				h
<i>Affricate</i>			c			
<i>Nasal</i>	m	n				
<i>Flap</i>		r				
<i>Approximant</i>	w	l		y		

Selected minimal pairs and near-minimal pairs illustrate contrast for phonemes at the same point of articulation: /p/ vs. /b/ vs. /m/ vs. /w/ (1); /t/ vs. /s/ vs. /n/ vs. /r/ vs. /l/ (2); /k/ vs. /g/ (3).

- (1) a. /p/ vs. /b/
 /pamí/ ‘up.there/arriba’
 /bamí/ ‘year/año’

- b. /b/ vs. /m/
 /**b**ací/ ‘pumpkin/calabaza’
 /**m**ací/ ‘outside/afuera’
- c. /p/ vs. /m/ vs. /f/
 /wep**á**/ ‘hit/golpear’
 /wem**á**/ ‘liver/hígado’
- d. /m/ vs. /w/
 /ci’w**á**/ ‘breast/pecho’
 /ci’**m**á/ ‘beautiful/bonito’
- (2) a. /t/ vs. /s/
 /nesé-me/ ‘take.care-PTCP/cuidar-PTCP’¹
 /neté-me/ ‘make-PTCP/hacer-PTCP’
- b. /s/ vs. /n/
 /sawí-me/ ‘get well-PTCP /aliviarse-PTCP’
 /nawí-me/ ‘arrive-PTCP /llegar-PTCP’
- c. /n/ vs. /r/
 /roká-me/ ‘be missing-PTCP/extrañar-PTCP’
 /noká-me/ ‘move around-PTCP/andar-PTCP’
- d. /r/ vs. /l/
 /yé**l**a/ ‘mother/mamá’
 /yé**r**a/ ‘door/puerta’
- e. /t/ vs. /r/
 /towí/ ‘boy/niño’
 /rowí/ ‘rabbit/conejo’
- f. /t/ vs. /n/
 /atí-me/ ‘sit SG/sentado SG’
 /aní-me/ ‘say/decir’

The following near minimal pairs illustrate the contrastive distribution of /k/ vs.

/g/.

- (3) near-minimal pairs of /k/ vs. /g/
 /oto-gé=ne/ ‘carry-PST=1SG’
 /tó-**k**e=ne/ ‘bury-PST=1SG’

¹ A note about a methodological decision used in this work. It is not possible in UT for an unconjugated verb root to appear as an independent word. Following the practice of the speakers with whom I work, I use as the citation form the root plus the suffix *-me* ‘PTCP’: [V-*me*].

/beté-ge=ne/	‘live-PST=1SG’
/neté-ke=ne/	‘make-PST=1SG’
/meté-ke=ne/	‘cut-PST=1SG’ (with an instrument)
/cigó-ge=ne/	‘steal/rob-PST=1SG’
/pagó-ke=ne/	‘wash object(s)-PST=1SG’

2.2. Allophones and free variation that are never written

In complementary distribution we have some allophones that do not rise to the level of awareness of the speakers, and as such are not given symbols in the orthography. UT has two allophonic variation phenomena that meet this description: First, the alveolar flap is realized as an alveolar trill word initially; second, voiceless stops are realized as pre-aspirated word medially in stressed syllables. In addition, some phonemes have allophones in free variation: the alveopalatal affricate is realized alternatively as an alveopalatal fricative, as an alveolar affricate, or as an alveolar fricative and the glottal fricative is realized alternatively (and most frequently, to my ear) as a velar fricative. The remainder of this section illustrates each of these cases of allophonic variation.

The flap

As has been described for Choguita Rarámuri (Caballero 2008), in UT the alveolar flap /r/ is realized as an alveolar trill [r] word initially: schematically /r /→ [r] / # __. Examples in (44) illustrate this phenomenon in UT. The alveolar flap and its allophone the alveolar trill are both orthographically represented as < r >.

(4)	/remó/	[remó]	'frog/rana'
	/remé/	[remé]	'tortilla/s/tortillas'
	/ra'íca-me/	[ra'íca-me]	'speak-PTCP /hablar-PTCP '
	/reté]	[reté]	'stone/piedra'
	/rimú-me/	[rimú-me]	'dream-PTCP /sueño-PTCP '

In UT, the trill can occur in word-medial position in borrowed words from Spanish. For example, Spanish *morral* ‘bag’ → UT *morali*.²

Voiceless pre-aspirated stops

Voiceless stops in UT become pre-aspirated allophones when word medial as the onset of a stressed second syllable, with two, three, and four syllable words (5-7), all of them with the stress on the second syllable. Voiceless stops in an unstressed word medial position are not pre-aspirated, whether in a two or three syllable word (8-9).

(5)	/sekó/	[se ^h kó]	‘nook/rincón’
	/rapé/	[ra ^h pé]	‘only/sólo’
	/ripí-me/	[ri ^h pí-me]	‘remain.SG-PTCP /quedar SG-PTCP’
	/ratá-ga-me/	[ra ^h tá-ga-me]	‘be.hot-CONT- PTCP /hacer calor-CONT-PTCP.’
	/wepá/	[we ^h pá]	‘hit-PTCP /golpear-PTCP ’
	/bakó/	[ba ^h kó]	‘river/río’
	/beté/	[be ^h té]	‘live-PTCP /vivir-PTCP’
	/cipí/	[ci ^h pí]	‘honey/miel’
(6)	/batóla/	[ba ^h tóla]	‘groin/ingle’
	/betóli/	[be ^h tóli]	‘bowl/plato’
(7)	/atísi-me/	[a ^h tísi-me]	‘sneeze-PTCP /estornudar-PTCP’
	/sap-é-ga-me/	[sa ^h p-é-ga-me]	‘meat-HAVE-CONT-PTCP’
	/wipína-me/	[wi ^h pína-me]	‘turn.over(dirth)-PTCP’
	/atísu-li-ge/	[a ^h tísu-li-ge]	‘sneeze-3-PST’
	/ripú-ri-ge/	[ri ^h pú-ri-ge]	‘cut-1PL-PST’
(8)	/péka/	[péka]	‘no’
	/akiná/	[akiná]	‘here/aquí’
	/cátiri/	[cátiri]	‘ugly/feo’
(9)	/otobóli/	[otobóli]	‘spine (anat.)/columna’
	/batarí/	[batarí]	‘teswino’ ³
	/cuéti/	[cuéti]	‘hardly/apenas’

² Caballero (2008) reports that some speakers of Choguita Rarámuri have a trill in word medial position.

³ Alcoholic drink made from a fermented agave.

Allophones and free variation for *c*

The voiceless alveo-palatal affricate *c* (/tʃ/) has three allophones, [tʃ], [ʃ], and [s].
it becomes [ʃ] in front of high vowels (10-11) and one front vowel (12). In one word,
cimi, /c/ becomes [ʃ] and [s] in free variation (13). It is pronounced as a voiceless alveo-palatal affricate in front of /a/ and /o/ (14).

(10) /tʃ/ → [ʃ] word medial

/bitʃé/	[biʃé]	‘wasp/avispa’
/butʃí/	[buʃí]	‘eyes/ojos’
/matʃíli/	[maʃíli]	‘scorpion/escorpión’
/golátʃi/	[goláʃi]	‘crow/cuervo’
/kutʃí/	[kuʃí]	‘small, little/pequeño, chico’

(11) /tʃ/ → [ʃ] word initial

/tʃiná-me/	[ʃiná-me]	‘scream, yell/gritar’
/tʃipí/	[ʃipí]	‘honey/miel’
/tʃiniwá/	[ʃiniwá]	‘different/diferente’
/tʃuétí/	[ʃuétí]	‘hardly/apenas’
/tʃulagóma-ci/	[ʃulagóma-ʃi]	‘heart-LOC/corazón-LOC’
/tʃulá-la/	[ʃulá-la]	‘chest-POSS/pecho-POSS’

(12) /butʃé-me/ [buʃé-me] ‘blow/soplar’

(13) /tʃ/ → [ʃ], [s]

/tʃimí-me/	[ʃimí-me]	[simí-me]	‘go/ir’
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(14) /tʃ/ → [tʃ] #_/a/, /o/

/tʃabé/	[tʃabé]	‘before/antes’
/tʃabóci/	[tʃabóci]	‘mestizo’
/tʃalawá/	[tʃalawá]	‘bush/arbusto’
/tʃalóla/	[tʃalóla]	‘beard/barba’
/tʃátiri/	[tʃátiri]	‘ugly/feo’
/tʃomalí/	[tʃomalí]	‘deer/ciervo’

Free variation between [tʃ] and [s] is attested word-initially preceding any vowel accept /a/ (15).

(15) /tʃ/ → [tʃ] ~ [s]

/tʃehá-me/	[tʃehá-me]	[sehá-me]	‘swell/hincharse’
/tʃiná-me/	[tʃiná-me]	[siná-me]	‘scream/gritar’
/tʃipulí/	[tʃipulí]	[sipulí]	‘tarántula’
/tʃokógo/	[tʃokógo]	[sokógo]	‘sour/amargo’
/tʃugí/	[tʃugí]	[sugí]	‘teswino’
/tʃikiré-me/	[tʃikiré-me]	[sikiré-me]	‘cut in small pieces/cortar en piezas chicas’

Examples in (16) are exceptions to the rule that /tʃ/ → [ʃ]/_high V. The exception could be to avoid homophony between possible pronunciations of the verb /gotʃí/ ‘sleep’, the noun /gotʃí/ ‘older sister’, and the noun /gotʃí/ ‘anus’ with an alternative form [goʃí] ‘anus’.

(16) /tʃ/ → [tʃ] exceptions to the rule

/gotʃí-me/	[gotʃí-me]	‘sleep/dormir’
/gotʃí-lá/	[gotʃí-lá]	‘older.sister.f/hermana mayor’

Free variation for /h/

There is free variation in which the glottal fricative /h/ is often realized as the velar [x], schematically /h/ → [h] ~ [x].

(17) /h/ → [h] ~ [x]

/bahí-me/	[bahí-me]	[baxí-me]	‘drink/beber’
/hu/	[hu]	[xu]	‘be/ser’
/hípaka/	[hípaka]	[xípaka]	‘now/ahora’
/hubá-me/	[hubá-me]	[xubá-me]	‘smell/oler’
/héna/	[héna]	[xéna]	‘here/aquí’
/mahá-me/	[mahá-me]	[maxá-me]	‘get.scared/asustarse’
/uhí-me/	[uhí-me]	[uxí-me]	‘fart/pedorrearse’

Free variation for /r/ → [l]

There is free variation in which the flap /r/ is sometimes realized as the lateral [l].

(18)	/rarómuri/	[ralómuli]	‘people’
	/-ra/	[-la]	‘possessive’
	/arué/	[alué]	‘demonstrative’

2.3. The fortis/lenis phenomenon in UT

In UT, many consonants fall into two natural classes that participate in allomorphic alternations: a fortis series alternating with a lenis series. The term FORTIS refers to the “increased respiratory energy applied in the production of a segment...LENIS indicates less energy” (Ladefoged & Maddieson, 1996:95). The fortis/lenis phenomenon is common in Uto-Aztecan languages (Vogelin & Hale, 1962; Miller, 1967; Manaster, 1993; Thornes, 2003; Caballero, 2008 inter alia). However, the fortis/lenis phenomenon does not work in the same way for all the Uto-Aztecan languages. For example, in Northern Paiute, fortis consonants are geminated (Thornes, 2003), whereas in UT, they are the simple voiceless stops, /p, t, k/ (although aspirated word-medially as the onsets to stressed syllables, cf. section 2.1). The lenis versions of these stops are, respectively, /b, r, g/.

These are not allophonic alternations in the sense that both fortis and lenis consonants are clearly phonemes in contrastive distribution with each other (cf. section 2.1), but these classes of phonemes alternate in the surface forms of many inflectional morphemes. For example, the segment /k/ alternates with /g/ in the morpheme *-ka/-ga* ‘CONTINUATIVE’, and the initial consonant of the past tense morpheme alternates between /k/, /g/, /l/, and Ø. In some models of phonology commonly used in linguistic description,

analysts are required to select one of the forms of each morpheme to consider basic, i.e. the “deep” form from which the other “surface” forms are derived. In looking at analyses of other Uto-Aztecan languages, we can see that some linguists consider the fortis forms to be basic and derive the lenis forms by phonological rule (e.g. Thornes 2003), whereas others consider the lenis forms to be basic and derive the fortis forms by phonological rule (e.g. Caballero 2008: 49-51 shows phonological conditioning for a subset of the fortis-lenis distinction, in which basic voiced forms become voiceless for phonotactic reasons). Someday I hope to explore a theoretical explanation for the fortis-lenis alternation in UT within the framework of evolutionary phonology (Blevins 2004).

In this thesis, I choose to avoid selecting either form as basic. Instead I list every allomorph for each morpheme and describe the environment in which each occurs. In the remainder of this section, I introduce the verb classes that condition the fortis-lenis alternations in verbal morphology, then show some examples of the alternations that they condition.

2.4. The verb/suffix classes

In UT there are two verb classes that consistently condition allomorphy in suffixes that immediately attach to them: Class I conditions lenis allomorphs and Class II conditions fortis allomorphs.⁴ Also verbs of class I condition allomorphy depending on whether or not the verb root bears primary stress. There is no way to predict which class a verb belongs to based on its phonological form: verbs in both classes may be of 2, 3, and 4 syllables in length, and may bear stress on any of these syllables, and may end with the same inventory of vowels. The only way I have found to identify the verb class of a new

⁴ These numbers are purely arbitrary. Class I has more members, so it was easier to see originally.

verb is to inflect it with an alternating morpheme and see whether the allomorph that appears is lenis or fortis. Appendix 1 contains the full list of verbs that I have identified so far as belonging to each class (as well as some other subclasses that will become relevant in subsequent chapters). For illustration here, I give three verbs of each class:

(19) Class 1 Verb roots that do not keep primary stress

<i>sawí-me</i>	‘getting well/aliviando’
<i>witá-me</i>	‘defecating/defencando’
<i>otó-me</i>	‘taking/tomando’

(20) Class 1 Verb roots that do keep primary stress

<i>ayó-me</i>	‘being angry/estando enojado’
<i>ripí-me</i>	‘staying/quedándose’
<i>ropóca-me</i>	‘bending down (human)/agachandose’

(21) Class 2

<i>elowí-me</i>	‘being hungry/estar hambriento’
<i>ciná-me</i>	‘screaming, yelling/gritando’
<i>inámu-me</i>	‘understanding/entendiendo’

Probably the most salient fortis-lenis alternation in UT is the one between /k/ and /g/, because it occurs in several high-frequency morphemes. The following examples illustrate this alternation with the suffixes *-ge/-ke* ‘PAST’ (22) and *-ga/-ka* ‘CONTINUATIVE’ (23).

(22) Suffix *-ge/-ke* ‘past’

a. Class 1. Verb roots that do not bear primary stress

<i>sawi-gé=ne</i>	‘I got well/me alivié.’
<i>wita-gé=ne</i>	‘I defecated/defequé.’
<i>oto-gé=ne</i>	‘I took (it)/(lo) agarré’

- b. Class 1. Verb roots that bear primary stress

ayó-ge=ne 'I was angry/me enojé'
ripí-ge=ne 'I stayed/me quedé'
ropóca-ge=ne 'I bent down (human)/me agaché'

- c. Class 2

elowí-ke=ne 'I was hungry/estaba hambriento'
ciná-ka=ne 'I screamed, yelled/grité'
ináme-ke=ne 'I understood/entendí'

(23) **Suffix -ga/-ka 'continuative'**

- a. Class 1. Verb roots that do not bear primary stress

sawi-gá 'getting well/aliviándose'
wita-gá 'defecating/defecando'
oto-gá 'taking/llevando'

- b. Class 1. Verb root that bear primary stress

ayó-ga 'being angry/estar enojado'
ripí-ga 'staying/quedándose'
ropóca-ga 'bending down (human)/agachándose'

- c. Class 2

elowí-ka 'being hungry/estar hambriento'
ciná-ka 'screaming/yelling/gritando' (RT:74)
inámu-ka 'understanding/entendiendo'

Another alternation that is an anchor in the differentiation of class 1 and class 2 verbs is the alternation between /t/ and /r/ with the first person plural suffix *-ti/-ri/-ru*. The first person plural suffix for verbs of class 1 occurs with one of two lenis allomorphs, first person plural *-ri* when the verb root bears primary stress, and first person plural *-ru* when the verb root does not bear primary stress; while first person plural for class 2 verbs occurs with the fortis allomorph *-ti*.

- (24) a. Class 1. Verb roots that do not bear primary stress

sawi-rú-ge ‘We got well/Nos aliviamos.’
wita-rú-ge ‘We defecated/defecamos.’
oto-rú-ge ‘We took (something)/Nos llevamos (algo).’

- b. Class 1. Verb root that do bear primary stress

ayó-ri-ge ‘We got angry/Nos enojamos.’
ripí-ri-ge ‘We stayed/Nos queamos.’
ropóca-ri-ge ‘We bent down (human)/Nos agachamos.’

- d. Class 2

elowí-ti-ge ‘We were hungry/Estuvimos hambrientos.’
ciná-ti-ge ‘We screamed, yell/Gritamos.’
inámu-ti-ge ‘We understood/Entendimos.’

One more alternation to illustrate the conditioning of the allomorph by the verb class and the primary stress in the verb root is the occurrence of the allomorphs *-bo/-po* for first person plural future.

- (25) Class 1 Verb roots that do not bear primary stress

sawi-bó ‘We will get well/nos aliviaremos.’
witá-bó ‘We will defecate/defecaremos.’
oto-bó ‘We will take (something)/nos llevaremos (algo).’

- (26) Class 1 Verb roots that bear primary stress

ayó-bo ‘We will get angry/Nos enojaremos.’
ripí-bo ‘We will stay/Nos quedaremos.’
ropóco-bo ‘We will bend down/Nos agacharemos.’

- (27) Class 2

inámo-po ‘We will understand (something)/Entenderemos.’
ciná-po ‘We will yell/Gritaremos.’
elowí-po ‘We will be hungry/Tendremos hambre.’

In addition, sometimes roots bear multiple suffixes, and when a given suffix occurs before one of the alternating forms, that suffix may either condition a lenis or

fortis onset to the subsequent suffix, and thereby can be assigned to either Class I or Class II. So far, I have identified five suffixes that condition lenis allomorphs of subsequent suffixes, and six suffixes that condition fortis allomorphs of subsequent suffixes.⁵

Table 2.2. Verbal suffixes that condition lenis versus fortis in subsequent suffixes

Class 1		Class 2	
<i>-e</i>	‘HAVE’	<i>-sa</i>	‘WHEN’
<i>-a</i>	‘PROGRESSIVE’	<i>-ga/-ka</i>	‘CONTINUATIVE’
<i>-nali/-nili</i>	‘DESIDERATIVE’	<i>-go/-ko</i>	‘IRREALIS/DUBITATIVE’
<i>-li</i>	‘3’	<i>-mia</i>	‘PURPOSE’
<i>-ri/-ti</i>	‘1PL’	<i>-bo/-po</i>	‘1PL.FUTURE’
		<i>-e/-le</i>	‘PAST’

The following examples (all from text) show the verbal suffixes from table 2.2, each showing the initial consonant of the following morpheme in bold. When the following morpheme is lenis the preceding morpheme is class 1, and when it is fortis, the preceding morpheme is class 2.

(28) Class I suffixes

a. *-e* ‘have’

ran-é-ga-me ‘kid-HAVE-CONT-PTCP (OXI:57)’
bo’-é-ge-me-ti ‘hair-HAVE-CONT-PTCP-NMLZ’ (OXI:58c, 59)
bo’é-ga-me ‘hair-CONT-PTCP’ (OXI:67, 69)

b. *-a* ‘ipfv’

maci-a-go ‘know-PROG-IRR/DUB’ (GANO:2)
go-ya-go ‘eat-PROG-DUB’ (LMMY:150)
ani-a-ga=ba=mo ‘say-PROG-CONT=EXPL=2SG’ (OXI:3)

c. *-nali/-nili* ‘DESIDERATIVE’

cimi-náli-ga ‘go-DESID-CONT’ (ADJ:123)

⁵ Note that these suffixes themselves show allomorphic variation, each of which is described in its own section of Chapter V.

(29) Class 2 suffixes

a. *-sa* ‘WHEN/IF’

<i>rahi-sa-ka</i>	‘burn-WHEN-CONT’ (ADJ:62)
<i>macine-sa-ka</i>	‘go.out.WHEN-CONT’(ADJ:107)
<i>alaki-sa-ka</i>	‘happen-WHEN-CONT’ (LMMY:168)
<i>rehe-sá-ka</i>	‘play-WHEN-CONT’ (MA:89, 90)
<i>go-sa-ka</i>	‘eat-WHEN-CONT’ (HHJD:4b), (MA:105)

b. *bo/po* ‘future’

<i>nata-bo-ka</i>	‘think-FUT-CONT (COL:31)’
<i>ani-bo-ko</i>	‘speak-FUT-IRR/DUB’ (ACCLOLA:6)
<i>ené-bo-ko</i>	‘see-FUT-IRR/DUB’ (ADJ: 112)

c. *-ci* ‘progressive’

<i>ilí-ge-ci-ka</i>	‘stand.SG-PST-PROG-CONT’ (ACCLOLA:47)
<i>atí-gi-ci-ka</i>	‘sit.SG-PST-PROG-CONT.’ (OXI:108)
<i>nawá-ci-ka</i>	‘arrive-PROG-CONT.’ (OXI:116)

d. *-e/-le* ‘pst’

<i>ani-é-ko</i>	‘say-PST-IRR/DUB’ (ACCLOLA:19e)
<i>ripi-le-ko=ba</i>	‘remain-PST-IRR/DUB-EXPL’ (ACCLOLA:50)
<i>cimí-le-ko</i>	‘go-PST-IRR/DUB’ (ADJ:22)
<i>eté-le-ko=ba</i>	‘see-PST-IRR/DUB-EXCL’ (ADJ:33)
<i>mocí-le-ko=ba</i>	‘sit.PL-PST-IRR/DUB-EXCL’ (ADJ:33b, 112b)

e. *-mia* ‘purpose’

<i>ené-mia-ka</i>	‘see-PURP-CONT’ (HHJD:100)
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To summarize this section, the fortis/lenis alternation in allomorphs is largely conditioned by the class of the preceding root or morpheme, and no phonological feature has been shown to correlate with (and so allow us to predict) these classes.

2.5. Some additional alternations that are less well-behaved

There is a great deal more allomorphy in UT verbs, some of it overlapping with the fortis-lenis alternation and some appearing completely idiosyncratic. Here we will

consider two cases that overlap partially. In the first, the *-a/-ya* ‘PROGRESSIVE’, the allomorphy is not fortis/lenis, but it is at least partially conditioned by the same verb classes. In the second, the *=guru/=kuru/=turu* ‘FOCUS2’ marker, the segmental alternation resembles the fortis/lenis alternation, but the conditioning environment is clearly not related to the verb classes.

The progressive *-ya* and its alternate form *-a* are outside of the fortis/lenis system. The allomorph *-ya* never takes stress itself, and it occurs with verb roots from either class I or II, that end with the vowels /a/ and /e/ (29). The allomorph *-a* occurs with verb roots ending with the vowels /o/, /i/ and /u/ (examples in 30). The allomorph *-a* occurs with stress with class 1 verbs that do not retain primary stress (31b). It occurs unstressed with class 1 verbs that retain primary stress and class 2 verbs (31a) and (31c).

- (30) *rewá-ya* ‘finding/encontrando’
ciná-ya ‘screaming/yell’
neté-ya ‘making (something)/haciendo (algo)’
cikiré-ya ‘cutting/cortando’
- (31) *sawi-á* ‘getting well, give birth (human)/aliviarse, pariendo (humanos)’
ayó-a ‘getting angry/enojando’
cíbu-a ‘hiding/escondiendo’
- (32) a. Class 1 verbs that retain primary stress
- ayó-a* ‘getting angry/enojando’
wipí-a ‘rising and falling/subiendo y bajando’
océru-a ‘growing up/creciendo’
- b. Class 1 verbs that do not retain primary stress
- ka’wi-á* ‘bringing wood/trayendo leña’
ani-á ‘saying/diciendo’
bini-á ‘understanding/entender’

c. Class 2 verbs

<i>batú-a</i>	‘grinding/moliendo’
<i>pagó-a</i>	‘washing the dishes/lavando los trastes’
<i>tici-a</i>	‘combing (the hair)/peinándose’

The alternations between =*kuru*, =*tutu* and =*guru* are not related to verbal class or primary stress. Here are a couple of problems to point out. First, verbs from both classes (1 and 2) can occur with any of the three allomorphs =*guru*, =*kuru* and =*turu* (32) and (33). Whatever it is that conditions this alternation, it is not the same verb classes that condition the verbal suffixes we saw before.

(33) Class 1

<i>mué=ka ayó=kuru</i>
<i>mué=ka ayó=guru</i>
<i>mué=ka ayó=turu</i>
‘You are mad/Tú estás enojado’

(34) Class 2

<i>mué=ka wipína=kuru</i>
<i>mué=ka wipína=guru</i>
<i>mué=ka wipína=turu</i>
‘You turn over the dirt/Tú volteas la tierra.’

The following examples are from text. All three allomorphs occurring after *eyena-me* ‘walk’, *nolina-me* ‘arrive’, and *ru-me* ‘say’

(35) a.	<i>eyéna=kuru=ne</i>	‘walk=FOC2=1SG’ (ADJ:35)
	<i>eyéna=turu=ne</i>	‘walk=FOC2=1SG’ (ADJ:107)
	<i>eyéna=guru=ne</i>	‘walk=FOC2=1SG’ (ADJ:93)
b.	<i>nolína=guru</i>	‘arrive=FOC2’ (ADJ:73d)
	<i>nolína=kuru</i>	‘arrive=FOC2’ (ADJ:17b)
	<i>nolína=turu</i>	‘arrive=FOC2’ (ADJ:42b, 95)
c.	<i>rá=guru</i>	‘say=FOC2’ (ACCLOLA:23b)
	<i>rá=kuru</i>	‘say=FOC2’ (ACCLOLA:46)
	<i>rá=turu</i>	‘say=FOC2’ (ADJ:103c)

Surprisingly even though the verb root is not a conditioning factor for the occurrence of *=kuru*, *=turu* or *=guru*, certain verbal suffixes are only followed by one of the three forms, so apparently the allomorphy can be morphologically conditioned, even though by something different from the lenis-fortis alternation. So far, I have identified four suffixes that condition *=guru* (35), three that condition *=kuru* (36), and three that condition *=turu* (37). Even so, however, the suffix *-nali* ‘DESIDERATIVE’ occurs with both *=guru* and *=turu* (38), so perhaps future research will reveal counter-examples to all these apparent patterns.

(36) *=guru*

- a. Following *-ri=guru* ‘third person’

<i>noli-gi-ri=guru</i>	‘bring-PST-3=FOC2’ (ACCLOLA:17)
<i>nola-ri=guru</i>	‘bring-3=FOC2’ (ACCLOLA:35f)
<i>anaca-ri=guru</i>	‘stand.a.pain-3=FOC2’ (ACCLOLA:23)
<i>okó-ri=guru</i>	‘spicy-3=FOC2’ (ACCLOLA:23)
<i>oto-ru-go-ri=guru</i>	‘take-PASS-IRR/DUB-3=FOC2’ (ACCLOLA:37)

- b. Following *-bo=guru* ‘FUTURE’

<i>ani-bo=guru</i>	‘speak-FUT=FOC2’ (ACCLOLA:2)
<i>raicá-bo=guru</i>	‘speak-FUT=FOC2’ (ACCLOLA:29)

- c. Following *-méla=guru* ‘FUTURE’

<i>ruku-méla=guru</i>	‘ask-FUT=FOC2’ (ACCLOLA:1)
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- d. Following *-cane=guru* ‘sound’

<i>ru-cane=guru</i>	‘say-sound=FOC2’ (ACCLOLA:7, 9, 30)
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(37) *=kuru*

- a. Following *-le=kuru* ‘PAST’

<i>raicá-le=kuru</i>	‘talk-PST=FOC2’ (ADJ:11)
<i>kola-le=kuru=ne</i>	‘mistake-PST=FOC=1SG’ (ADJ:15b)
<i>kola-le=kuru</i>	‘mistake-PST=FOC2’ (ADJ:15)

<i>kolá-le=kuru</i>	‘mistake-PST=FOC’ (ADJ:15)
<i>asá-le=kuru</i>	‘sit.SG-PST=FOC2’ (ACCLOLA:21)
<i>eyéna-le=kuru</i>	‘walk-PST=FOC2’ (ADJ:23)
<i>moci-le=kuru</i>	‘sit-PST=FOC2’ (ADJ:27b)
<i>ruyé-le=kuru</i>	‘say-PST=FOC2’ (ADJ:54, 58)
<i>ni-le=kuru</i>	‘exist-PST=FOC2’ (ADJ: 81b)

- b. Following **-ge=kuru** ‘PAST’

simi-ge=kuru=ne ‘go-PST=FOC2’ (ADJ:17)

- c. Following **-e=kuru** ‘PAST’

ri-é=kuru ‘say-PST=FOC2’ (ACCLOLA:19d)

- d. Following **=no=kuru** ‘INCHOATIVE’

ayó=no=kuru ‘get.mad=INCH=FOC2’ (ADJ:21b)

(38) **=туру**

- a. Following **-le/-re=туру** ‘PERFECTIVE’

<i>basi-si-le=туру</i>	‘throw.stones.at-go-PFV=FOC2’
<i>ocó-le=туру</i>	‘punch-PFV=FOC2’
<i>namibi-le=туру</i>	‘die-PFV=FOC2’ (ADJ:92, 92b)
<i>buhe-re=туру=ne</i>	‘take.off.pl=PFV=FOC2’ (ADJ:94b98)
<i>ku=sima-re=туру</i>	‘back=go-PFV=FOC2’ (ADJ:110b)

- b. Following **-ra=туру** ‘REPORTATIVE’

ka-rá=туру ‘be-REP-FOC2.’ (ADJ:52)

- c. Following **-ru=туру** ‘PASSIVE’

oto-ru=туру=ne ‘carry-PASS=FOC2=1SG’ (ADJ:14, 67)

(39) Both **=guru** and **=kuru** following **-nali** ‘DESIDERATIVE’

<i>go’-nali=guru</i>	‘eat-DES=FOC2’ (OXI:101)
<i>ace-nali=kuru</i>	‘stay.overnight-DES=FOC2’ (ADJ:13)

2.6. Vowels

UT has five vocalic phonemes, as presented in Table 2.3

Table 2.3. Vowels in Urique Tarahumara

	Front	Central	Back
High	i		u
Mid	e		o
Low		a	

In terms of high-low there are two high vowels, one front high /i/, and one back high /u/. There are two mid vowels, one front mid /e/ and one back mid /o/. There is one low central vowel /a/.

There are a number of alternations found in vowels in UT. One such alternation resembles vowel harmony, in that one vowel changes to add one or more features of a vowel found in a following suffix. It is not a paradigm case of vowel harmony, however, because although some changes (especially rounding) appear to harmonize with the “trigger” vowel, other changes (especially to vowel height and backness) are not assimilating to the features of the “trigger” vowel. For example, in (40a), the last vowel of the root /océra/ ‘grow up’ changes from /a/ to [u] when followed by the future tense suffix *-bo*. The addition of rounding looks like harmony, but the raising to a high vowel does not. The vowel changes in (40b-d) similarly are not consistently “harmonic”.

- (40) a. /océra-bo/ [océru-bo-ka] 'grow up' (COL:33)
 b. /séba-re/ [sébi-le] 'arrive-PFV' (HHJD:37b)
 c. /séba-ge/ [sébi-ge] 'arrive-PST' (ACCLOLA:19e)
 b. /ro'á-re/ [ro'é-le] 'spill-PFV' (GA:141)

Such changes can affect several morphemes in sequence, as in (41), where the suffix *-ga* ‘CONT’ is pronounced *-ge* preceding the suffix *-me* ‘PTCP’; the final vowel of the root also changes, in this case from *océra* to *océri*.

- (41) /océra-ga-me/ [océri-ge-me] (ACCDJ:86)

Unstressed vowels in the root can all be raised together when followed by the suffix *-méla* 'FUT'.

(42) /rewa-méla/ [riwi-méla] 'find-FUT' (LMMY:154)

Dissimilation is another phenomenon that can affect vowels in UT. In other words, two vowels that have similar characteristics become less similar. Example (43) illustrates this. The vowel of the ultimate syllable is the same as the vowel of the suffix /-a/. The vowel of the ultimate syllable of the verbal root becomes [u] in a dissimilation process.

(43) a → u
/ocera-a/ [oceru-a] 'grow.up-PROG' (COL:49)

Elision is another common process that occurs in fast speech in UT. Elision can affect vowels and consonants. Example (44) shows elision in vowels and example (45) shows elision in consonants.

(44) a. /akaré/ [Økalé] 'lie/mentir'
b. /okocí/ [Økocí] 'dog/perro'

(45) a. /yúga/ [Øúga] 'with/con'
b. /xícika/ [Øícika] 'who/quién' (ACCDJ:8)

UT also has the phenomenon of vowel reduction. It happens more often in fast speech. Any of the five vowels can be reduced to the central high vowel [ɨ]. Caballero (2008) reports vowel reduction to [ə] for Choguita Rarámuri.

(46) a. /ké = mo/ [ki = mo] 'be.PSD = 2SG' (ACCDJ:6)
b. /ké = kuru/ [ke = kiru] 'be.PSD = FOC2' (ACCDJ:7)
c. /cu-ciá-li-ko/ [cu-cia-li-ko] 'Q-do-3-DUB' (ACCDJ:10)
e. /atí-ge-ci/ [ati-gi-ci] 'sit.SG-PSD-CI' (ACCDJ:21d)
d. /ayó-na-ga = mo/ [ayo-no-gi = mo] 'be.angry-IPFV-CONT = 2SG' (ACCDJ:19)

This concludes on the phonological and orthographical notes that will orient the reader to the choices I have made in orthography, and to prepare the reader to recognize the more common allomorphic alternations that will be seen in examples throughout this dissertation. In the next chapter I give an overview of the UT Noun and Noun Phrase.

CHAPTER III

A SKETCH OF NOUNS AND THE NOUN PHRASE

This chapter describes the basics of UT nouns, their morphology and syntax. This chapter will allow the reader to have a better understanding of the examples in the rest of this dissertation.

3.1. Word classes or part of speech

The major word classes that are grammatically distinguished in a language such as NOUNS, VERBS, ADJECTIVES and ADVERBS are called traditionally PARTS OF SPEECH (Givón 2001:55-85; Shopen 2007:1). Typical categories that nouns can bear either syntactically and/or morphologically are case, number, class or gender, definiteness and possession (Shopen 2007:7).

There are three relevant levels to recognize and distinguish word classes in a language: monomorphemic roots may begin in a specific word class, which may be defined by the kinds of derivational morphology it accepts. A root plus derivational morphology creates a stem of a particular class: meaning-changing derivations create a stem of the same class, whereas category-changing derivations create a stem of a different class. Some roots and stems are already usable as independent words, but other roots and stems (like verbs) must bear inflectional morphology to become words that can be deployed in specific syntactic constructions.

For UT verbs, all three levels are clearly relevant (as seen in Chapter V), but with the exception of two morphemes that uniquely distinguish the subclass of inalienable noun roots, I have found no other morphology, either inflectional or derivational, that is unique to nouns. I will explain the criteria that I use to identify nouns in UT in section 3.1.2, after a brief review of the literature for the most closely related languages.

3.1.1. Nouns in other Uto-Aztecan languages

All of the grammars of Tarahumara that have been written so far just treat the parts of speech as a given, defining nouns in terms of their semantics (Brambila 1953: 12) or apparently taking it as a given that if a word translates into English or Spanish as a noun, then it must be a noun in Tarahumara as well. Both Lionnet (1973: 18) and Brambila (1953: 20) mention that the suffix *-ra* marks a subset of nouns and adjectives, both describing the morpheme as a determiner, and both talk about the case suffix *-ci* ‘LOC’ that nouns can bear. Both also give a long list of verbalizers that transform noun roots into verb stems, and verb roots into noun stems. Miller (1983: 117) talks about an ‘absolute’ suffix *-li* in Tarahumara that “is used to distinguish an item from all others and is often best translated into English by ‘the’.” I have not seen such a suffix in UT. Caballero (2008) focuses on only verbs, making the entire work implicitly a study of what counts as verbs, but there is no explicit differentiation of verbs from other parts of speech and no discussion of how one might identify other parts of speech in Choguita Rarámuri. To get a sense of the grammatical criteria that others have utilized to define nouns, we can look at descriptions of the closely related languages.

Yaqui and Guaríjío (a.k.a. Warihío) are the closest related languages to Tarahumara. These three languages belong to the Taracahitian sub-branch in the Uto-Aztecan family (Miller 1996). The noun characteristics of UT are similar to these languages, especially to River Warihío. Felix (2005) mentions that nouns in River Warihío are not marked for gender, number or case for the agent. Nouns can be marked as obliques with instrumental *-e*, locative *-ci*, and comitative *-ma*. Also, they occur in the possessive construction. In a similar way, UT nouns do not have morphology for gender, number or case (I discuss the clitic *=ka* in section 3.6). UT nouns can occur with the locative suffix *-ci* and the instrumental suffix *-te*. A notable difference between UT and River Warihío is that UT has adpositions as independent words, while River Warihío (Felix 2005) has postpositions that are suffixed to the noun.

3.1.2. Nouns in UT

In the domain of syntax, the usual test would be to see what words could serve as the core arguments of clauses. In UT, however, this test is problematic because sentences are perfectly fine without core arguments occurring as either nouns or free pronouns, and there is no special case marking or constituency behavior associated with them when they do occur. This means that an adjective could occur apparently as the subject of an inflected verb, without an explicit head noun: while this could mean that it is the subject (and therefore a noun), it could also be merely an adjective modifying an unexpressed subject noun. But even notional adjectives may not be able to occur as core arguments, it does appear that only nouns may be the object of postpositions (section 3.5), including bearing the locative suffix *-ci* (section 3.5) and the instrumental suffix *-te* (3.5); also, only nouns can be the possessed item in either the inalienable or the alienable possessive

phrase (section 3.2). Finally, perhaps also only nouns may bear the enclitic =*ka* ‘FOCUS MARKER’ (section 3.6).

3.2. The noun phrase

A Noun Phrase in UT may consist of only the head of the noun phrase, which is a single noun. It can also expand to include possessor nouns and possessive classifiers (3.3), adjectives (3.4), numerals (3.5), and gender words modifying the head (3.6). Alternatively, it may consist of a single pronoun, which may be a free form or a bound clitic (3.7).

3.3. Nominal possession

UT grammar separates two types of nouns, those that are inalienably possessed and those that are alienably possessed. Inside the NP, the inalienably possessed nouns take a suffix and are possessed directly by a preceding unmarked noun (3.2.1), whereas alienably possessed nouns are possessed by means of a genitive classifier (3.2.2).

3.3.1. Inalienable construction

Tarahumara nouns using the inalienable possession construction include nouns referring to body parts, kin terms, items closely related with the person such as ‘house’, and part-whole relations such as ‘egg’s yolk’. Semantically, inalienable nouns form a group where the possessor exercises little choice or control over the possessive relation. In other words, the possessor cannot normally get rid of its relation with the possessed.

Morphosyntactically, in UT inalienable possession is the most reduced construction, different from the more elaborate construction used for alienable possession. The inalienable possessive construction includes the possessor (PR),

mentioned as a free pronoun or a noun, followed by the possessed (PSD), which bears the possessive suffix *-ra*. I illustrate first with nouns referring to body parts.

- (1) a. *nee ini-lá*
 1SG tongue-POSS
 ‘my tongue/mi lengua’
- b. *mue buci-la*
 2SG eye/s-POSS
 ‘your eye(s)/tus ojo(s)’
- c. *alue akabó-la*
 3 nose-POSS
 ‘his/her nose/su nariz’

Other examples of body parts that use this construction are *ne culá-la* ‘my mouth,’ *ne gupá-la* ‘my hair,’ *ne ramé-la* ‘my teeth,’ *ne naká-la* ‘my ears,’ *ne bana-lá* ‘my cheek,’ *ne goa-lá* ‘my forehead,’ *ne caló-la* ‘my chin,’ *ne gutá-la* ‘my neck,’ *ne ronó-la* ‘my foot/feet,’ *ne ralá-la* ‘my sole,’ *ne capagali-la* ‘my calf,’ *ne cokóbo-la* ‘my knee,’ *ne kabóca-la* ‘my ankle.’ Nouns referring to internal organs such as *ne wema-lá* ‘my liver,’ *ne culagóma-la* ‘my heart,’ *ne sona-lá* ‘my lung’ also uses the inalienable construction. Nouns referring to body fluids also use the inalienable possessive construction *towi comá-la* ‘(the) boy’s mucus,’ *tewe ici-la* ‘(the) girl’s urine.’

The use of the inalienable possessive construction for body parts extends to nouns referring to an animal’s body parts. Examples of nouns referring to animal’s’ body parts using the inalienable construction are shown in (2).

- (2) a. *basací wací-la*
 coyote tail-POSS
 ‘coyote’s tail/la cola del coyote’
- b. *torí aná-la*
 hen wing-POSS
 ‘hen’s wing(s)/las alas de la gallina’

- c. *kowí akabó-la*
 pig nose-POSS
 ‘pig’s nose/la nariz del cerdo’

Kinship terms also use the inalienably possessed construction, as illustrated in (3).

- (3) a. *lusia gocíbo-la*
 lucía older.sister-POSS (from a female perspective)
 ‘Lucia’s older sister/la hermana mayor de Lucía’
- b. *nee baciwa-la*
 1SG younger.sister-POSS
 ‘my younger sister/mi hermana menor’ (from a male perspective)
- c. *ne boniwa-la*
 1SG younger.brother-POSS
 ‘my younger brother/mi hermano menor’ (from a male perspective)

More examples of kin terms using the inalienable possessive constructions are *ne ukú-la* ‘uncle/my mother’s older brother), *ne moné-la* ‘my son in law,’ *ne mo’oli-la* ‘my daughter in law,’ *ne kumúci-la* ‘my uncle (my father’s older brother),’ *ne icilá-la* ‘my aunt (my mother’s younger sister),’ *ne atéwa-la* ‘my uncle (my mother’s younger brother),’ *ne ricilá-la* ‘my uncle (my father’s youngest brother),’ *ne ocíi-la* ‘my grandfather (my father’s father),’ *ne sólo-la* ‘my aunt (my father’s older sister),’ *ne nesála-la* ‘my aunt (my mother’s older sister), and the like. One non-kin relationship that is expressed via inalienable possession is that of student and teacher, as seen in (4).

- (4) *alue=ka ne maestra-la*
 DEM=FOC 1SG teacher-POSS
 ‘Este es mi maestro.’
 ‘That (is) my teacher’

One subcategory also included in inalienable possession in some languages concerns items in the “personal domain,” that is, objects associated with the person in a habitual, intimate or very close way (Bally, 1926 [1995]). UT nouns referring to items very closely associated with the person also use the inalienable possessive construction.

In UT, the “personal domain” category includes nouns referring to objects necessary for the survival of the person such as ‘house’ (5a); clothes such as ‘sandals’ (5b), ‘skirt’ (5c), and ‘blouse’; and elements very closely related to the person.

- (5) a. *Juani gari-la*
 John house-POSS
 ‘John’s house/la casa de Juan’
- b. *ne akaraci-la*
 1SG sandal-POSS
 ‘my sandal(s)/mis huaraches’
- c. *ne sipuca-la*
 1SG skirt-POSS
 ‘my skirt/mi falda’

Other nouns referring to personal domain items are *ne rará-la* ‘my footprint(s)’, *ne rewa-lá* ‘my name’, *ne salé-la* ‘my underwear’, *ne opáca-la* ‘my shirt’, *ne batalóni-la* ‘my pants’.

In general, the expression of possession of animals in Tarahumara is coded in the alienable possession construction. However, certain parasites (which are very closely physically associated with the person), like *até* ‘lice’ and *towí* ‘pinworms’, also occur in the inalienable possession category.

- (6) a. *ne até-la*
 1SG louse-POSS
 ‘my lice/mi liendre’
- b. *towí sikóli-la*
 boy pinworm-POSS
 ‘boy’s pinworm/mi gusano’

Tarahumara nouns referring to part-whole relations also use the inalienable possession construction. The concept part whole indicates “entities which imply the existence of some other entity, the ‘whole’ to which they belong, or whitt they are

associated” (Evans 1996). The examples in (7) show three different part-whole combinations in Tarahumara. In these part-whole relations, the “whole” is the possessor and the “part” is treated as the possessed item. The prototypical ‘egg’ has a ‘yolk’ in its interior (7a), a prototypical ‘pumpkin’ has a ‘stem’, which is attached to the rest of the plant (7b), and the prototypical ‘peach’ has a ‘pit’ in its interior (7c).

- (7) a. *kawa rosowá-la*
 egg yolk-POSS
 ‘egg’s yolk/la yema del huevo’
- b. *baci bacago-la*
 pumpkin trunk-POSS
 ‘pumpkin’s stem/las semillas de la calabaza’
- c. *ru’uraci raka-la*
 peach seed-POSS
 ‘peach pit/la semilla del durazno’ (lit. ‘peach’s seed’)

Other part-whole relations in UT are *roxa gaxé-la* ‘tree’s bark’, *mutéla ronó-la* ‘bench’s leg’, *roxa sawá-la* ‘tree’s leaf’, *ramári gahé-la* ‘tamale’s leaf (wrapper),’ *sunú gahé-la* ‘corn’s leaf,’ *ru’ráci gahé-la* ‘peach’s skin,’ *masana gahé-la* ‘apple’s skin,’ *sunú ona-lá* ‘corn’s cob,’ *paci citabo-la* ‘corn’s silk,’ and *oma mulá-la* ‘corn’s flower.’

Grammatically, inalienable possession cannot be indicated merely by the juxtaposition of two nouns or a pronoun and noun. The examples in (8) show that, without the possessed noun bearing the suffix *-ra* ‘POS’, the juxtaposition of two nouns does not result in an acceptable phrase. Nevertheless, the possessive suffix *-ra* may be optional in citation forms for nouns referring to body parts, as in example (9).

- (8) a. **ne ini* [my tongue/mi lengua]
 b. **ne baciwa* [my older brother/mi hermano mayor]
 c. **kawa rosota* [egg’s yolk/la yema del huevo]

- (9) a. *mo'ó(-la)*
head-POSS
'head/cabeza'
- b. *buci(-la)*
eye/s-POSS
'eye(s)/ojo(s)'
- c. *ini(-la)*
tongue-POSS
'tongue/lengua'
- d. *naká(-la)*
ear/s-POSS
'ear(s)/oreja(s)'

For different reasons, the possessive suffix *-ra* is optional for body parts when the body part is (exceptionally) not attached to the body. In this case it is still preferable to use the possessive suffix *-ra*, but its elision does not result in an unacceptable utterance (10-11).

- (10) *ne=ka rewa=turu=ne bire mo'o(-la)*
1SG=FOC find=FOC2=1SG one head-POSS
'Encontré una cabeza.' [en medio del bosque]
'I found a head.' [in the middle of the forest]

- (11) *ne=ka rewa=turu=ne bire gupa(-la)*
1SG=FOC find=FOC2=1SG one hair-POSS
'Encontré un pelo.' [en la sopa]
'I found a hair.' [in the soup]

When the body part is understood to be attached to the body, the use of the possessive suffix *-ra* on the possessed noun is obligatory.

- (12) a. *ne=ka buci-la oko=ne*
1SG=FOC eye-POSS hurt=1SG
'My eyes hurt/mis ojos (me) duelen.'
- b. **neka buci oko=ne* [My eyes hurt/mis ojos me duelen]

Turning now to the question of constituency in the inalienable possessive construction, we have already seen that the possessor must precede the possessed. The other order, possessed-possessor, is not accepted, either for body parts (13), for kin terms (14), for person domain items (15), or for part-whole relationships (16).

- (13) a. **ini-lá ne* [my tongue/mi lengua]
b. **buci-lá mue* [your eyes/mis ojos]
c. **waci-la basací* [coyote's tail/la cola del coyote]

- (14) a. **gocibo-la ne* [my older sister/mi hermana mayor]
 b. **biniwa-la ne* [my younger sister/mi hermana menor]
- (15) a. **gari-la Juani* [John's house/la casa de Juan]
 b. **akaraci-la ne* [my sandal/mis huaraches]
- (16) a. **bacago-la baci* [pumpki's trunk/el tronco de la calabaza]
 b. **ona-la sunu* [corn's cob/la mazorca del maíz]

Having established that the order of possessor and possessed is not flexible, the next question is whether they are separable by other words. As seen in (17-20), the answer is no. Adjectives cannot occur between the possessor and the possessed (17), nor can numerals (18), the descriptive words *o'wi-ná* 'left' and *wato-ná* 'right' (19), or demonstratives (20).

- (17) a. **ne wili ini-lá*
 1SG long tongue-POSS
 [my long tongue/mi lengua larga]
- b. **mue walu buci-la*
 2SG big eye-POSS
 [your big eyes/mis ojos grandes]
- (18) a. **ne bile buci-la* [one of my eyes/my one eye/uno de mis ojos]
 b. **ne bile seka-la* [one of my arms/my one arm/uno de mis brazos]
 c. **ne bile gasi-la* [one of my legs/my one leg/una de mis piernas]
 d. **ne bile rihíma-la* [my one brother/sister/uno de mis hermanos]
- (19) a. *ne seka-la o'wi-ná*
 1sg arm.hand-POSS left-DIST
 'my left hand/mi mano izquierda' (the one who helps)
- b. *ne seka-la wato-ná*
 1SG arm.hand-POSS right-DIST
 'my right hand/mi mano derecha' (the one who works)
- c. **ne owiná seká-la* [my left hand/mi mano izquierda]
 d. **ne watoná seka-la* [my right hand/mi mano derecha]
- (20) a. **Juani ye gari-la* 'this John's house/esta la casa de Juan'
 b. **ne ye sipuca-la* 'this my skirt/esta mi falda'

So it seems that the possessor and the possessed do combine into a solid syntactic constituent with pronominal possessors.

In order to combine numerals with possession, it is possible to place some inalienable nouns into the alienable noun construction (21). The alienable noun construction is discussed in more detail in 3.2.2. Another alternative construction uses possessive predication (22), which is discussed more fully in 4.5. When one wants to predicate about a particular number of body parts, it is possible to make a clause in which the possessor is the subject and the possessed noun can be counted readily without breaking up the possessor-possessed constituent (23).

- (21) a. *ne ini-la oká sipuca*
 1SG GCL-POSS two skirt
 ‘my two skirts/mis dos faldas’
- b. *ne ini-la oká akaraci*
 1SG GCL-POSS two sandals
 ‘my two sandals/mis dos huaraches’
- c. **ne oká sipuca-la* [my two skirts/mis dos faldas]
- d. **ne oká akaraci-la* [my two sandals/mis dos huaraches]

- (22) *ne=ka bile-pi rihim-e-ga-me hu*
 1SG=FOC one-only brother.sister-have-CONT-PTCP be
 ‘Yo sólo tengo un hermano.’
 ‘I have only one brother.’ (Lit. ‘I am one brothered.’)

ne=ka oká bon-e-ga-me hu
 1SG=FOC two brother-have-CONT-PTCP be
 ‘Tengo dos hermanos.’
 ‘I have two brothers.’ (lit. ‘I am two brothered.’)

- (23) *ne=ka bile-na seka-ci oko=ne*
 1SG=FOC one-DIST arm-LOC hurt=1SG
 ‘Un brazo (me) duele.’
 ‘One arm hurts.’ (Lit. ‘I hurt in one arm.’)

Although the possessor and possessed form a tight constituent, there are cases where the possessor is obvious from context, and does not have to be expressed explicitly. In (24), the subject of the clause, *bilistaka* ‘Felicitas’ is the obvious possessor of the later associative N *papa-la* ‘father-POSS’; in (25), the subject of the clause is not mentioned in the clause proper, then is further specified in three consecutive afterthought phrases, the first two consisting of inalienably possessed nouns that lack an explicit possessor, the last one finally specifying who is the possessor, *lurana* ‘Lourdes’.

- (24) *bilista=ka* *mocis* *mi* *eyena-me* *ni-le-kuru* *noca-ga*
 Felicitas=FOC Mochis there walk-PTCP be-PST=FOC2 work.PL-CONT

papa-la *yuga*
 father-POSS with
 ‘Felicitas estaba trabajando en los Mochis con su padre.’
 ‘Felicitas was working in los Mochis with her father.’

- (25) *ta* *noca-me* *ke* *ru-le-kuru,* *rio-la,*
 NEG work.PL-PTCP be.PST say-PST=FOC2 man-POSS

mo'ne-la, *lurana* *rio-la*
 son.in.law-POSS Lourdes man-POSS
 ‘El no estaba trabajando, su hombre, su yerno, el esposo de Lourdes.’
 ‘He was not working, her man, her son in law, Lourdes’ husband.’(LMMY:23)

Inalienable noun roots can become verb stems by the addition of the category-changing derivational morpheme *-e* ‘HAVE’ (26), and when possessed, they must take the inflectional suffix *-la* ‘POSSESSED’ (27). For a fuller discussion of inalienable nouns and the inalienable possessive phrase, see section 3.2.1; for the verbalization of inalienable nouns in the inalienable possession construction, see section 4.5.

- (26) *rihim-e* ‘to have a sibling/tener hermano(s)’
bon-e ‘to have a brother/tener hermano’
gal-é ‘to have a house/tener casa’
mo'-e ‘to have a head/tener cabeza’

(27)	<i>bucí-la</i>	‘eye-POSS/ojo-POSS’
	<i>mo’ó-la</i>	‘head-POSS/cabeza-POSS’
	<i>ronó-la</i>	‘foot-POSS/ pie-POSS’
	<i>bacíwa-la</i>	‘younger.sister-POSS/ hermana menor-POSS’
	<i>rihíma-la</i>	‘sibling-POSS/hermano(s)-POSS’
	<i>moné-la</i>	‘son in law-POSS/yerno-POSS’
	<i>gari-la</i>	‘house-POSS/casa-POSS’
	<i>até-la</i>	‘lice-POSS/liendre-POSS’
	<i>raka-la</i>	‘seed/pit-POSS/semilla-POSS’
	<i>ini-la</i>	‘GCL-POSS’
	<i>buku-la</i>	‘GCL.ANIM-POSS’

This concludes my description of inalienable possession. The next section presents the construction that speakers can use to possess an alienable noun, by means of a small set of genitive classifiers.

3.3.2. Alienable construction

It is known that some languages that grammatically code inalienable versus alienable possession may use GENITIVE CLASSIFIERS in expressing alienable possession inside the NP (Carlson and Payne 1989). In UT, alienable possession has a more elaborated form than inalienable possession. The alienable construction contains the NP possessor (PSR), a genitive classifier (GCL), which also bears the inalienable possession suffix *-ra*, and the possessed NP (PSD); schematically [PSR GCL-*ra* PSD]. Some languages have a highly elaborated group of genitive classifiers. For example, Ponapean, an Oceanic language, has more than twenty genitive classifiers (Rehg, 1981). In contrast, alienable possession in UT has a much more limited system, with only three genitive classifiers: *yu-ra* ‘spouse’, which only applies to husband and wife, *buku-ra* ‘ANIMAL’, which applies to both pets and livestock, and *ini-ra* ‘INANIMATE’, which applies to everything else. After looking at examples of each classifier, I will discuss the constituency of the units in this construction.

The genitive classifier *yu-ra* ‘spouse’ is exemplified in (28-29), both in the order [possessor-GCL possessed] (28a-b) or [possessed possessor-GCL] (29a-b). In contrast, other types of relationship pairs cannot occur with the classifier *yu-ra*, some examples are teacher-student (30a), parent child (30b), other humans like *towi* ‘boy’ (30c). They are expressed through the inalienable construction (3.2.1). Other animate beings like *toli* ‘hen’ (30d) cannot use *yura*. Animals instead use the alienable construction with the GCL *buku-ra* (32). Inanimate objects like *gari* ‘house’ (30e) cannot use *yura*. Inanimate objects use *ini-ra* (35).

- (28) a. *ne yu-la alué muki*
 1SG GCL-POSS DEM woman
 ‘my woman/mi mujer’
- b. *ne yula alué rió*
 1SG GCL-POSS DEM man
 ‘my man/mi hombre’
- (29) a. *alue muki ne yu-la*
 that woman 1SG GCL.P-POSS
 ‘Esa mujer es mi esposa.’
 ‘That woman (is) my wife’
- b. *alue rio ne yu-la*
 that man 1SG GCL.P-POSS
 ‘Ese hombre es mi esposo.’
 ‘That man (is) my husband’
- (30) a. **alueka maestra ne yula* [my teacher]
 b. **alue rana-la ne yula* [my child]
 c. **alue towi ne yura* [my boy]
 d. **alue toli ne yura* [my chicken]
 e. **alue gali ne yura* [my house]

Interestingly, another way to express possession for the members of the couple is to use the inalienable possessive construction (31a-b).

- (31) a. *alue ne rio-la*
 DEM 1SG man-POSS
 ‘Este (es) mi esposo.’
 ‘That (is) my husband.’
- b. *alue ne muki-la*
 DEM 1SG woman-POSS
 ‘Esa es mi esposa.’
 ‘That (is) my wife.’

The next GCL to examine is *buku-ra* ‘genitive classifier for animals’ (GCL.ANIM).

By means of *buku-ra*, almost any animal may be possessed. Almost by definition, domestic animals are possessed (32a-b), but a successful hunter can also possess a wild animal (33a-b). Note again the possibility of the order alternation, possessor-GCL possessed in (32), possessed possessor-GCL in (33).

- (32) a. *Juani buku-la okoci*
 John GCL.ANIM-POSS dog
 ‘John’s dog/el perro de Juan’
- b. *kawe alue rio buku-la*
 horse dem man GCL.ANIM-POSS
 ‘that man’s horse/el caballo de Juan’
- (33) a. *alué comalika ne buku-la*
 DEM venado 1sg GCL.ANIM-POSS
 ‘my deer/mi venado’
- b. *alué armario ne buku-la*
 DEM armadillo 1sg GCL.ANIM-POSS
 ‘my armadillo/mi armadillo’

Some other possibilities are *ne buku-la ciba* ‘my goat,’ *ne buku-la bowi* ‘my pig,’ *ne buku-la misi* ‘my cat,’ *ne buku-la toil* ‘my chicken,’ *ne buku-la culugi* ‘my bird,’ *ne buku-la bulito* ‘my donkey,’ *ne buku-la gawe* ‘my horse,’ *ne buku-la akasi* ‘my cow’. As shown in (34), the inalienable construction cannot be used to indicate possession of animals.

- (34) a. **ne bowí-la* [my pig/mi cerdo]
 b. **ne misí-la* [my cat/mi gato]
 c. **ne tolí-la* [my chicken/mi gallina]

Finally, the GCL *ini-ra* ‘GCL.INAN’ is used to possess inanimate alienable objects, such as *enomí* ‘money’ (35a), and even objects from the nature that are found on someone’s property, like *roha* ‘tree’ (35b), *rete* ‘stone’ (35c), and *gomi* ‘river’ (35d).

- (35) a. *rió ini-la enomí*
 man GCL.IN money
 ‘man’s money/el dinero del hombre’
- b. *ne ini-la roha*
 1SG GCL.IN-POSS tree
 ‘my tree/mi árbol’ [because it is in my land]
- c. *ne ini-la rete*
 1SG GCL.IN-POSS stone
 ‘This is my stone/esta es mi piedra.’ [because it is in my land]
- d. *ne ini-la gomi-ci*
 1SG GCL.IN-POSS river-LOC
 ‘This is my river/este es mi río.’ [because it is in my land]

Turning to the question of constituency, we have already seen that the phrase formed by the possessor and the genitive classifier may precede the possessed noun or follow it. When the possessed precedes the possessor, the speaker wants to call attention to the possessed item, to “make it more important.” However, the possessor-GCL phrase is clearly an inalienable possessed constituent, just like those seen in 3.2.1: the possessed noun may not occur inside the possessor-GCL phrase, between the possessor and the GCL (36, 37a), nor can the possessor follow the GCL (37b).

- (36) **ne alué mukí yula* [my wife/mi esposa]
 **ne alué rio yula* [my man/mi hombre]

- (37) a. **ne enomi ini-la*
 1SG money GCL-POSSS
 [my money/mi dinero]

- b. **enomi ini-la ne*
 money GCL-POSS 1SG
 [my money/mi dinero]

As for other elements of the noun phrase, a demonstrative can occur before the possessor (38a-b) or between the possessor-GCI phrase and the possessed N (39a-b). A number may also occur between the possessor-GCI phrase and the possessed (40a) or before the possessed, which then precedes the possessor-GCI phrase (40b), but it may not intrude between the possessor and the GCL (40c). Adjectives may come between the possessor-GCL phrase and the possessed noun (41a) or preceding the possessed noun, with that then followed by the possessor-GCL phrase (41b); but adjectives cannot occur between the possessor and the GCL (42).

- (38) a. *ye sunu=ka ne ini-la*
 this corn=FOC 1SG GCL-POSS
 ‘This corn (is) mine/este maíz (es) mío.’
- b. *ye iligo=ka ne ini-la*
 this wheat=FOC 1SG GCL-POSS
 ‘This wheat (is) mine/Este trigo (es) mío.’
- (39) a. *ne buku-la alué bo’a=(ka)*
 1sg GCL.ANIM-POS this sheep=(FOC)
 ‘my sheep/mi obeja’ (lit. my animal that sheep)
- b. *ne buku-la ye bo’a=(ka)*
 1sg GCL.ANIM-POS this sheep=(FOC)
 ‘my sheep/mi obeja’ (lit. my animal this sheep)
- (40) a. *ne ini-la bile roha*
 1SG GCL-POSS one tree
 ‘my one tree/mi un árbol’
- b. *bile roha ne ini-la*
 one tree 1SG GCL-POSS
 ‘my one tree/mi un árbol’
- c. **ne bile roha inila* [my one tree/mi un árbol]

- (41) a. *Juani buku-la walu okoci*
 John GCL-POSS big dog
 ‘John’s big dog/el perro grande de Juan’
- b. *walu okoci Juani buku-la*
 big dog John GCL-POSS
 ‘John’s big dog/El perro grande de Juan’
- (42) **Juani walu okoci buku-la* [John’s big dog/El perro grande de Juan]

Finally, like other inalienable possessed nouns, it is possible for a GCL to occur without an explicit possessor, when the possessor is clear from context. The GCL and the possessed can occur with no explicit possessor, as in (43a-c), or without expressing either possessor or possessed as an explicit noun, in which case the GCL has a meaning very similar to the English possessive adjective, like the first singular ‘mine’ (44a-c).

- (43) a. *buku-la okoci*
 GCL-POS dog
 ‘my/someone’s dog/mi perro, el perro de alguien’
- b. *ini-la masana*
 GCL-POSS apple.tree
 ‘my/someone’s apple tree/mi árbol de manzana/el árbol de manzana de alguien’
- c. *yu-la rio*
 GCL-POSS man
 ‘my/someone’s husband/mi hombre, el hombre de alguien’
- (44) a. *buku-la*
 ‘mine/mío’ (animal)
- b. *ini-la*
 ‘mine/mío’ (inanimate object)
- c. *yu-la*
 ‘mine/mío’ (partner)

This concludes the section on possession inside the NP, both inalienable and alienable. In the next sections, we will consider the other parts of speech that occur inside the NP.

3.4. Adjectives

All the languages in the world seem to distinguish at least two parts-of-speech, nouns and verbs. In some languages of the world, the class of adjectives is a distinct class, but for some languages is a subclass of either nouns or verbs, perhaps with some special behavior. A semantic definition of adjective is “words denoting qualities or attributes” (Shopen, 2007:13), “property words” (Croft, 2001:87), or “adjectival concepts” (Dixon, 1982:3). The grammatical characteristics that define the class of adjectives are language particular. Usually adjectives function as attributive noun modifiers (e.g. *long* in *The long hair is beautiful*) or as predicates (e.g. *The hair is long*). In some languages, adjectives can express degree (e.g. *long, longer, longest*), that is, they are gradable (Croft, 2001:87). The range of meanings that adjectives tend to express cross-linguistically includes dimension, color, age and value (Dixon, 1977). This section first addresses the very few unique characteristics of the UT class of adjectives, which is almost identical to nouns (3.3.1); one such property is the order of adjectives in the NP. Then the section turns to how adjectives can be derived from verbs (3.3.2).

3.4.1. Basic adjectives

UT has a small set of un-derived, or basic adjectives. The list of basic adjectives in my database is relatively small — the seven that I have identified so far are listed in (45).

- (45) *utá* ‘small SG/chico SG’ *kucí* ‘small PL/chico PL’
walú ‘big SG/grande SG’ *ewéle* ‘big PL/grande PL’
wilí ‘long SG/largo SG’ *iwéli* ‘long PL/largo PL’
ci’tí ‘thin/delgado’

Three of the adjectives have a suppletive form for singular vs. plural: *utá* ‘small SG’ (46) versus *kucí* ‘small PL’ (47); *wilá* ‘long SG’ (48a) versus *iwéli* ‘long PL’ (48b); and *walú* ‘big SG’ (49) versus *ewéle* ‘big PL’ (50). Note that the plural *ewéle* ‘big PL’ cannot modify abstract nouns (51).

- (46) *utá towí* ‘little kid/niño chico’
utá tolí ‘little chicken/gallina chica’
utá okocí ‘little dog/perro chico’
utá cibá ‘little goat/chiva chica’
- (47) *kucí temáli* ‘small kids/ niños chicos’
kucí tolí ‘small chickens/gallinas chicas’
kucí okocí ‘small dogs/perros chicos’
kucí cibá ‘small goats/chivas chicas’
- (48) a. *wilí inilá* ‘long tongue/lengua larga’
b. *iwéli gupála* ‘long hair/pelo largo’
- (49) *walú galí* ‘big house/casa grande’
walú rió ‘big man/hombre grande’
walú elá ‘big amount of blood/mucha sangre’
walú gastígo ‘big punishment/castigo grande’
- (50) *ewéle gali* ‘big houses/casas grandes’
ewéle riowe ‘big men/hombres grandes’
- (51) **ewéle fiesta* [big celebrations/fiestas grandes]
**ewéle gastígo* [big punishments/castigos grandes]

In contrast, *ci’tí* ‘thin’ can modify either singular or plural referents (52-53)

- (52) *ci’tí tewé* ‘thin girl/niña delgada’
- (53) *c’iti umugí* ‘thin women/mujeres delgadas’

The group of underived adjectives in UT is small, and because most derived adjectives can also be translated as nominalizations in languages like Spanish and English, the doubt arises whether there is a real syntactic difference between nouns and adjectives. However, there are a few syntactic collocations that treat nouns and adjectives differently. First, the intensifier *we* ‘very’ can modify adjectives (54), but not nouns (55).¹

- | | | |
|------|-------------------------|-------------------------------------|
| (54) | <i>we ci'tí tewé</i> | ‘very thin girl/niña muy delgada’ |
| | <i>we utá tewé</i> | ‘very small girl/niña muy chica’ |
| | <i>we kuci temálika</i> | ‘very small kids/niños muy chicos’ |
| | <i>we wilí inilá</i> | ‘very long tongue/lengua muy larga’ |

- | | | |
|------|-------------------|-------------------------|
| (55) | * <i>we rohá</i> | [very tree/muy árbol] |
| | * <i>we towí</i> | [very boy/muy niño] |
| | * <i>we tewé</i> | [very girl/muy niña] |
| | * <i>we reté</i> | [very stone/muy piedra] |
| | * <i>we ba'wí</i> | [very water/muy agua] |

In order to be able to use the intensifier *we* ‘very/a lot’ with nouns, the noun has to occur with specific morphology, such as the suffix *-rile* ‘PLACE.OF’, e.g. *roha-rile* ‘tree-PLACE.OF’, ‘a place with trees’ (56).

- | | | |
|------|-----------------------|---|
| (56) | <i>we rohá-rile</i> | ‘a place with a lot of trees/un lugar con muchos árboles’ |
| | <i>we ba'icí-rile</i> | ‘a place with a lot of water/un lugar con mucha agua’ |

The nouns *rió* ‘man’ and *mukí* ‘woman’ are the only nouns that can occur preceded by the word *we* ‘very’ in an idiomatic expression (57a-b). The speaker explained that this is a way to talk about a woman or a man who has the power of healing or doing bad things to other people through magic, perhaps a kind of ‘augmented’ man or woman. Note that *mukí* ‘woman’ also is used in an adjective-like way to indicate females of animal species (section 3.3.2).

¹ The modifier *we* also modifies verbs (see example 107e).

- (57) a. *alué=ka we mukí hu*
 DEM=FOC very woman be
 ‘That woman is a witch / Esa mujer es bruja.’
- b. *alué=ka we rió hu*
 DEM=FOC very man be
 ‘That man is a sorcerer / Ese hombre es brujo.’

A morpheme apparently unique to adjectives in UT is the clitic =*tiri* ‘INTENSIFIER’, which translates as ‘very’. The clitic =*tiri* attaches to the adjectives *walú* ‘big SG’ (58a), *ewéle* ‘big PL’ (58b), *utá* ‘small SG’ (58c), and *kucí* ‘small PL’ (58d), always yielding a translation of ‘very ADJ’.

- (58) a. *walú=tiri rohá*
 big.SG=INTENS tree
 ‘very big tree/árbol muy grande’
- b. *ewéle=tiri okocí*
 big.PL=INTENS dog
 ‘very big dogs/perros grandotes’
- c. *utá=tiri rolí*
 small.SG=INTENS rat
 ‘very small mouse/ratón chiquito’
- d. *kucí=tiri rolí*
 small.PL=INTENS rat
 ‘very small mice/ratones chiquitos’

A noun slot that adjectives generally cannot fill is the syntactic slot of the possessed in the inalienable possessive construction (59), but there is one adjective in my database, *kucí* ‘small PL’ (60), that can occur as the possessed in the inalienable possessive construction. When possessed, it has the idiomatic meaning of ‘my kids’ or a more literal translation ‘my little ones’. Of course, it is always possible that this construction represents the origin of the adjective rather than an unusual use of the adjective.

- (59) **ne ewéle-la* [my big (ones)/mis grandes]
 **ne uta-la* [my small (one)/mis chico]
 **ne wili-la* [my long (ones)/mis largo]
 **ne iwéli-la* [my long (one)/mis largos]
 **ne ci'tí-la* [my thin (one)/mi delgado]
- (60) *né kúci-la* 'my kids/mis hijos'
mué kúci-la 'your kids/tus hijos'

Along with *kúci* 'little PL', the word *ca* 'bad, ugly' appears to be a noun that can become a derived adjective by the addition of the suffix *-tiri* 'ADJ' (61a). Once it bears the suffix, it can modify a noun like a basic adjective would (61b).

- (61) a. *cá-tiri* 'ugly/feo'
 kucí-tiri 'little ones/kids'
 b. *cá-tiri rió* 'ugly man/hombre feo'

3.4.2. Derived adjectives

Very few property concept terms in UT are basic adjectives, leaving most of the concepts that translate as English or Spanish adjectives to be derived. This section briefly describes the two most productive strategies used to derive adjectives from verbs, one placing the participle suffix *-me* directly on the verb stem (62), the other placing the suffix sequence *-ga-me* 'CONTINUOUS-PARTICIPLE' on the verb (63-64). Note that the suffix *-ga* may also appear in a fortis allomorph *-ka* (63b), as well as with the vowel harmonized to *i*, *u*, or *o* (64a-b).

- (62) *lá-me* 'old (fem)/vieja'
océra-me 'old (masc)/viejo'
cimá-me 'beautiful, pretty/bonita(o)'
lasá-me 'soft1/suave'
lomí-me 'soft2/suave'

- (63) a. *wa-ga-me* ‘strong/fuerte’
oporú-ga-me ‘irascible/enojón’
yé-ga-me ‘liar/mentiroso’
ra’la-ga-me ‘wide/ancho’
ratá-ga-me ‘hot/caliente’
rulá-ga-me ‘cold/frío’
wakí-ga-me ‘dry/seco’
ra’í-ga-me ‘tasty/sabroso’
aká-ga-me ‘sweet/dulce’
biká-ga-me ‘rotten/podrido’
aká-ga-me ‘salty, sweet/salado, dulce’
- b. *rosá-ka-me* ‘white/blanco’
setá-ka-me ‘red/rojo’
ulá-ka-me ‘yellow/amarillo’
- (64) a. *cokó-go-me* ‘sour/agrio’
cikú-gu-me ‘bitter/amargo’
gulú-gu-me ‘thick/espeso’
iníli-gi-me ‘disrespectful/grosero’
wakí-gi-me ‘hard/duro’
- b. *siyó-ko-me* ‘green.blue/azul.verde’
có-ko-me ‘black/negro’

In the same way as basic adjectives, the adjectives derived with *V-me* (65) and *V-ga-me* (66) can modify a noun in the NP, whether preceding the modified noun, as in (65), or following it, as in (66). Derived adjectives may also be preceded by the intensifier *we* ‘very’ (67).

- (65) *lá-me muki* ‘old woman/mujer vieja’
océra-me rió ‘old man/hombre viejo’
cimá-me tewé ‘beautiful girl/niña bonita’

- (66) a. *masana* *setá-ka-me*
apple red-CONT-PTCP
'red apple'
- b. *culugí* *ulá-ka-me* 'yellow bird/pájaro amarillo'
c. *masana* *siyó-ko-me* 'green.blue apple/manzana verde'
d. *opaca* *siyó-ko-me* 'green.blue shirt/camisa azul.verde'
e. *okocí* *có-ko-me* 'black dog/perro negro'
f. *okocí* *rosá-ka-me* 'white dog/perro blanco'
g. *cibá* *rosá-ka-me* 'white goat/chiva blanca'
h. *okocí* *ulá-ka-me* 'yellow dog/perro amarillo'
- (67) *we wa-ga-me* 'very strong/muy fuerte'
we oporú-ga-me 'very irascible/muy enojón'
we yé-ga-me 'very liar/muy mentiroso'
we iníli-gi-me 'very disrespectful/muy grosero'
we ratá-ga-me 'very hot/muy caliente'
we rulá-ga-me 'very cold/muy frío'
we waki-ga-me 'very dry/muy seco'
we ra'i-ga-me 'very tasty/muy sabroso'
we aká-ga-me 'very sweet or salty/muy dulce o salado'
we cokó-go-me 'very sour/muy amargo'
we cikú-gu-me 'very bitter/muy agrio'
we biká-ga-me 'very rotten/muy podrido'
we waki-gi-me 'very hard.muy duro'
we gulú-gu-me 'very thick/muy espeso'

Full-clause examples of a derived adjective modifying a head noun occur in (68).

Note that in (68b), the subject NP has three words in it: first the demonstrative *alué* 'that', then the head N *okocí* 'dog', and finally the derived adjective *cókome* 'black'.

- (68) a. *okocí có-ko-me* *tewé ikí-li-ge*
dog be.black-CONT-PTCP girl bite-3-PST
'A black dog bit the girl/Un perro negro mordió a la niña.'
- b. *alué okocí có-ko-me* *ne-cí ikí-ge*
dem dog be.black-CONT-PTCP 1SG-LOC bite-PST
'That black dog bit me/El perro negro me mordió.'
- c. *cibá rosá-ka-me* *tewé rahicó-li-ge*
goat be.white-CONT-PTCP girl gore-3-PST
'The white goat gored the girl/La chiva blanca cornó a la niña.'

As mentioned earlier, there is no morphological gender in UT. To specify the gender of an animal, speakers use the gender adjective *garóni* ‘male’ and the gender noun *mukí* ‘female’. Like other adjectives, the adjective *garóni* ‘male’ follows the head N (69), as seen also in the full sentence examples in (70a-c). In contrast, to indicate female animals, the type of animal occurs in the possessor role of the inalienable possession construction, with *mukí-ra* ‘female-POS’ in the possessed role (71). When I constructed examples with *mukí* occurring after the head noun, but not possessed, or with *garóni-ra* ‘male-POS’ occurring in the inalienable possession phrase, both were rejected (72).

- (69) *toli garóni* ‘rooster/gallo’
cibá garóni ‘male goat/chivo’
gowí garóni ‘male pig/cerdo macho’
bulito garóni ‘male donkey/burro’
kawé garóni ‘male horse/caballo’
basací garóni ‘male coyote/coyote macho’
ohí garóni ‘male bear/oso macho’
culugí garóni ‘male bird/pájaro macho’
- (70) a. [*cibá garóni*] *tewé rahicó-li-ge*
goat male girl gore-3-PST
‘A male goat gored the girl/El chivo cornó a la niña.’
- b. [*tolí garóni*] *tewé cu’má-li-ge*
chicken male girl peck.at-3-PST
‘The rooster pecked at the girl/el gallo le picó a la niña.’
- c. *né=ka [tolí garóni] me’e-gé=ne*
1SG=FOC chicken male kill-PST=1SG
‘I killed the rooster/yo maté al gallo.’
- (71) a. *toli mukí-la*
chicken female-POS
‘female chicken/gallina’ [Lit. goat’s female]
- b. *cibá mukí-la* ‘female goat/chiva’
c. *akasi mukí-la* ‘female cow/vaca’
d. *kowí mukí-la* ‘female pig/cerdo hermbra’
e. *bulito mukí-la* ‘female donkey/burra’
f. *kawé mukí-la* ‘mare/yegua’

- | | | | |
|------|----|---------------------------|-------------------------------|
| | g. | <i>basací muki-la</i> | ‘female coyote/coyote hembra’ |
| | h. | <i>ohí muki-la</i> | ‘female bear/oso hembra’ |
| | i. | <i>culugí muki-la</i> | ‘female bird/pájaro hembra’ |
| (72) | a. | * <i>tolí muki</i> | [chicken woman/gallina mujer] |
| | b. | * <i>cibá muki</i> | [goat woman/gallina mujer] |
| | c. | * <i>toli garoni-la</i> | [male chicken] |
| | d. | * <i>cibá garóni-la</i> | [male goat] |
| | e. | * <i>gowí garóni-la</i> | [male pig] |
| | f. | * <i>bulito garóni-la</i> | [male donkey] |

So even though the concepts ‘male’ and ‘female’ come from the same conceptual category (and even form an antonymic pair), the fact that the two terms in UT come from two different word classes means that they must utilize different kinds of constructions in order to modify the head noun. Thus, these examples show a limitation in the possible uses of even a very adjective-like noun to modify other nouns. While the form *garoni* ‘male’ comports itself entirely like an adjective, the corresponding female term, *muki* ‘woman’, requires a possessive construction in order to modify another noun.

Having described the primary use of *-me* and *-ga-me*, which is to derive adjectives, I now turn to the rare cases in which words derived by these same suffixes sometimes appear to be functioning as nouns. For example, *go’a-me* ‘eat-PTCP’ is the common word for ‘food’, and as such it looks like any noun, being determined by a demonstrative (73a) and bearing the inalienable possession suffix *-ra* when possessed (73b). Similarly, the word *ruwí-me* ‘say-PTCP’ translates as ‘advice’, and can serve as the direct object of the verb *nisa* ‘give’ in the idiomatic saying *ruwí-me nisa* ‘give me some advice’, literally ‘give one saying’ (73c). Also, the word *ici-ru-ga-me* ‘plan-PASS-CONT-PTCP’ translates as ‘planting’, or ‘the thing that is/has been planted’, and when treated as a referential entity, it can be possessed via the inanimate genitive classifier (74). In future research, I hope to explore more widely to see how many more forms like this exist, and

therefore if it is possible that the [V-*me*] and [V-*ga-me*] forms more productively can be used syntactically as nouns.

- (73) a. *ye go'a-me*
 this eat-PTCP
 'this food/esta comida'
- b. *ne go'á-me-la*
 1SG eat-PTCP-POSS
 'my food/mi comida'
- c. *bilé ruwí-me nisa*
 one say-PTCP give
 'Dame un consejo.'
 'Give [me] a piece of an advice.' (Lit. give one saying)
- (74) *juani ini-la ye ici-ru-ga-me*
 John GCL.INAN-POSS DEM planting
 'John's planting'

I conclude this section with some illustrative examples from texts, where it is exceptionally rare to find adjectives modifying nouns in NPs. The property words in (75-76) occur instead of the noun, and therefore look like the head of a noun phrase. In examples (75a-b), the adjective *walú* 'big, a lot' occupies the syntactic slot of the O argument for the verb *go'á* 'eat' (although it could be in the role of an adverbial modifier, parallel to the. In example (75) the adjective *kucí* 'little' is inalienably possessed, which triggers the interpretation of 'the little ones' as children owned by the possessor. It is the subject of the intransitive verb *oceru* 'grow up.'

- (75) a. *riku=guru-ne eyena gariga walu go'-sa*
 to.totter=FOC2-1SG walk completely big eat-WHEN
 'Ando ataratado cuando como mucho.'
 'I (am) dizzy when I eat a lot.' (ADJ:109)
- b. *lusita=ka walu go'a-le*
 Lucía=FOC big eat-PST
 'Lucía comió mucha comida.'
 'Lucía ate a lot (of food).'

- (76) *oceru eme kuci-la cuwabuga ruwi-ga*
 grow.up 2PL little-POSS all tell-CONT

oceru-bo-ka la ani=guru
 grow.up-FUT-CONT good say=FOC2

‘Cuando tus hijos crezcan aconséjalos sobre todo, cuando estén creciendo aconséjalos bien.’

‘When your kids are growing up, advise (them) about all; (when they) are growing advice them well.’ (COL:33) [Lit. your little ones]

In texts, we also see adjectives used with adverbial meanings, such as *wili* ‘long SG’ used to indicate a temporal ‘long time’ (77) or *ewéle* ‘big PL’ used to indicate the desire for someone to ‘speak bigger’, i.e., ‘louder’ (78).

- (77) *wili moci-go ri=guru pani-mi*
 long.SG sit.PL-CONT say=FOC2 uphill-DEM

‘Se quedaron largo tiempo allá arriba, dijeron.’

‘They stayed long time up there, they say.’ (ACCLOLA:37)

(Lit. ‘They stayed seated long there uphill.’)

- (78) *la ewéle ra'ica-ga ani-bo=guru*
 AFF big.PL speak-CONT say-FUT=FOC2

‘Habla recio!’

‘Speak louder!’ (ACCLOLA:2) (Lit. ‘Say it, speaking big!’)

3.4.3. Numerals and number

One of the typical inflectional categories for nouns is number, but UT does not have inflectional number marking for nouns, although it does have a number distinction in some suppletive verb stems (see especially section 4.3 for suppletion in posture verbs). Inside the noun phrase, the category of number is specified syntactically in the noun phrase through noun modifiers such as numbers, quantity modifiers, etc. The order of the numeral and the quantifier in UT is preceding the noun as we can see in (79) where the number *bilé* ‘one’ precedes the noun, in (80) the numeral *oká* ‘two’, and in (81) the quantifier *weká* ‘a lot of’ precedes the noun. Although the semantics of the noun phrase in both (80) and (81) are plural, the form of the noun does not change.

- (79) *bilé rió* ‘one man/un hombre’
bilé rohá ‘one tree/un árbol’
bilé galí ‘one house/una casa’
- (80) *oká gali* ‘two houses/dos casas’
oká okoci ‘two dogs/dos perros’
oká opáca ‘two shirts/dos camisas’
oká towi ‘two boys/dos niños’
- (81) *weká rió* ‘a lot of men/muchos hombres’
weká rohá ‘a lot of trees/muchos árboles’
weká galí ‘a lot of houses/muchas casas’

In elicitation, the sequence [DEMONSTRATIVE NUMERAL NOUN] is possible as in

(82).

- (82) *ye oká rarómuri*
 this two Tarahumara
 ‘these two ralómuli/estos dos ralómulis’

3.5. Pronouns

In UT pronouns carry information pertaining to person and number. The language exhibits two sets of pronominal forms: long form free pronouns, and short forms enclitics for first and second person singular. UT has also subject indexation in the verb. It occurs exclusively in past tense (see a detailed description in chapter V). The demonstrative *alué* ‘that’ functions in UT as a third person free pronoun, using the same form for singular and plural. Free pronouns are the same for subject and object except for 1SG, which in object function is uniquely marked with the locative suffix *ne-ci* ‘1SG-LOC’. This section considers free pronouns, including demonstrative pronouns that also serve as determiners (3.4.1); then it considers encliticized pronouns (3.4.2).

3.5.1. Free pronouns

Free pronouns in UT have the same form for subject and object except for first person singular, which may take the locative suffix *-ci* when it is an object. For the forms, see table 3.1, and for full sentence illustrations, see (83a-e). I postpone discussion and illustration of the cliticized pronouns for first and second person singular until section 3.4.2.

Table 3.1. Urique Tarahumara free personal pronouns

	SUB free PRON	OBJ free PRON	CLITICS
1SG	<i>ne</i>	<i>ne-ci</i>	= <i>ne</i>
2SG	<i>mué</i>	<i>mué</i>	= <i>mo</i>
1PL	<i>ramué</i>	<i>ramué</i>	
2PL	<i>éme</i>	<i>éme</i>	

- (83) a. *né=ka mué eté-ge=ne*
 1SG=FOC 2SG see-PST=1SG
 ‘I saw you/Yo te vi.’
- b. *mué=ka ramué eté-ge=mo*
 2SG=FOC 1PL see-PST=2SG
 ‘You saw us/Tú nos viste.’
- c. *né=ka alué eté-ge=ne*
 1SG=FOC 3 see-PST=1SG
 ‘I saw her/him/them/Yo lo vi.’
- d. *ramué=ka éme eté-ru-ge*
 1PL=FOC 2PL see-1PL-PST
 ‘We saw you all/Nosotros los vimos (a ustedes).’
- e. *éme=ka ramué eté-le*
 2PL=FOC 1PL see-PST
 ‘You all saw us/Ustedes nos vieron.’

The distal demonstrative *alué* ‘that’ functions as both an anaphoric third person SG/PL pronoun (84) and as a demonstrative determiner to the head noun of a noun phrase

(85); in contrast, the proximal demonstrative, *ye* ‘this’ serves only as a determiner (86).²

In the NP, the demonstrative precedes both adjective and noun (87).

- (84) *alue=ka nóca-me hu*
 3=FOC to.work-PTCP be
 ‘El es trabajador.’
 ‘He is hard working.’
- (85) a. *alué gari* ‘that house/esa casa’
 b. *alué rete* ‘that stone/esa piedra’
 c. *alué roha* ‘that tree/ese árbol’
 d. *alué okocí* ‘that dog/este perro’
 e. *alué rarómuri* ‘that people/esta gente’
 f. *alué tolí* ‘that chicken/esta gallina’
 g. *alué opáca* ‘that blouse/esta blusa’
 h. *alué sipúca* ‘that skirt/esta falda’
 i. *alué aká* ‘that sandal(s)/estos huaraches’
 j. *alué towí* ‘that boy/este niño’
- (86) a. *ye gali* ‘this house/esta casa’
 b. *ye rete* ‘this stone/esta piedra’
 c. *ye roha* ‘this árbol/este árbol’
 d. *ye okocí* ‘this dog/este perro’
 e. *ye rarómuri* ‘this people/esta gente’
 f. *ye tolí* ‘this chicken/esta gallina’
 g. *ye opáca* ‘this blouse/esta blusa’
 h. *ye sipúca* ‘this skirt/esta falda’
 i. *ye aká* ‘this sandal(s)/estos huaraches’
 j. *ye towí* ‘this boy/este niño’
- (87) *alue walu hariya*
 DEM big pot
 ‘that big pot/esa olla grande’

The following examples are from text and show the sequence demonstrative + noun using the demonstratives *ye* ‘this’ (88) and *alue* ‘that’ (89).

² This claim may be too strong; it is based in both my text and elicitation databases. A larger database in the future might reveal a different story about *ye* ‘here’.

- (88) *cuwábuga boni-bo=guru ye ohkó*
 all remove-FUT=FOC2 DEM pine
ané-li-ge rá-ga-ru
 say-3-PST say-CONT-PASS
 ‘Sacaremos todos estos pinos, dijeron.’
 ‘We will remove all these pines, people said.’ (GANO:148)

- (89) a. *ne ríge, ne kolá-le=kuru*
 1SG then 1SG confuse-PST=FOC2
alige alué yolí=ka
 then DEM.DIS mestizo=FOC
 ‘Entonces yo...ese mestizo me confundió.’
 ‘Then I...That mestizo mistook me (for some one else).’ (ADJ:15)

3.5.2. The 1SG & 2SG pronominal enclitics

The free pronouns *ne* ‘1SG’ and *mue* ‘2SG’ can also occur as verbal enclitics, =*ne* ‘1SG’ and =*mo* ‘2SG’. They can be the only register of 1SG and 2SG in the clause, or they can agree with a free 1SG or 2SG nominative pronoun (S, A), and in some circumstances, P. These enclitics occur on verbs of any tense-aspect, and for the past tense, they are the only grammatical mark of the singular speech act participant (SAP) subject (see chapter V section 5.1.1.2). The first four examples show these enclitics marking S on an intransitive verb. The clitic may or may not co-occur with a coreferential free pronoun: the free pronoun and the enclitic co-occur in (90), the enclitic occurs alone in (91), and the free pronoun occurs alone in (92).

- (90) a. *né=ka eyena-molá=**ne** tú-mi*
 1SG=FOC walk.SG-FUT=1SG down.hill-DEM
 ‘Voy a caminar alla colina abajo.’
 ‘I am going to walk down hill.’
 b. *mué=ka eyena-molá=**mo** miná-mi*
 2SG=FOC walk.SG-FUT=2SG over.there-DEM
 ‘Tú vas a caminar para allá.’ [camino plano]
 ‘You are going to walk over there.’ [flat landscape]

- (91) a. *kulípi noli-molá=ne*
 near.future come.SG-FUT=1SG
 ‘ahorita voy a venir.’
 ‘I will come in a moment.’
- b. *kulípi noli-molá=mo*
 near.future come.SG-FUT=2SG
 ‘Ahorita vas a venir.’
 ‘You will come in a moment.’
- (92) a. *né=ka ena-molá miná-mi*
 1SG=FOC walk.SG-FUT there-DEM
 ‘Yo voy a caminar para allá.’ [camino plano]
 ‘I am going to walk there.’ [flat landscape]
- b. *mué=ka ena-molá miná-mi*
 2SG=FOC walk.SG-FUT there-DEM
 ‘Tú vas a caminar para allá.’ [camino plano]
 ‘You are going to walk there.’ [flat landscape]

For transitive verbs, the function of these clitics is marking a 1SG or 2SG subject

(93-94), regardless of the person of the object.

- (93) a. *né=ka mué eté-ge=ne*
 1SG=FOC 2SG see-PST=1SG
 ‘I saw you/Yo te vi.’
- b. *né=ka alué mukí eté-ge=ne*
 1SG=FOC dem woman see-PST=1SG
 ‘I saw that woman/Yo vi (a) esa mujer.’
- c. *né=ka éme eté-ge=ne*
 1SG=FOC 2PL see-PST=1SG
 ‘I saw you all/Yo (los) vi (a) ustedes.’
- d. *né=ka alué umugí eté-ge=ne*
 1SG=FOC DEM woman see-PST=1SG
 ‘I saw those women/Yo vi (a) esas mujeres.’
- (94) a. *mué=ka ne-cí eté-ge=mo*
 2SG=FOC 1SG-LOC see-PST=2SG
 ‘You saw me/Tú me viste.’

- b. *mué=ka alué rió eté-ge=mo*
 2SG=FOC DEM man see-PST=2SG
 ‘Tu viste (a) ese hombre.’
 ‘You saw that man.’
- c. *mué=ka ramué eté-ge=mo*
 2SG=FOC 1PL see-PST=2SG
 ‘Tú nos viste.’
 ‘You saw us.’
- d. *mué=ka alué umugí eté-ge=mo*
 2SG=FOC DEM woman see-PST=2SG
 ‘Tú viste (a) esas mujeres.’
 ‘You saw that women.’

The subject free pronoun can be omitted, with the object occurring as a free pronoun either before (95a, 96a) or after (95b, 96b) the verbal word, or even not occurring at all (97). In all these circumstances, the verbal enclitic is interpreted as the subject.

- (95) a. *eté-ge=ne mué*
 see-PST=1SG 2SG
 ‘Yo te vi.’
 ‘I saw you.’
- b. *mué eté-ge=ne*
 2SG see-PST=1SG
 ‘Tú me viste.’
 ‘I saw you.’
- (96) a. *ne-cí eté-ge=mo*
 1SG-LOC see-PST=2SG
 ‘Tú me viste.’
 ‘You saw me.’
- b. *eté-ge=mo ne-cí*
 see-PST=2SG 1SG-LOC
 ‘Tú me viste.’
 ‘You saw me.’
- (97) a. *eté-ge=ne*
 see-PST=1SG
 ‘I saw (it)/Yo (lo) vi.’

- b. *eté-ge=mo*
 see-PST=2SG
 ‘You saw (it)/Tú (lo) viste.’

The one circumstance in which these enclitics can mark 1SG P or R or 2SG P is when there is a third person subject. In the past tense verb, a third person subject is indexed via the suffix *-li* (see chapter V) and, optionally, the verb can also bear the enclitic *=ne* ‘1SG’ (98a-b). After discovering this pattern in texts, I looked for it in elicitation, then discovered the same pattern also when 3A acts on 2SG P, with the verb bearing both *-li* ‘3’ and the enclitic *=mo* ‘2sg’ (99).

- (98) a. *apé ruyé-li-ge=ne né=ka yabé cigó*
 like.that tell-3-PST=1SG 1SG=FOC before too
 ‘Alguien me dijo (eso) hace mucho tiempo.’
 ‘Someone told me (that), to me, a long time ago.’ (COL:20)
- b. *apirigá lolá-ri-ge=ne yabé*
 like do.NEG-3-PST=1SG before
 ‘Alguien me hizo algo muy malo hace mucho tiempo.’
 ‘Someone did something bad to me long time ago.’ (ADJ:5)

- (99) *alué rióe eté-ri-ge=mo*
 dem man kick-3-PST=2SG
 ‘Ese hombre te pateó.’
 ‘That man kicked you.’

Unlike the possible double-marking of subjects, when the enclitic *=ne* marks 1SG P, the first person free pronoun *neci* cannot co-occur (100). Second person T (Theme) can occur as the clitic *=mo* when third person is the A.

- (100) **alué muki ne-ci eté-li-ge=ne*
 that woman 1SG.LOC kick-3-PST=1SG
 [That woman kicked me/Esa mujer me pateó]
- (101) *mué papá-la mue yá-ri-ge=mo ne*
 2SG father-POSS 2SG give-3-PST=2SG 1SG
 ‘Tu padre te regaló a mi.’
 ‘Your father gave you to me.’

- (102) **alué rioe ene-gé=ne ne-cí yuga*
 [That man saw me/ese hombre me vió a mi]

It is never accepted for two enclitics to occur together (103). It is also unacceptable when a subject pronoun and an enclitic both occur, but do not agree — i.e., the enclitic cannot mark 1SG P when the subject is 2SG A, nor can it mark or 2SG P when the subject is 1SG A (104).

- (103) **ne=ka mue eté-ge=ne=mo* [I saw you/Yo te vi]
 **ne=ka mué eté-ge=mo=ne* [I see you/Yo te vi]
 **mue=ka neci eté-ge=mo=ne* [You saw me/Tú me viste]
 **mue=ka necí eté-ge=ne=mo* [You saw me/Tú me viste]

- (104) **ne=ka mué eté-ge=mo* [I saw you/Yo te vi]
 **mué=ka neci eté-ge=ne* [You saw me/Tú me viste]

In sum, the verbal indexation of 1SG and 2SG core arguments differs with respect to the other markers (see chapter V): they can be expressed as final enclitics, rather than suffixes that proceed tense markers (as I will show in chapter V). Also, while they occur frequently, the enclitics are not obligatory like the suffixes. Finally, in function, these enclitics can encode not only subjects, but they also mark 1SG and 2SG objects when A is third person.

3.6. Postpositions in UT

The postpositional system in UT is complex, and this is not the venue to give a full description. However, it is also a distinct characteristic of the NP that it can occur as the object of a postposition, postpositions are traditionally written as suffixes in UT. This section is limited to showing a short list of the postpositions, both alone and in combination with adverbs and relational nouns, leaving for future work a deep study of the adpositional system in UT. My short list of postpositions includes *-ci* ‘LOCATIVE’, *-ka*

‘ABLATIVE’, *móba* ‘over’, *rile* ‘at’; these occur in combination with the adverbs *repá* ‘up there,’ and *rabótu* ‘on the hill’, plus what appear to be relational nouns, *amóba* ‘over’ and *koliwuána* ‘behind’.

The postposition *-ci* is semantically a general locative, indicating static location that translates as ‘on’, ‘in’, or ‘at’. Like verbs, some noun roots retain primary stress (105) and others do not (106).

- | | | |
|-------|------------------|-------------------------------|
| (105) | <i>re'obá-ci</i> | ‘at the chapel/en la iglesia’ |
| | <i>betél-ci</i> | ‘at the house/en la casa’ |
| | <i>mésa-ci</i> | ‘on the table/en la mesa’ |
| | <i>gomí-ci</i> | ‘at the river/en el río’ |
| | <i>repóli-ci</i> | ‘on the rock/en la roca.’ |
| | <i>iwí-ci</i> | ‘on the cord/en la cuerda’ |
| (106) | <i>rono-cí</i> | ‘in the knee/ en la rodilla’ |
| | <i>mo'o-cí</i> | ‘on the head/en la cabeza’ |
| | <i>biti-cí</i> | ‘at the house/en la casa’ |

Locative *-ci* occurs on the word that expresses the ground where a figure is located; making that ground its object. When the figure is an entity, it is then expressed as the subject of a locative predicate, which is headed by one of the posture verbs (see section 4.3 for a fuller treatment). When the figure is an event, the locative phrase occurs as an adjunct to the clause that expresses the event. In (107a-b), the adverb *repá* precedes the PP, indicating the direction in which the ground, *repoli-ci* ‘rock-LOC’ or *iwí-ci* ‘cord-LOC’ may be found. In (107c), the adverb *amoba* ‘over’ further specifies the relation between the ground and the figure, indicating that the shirt is not just generally *kama-ci* ‘bed-LOC’, but that the specific location is *amóba* ‘over’ the superficial surface of the bed. In (107d-e), *-ci* marks the location where the event of perceiving a body sensation is felt, the pain of *uku* ‘hurt’ in (107d) and the itchy sensation of *cipabáli* ‘itch’ in (107e).

- (107) a. *repá repóli-ci oká okocí ucú*
 up.there rock-LOC two dog stand4.PL
 ‘Arriba en la roca hay dos perros parados.’
 ‘Up there on the rock there are two dogs standing.’
- b. *repá ucú iwí-ci oká sipúca*
 up.there stand4.PL cord-LOC two skirts
 ‘Arriba en el tendedero hay dos faldas colgadas.’
 ‘Up there, there are two skirts hanging on the clothesline.’
- c. *amóba káma-ci mocí oká opáca*
 over bed-LOC sit.PL two shirt
 ‘En la cama hay dos camisas.’
 ‘On the bed there are two shirts.’
- d. *mo'o-cí okó*
 head-LOC hurt
 ‘The head hurts/duela la cabeza.’ (lit. ‘It hurts in the head’)
- e. *ne=ka we cipabáli=ne mo'o-cí*
 1SG=FOC a.lot itch=1SG head-LOC
 ‘(Tengo) mucha comezón en la cabeza.’
 ‘I (am) very itchy on the head/

Another fairly general locative postposition is *-rile* ‘at’, which occurs in (108a) in combination with the more specific locational adverb *koliwuána* ‘behind’; in (108b), *-rile* ‘at’ takes two pre-PP words, each indicating a different component of the more specific location: *koliwuána* ‘behind’ and the relational noun *pacá* ‘inside’.

- (108) a. *koliwuána galí-rile oká towí mocí*
 behind house-at two boy sit.PL
 ‘Atrás de la casa están dos niños.’
 ‘Behind the house there are two kids.’
- b. *koliwuána pacá galí-rile bití aká*
 behind inside house-at lie.PL sandals
 ‘Los huaraches están dentro de la casa.’
 ‘The sandals are behind, inside the house.’

In (109), the postposition *-móba* ‘over’ marks that the figure is located on a superficial surface of the ground, in combination with the adverb *repá* ‘up there’, which indicates the direction one should look to see the ground with its superficial figure.

- (109) a. *repá gali-móba oká rokósoli ucú*
 up.there house-over two spider stand4.PL
 ‘Arriba en el techo hay dos arañas.’
 ‘Up there on the ceiling there are two spiders.’
- b. *repá gali-móba oká otolí bití*
 up.there house-over two chicken lie.PL
 ‘Arriba en el techo hay dos gallinas.’
 ‘Up there on the roof there are two chickens lying.’

The postposition *-ka* ‘from’ is homophonous with *=ka* ‘focus’. In (110a), note that it is the relational noun that bears the postposition, *pacá-ka* ‘inside-from’; whereas in (110b), the postposition follows a demonstrative pronoun. Note that *-ka* codes a dynamic relation, the source from which something moves, and as such, the *-ka* PPs do not occur in the static locative predicate construction, but rather as adjuncts to clauses headed by movement verbs; as such, they come at the ends of the examples.

- (110) a. *bile nolina=turu paca-ka*
 one come=FOC2 inside-from
 ‘Uno viene de adentro (de la casa).’
 ‘One comes from inside [of the house].’ (ACCDJ:42b)
- b. *wici-li-ga komiena oto-ru=pa=mo ale-ka*
 ground-PTCP-CONT where take-PASS=Q-2SG dem-from
 ‘A donde la llevaron de ahí.’
 ‘Where did they take her from there? (ADJ:65)

I end this section with two brief examples from text, one of which (111) shows the locative postposition behaving precisely as expected, indicating that *re’oba-ci* ‘church-LOC’ is the location where the event of praying takes place. Example (112) is something of a surprise, in which the postposition *-ci* marks a number borrowed from

Spanish in order to indicate a location in time, almost as though it were filling the slot of *de* in the Spanish phrase *el veintiséis de junio* ‘the 26 of June’.

(111) *amaci-po* *re'oba-ci*
 pray-FUT chapel-LOC
 ‘Vamos a rezar a la iglesia.’
 ‘We are going to pray at the chapel’ (POR:19)

(112) *beintisei=ka-ci* *hunio*
 twenty.six=FOC-LOC June
 ‘On June twenty six/en junio veintiséis’ (RAY:8)

3.7. =ka ‘focus marker’

The clitic =ka ‘focus’ is a phrase-final enclitic, phonologically attached to the last element of the noun phrase, but preferentially marking simple nouns and pronouns. Some simple one-phrase answers to the question ‘which one?’ see the examples in (113), where the enclitic is always attached to the last element of the noun phrase, in these cases just a pronoun or a noun.

(113) *ye=ka* ‘this (one)/este(a)’
alué=ka ‘that (one)/ese(a)’
alué muki=ka ‘that woman/esa mujer’
alué rió=ka ‘that man/ese hombre’
ye reté=ka ‘this rock/esta piedra’
alué okocí=ka ‘that dog/este perro’

In the analysis of Burgess (1984:17), =ka is said to occur on subject, although Burgess does indicate also “in narrative discourse, -ka can be used to mark the main participant.” In my own data, both elicitation and text, most examples of =ka do, in fact, mark the subject, as in the subjects of nonverbal predications in (114), of intransitive verbs in (115), and of transitive verbs in (116).

- (114) a. *alué=**ka** muki hu*
 DEM=FOC woman be
 ‘Esa es una mujer.’
 ‘That is a woman.’
- b. *alué rió=**ka** ralómuli hu*
 DEM man=FOC ralómuli be
 ‘Ese hombre es ralómuli.’
 ‘That man is *ralómuli*.’
- (115) a. *ne=**ka** ili-gé=ne*
 1SG=FOC stand.SG-PST=1SG
 ‘Yo estaba parado.’
 ‘I was standing.’
- b. *mue=**ka** ili-gé=mo*
 2SG=FOC stand.SG-PST=2SG
 ‘Tú estabas parado.’
 ‘You were standing.’
- c. *alué rió=**ka** ilí-li-ge*
 dem man=FOC stand.SG-3-PST
 ‘El hombre estaba parado.’
 ‘That man was standing.’
- (116) a. *ne=**ka** enomí nasó-ke=ne*
 1sg=FOC money hide-PST=1SG
 ‘Yo escondí el dinero.’
 ‘I hid the money.’
- b. *ne=**ka** towí nasó-ke=ne*
 1SG=FOC boy hide-PST=1SG
 ‘Yo escondí al niño.’
 ‘I hid the boy.’
- c. *ramue=**ka** enomí nasó-ti-ge*
 1PL=FOC money hide-1PL-PST
 ‘Nosotros escondimos el dinero.’
 ‘We hid the money.’

In simple elicitation, the speaker did not accept a transitive predicate with the object bearing =*ka*, as seen in (117), which presents the same transitive clause type as (116) except with the clitic =*ka* marking the object.

(117) **alué rió enomí=ka nasó-li-ge*
[That man hid the money/ese hombre escondió el dinero]

**ne enomí=ka nasó-ke=ne*
[I hid the money/yo escondí el dinero]

**ne towí=ka nasó-ke=ne*
[I hid the boy/Yo escondí al niño]

**mué enomí=ka nasó-li-ge=mo*
[You hid the money/Tú escondiste el dinero]

But what if a transitive event has a third person non-human agent acting on a third person human patient? Instead of just marking the patient with focus, the verb occurs in the passive voice and the human patient then becomes the subject of passive, and can thus join other subjects in being marked by =*ka* (118). The semantic agent occurs as an oblique marked with the instrumental: *macili-re* ‘by/with (a) scorpion’.

(118) a. *ne=ka macili-re iki-ri-ge=ne*
1sg=FOC scorpion-INSTR bite-PASS-PAST=1SG
‘Fue mordido por un alacrán.’
‘I was bit by a scorpion.’

b. *mue=ka macili-re iki-ri-gi=mo*
2sg=FOC scorpion-INSTR bite-PASS-PST=2SG
‘Un alacrán te mordió.’
‘A scorpion bit you.’

These examples from elicitation appear to make the distribution of =*ka* absolutely clear, as though it were an optional subject marker, or at best, an information structure marker that is restricted to marking the nominative core argument of a clause. However, examples from text show that the patterns found in elicitation do not tell the entire story. For instance, in (119) =*ka* appears to mark the object pronoun *arue=ka* ‘that=FOC’, and in (120) marks the number that is inside a subordinate phrase, *makwe=ka* ‘ten=FOC’.

(119) *arue=ka oco-le=turu*
 3=FOC punch-PST=FOC2
 ‘Ellos le pegaron.’
 ‘They punched him.’ (ADJ:42)

(120) *makwe=ka bami-gi-me ma nóca-me ni-le=pa?*
 ten=FOC be.years.old-CONT-PTCP already work.PL-PTCP exist-PST=Q
 ‘Tenía diez años y ya trabajaba?’
 ‘Being ten years old, she already was working?’ (ADJ:79)

In addition to these two cases where the NP marked with =*ka* is a non-subject that occurs in its canonical location in the clause, there are quite a few examples where the NP marked with =*ka* follows the verb, in something of an afterthought position, and in these cases, it appears that the semantic role can be almost anything: subject in (121), direct object in (122-123), recipient in (124), addressee of speech verb in (125), and the adverbial *be’a* ‘early’ in (126). Note that in (126) the subject of the clause in its usual sentence-initial position also bears =*ka*, showing that it can occur once inside and once just outside the clause.

(121) *ani-si-a noline=kuru alo=ka*
 say-GO-PROG come=FOC 3=FOC
 ‘El viene y me dice.’
 ‘**He** comes and says (to me).’ (ADJ:56c)
 (lit. ‘comes saying [while moving], **him**)

(122) *ma ta ne labogo-ri=guru ale=ka*
 already NEG 1SG know-APPL=FOC2 DEM=FOC
 ‘No recuerdo eso.’
 ‘I don’t remember **that**.’ (ACCLOLA:13)
 (lit. ‘already I don’t remember it, **that**’)

(123) *pe kale-ga-me hu-pa pe la ani-le=pa alo=ka*
 just lie-CONT-PRTC be=EXPL only AFF say-PFV=EXPL 3=FOC
 ‘Es un mentiroso, sólo dice eso.’
 ‘He is a liar, he only said **that**.’ (ACCLOLA:18)
 (lit. ‘He is just a liar, only yes (he) said it, **that**’)

- (124) *troka nola-ri=guru nali apaloci=ka*
 car bring-3=FOC somebody grandfather.f=FOC
 ‘El traje el carro para alguien, para el abuelo.’
 ‘He brought the car for someone, the grandfather.’ (ACCLOLA:35f)
 (lit. ‘The car was brought, somebody, **grandfather**’)
- (125) *icika ruye-le=pa alue=ka?*
 who tell-PST=Q 3=FOC
 ‘Quién le dijo?’
 ‘Who told **him**?’ (ADJ:57)
 (lit. ‘Who told (it), (to) **him**?’)
- (126) *papa=ka ayo-si-a noline=kuru be’li be’a=ka*
 father=FOC be.angry-GO-PROG come=FOC2 the.next.day early=FOC
 ‘Mi padre llegó enojado el temprano día siguiente.’
 ‘**My father** came very angry very **early** the next day.’ (ADJ:55)
 (lit. ‘**My father** came (being) angry [while moving], the next day **early**.’)

This concludes the chapter on nouns and the noun phrase. In this chapter, we have seen how nouns are distinguished grammatically from the very similar class of adjectives, we have seen the two subtypes of nouns as distinguished by the alienable and inalienable possession constructions, we have seen how other parts of speech occur inside the noun phrase to modify the head noun, and we have seen how adpositions and the focus particle mark the end of the noun phrase. The next chapter will show how the noun phrase can also function as a predicate, along with the other kinds of nonverbal predication.

CHAPTER IV

NONVERBAL PREDICATES

This chapter is dedicated to nonverbal predicates in UT. Dryer (2007:224) divides nonverbal predicates in three types: nominal predicates, adjectival predicates and locative predicates. English uses the verb *to be* for these three nonverbal predicates as for example *Mary is a teacher* (nominal), *Mary is tall* (adjectival), and *Mary is at school* (locative). Nonverbal predicates can occur with a verbal copula like in English. In these examples the subject is the NP *Mary*, and the element that follows the copula is the lexical predicate. The copula is “the morpheme (affix, particle or verb) that ‘joins’, or ‘couples’ two nominal elements in a predicate nominal construction” (Payne, 1997: 114). Dryer (2007:225) differentiates between nonverbal predicates that contain a copula, and thereby are technically verbal clauses with nonverbal lexical predicates, versus nonverbal predicates that do not contain a copula, and are thereby also nonverbal clauses. UT has nonverbal predicates both with a copula and without a copula.

This chapter describes the following range of nonverbal predicates in Urique Tarahumara: Nominal predicates, both [NP NP COP] and Adjectival Predicates with underived adjectives [NP ADJ COP] and two types of derived adjective predicates ([V-*ga-me* COP] and [V-*me* COP] (4.2); Locative predicates [NP Posture verb (POV) Locative (LOC)] (4.3); Existential [NP NP EXIST] (4.4), and Possessive (4.5).

4.1. The nominal predicate construction: [NP NP COP]

The nominal predicate construction in UT contains a NP subject, a NP predicate, and a copula (COP), schematically [NP NP COP]. There are four copulas that can occupy

the syntactic slot in the nominal predicate in UT: the three non-inflecting copulas are *hu* ‘be’, *ka* ‘be (uncertain)’, and *ke* ‘be past’; the only inflectable copula is *ni* ‘exist/be’. The selection of the copula in UT is related to tense, person and certainty: The copula *hu* ‘be’ functions in present tense. The copula *ka* ‘be’ also functions in present tense for uncertain situations. The copula *ke* functions in the past tense. The copula *ni* ‘exist/be’ is more variable because it can inflect for the same range of tenses as any verb: it can mark future or past situations for all persons of subject, and when the subject is first person plural, it can also be used in a present situation. While the copulas *hu* and *ka* can be used with 1PL in present tense (5d, 6d), the preferred choice for 1PL in present tense is *ni*. Table 4.1 summarizes the uses of the copulas in past, present and future tense.

Table 4.1. Copulas and tense in UT

	PAST	PRESENT	FUTURE
<i>hu</i>	-	√	-
<i>ka</i>	-	√	-
<i>ke</i>	√	-	-
<i>ni</i>	√	1PL √	√

Now we take a short look into one of the closest related language to Tarahumara, Guarijío (Miller, 1996). Miller (1996:80) reports three copulas in Guarijío (see example 1).

- (1) Guarijío’s copulas (adapted from Miller, 1996:80)
- iné* ‘be/ser’
 - hú* ‘be/ser’
 - reé* ‘be, seems, looks like/ser, parece’

The Guarijío copula *hu* ‘be’ is cognate with the UT copula *hu* ‘be’. The Guarijío copula *iné* is not a clear cognate of the UT *ni* ‘exist/be’, however; both copulas have

similar sounds, the UT copula *ni* may correspond to the last syllable of the Guarijío's copula *ine*. The copula *iné* in Guarijío does not have an existential meaning (2a,b). The Guarijío copula *reé* has a meaning of 'be, seems, looks like' (3a, b). The Guarijío copula *reé* has no similarity with the UT copula *ka*, but it looks and means almost exactly the same thing as the UT suffix *-re*, which is an 'inferential/indirect evidence' verbal suffix (cf. §5.4.1.1).

- (2) a. *kaláci=muga ine-má e'égo*
crow=2SG be-FUT then
'Vas a ser un cuervo.'
'You are going to be a crow.' (Miller, 1996:81)
- b. *a'ció=ma rikó ine-ré pié tihóé*
very=say rich be-PST a man
'Ellos dicen que era un hombre rico.'
'(They) say that he was a rich man.' (Miller, 1996:81)
- (3) a. *kagapá=hu i'wá-go eci-mé reé*
flat.ground=be here-ENF plant-PTCP be
'Esta tierra es planaparece ser buena para plantar.'
'This ground is flat here seems good for planting.' (Miller, 1996:85)
- b. *pení reé na'í*
beautiful be.seem fire
'El fuego parece bonito.'
'The fire seems beautiful.' (Miller, 1996:85)

4.1.1. Proper inclusion and equative predicates in UT

Predicate nominal clauses can be semantically divided in two subtypes: proper inclusion and equation. I use the term PROPER INCLUSION when "a specific entity is asserted to be among the class of items specified in the nominal predicate" (Payne, 1997:114). For example, in the predication *Mary is a student* it is stated that Mary belongs to the class of elements indicated by the nominal phrase *a student*. In EQUATIVE

predications “(the subject of the clause) is identical to the entity specified in the predicate nominal, e.g., *He is my father*” (Payne, 1997: 114).

In UT, proper inclusion and equative clauses use the same construction, schematically [NP_{SUBJ}(=*ka*) NP_{PRED} COP]. In UT, equative and proper inclusion predicate constructions occur with two NPs and a copula, selected as described in the previous section: *hu* ‘be’ occurs in present tense (4, 5); *ka* ‘be’ can also occur in present tense situations with a sense of uncertainty or surprise (6); *ke* ‘be past’ occurs in past tense situations (11); and *ni* ‘exist/be’ occurs in future and past tense situations, as well as in present tense only for first person plural. Examples in (4) illustrate present tense PROPER INCLUSION clauses with *hu* and examples in (5) illustrate present tense EQUATIVE clauses with *hu*.

(4) Proper inclusion

- a. *ne=ka ralómuli hu=ne*
1SG=FOC people be=1SG
‘I am ralómuli/Yo soy ralómuli.’
- b. *mué=ka ralómuli hú=mo*
2SG=FOC ralómuli be=2SG
‘You are ralómuli/Tú eres ralómuli.’
- c. *Lusí=ka ralómuli hu*
Lucía=FOC ralómuli be
‘S/he is ralómuli/Ella es ralómuli.’
- d. *ramué=ka ralómuli hu*
1PL=FOC ralómuli be
‘We are ralómuli/We are ralómuli.’
- e. *éme=ka ralómuli hu*
2PL=FOC ralómuli be
‘You all are ralómuli/Ustedes son ralómulis.’
- f. *alué umugí=ka ralómuli hu*
DEM women=FOC ralómuli be
‘They are ralómuli/Las mujeres son ralómulis.’

(5) Equative

- a. *ne=ka mué gocilá-la hu*
1SG=FOC 2SG older.sister-POSS be
'I am your older sister/Yo soy tu hermana mayor.'
- b. *mué=ka bini-lá hu*
2SG=FOC younger.sister-POSS be
'You are my younger sister/Tu eres mi hermana menor.'
- c. *alué muki=ka bini-lá hu*
DEM woman=FOC younger.sister-POSS be
'That woman is my younger sister/Esa mujer es mi hermana menor.'
- d. *ramué=ka gocilá-la hu*
1PL=FOC older.sister-POSS be
'We are your older sisters/Nosotras somos tus hermanas mayores.'
- e. *éme=ka bini-lá hu*
2PL=FOC youger.sister-POSS be
'You all are my younger sisters/Ustedes son mis hermanas menores.'
- f. *alué umugi=ka bini-lá hu*
DEM women=FOC younger.sister-POSS be
'They are my younger sisters/Esas mujeres son mis hermanas menores.'

The copula *ka* 'be [uncertain]' is used in present tense situations when there is a kind of surprise or uncertainty about what is stated. *Ka* usually occurs with the dubitative suffix *-ba* (which, in turn, cannot occur with the other copulas) and sometimes with *-ra* 'reportative'.

- (6) a. *ne=ka mué gociwa-la ka-bá=ne*
1SG=FOC 2SG older.sister-POSS be-DUB=1SG
'I am your older sister/Soy tu hermana mayor.'
- b. *mué=ka ne biniwa-la ka-bá=mo*
2SG=FOC 1SG younger.sister-POSS be-DUB=2SG
'You are my younger sister/Eres mi hermana menor.'
- c. *alué muki=ka ne biniwa-la ká-ba*
DEM woman=FOC 1SG younger.sister-POSS be-DUB
'That woman is my younger sister/Esa mujer es mi hermana menor.'

- d. *ramué=ka mué gocilá-la ká-ba*
 1PL=FOC 2SG older.sister-POSS be-DUB
 ‘We are your older sisters/Nosotras somos tus hermanas mayores.’
- e. *éme=ka ne biniwa-lá ká-ba*
 2PL=FOC 1SG younger.sister-POSS be-DUB
 ‘You all are my younger sisters/Ustedes son mis hermanas menores.’
- f. *alué umugí=ka ne biniwa-lá ká-ba*
 DEM women=FOC 1SG younger.sister-POSS be-DUB
 ‘They are my younger sisters/Ellas son mis hermanas menores.’

The examples in (6) can occur in different contexts, all including a type of surprise or uncertainty in the situation, as stated. For example, a speaker might use this construction to assert that ‘X is the sister of Y’ after having previously met X and Y without knowing that they were related to each other. Another possible context is when maybe X and Y have not seen each other since they were kids and now they barely recognize each other. A third possible context would be a dubitative reading, something like “Really? Is she your sister?” This would perhaps be followed by a reason for doubt, like “Because you don’t look like sisters.” In each of the contexts, the constant is that there is some surprise or uncertainty about the sentence stated. The clauses were not accepted without the dubitative *-ba*.

- (7) **ne=ka mué gocilá-la ka* [I am your older sister/Yo soy tu hermana mayor]
**ye=ka rokosóli ka* [This is a spider/Esta es una araña]

Examples in (8) show the contrast between the copulas *hu* and *ka* with an example from text. In example (8a) the nominal predicate with the copula *hu* states that the person the speaker is talking about is *yorí* ‘mestizo’; the speaker knows that that piece of information is true, as it is first-hand information. In the next line (8b) a nominal

predicate with the copula *ka* with the reportative *-ra*, the information is second-hand, and so is not asserted as strongly as the first hand information in (8a).¹

- (8) a. *yoli hu=turu;*
 mestizo be=FOC2
- b. *kuate ka-ra=turu*
 twin be-REP=FOC2
 ‘El es mestizo; es cuate.’
 ‘He is a mestizo man; he is a twin.’ (ACCDJ: 52)

The copula *ka* can also occur with the ‘inferential or indirect evidence’ suffix *-re*, which is used when the speaker is not sure about the identity of the subject. The following examples illustrate this use (see more about the inferential *-re* in chapter V §5.4.1.1).

- (9) a. *alué=ka rokosóli ká-re*
 DEM=FOC spider be-INFERENTIAL
 ‘That seems to be a spider/Eso parece una araña.’
- b. *alué=ka gali ká-re* ‘That seems a house/parece una casa.’
 c. *alué=ka reté ká-re* ‘That seems a stone/parece una piedra.’
 d. *alué=ka rohá ká-re* ‘That seems a tree/parece un árbol.’
 e. *alué=ka okocí ká-re* ‘That seems a dog/parece un perro.’
 f. *alué=ka ralómuli ká-re* ‘That seems a people/parece un ralómuli.’
 g. *alué=ka toli ká-re* ‘That seems a chicken/parece una gallina.’
 h. *alué=ka opáca ká-re* ‘That seems a shirt/parece una blusa.’
 i. *alué=ka sipúca ká-re* ‘That seems a skirt/parece una falda.’

Other copulas cannot occur with *-re* ‘INFERENTIAL’

- (10) **alué=ka gali ké-re* [That seemed a house/Eso parecía una casa]
 **alué=ka gali hu-re* [That seems a house/Eso parece una casa]
 **alué=ka gali ni-re* [That seemed a house/Eso parecía una casa]

The copula *ke* ‘be past’ functions in the past tense for proper inclusion and equative preducatives.

¹ Note that the form **hu-ra* is not attested in my database, and the speaker rejects them categorically.

- (11) a. *alué=ka rokosóli ke* ‘That was a spider/Esa era una araña.’
 b. *alué=ka galí ke* ‘That was a house/Esa era una casa.’
 c. *alué=ka reté ke* ‘That was a stone/Esa era una piedra.’
 d. *alué=ka rohá ke* ‘That was a tree/Ese era un árbol.’
 e. *alué=ka okocí ke* ‘That was a dog/Ese era un perro.’
 f. *alué=ka tolí mukí-la ke* ‘That was a chicken/Esa era una gallina.’
 g. *alué=ka opáca ke* ‘That was a blouse/Esa era una blusa.’
 h. *alué=ka sipúca ke* ‘That was a skirt/Esa era una falda.’

The copula *ni* ‘exist/be’ can occur with equative and proper inclusion predicates.

Morphologically, *ni* is different from the other copulas in that it takes tense and person-marking morphology: with third person, it takes the person-marking suffix *-li* preceding the past tense suffix *-ge*.

- (12) a. *alué=ka rokosóli ni-le*
 DEM=FOC spider be/exist-PST
 ‘That was a spider/Esa era una araña.’
 b. *alué=ka galí ni-li-ge* ‘That was a house/Esa era una casa.’
 c. *alué=ka rete ni-li-ge* ‘That was a stone/Esa era una piedra.’
 d. *alué=ka rohá ni-li-ge* ‘That was a tree/Ese era un árbol.’
 e. *alué=ka okocí ni-li-ge* ‘That was a dog/Ese era un perro.’
 f. *alué=ka raromuri ni-li-ge* ‘That were people/Esa era gente’
 g. *alué=ka tolí ni-li-ge* ‘That was a chicken/Esa era una gallina.’
 h. *alué=ka opáca ni-li-ge* ‘That was a shirt/Esa era una camisa.’
 i. *alué=ka sipúca ni-li-ge* ‘That was a skirt/Esa era una falda.’

Equative and proper inclusion clauses in future tense use the verb *ni* ‘exist’ marked with either *-mala* ‘FUTURE’ or *-mere* ‘FUTURE’. The copulas *hu* ‘be’ and *ke* ‘be past’ cannot occur with either *-mala* (14) or *-mere* (14b).

- (13) a. *alué=ka galí ní-mala*
 DEM=FOC house be/exist-POT.FUT
 ‘That is going to be a house/Eso va a ser una casa.’
 b. *(alué=ka galí ni-meré)* ‘That is going to be a house/Eso va a ser una casa.’
 c. *alué=ka opáca ní-mala* ‘That is going to be a shirt/Esa va a ser una camisa.’
 d. *alué=ka sipúca ní-mala* ‘That is going to be a skirt/Esa va a ser una falda.’
 e. *alué=ka sewá ni-meré* ‘That is going to be a flower/Esa va a ser una flor.’
 f. *alué=ka towí ni-meré* ‘He is going to be a boy/Ese va a ser niño.’

g. *alué=ka tewé ní-meré* ‘She is going to be a girl/Esa va a ser niña.’ (talking about an unborn child)

- (14) **hu-mala* [it is going to be/va a ser]
 **hu-mere* [it is going to be/va a ser]

4.1.2. First person plural

The copula is the same for all the persons except for first person plural (15). First person plural can occur with the copula *hu* (15e); however (15d) is preferred. The preferred form for 1PL in present tense is the copula *ni* ‘exist’ that occurs with the first person plural suffix *-ru* (15d, 16a-h). The examples in (15) show all persons of subjects in the present tense with the derived adjective predicate *inowéla-me* ‘jealous’. The examples in (16) show the 1PL subject with a variety of derived adjective predicates.

- (15) a. *ne=ka we inowéla-me hu*
 1SG=FOC very jealous-PTCP be
 ‘I am very jealous/Yo soy muy celoso.’
- b. *mué=ka we inowéla-me hu*
 2SG=FOC very jealous-PTCP be
 ‘Tú eres muy celoso.’
 ‘You are very jealous’
- c. *alué muki=ka we inowéla-me hu*
 DEM woman=FOC very jealous-PTCP be
 ‘Esa mujer es muy celosa.’
 ‘That woman is very jealous.’
- d. *ramué=ka we inowéla-me ní-ru*
 1PL=FOC very jealous-PTCP be/exist-1PL
 ‘Nosotros somos muy celosos.’
 ‘We are very jealous.’
- e. *ramué=ka we inowéla-me hu*
 1PL=FOC very jealous-PTCP be
 ‘Nosotros somos muy celosos.’
 ‘We are very jealous.’

- f. *éme=ka we inowéla-me hu*
 2PL=FOC very jealous-PTCP be
 ‘Ustedes son muy celosos.’
 ‘You all are very jealous.’
- g. *alué ralómuli=ka we inowéla-me hu*
 DEM people=FOC very jealous-PTCP be
 ‘Esa gente es muy celosa.’
 ‘Those people are very jealous.’
- (16) a. *ramué=ka we wá-ga-me ni-ru*
 1PL=FOC very be.strong-CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy fuertes.’
 ‘We are very strong.’
- b. *ramué=ka we oporú-ga-me ni-ru*
 1PL=FOC very be.irascible-CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy enojones.’
 ‘We are very irascible.’
- c. *ramué=ka we hobáti-ge-me ní-ru*
 1PL=FOC very be.irascible-CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy peleoneros.’
 ‘We are very irascible.’
- d. *ramué=ka we sap-é-ga-me ní-ru*
 1PL=FOC very meat-have- CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy gordos.’
 ‘We are very fat.’
- e. *ramué=ka we yé-ga-me ni-ru*
 1PL=FOC very lie-CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy mentirosos.’
 ‘We are very liars.’
- f. *ramué=ka we iníli-gi-me ni-ru*
 1PL=FOC very be.disrespectful-CONT-PTCP be/exist-1PL
 ‘Nosotros somos muy groseros.’
 ‘We are very disrespectful.’
- g. *ramué=ka we ne’ó-me ní-ru*
 1PL=FOC very be.irascible-PTCP be/exist-1PL
 ‘Nosotros somos muy enojones.’
 ‘We are loud-mouthed.’

- h. *ramué=ka buc-é-ga-me ní-ru*
 1PL=FOC eyes-have-PTCP be/exist-1PL
 'Nosotros tenemos los ojos grandes.'
 'We have big eyes.'

Word order in the nominal predicate construction

The word order in a predicate nominal construction is fixed in the sense that the only word order that is grammatical is the noun phrase subject followed by the noun phrase predication and both followed by the copula, schematically [NPSUBJ NPPRED COP] (17a). Any time I tried to elicit other orders, the result was unacceptable to the speakers, as shown in (17b-e).

- (17) a. NPSUBJ NPPRED COP
 [*alué muki*] [*ralomuli*] *hu*
 that woman raramuri be.PRES
 'That woman is ralómuli/Esa mujer es ralómuli.'
- b. *NPSUBJ COP NPPRED
 **alué muki* *hu* *ralomuli*
 [That woman is ralómuli/Esa mujer es ralómuli]
- c. *NPSUBJ COP NPPRED
 **alué rio* *hu* *ralomuli*
 [That man is ralómuli/Ese hombre es ralómuli]
- d. *NPPRED NPSUBJ COP
 **ralomuli* *alué rio* *hu*
 [That man is ralómuli/Ese hombre es ralómuli]
- e. *COP NPSUBJ NPPRED
 **hu* *alué rio* *ralomuli*
 [That man is ralómuli/Ese hombre es ralómuli]

4.2. Adjectival predicate construction

UT uses a single construction with adjectival predicates, in which the subject NP comes first, followed by the adjective, which is in turn followed by the copula: [NP ADJ

COP]. The adjective slot may be filled by an underived adjective, but it is most common for the adjective slot to be filled by a deverbal adjective derived with either the suffix *-me* or the sequence *-ga-me*.

4.2.1. Basic adjectival predication: [NP ADJ COP]

UT has a small group of underived adjectives. With underived or basic adjectives, the adjectival predicate construction looks quite similar to the nominal predicate: [NP ADJ COP].

Some adjectives have one form for singular and one form for plural and some adjective use the same form for singular and plural. Examples in (18) show the basic adjectival predication in present tense with the adjective ‘big’ that has the form *walú* for SG and *ewéle* for PL. Examples in (19) show the basic adjectival predication with the adjective *ci’tí* ‘thin’ that has the same form for SG and PL. Example (20) shows an example from text.

- (18)
- b. *ne=ka walú hu=ne*
 1SG=FOC big.SG be
 ‘Yo soy grande.’
 ‘I am big.’ [in size, in years/en talla, en años]
 - c. *mué=ka walú hu*
 2SG=FOC big.SG be
 ‘You are big/Tú eres grande.’
 - d. *alué rió=ka walú hu*
 DEM man=FOC big.SG be
 ‘That man is big/ese hombre es grande.’
 - e. *ramué=ka ewéle ní-ru*
 1PL=FOC big.PL be/exist-1PL
 ‘We are big/Nosotros somos grandes.’
 - f. *éme=ka ewéle hu*
 2SG=FOC big.PL be
 ‘You all are big/Ustedes son grandes.’

- g. *alué ralómuli=ka ewéle hu*
 DEM ralómuli=FOC big.PL be
 ‘That people are big/Esa gente es grande.’
- (19) a. *né=ka we ci'tí hu=ne*
 1SG=FOC very thin be=1SG
 ‘I am very thin/Yo soy muy delgado.’
- b. *mué=ka we ci'tí hu=mo*
 2SG=FOC very thin be=2SG
 ‘You are very thin/Tú eres muy delgado.’
- c. *alué rio we ci'tí hu*
 DEM man very thin be
 ‘That man is very thin/Ese hombre es muy delgado.’
- d. *ramué=ka we ci'tí ni-ru*
 1PL=FOC very thin be/exist-1PL
 ‘We are very thin/Nosotros somos muy delgados.’
- e. *éme=ka we ci'tí hu*
 2SG=FOC very thin be
 ‘You all are very thin/Ustedes son muy delgados.’
- f. *umugí=ka we ci'tí hu*
 women=FOC very thin be
 ‘The women are very thin.’
- (20) *moresto uta hu=turu*
 Modesto small be=FOC2
 ‘Modesto is small/Modesto está chico.’ (ACCDJ:92f)

Examples in (21) and (22) show the basic adjectival predication construction in past tense. Examples in (21) show the adjective ‘big’ that has one form for SG and a different one for PL. Examples in (22) shows the adjective *ci'tí* that has the same form for SG and PL. As noted earlier, first person plural cannot occur with the copula *ke* in past tense (23). It occurs with the verb *ni*, conjugated with *-ri* ‘1PL’ followed by *-ge* ‘PAST’ (21d).

- (21) a. *ne=ka walú ké=ne cabeko*
 1SG=FOC big.SG be.PST=1SG before
 ‘Yo era grande.’
 ‘I was big.’ [size, age]
- b. *mué=ka walú ké=mo*
 2SG=FOC big.SG be.PST=2SG
 ‘You were big/Tú eras grande.’
- c. *alué muki=ka walú ke cabéko*
 DEM woman=FOC big.SG be.PST before
 ‘That woman was big before/Esa mujer era grande antes.’
- d. *ramué=ka ewéle ní-ri-ge*
 1PL=FOC big.PL be/exist-1PL-PST
 ‘We were big/Nosotros éramos grandes.’
- e. *éme=ka ewéle ke*
 2SG=FOC big.PL be.PST
 ‘You all were big/Ustedes eran grandes.’
- f. *alué umugi=ka ewéle ke cabéko*
 DEM women=FOC big.PL be.PST before
 ‘Those women were big before/Esas mujeres eran grandes antes.’
- (22) a. *né=ka we ci’ti ké=ne*
 1SG=FOC very thin be.PST=1SG
 ‘I was very thin before/Yo era muy delgado.’
- b. *mué=ka we ci’ti ké=mo*
 2SG=FOC very thin be.PST=2SG
 ‘You were very thin/Tú eras muy delgado.’
- c. *alué muki=ka we ci’ti ke*
 DEM woman=FOC very thin be.PST
 ‘That woman was very thin/Esa mujer era muy delgada.’
- d. *ramué=ka we ci’ti ní-ri-ge*
 1PL=FOC very thin be/exist-1PL-PST
 ‘We were very thin/Nosotros éramos muy delgados.’
- e. *éme=ka we ci’ti ke*
 2PL=FOC very thin be.PST
 ‘You all were very thin/Ustedes eran muy delgados.’

- f. *alué umugí=ka we ci'tí ke*
 DEM women=FOC very thin be.PST
 'Those women were very thin/Esas mujeres eran muy delgadas.'
- (23) a. **ramué=ka ewéle ke*
 [We were big/Nosotros 'éramos muy grandes]
- b. **ramué=ka we ci'tí ke*
 [We were very thin/Nosotros eramos muy delgados]

In the same way as in predicate nominal constructions, the basic adjectival predicate construction in future tense is constructed by inflecting the existential copula *ni* with the expected future tense marker. Examples in (24) show the adjective 'big' that has one form for SG and another form for PL. Examples in (25) show the adjective *ci'ti* SG/PL.

- (24) a. *ne=ka walú ní-me=ne*
 1SG=FOC big.SG be/exist-FUT=1SG
 'I am going to be big/Yo voy a ser grande.'
- b. *mué=ka walú ní-me=mo*
 2SG=FOC big.SG be/exist-FUT=2SG
 'You are going to be big/Tú vas a ser grande.'
- c. *alué towí=ka walú ní-mala*
 DEM boy=FOC big.SG be/exist-FUT
 'That boy is going to be big/Ese niño va a ser grande.'
- d. *ramué=ka ewéle ní-bo*
 1PL=FOC big.PL be/exist-FUT.1PL
 'We are going to be big/Nosotros vamos a ser grandes.'
- e. *éma=ka ewéle ní-mala*
 2SG=FOC big.PL be/exist-FUT
 'You all are going to be big/Ustedes van a ser grandes.'
- f. *alué umugí=ka ewéle ní-mala*
 DEM women=FOC big.PL be/exist-FUT
 'Those women are going to be big/Esas mujeres van a estar grandes.'
- (25) a. *né=ka we ci'ti ní-me=ne*
 1SG=FOC very thin be/exist-FUT=1SG
 'I am going to be thin/Yo voy a ser delgado.'

- b. *mué=ka we ci'tí ní-me=mo*
 2SG=FOC very thin be/exist-FUT=2SG
 'You are going to be thin/Tú vas a ser delgado.'
- c. *alué towí=ka we ci'tí ní-mala*
 DEM boy=FOC very thin be/exist-FUT
 'That boy is going to be thin/El niño va a ser delgado.'
- d. *ramué=ka we ci'tí ní-bo*
 1PL=FOC very thin be/exist-FUT
 'We are going to be thin/Nosotros vamos a ser delgados.'
- e. *éme=ka we ci'tí ní-mala*
 2SG=FOC very thin be/exist-FUT
 'You all are going to be thin/Ustedes van a ser delgados.'
- f. *alué umugí=ka we ci'tí ní-mala*
 DEM women=FOC very thin be/exist-FUT
 'That women are going to be thin/Las mujeres van a ser delgadas.'

4.2.2. The predicate adjective construction with a derived adjective

The majority of the property concept words in UT are derived from verbs via the morphology [V-*me*] and [V-*ga-me*] (see §3.3.2). The adjectival predicate construction with a derived adjective is the same as the adjectival predicate construction with underived adjectives. The derived adjective occupies the syntactic slot of the adjective, in the [NP ADJ COP] construction. As most of the property concepts are formed with the [V-*me*] and the [V-*ga-me*] constructions, examples with these two constructions are abundant.

Examples in (26-27) show the predicate adjective with the form V-*me* as the nucleus of the predicate. The majority of the [V-*me*] property words refer to human characteristics (26), but other types of properties are also attested (27).

- (26) a. *alué mukí lá-me hu*
 DEM woman be.old.FEM-PTCP be
 'That woman is old/Esa mujer es mayor (vieja).'

- b. *alué rió océra-me hu*
 DEM man be.old.MASC-PTCP be
 ‘That man is old/Ese hombre es mayor (viejo).’
- c. *alué tewé cimá-me hu*
 DEM girl be.pretty-PTCP be
 ‘That girl is pretty/Esa niña es bonita.’
- d. *alué mukí we nóca-me hu*
 DEM woman very work-PTCP be
 ‘That woman is very hard working/Esa mujer es muy trabajadora.’
- e. *we nayu-me hu=ne*
 very sick-PTCP be=1SG
 ‘I am sick/Yo estoy enferma.’
- f. *alué mukí we ayo-me hu*
 DEM woman very be.mad-PTCP be
 ‘That woman is very bad-tempered/La mujer es enojona.’
- g. *mué=ka we mayé-me hu=mo*
 you=FOC very jealous-PTCP be-2SG
 ‘You are very jealous/Tú eres muy celoso.’
- h. *alué rio we ne’ó-me hu*
 DEM man very yell-PTCP be
 ‘That man is very loud-mouthed/Ese hombre es muy gritón.’
- (27) a. *ye remé=ka la lasá-me hu*
 this tortilla=FOC AFF soft-PTCP be
 ‘This tortilla is soft/Estas tortillas sí están blanditas.’
- b. *ye ramé=ka lomí-me hu*
 this tortilla=FOC smooth-PTCP be
 ‘This tortillas are smooth/Estas tortillas están blanditas.’

The remaining examples in this section show adjectival predicates whose nucleus is the derived form *V-ga-me*. Note that The suffix *-ga* ‘continuative’ shows variation in the realization of the vowel, occurring sometimes as *-gi* (28f), *-go* (28d), or *-gu* (33d).

(28) Human/animal propensity

- a. *alué riowe we wa-ga-me hu*
DEM man very be.strong-CONT-PTCP be
'That man is strong/Ese hombre es fuerte.'
- b. *alué rió we oporú-ga-me hu*
DEM man very be.fierce.SG-CONT-PTCP be
'That man is very irascible/Ese hombre es enojón.'
- c. *alué riowe sap-é-ga-me hu*
DEM man meat-HAVE-CONT-PTCP be
'That man is fat/Ese hombre es gordo.'
- d. *alué okoci we oporú-go-me hu*
DEM dog very fierce-CONT-PTCP be
'That dog is fierce/Ese perro es bravo.'
- e. *mué=ka we yé-ga-me hu=mo*
2SG=FOC very lie-CONT-PTCP be=2SG
'You are a big liar/Tú eres muy mentiroso.'
- f. *mué=ka we iníli-gi-me hu*
2SG=FOC very be.disrespectful-CONT-PTCP be
'You are very disrespectful/Tú eres muy grosero.'
- g. *uta-la ewele buc-é-ga-me hu*
small-NMLZ big eye-HAVE-CONT-PTCP be
'The little one has big eyes/Ese bebé tiene ojos grandes.'

The examples in (28-30) show the way UT talk about the physical property of people's height. The clauses are translated in English as 'X is very tall' or 'X is very short'. A more literal translation is to say 'X is standing very up there' or 'X is high standing'. In the same way, a literal translation of the English free translation 'X is very short' is 'X is standing very low/down' or 'X is low standing'.

- (29) a. *né=ka we repá ilí-ga-me hu=ne*
1SG=FOC very up.there stand.SG-CONT-PTCP be=1SG
'I am very tall/Yo soy muy alto.'

- b. *mué=ka we repá ilí-ga-me hu=mo*
 2sg=FOC very up.there stand.SG-CONT-PTCP be=2sg
 ‘You are very tall/Tú eres muy alto.’
- c. *alué rió=ka we repá ilí-ga-me hu*
 DEM man=FOC very up.there stand.SG-CONT-PTCP be
 ‘That man is very tall/Ese hombre es muy alto.’
- d. *ramué=ka we repá há-ga-me ni-ru*
 1PL=FOC very up.there stand.PL-CONT-PTCP be/exist-1pl
 ‘We are very tall/Nosotros somos muy altos.’
- e. *éme=ka we repá há-ga-me hu*
 2sg=FOC very up.there stand.PL-CONT-PTCP be
 ‘You all are very tall/Ustedes son muy altos.’
- f. *alué umugí=ka we repá há-ga-me hu*
 DEM women=FOC very up.there stand.PL-CONT-PTCP be
 ‘Those women are very tall/Esas mujeres son muy altas.’
- (30) a. *ne=ka we re’lé ilí-ga-me hu=ne*
 1SG=FOC very down stand.SG-CONT-PTCP be=1SG
 ‘I am very short/Yo soy muy bajo.’
- b. *mué=ka we re’lé ilí-ga-me hu=mo*
 2SG=FOC very down stand.SG-CONT-PTCP be=2SG
 ‘You are very short/Tú eres muy bajo.’
- c. *martina=ka we re’lé ilí-ga-me hu*
 Martina=FOC very down stand.SG-CONT-PTCP be
 ‘Martina is very short/Martina es muy baja. (de estatura)’
- d. *ramué=ka we re’lé xá-ga-me ni-ru*
 1PL=FOC very down stand.SG-CONT-PTCP be/exist-1PL
 ‘We are very short/Nosotros somos muy bajas (de estatura).’
- e. *éme=ka we re’lé xá-ga-me hu*
 2PL=FOC very down stand.SG-CONT-PTCP be
 ‘You all are very short/Ustedes son muy bajos (de estatura).’
- f. *alué umugí=ka we re’lé xá-ga-me hu*
 DEM women=FOC very down stand.SG-CONT-PTCP be
 ‘Those women are very short/Esas mujeres son muy bajas (de estatura).’

(31) Additional physical properties

- a. *bakoci ra'lá-ga-me hu*
river wide-CONT-PTCP be
'The river is wide/El río es ancho.'
- b. *bawí=ka ratá-ga-me hu*
water=FOC be.hot-CONT-PTCP be
'The water is hot/El agua está caliente.'
- c. *bawí=ka rulá-ga-me hu*
water=FOC be.cold-CONT-PTCP be
'The water is cold/El agua está fría.'
- d. *remé=ka wakí-ga-me hu*
tortillas=FOC be.dry-CONT-PTCP be
'The tortillas are dry/Las tortillas están secas.'

The adjectival predicate construction with color terms is the same as the basic adjectival predicate except that in the adjective syntactic slot is the color term word. As I mentioned before (chapter III, §3.6.3.3), color terms in UT are derived words. They contain a verbal root, and the suffixes *-ka* (allomorph of *-ga*) and *-me*, schematically [V-*ka-me*]. Recall that the vowel in the suffix *-ka* may change, in this case to *-ko* in (32d).

- (32) a. *ne gari-la siyó-ka-me hu*
1SG house-POSS be.green.blue-CONT-PTCP be
'My house is green.blue/Mi casa es azul.verde.'
- b. *ne sipúca-la setá-ka-me hu*
1SG skirt-POSS be.red-CONT-PTCP be
'My skirt is red/Mi falda es roja.'
- c. *ne opáca-la ulá-ka-me hu*
1SG shirt/blouse-POSS be.yellow-CONT-PTCP be
'My shirt is yellow/Mi falda es amarilla.'
- d. *mué opáca-la có-ko-me hu*
2SG shirt/blouse-POSS be.black-CONT-PTCP be
'Your shirt is black/Tú camisa es negra.'

- e. *alué muki gali-la rosá-ka-me hu*
 DEM woman house-POSS be.white-CONT-PTCP be
 ‘That woman’s house is white/La casa de esa mujer es blanca.’

(33) Physical properties associated with flavor

- a. *ye muni=ka we ra’í-ga-me hu*
 this beans=FOC very be.tasty-CONT-PTCP be
 ‘These beans are tasty/Estos frijoles están sabrosos.’
- b. *ye ruláci=ka we aká-ga-me hu*
 this peach=FOC very be.salty/sweet-CONT-PTCP be
 ‘This peach is very sweet/Este durazno es muy dulce.’
- c. *ye limó=ka we cokó-go-me hu*
 this lime=FOC very be.sour-CONT-PTCP be
 ‘This lime is sour/Este limón es amargo.’
- d. *komplani=ka we cikú-gu-me hu*
 copalquín==FOC very be.bitter-CONT-PTCP be
 ‘The copalquín is bitter/El copalquín es amargo.’²
- e. *ye sapá=ka biká-ga-me hu*
 this meat=FOC be.rotten -CONT-PTCP be
 ‘This meat is rotten/Esta carne está podrida.’
- f. *ye remé waki-gi-me hu*
 this tortilla be.hard-CONT-PTCP be
 ‘This tortilla is hard/Esta tortilla está dura.’
- g. *ye atonilika we gulú-gu-me hu*
 this atole=FOC very be.thick-CONT-PTCP be
 ‘The porridge is thick/El atole está espeso.’
- h. *ye muni=ka we aká-ga-me hu*
 this beans=FOC very be.salty/sweet-CONT-PTCP be
 ‘The beans are salty/Estos frijoles están muy salados.’

² *Komplani* (a.k.a. *copalquín*, *torote blanco*, elephant tree) is a medicinal plant used by the *ralómuli* people to cure high fever and hair loss, among other things. *komplani*’s scientific name is *pachycormus discolor*.

4.3. Locative predicate construction: posture verbs [NP POV LOC]

The locative predicate construction in UT is expressed with posture verbs. UT has ten posture verbs, nine of which occur in the locative construction. The syntactic elements of the basic posture verb construction are a subject, a posture verb (POV), and a locative element, schematically [SUBJ POV LOC]. The position of the elements can vary within the construction. The nine verbs that can occur in the syntactic slot of the basic POV construction are: *iri* and *ha* ‘be.standing.SG/PL’, *cuku* and *ucu* ‘be.standing.SG/PL’ (referring to the standing posture of animals with several legs), *bo’i* and *biti* ‘be.lying.SG/PL’, and three sit verbs: *ati* and *asa*, both ‘be.sitting.SG’, both pluralized via *moci* ‘be.sitting.PL’. These are summarized in Table 4.2.³

Table 4.2. Posture verbs in UT

POV			GLOSS
SIT	<i>atí</i>	SG	‘be sitting’
	<i>asá</i>		
	<i>ayá</i>		
	<i>mocí</i>	PL	
LIE	<i>bo’i</i>	SG	‘be lying’
	<i>bití</i>	PL	
STAND ₁	<i>ilí</i>	SG	‘be standing’
	<i>ha</i>	PL	
STAND ₄	<i>cukú</i>	SG	‘be standing (for four-legged animals); ‘be crouching/bending’ (for humans); ‘be in convex position, hanging up, or stuck (for inanimate objects)’
	<i>ucú</i>	PL	

The posture verbs profile the number, shape and dimension of the referent. Number is marked through suppletive plural forms. As for shape and dimension, the STAND₁ verbs profile an elongated shape in a vertical dimension (4.3.1), the LIE verbs profile an elongated shape in a horizontal dimension (4.3.3), the STAND₂ verbs profile a

³ I will discuss the differences between the SIT verbs in §4.3.5.

curved or convex shape (4.3.4), and the SIT verbs profile a triangular or conical shape (4.3.4). If the shape of the referent changes from one position to another, for instance, from a sitting position to a lying position, the verb of the construction has to change from a SIT verb to a LIE verb. The basic POV construction in Urique Tarahumara refers only to the state of being in a given posture, and never to the activity of assuming a posture. In order to get the dynamic meaning entering a posture, additional morphology or an entirely different construction are required.

However, the POV construction is not merely about posture — in the real world it is a given that one must be SOMEWHERE in the given posture. While the posture verbs themselves profile the body shape or postures of their respective subjects, the POV construction in which they occur is also the basic locative predicate in UT (as seen in the remaining subsections of §4.3, but especially 4.3.6. As an extension of this basic locative function, the POV construction is also used for existential predicates (4.4.4). I turn now to the illustration of the semantics of the individual posture verbs.

4.3.1. The STAND₁ verbs: *irí*, *há*

The basic posture verb construction in combination with the verb *irí* or *há* refers prototypically to the human standing position in which the body is held upright and supported by the legs/feet, with *irí* referring to a singular subject and, *há* to a plural subject. I name these verbs the STAND₁ verbs. The basic POV construction with the STAND verbs is used to locate humans in space, and also animal or objects that are vertically oriented, similar to the human standing position. Some animals stand on two legs in an upright position similar to the human standing position. In these cases, the only

appropriate locative predicate is formed around a STAND₁ verb: for instance, *wacó* 'heron/s' in (35a) and (35b) only can be 'standing'.

(34) Humans

- a. *ne=ka irí*
 1SG=FOC stand.SG
 'I am standing/estoy parado.'
- b. *ralómuli ha*
 people stand.PL
 'People are standing/la gente está parada.'

(35) Animals

- a. *biré wacó repóli-ci irí gomí-ci*
 one heron stone-LOC stand.SG creek-LOC
 'Una garza está parada en la piedra en el arroyo.'
 'One heron is standing on the stone in the creek.'
- b. *baikiá wacó gomí-ci ha repóli-ci,*
 three heron creek-LOC stand.PL stone-LOC
 'Tres garzas están paradas en la piedra en el arroyo.'
 'Three herons are standing on the stone in the creek.'

(36) Objects

- a. *botea mésa-ci irí*
 glass table-LOC stand.SG
 'La botella está en la mesa.' [paradas]
 'The bottle is on the table.' [standing]
- b. *baikiá botéa mésa-ci ha*
 three glass table-LOC stand.PL
 'Tres botellas están en la mesa.' [paradas]
 'Three bottles are on the table.' [standing]

A majority of nominals referring to animals use the verbs *cukú* and *ucú* in the basic POV construction. These verbs refer to the prototypical position of four (six, or more) legged animals (see §4.3.3).

Some uses of the STAND verbs have an opaque motivation. For instance, shadows of any kind — of people or of trees, inside of a cave, etc. — are categorized as ‘standing’. A possible explanation is that as a radial structure (following Lakoff, 1987), the central meaning of *iri-me* refers to a vertically elongated object; this meaning can be metaphorically used for human shadows and then is extended to the shadows of other objects. Other posture verbs cannot be used with the nominal *kága* ‘shadow’.

- (37) a. *la weré kága irí*
 AFF big shadow stand.SG
- b. *rohá weká ha*
 tree a.lot stand.PL
 ‘Hay una sombra grande.’
 ‘There is a big shade; because there are a lot of trees.’ [standing]

- (38) *pacá resoci walú kága irí*
 inside cave big shadow stand.SG
 ‘Adentro de la cueva hay una sombra grande.’
 ‘Inside the cave there is a big shade.’

- (39) **pacá resoci walú kága ati*
 **pacá resoci walú kága moci*
 **pacá resoci walú kága bo'i*
 **pacá resoci walú kága bití*
 **pacá resoci walú kága cuku*
 **pacá resoci walú kága ucú*
 [hay una sombra grande dentro la cueva]
 [‘There is a big shade inside the cave.’]

Another extension is the case where ‘holes’ are located via the STAND₁ verbs.

- (40) *repa galí-riri ewagá irí*
 up.there house-LOC hole stand.SG
 ‘There is a hole up there at the house.’ [on the roof]

4.3.2. The [NP COLOR-*na-ga ili*] predicate

The verb *ili* ‘stand1.SG’ occurs in an inchoative predicate with color terms. The color term occurs with the inchoative suffix *-na* and the continuative suffix *-ga*. In future research, I hope to investigate the relationship between the *ili* and the inchoative form of

the color verbs, both in the syntax (*ili* appears to be an auxiliary) and in the semantics (why ‘stand₁’, but not ‘stand₄’, ‘sit’, or ‘lie’?).

- (41) a. *ri’ligó ma ulá-na-ga ilí*
 wheat already be.yellow-INCH-CONT stand.SG
 ‘The wheat is turning yellow already/El trigo se está volviendo amarillo.’
- b. *xípiko ma we siyó-na-ga ilí gasalá*
 now just very be.green.blue-inch-cont stand.sg grass
 ‘Now the grass is just turning green [the dry season is over]
 ‘Ahora ya se está poniendo muy verde el zacate.’
- c. *ne makúci-la có-na-ga ilí*
 1SG finger-POSS black-INCH-CONT stand.SG
 ‘My finger is turning black.’ [because I smashed it]
 ‘Mi dedo se está poniendo negro.’ [porque me lo machuqué]
- d. *rosá-na-ga ilí ritú*
 white-INCH-CONT stand.SG ice
 ‘It is turning white (because of) the ice/Se está volviendo blanco (por) el hielo.’
- e. *rosá-na-ga ilí gepá*
 white-INCH-CONT stand snow
 ‘It is turning white (because of) the snow/Se está volviendo blanco (por) la nieve.’
- f. *ne=ka seka-ci raha-ge=ne setá-na-ga ilí*
 1SG=FOC arm-LOC burn-PST=1SG red-INCH-CONT stand.SG
 ‘I burned my arm; it is turning red/Quemé mi brazo, se está poniendo rojo.’

Having reviewed the relatively little variation found with the STAND₁ verbs, we now turn to the LIE verbs.

4.3.3. The LIE verbs: *bo’í*, *bití*

The verbs *bo’í* and *bití* refer prototypically to the human lying position in which the human body is horizontal, with *bo’í* referring to a singular subject, and *bití* to a plural subject. In addition to the human body in lying position, for other entities both verbs profile an elongated shape in a horizontal dimension.

(42) Human

- a. *héna bo'í muhé raná-ra*
here lie.SG 2SG son-POSS
'Aquí está tu hijo.' [acostado]
'Here is your son.' [lying]
- b. *héna bití muhé kucí-ra*
here lie.PL 2SG kids-POSS
'Aquí están tus hijos.' [acostados]
'Here are your kids.' [lying]

(43) Animals

- a. *basací repá bo'í repóli-ci*
coyote up.there lie.SG stone-LOC
'El coyote está en la piedra.' [acostado]
'The coyote is up there on the stone.' [lying]
- b. *baikiá basací repá bití repóli-ci*
three coyote up.there lie.PL stone-LOC
'Tres coyotes están en la piedra.' [acostados]
'Three coyotes are up there on the stone.' [lying]

(44) Objects

- a. *biré calawá bo'í pa gari-móba*
one branch.detached lie.SG UP house-OVER
'Unarama está arriba en el techo.' [acostada]
'One branch is up there on the roof.' [lying]
- b. *oká calawá bití pa gari-móba*
two branch.detached lie.PL UP house-OVER
'Dos ramas están arriba en el techo.' [acostadas]
'Two branches are lying up there on the roof.'

Objects that are in a bunch or in a group can require different POVs depending on the individual shape of the objects rather than the shape of the objects as a group. For instance, the location of beans is indicated with *bití-me* 'lie PL' and no other posture verb is permitted, while a bunch of apples are *mocí-me* 'seated'.

- (45) *pacá-ga-na sekolí-ci bití-li-ge muni*
inside-LOC-LOC pot-LOC lie-3-PST beans
‘Los frijoles están en la olla.’ [acostados]
‘The beans are in the pot.’ [lying]
- (46) **pacá-ga-na sekolí-ci atí-li-ge muni*
**pacá-ga-na sekolí-ci mocílige muni*
**pacá-ga-na sekolí-ci irílige muni*
**pacá-ga-na sekolí-ci hálige muni*
**pacá-ga-na sekolí-ci cukúlige muni*
**pacá-ga-na sekolí-ci ucúlige muni*
[the beans are in the pot sitting/standing/in a convex position]
- (47) *weká moci masana mú-ci*
a.lot sit.PL apple basket-LOC
‘Hay muchas manzanas en la canasta.’ [sentadas]
‘There are a lot of apples in the basket.’ [sitting]

Examples in this section also show that the position of the locative phrase and the NP can vary within the construction.

4.3.4. The STAND4 verbs: *cukú*, *ucú*

We turn now to the STAND4 posture verbs, *cukú* ‘stand4.SG’ and *ucú* ‘stand4.PL’. The translation STAND4 is intended to capture the most basic meaning of these verbs: they profile the standing position of animals with **four or more legs**. They can also refer to humans bent down or in a crouching position, objects with a convex superficial surface, and — in extensions that move quite far from the basic meaning — they are used for objects that are hanging from or stuck to a surface.

The basic posture verb construction with a STAND4 verb is the canonical way to talk about the location of animals that are in a standing position supported by their extremities, four or more. I propose that the profiled element of these verbs is to have the four (or more) extremities on the ground supporting the body. However, the profile also includes the curved shape of the animal's body from side to side, seen from the side as a

line starting from the animal's legs, reaching the highest point midway across the back and lowering to the opposite front legs.

The basic POV construction in combination with a STAND4 verb is used to locate animals whose natural position is on four legs, for instance, *basací* 'coyote', *mawiyá* 'puma concolor', *ohí* 'Mexican grizzly bear', *batuí* 'badger', *curé* 'coati' and *armario* 'armadillo', among others. It can also refer to smaller four-legged animals like *rorí* 'rat', *ekógoli* 'chameleon', and to four-legged animals introduced by the Europeans, for instance, *kawé* 'horse', *akací* 'cow' and *cibá* 'goat'. It can also refer to insects with their six legs, such as *se'olí* 'fly/bee', *wahó* 'mosquito'; and animals with even more legs such as *macíli* 'scorpion', *rokosóli* 'spider', *nowí* 'caterpillar', and *ma'egá* 'millipede'. Examples of the basic construction with STAND4 verbs are the following:

(48) Four-legged animals

- a. *basací repóri-ci repá cukú*
 coyote rock-LOC up.there stand4.SG
 'El coyote está en la piedra.' [parado]
 'The coyote is up there on the stone.' [standing]
- b. *basací weká ucú repóri-ci*
 coyote a.lot stand4.PL rock-LOC
 'Los coyotes están en la piedra.' [parados en 4]
 'The coyotes are on the stone.' [standing in 4]
- c. *ekógoli wicí cukú*
 chameleon ground stand4.SG
 'El camaleón está en e suelo.' [parado en 4]
 'The chameleon is on the ground.' [standing in 4]

(49) Six-legged animals

- a. *se'olí remé-ci cukú*
 fly/bee tortilla-LOC stand4.SG
 'La mosca está en al tortilla.' [parado en 4]
 'The fly is on the tortilla.' [standing in 4]

- b. *apalélo gutumó-ci cukú*
 praying.mantis trunk-LOC stand4.SG
 ‘La mantis está en el tronco.’ [parado en 4]
 ‘The mantis is on the trunk.’ [standing in 4]

(50) Eight-legged animals

- a. *macíli cukú igú-ci*
 scorpion stand4.SG wood-LOC
 ‘El alacrán está en la madera.’ [parado en 4]
 ‘The scorpion is on the wood.’ [standing in 4]

- b. *rokosóli gasála-ci cukú*
 spider branch-LOC stand4.SG
 ‘La araña está en la rama.’ [parada en 4]
 ‘The spider is on the branch.’ [standing in 4]

(51) More than eight legs

- a. *biré nowí cukú rohá-rili*
 one worm stand4.SG tree-LOC
 ‘Hay un gusano en el árbol.’ [parada en 4]
 ‘There is a worm on the tree.’ [standing in 4]

- b. *biré ma'egá wicí cukú*
 one milipede ground stand4
 ‘Hay un milpiés en el suelo.’ [parado en 4]
 ‘There is a millipede on the ground.’ [standing in 4]

In contrast to *cukú* and *ucú*, the basic construction with animals in a sitting position similar to the human sitting position requires the verb *atí* 'sit SG' or *mocí* 'sit PL'. For instance, the position of the snake when it is coiled up is expressed with the verb *atí* 'sit SG', indicating a position where the referent tends to be wide at the base and less wide at the top, similar to the characteristics of the human's sitting position, cf. example (52). In the same way, the “standing” position of the frog is perceived as sitting, more similar to the human position of sitting, see example (53).

(52) *sinowí pacá sekó-ci ati citó-ci*
 snake inside on.the.side.of-LOC sit.SG corner-LOC
 ‘La víbora está dentro (de la casa) en la esquina.’ [sentada]
 ‘The snake is inside (of the house) in the corner.’ [sitting]

(53) *biré remó=ka pacá atí sekó-ci*
 one frog=FOC inside sit.SG on.the.side.of-LOC
 ‘La rana está dentro (de la casa) en la orilla.’ [sentada]
 ‘The frog is inside (of the house) on the side of the room.’ [sitting]

When the position of the animal is similar to the human lying position, that is, when the body is extended in a horizontal position, the verb has to change to a LIE verb, for example, when animals without legs such as *sinowí* ‘snakes’ and *nowí sahí* ‘earthworms’ are in a horizontal extended position (54); or for animals which are lying for a short period of time (55).

(54) *nowí sahí weká bití re're ewé-rere*
 earthworm a.lot lie.PL down earth-down
 ‘Hay muchos gusanos de tierra abajo de la tierra.’ [acostados]
 ‘There are a lot of earthworms under the earth.’ [lying]

(55) *basací repá bo'í repóli-ci*
 coyote up.there lie.SG rock-LOC
 ‘El coyote está en la roca’ [acostado]
 ‘The coyote is lying on the rock.’ [lying]

In the same vein, if the position of the animal is similar to the human standing position either because it is the animal’s natural position such as *wacó* ‘heron/s’ (see example 35) or because the animal is in a two legged standing position for a sufficient period of time, then the verb of the construction is a STAND1 verb.

(56) a. *ohí irí;*
 bear stand.SG
 b. *pací o'lí-na*
 corn pull-IPFV
 ‘El oso está parado en dos piernas jalando el maíz.’ [de la planta]
 ‘The bear is standing on two legs pulling the corn.’ [from the plant]

- (57) a. *kawé=ka wéti iri*
horse=FOC long stand
- b. *yawi-nari iri*
dance-DESID stand
'El caballo está parado en dos patas; quiere bailar parado en dos patas.'
'The horse is standing on two legs; [it] wants to dance standing on two legs.'

The STAND4 verbs can also be used for animals with no visible legs. For example, to indicate the location of *ingenia* 'mites' it is obligatory to use the verb *ucú* 'stand4.PL'; no other verb is accepted (59). This insect has no visible legs because it is too small. The requirement for plural is likely due the fact of this type of insect lives and travels in swarms, and it is so small that one would rarely notice a single one alone.

- (58) *weká seka-cí ucu ingenia*
a.lot arm.hand-LOC stand4.PL mites
'Hay muchos ácaros en el brazo.' [parados en 4]
'I have a lot of mites on the arm.' [Lit. a lot of mites stand 4 on my arm]

- (59) **weká sekaci cuku ingenia*
**weká sekaci biti ingenia*
**weká sekaci iri ingenia*
**weká sekaci ha ingenia*
**weká sekaci ati ingenia*
**weká sekaci moci ingenia*
[I have a lot of mites on the arm]

Some referents that normally occur with one particular POV sometimes have a second option for a POV. For instance, fish preferentially occur with STAND4, but the LIE verbs are sometimes attested also, apparently with no change in meaning.

- (60) *weka rocí kili ucu ba'wi-ci cuwéke; racúka-ga*
a.lot fish silently stand4.PL water-LOC bank take.sun-CONT
'El pez está tranquilo en el la orilla en el agua; tomando sol.' [parado en 4]
'The fish are (standing) in the shallows of the river taking sun.' [stand 4]

- (61) *weka roci biti*
 a.lot fish lie.PL
 ‘Hay muchos peces.’ [acostados]
 ‘There are a lot of fish.’ [lying]

We now turn to a number of semantic extensions of the POV construction with STAND4 verbs.

The STAND4 verbs can be used to refer to the stationary location of one or several objects with a convex form such as *bilato* ‘plate/s’, *baso* ‘cup/s’ and *betóli* ‘rounded dish or bowl’. The semantic link is presumably that STAND4 profiles the curved shape of an animal back, and this profile is extended to objects with a convex shape (62). The STAND4 verbs can be also used with a meaning of ‘be hanging’ (63-64).

- (62) *biláto mésa-ci cuku*
 plate table-LOC stand4.SG
 ‘El plato está en la mesa.’ [boca abajo]
 ‘The plate is on the table.’ [face down]

- (63) *arue baso repa cuku-ga-re*
 DEM cup up stand4.SG-CONT-PST
 ‘La taza está colgando allá arriba.’
 ‘That cup is hanging up there.’

- (64) *sarténi repá-ge cuku kilábu-ci*
 fry.pan up-there stand4.SG nail-LOC
 ‘El sartén está allá arriba colgando en el clavo.’
 ‘The frying pan is up there hanging from the nail.’

This extension is based on the curved line that the STAND4 verbs profile: in the central meaning this curved line is the back of the animal standing, whereas in the hanging item the curved line is the curved element that allows the figure object to hang from a ground object (e.g. a string or handle).

A still more extended meaning is the use of STAND4 verbs to locate a flat object that is in close contact with or adhering to a surface (65-66). Similarly, fruits are

perceived as *cukú-me* ‘STAND4.PL’ on a tree. The speaker explained that this verb is used because the fruit stem adheres to or is in close contact with the plant. For instance, peaches and apples are perceived as *cukú* ‘stuck’ to the tree's arm (67).

(65) a. *bo'ori* *cukú* *apéli;*
 opposite.side.UP stand4.SG paper

b. *santa lupe* *iri-ga-me*
 saint Guadalupe stand.SG-CONT-PTCP

‘El papel está pegado (en la pared) enfrente de nosotros; (con) la Virgen de Guadalupe parada.’
 ‘A paper is stuck (on the wall) in front of us; (with) the Guadalupe virgin standing.’

(66) *bonáli-ge* *la walú* *cukú* *gepá*
 opposite.side-by AFF a.lot stand4.SG snow

‘Hay mucha nieve en la pendiente frente a nosotros.’
 ‘There is a lot of snow over there on the slope in front of us.’

(67) *ruráci=ka* *weka* *ucu*
 peach=FOC a.lot stand4.PL

‘Hay muchos duraznos.’ [en el árbol]
 ‘There are a lot of peaches stuck.’ [on the tree]

This meaning of the STAND4 verbs appears to be a semantic extension from the ‘hanging’ meaning. The ‘hanging’ meaning refers to a Figure which is in close contact with and curved over another object (the Ground); the ‘stuck’ sense retains the element of close contact and the idea that the Figure is suspended from or over the Ground, but the basic profile of a curved back appears to be completely absent in (67). Note that the supporting ground can be vertical (the wall in 65), horizontal or near to horizontal (the tree branch in 67), or it can contain multiple irregular slopes (the mountain surface in 66).

In sum, the STAND4 verbs have four semantic extensions: the human crouching or bent over position, the convex shape of objects such as face-down plates, the hanging position of objects and the meaning of ‘be stuck’. The cognate verbs in Guarijio *cuhku*

(stand4.SG) and *cucu* (stand4.PL) mean ‘to be on four legs’, ‘to be in a crouching position’, and ‘to be hanging’ (Miller, 1996). Miller does not mention the senses of ‘to be stuck’ or ‘to be in convex position for objects’. Although less certain, the Yaqui verb *cha'aka* ‘to be hanging’ (Lilian Valenzuela p.c.) might be related to UT *cuku* ‘stand4.SG’.

4.3.5. The SIT verbs: *atí*, *asá*, *ayá*, *mocí*

The SIT verbs are formally more complicated than the other posture verbs because there are three different singular roots, *atí* ‘sit1.SG’, *asá* ‘sit2.SG’, and *ayá* ‘sit3.SG’, all of which take the same plural root, *mocí* ‘sit.PL’. All four refer prototypically to the human sitting position, and are easily extended to animals and objects whose shape in space is similar to the human sitting position, that is, a body of mass tending to be wide at the base and less wide at the top. The semantic and grammatical differences between the singular SIT verbs are addressed in §4.3.5.

Examples (68-70) show the contrast between *atí* ‘sit1.SG’ vs. *mocí* ‘sit.PL’.

(68) Human

- a. *héna atí muhe raná-ra*
 here sit.SG 2SG son-POS
 ‘Aquí está tu hijo.’ [sentado]
 ‘Here is your son.’ [sitting]
- b. *héna mocí muhé kucí-ra*
 here sit.PL 2SG kids-POS
 ‘Aquí están tus hijos.’ [sentados]
 ‘Here are your kids.’ [sitting]

(69) Animals

- a. *biré culugí repá atí rasó-ci*
 one bird up.there sit.SG nest-LOC
 ‘Un pájaro está allá arriba sentado en el nido.’ [sentado]
 ‘One bird is up there in the nest.’ [sitting]

- b. *oká culugí moci repá rasó-ci*
 two bird sit.PL up.there nest-LOC
 ‘Dos pájaros están allá arriba en el nido.’ [sentados]
 ‘Two birds are up there in the nest.’ [sitting]

(70) Objects

- a. *gawisóli kartón-ci amóba ati*
 blanket cardboard.box-LOC over sit.SG
 ‘La cobija está encima de la caja de cartón.’ [sentada]
 ‘The blanket is on the cardboard box.’ [sitting]
- b. *banécili weká moci yóci sekó-ci*
 cloth a.lot sit.PL door on.the.side.of-LOC
 ‘Hay mucha ropa a un lado de la puerta.’ [sentada]
 ‘There is a lot of cloth by the door.’ [sitting]

In the examples above, the objects *gawisóli* ‘blanket’ (70a) and *banécili* ‘cloth’ (70b) are heaped up into a conical shape similar to the human sitting position. In examples (69a-b) the referents *curugí* ‘bird’ are seated inside the nest, which is perceived to be similar to the human sitting position.

In Urique Tarahumara the shape of the FIGURE is relevant even when the size of the FIGURE is small. For instance, a *remócili* ‘pimple’ sits on the body, with a base that is wider than the top.

- (71) *bilé remócili ati seka-ci*
 one pimple sit.SG arm.hand-LOC
 ‘Tengo un grano en el brazo.’ [sentado]
 ‘I have a splinter on one’s arm.’ [sitting]

As noted in §4.3.3 with reference to animals, some have two options in the selection of the POV, each used in a specific context and depending on the shape of the animal. In the same vein, some objects can have two options in the selection of the POV depending on the temporary shape of the object. For instance, *remé* ‘tortilla/s’ is or are

‘seated’ when there is one or a bunch of tortillas spread on a plate (72); but when they are on a *remélaci* ‘griddle’ like in (73a-b), their shape follows the curved shape of the griddle therefore the STAND4 verbs are used (although upside-down compared to the prototypical shape of the subject of a stand4 verb).

(72) *remé biláto-ci moci*
 tortilla plate-LOC sit.PL
 ‘Las tortillas están en el plato.’ [sentadas]
 ‘The tortillas are on the plate.’ [sitting]

(73) a. *reméla-ci ucú-ke remé*
 griddle-LOC stand4.PL-PST tortilla
 ‘Las tortillas estaban en el comal.’ [paradas en 4]
 ‘The tortillas were on the griddle.’ [stand in 4]

b. *reméla-ci cuku-gé biré remé*
 griddle-LOC stand4.SG-PST one tortilla
 ‘En el comal estaba una tortilla.’ [parada e 4]
 ‘On the griddle was one tortilla.’ [stand 4]

4.3.5.1. SIT verbs: morpho-syntactic subclasses

The question to be addressed in this section is the difference between the three singular SIT verbs, *ati*, *aya*, and *asa*. Some features of the SIT verbs in Tarahumara have been briefly addressed in previous literature. Brambila and Vergara-Bianchi (1953:156) called the verbs *ati*, *asa*, and *aya* “defectives” because *asa* and *aya* “lack” some tenses that are “covered” by *ati*. Lionnet (1972:42) included *aya* under the same lexical entry as *asa* with the meaning of ‘to be sitting’. Burgess (1984:22) analyzed the verb *asa* as ‘sit/live’ and *ati* as ‘be’. Based on my fieldwork with UT, I argue that even though the four SIT verbs refer to ‘the human sitting position’, they behave differently semantically and syntactically, proving that they belong to different synchronic categories. The

conclusions about subclasses of SIT verbs in this section are based on their morphosyntactic distribution.

We have already seen verb suppletion used for singular versus plural themes, but in addition, UT uses suppletion for verbal aspect with SIT verbs. That is, the verbs *atí*, *asá*, and *ayá* all refer to a singular referent in a sitting position, but each verb are limited to a specific aspectual sense. As I mentioned before, all POVs are stative. Givón (2001:106) defines states as involving no change over time, differentiating three types of state: temporary (limited duration), permanent (relatively long duration) and intermediate between these two. In UT, the lexical meaning of a temporary state of sitting, that is, a state of sitting that is maintained for a limited duration of time, is indicated via the unmarked forms *atí* ‘sit1’, *ayá* ‘sit2’ and *mocí* ‘sit.PL’. The difference between *atí* ‘sit1.SG’ and *ayá* ‘sit2.SG’ lies in that the verb *ayá* ‘sit2.SG’ only occurs with the allomorph *-to* of the movement suffix *-ro*;⁴ the combination indicates that someone is in a sitting position for a limited period of time, moving some part of the body, usually the hands for work (see example 76). The verb *aya* without the movement suffix is not allowed, as example (77) shows.

(74) *né=ka atí*
1SG=FOC sit.SG
‘I am sitting/Estoy sentado.’

(75) *rarómuri mocí*
people sit.PL
‘People are sitting/La gente está sentada.’

⁴ In future work, I intend to describe and illustrate all such derivational morphemes in UT. However, for now, this is the only mention of the suffix *-to*, which add a secondary meaning to any verb, which is roughly ‘to be moving (some part of the body) while V-ing’.

(76) *ne=ka aya-to*
 1SG=FOC sit.SG-MOV
 'I am sitting working/Estoy sentado trabajando.' [Lit. I am seated moving]

(77) **ne=ka aya* [I am sitting/Estoy sentado]

The verb *asá* 'sit3.SG' occurs in the unmarked form with the lexical meaning of a state of permanent or long duration, which indicates that the lexical aspect for *asa* is habitual (i.e., a situation which is usual or repeated on different occasions over a period of time, cf. Bybee et al. 1994). Example (78a) shows the habitual sense of *asá* 'sit3.SG'. Example (78b) shows the incompatibility of *asá* 'sit SG' with the adverbial element *kulipi* 'very close in time/right now'; this suggests that the permanent or long duration lexically inherent in *asá* 'sit3.SG' is incompatible with an adverbial that limits the duration of a state.

- (78) a. *ne=ka (hena) asa=ne*
 1SG=FOC here sit.SG-1SG
 'I sit here/Me siento aquí.' [all the time]
- b. **neka hena asa=ne kulipi*
 [I am seated here right now/Estoy sentado aquí ahora]

In contrast, the verbs *atí* 'sit SG' and *moci* 'sit.PL' only have the limited duration interpretation, and so they are compatible with the verbal modifier *kulipi* 'very close in time/right now', as shown in examples (79a) and (80a). As might be expected, in the unmarked form both are incompatible with the adverbial element *nabí* 'all the time', as examples (79b) and (80b) show.

- (79) a. *ne=ka hena ati kulipi*
 1SG=FOC here sit.SG close.in.time
 'I am sitting here right now/Estoy sentada aquí ahorita.'
- b. **ne=ka hena ati nabí*
 [I sit here all the time/Me siento aquí todo el tiempo]

- (80) a. *ramué=ka hena moci kulípi*
 1PL=FOC here sit.PL close.in.time
 ‘We are sitting here right now/Estamos sentado aquí ahorita.’
- b. **ramué=ka hena moci nabi*
 [We sit here all the time/Nosotros nos sentamos aquí todo el tiempo]

In order to get the habitual reading with *atí* ‘sit.SG’ and *moci* ‘sit.PL’, it is necessary to use a different construction, first nominalizing the SIT verbs with the suffix *-me* ‘PARTICIPIAL’, then putting it into a stative construction with the auxiliary verb *ka* ‘be’ and the adverbial element *nabi* ‘all the time’ (81-82).

- (81) *ne=ka nabi ati-me ke=ne hena*
 1SG=FOC all.the.time sit.SG-PTCP be.PST=1SG here
 ‘I sit here all the time/Yo me siento aquí todo el tiempo.’

- (82) *ralómuli hena nabi moci-me ke*
 people here all.the.time sit.PL-PTCP be.PST
 ‘People sit here all the time/La gente se sienta aquí todo el tiempo.’

In a typical semantic extension, three of the four SIT verbs can be used in the POV construction with a sense of ‘reside in a certain place’. In this use, the verb *atí* has the sense of ‘live in a place for a limited period of time’ (83), *asá* has a more permanent sense (84), and *moci* is used for a plural subject regardless of duration.

- (83) *makwé malige bamí ati-gé=ne lakumbre*
 ten five year sit-PST=1SG la.cumbre
 ‘I lived in La Cumbre for 15 years/Viví en la Cumbre por 15 años.’

- (84) *ne=ka arué asá=ne*
 1SG=FOC DEM sit.SG=1SG
 ‘I live there/Viví ahí.’

Another semantic extension is into the domain of time. The verb *ati* ‘sit1.SG’ can occur with the verbal modifier *ma* ‘already’ and the nominal *rawirí* ‘noon’. I call this the ‘noon’ construction; it is used to indicate the precise moment when that the sun ‘sits’ temporarily at its highest position of the day, i.e., ‘noon’. The ‘noon’ construction is

punctual, that is, it describes the sun sitting at a specific point in both space and time; since the time that the sun sits at its zenith is always limited in duration, the aspectual value of limited duration associated with *ati* ‘sit1.SG’ (85a) is more appropriate than the permanent semantics associated with *asa* ‘sit2.SG’ (85b).

- (85) a. (*ma*) *rawili ati*
 already noon sit.SG
 ‘(Already) it is noon/Es medio día.’
- b. **rawili asa* [It is noon/Es medio día]

The other singular sit verb, *aya* ‘sit3.SG’, with its obligatory movement suffix *-to*, can also occur in this ‘noon’ construction, but only to describe the movement of the sun towards an impending zenith (86), and not to describe the actual moment of noon (86).

- (86) *ma rawili aya-to rayénili*
 already noon sit.SG-MOV sun
 ‘It is almost noon/Es casi medio día.’ [lit. The sun is seated [on the sky] moving [towards] noon]

The verb *moci* is incompatible with the ‘noon’.

- (87) **rawili aya moci* [It is noon/Es medio día]

4.3.5.2. The [SIT-*ga-ba*] construction ‘take a seat please’

Two of the SIT verbs occur in another construction in UT, a polite invitation to sit. The context of use is when one or several people arrive at a house, the host/ess invites the guest/s to take a seat. This construction in Urique Tarahumara does not describe a dynamic event of sitting down (for which another construction entirely is used), but rather refers to the invitation from the speaker to the listener to take a sitting position. The form of the construction is a SIT verb, *asa* if the subject is singular (88a) and *moci* if the subject is plural (88b), followed by *-ga* ‘CONTINUATIVE’ and *-ba* ‘POLITE

EXCLAMATIVE’, this latter being the element that makes this construction a polite invitation. The verbs *atí* and *ayá* are not allowed in this expression (89).

- (88) a. *asa-ga-bá*
sit.SG-STAT-EXPL
‘Sit down please/Siéntese por favor.’ [singular interlocutor]
- b. *moci-ga-bá*
sit.PL-STAT-EXPL
‘Please sit down/Sientense por favor.’ [plural interlocutor]
- (89) a. **atigaba* [sit down please/siéntese por favor]
b. **ayagaba* [sit down please/siéntese por favor]

4.3.6. The [POV=*kuru*] construction

Urique Tarahumara has a construction for indicating the location of an object when is in plain view and can be pointed at with a gesture. In this construction the POV may be preceded by a deictic element, and the verb bears the focus clitic =*kuru*. The selection of the POV depends on the usual semantic properties such as number, position and dimension of the referent perceived by the speakers. The following examples show the POV and a deictic element.

- | | | | | |
|------|----|---|----|---|
| (90) | a. | <i>héna atí=kuru</i>
here sit.SG=FOC2
‘Aquí está!’ [sentado]
‘Here [it] is!’ [sitting] | b. | <i>hena moci=kuru</i>
here sit.PL=FOC2
‘Aquí están!’ [sentados]
‘Here they are.’ [sitting] |
| (91) | a. | <i>héna bo’í=kuru</i>
here lie.SG=FOC2
‘Aquí está!’ [acostado]
‘Here it is.’ [lying] | b. | <i>héna bití=kuru</i>
here lie.PL=FOC2
‘Aquí están!’ [acostados]
‘Here they are.’ [lying] |
| (92) | a. | <i>héna irí=kuru</i>
here stand.SG=FOC2
‘Aquí está!’ [parado]
‘Here it is.’ [standing] | b. | <i>héna ha=kuru</i>
here stand.PL=FOC2
‘Aquí están!’ [parado]
‘Here they are.’ [standing] |

The verb *asá* ‘sit SG’ in this same construction can have an imperative sense (93) and *ayá* ‘sit SG’ cannot appear in this construction (94). Compare the use of *ati* ‘sit SG’ in the locative construction in example (90a) with the imperative sense of *asa* in example (93) and the unacceptability of (94a-b) with *=kuru*.

- (93) *hena asa*
 here sit.SG
 ‘Siéntate aquí.’ [imperativo] pero no * ‘aquí está’
 ‘Sit here.’ [imperative] it cannot have the reading of * ‘here it is’
- (94) **hena aya* [here it is or sit here/aquí está o siéntate aquí]
- (95) a. **asa=kuru* [here it is/aquí está]
 b. **aya=kuru* [here it is/aquí está]

This concludes the exposition of the posture verbs as the nuclei of locative predicates in UT. Next we turn to existential predicates, where, in addition to a set of dedicated existential verbs, we will see a further use of posture verbs.

4.4. Existential verb constructions

There are multiple existential constructions in UT, some with dedicated existential verbs, others using both dynamic and stative lexical verbs. In this section, we will see the suppletive existential verbs *maní* ‘exist.SG’ and *amáni* exist.PL’ (§4.4.1), the existential that doubles as a copular verb *ni* ‘exist’ (4.4.2), the dynamic verb *eyena* ‘walk’ as an existential (4.4.3), posture verbs as existentials (4.4.4), and finally the dedicated negative existential *ite* ‘not.exist’.

4.4.1. *maní* and *amáni* ‘exist’

The verbs *maní* and *amani* are the nuclei of the most basic existential construction, introducing both countable nouns like plates and pots and mass nouns like liquids and cooked beans.

- (96) a. *biláto maní mesa-ci*
plate be.SG table-LOC
‘Hay un plato en la mesa.’
‘There is a plate on the table.’
- b. *biláto weká amani mésa-ci*
plate a.lot be.PL table-LOC
‘Hay muchos platos en la mesa.’
‘There are a lot of plates on the table.’
- (97) a. *sekolí tenáha-ci maní*
pot pot.stand-LOC be.SG
‘La olla está en tripié.’
‘The pot is at the pot stand.’⁵
- b. *sekolí weká amáni wicí*
pot a.lot be.PL ground
‘Hay muchas ollas en el suelo.’
‘There are a lot of pots on the ground.’

With mass nouns, the singular plural/distinction is recast as a quantity distinction, with *maní* ‘exist.SG’ indicating mere existence (98a, c, e) and *amáni* ‘exist.PL’ indicating existence of a larger quantity (98b, d, f).⁶

- (98) a. *muni maní kubéta-ci*
beans exist.SG bucket-LOC
‘Hay frijoles en la cubeta.’
‘There are beans in the bucket.’
- b. *muni ewéle amáni sekolí-ci; wací-ga-me*
beans a.lot exist.PL pot-LOC; cook-CONT-PTCP
‘Hay muchos frijoles en la olla; cocinados.’
‘There are a lot of beans in the pot; cooked.’

⁵ *Tenaha* is a tripod made from a tree’s trunk.

⁶ *Teswino* is an alcoholic drink made of corn.

- c. *ba'wí kubéta-ci maní*
 water bucket-LOC exist.SG
 'Hay agua en la cubeta.'
 'There is water in the bucket.'
- d. *ba'wí weká amáni sekoli-ci*
 water a.lot exist.PL pot-LOC
 'Hay mucha agua en la olla.'
 'There is a lot of water in the pot.'
- e. *cuwí maní sekoli-ci*
 teswino exist.SG pot-LOC
 'Hay teswino en la olla.'
 'There is teswino in the pot.'
- f. *cuwí weká amáni sekoli-ci*
 teswino a.lot exist.PL pot-LOC
 'Hay mucho teswino en la olla.'
 'There is a lot of teswino in the pot.'

The verb *amani*, when used with uncountable nouns, can give a plural sense referring to a different presentation of the referent, e.g. bulk vs individuated items. For example, in (99a) *maní* refers to the existence of sugar without specifying anything about quantity or container, whereas in (99b) *amáni* makes the sugar countable, which requires the hearer to infer, e.g., several sugar bowls.

- (99) a. *acúkili maní mesa-ci*
 sugar be.SG table.PL
 'El azúcar está en la mesa.'
 'The sugar is on the table.'
- b. *acúkili amáni mesa-ci*
 sugar be.PL table-LOC
 'Hay azucareras en la mesa.'
 'There are sugar containers on the table.'

The verbs *maní* and *amani* cannot be used with some nouns, such as *igú* 'wood', *na'i* 'fire', or *rete* 'stone'. I do not have an explanation for this incompatibility.

- (100) * *igú mani* [there are wood/hay leña]
 * *na'í mani* [there is fire/hay fuego]
 * *weká galí amáni/maní* [there are a lot of houses/hay muchas casas]
 * *rete mani* [there are stones/hay piedras]
 * *weká mani rohá* [there are a lot of trees/hay árboles]

4.4.2. *ni* 'exist'

Another existential construction in UT takes as its nucleus the verb *ni* 'exist'. The sentence begins with some kind of modifier, like *hípuko* 'now', and/or the affirmative particle *la*, followed by the conjugated form of *ni*, with the indefinite subject coming at the end of the sentence. This construction occurs only with nonhuman referents that are static; the introduction of referents in motion is accomplished using the verb *eyena* 'walk' (4.4.3) and human referents are introduced using posture verbs (4.4.4).

- (101) a. *hípuko la ni-rú muni*
 now AFF exist-PASS beans
 'Ahora sí hay frijoles.'
 'Now there are beans.'
- b. *hípuko la ni-ru asúkili* 'Now there is sugar/Ahora sí hay azúcar.'
 c. *hípuko la ni-rú igú* 'Now there are wood/Ahora sí hay leña.'
 d. *hípuko weká ni-rú bilato* 'Now there are a lot of plates/Ahora hay muchos platos.'
 e. *hípuko la ni-ru cuwí* 'Now there is teswino/Ahora sí hay teswino.'
 f. *hípuko la ni-rú cunú* 'Now there is corn/Ahora sí hay maíz.'
 g. *la ni-rú na'í* 'There is light/Sí hay luz.' [in the morning/en la mañana]
 h. *hípuko la ni-rú atónili* 'Now there is *atole*/Ahora sí hay *atole*.'⁷
 i. *hípuko la ni-rú sapá* 'Now there is meat/Ahora sí hay carne.'
 [drying/secándose]
 j. *hípiko weká ni-rú masana* 'Now there are a lot of apple trees/Ahora hay muchos árboles de manzana.'
 k. *weká ni-rú rohá* 'There are a lot of trees/Hay muchos árboles.'
 l. *weka ni-rú reté* 'There are a lot of rocks/Hay muchas rocas.'

Speakers do not accept the use of the verb *ni* to introduce people.

⁷ *Atole* is a sweet, hot porridge drink made with corn flour and sugar cane.

- (102) a. **weká ni-ru rarómuri* [there are a lot of people/hay mucha gente]
 b. **weká ni-rú muki* [there are a lot of women]

4.4.3. *eyena* ‘walk’: existential for referents in motion

In UT, the verbs *eyena* ‘walk SG’ and *yena* ‘walk PL’ can express the existence of a referent that is in motion. Notice an important signal of the existential use of *eyena* ‘walk’ is constituent order, with the subject generally following the verb instead of occurring sentence-initially.

- (103) *weká yéna rokosóli*
 a.lot walk.PL spiders
 ‘Hay muchas arañas.’ [lit. caminando]
 ‘There are a lot of spiders.’ [lit. walking]

- (104) a. *weká yena culugí*
 a.lot walk.PL bird
 ‘There are a lot of birds/Hay muchos pájaros.’

- b. *weká yena akasí*
 a.lot walk.PL cow
 ‘There are a lot of cows/Hay muchas vacas.’

- c. *tolí weká yena*
 chicken a.lot walk.PL
 ‘There are a lot of chickens/Hay muchas gallinas.’

- d. *weká yena wahó*
 a.lot walk.PL mosquitos
 ‘There are a lot of mosquitos/Hay muchos zancudos.’

- e. *weká yena cibá létu eepó*
 a.lot walk.PL goat down.there meadow
 ‘There are a lot of goats down there at meadow/Hay muchas vacas en el campo.’

- f. *weká yena rocí ba’wi-cí*
 a.lot walk.PL fish water-LOC
 ‘There are a lot of fish in the water/Hay muchos peces en el agua.’

- g. *weká yena sopicí*
 a.lot walk.PL bat
 ‘There are a lot of bats/Hay muchos murciélagos.’
- h. *weká yéna sinowí*
 a.lot walk.PL snake
 ‘There are a lot of snakes/Hya muchas víboras.’
- i. *hénaka weká yéna cikwí*
 ahere a.lot walk.PL ant
 ‘Here there are a lot of ants/Hay muchas hormigas.’

Existential senses also arise with other motion verbs like *ma* ‘run SG’ and *húma* ‘run PL’ (105a-b), although it is not clear how the speakers know that these are existential uses, since the subject comes in its usual location, at the start of the sentence.

- (105) a. *nolíka we ma-wá*
 clouds a.lot run-PASS
 ‘Hay muchas nubes.’ [lit.corriendo]
 ‘There are a lot of clouds.’ [lit. running]
- b. *culugí weká húma repá*
 bird a.lot run.PL up.there
 ‘Hay muchos pájaros arriba (en el cielo).’ [li. corriendo]
 ‘There are a lot of birds up there (in the sky).’ [lit. running]

4.4.4. The use of POVs in existential predicates

When asking for existential constructions that involve items that occur in particular configurations, the UT sentences provided were locative constructions headed by posture verbs, with the location not necessarily further specified. This is clearest with inanimate entities, which do not move around, like wood and houses (106); but it also happens with referents that have restricted motion, for example, cows that are enclosed in a pen (107a), chickens in a hen house (107b), or a swarm of mosquitoes that is enclosed in the corner of a room (107c). Interestingly, it appears that these constructions occur

either with subjects in the normal sentence-initial position (106a, 107b) or in sentence final position (106b, 107c).

- (106) a. *igí weká bití*
 wood a.lot lie.PL
 ‘There is a lot of wood/Hay mucha madera.’
- b. *weká ha galí*
 a.lot standing.PL house
 ‘There are a lot of houses/Hay muchas casas.’
- (107) a. *weká ucú akaci mu’á-ru-ga go’lé-ci*
 a.lot stand4.PL cows enclosed-PASS-CONT pen-loc
 ‘Hay muchas vacas encerradas en el corral.’
 ‘There are a lot of cows enclosed at the pen.’
- b. *tolí weká ha mo’á-ru-ga*
 chicken a.lot stand.PL enclosed-PASS-CONT
 ‘Hay muchas gallinas encerradas.’
 ‘There are a lot of chickens enclosed.’
- c. *weká ucú wahó sekó-ci*
 a.lot stand4.PL mosquito corner-LOC
 ‘Hay muchos mosquitos en la esquina (del cuarto).’
 ‘There are a lot of mosquitos in the corner (of the room).’

4.4.5. The negative existential *tabilé ité*

In UT, there is a special negation strategy for the existential, using a unique negative existential verb *ite* ‘not. exist’, preceded by the independent negative word *tabilé* (or its short form *ta*, as in 109). The verb *ité* occurs in no other constructions, so it is uniquely a negator of existence. In this construction, also, the indefinite subject follows the verb.

- (108) *hípiko tabilé ité muni*
 now NEG not.exist beans
 ‘No hay frijoles ahora.’
 ‘There are no beans now.’

- (109) *bi'li=ka ta ite-le-meré muni*
 tomorrow=FOC NEG not.exist-PFV-FUT beans
 'Mañana no va a haber frijoles.'
 'Tomorrow there will not be (any more) beans.'
- (110) *tabilé ité na'i* 'There is no light/No hay luz.'
tabilé ité igú 'There is no wood/No hay madera.'
tabilé ité sopali 'There are no stars/No hay estrellas.'
héna=ka tabilé ité mísi 'There is no cat here/Aquí no hay gato.'
héna=ka tabilé ité sinowí 'There are no snakes here/No hay víboras aquí.'
héna=ka tabilé ité boé 'There is no road here/No hay camino aquí.'
héna=ka tabilé ité toli 'There are no chickens here/No hay gallinas aquí.'
hípiko tabilé ití mecá 'There is no moon now/Ahora no hay luna.'
hípuko tabilé ité remé 'There are no tortillas now/Ahora no hay tortillas.'
hípuko tabilé ité betóli 'There are not bowls now/Ahora o hay platos.'
hípuko tabilé ité cuwí 'There is no teswino now/Ahora no hay teswino.'

This concludes the presentation of existential constructions, but clearly there are many questions still to be answered. In future research, I hope to study what conditions the selection of a particular existential construction from among the four described here, and also to check whether it is possible to get a negative existential reading with either *yéna* 'walk' or a POV in existential function.

4.5. Possessive predicate constructions in UT

Possessive predicate constructions in UT are a subtype of the adjectival predicate construction, in which the subject is the possessor and the possessed noun bears a suffix *-e* 'have' that derives a verb stem, followed by the sequence *-ga-me* 'CONTINUOUS-PARTICIPLE'; a copula completes the construction. Schematically, the combination looks like [NPSSR NPSSD-*e-ga-me* COP]. Like other adjectival predicate constructions in UT, the unmarked present tense copula is *hu* (111), past tense uses the copula *ke* (112), the future tense uses the copula *ni* (113). In the present tense, the first person plural uses the copula *ni* 'be/exist' with the suffix *-ru* '1PL' (111d).

- (111) a. *ne=ka gal-é-ge-me hu=ne*
 1SG=FOC house-HAVE-CONT-PTCP be=1SG
 ‘Tengo casa.’
 ‘I have a house.’
- b. *mué=ka gal-é-ga-me hu=mo*
 2SG=FOC house-HAVE-CONT-PTCP be=2SG
 ‘Tú tienes casa.’
 ‘You have a house.’
- c. *alué muki=ka gal-é-ga-me hu*
 DEM woman=FOC house-HAVE-CONT-PTCP be
 ‘Esa mujer tiene casa.’
 ‘That woman has a house.’
- d. *ramué=ka gal-é-ga-me ní-ru*
 1PL=FOC house-HAVE-CONT-PTCP be/exist-1pl
 ‘Nosotros tenemos casa.’
 ‘We have a house.’
- e. *éme=ka gal-é-ga-me hu*
 2PL=FOC house-HAVE-CONT-PTCP be
 ‘Ustedes tienen casa.’
 ‘You all have a house.’
- f. *alué umugí=ka gal-é-ga-me hu*
 DEM women=FOC house-HAVE-CONT-PTCP be
 ‘Esas mujeres tienen casa.’
 ‘Those women have a house.’
- (112) a. *ne=ka gal-é-ge-me ke=ne*
 1SG=FOC house-HAVE-CONT-PTCP be.PST=1SG
 ‘Yo tuve casa.’
 ‘I had a house.’
- b. *mué=ka gal-é-ga-me ke=mo*
 2SG=FOC house-HAVE-CONT-PTCP be.PST=2SG
 ‘Tú tuviste casa.’
 ‘You had a house.’
- c. *alué muki=ka gal-é-ga-me ke*
 DEM woman=FOC house-HAVE-CONT-PTCP be.PST
 ‘Esa mujer tuvo casa.’
 ‘That woman had a house.’

- d. *ramué=ka gal-é-ga-me ke*
 1PL=FOC house-HAVE-CONT-PTCP be.PST
 ‘Nosotros tuvimos casa.’
 ‘We had a house.’
- e. *éme=ka gal-é-ga-me ke*
 2pl=FOC house-HAVE-CONT-PTCP be.PST
 ‘Ustedes tuvieron casa.’
 ‘You all had a house.’
- f. *alué umugí=ka gal-é-ga-me ke*
 DEM women=FOC house-HAVE-CONT-PTCP be.PST
 ‘Esas mujeres tuvieron casa.’
 ‘Those women had a house.’
- (113) a. *ne=ka gal-é-ge-me ni-meré=ne*
 1SG=FOC house-HAVE-CONT-PTCP be-FUT=1SG
 ‘Voy a tener casa.’
 ‘I am going to have a house.’
- b. *mué=ka gal-é-ga-me ni-meré=mo*
 2SG=FOC house-HAVE-CONT-PTCP be-FUT=2SG
 ‘Vas a tener casa.’
 ‘You are going to have a house.’
- c. *alué muki=ka gal-é-ga-me ni-meré*
 DEM woman=FOC house-HAVE-CONT-PTCP be-FUT
 ‘Esa mujer va a tener casa.’
 ‘That woman is going to have a house.’
- d. *ramué=ka gal-é-ga-me ní-boré*
 1PL=FOC house-HAVE-CONT-PTCP be-FUT
 ‘Nosotros vamos a tener casa.’
 ‘We are going to have a house.’
- e. *éme=ka gal-é-ga-me ni-meré*
 2PL=FOC house-HAVE-CONT-PTCP be-FUT
 ‘Ustedes van a tener casa.’
 ‘You all are going to have a house.’
- f. *alué umugí=ka gal-é-ga-me ni-meré*
 DEM women=FOC house-HAVE-CONT-PTCP be-FUT
 ‘Esas mujeres van a tener casa.’
 ‘Those women are going to have a house.’

More examples

- (114) *alué muki ma ucé sap-é-ga-me hu*
 DEM woman just again meat-HAVE-CONT-PTCP be
 ‘Esa mujer está embarazada otra vez.’
 ‘That woman just got pregnant again.’ [lit. ‘That woman just again is meat-
 having’]
- (115) *la ben-é-ga-me hu=ne, sekoli nete-ka*
 AFF know-HAVE-CONT-PTCP be=1SG pot make-CONT
 ‘Yo soy conocedor (de como) hacer ollas.’
 ‘I am knowledgeable making pots.’
- (116) *alué rió kal-é-ga-me hú*
 DEM man lie-HAVE-CONT-PTCP be
 ‘Ese hombre es un mentiroso.’
 ‘That man is a liar.’
- (117) *alué muki we ala mo'-é-ga-me hu*
 DEM woman very good head-HAVE-CONT-PTCP be
 ‘Esa mujer tiene muy buena memoria.’ [lit. muy buena cabeza]
 ‘That woman has very good memory. [lit. very good head]
- (118) *walú bo'-é-ga-me-ti*
 big hair-HAVE-CONT-PTCP-NMLZ
 ‘(El) es peluda.’
 ‘(He) has a lot of hair.’ (OXI:58c)
- (119) *amulí ran-é-ga-me*
 almost kid-HAVE-CONT-PTCP
 ‘(Ella) casi tiene el bebé.’
 ‘(She) almost has the baby.’ (OXI:286)

In one case, immediately following the high front vowel that comes at the end of *enomí* ‘money’, the *-e* ‘have’ suffix is not attested. This is illustrated in (120), where *enomí* ‘money’ takes the *-ga-me* sequence without *-e* ‘have’, but the resulting clause is identical in structure to the examples in (111-119). It is possible that this absence of *-e* is due to assimilation to the accented final vowel of the root *enomí*, a hypothesis I plan to test in future research.

- (120) a. *ne=ka enomí-ga-me hu=ne*
 1SG=FOC money-CONT-PTCP be=1SG
 ‘Yo soy adinerado.’
 ‘I have money.’
- b. *mué=ka enomí-ga-me hú=mo*
 2SG=FOC money-CONT-PTCP be=2SG
 ‘Tú eres adinerado.’
 ‘You have money.’
- c. *alué rió=ka enomí-ge-me hu*
 DEM man=FOC money-CONT-PTCP be
 ‘Ese hombre es adinerado.’
 ‘That man has money.’
- d. *ramué=ka enomí-ga-me ni-ru*
 1PL=FOC money-CONT-PTCP be/exist-1PL
 ‘Nosotros somos adinerados.’
 ‘We have money.’
- e. *éme=ka enomí-ga-me hu*
 2SG=FOC money-CONT-PTCP be
 ‘Ustedes son adinerados.’
 ‘You all have money.’
- f. *alué umugí=ka enomí-ga-me hu*
 DEM women=FOC money-CONT-PTCP be
 ‘Las mujeres son adineradas.’
 ‘Women have money.’

Another strategy for creating a possessive predicate construction is to use the transitive verb *iní* ‘have’, which takes as its subject and object the possessor and possessed, respectively. This verb inflects like any verb (cf. Chapter V), taking no TAM morphology in the present tense (121-123). It also can take the adjectivalizing sequence *-ga-me* ‘CONT-PTCP’ to become an adjectival predicate with a possessor subject and a preceding possessed object (123).

- (121) a. *ne=ka la eyé-ga-me hú=ne*
 1SG=FOC AFF mother-CONT-PTCP be=1SG
 ‘I have mother/tengo mamá.’

- b. *ne=ka gawíla welé iní=ne*
 1SG=FOC land big mine=1SG
 ‘I have a large farm/piece of land.’
- (122) a. *ne=ka bilé galí iní=ne*
 1SG=FOC one house have=1SG
 ‘Yo tengo una casa.’
 ‘I have a house’
- b. *mué=ka bilé galí iní=mo*
 2SG=FOC one house have=2SG
 ‘Tú tiene una casa.’
 ‘You have a house’
- c. *alué rió=ka weká enomí iní*
 DEM man=FOC a.lot money have
 ‘Ese hombre tiene mucho dinero.’
 ‘That man has a lot of money.’
- d. *éme we okábi enomí iní*
 2PL=FOC very little house have
 ‘Ustedes tienen muy poco dinero.’
 ‘You all have very little money.’
- e. *alué umugí=ka we okábi enomí iní*
 DEM women=FOC very little money have
 ‘Las mujeres tienen muy poco dinero.’
 ‘The women have very little money.’
- (123) a. *ne=ka akaráci iní-ga-me hu*
 1SG=FOC sandals have-CONT-PTCP be
 ‘Yo tengo huaraches.’
 ‘I have sandals.’
- b. *ne=ka bilé nabaha iní-ga-me hú=ne*
 1SG=FOC one razor have-CONT-PTCP be=1SG
 ‘Yo tengo una navaja.’
 ‘I have a razor’

This concludes the chapter on nonverbal predication. The copulas and posture verbs introduced here will return as auxiliaries when we consider complex predicates in Chapter VI. But first, in the next chapter I give an overview of verbal inflectional morphology in the main clause.

CHAPTER IV

INTRODUCTION TO VERB MORPHOLOGY

This chapter provides an introduction to the morphological units used with main clause verbs in UT. The allomorphy in verbal morphology is an area of great complexity in UT. This chapter introduces that allomorphy and, where possible, identifies morphological and phonological conditioning factors for different variants of each morpheme. However, to fully understand this system, further study is necessary, particularly with an extensive body of text material and carefully controlled elicitation techniques. I begin with a quick definition of the difference between derivational and inflectional morphology, then turn to an outline of the rest of this chapter.

INFLECTIONAL morphology produces new forms of the same word, often showing the relationships that word has to other words or concepts in the phrase or clause. In contrast, DERIVATIONAL morphology creates new words with new meanings, whether by adding a semantic value to the old word (i.e. changing the semantics) or by changing the part of speech (e.g. from noun to verb). Prototypically inflectional categories in verbal systems show tense/aspect/mood/evidential status, as well as person/number/gender, etc. of subject and/or object nouns. Prototypical derivational categories would adjust valence (like causative/passive), change aktionsart (like completive or iterative aspect), or change part of speech (like verbalizers) (Payne, 1997; Shopen, 2007:280). In Table 5.1, I list many of the criteria that have been proposed to distinguish the two.

Table 5.1. Differences between inflectional and derivational morphology

Inflection	Derivation
Relevant to syntax	Not relevant to the syntax
Obligatory	Optional
Not replaceable by simple word	Replaceable by simple word
Same concept as base	New concept
Relatively abstract meaning	Relatively concrete meaning
Semantically regular	Possibly semantically irregular
Less relevant to the base meaning	Very relevant to the base meaning
Unlimited applicability	Limited applicability
Expression at word periphery	Close to the base
Less base allomorphy	More base allomorphy
Cumulative expression possible	No cumulative expression
Not iterable	Iterable

Within Urique Tarahumara, many derivational and inflectional morphemes occur in the verb word. For the most part, I avoid treating the complexities of derivational morphology — Caballero’s (2008) analysis of Choguita Tarahumara treats multiple verbalizers and valence-changing morphemes, so it is quite likely that similar morphemes will be described in future research on UT. In the domain of inflection, UT shows both past and future tense (§5.1), aspectual morphemes (largely imperfective, cf. §5.2), mood and evidentiality (§5.3, 5.4), and voice and valence (§5.5). In addition to these inflectional and derivational morphemes, there are also multiple enclitics that attach at the end of the verb complex (§5.6).

5.1. Tense

UT makes a morphological distinction between future and past tense. There is one type of past tense and two different types of future, POTENTIAL FUTURE and IMMEDIATE FUTURE. The complications of the system come to light with the allomorphy and the distributions of the allomorphs related to the person paradigm and verbal classes. Table 5.2 shows the allomorphs and their glosses.

Table 5.2. Tense morphemes in UT

TENSE	GLOSS
<i>-ge/-le/-e/-ke</i>	PAST TENSE
<i>-méla/-mala/-mara/-mé/-ma/-bo/-po</i>	POTENTIAL FUTURE
<i>-meré/-boré/-poré</i>	IMMEDIATE FUTURE
<i>-meolá/-molá</i>	PROBABLE/POTENTIAL FUTURE

The next section discusses the past tense, its allomorphs and their distribution.

5.1.1. The PAST TENSE: *-ge/-le/-e/-ke*

The past tense suffix in UT has the following allomorphs: *-ge*, *-le*, *-ke* and *-e*. In other varieties of Tarahumara, suffixes with similar forms and/or meanings are attested. In Norogachi the suffix *-e* has been reported as ‘imperfect’ for regular verbs (Brambila, 1953:69) and with a meaning of ‘past tense’ (Lionnet, 1972:43). Western Tarahumara has the suffix *-ge* with a meaning of ‘past imperfective’ (Burgess, 1984:25). In Choguita Rarámuri the imperfective *-e* is attested (Caballero, 2008:429). My description of the past tense in UT begins with a description of the distribution of the various allomorphs of the past tense suffix.

The fortis versus lenis versions of the Past Tense suffix are primarily conditioned by the class of the verb that precedes them (see §2.3 for discussion and illustration of multiple suffixes with this distinction). The lenis allomorph *-ge* occurs with class 1 verbs with all persons except 2PL (1a-d, f), directly following the verb root when the subject is 1SG or 2SG (1a-b). Regardless of verb class, 1PL and third person suffixes (which precede the past tense suffix) also condition the lenis allomorph (1c-d, f; 2c-d, f). The fortis allomorph *-ke* occurs directly following a class 2 verb, which is to say with 1 SG and 2 SG subjects (2a-b). The allomorph *-le* occurs with 2PL subjects regardless of verb class, (1e) and (2e). Interestingly, the allomorph *-le* immediately follows the verb root, with no

additional subject indexation for 2PL; the lack of effect of the verb class indicates that historically, there must have been a 2PL suffix preceding the past tense suffix, so that the allomorph *-le* represents a modern fusion of the 2PL suffix with the past tense suffix. Although *-le* is the canonical form of the past tense suffix with a 2PL subject, it is also possible (and even common) for speakers to use the third person verb form with 2PL subjects (3a, b).

- (1) Verb class 1
- a. *ripí-ge=ne* ‘I stayed/Yo (me) quedé.’
 - b. *ripí-ge=mo* ‘You stayed/Tú (te) quedaste.’
 - c. *ripí-li-ge* ‘S/he stayed/El/ella (se) quedaste.’
 - d. *ripí-ri-ge* ‘We stayed/Nos quedamos.’
 - e. *ripí-le* ‘You all stayed/Tú (te) quedaste.’
 - f. *ripí-li-ge* ‘They stayed/Ellos se quedaron.’
- (2) Verb class 2
- a. *pagó-ke=ne* ‘I washed (it)/Yo (lo) lavé.’
 - b. *pagó-ke=mo* ‘You washed (it)/Tú (lo) lavaste.’
 - c. *pagó-li-ge* ‘S/he washed (it)/Ella, él lo lavó.’
 - d. *pagó-ti-ge* ‘We washed it/Nosotros (lo) lavamos.’
 - e. *pagó-le* ‘You all washed (it)/Ustedes (lo) lavaron.’
 - f. *pagó-li-ge* ‘They washed (it)Ellos (lo) lavaron.’
- (3) a. *éme=ka ripí-li-ge* ‘You all stayed/Ustedes (se) quedaron.’
 b. *éme=ka pagó-li-ge* ‘You all washed (it)/Ustedes (lo) lavaron.’

For some irregular verbs, the past tense allomorph *-e* occurs with 1SG, 2SG, and 2PL subjects (4a-b). More extensive irregularity is described in §5.1.1.5-6.

- (4) a. *aci-é=ne* ‘I laughed/Yo (me) reí.’
aci-é=mo ‘You laughed/Tú te reíste’
aci-rú-ge ‘We laughed/Nosotros nos reímos.’
aci-é ‘You all laughed/Ustedes se rieron.’
aci-li-ge ‘S/he, they laughed/El, ella, ellos se rieron’
- b. *eté-e=ne* ‘I saw (it)/Yo (lo) vi.’
eté-e=mo ‘You SG saw (it)/Tú (lo) viste.’
eté-ri-ge ‘We saw (it)/Nosotros (lo) vimos.’
eté-ri-e ‘You all saw (it)/Tú (lo) viste.’
eté-ri-ge ‘S/he, they saw (it)/El, ella, ellos (lo) vieron.’

For another set of verbs, the suffix *-le* can occur not just 2PL subjects, but also with third person subjects (5a-b). For these verbs, in the absence of a preceding 2PL subject pronoun (i.e. either with or without a preceding NP), the default interpretation is for the subject to be third person (5c). Even with these irregular verbs, the allomorph *-le* never co-occurs with a 1SG (6a-b), 2SG (6c-d), or 1PL subject (6e-f).

- (5) a. *alué muki ra'ica-le*
 DEM woman talk-PST
 'That woman talked/La mujer habló.'
- b. *ralómuli=ka ra'ica-le*
 people=FOC talk-PST
 'People talked/La gente habló.'
- c. *ra'ica-le*
 speak-PST
 'S/he talked/El, ella habló.'
- (6) a. **né=ka ra'ica-le* [I talked/yo hablé]
 b. **né=ka ra'icá-le=ne* [I talked/yo hablé]
 c. **mué=ka ra'icá-le* [You talked/Tú hablaste]
 d. **mué=ka ra'icá-le=mo* [You talked/Tú hablaste]
 e. **ramué=ka ra'ica-le* [We talked/Nosotros hablamos]
 f. **ramué=ka ra'icá-ri-le* [We talked/Nosotros hablamos]

In this set of verbs, the alternation between *-le* and *-ge* on the otherwise unmarked verb *ra'ici* 'talk' can create an interesting semantic distinction, both involving a third person subject, but uniquely in this case, correlating with different persons of object. When *ra'ici* takes the suffix *-ge*, the interpretation is that a third person subject is talking to a first person addressee object (7a-b). However, when *ra'ici* takes the suffix *-le*, the interpretation is that a third person subject is talking to a third person addressee object (7c-d). The same verb forms co-occur with overt arguments, as well (7b, d) — note that the overt 1SG object is marked with the locative *-ci* (7b), whereas other persons of object

(like the third person object *bilé muki* ‘one woman’ in (7d) are not. The past tense form -*le* does not occur when subject is third person and object is first person (8).

- (7) a. *ra'íci-ge=kuru*
 speak-PST=FOC2
 ‘He talked/El habló’ [He talked with me/El habló conmigo]
- b. *alué rió=ka ne-cí ra'íci-ge=kuru*
 DEM man=FOC 1SG-LOC speak-PST=FOC2
 ‘This man talked with me/Ese hombre habló conmigo.’
- c. *ra'íca-le=kuru*
 speak-PST=FOC2
 ‘He talked/El habló.’ [He talked with him/her/ El habló con él/ella]
- d. *alué rio=ka ra'íca-le bilé muki*
 DEM man=FOC speak-PST one woman
 ‘The man talked with one woman/El hombre habló (con) la mujer.’
- (8) **alué rioka necí ra'íca-le* [this man talked to me]

For one posture verb, *moci* ‘sit.PL’, there is an alternation between *-le* and *-ge* for 2PL subjects that appears to reflect a sense of duration, with *-le* indicating that the 2PL subject is sitting and ‘staying for some time in a place’ (9a), but *-ge* indicating that the 2PL subject is ‘sitting for a short period of time’ (9b). Such an alternation has not been reported for any other verb, but the possibility for this one verb tells us that we should not be surprised to find more such cases of idiosyncratic alternations with unexpected semantics.

- (9) a. *éme=ka alé moci-le*
 2PL=FOC DEM sit.PL-PST
 ‘You all stayed there/Ustedes se quedaron.’ [several days]
- b. *éme=ka alé moci-ge*
 2PL=FOC DEM sit.PL-PST
 ‘You all were sitting there/Ustedes estaban sentados.’ [taking a break]

To summarize, the past tense suffix occurs as *-ge* after person suffixes (usually 1PL and third person) or directly following a class 1 verb root, as *-ke* directly following a class 2 verb root, as *-le* to indicate a 2PL subject regardless of verb class, and as *-e* directly following the verb root and with 2PL subjects for a group of irregular verbs such as *ani* ‘say’. More irregular and semantically surprising alternations are also attested between *-ge* and *-le*, but only with a couple of verbs.

5.1.1.1. Subject verbal indexation in the past tense

In the past tense, the UT verb indexes person and number of the subject via a range of grammatical markers on the verb that indicate who is the subject and, in the case of 1SG and 2SG, also the object. As in all tenses, the 1SG and 2SG subjects or objects may be indexed by a verbal enclitic: *=ne* ‘1SG’ and *-mo* ‘2SG’ (see §3.4.2; for future tenses, see §5.1.2.3). The remaining person-number suffixes only occur preceding the past tense suffix; for this reason I describe verbal indexation in this section, focusing on the inflectional suffixes used for 1PL, 2PL, and all third person subjects.

There are two distinct patterns of allomorphy for subject suffixes conditioned by the class of the verb root: these distinguish separate allomorphs of the 1PL suffix and the past tense suffix, both of which immediately follow the verb root when used with 1SG and 2SG subjects. For Class 1 verbs, the forms are *-ri* / *-ru* ‘1PL’¹ and *-ge* ‘PAST’; for Class 2 verbs, *-ti* ‘1PL’ and *-ke* ‘PAST’. In both classes, 2PL is a zero form followed by a unique allomorph of the past tense suffix, *-le* ‘PAST’.

¹ The conditioning factor for the variation between *-ri* and *-ru* is unknown.

Table 5.3 Subject indexation and past tense in the two UT verb classes.

	CLASS 1			CLASS 2		
1SG	-Ø	-ge	=ne	-Ø	-ke	=ne
2SG	-Ø	-ge	=mo	-Ø	-ke	=mo
1PL	-ri/-ru	-ge		-ti	-ge	
2PL	-Ø	-le		-Ø	-le	
3SG/PL	-li	-ge		-li	-ge	

Example (10a) illustrates class 1 with *-ri* ‘1PL’; (10b) with the suffix *-ru* ‘1PL’.

- (10) a. *eléni-ge=ne* ‘I bled/Yo sangré.’
eléni-ge=mo ‘You bled /Tú sangraste.’
eléni-ri-ge ‘We bled /Nosotros sangramos.’
eléni-le ‘You all bled/Ustedes sangraron.’
eléni-li-ge ‘S/he/They bled/Ella/él/Ellos sangraron.’
- b. *bini-gé=ne* ‘I knew (it)/Yo (lo) supe.’
bini-gé=mo ‘You knew (it)/Tú (lo) supiste.’
bini-rú-ge ‘We knew (it)/Nosotros (lo) supimos.’
bini-le ‘You knew (it)/Ustedes (lo) supieron.’
bini-li-ge ‘S/he/They knew (it)/ El (lo) supo.’

Other Class 1 verbs that take *-ri* ‘1PL’ are *ripí-me* ‘remain,’ *wipí-me* ‘bend down (plants)’ *ayó-me* ‘get angry,’ *buná-me* ‘bend down (people),’ *napó-me* ‘weed (by hand),’ *mahá-me* ‘get scared,’ *uhí-me* ‘fart,’ *cigó-me* ‘steal,’ *napiwa-me* ‘weed (with a tool), and *sebá-me* ‘come’. Other Class 1 verbs that take *-ru* ‘1PL’ are *rahá-me* ‘burn’, *sawí-me* ‘get well/give birth’, *eléna-me* ‘bleed’, *witá-me* ‘defecate’, *ací-me* ‘laugh’, *ciwí-me* ‘die PL’, *neté-me* ‘kick’, *ka’wí-me* ‘transport’. (See the list of class 1 verbs in the Appendix.)

Example (2) and *meté-me* ‘cut (with a machete)’(11) illustrate the paradigm for a class 2 verb.

- (11) *meté-ke=ne* ‘I cut (it)/Yo (lo) corté.’
meté-ke=mo ‘You cut (it)/Tú lo cortaste.’
meté-ti-ge ‘We cut (it)/Nosotros (lo) cortamos.’
meté-le ‘You all cut (it)/Ustedes (lo) cortaron.’
meté-li-ge ‘S/he, they cut (it)/El, ella, ellos (lo) cortaron.’

Other class 2 verbs are *emé-me* ‘fall down,’ *rikú-me* ‘get dizzy/drunk,’ *cibu-me* ‘hide,’ *bicí-me* ‘peel the cactus,’ *ticí-me* ‘comb,’ *sasíro-me* ‘slip,’ *pagó-me* ‘wash,’ *balámu-me* ‘be thirsty,’ *cukuré-me* ‘scratch,’ *ciná-me* ‘scream,’ *inámu-me* ‘entender,’ *cibú-me* ‘hide,’ *neté-me* ‘do, make,’ *batú-me* ‘grind on a stone.’ (See the list of class 2 list in the Appendix.) Having presented the most regular portion of the paradigms, we now turn to the suppletive verb group. In future tense, the first and second person clitics may occur, but not the verbal suffixes for 1PL, 2PL, or 3 (see §5.1.2).

In addition to the Speech Act Participants (SAP) singular enclitics and the verbal suffixes to be illustrated in this section, subject agreement sometimes also involves suppletive changes in the form of the verb root (singular *vs.* plural roots), plus irregular changes in one or more vowels in the root and/or in the lexical stress pattern (§ 5.1.1.5). I discuss and illustrate this irregularity in specific sections, but I also mention it at the outset to avoid possible confusion when these other elements interfere with otherwise regular patterns of agreement in specific examples. The following section explains how the indexation of subject works in the suppletive verb group.

5.1.1.2. Number suppletion

Number suppletion in verbs is common throughout the languages of North America (Sherzer, 1976), and it is so widespread in Uto-Aztecan languages that Langacker (1977:127) has reconstructed it to Proto-Uto-Aztecan. Thus it is not surprising that UT is one of those languages that show number suppletion in verb roots.

Verbal suppletion in UT is conditioned by number of the absolutive argument, with one root used for a singular absolutive and the other for a plural absolutive. So

intransitive verbs are singular or plural depending on the number of the S (12a-b) and transitive verbs depending of the number of the P (12c-d).

- (12) a. *bilé muki rapáko wici-li-ge ipici*
 one woman yesterday **fall.off.SG-3-PST** rock.quarry-LOC
 ‘Una mujer se cayó ayer en el pedregal.’
 ‘One woman fell off yesterday at the rock quarry.’
- b. *ramué=ka rapáko lucú-ti-ge ipici*
 1pl-foc yesterday **fall.off.PL-1PL-PST** rock.quarry-LOC
 ‘Nosotros nos caímos ayer en el pedregal.’
 ‘We fell off yesterday at the rock quarry.’
- c. *mi cuéke ela-molá=ne sewá*
 DEM edge **put.standing.SG-FUT=1SG** flower
 ‘Voy a plantar una flor en la orilla (del terreno).’
 ‘I am going to plant (Lit.put standing) a flower on the edge (of the property).’
- d. *ramué=ka weká hawá-ri-ge masana*
 we-FOC a.lot **put.PL-1PL-PST** apple.tree
 ‘Nosotros plantamos muchos árboles.’
 ‘We planted (lit.put standing) a lot of apple trees.’

For the encoding of S and A in the suppletive verb group, the singular and the plural verb can belong to the same or different inflectional classes (as defined in 5.1.1.2). For example, the verbs *atí-me* ‘be sitting SG’ (13) and *mocí-me* ‘be sitting PL’ (14) both belong to Class 1; the verbs *emé-me* ‘get dizzy SG’ (15) and *tegú-me* ‘get dizzy/drunk PL’ (16) both belong to Class 2; and *wici-me* ‘fall off SG’ (17) is Class 1, whereas *lucú-me* ‘fall off PL’ (18) is Class 2. Recall that the class of the verb does not determine the allomorph of the past tense suffix when a person-marker intervenes between the root and the past tense suffix, as in the third person form in (15), etc.

- (13) *ati-gé=ne* ‘I was sitting/estaba sentada.’ [Class 1]
ati-gé=mo ‘You were sitting/estabas sentada.’
atí-li-ge ‘S/he was sitting/estaba sentada.’

- (14) *moci-ri-ge* ‘We were sitting/estábamos sentados.’ [Class 1]
moci-le ‘You all were sitting/Ustedes estaban sentados.’
moci-li-ge ‘They were sitting/Ellos estaban sentados.’
- (15) *emé-ke=ne* ‘I got dizzy/me ataranté.’ [Class 2]
emé-ke=mo ‘you got dizzy SG/te atarantaste.’
emé-li=ge ‘S/he got dizzy/se atarantó.’
- (16) *tegú-ti-ge* ‘We got dizzy/Nos emborrachamos.’ [Class 2]
tegú-le ‘You all got dizzy/Ustedes se emborracharon.’
tegú-li-ge ‘They got dizzy/Ellos se emborracharon.’
- (17) *wici-gé=ne* ‘I fell off/Me caí.’ [Class 1]
wici-gé=mo ‘You fell off/Te caíste.’
wici-li-ge ‘S/he fell off/Se cayó.’
- (18) *lucú-ti-ge* ‘We fell off/Nos caímos.’ [Class 2]
lucú-le ‘You PL fell off/se cayeron.’
lucú-li-ge ‘They fell off/se cayeron.’

Other suppletive verbs are *irí-me* ‘stand1.SG’ vs. *ha-me* ‘stand1.PL’; *bo’i-me* ‘lie.SG’ vs. *bití-me* ‘lie.PL’; *cukú-me* ‘stand4.SG’ vs. *ucu-me* ‘stand4.PL’; *baki-me* ‘enter.SG’ vs. *mo’i-me* ‘enter.PL’, *maci-me* ‘go.out.SG’ vs. *buya-me* ‘go.out.PL’; and *rikuli-me* ‘be.drunk.SG’ vs. *tegiri-me* ‘be.drunk.PL’ (see the lists of suppletive verbs in the Appendix).²

In addition to fully suppletive verbs, there are other verbs with almost identical singular and plural forms. In these verbs, even though third person singular and third person plural are marked with the same suffix, *-li*, the two are distinguished via changes in the verb root itself. For example, the elision of a vowel from the singular form distinguishes the plural form in (19), and a change in the final vowel from /i/ to /a/ distinguishes singular from plural in (20).

² In the database used for this work, transitive suppletive verbs are rare.

- (19) *eyéni-ge=ne* ‘I walked/caminé.’
eyéni-ge=mo ‘You walked/caminaste’
eyéni-li-ge ‘S/he walked/caminó.’
yéni-ri-ge ‘We walked/caminamos.’
yéni-le ‘You all walked/caminaron.’
yéni-li-ge ‘They walked/caminaron.’
- (20) *náti-ge=ne* ‘I remembered/me acordé.’
náti-ge=mo ‘You SG remembered/te acordaste.’
nati-lí-ge ‘S/he remembered/se acordó.’
nata-ru-ge ‘We remembered/nos acordamos.’
nata-le ‘You all remembered/se acordaron.’
nata-lí-ge ‘They remembered/se acordaron.’

Finally, there are some suppletive verbs in which one allomorph has only 3 forms (whether the singular or plural) but the other has a full paradigm. For example *nawá-me* ‘arrive SG’ has only the singular forms (21), but its suppletive plural partner, *sébi-me* ‘arrive’ has all five forms (22). In a similar way, the verb *tegú-me* ‘get dizzy/drunk PL’ has only the plural forms (23), whereas its singular suppletive partner *rikú-me* ‘get dizzy/drunk’ has all five forms (24).

- (21) *nawa-gé=ne* ‘I arrived/llegué.’
nawa-gé=mo ‘You arrived/llegaste.’
nawá-li-ge ‘S/he arrived/llegó.’
- (22) *sébi-ge=ne* ‘I arrived/llegé.’
sébi-ge=mo ‘You arrived/llegaste.’
sebá-ri-ge ‘We arrived/llegamos.’
sébi-le ‘You all arrived/llegaron.’
sébi-li-ge ‘S/he/they arrived/llegaron.’
- (23) *tegú-ti-ge* ‘We got drunk/nos emborrachamos.’
tegú-le ‘You got drunk/se emborracharon.’
tegú-li-ge ‘They got drunk/se emborracharon.’
- (24) *rikú-ke=ne* ‘I got drunk/me emborraché.’
rikú-ke=mo ‘You got drunk/te emborrachaste.’
rikú-ti-ge ‘We got drunk/Nos emborrachamos.’
rikú-le ‘you all got drunk/se emborracharon.’
rikú-li-ge ‘S/he/they got drunk/se emborracharon.’

In future research, I hope to compare such verbs with other Uto-Aztecan languages to see if this is perhaps an early stage in the innovation of new suppletive verb pairs, an early stage in the expansion of half of a suppletive verb pair to take over a full paradigm of inflections, or perhaps even a stable phenomenon. The next section addresses the use of the 3PL inflectional suffix for 2PL subjects.

5.1.1.3. Using the 3PL form for 2PL

For the majority of verbs in my UT database, the third person suffix can also be used to indicate a 2PL subject. As described above, 2PL regularly has no agreement suffix, but the past tense suffix takes the unique allomorph *-le*. In contrast, all third person subjects (both 3SG and 3PL) are marked by the suffix *-li* preceding the past tense allomorph *-ge*. However, speakers consistently allow the third person form *-li-ge* to agree also with second person plural subjects; when the 3SG and 3PL forms are distinct, only the 3PL form marks 2PL. Example (25) shows both second person plural forms for the verb *nolá-me* ‘bring’: first is the form with zero and *-le*, and second is the form identical to the third person plural. In this particular case, penultimate stress distinguishes the third person singular form, whereas both the second and third person plural forms show antepenultimate stress.

- (25) *nóli-ge=ne* ‘I brought (it)/(lo) traje.’
nóli-ge=mo ‘You SG brought (it)/(lo) trjiste.’
noli-lí-ge ‘S/he brought (it)/(lo) trajo.’
nolá-ri-ge ‘We brought (it)/(lo) trajimos.’
nóli-le ‘**You PL** brought (it)/(lo) trajeron.’
nóli-li-ge ‘**You PL** brought (it)/(lo) trajeron.’
nóli-li-ge ‘They brought (it)/(lo) trajeron.’

There is also a small group of verbs where the third person plural is marked with the same form as the second person plural; in this case, there is a single 2PL form (i.e., no alternation with a more regular third person form) (26).

- (26) *omébi-ge=ne* ‘I could/Yo puedo.’
omébi-ge=mo ‘You could/Tú puedes.’
omébi-li-ge ‘S/he could/El puede.’
omóba-ri-ge ‘We could/Nosotros podemos.’
omébi-Ø-le ‘You all could/ustedes pueden.’
omébi-Ø-le ‘They could/ellos pueden’

This sort of variation in marking 2PL verb agreement is not reported for other Uto-Aztecan languages, nor for other dialects of Tarahumara. One possible explanation is that this is an innovation in UT, probably based on contact with the local dialect of Spanish, which (as is common throughout Spanish in Latin American) uses a single verb inflection to mark both 2PL and 3PL. Having presented the most regular portions of the paradigms, we now turn to the irregularities.

5.1.1.4. Irregularity in past tense suffixes

UT has some verbs whose suffixes do not fall into the regular patterns, which I discuss in this section. Some of the irregular patterns in my database are unique, represented only by one example, whereas others are similar enough to be grouped together, even though they are not identical.

The first irregular class contains verbs that occur with the allomorph *-e* for past tense with 1SG, 2SG, and 2PL subjects (4a-b) repeated here for an easy reading as (27a-b).

- (27) a. *aci-é=ne* ‘I laughed/Me reí.’
aci-é=mo ‘You laughed/Te reiste’
aci-rú-ge ‘We laughed/Se rió.’
aci-é ‘You all laughed/Nos reimos.’
aci-li-ge ‘S/he/they laughed/El, ella, ellos se rieron.’

- b.
- | | |
|------------------|-----------------------------------|
| <i>eté-e=ne</i> | ‘I saw (it)/(lo) vi.’ |
| <i>eté-e=mo</i> | ‘You saw (it)/(lo) viste.’ |
| <i>eté-ri-ge</i> | ‘We saw (it)/(lo) vimos.’ |
| <i>eté-ri-e</i> | ‘You all saw (it)/(lo) vieron.’ |
| <i>eté-ri-ge</i> | ‘S/he/they saw (it)/(lo) vieron.’ |

The second is a group of five verbs where the form of the past tense suffix differs between the first and second person singular verbs (28 a-c). In four of these verbs, the difference appears to be rounding harmony between a preceding rounded final vowel of the verb root and the following rounded vowel of the second person plural clitic (28 a-b). Vowel harmony has been documented for other variants of Tarahumara: Caballero (2008:158) mentions that Choguita Rarámuri has a rounding harmony process. An unpredictable case is *ciná-me* ‘yell’ (28c), in which the first person singular takes an irregular past tense suffix *-ka* (*ciná-ka=ne* ‘I yelled’), while the second person singular takes the expected allomorph *-ke* (*ciná-ke=mo* ‘you yelled’).

- (28)
- | | | |
|----|--------------------------------|--------------------------------------|
| a. | <i>ayó-ge=ne</i> | ‘I got angry/me enojé.’ |
| | <i>ayó-go=mo</i> | ‘You got angry/te enojaste.’ |
| | <i>ayó-ri-ge</i> | ‘We got angry/se enojó.’ |
| | <i>ayó-le</i> | ‘You all got angry/nos enojamos.’ |
| | <i>ayó-li-ge</i> | ‘S/he, they got angry/se enojaron.’ |
| b. | <i>napabú-ge=ne</i> | ‘I harvested/coseché.’ |
| | <i>napabú-gu=mo</i> | ‘You harvested/cosechaste.’ |
| | <i>napabú-ri-ge</i> | ‘We harvested/cosechamos.’ |
| | <i>napabú-le</i> | ‘You all harvested/cosecharon.’ |
| | <i>napabú-li-ge</i> | ‘S/he/they harvested/cosecharon.’ |
| c. | <i>ciná-ka=ne</i> | ‘I yelled/grité.’ |
| | <i>ciná-ke=mo</i> | ‘You yelled/gritaste.’ |
| | <i>ciná-ti-ge</i> | ‘We yelled/gritamos.’ |
| | <i>ciná-le</i> | ‘You all yelled/gritaron.’ |
| | <i>ciná-li-ge</i> | ‘S/he, they yelled/gritó, gritaron.’ |

In example (29), the verbs use an idiosyncratic person suffix to mark one or more of the persons such as *-bi* ‘2PL, 3PL’ (29a), and *-wa* ‘1PL’ (29 b-c), which is then followed

by the allomorph *-e* ‘PAST’ (29 b-c). In (30), the plural verb *ucú* ‘be standing for animals with four or more legs/ be bending down for humans’ (singular verb *cuku*) marks third person plural with the suffix *-to* and the past tense with the allomorph *-e*. In some examples, the vowel of *-to* disappears, leaving the sequence *-t-e* to mark both 3PL and PAST. Verbs with *-bi*, *-wa*, or *-to* as person markers are rare in my database and they deserve more detailed study in future research.

- (29) a. *simi-gé=ne* ‘I went/fui.’
simi-gé=mo ‘You went/fuiste.’
simí-li-ge ‘S/he went/fue.’
simá-ri-ge ‘We went/fuimos.’
simí-bi-le ‘You all went/fueron.’
simí-bi-le ‘They went/fueron.’
- b. *kori-é-ke=ne* ‘I said/dije.’
kori-é-ke=mo ‘You said/dijiste.’
kori-wá-e ‘We said/dijimos.’
kori-Ø-é ‘S/he,they, you all said/dijo, dijeron.’
- c. *maci-é=ne* ‘I met (him/her)/(lo/la) conocí.’
maci-é=mo ‘You met (him/her)/ (lo/la) conociste.’
maci-wá-e ‘We met (him/her)/ (lo/la) conocimos.’
maci-Ø-é ‘You all met (him/her)/ (lo/la) conocieron.’
mació-ri-e ‘S/he, they met (him/her)/ (lo/la) conocieron.’
- (30) *ucú-ti-ge* ‘We bent down/Nos agachamos’
ucú-le ‘You all bent down/se agacharon.’
ucú-to-e ‘They bent down/se agacharon.’
ucú-t-e ‘They bent down/se agacharon.’

In example (31), the verb *elowí-me* ‘be hungry’ is a particularly irregular case. Whereas *-ri* usually marks 1PL in the Class 1 paradigm, with *elowí-me*, *-ri* marks 2PL plus 3SG/PL, in all cases followed by the allomorph *-e* ‘PAST’. While we could assume that the 2PL is just an extension of the 3PL form (5.1.1.4), it is also worth noting that the sequence *-ri-e* occurs in other irregular verbs marking only second person plural, e.g. *eté-me* ‘see’ (4b) and (27b), and marking only third person, e.g. *mací-me* ‘know’ (29c).

- (31) *elowi-ke=ne* ‘I was hungry/ tuve hambre.’
elowi-ke=mo ‘You all were hungry/tuviste hambre.’
elowi-ri-e ‘S/he was hungry/tuvo hambre.’
elowi-ti-ge ‘We were hungry/estuvimos hambrientos.’
elowi-ri-é ‘You all/they were hungry.’

A last observation is that some verbs occur with a combination of these irregularities. For instance, the verb *mací-me* ‘know’ takes the past tense allomorph *-e* for all persons, marks only third person with the suffix *-ri*, and marks the first person plural with the suffix *-wa* (29c).

The degree of morphological irregularity is quite high (including some verb roots, cf. the next section), but it is nevertheless still true that every verb has a consistent conjugational pattern. That is, while a linguistic analysis would be hard pressed to identify a single underlying form for each morpheme, most verbs do show five distinct inflected forms in the past, one each for 1SG, 1PL, 2SG, 2PL, and 3SG/PL. Thus, the UT language learner confronts a significant problem in memorization of irregularity, but this is not insurmountable, especially given that some generalizations can be found that group together irregularities (e.g. Class 1 versus Class 2 roots). No linguist to date has been able to propose a motivated synchronic rule-governed derivation for each form, but in future work, I hope to be able to find a historical basis for much of the modern allomorphy.

5.1.1.5. Irregularities in roots

As seen in the examples in this work, there is a great deal of variation in the UT verb throughout most paradigms, in the form of both the root and the suffixes. However, not all of the variation is so systematic as the suffix allomorphy conditioned by verb class. For example, the variation can be simply alternation of stress between penultimate

and antepenultimate syllables (32), a vowel change in the verb root (33), or loss of a consonant, as in the 1PL form in (34).

- (32) *bini-gé=ne* ‘I knew/Yo (lo) supe.’
bini-gé=mo ‘You knew/Tú (lo) supiste.’
bini-rú-ge ‘We knew/Nosotros (lo) supimos.’
bini-le ‘You all knew/Ustedes (lo) supieron.’
bini-li-ge ‘S/he, They knew/El, ella, ellos (lo) supieron.’
- (33) *atísi-ge=ne* ‘I sneezed/estornudé.’
atísi-ge=mo ‘You sneezed/estornudaste.’
atísu-ri-ge ‘We sneezed/estornudamos’
atísi-le ‘You all sneezed/estornudaron.’
atísu-li-ge ‘S/he/They sneezed/El, ella, ellos estornudaron.’
- (34) *napiwa-ge=ne* ‘I weeded/desyerbé.’ [with a mattock/con asadón]
napiwa-ge=mo ‘You weeded/desyerbaste.’
napiá-ri-ge ‘We weeded/desyerbamos’
napiwi-le ‘You all weeded/desyerbaron.’
napiwi-li-ge ‘S/he/they weeded/desyerbaron.’

For one verb root *raíca-me* ‘speak’, the root alternations combine with idiosyncratic agreement suffixes to distinguish the same set of person oppositions as the standard verbs (35). Unusually, the suffix *-ri* co-occurs with 3SG, 1PL, and 3PL subjects (35c, d, f), which are distinguished instead by differences in the form of the root: the 3SG root is the only one that lacks the glottal (35c), whereas the 1PL and 3PL roots are distinguished by different stress patterns (final (35c) and penultimate (35f), respectively).

- (35) a. *ra’íci-ge=ne* ‘I spoke/hablé’
b. *ra’íci-ge=mo* ‘You spoke/hablaste’
c. *raíca-ri-ge* ‘S/he spoke/habló’
d. *ra’íca-ri-ge* ‘We spoke/hablamos’
e. *ra’íci-li-ge* ‘You all spoke/hablaron’
f. *ra’íca-ri-ge* ‘They spoke/hablaron’

Alongside this unpredictable variation, the next section addresses a more regular phenomenon, the passive problem.

To summarize, the past tense suffix occurs as *-ge* after person suffixes (1PL and third person) or directly following a class 1 verb root, as *-ke* directly following a class 2 verb root, as *-le* to indicate a 2PL subject regardless of verb class, and as *-e* directly following the verb root and with 2PL subjects for a group of irregular verbs such as *ani* ‘say’. More irregular and semantically surprising alternations are also attested between *-ge* and *-le*, but only with a couple of verbs.

5.1.2. The future tense

UT has three types of future: a potential future *-méla/-mala/-mé/-ma/bo/po* (§5.2.2.1) an immediate future *-meré/-boré/-poré* (§5.2.2.2), and a probable future *-meolá/-molá* (§5.2.2.3). Looking at these lists of allomorphs, two things jump out. First, each semantic distinction contains a great deal of allomorphy, some phonologically related, some lexically related but some clearly suppletive. Second, certain syllables recur across the three categories, which indicates shared morphology. It may be possible to separate the morphological components synchronically (cf. the analyses of related forms in Caballero 2008), but in this section, I will treat these forms as unanalyzed synchronic allomorphs rather than as combinations of synchronic morphemes. To orient the reader to this section, I will provide my historical hypotheses as to the sources of the rampant allomorphy, with the understanding that some may prefer to analyze my internal reconstruction as synchronic combinatory morphology.

First, much of the allomorphy in the POTENTIAL FUTURE and the IMMEDIATE FUTURE comes from two source forms, previously identified in Miller (1996: 133) as the Proto-Sonoran verbs **mi(l)a* ‘go, run.SG’ and **po* ‘go, run.PL’. These became a future auxiliary through the well-known pathway of GO > FUTURE (Bybee, Perkins &

Pagliuca 1994: 267; Heine & Kuteva 2002: 161). In Choguita Rarámuri the future morpheme is suppletive exactly depending on the number of the subject, *-mea/-ma* ‘FUT.SG’ and *-po/-bo* ‘FUT.PL’ (Caballero 2008: 421-3) and in Guarijio, the same number-based suppletion is seen, with *-ma* ‘FUT.SG’ in opposition to *-pó/-bo* ‘FUT.PL’ (Miller 1996: 133). In UT, the modern reflexes of **mi(l)a* are *-méla*, *-mala*, *-mara*, *-mé*, and *-ma*; these are the allomorphs of the POTENTIAL FUTURE morpheme used with every person of subject except the first person plural. The modern reflexes of **po* are *-po* and *-bo* (the familiar fortis/lenis alternation, cf. Chapter II, § 2.3, and also §5.1.1.1); these are the allomorphs of the POTENTIAL FUTURE morpheme used only with first person plural subjects. The allomorphs *-mé*, *-ma*, *-po*, and *-bo* are also found as formatives in the IMMEDIATE FUTURE suffix, combined with a formative *-re* (possibly coming originally from *-re* ‘INFERENCE’).

In contrast, the PROBABLE FUTURE *-meola/-mola* appears to have a completely different and more recent source, which explains its relative lack of allomorphy: V-me + *olá* ‘V-PTCP + do’.

The subsequent sections provide details on the synchronic allomorphy for each morpheme, as well as a more detailed selection of examples showing the semantics of each morpheme.

5.1.2.1. The POTENTIAL FUTURE *-méla/-mala/-mara/-mé/-ma/-bo/-po*

The Potential Future contains seven allomorphs, four of them phonologically conditioned, two suppletive, and one with conditioning environment unknown. The simplest distinction is the two suppletive suffixes *-po/-bo*, a fortis-lenis pair (cf. §2.3) conditioned by a first person plural subject. The allomorph *-po* occurs with the 1PL of

class 2 verbs and *-bo* with 1PL of class 1 verbs. For class 1 verbs, *-bo* occurs without stress with verbs that retain primary stress and *-bó* occurs with stress with verbs that do not retain primary stress. The remaining five allomorphs occur with non-first-person-plural (i.e, with all other persons). The two forms *-méla* and *-mé* both occur with roots that do not take primary stress when inflected, so that the /e/ vowel of the (first syllable of the) suffix bears the primary stress for the word. The three forms *-mala*, *-mara*, and *-ma* all occur with verb roots that take the primary stress when inflected. Examples (36-37) are paradigms that illustrate the alternation between *-mala* and *-bo/ -po*. Examples (38) illustrate the alternation between *-mé* (preceding the first and second person singular enclitics).

- | | | |
|------|--|---|
| (36) | <i>né=ka elena-ma=ne</i>
<i>né=ka eléna-mala=ne</i>
<i>mué=ka eléna-mala=mo</i>
<i>mué=ka elena-molá=mo</i>
<i>*mué=ka elena-ma=mo</i>
<i>alué muki=ka eléna-mala</i>
<i>ramué=ka eléna-bo</i>
<i>éme=ka eléna-mala</i>
<i>umugí=ka eléna-mala</i> | ‘I will bleed/Yo voy a sangrar.’
‘I will bleed/Yo voy a sangrar.’
‘You will bleed/Tú vas a sangrar.’
‘You will bleed/Tú vas a sangrar.’
[You will bleed/tú vas a sangrar]
‘That woman will bleed/Esa mujer va a sangrar.’
‘We will bleed/Nosotros vamos a sangrar.’
‘You all will bleed/Ustedes van a sangrar.’
‘Women will bleed/Las mujeres van a sangrar.’ |
| (37) | <i>né=ka ciná-ma/me=ne</i>
<i>(né=ka ciná-mala=ne</i>
<i>mué=ka ciná-mala=mo</i>
<i>mué=ka ciná-me=mo</i>
<i>alué=ka ciná-mala</i>
<i>ramué=ka cina-po</i>
<i>éme=ka ciná-mala</i>
<i>ralómuli=ka ciná-mala</i> | ‘I will scream/Yo voy a gritar.’
‘I will scream/Yo voy a gritar.’
‘You will scream/Tú vas a gritar.’
‘You will scream/tú vas a gritar.’
‘S/he/ will scream/Ella va a gritar.’
‘We will scream/Nosotros vamos a gritar.’
‘You all will scream/ Ustedes van a gritar.’
‘People will scream/La gente va a gritar.’ |
| (38) | <i>né=ka aci-mé=ne</i>
<i>mué=ka aci-mé=mo</i>
<i>(mué=ka aci-méla=mo</i>
<i>alue towí=ka aci-méla</i>
<i>ramué=ka aci-bó</i>
<i>éme=ka aci-méla</i>
<i>umugí=ka aci-méla</i> | ‘I am going to laugh/Yo voy a reir.’
‘You are going to laugh/Tú vas a reir.’
‘You are going to laugh/Tu vas a reir.’
‘That boy is going to laugh/Ese niño va a gritar.’
‘We are going to laugh/Nosotros reimos.’
‘You all are going to laugh/Ustedes van a reir.’
‘We are going to laugh/NNosotros vamos a reir.’ |

The conditioning for *-méla* versus *-mala* and the *-mara* allomorph is still unknown. Example (39) shows verb class one with both suffixes. These suffixes can occur with verbs roots from Class 1 and Class 2. The form *-mara*, like *-mala*, never takes stress, nor is it followed by other suffixes or enclitics, so in this sense, it appears to be an alternate pronunciation of *-mala*. It is possible that it is in free variation with *-mala*, and also that it is restricted to certain morphological contexts (i.e., only occurs following certain roots and/or earlier suffixes). This is a topic for future research.

- (39) Class 1 verbs
rahi-méla ‘burn/quemar’
ani-méla ‘say/decir’
sawi-méla ‘get well, give birth/aliviarse, parir’
eléna-mala ‘bleed/sangrar’
ranéla-mala ‘give birth/parir’

The potential future meaning of this suffix indicates that the event might happen or it might not happen, that is, it is a weak prediction and it is possible that the event will not happen. In the paradigm for ‘bleed’ (36), the context given is that the subject is going to cross a barbed-wire fence and thus might (or might not) get a cut and might (or might not) bleed. Similarly, example (40a) illustrates a situation in which the speaker has to talk the next day, but (as indicated in 40b) she does not know very well what to say, so might not say anything.

- (40) a. *né=ka alué ani-méla bi'ilí*
 1SG=FOC DEM say-POT.FUT tomorrow
 ‘I am going to say that tomorrow.’
- b. *tabilé la mací=ne*
 NEG AFF know=1SG
 ‘I don’t know very well (what I am going to say).’ [I might not say it]

In §5.1.2.2, I will show some examples that explicitly contrast the semantics of the different future suffixes.

Before moving to the next suffixes, I would like to point out that the UT Potential Future suffix has innovated in a surprising way compared to the most closely related languages. As mentioned earlier, the source of the potential future morpheme is a suppletive pair of Proto-Sonoran main verbs, **mi(l)a* ‘go.SG’ and **po* ‘go.PL’. By means of the well-known pathway GO > FUTURE (Bybee, Perkins & Pagliuca 1994: 267; Heine & Kuteva 2002: 161), this suppletive pair of verbs became suppletive future suffixes in Guarijio and Choguita Rarámuri, with the modern reflexes of **mi(l)a* becoming the allomorph that occurs with singular subjects and the modern reflexes of **po* becoming the allomorph that occurs with plural subjects. The situation in UT thus represents a further evolution, in which the modern reflexes of **po* no longer mark all plural subjects, but just 1PL subjects, with modern reflexes of **mi(l)a* marking the 2PL and 3PL subjects. As far as I am aware, this innovation is unique to UT, thereby distinguishing UT from all other Sonoran languages. There have been further changes in the distribution of modern reflexes of **mi(l)a*, as discussed in §5.1.2.3.

5.1.2.2. The IMMEDIATE FUTURE *-meré/-boré/-poré*

The suffixes *-meré*, *-boré*, and *-poré* mark a future event that is immediate, and feels relatively certain to occur. The IMMEDIATE FUTURE looks very much like the short form *-mé* of the potential future plus an additional morpheme *-re/=re*, which greatly resembles the inferential evidence enclitic *=re*. However, the stress-related vowel alternation found in the potential future, *-méla* versus *-mala*, is not found in the immediate future: primary stress always falls on the final syllable of the suffix and

despite being unstressed, the vowel of the first syllable is always /e/. The forms *-boré* and *-poré* similarly look like the fortis and lenis forms of the potential future with a 1PL subject plus the stressed /ré/: A paradigm of *-meré* with *-boré* is seen in (41), and of *-meré* with *-poré* in (43).

- (41) *né=ka rena-meré* ‘I am going to yawn/Voy a bostezar.’
mué=ka rena-meré ‘You are going to yawn/Tú vas a bostezar.’
Martina=ka rena-meré ‘They are going to yawn/Ellos van a bostezar.’
ramué=ka rena-boré ‘We are going to yawn/Nosotros vamos a bostezar.’
éme=ka rena-meré ‘You all are going to yawn/Ustedes van a bostezar.’
umugí=ka rena-meré ‘Women are going to yawn/Las mujeres van a bostezar.’

- (42) *né=ka bi'ilí seba-meré=ne*
 1SG=FOC tomorrow arrive-IMM.FUT=1SG
 ‘I am going to arrive tomorrow/Voy a llegar mañana.’
- mué=ka bi'ilí sebá-more=mo*
 2SG=FOC tomorrow arrive-IMM.FUT=2SG
 ‘You are going to arrive tomorrow/Tú vas a llegar mañana.’
- alué mukí=ka bi'ilí seba-meré*
 DEM woman=FOC tomorrow arrive-IMM.FUT
 ‘That woman is going to arrive tomorrow.’
- ramué=ka bi'lí sebá-boré*
 1pl=foc tomorrow arrive-IMM.FUT
 ‘We are going to arrive tomorrow.’
- éme=ka bi'lí seba-meré*
 2pl=foc tomorrow arrive-IMM.FUT
 ‘You all are going to arrive tomorrow.’
- ralómuli bi'ilí seba-meré*
ralómuli tomorrow arrive-IMM.FUT
 ‘People are going to arrive tomorrow.’

- (43) *né=ka elowi-meré=ne*
 1sg=foc hungry-IMM.FUT=1SG
 ‘I am going to be hungry/Voy a (tener) hambre.’

mué=ka elowi-meré=mo
 2sg=foc hungry-IMM.FUT=2SG
 ‘You are going to be hungry/Vas a (tener) hambre.’

lucía elowi-meré
 Lucía hungry-IMM.FUT
 ‘Lucía is going to be hungry/Lucía va a (tener) hambre.’

ramué=ka elowi-poré
 1pl=foc hungry-IMM.FUT
 ‘We are going to be hungry/Nosotros vamos a (tener) hambre.’

éme=ka elowi-meré
 2pl=foc hungry-IMM.FUT
 ‘You all are going to be hungry/Ustedes van a (tener) hambre.’

kucí=tiri elowi-meré
 small=tiri hungry-IMM.FUT
 ‘The kids are going to be hungry/ Los niños van a (tener) hambre’

The following examples show the immediate, certainty meaning of this suffix in contrast with the less definite and more distant reading of the same verbs with the potential future suffix. The verbs *ranela-me* ‘give birth’ and *sawi-me* ‘get well’ can both be translated (in the right context) with a meaning of giving birth. In (40a, c), both verbs bear the potential future suffix, in (40b, d), both bear the immediate future suffix. Formally, note that the two verbs take different allomorphs of the potential future suffix, *-méla* suffixed to *sawi* ‘get well’ and *-mala* suffixed to *ranéla* ‘have a child’. Semantically, (40a,c) indicate a belief that the event will possibly happen sooner or later, whereas (40b, d) would be more appropriately said when the birth is imminent, for example when Martina is already having contractions.

- (44) a. *Martina sawi-méla*
 Martina get.well/give.birth-POT.FUT
 ‘Martina will get well/have a baby/Martina se va a liviar/a parir.’

- b. *Martina sawi-meré*
 Martina get.well/give.birth-IMM.FUT
 ‘Martina is going to give birth/Martina se va a liviar /va a parir.’
- c. *cibá ranéla-mala*
 goat give.birth-POT.FUT
 ‘The goat will give birth/La chiva va a parir.’
- d. *cibá ranele-meré*
 goat give.birth-IMM.FUT
 ‘The goat is going to give birth/La chiva va a parir.’

A similar example to illustrate the semantic difference between these two future morphemes is with the verb *wita-me* ‘defecate’: when the verb bears the suffix *-mala* (45a), the event will probably happen at some point in the future, but with *-meré* (45b), it has to happen soon.

- (45) a. *né=ka wita-méla*
 1sg=FOC defecate-POT.FUT
 ‘I am going to defecate/Voy a defecar.’
- b. *né=ka wita-meré*
 1sg=FOC defecate-IMM.FUT
 ‘I am going to defecate (soon)/Voy a defecar (pronto).’

Example (46) is from near the very beginning of a text, where the daughter introduces her mother and then announces that her mother will now start talking.

- (46) *né eyé-la ra'ica-meré pe oka-bi ra'ici-li*
 1SG mother-POSS talk-IMM.FUT few two-BI talk-NMLZ
 ‘My mother is going to say a couple words.’ (LMMY: 3)

5.1.2.3. The PROBABLE/POTENTIAL FUTURE *-meolá/-molá*

The final future suffix we consider here is the probable future suffix *-meolá/-molá*, which clearly has its own formal history, but which may not have a distinct meaning from the potential future. Both allomorphs share final stress, differing in that *molá* appears to be a reduced form of the unstressed diphthong in the initial syllable of

the fuller allomorph *-meolá*, which itself appears to be etymologically a combination of the derivational suffix *-me* plus the archaic verb *olá* ‘do’, cf. Brambila (1953).

The distribution of *-meolá* is restricted to verbs with singular subjects; when I tried to use it for verbs with plural subjects; I was corrected to the plural paradigm of the potential future, i.e., *-bo/-po* for 1PL subject and *-méla/-mala* for 2pl and 3PL subjects. This fact suggests that it might be analyzed as another suppletive form of the potential future. However, it also occurs alongside the singular forms of the potential future, apparently with a distinct meaning, which invites the analysis that it is a separate suffix. A diachronic analysis would argue for it as a separate suffix (clearly it comes from a distinct source), whereas the varying synchronic co-occurrence patterns suggest that it is well advanced on the path to becoming a suppletive variant of the potential future suffix.

There are two dimensions to the question of when *-meolá* is used: the first is a question categorizing verbs according to which persons of subject can occur with *-meolá*, and the second dimension what conditions the use of *-meolá* for each (category of) verb. With regard to this second dimension, one could create a person hierarchy to identify when to expect *-meolá* and when to expect *-méla/-mala*: 3SG > 2SG > 1SG. That is, if *-meolá* occurs with 3SG subjects, then it also occurs with 2SG and 1SG subjects; if *-meolá* occurs with 2SG subjects, then it also occurs with 1SG subjects.

For ease of exposition, I identify three categories of verbs (A, B, and C) based on the distribution of *-meolá* in their future paradigms, as shown in Table 5.4. Category A is those verbs that never accept *-meolá* as a future suffix, taking only *-méla/-mé/mala/-ma* in the singular; Category B is those verbs that always accept either *-méla/-mé/-mala/-ma*

or *-meolá* as a future suffix for singular subjects; and Category C is those verbs that are beginning to merge *-méla/-mé/mala/-ma* with *-meolá* when the subject is singular.

Table 5.4. Distribution of *-meolá*

	A not accepted	B All singular	C beginning to merge
1SG	*	yes	yes
2SG	*	yes	yes
3SG	*	yes	*
1PL	*	*	*
2PL	*	*	*
3PL	*	*	*

For the verbs in category A, *-meolá* never occurs. These are verbs like *eléna-me* ‘bleed’ (example 36). In contrast to Category A is Category B, in which *-meolá* occurs with all singular subjects, but not with plural subjects. Category B includes verbs like *sawi-me* ‘get well/give birth’, *korí-me* ‘say (something)’, and *witá-me* ‘defecate’. In Category C, *-meola* only occurs with 1SG and 2SG subjects, but never with plural or 3SG subjects. Category C includes verbs like *aci-me* ‘laugh’, *ranela-me* ‘have kid(s)’, and *aní-me* ‘say (something)’.

But Table 5.4 actually only gives half the story. In order to tell whether *-meolá* is analyzable as a suppletive alternant of *-méla/-mala*, we should see if *-méla/-mala* is losing some of its inflectional possibilities to *-meolá*. That is, can *-méla/-mala* truly co-occur with all persons (except, of course, 1PL) in competition with *-meolá*? In fact, all three of the Category C verbs identified so far show distinct patterns of occurrence with 1SG subjects: alongside *-meolá*, the verb *ani-me* ‘say (something)’ takes both the full form and the reduced form of *-méla* (47a), *aci-me* ‘laugh’ takes only the reduced form

-mé (47b), and *ranéla-me* ‘have kids’ cannot take either form of the potential future suffix, but only takes the *-molá* allomorph of the probable future suffix (47c).

(47) a. *ani-me* ‘say (something)’ with 1SG subject

né=ka ani-méla ‘I’m going to say (something)/Voy a decir (algo)’
né=ka ani-mé=ne ‘I’m going to say (something)/Voy a decir (algo)’
né=ka ani-meolá=ne ‘I’m going to say (something)/Voy a decir (algo)’

b. *aci-me* ‘laugh’ with 1SG subject

**né=ka aci-méla* [I’m going to laugh/Voy a reir.]
né=ka aci-mé=ne ‘I’m going to laugh/Voy a reir.’
né=ka aci-meolá=ne ‘I’m going to laugh/Voy a reir.’

c. *ranéla-me* ‘give birth’ with 1SG subject

**né=ka ranéla-mala* [I’m going to give birth/Voy a parir]
**né=ka ranéla-ma=ne* [I’m going to give birth/Voy a parir]
né=ka ranéla-molá=ne ‘I’m going to give birth/Voy a parir.’

Continuing to test the loss of inflectional possibilities for the future, with second person subjects, all three options are found when the subject is 2SG (48), whereas with 3SG subjects, some verbs show *-meolá*, but others only allow *-méla/-mala* (49).

(48) a. *ani-me* ‘say (something)’ with 2SG subject

mué=ka ani-méla
2SG=FOC say- POT.FUT
‘I’m going to say (something)/Voy a decir (algo)’

mué=ka ani-mé=mo
2SG=FOC say-FUT=2SG
‘I’m going to say (something)/Voy a decir (algo)’

mué=ka ani-meolá=mo
2SG=FOC say-FUT=2SG
‘I’m going to say (something)/Voy a decir (algo)’

- b. *aci-me* ‘laugh’ with 2SG subject

mué=ka aci-méla ‘you’re going to laugh/Tú vas a reir.’

mué=ka aci-mé=mo ‘you’re going to laugh/Tú vas a reir.’

mué=ka aci-meolá=mo ‘you’re going to laugh/Tú vas a reir.’

- c. *ranéla-me* ‘have kids’ with 2SG subject

mué=ka ranéla-mala ‘you’re going to give birth/Tú vas a parir.’

mué=ka ranéla-ma=mo ‘you’re going to give birth/Tú vas a parir.’

mué=ka ranéla-molá=mo ‘you’re going to give birth/Tú vas a parir.’

- (49) a. *ani-me* ‘say (something)’ with 3SG subject

alué mukí=ka ani-méla

DEM woman=FOC say=POT.FUT

‘That woman is going to say (something)/Esa mujer va a decir (algo)’

alué mukí=ka ani-mé

DEM woman=FOC say=POT.FUT

‘That woman is going to say (something)/Esa mujer va a decir (algo)’

**alué mukí=ka ani-meolá*

[That woman is going to say something/Esa mujer va a decir (algo)]

- b. *aci-me* ‘laugh’ with 3SG subject

alué mukí=ka aci-méla

DEM woman=FOC laugh-POT.FUT

‘That woman is going to laugh/Esa mujer va a reir.’

**alué mukí=ka aci-mé*

[That woman is going to laugh/Esa mujer va a reir]

**alué mukí=ka aci-meolá*

[That woman is going to laugh/Esa mujer va a reir]

- c. *ranéla-me* ‘give birth’ with 3SG subject

alué mukí=ka ranéla-mala

dem woman=FOC give.birth-POT.FUT

‘That woman is going to give birth/Esa mujer va a parir’

**alué mukí=ka ranéla-ma*

[That woman is going to give birth/Esa mujer va a parir]

**alué muki=ka ranela-molá*

[That woman is going to give birth/Esa mujer va a parir]

When the probable future is used in texts, its meaning is a possible situation that might or might not happen. In example (50) the speaker is telling her daughter that when she has kids (she does not have kids yet) they are going to give the kids advice and talk to them so the kids do not steal. In example (51) and (52) the speaker went to visit Virginia, a friend who lives in a very far region in the mountains. Virginia is telling the speaker that next time the speaker comes to visit, probably she is not going to find her; Virginia will not be there (because she probably is going to die before another visit happens).

- (50) a. *ruyé-bo=guru cigóriga náta-ga*
tell-FUT.1PL=FOC2 same.way think-CONT
'Vamos a decirle (a los hijos) de la misma manera que piensen.'
'We are going to tell (your kids) in the same way, think (about that).'
- (Colgado:69a)
- b. *apirigá táse noki-méla cigó*
in.order.to NEG move.around-POT.FUT steal
'así no van a andar robando.'
'so that they do not go around robbing anything' (Colgado:69b)
- (51) *ma ucé nawá=ka péca riwi-méla=kuru=mo ani-é=turu*
already again arrive-CONT NEG find-POT.FUT=FOC2=2SG say-PST=FOC2
'cuando vuelvas otra vez tal vez tú ya no me vas a encontrar, dijo.'
'When you come back again maybe you are not going to find me, (she) said.'
(LMMY:154)
- (52) a. *ma péca asi-méla-ga=ne,*
already NEG sit.SG-POT.FUT-CONT=1SG
- b. *mué ucé nawá-ci-ka héka aní=guru*
2SG another arrive.SG-WHEN-CONT here say=FOC2
'Ya no voy a estar aquí cuando tú vuelvas, dijo.'
'I am not going to be here when you come back here, she said.'
(LMMY.0156)

To conclude this section on the future tenses, I highlight the historical changes that have led to the unusual distribution of the modern reflexes of **mi(l)a* and **po*, as

well as the incipient incorporation of the modern reflexes of **olá* ‘do’ into the paradigm.

The hypothesized evolution is summarized in Table 5.5.

Table 5.5. The evolution of the patterns of suppletion in the potential future suffix

	Proto-form	Related languages	Category A verbs	Category B verbs	Category C verbs
	Biclausal Source	Original Reanalysis	Extension 1: - <i>po/-bo</i> limited to 1PL	Reanalysis 2: introducing <i>V-me olá</i>	Partial Paradigm Replacement
	V + ‘go’	V-POT.FUT	V-POT.FUT	V-POT.FUT ~ V-PROB.FUT	V-POT/PROB.FUT?
1SG	V *mi(l)a	V-méla/-mala	V-méla/-mala	V-méla/-mala ~ V-meolá	V-meolá
2SG	V *mi(l)a	V-méla/-mala	V-méla/-mala	V-méla/-mala ~ V-meolá	V-méla/-mala ~ V-meolá
3SG	V *mi(l)a	V-méla/-mala	V-méla/-mala	V-méla/-mala ~ V-meolá	V-méla/-mala
1PL	V *po	V-po/-bo	V-po/-bo	V-po/-bo	V-po/-bo
2PL	V *po	V-po/-bo	V-méla/-mala	V-méla/-mala	V-méla/-mala
3PL	V *po	V-po/-bo	V-méla/-mala	V-méla/-mala	V-méla/-mala

In the second column, we have the source construction, a biclausal construction with the two forms of the main verb ‘go’, one occurring with all singular subjects and the other with all plural subjects; this main verb is preceded by a dependent verb, likely in some kind of a purpose construction.

In the third column, we see the results of reanalysis, in which the suppletive verb ‘go’ becomes a suppletive future tense suffix, still conditioned by singular versus plural subject. This third column represents the synchronic distribution of future allomorphs in both Choguita Rarámuri (Caballero 2009: 421-2) and Guarijío (Miller 1996: 141).

In the fourth column, we see the first innovation unique to UT, in which the singular future suffix *-méla/-mala* extends to 2PL and 3PL (in bold), leaving the allomorph *-po/-bo* restricted to 1PL subjects. (Brámbila (1953: 64) documents an intermediate stage in the dialect of Tarahumara that he studied, in which *-méa/-ma* is extended only to 3PL subjects and *-bóo/-bo* is still used for both 1PL and 2PL subjects). Although this change

presumably happened for all verbs, I label the column “Category A verbs” because those are the ones that still show this pattern synchronically.

In the fifth column, we see the introduction of the innovative probable future suffix (in bold), in which the nonfinite suffix *-me* and the verb *olá* ‘do’ combine to create the new suffix *-meolá*, which is found only with singular subjects.

Finally, in the sixth column we see the first steps of the suppletive merger of the potential future and the probable future suffixes, limited to only a few verbs (the ones I call Category C), in which the probable future becomes the only suffix found with 1SG subjects (in bold), replacing the old potential future suffix entirely, and as if in compensation, the potential future becomes the only suffix found with 3SG subjects (in bold), with the innovative probable future form no longer possible. In this small category of verbs, the alternation between potential and probable future is possible only for 2SG subjects.

A last observation about subject indexation is that in future tense, the first and second person clitics may occur, as in (53a-b), but not the verbal suffixes for 1PL, 2PL, or 3 (53 c-f).

- (53) a. *né=ka ciná-mala(=**ne**)*
 1SG=FOC screm-POT.FUT=1SG
 ‘I am going to scream/voy a gritar.’
- b. *mué=ka ciná-mala(=**mo**)*
 2SG=FOC screm-POT.FUT=2SG
 ‘You are going to scream/Vas a gritar.’
- c. *alué mukí=ka ciná-mala*
 DEM woman=FOC screm-POT.FUT
 ‘That woman is going to scream/la mujer va a gritar.’

- d. *ramué=ka ciná-po*
 1PL=FOC screm-POT.FUT
 ‘We are going to scream/Nosotros vamos a gritar.’
- e. *éme=ka ciná-mala*
 2PL=FOC screm-POT.FUT
 ‘You all are going to scream/Ustedes van a gritar.’
- f. *ralómuli=ka ciná-mala*
 people=FOC screm-POT.FUT
 ‘People are going to scream/la gente va a gritar.’

This concludes my discussion of the tense suffixes in UT. Next we turn to the aspect suffixes.

5.2. Aspect

UT has a group of morphemes that function as aspectual markers. The following list is not exhaustive. For an exhaustive list a grammar on the UT language is necessary.

Table 5.6. Aspect markers and their functions

ASPECT	GLOSS
<i>-a/ya</i>	PROGRESSIVE
<i>-ga/-ka</i>	CONTINUOUS
<i>-si</i>	ASSOCIATIVE MOTION
<i>-pi</i>	INCHOATIVE (POV)
<i>-na</i>	INCHOATIVE

5.2.1. The non-finite *-a/-ya* ‘PROGRESSIVE’

In UT the suffix *-a/-ya* occurs in different constructions. It has a ‘progressive’ meaning when it occurs in a simple predicate (54-58). It functions as a non finite (NF) marker for the dependant verb when it occurs in a complex predicate (59). The allomorph *-ya* occurs with verb roots ending in the vowels /a/ and /e/ (see examples in 54). The allomorph *-a* occurs with verb roots ending with the vowels /o/, /i / and /u/ (examples in 55). The allomorph *-ya* can occur with verbs from either class 1 or 2 and never occurs

with stress (54). The allomorph *-a* occurs with stress with class 1 verbs that do not retain primary stress (56b). It occurs unstressed with class 1 verbs that retain primary stress and class 2 verbs (56a) and (56c). In other variants of Tarahumara the suffix *-a/-ya* has similar meanings. In Choguira Rarámuri the suffix *-a* has a meaning of ‘progressive’ (Caballero, 2008:411). In Western Tarahumara the suffixes *-a* and *-ya* have the meanings of ‘simultaneous’, ‘continuative’, and ‘subordinator’ (Burgess, 1984:112). In Norogachi the suffix *-a* with the allomorphs *-ya* and *-ga* has a meaning of ‘present gerund’ (Brambila, 1953:83). Also for Norogachi the suffix *-a, -ya* is reported as ‘narrative present’ (Lionnet, 1972:18). In Samachique the suffixes *-a, -ya* have a meaning of ‘gerund’ (Hilton, 1959:159). In Guarijío, the closest related language to Tarahumara, the imperfect is *-ari* (Miller, 1996:137).

- | | | |
|------|--------------------|--|
| (54) | <i>buná-ya</i> | ‘bending down (human)/agachándose’ |
| | <i>rahá-ya</i> | ‘burning/quemándose (INTR)’ |
| | <i>raná-ya</i> | ‘giving birth (animals)/pariendo (animales)’ |
| | <i>witá-ya</i> | ‘defecating/defecando’ |
| | <i>rewá-ya</i> | ‘finding/encontrando’ |
| | <i>ciná-ya</i> | ‘screaming/yelling’ |
| | <i>neté-ya</i> | ‘making (something)/haciendo (algo)’ |
| | <i>cikiré-ya</i> | ‘cutting/cortando’ |
| (55) | <i>wipí-a</i> | ‘rising and falling/subiendo y bajando’ |
| | <i>witilinti-a</i> | ‘be hanging/colgándose’ |
| | <i>sawi-á</i> | ‘getting well, give birth (human)/aliviarse, pariendo (humanos)’ |
| | <i>ayó-a</i> | ‘getting angry/enojando’ |
| | <i>cigó-a</i> | ‘stealing/robando’ |
| | <i>okó-a</i> | ‘hurting/doliendo’ |
| | <i>pagó-a</i> | ‘washing the dishes/lavando los trastes’ |
| | <i>océru-a</i> | ‘growing up/creciendo’ |
| | <i>rikí-a</i> | ‘getting dizzy/drunk SG/emborrachando SG’ |
| | <i>tégu-a</i> | ‘getting dizzy/drunk PL/emborrachando PL’ |
| | <i>cíbu-a</i> | ‘hiding/escondiendo’ |
-
- | | | |
|------|----|---|
| (56) | a. | Class 1 verbs that retain primary stress |
| | | <i>ayó-a</i> ‘getting angry/enojando’ |
| | | <i>wipí-a</i> ‘rising and falling/subiendo y bajando’ |
| | | <i>océru-a</i> ‘growing up/creciendo’ |

- b. Class 1 verbs that do not retain primary stress
ka'wi-á 'bringing wood/trayendo leña'
ani-á 'saying/diciendo'
bini-á 'understanding/entendiendo'
- c. Class 2 verbs
batú-a 'grinding/moliendo'
pagó-a 'washing the dishes/lavando los trastes'
tici-a 'combing (the hair)/peinándose'

The following are examples from texts illustrating the progressive function of

-ya/-a.

- (57) a. *weka raromuri*
 a.lot people
 'a lot of people/mucha gente.' (POR:152)
- b. *nete hu=kuru bosori*
 make be=FOC2 corn.soup
 'making corn soup/haciendo sopa.' (POR:154)
- c. *yawi-yá rukó=ka matacini-tere baskóla*
 dance-PROG night=FOC2 ritual.dance-quality ritual.dance
 'dancing all night matachine, pascola/bailando toda la noche matachines y pascola.' (POR:155)
- (58) *tabire anera-me bahi-a*
 NEG have.hangover-PTCP drink-PROG
 'You don't have a hangover (while you are) drinking?' (POR:215)

The following is an example from text that shows the NF function of the verbal suffix *-a/-ya* when occurs in a complex predicate.

- (59) *ca weká beséro ne cigó-a akasí oto-ga*
 big a.lot bull.calf 1SG steal-PROG cow take-CONT

rariné-ya

sell-PROG

'Yo ando robando vacas llevándomelas y vendiéndolas.'

'I am stealing cows, bull a lot of calves, taking and selling (them).' (COL:11)

5.2.2. The non-finite *-ga/-ka* ‘CONTINUOUS’

In UT the suffix *-ka/-ga* occurs in different constructions. It has a ‘continuous’ meaning when it occurs in a simple predicate. It functions as a non-finite (NF) marker for the dependant verb when it occurs in a complex predicate. In other variants of Tarahumara the suffix *-ka/-ga* has been documented with similar functions as in UT. In Western Tarahumara, the verbal suffix *-ga* has the meanings of ‘continuative’ and ‘stative’ (Burgess, 1984: 24, 112). In Tarahumara from Norogachi the suffix *-ga* has a meaning of ‘present gerund’ (Lionnet, 1972: 58). In Choguita Rarámuri the suffix *-ka* functions as a ‘gerund’ in subordinate clauses (Caballero, 2008:432). In UT, the ‘continuative’ suffix has two allomorphs, *-ga* and *-ka*. The allomorph *-ga* occurs with verbs from class 1 (see examples 60 and 61). The allomorph *-ka* occurs with verbs from class 2 (ex. 62). The allomorph *-ga* does not carry stress when occurring with class 1 verbs that retain their primary stress (60). The allomorph *-gá* carries stress when occurring with class 1 verbs that do not bear primary stress (61).

- (60) Verbs from class 1 that bear primary stress
- | | |
|---------------------|--|
| <i>ayó-ga</i> | ‘(being) mad/ enojado.’ |
| <i>wipí-ga</i> | ‘moving up and down/balanceando’ |
| <i>ropóca-ga</i> | ‘bending down (plants)/agachándose’ |
| <i>wipína-ga</i> | ‘turning over the earth/volteando la tierra’ |
| <i>buná-ga</i> | ‘bending down (human)/ agachado’ |
| <i>witilinti-ga</i> | ‘hanging/colgando’ |
| <i>napó-ga</i> | ‘weeding (by hand)/desyerbando (a mano)’ |
| <i>napíwa-ga</i> | ‘weeding (with a tool)/desyerbando (con un instrumento)’ |
| <i>séba-ga</i> | ‘arriving/llegando’ |
| <i>ripí-ga</i> | ‘staying/quedándose’ |

- (61) Verbs from class 1 that do not bear primary stress
- | | |
|-----------------|--|
| <i>raha-gá</i> | ‘burning (Intr)/ quemándose’ |
| <i>rana-gá</i> | ‘giving birth (animals)/pariendo (animales)’ |
| <i>sawi-gá</i> | ‘getting well/aliviándose’ |
| <i>wita-gá</i> | ‘defecating/defecando’ |
| <i>ici-gá</i> | ‘laughing/riendo’ |
| <i>oto-gá</i> | ‘taking/llevando’ |
| <i>ani-gá</i> | ‘saying/diciendo’ |
| <i>biti-gá</i> | ‘lying down/acostados’ |
| <i>rewa-gá</i> | ‘finding/hallando (algo)’ |
| <i>ka’wi-gá</i> | ‘bringing wood/trayendo leña’ |
- (62) Verbs from class 2
- | | |
|------------------|---|
| <i>inámu-ka</i> | ‘understanding/ entendiendo’ |
| <i>rikú-ka</i> | ‘drinking sg/emborrachandose sg’ |
| <i>tégu-ka</i> | ‘drinking pl/emborrachandose pl’ |
| <i>cibu-ka</i> | ‘hiding/escondiendo’ |
| <i>bokwí-ka</i> | ‘sinking/ hundiendo’ |
| <i>elowí-ka</i> | ‘being hungry/andar con hambre’ |
| <i>okó-ka</i> | ‘hurting/doliendo’ |
| <i>cukuré-ka</i> | ‘scratching/rascando’ |
| <i>emé-ka</i> | ‘el borracho se anda cayendo’ |
| <i>pici-ka</i> | ‘sweeping/ barriendo’ |
| <i>bici-ka</i> | ‘cleaning the prickly pear/ quitando las espinas del nopal’ |

In elicitation, the speaker did not accept certain verbs with *-ga*, giving instead alternate forms, such as the verb with the suffix *-me* ‘gerund’ (63b, 63d, 63e). In the case of the verb *cuké-me* ‘getting infected’, the speaker provided the future and the past perfective instead of *-ga*.

- (63)
- | | | |
|----|--------------------------|--|
| a. | <i>*cokía-ga</i> | [starting/empezando] |
| b. | <i>cokía-me</i> | ‘starting/empezando’ |
| c. | <i>*nete-gá</i> | [making (something)/haciendo (algo)] |
| d. | <i>neté-me</i> | ‘making/haciendo’ |
| e. | <i>múli neté-me atí</i> | ‘making baskets/haciendo canastas’ |
| f. | <i>*cuké-ga</i> | [getting infected/contagiándose] |
| g. | <i>cuké-molá</i> | ‘(he) is going to get infected/se va a contagiar.’ |
| h. | <i>*utá towí cuké-ga</i> | [The kid is getting infected/el niño se está contagiando]’ |
| i. | <i>utá towí cuké-le</i> | ‘The kid got infected/el niño contagió.’ |

Turning to semantics, the suffix *-ga* has a CONTINUOUS reading when it occurs as the only suffix in simple predicates. I use the term continuous in the sense of a single situation viewed as in progress, as maintained over a period of time; this is closely related to what typologists might call the ‘Durative’ or the ‘Continuative’. Bybee *et al.* (1994:317) define continuative as “keep on doing what is being done” and it is restricted to dynamic verbs. The following are some examples of the continuative suffix in UT from text:

- (64) *rige toli ya-ga*
 then chicken search-CONT
 ‘Entonces ella está buscando las gallinas.’
 ‘Then she is looking for the chickens.’ (ACCLOLA:9b)
- (65) *cuku-ga*
 stand4.SG-CONT
 ‘(anda) en cuantros patas gateando’
 ‘in four legs crawling’ (ACCLOLA:16)
- (66) *coniga ayo-na-ga=mo ani=guru*
 why angry-INCH-CONT-2SG tell=FOC2
 ‘Qué te hizo estar enojada, dijo.’
 ‘Why are you getting upset?’ (ADJ:19)
- (67) *ocó-ga wamí léga-na pasá=turu*
 punch-CONT far.over.there downwards-in.place push=FOC2
 ‘Dándole puñetazos allá lejos lo aventó.’
 ‘Punching (him) throws (him) out far over there downwards.’ (ADJ:44b)

The suffix *-ga/-ka* also occurs in nonfinite constructions, such as the [V-*ga-me*] derived adjective construction (see chapter III, § 3.3.2). It also occurs in complex predicates marking the dependant verb as non finite (NF). The following examples illustrate the suffix *-ga* marking a dependant verb as NF.

- (68) a. *alué rió ayó-ga eyena*
 DEM man be.mad-CONT walk.around.SG
 ‘Ese hombre anda enojado.’
 ‘That man is mad.’

- b. *alué rohá ropóca-ga cukú*
 DEM tree bend.down-CONT stand4.SG
 ‘El árbol se está agachando.’
 ‘That tree is bending down.’
- c. *alué muki buná-ga cukú*
 DEM woman bend.down.SG-CONT stan4.SG
 ‘Esa mujer está agachada en cuatro manos’
 ‘That woman is bending down.’ [working]
- d. *alué muki napó-ga cukí-ro*
 DEM woman weed-CONT stand4-MOV
 ‘Esa mujer está desyerbando.’
 ‘That woman is weeding.’
- e. *alué rió napiwa-ga cukí-ro*
 DEM man weed-CONT stand4.SG-MOV
 ‘Ese hombre está desyerbando.’
 ‘That man is weeding.’
- f. *alué umugí=ka mahá-ga húma*
 DEM women=FOC2 scared-CONT run.PL
 ‘Esas mujeres corrieron asustadas.’
 ‘Those women run scared.’
- g. *utá towí océri-ga bu’i*
 litte boy grow.up/born-CONT lie.down.SG
 ‘El niño está naciendo.’
 ‘The little boy is being born.’

It seems that the suffixes *-ka/-ga*, *-me* and *-a/-ya* each have the job of marking the dependant verb in a different kind of complex predicate. In future research, I intend to better understand the different constructions in which these three suffixes mark a verb as non finite.

5.2.3. The ASSOCIATIVE MOTION and INCHOATIVE *-si*

In Urique Tarahumara the verbal suffix *-si* expresses ‘ASSOCIATIVE MOTION’ that is, an action denoted by the verb that occurs while the subject is in motion. It also can have an INCHOATIVE meaning. The suffix *-si* is a reduced form of the verb *simi* ‘go’. In

UT, both forms occur synchronically, the free verb *simi* ‘go’ and the suffix *-si*. The verbal suffix *-si* does not have allomorphs attested in my database and it is always unstressed. In other variants of Tarahumara the suffix *-si* occurs with similar meanings. In Choguita Rarámuri the ‘associated motion’ suffix is the disyllabic *-simi* with a monosyllabic allomorph *-si* (Caballero, 2008: 418). In the Norogachi variant only the free morpheme *simi* has been attested with two meanings ‘go’ and ‘doing something on the go’ (Lionnet, 1972: 30). (In a probable case of accidental resemblance, in the Samachique variant the suffix *-sia* has a meaning of ‘gerund plural’; Hilton, 1993:160). The following examples illustrate the associative motion meaning of the suffix *-si* in UT. The examples are verbs from class 1 and 2.

- (69)
- | | |
|-----------------|---|
| <i>ayó-si</i> | ‘being mad while moving / estar enojado mientras se mueve’ |
| <i>mahá-si</i> | ‘being scared while moving / estar asustado mientras se mueve’ |
| <i>uhí-si</i> | ‘farting while moving / tirarse pedos mientras se mueve’ |
| <i>isí-si</i> | ‘peeing while moving / orinar mientras se mueve’ |
| <i>cigó-si</i> | ‘robbing while moving / robar mientras se mueve’ |
| <i>rahá-si</i> | ‘burning while moving / quemarse mientras se mueve’ |
| <i>raná-si</i> | ‘giving birth while moving (animals) / parir mientras se mueve (animales)’ |
| <i>sawí-si</i> | ‘getting well, giving birth while moving / aliviarse, parir mientras mueve’ |
| <i>witá-si</i> | ‘defecate while moving / defecar mientras se mueve’ |
| <i>ací-si</i> | ‘laughing while moving / reirse mientras se mueve’ |
| <i>otó-si</i> | ‘taking (something) while moving / llevarse algo mientras se mueve’ |
| <i>bini-si</i> | ‘understanding while moving / entendiendo mientras se mueve’ |
| <i>rewá-si</i> | ‘find something while moving / hallar algo mientras se mueve’ [A moving] |
| <i>ka’wí-si</i> | ‘bring wood while moving / acarrear leña mientras se mueve’ |
| <i>náta-si</i> | ‘thinking while moving / pensar mientras se mueve’ |
| <i>rikú-si</i> | ‘being dizzy, drunk SG while moving / estar borracho SG mientras mueve’ |
| <i>tégu-si</i> | ‘being drunk PL while moving / estar borrachos mientras se mueven’ |
| <i>cíbu-si</i> | ‘hide while moving / esconderse mientras se mueve’ |
| <i>elowí-si</i> | ‘be hungry while moving / estar habriendo mientras se mueve’ |
| <i>okó-si</i> | ‘hurting while moving / estar con dolor mientras se mueve’ |

The following examples illustrate the verb *simí-me* ‘go’ as a main verb.

- (70) a. *ne=ka simi-gé=ne gomi-ci*
 1sg=FOC go-PST=1SG river-LOC
 ‘I went to the river/fui al río.’
- b. *mué=ka simi-gé=mo gomi-ci*
 2sg=FOC go-PST=2SG river-LOC
 ‘You went to the river/tú fuiste al río.’

Associative motion examples from text:

- (71) *ne ale-mi simí-ri-le=kuru wicibá-si-a*
 1SG DEM.there go-CAUS-PST=FOC2 fall- ASSC.MOT-PROG

rehpopa-go mi=kuru
 back-OVER there=FOC2
 ‘Ahi me tiraron y me cai sobre la espalda allá.’
 ‘There they sent me, to go falling down on my back there.’ (ADJ:39)
- (72) *maha-ga, basí-si-le=turu*
 scare-CONT throw.stones.at-ASSC.MOT-PST=FOC2
 ‘asustado, lo apedrearón.’
 ‘scared, they went throwing stones at him.’ (ADJ:47)
- (73) *umugi nako-si-ge koli-ge-na*
 women fight-ASSC.MOT-PST by.the.other.side-there-LOC

ani-á rá=guru
 say-IPFV say=FOC2
 ‘Las mujeres estaban peleando alla de aquel lado, así dijo.’ [el que la tumbo]
 ‘The women went fighting there by the other side, he said.’ (ADJ:49)
- (74) *papá=ka ayó-si-a noline=kuru be’li be’á-ka*
 father=FOC2 be.angry-ASSC.MOT-PROG come=FOC2 early morning-IN
 ‘Mi papá vino muy enojado al otro día temprano.’
 ‘My father came, going angry early the next morning.’ (ADJ:55)
- (75) *lége ma-si-é-ko warú rosobócu-go-me gasá-tiri*
 downwards run-ASSC.MOT-PST-IRR big grey-CONT-PTCP grass-LOC
 ‘Alla abajo iba corriendo el coyote por el zacate.’
 ‘(It) ran away, the big grey one, by the grass.’ (MA:43)

5.2.3.1. The *-si* ‘INCHOATIVE’ meaning

The verbal suffix *-si* also has an inchoative meaning. The inchoative meaning occurs mainly with posture verbs (POV), weather verbs, and some active verbs. The following series of verbs illustrate the meaning of the start of a process.

- (76) a. *uki-si-a*
rain-INCH-PROG
‘Rain is coming/viene la lluvia.’
- b. *waki-si-a*
be.dry-INCH-PROG
‘It is getting dry/está seco.’
- c. *na’ye-si*
fire-INCH
‘The fire is in the process of extinguishing/el fuego se está extinguiendo.’
- d. *bokwi-si*
sink-INCH
‘(It) is sinking/Se está hundiendo.’

The following examples show the meaning of “go and start doing something”

- (77) a. *wipiná-si*
turn.over.dirt-INCH
‘go to turn over the dirt/ir a voltear la tierra’
- b. *napó-si*
weed.by.hand-INCH
‘go to weed/ir a desyerbar con la mano’
- c. *napiwá-si*
weed.with.a.tool-INCH
‘go to weed/ir a desyerbar con un instrumento’

The following examples show the meaning of ‘X just happened’

- (78) a. *sebá-si*
arrive-GO
‘just arriving/acabar de llegar’

- b. *nolíni-si*
 come-GO
 ‘just coming/acabar de venir’

An idiomatic use of the [V-*si*] construction is with the verb *mukú-me* ‘die’. The following example is not interpreted as ‘being in the process of dying’ but rather as ‘fainting’.

- (79) *riowe mukú-si*
 man die-GO
 ‘The man is fainting/el hombre se está desmayando.’

5.2.3.2. The -*si* ‘INCHOATIVE’ with posture verbs

The suffix -*si* in combination with posture verbs (POV) refers to a state-change ‘getting into a X position’: thus *atí* ‘be.sitting.SG’ → *atí-si* ‘sit down.SG’ (80), *irí / há* ‘stand.SG/PL’ → *irí-si / há-si* ‘stand up (from a sitting position)’ (81b-82), *boi / biti* ‘be.lying SG/PL’ → *boi-si / biti-si* ‘lie down SG/PL’ (83-84), and *cuku / ucu* ‘stand4.SG/PL’ → *cuku-si / ucu-si* ‘to assume a position on all fours, crouched, or hanging’ (85-87).

- (80) *mukí=ka atí-si-le*
 woman=foc2 sit.SG-GO-STAT
 ‘La mujer se sentó.’ [lit. la mujer se fue a sentar]
 ‘The woman sat down.’ [lit. ‘The woman went sitting.’]

- (81) a. *mukí=ka ati-gé;*
 woman=FOC2 sit.SG-PST

- b. *ma ilí-si-li-ge*
 already stand.SG-GO-3-PST
 La mujer estaba sentada; ya se levantó.
 ‘The woman was seated; [she] just stood up.’

- (82) *umugi ma há-si-re mutéla-ci*
 women already stand.PL-GO-PST chair-LOC
 ‘la mujer se paró de la silla.’
 ‘The women already stood up from the bench.’

- (83) *bilé riówe bo'í-si-le; we liciba-le*
 one man lie.SG-GO-PST; a.lot get.tired-PST
 'Un hombre se acostó, se cansó.'
 'One man lay down; (he) got tired.' [lit. 'The man went lying']
- (84) *umugi bití-si-ge; we liciba-li-ge*
 women lie.PL-GO-PST; a.lot get.tired-3-PST
 'Las mujeres se acostaron, estaban muy cansadas.'
 'The women lay down; they were very tired.' [lit. 'The women went lying']
- (85) *burito cukú-si-le*
 donkey four.legs.SG-GO-PST
 'El burro se paró.'
 'The donkey stood up.' [It is a newborn donkey, it was staggering]
- (86) *besero ma cukú-si-le*
 calf already four.legs.SG-GO-PST
 'El becerro se paró.'
 'The calf just stood up.' [It is a new born calf; it was staggering]
- (87) *oko-rá-ga besero ma ucú-si-le*
 two-NMLZ-GA calf already four.legs.PL-GO-PST
 'Dos becerros se pararon.'
 'The two calves just stood up.' [They are newborn]

Note that the inchoative STAND4 forms do not mean just the combination of 'STAND4' plus inchoative. In the examples I have collected, a semantic constraint on the [V-si] construction interacting with the verbs *cuku* and *ucu* is that it refers to assuming a position on all fours with difficulty, unsteadily, or staggering. So it is used in specific contexts such as with newborn animals, as in (85-87).

In contrast to the relatively clear cases above, when *asa / moci* 'be.seated.SG/PL' become *asi-si / moci-si*, the resultant meaning is not the expected 'enter into a sitting position', but is rather 'to get up from a lying position' (88). In this case, both the initial posture and the resultant posture are surprising, because neither involves the core 'be.sitting' meaning of the SIT verbs: in fact, they are usually used to indicate that a subject gets to his/her feet from having been asleep, although it is also possible that they

were only resting in a lying position. Thord-Grey (1955:73) listed in his dictionary the word *asisi* with a meaning of “to rise, to get up, to change a recumbent posture for an erect posture”, showing that this surprising semantic specialization of *asi-si* has been in place for at least 50 years. Note that in the verb form *asi-si* the last vowel of the verb root *asa* under goes vowel harmony under the influence of the suffix *-si* (which is now phonologically reduced and no longer a free form).

(88) *mukí=ka ma así-si-le*
 woman=FOC already sit.SG-GO-PST
 ‘La mujer se levantó.’
 ‘The woman already got up.’

(89) *mukí=ka be'a así-si-me hu*
 woman=FOC early sit-GO-PTCP be
 ‘La mujer se levatan temprano.’
 ‘The woman is an early riser.’

(90) *ma moci-si-le*
 already sit.PL-GO-PST.PST
 ‘Ellos ya se levantaron.’
 ‘They already got up.’

The unexpected semantics of *asi-si* ‘to get up’ creates the possibility of ambiguity with *iri-si* ‘to stand up’, as both result in the subject entering into a standing position. However, the two are distinguished in that each begins from a different starting posture: *iri-si* means that the subject is assuming a standing position from a sitting position, whereas *asi-si* implies that the subject was asleep, or resting in a lying position, before standing up. Thus, example (91) was completely rejected because the verb *asi-si* entails that the subject has to be asleep and preferably lying down, whereas the sentence specifies that she be seated before rising. On the other end of the trajectory of motion, example (92) is questionable because, although it is possible to interpret the verb *asi-si* as referring to getting up from bed, the second half of the sentence specifies that the subject

is seated, which is not the typical ending position of *así-si*. Finally, example (93) is rejected because the verb *iri-si* would mean something like ‘X is an early stander from a sitting position’, which makes no sense in the culture; to say that ‘X is an early riser’, or someone who gets out of bed early, implies that the person was asleep, so the correct verb would be *así-si*.

- (91) **mukí=ka* *ati-gé;* *ma* *así-si-le*
 woman=FOC sit.SG-PST already sit.SG-GO-PST
 [The woman was seated; (and) just got up/la mujer estaba sentada; (y) se levantó]
- (92) ?*mukí=ka* *ma* *así-si-le;* *atí* *mutela-ci*
 woman=FOC already sit.SG-GO-PST sit.SG bench-LOC
 ‘The woman got up; she is sitting on the bench/la mujer se levantó; estaba sentada en la banca.’
- (93) **mukí=ka* *be'a* *iri-si-me* *hu*
 woman=FOC early stand-GO-PRTC be
 [The woman is an early riser/la mujer se levanta temprano]

5.2.4. The suffix *-pi* ‘INCHOATIVE’: recently enter a posture

The suffix *-pi/-bi* ‘INCHOATIVE’ in UT only occurs with posture verbs, giving the meaning of ‘X recently enters into posture Y’. An apparently identical suffix is attested in other varieties of Tarahumara. Thord-Grey (1955:330) mentions that the particle *-pi* can be attached to a verb without any change in the verb. In the variant represented in Brambila (1953), *pi* occurs as a free element, amplified in Brambila (1976:428), which identifies the adverb *pi* or *bi* as an independent word that follows the verb with a meaning of ‘only, just’. In Western Tarahumara the suffix *-pi* is glossed as meaning ‘only’ (Burgess, 1984:20), whereas in Tarahumara from Norogachi the suffix *-pi/-bi* has the meaning of ‘just, only’ (Lionnet, 1972: 51). Choguita Rarámuri has no suffix *-pi/-bi*, but (Caballero, 2008:411) does report a suffix *-ba* ‘INCHOATIVE’ that may be related.

It is not yet clear what conditions the allomorphy between *-pi* and *-bi*, but it does not appear to be the expected verbal class, nor does it seem motivated by any phonological process. The following examples illustrate the suffix *-pi/-bi* with the verbs *ati* ‘sit SG’, *moci* ‘sit PL’, *boi* ‘lie SG’ and *biti* ‘lie PL’ where it has the meaning of ‘just enter the state denoted by the verb’.

- (94) *né=ka atí-bi=ne mutéla-ci*
 1SG=FOC sit.SG-INCH=1SG bench-LOC
 ‘Me acabo de sentar en la banca.’
 ‘I just sat down on the bench.’
- (95) *umugí moci-bi-le; ma licibá-le*
 women sit.PL-INCH-PST already be.tired-PST
 ‘Las mujeres se acaban de sentar ya están cansadas.’
 ‘The women just sat down; now [they are] tired.’
- (96) *towí bu’í-bi-le*
 boy lie.SG-INCH-PST
 ‘El niño se acostó.’
 ‘The boy laid down.’
- (97) *kucí bití-bi-le*
 kids lie.PL-INCH-PST
 ‘Los niños se acostaron.’
 ‘The kids laid down.’

In addition to the expected meaning of changing posture from sitting to standing, both the STAND1 and STAND4 verbs plus the suffix *-pi* can have a reading of ‘to stop’, or come to a standstill from some other activity which already had them on their feet, but not standing still. The context of examples (98-101) is one in which the subjects were running and/or playing and then, having stopped, remained in the state of standing.³

- (98) *alue riowe ma ilí-bi-le*
 DEM man already stand.SG-INCH-PST
 ‘That man already stopped/El hombre ya se detuvo.’

³ There are other languages where the verb ‘stand’ also means ‘to stop’. For example, in Spanish, the verbs *parar* or *pararse* mean both ‘to stand up’ and ‘to stop’.

(99) *alue riowe ma há-bi-le*
 DEM man already stand.PL-INCH-PST
 ‘Esos hombres ya pararon.’
 ‘Those men already stopped.’ [They were running in the race]

(100) *bulito cuki-bi-le*
 donkey stand4.SG-INCH-PST
 ‘El burro paró.’
 ‘The donkey stopped.’ [The donkey was walking and stopped]

(101) *weka bulito ucú-pi-le*
 a.lot donky stand4.PL-INCH-PST
 ‘Los burros pararon.’
 ‘The donkeys stopped.’

Bybee et al. (1994:318) point out that in a language if there is a morpheme specifically that indicates beginning of a state, it is usually restricted to occurring with stative verbs. It appears that UT *-pi/-bi* ‘RECENT INCHOATIVE’ might be even more restricted than this, as seen in the extensive list of verbs with which it cannot occur, verbs of class 1 in (102-103) and of class 2 in (104). Note that some of these are clear state verbs, like *witilíti* ‘be hanging’, *ripí* ‘stay’, and *inámu* ‘understand’.

(102) Verb class 1 (that retains primary stress)

* <i>ayó-bi/-pi</i>	[‘get angry/enojarse’]
* <i>wipí-bi/-pi</i>	[‘go up and down/sube y baja’]
* <i>ropóca-bi/-pi</i>	[‘bend down (human)/agacharse (humano)’]
* <i>wipína-bi/-pi</i>	[‘turn over dirt/palaquear’]
* <i>buná-bi/-pi</i>	[‘bend down /agacharse’]
* <i>witilíti-bi/-pi</i>	[‘be hanging/colgarse’]
* <i>napó-bi/-pi</i>	[‘weed (by hand)/desyerbar’]
* <i>napiwa-bi/-pi</i>	[‘weed (with a tool)/desyerbar’]
* <i>séba-bi/-pi</i>	[‘come/venir’]
* <i>ripí-bi/-pi</i>	[‘stay/quedar’]
* <i>cokiá-bi/-pi</i>	[‘start/empezar’]

(103) Verb class 1 (that does not retain primary stress)

* <i>rahá-bi/-pi</i>	[‘burn/quemarse (intr)’]
* <i>raná-bi/-pi</i>	[‘give birth (animals)/parir (animales)’]
* <i>sawí-bi/-pi</i>	[‘get well, give birth (human)/aliviarse, parir (humanos)’]
* <i>ací-bi/-pi</i>	[‘laugh/reir’]
* <i>otó-bi/-pi</i>	[‘take/llevar’]

(104) Verb class 2

- **inámu-bi/-pi* [‘understand/entender’]
- **rikú-bi/-pi* [‘get dizzy/drunk SG/emborracharse SG’]
- **tégu-bi/-pi* [‘get dizzy/drunk PL/emborracharse PL’]
- **cíbu-bi/-pi* [‘hide/escondarse’]
- **bokwí-bi/-pi* [‘disappear in the distance, sink/ hundirse’]
- **pagó-bi/-pi* [‘wash/lavar’]
- **húma-bi/-pi* [‘run PL/correr PL’]
- **meté-bi/-pi* [‘cut with a machete/cortar con machete’]

Although no body function verbs are attested in texts with the suffix *-pi/-bi*, in elicitation, two cases, *icí* ‘urinate’ and *witá* ‘defecate’ are both marginally acceptable

(105).

- (105) a. ? *ne icíbine* [‘I started to urinate/me empecé a orinar.’]
b. ? *ne witábine* [‘I started to defecate/empecé a defecar.’]

5.2.5. The suffix *-na/-ni* INCHOATIVE ‘become’

The most productive of the inchoative suffixes in UT has three allomorphs: *-na/-ni/-no*.⁴ The vowel alternants appear to be conditioned by both the preceding and following morphemes. When preceding the sequence *-li-ge* ‘3-PAST’, the allomorph is always unaccented *-ni* (106); when preceding *-meré* ‘IMMEDIATE.FUTURE’, =*ne* ‘1SG’, or when there is no further suffixation, the allomorph always takes the vowel /a/, sometimes accented *-ná* (107a), other times unaccented *-na* (107b-c).

This inchoative suffix attaches to color terms (106-107), verbs referring to the emission of body/plant fluids (108), and (a limited subset) of active verbs (109), to indicate that the subject is entering into a state characterized by the root. In combination with future tense suffix, *-na/-ni* often translates as ‘becoming’ (107).

⁴ Caballero (2008:50) mentions an inchoative suffix *-ba*. This suffix *-ba* is unlikely to be related to this particular inchoative suffix in Urique Tarahumara.

- (106) a. *banésili siyó-ni-li-ge*
 cloth green.blue-INCH-3-PST
 ‘The cloth became green.blue/el trapo se volvió verde.azul.’
- b. *banécili setá-ni-li-ge*
 cloth red-INCH-3-PST
 ‘The cloth became red/el trapo se volvió rojo.’
- c. *banécili ulá-ni-li-ge*
 cloth yellow-INCH-3-PST
 ‘The cloth became yellow/el trapo se volvió amarillo.’
- d. *banécili có-ni-li-ge*
 cloth black-INCH-3-PST
 ‘The cloth became black/el trapo se volvió negro.’
- e. *banécili rosá-ni-li-ge*
 cloth white-INCH-3-PST
 ‘The cloth became white/el trapo se volvió blanco.’
- (107) a. *ma co-ná-meré*
 just black-INCH-IMM.FUT
 ‘It is just going to get dark/ya se va a oscurecer.’ [Lit.become]
- b. *banecili rosá-na-mere*
 cloth white-INCH-IMM.FUT
 ‘The cloth is going to become white/la ropa se va a volver blanca.’
- c. *cihú-na-mere*
 be.embarrassed-INCH-IMM.FUT
 ‘It is going to become embarrassed/ashamed/se va a avergonzar’
- (108) a. *ak-e-na=ne*
 saliva-VLZ-INCH=1SG
 ‘I am drooling/spitting/estoy babeando’ [Lit.coming out saliva/saliendo saliva]
- b. *ok-e-na=ne*
 tear-VLZ-INCH=1SG
 ‘coming into tears/se me salen las lágrimas.’
- c. *cil-e-na*
 sweat-VLZ-INCH
 ‘sweating/sudando’

- d. *co'm-e-na*
mucus-VLZ-INCH
'coming out mucus/salir mocos.'
- e. *col-e-na*
sap-VLZ-INCH
'coming out sap/saliendo savia.' [for example from a pine/de los pinos]
- f. *el-é-na*
blood-VLZ-INCH
'beeding/sangrar'

(109) More verbs

- ayó-ni* 'starting to get angry/empezar a enojarse.'
wipí-ni 'starting to go up and down/empezar a sube y baja.'
napó-ni 'starting to weed (by hand)/empezar a desyerbar.'
rahi-na 'starting to burn/empezar a prender.'

I conclude this section with a selection of the many verbs that were not accepted with one of these suffixes. This shows that even this suffix is of very limited productivity.

(110) Verb class 1a

- **ropóca-na/-ni/-no* [bend down (human)-INCH/agacharse-INCH]
 **buná-na/-ni/-no* [bend down-INCH/agacharse-INCH]
 **witilíti-na/-ni/-no* [be hanging-INCH/colgar-INCH]
 **napíwa-na/-ni/-no* [weed (with a tool)-INCH/desyerbar-INCH]
 **séba-na/-ni/-no* [come-INCH/venir-INCH]
 **ripí-na/-ni/-no* [stay-INCH/quedar-INCH]
 **cokiá-na/-ni/-no* [start-INCH/empezar-INCH]
 **nolína-na/-ni/-no* [arrive-INCH/llegar-INCH]
 **nakósi-na/-ni/-no* [fight-INCH/pelear-INCH]
 **mahá-na/-ni/-no* [get scared-INCH/asustarse-INCH]
 **cuké-na/-ni/-no* [be contagious-INCH/ser contagioso-INCH]
 **océru-na/-ni/-no* [grow up-INCH/crecer-INCH]
 **uhí-na/-ni/-no* [fart-INCH/pedorrearse-INCH]

(111) Verb class 1b

- **raná-na/-ni/-no* [give birth (animals)/parir (animales) -INCH]
 **sawí-na/-ni/-no* [get well, give birth (human)/aliviarse, parir-INCH]
 **witá-na/-ni/-no* [defecate/defecar-INCH]
 **ací-na/-ni/-no* [laugh/reir-INCH]
 **aní-na/-ni/-no* [say/decir-INCH]
 **biniwá-na/-ni/-no* [understand/entender-INCH]

(112) Verb class 2	
* <i>inámu-na/-ni/-no</i>	[understand-INCH]
* <i>rikú-na/-ni/-no</i>	[get dizzy/drunk SG-INCH]
* <i>tégu-na/-ni/-no</i>	[get dizzy/drunk PL-INCH]
* <i>cíbu-na/-ni/-no</i>	[hide-INCH]
* <i>bokwí-na/-ni/-no</i>	[disappear in the distance/sink-INCH]
* <i>elowí-na/-ni/-no</i>	[be hungry-INCH]
* <i>okó-na/-ni/-no</i>	[hurt-INCH]

5.3. Mood

The category of MOOD is not easy to define. Bybee et al. (1994:176) define mood as “the grammaticalization of speakers’ (subjective) attitudes and opinions.” Payne (1997:244) defines mood as “the speaker’s attitude toward a situation, including the speaker’s belief in its reality, or likelihood. It sometimes describes the speaker’s estimation of the relevance of the situation to him/herself.” Givón (2001: 300) defines MODALITY as “the speaker’s attitude towards the proposition” and he then defines ATTITUDE as the judgment that the speaker makes about the propositional information carried in the clause.

Different authors subdivide modality in different ways. Givón (2001:300) explains that there are two types of judgments that the speaker makes about a proposition: i) EPISTEMIC JUDGMENT such as truth, probability, certainty, belief, evidence, and ii) EVALUATIVE (DEONTIC) JUDGMENT such as desirability, preference, intent, ability, obligation and manipulation. Bybee et al. (1994) and previous studies divide modality in four subtypes: 1) AGENT-ORIENTED MODALITY, 2) SPEAKER-ORIENTED MODALITY, 3) EPISTEMIC and 4) SUBORDINATING. The first one, AGENT-ORIENTED modality “reports the existence of internal and external conditions on an agent with respect to the completion of the action expressed in the main predicate” (LYONS 1977: 746). OBLIGATION, NECESSITY, ABILITY and DESIRE are four of the most common agent-oriented modalities in language

(Bybee et al. 1994: 177-78). The SPEAKER ORIENTED modality domain includes all the directives as well as utterances in which the speaker grants the addressee permission such as commands, demands, requests, entreaties (all of which are “mands”) and warnings, exhortations, and recommendations (Bybee et al., 1994: 179). EPISTEMIC modality “applies to assertions and indicates the extent to which the speaker is committed to the truth of the proposition” (Bybee et al., 1994: 179). Bybee et al. (1994:180) mention, “the same forms that are used to express the speaker-oriented and epistemic modalities are often also used to mark the verbs in certain types of subordinate clauses,” thereby identifying the fourth category, SUBORDINATING moods.

In UT, the agent-oriented modalities are represented by a desiderative suffix (§ 5.3.1), speaker-oriented modalities by a directive suffix, and epistemic modalities by three evidential suffixes. Subordinate modality surely exists, but will not be addressed in this thesis.

5.3.1. The desiderative: *-náli/-nili*

In UT the desiderative mood has two allomorphs conditioned by the occurrence of the stress in the verb root. The accented allomorph, *-náli* ‘DESIDERATIVE’, occurs with verbs that do not bear primary stress, all of which are Class 1 (113); the unaccented allomorph, *-nili* ‘DESIDERATIVE’, occurs with verbs that retain the primary stress, which are both Class 1 (114) and Class 2 (115).

(113) Class 1 verbs that do not bear primary stress

<i>ani-náli</i>	‘want to say (something)/querer decir (algo).’
<i>sawi-náli</i>	‘want to get well, give birth/querer aliviarse, parir.’
<i>wita-náli</i>	‘want to defecate/querer defecar.’
<i>aci-náli</i>	‘want to laugh/querer reír.’
<i>oto-náli</i>	‘want to take (something)/querer llevar (algo).’
<i>biti-náli</i>	‘want to lie down PL/querer acostarse PL.’
<i>riwi-náli</i>	‘want to find/querer encontrar.’

- ka'wi-náli* 'want to bring wood/querer traer leña.'
- ake-náli* 'want to hear/querer oír.'
- mi'li-náli* 'want to kill/querer matar.'
- (114) Class 1 verbs that bear primary stress
- ayó-nili* 'want to get mad/querer enojarse.'
- wipiná-nili* 'want to turn over the dirt/querer voltear la tierra.'
- napó-nili* 'want to weed (by hand)/querer desyerbar.'
- napiá-nili* 'want to weed (with an instrument)/querer desyerbar (con instrumento).'
- sebá-nili* 'want to come/querer venir.'
- ripí-nili* 'want to stay/querer quedarse.'
- cokíá-nili* 'want to start/querer empezar.'
- nolína-nili* 'want to arrive/querer llegar.'
- nacóci-nili* 'want to fight' (physical)/querer pelear.'
- uhí-nili* 'want to fart/querer tirarse pedos.'
- icí-nili* 'want to urinate/querer orinar.'
- (115) Class 2 verbs
- inámu-nili* 'want to understand/querer entender.'
- rikú-nili* 'want to get drunk SG/querer emborracharse SG.'
- tégu-nili* 'want to get drunk PL/ querer emborracharse PL.'
- cíbu-nili* 'want to hide/querer esconderse.'
- cukuré-nili* 'want to scratch/querer rascarse.'
- bicí-nili* 'want to clean (prickle) /querer limpiar (espinas).'
- cipirú-nili* 'want to peel (fruit)/querer pelar (fruta).'
- ticí-nili* 'want to comb/ querer peinarse.'
- pagó-nili* 'want to wash/querer lavar.'
- ciná-nili* 'want to scream, yell/querer gritar.'
- neté-nili* 'want to make/querer hacer.'

The verb *cimi/cimá* 'go.SG/go.PL' is the only verb in my database that occurs with both allomorphs *-náli* and *-nili* 'desiderative'. The allomorph *-náli* (116a) occurs with the singular form *cimi* and the allomorph *-nili* occurs with the plural form *cimá* (116b).

- (116) a. *cimi-náli* 'want to go SG/querer ir SG.'
- b. *cimá-nili* 'want to go PL/querer ir PL.'

A related suffix is documented for other varieties of Tarahumara as well, for the variant of Norogachi, Brambila (1953:163) mentions that there are "verbs that are suffixes" such as *-náre* 'wish'. For the same variant of Norogachi, Lionnet (1972:72)

mentions the suffixes *-náre/-níre* ‘want’. For Western Tarahumara, Burgess (1984: 22 and 108) mentions the desiderative *-nale*. In Choguita Rarámuri the desiderative *-nale/-nare* triggers stress shift with unstressed roots (Caballero, 2008:96). It is the only disyllabic suffix in Choguita Rarámuri that is stress shifting (Caballero, 2008:294). It has the allomorph *-niri* due to a phonological process where post-tonic vowels are often neutralized in height (Caballero, 2008:290). Also in Choguita Rarámuri the desiderative suffix *-nale* is related to a free lexical verb, *naki* ‘want’ (Caballero, 2008:93). The most closely related language to UT, Guarijío, has the cognate *-nare* ‘want’ (Miller, 1996:163).

The desiderative construction in UT indicates that the subject desires or wants to do the action of the verb to which it is attached. The desiderative mood in UT falls into the category that Bybee et al. (1994:178) calls AGENT-ORIENTED modality, specifically the DESIRE mood “the existence of internal volitional conditions in the agent with respect to the predicate action”. In text, it is often used in questions (117-118) or first person statements in which the subject may be presumed from context (119).

(117) *mué=ka cu-yena cimi-náli-ga cimi pani-mo o-mi*
 2SG=FOC Q-walk go-DES-CONT go.SG uphill-DIR upstream-there
 ‘Tu quieres ir para arriba?’
 ‘Do you want to go there uphill, upstream?’ (ADJ:123)

(118) *ma tabile cima-náli=mo*
 already NEG go.SG-DES=2SG
 ‘ya no quiere ir?’
 ‘Don’t you want to go now?’ (ADJ:135)

(119) *nana ba’i bahí-nili*
 mother water drink-DES
 ‘Mamá, quiero tomar agua.’
 ‘Mom, I want to drink some water.’ (OXI:355)

5.3.2. The directive *-poko/-boko*

The suffix *-poko/-boko* in UT indicates that a second person (singular or plural) is directed to do something (in the future), with an illocutionary force very similar to an imperative. The fortis version *-poko* ‘DIRECTIVE’ occurs with Class 1 verbs (120) and the lenis version *-boko* ‘DIRECTIVE’ with Class 2 verbs (122).

(120) Class 1 verbs

mué=ka ani-bóko
2SG=FOC say-DIRECTIVE
‘You say it /tú dilo.’

<i>mué=ka napó-boko</i>	‘You weed (by hand)/tú desyerba (a mano).’
<i>mué=ka napiá-boko</i>	‘You weed (with a tool)/tú desyerba (con asadón).’
<i>mué=ka rihpi-boko</i>	‘You stay/tú quédate.’
<i>mué=ka cokiá-boko</i>	‘You start/tú empieza.’
<i>mué=ka osomá-boko</i>	‘You wash your head/tú lávate la cabeza.’
<i>mué=ka ená-boko</i>	‘You walk/tú anda.’
<i>mué=ka nayá-boko</i>	‘You feed the fire/tú pon lumbre.’

(121) *mué=ka oto-bóko* *mué ani-bóko* *ma bití-boko* *ma goci-bóko*

‘You take it/tú llévatelo.’
‘You say it/tú dilo.’
‘go to bed now (lit.lie down pl)/ya acuéstense’
‘(go to) sleep now/ya duermanse’

(122) Class 2 verbs

<i>mué=ka picí-poko</i>	‘You sweep/tú barre.’
<i>mué=ka tici-poko</i>	‘You comb (yourself)/tú péinate’
<i>mué=ka pagó-poko biláto</i>	‘You wash the dishes/tú lava los platos.’
<i>mué=ka batú-puko napíli</i>	‘You grind the corn/tú muele el nixtamal’
<i>mué=ka cikiré-poko</i>	‘You cut it/tú córtalo’ [the rope/el mecate]
<i>mué=ka cikimó-poko</i>	‘You cut it/tú cortalo [the meat/la carne]
<i>mué=ka gaperá-boko</i>	‘You cut it/tú córtalo [the meat, in big pieces/la carne, en pedazos grandes]

The construction can occur without the second person pronoun and still the reading is a second person addressee.

(123) *ma riwi-bóko* now find-DIRECT ‘Find it now/ya hállalo.’

ma tici-poko
now comb-DIRECT
'Comb your hair now/ya péinate.'

The first half of this suffix looks exactly like *-po/-bo* '1PL.FUT' and the irrealis meaning associated with a directive necessarily means that if the event is to be realized, it will be in the future. Given that the directive suffix has neither the person nor number restriction associated with *-po/-bo*, it is not a good synchronic analysis to say that this is a complex morpheme, but it is a good starting hypothesis that the *-po/-bo* portion of the directive suffix comes from the same source (the plural verb 'go') as the future suffix.

5.4. Evidentiality suffixes in UT

Alongside modality, many languages of the world also have evidentials, that is, a category that marks the "source of evidence for a proposition" (DeLancey, 2001). The number of evidential distinctions made may vary from a single category to as many as six (Aikhenvald & Dixon, 2003:3). The Urique Tarahumara evidential system has three clear distinctions: *-re* 'INFERRED' information (5.4.1), *-ra* 'REPORTATIVE' (5.4.2), and *-cane* 'AUDITORY' evidence (5.4.3).

5.4.1. The reportative clitic =*ra*

In UT The morpheme =*ra* functions as a REPORTATIVE, indicating that another person reported the information to the speaker; when the source of information is not specified, the translation is indefinite: 'people or someone said it/la gente dijo o dijeron.' The reportative suffix seems to have its own stress, and it occurs with the past tense allomorph *-e*.

(124) <i>ayó=rá-e</i>	‘(s/he) is getting upset, someone said/se está enojando, dijeron’
<i>napó=rá-e</i>	‘(s/he) is weeding (by hand), someone said/ está desyerbando (a mano), dijeron’
<i>napiwa=rá-e</i>	‘(S/he) is weeding (with a tool), someone said /está desyerbando (con un instrumento), dijeron.’
<i>séba=rá-e</i>	‘(S/he) arrives, someone said /llega, dijeron’
<i>ripí=rá-e</i>	‘(S/he) stays, someone said/ se queda, dijeron’
<i>cokíwa=rá-e</i>	‘(S/he) starts (something), someone said/empezó (algo), dijeron’
<i>nolína=rá-e</i>	‘(S/he) comes, someone said/llega, dijeron’
<i>rahá=rá-e</i>	‘there is fire, someone said/hay lumbre prendida, dijeron’
<i>sawi=rá-e</i>	‘(S/he) is getting well or give birth, someone said/se alivia/pare, dicen’
<i>witá=rá-e</i>	‘(S/he) is defecating, someone said/defeca, dijeron’
<i>aci-á=rá-e</i>	‘(S/he) is laughing, someone said/se está riendo, dijeron’
<i>oto-gá=rá-e</i>	‘(S/he) is taking (it), someone said/se lo está llevando, dijeron.’
<i>ani-á=rá-e</i>	‘(S/he) is saying (something)/está diciendo (algo), dijeron.’
<i>bini-a=rá-e</i>	‘(S/he) is understanding, someone said/ está entendiendo, dijeron.’

Apparently cognate reportative morphemes occur in other dialects of Tarahumara.

Choguita Rarámuri has the suffix *-ra* with a ‘reportative’ meaning (Caballero, 2008:427).

Although Lionnet (1972) does not mention a reportative for the Norogachi dialect,

Brambila (1976: 433) reports a suffix *-ru* that refers to ‘what other people say’. A

possible source for the reportative *-ra* is one of the speech verbs, *ru-me* ‘say’. Brambila

(1976: 433) asserts that the suffix *-ru* comes from the verb *ru* ‘to say’, and verbs of

saying are attested as a source for hearsay evidentials (Heine & Kuteva 2002: 265). In

UT, the verb *ru-me* ‘say’ is an irregular verb (125), as the third person SG/PL has an

unusual sequence of morphemes *-le-ge* instead of the usual *-li-ge* (cf. § 5.1.1.2).

(125) <i>ru-gé=ne</i>	‘I said/Yo dije.’
<i>ru-gé=mo</i>	‘You said/Tú dijiste’
<i>ru-lé-ge</i>	‘S/he said/El, ella dijo.’
<i>ru-tú-ge</i>	‘We said/Nosotros dijimos.’
<i>ru-lé</i>	‘You all said/Ustedes dijeron algo.’
<i>ru-lé-ge</i>	‘They said/Ellos dijeron.’

On the one hand, the verb stem *ru* ‘say’ does not retain primary stress, which might make it susceptible to the phonological processes of vowel harmony or vowel

reduction, such as a possible vowel change from *ru* to *-ra*. On the other hand, the reportative suffix does bear primary stress for the word (124), which we would not expect if it came from the unstressed verb root, and also we usually do not see vowel weakening on a stressed vowel.

The following examples show that the reportative suffix occurs in the past.

- (126) a. *alúe rióe rikú=rá-e*
 DEM man drunk.PL=REP-PST
 ‘That man was drunk, someone said / Ese hombre estaba borracho, dicen’
- b. *ralómuli tégu=rá-e*
 people drunk.PL=REP-PST
 ‘People were drunk, someone said / La gente andaba borracha, dicen.’
- d. *Martina nayú ati-ga=rá-e*
 Martina sick sit-CONT-REP-PST
 ‘Martina was (lit. ‘sits’) sick / Martina estaba enferma.’
- e. *Martina rohpací okó=rá-e*
 Martina stomach pain=REP-PST
 ‘Martina’s stomach hurt/Martina tuvo dolor en el estómago.’
- f. *alúe rióe cibi=rá-e*
 dem man hide=REP-PST
 ‘This man hid/ Ese hombre se escondió’
- (127) *ma la inamu=rá-e*
 already aff understand=REP-PST
 ‘(S/he) already understood, someone said/ ya entendió, dicen.’

The following series of examples were obtained in an elicitation session where the researcher started to talk about the weather in the city where she is living, Eugene, Oregon. After that, the researcher asked the speaker to describe the weather where the researcher lives (128-133).

- (128) *we rulá-ga=rá-e yolanda betél-ci*
 very be.cold-CONT=REP-PST Yolanda live-LOC
 ‘Esta haciendo mucho frío donde vive Yolanda, dicen.’
 ‘It’s very cold where Yolanda lives, someone said.’
- (129) *we walú bemo=ka celá=rá-e yolanda betel-ci*
 very big be.foggy-CONT morning=REP-PST Yolanda live-LOC
 ‘Hay mucha neblina en la mañana donde vive Yolanda, dicen.’
 ‘It is very foggy in the morning where Yolanda lives, someone said.’
- (130) *ritú-ga celále-ge=rá-e pa golimóba*
 be.freezing-CONT dawn-PST-REP-PST up roof
 ‘Amaneció hielo arriba en el techo, dicen.’
 ‘It was frozen up there the roof at dawn, someone said.’
- (131) *we uki-á=rá-e yolanda betel-ci*
 a.lot rain-PROG=REP-PST Yolanda live-LOC
 ‘Llueve mucho donde vive Yolanda, dicen.’
 ‘It rains a lot where Yolanda lives, someone said.’
- (132) *gepá-me ka=rá-e yolanda batel-ci*
 snow-PTCP be=REP-PST Yolanda live-LOC
 ‘Cae nieve donde vive Yolanda, dicen.’
 ‘It snows where Yolanda lives, someone said.’
- (133) *yolanda betel-ci weká há-ga-me ka=rá-e ohkó*
 Yolanda live-LOC a.lot stand.PL-CONT-PRTC be=REP-PST pine
 ‘Hay muchos pinos donde ella vive, dicen.’
 ‘There are a lot of pines where she lives, someone said.’

Similarly, (134) is uttered in the context that the speaker did not see her grandmother recently, but heard from her mother that she is getting better, and (135) is uttered in the context that the speaker has not seen Lucia recently, but Lucia’s mother told the speaker that Lucia is getting taller.

- (134) *ne ucú-la makú la sawi-á=rá-e*
 1SG grandmother-POSS already AFF get.well-PROG=REP-PST
 ‘Mi abuela ya se está aliviando me dijeron.’
 ‘Mi grandmother is getting better, someone said.’

- (135) *lucía we repá ilí-ga-me ka=rá-e*
 Lucía very up.there stand.SG-CONT-PTCP be=REP-PST
 ‘La lucía está muy alta me dicen.’
 ‘Lucía is very tall, someone said.’

The suffix *-ra* can occur in combination with the auditive evidence *-cane* (see §5.4.3); in the combination, *-ra* marks that the speaker learned about the information from another person, and *-cane* marks that this other person obtained the information by hearing the event.

- (136) *ramué=ka we rolo-cane=ra-e be'áriko*
 1pl=FOC a.lot snore-AUD.EV=REP-PST last.night
 ‘Roncamos anoche, dijeron.’
 ‘We snored a lot last night, people said.’

- (137) *be'áriko alé-mi walú ukú-cane-ge=ra-e*
 last.night dem-dem a.lot rain-AUD.EV-PST=REP-PST
 ‘Anoche allá llovió mucho, me dijeron.’
 ‘Last night it rained a lot there, someone told me.’

In text, one of the most frequent constructions where the suffix *-ra* ‘reportative’ occurs is attached to the copula *ka* ‘be’, in a complex predicate with a nonfinite verb (*V-me*, cf. Chapter VI).

- (138) *ra aní-me ka=rá=guru*
 AFF say-PTCP be=REP=FOC2
 ‘Digo sólo lo que dicen.’
 ‘I am saying what other people say.’ (OXI:21)

- (139) *aro ruwí-me ke are aní-me ka=ra-e*
 dem tell-ptcp be.pst dem tell-PTCP be=REP-PST
 ‘eso dijeron, eso dijeron.’
 ‘(They) were saying that, people said that.’ (OXI:28)

5.4.2. The inferential/indirect evidence suffix *-re*

The second evidential suffix in UT is the inferential or indirect evidence suffix *-re* ‘INFERENCE’, which in my corpus only occurs on the present tense copula *ka*. In a proper inclusion predicate the inferential suffix *-re* indicates that the speaker can infer the

identity of the subject from visible physical evidence. In examples (140a-c), the speaker sees some remains and suggests that each looks like it was, respectively, a spider, a dog, and a chicken. In this way, the speaker infers through physical evidence what kind of things the remains represent. In examples (140d-f) the speaker sees bricks that might be the foundations of a house, small rocks that looks like they were part of a larger rock, or the trunk of a tree that was cut. In examples (140g-h) the speakers can see a piece of cloth that looks like a skirt and a blouse. In examples (140i) a possible context is when the speaker sees someone from far away and can infer from the characteristics of the person that s/he might be a *ralómuli*. In example (140j) the speaker is inferring the sex of an unborn baby from the form of the belly of a pregnant woman.

- (140) a. *ye=ka rokosóli ká-re*
 this=FOC spider be-INFER
 ‘It seems a spider/parece una araña.’
- b. *alué=ka okocí ká-re* ‘It seems a dog/parece un perro.’
 c. *alué=ka tolí ká-re* ‘It seems a chicken/parece una gallina.’
 d. *alué=ka galí ká-re* ‘It seems a house/parece una casa.’
 e. *alué=ka reté ká-re* ‘It seems a stone/parece una piedra.’
 f. *alué=ka rohá ká-re* ‘It seems a tree/parece un árbol.’
 g. *alué=ka sipúca ká-re* ‘It seems a skirt/parece una falda.’
 h. *alué=ka opáca ká-re* ‘It seems a shirt, blouse/parece una blusa.’
 i. *alué=ka ralómuli ká-re* ‘It seems a person/parece una persona.’
 j. *alué=ka towí ká-re* ‘It seems a boy/parece un niño’ [you don’t know if it is a boy or a girl.]

In other varieties of Tarahumara cognates of the suffix *-re* have been reported.

Burgess (1984: 52, 109) mentions the suffix *-le* with a meaning of ‘appear/evidence of’ for Western Tarahumara. This suffix *-le* in WT has a similar form to the inferential/direct evidence suffix *-re* in UT, but in WT, it is not limited to marking the copula, as seen in (141).

- (141) *go'-lé-le*
 eat-EVIDENCE-PST
 'There is evidence that he ate here.' [such as when it can be seen that an animal got into the garden] (Burgess, 1984:52)

5.4.3. The auditory evidence suffix *-cane*

The final evidential I discuss here is the verbal auditory evidence marker *-cane*, which indicates that the speaker claims to have heard the situation, which is described. It is used specially with verbs that refer to events that can be perceived by sound such as *ciná-me* 'yell', *uhí-me* 'fart', *roló-me* 'snore'; or noisy weather events such as 'thunder', 'rain', 'hail' and the like. The same form and meaning is documented in other varieties of Tarahumara: Tarahumara from Norogachi has the suffix *-chane* 'to say/to sound' (Lionnet, 1972:36), Choguita Rarámuri has the cognate *-cane* 'auditory evidential' (Caballero, 2008:93), and Tarahumara from Samachique has the free verb *chane* 'sound' (Hilton, 1993: 23). The following examples illustrate the suffix *-cane* in UT.

- | | | |
|-------|------------------|---|
| (142) | <i>ací-cine</i> | 'to hear laughing/oir reir.' |
| | <i>ciná-cane</i> | 'to hear yelling/oir gritar.' |
| | <i>roló-cane</i> | 'to hear snoring/oir roncar.' |
| | <i>ruwí-cine</i> | 'to hear saying/oir decir' |
| | <i>nalá-cane</i> | 'to hear crying/oir llorar' |
| | <i>ukú-cane</i> | 'to hear raining/oir llover' |
| | <i>eká-cane</i> | 'to hear the wind blowing/oir el viento' |
| | <i>rusú-cane</i> | 'to hear (something) falling/oir caer (algo)' |
| | <i>ená-cane</i> | 'to hear (someone) walking/oir caminar (a alguien)' |
| | <i>gucú-cene</i> | 'to hear (an animal) howling/oir aullar' ⁵ |
| | <i>aré-cine</i> | 'to hear (a bird) singing/oir cantar (pájaro/s)' |
| | <i>neká-cane</i> | 'to hear (a dog) barking/oir ladrar' |
| | <i>re'ó-cane</i> | 'to hear tunder/oir los truenos' |
| | <i>uhí-cine</i> | 'to hear farting/oir pedorrearse' |

The auditory evidence suffix *-cane* comes before the past tense suffix (143) but following the future suffix (144).

⁵ *gucú-me* refers to the sound that some animals make, such as the coyote, the toad, and the cricket.

(143) *be'áriko alé-mi walú ukú-cane-ge*
 last.night there-DEM a.lot rain-AUD.EV-PST
 'Anoche allá llovió mucho.'
 'Last night it rained a lot there.'

(144) *we re'ó-cane walú uku-mé-cene*
 a.lot thunder-AUD.EV a.lot rain-FUT-AUD.EV
 'Está tronando mucho; va a llover mucho.'
 'It is thundering a lot; it sounds like it is going to rain.'

The suffix *-cane* is required when the speaker is reporting an event that occurred or is occurring when the speaker only knows about the event through hearing noise associated with that event.

(145) *nalá-cane towí*
 cry-AUD.EV boy
 'El niño está llorando.'
 'The boy is crying.'

(146) *be'áriko uku-cané*
 last.night rain-AUD.EV
 'Anoche llovió.'
 'It rained last night.'

(147) *mué papá-la si mocí-cine ra'íca mací-ge*
 2SG father-POSS with sit.PL-AUD.EV talk outside-DEM
 'Tu papá está sentado afuera platicando con (alguien).'
 'Your father is outside talking with (someone).'

When the speaker talks about his own snoring, because the snoring happens during sleep, the speaker cannot experience it directly. So he has to use the reportative suffix *-ra* to indicate that someone else heard him and told him about the snoring.

(148) *né=ka we rolo-cane=ra-e be'áriko*
 1SG=FOC a.lot snore-sound=REP-PST last.night
 'Yo ronqué mucho anoche me dijeron.'
 'I snored a lot last night, someone said.'

(149) *ramué=ka we rolo-cane=ra-e be'áriko*
 1PL=FOC a.lot snore-AUD.EV=REP-PST last.night
 'Nosotros roncamos mucho anoche, nos dijeron.'
 'We snored a lot last night, people said.'

When the speaker is talking about an action that she experiences both directly and through hearing — for instance her own coughing — it is not necessary to use the auditory evidential suffix.

(150) *né=ka we rosówa=ne be'áriko*
 1SG=FOC a.lot cough=1SG last.night
 ‘Yo tosí mucho anoche.’
 ‘I coughed a lot last night.’

(151) *né=ka roso-só-ke=ne be'áriko*
 1SG=FOC cough-RED-PST=1SG last.night
 ‘Yo estuve tosiendo anoche.’
 ‘I was coughing last night.’

Events that cannot be perceived in any way through sound cannot occur with the suffix *-cane*.

(152) **rulá-cane* [cold-AUD.EV/hacer.frío-AUD.EV]
 **gepá-cane* [snow-AUD.EV/nevar-AUD.EV]
 **ratá-cane* [be.hot-AUD.EV/hacer.calor-AUD.EV]

UT has a construction that is common in text. It has a meaning of ‘I heard that someone said it’. The construction contains the verb of saying *ru* and the auditory evidential suffix *-cane*. The following examples from text illustrate this construction.

(153) *cuwi yá-ri-ge ru-cane=guru*
 teswino give-3-PST say-AUD.EV=FOC2
 ‘Le dieron teswino, dijeron.’
 ‘They gave (him) teswino, I heard it said.’ (ACCLOLA:7)

(154) *tolí yá-ga eyéna ru-cane*
 chicken search-CONT walk.SG say-AUD.EV
 ‘Andaba buscando las gallinas, dijeron.’
 ‘She was looking for the chickens, I heard it said.’ (ACCLOLA:11)

- (155) *lige ale; nali ela-le ru-cane=guru plaka,*
 then DEM something put.standing-PST say-AUD.EV=FOC2 plate
- rono-ci, anaguri*
 leg.foot-LOC back.and.forth
 ‘Entonces ahí, le pusieron algo, dijeron, una placa, en la pierna en los dos lados.’
 ‘Then, there, (they) put something I heard it said, a plate in the leg in both sides.’
 (ACCLOLA:30)

The use of the suffix *-cane* is not required when the speaker eyewitnesses the event (156-157) or when the event is projected to happen in the future (158).

- (156) *uki-a ilí hípuko*
 rain-PROG stand.SG now
 ‘Está lloviendo ahora.’
 ‘It is raining now.’
- (157) *uki-á ili-gé mací-ge*
 rain-PROG stand.SG-PST outside-DEM
 ‘Estaba lloviendo allá afuera.’ [ella la vió]
 ‘It was raining there outside.’
- (158) *ma uku-meré; walú nole-ga ilí*
 now rain-POT.FUT; big.PL be.cloudy-CONT stand.SG
 ‘Ya va a llover; está muy nublado.’
 ‘It’s going to rain; it’s very cloudy.’

5.5. Voice and valence

The following section discusses some suffixes related with voice and valence.

5.5.1. Causative *-ri/-ti*

In UT, there is a transitive causative suffix with the usual fortis-lenis allomorphs *-ri/-ti*. It is found on both intransitive and transitive stems. In Tarahumara from Norogachi, the suffix *-ti* is reported with a meaning of ‘the cause of’ (Lionnet, 1972: 79) and in Choguita Rarámuri there is a causative *-ti* with an allomorph *-ri* (Caballero, 2008: 411).

ria and *-wa*) and *-ru* (with its allomorph *-tu*). Lionnet (1972:22), who studied the variant from Norogachi, analyzes *-ru/-tu* as ‘be’, ‘exist’, and ‘semi passive,’ and *-ia/-riwa/-wa* as ‘impersonal, semi passive.’ Caballero (2008:130) mentions that in Choguita Rarámuri there are four passive suffixes: the ‘medio-passive’ *-riwa* (and its allomorph *-wa*), the ‘future passive’ *-pa*, the ‘past passive’ *-ru*, and the ‘conditional passive’ *-suwa*. Caballero (2008:93) mentions that in Choguita the use of *-riwa* vs. *-wa* is apparently lexically conditioned. However stress is also involved, as stressed roots occur with *-wa* and unstressed roots occur with *-riwa* (Caballero, 2008:93).

5.5.2.1. The passive: *-ru*

In earlier work (Valdez-Jara, 2005), I showed that UT has a passive suffix *-ru* that can occur on both transitive and intransitive verbs; this suffix does not appear to have a fortis form (see examples (167-168)) The intransitive passive has a meaning of impersonal, which is why I translate it as ‘they / people do something.’ The transitive passive does not accept an agent phrase, so the only way to introduce the agent is in a separate clause after the passive, for example in (163a) *ganó sile* ‘It was Gano (who did it).’ Example (163b) shows that if the NP *rio* ‘the man’ occurs before the verb with the passive suffix *-ru*, that NP is interpreted as the P rather than as the A. Speakers never accept the occurrence of both the agent and the patient (163c).

(162) *tewé=ka ubá-ru-re, mukí si-le*
 girl=FOC wash-PASS-PST, woman be-PST
 ‘La niña fue bañada, la mujer fue.’
 ‘The girl was got a shower, the woman was.’

(163) a. *mukí otó-le-ru=kuru, ganó si-le*
 woman take-PST-PASS=FOC2 Ganó be-PST
 ‘La mujer fue llevada, Ganó fue.’
 ‘The woman was kidnapped, it was Gano.’ [lit. taken]

b. *rió otó-le-ru=kuru*
 man take-PST-PASS=FOC2
 ‘El hombre fue llevado.’
 ‘The man was taken.’

c. **rió lola oto-le-ru=kuru*
 [The man kidnapped (lit. took) Lola/el hombre se llevó a Lola]

One of the problems with earlier analyses is the homophony between the passive suffix *-ru* and the first person plural suffix *-ru*. The problem is further complicated by the fact that the passive suffix *-ru* occurs in two different locations in the UT verb, sometimes before and sometimes after the suffix *-ge* ‘past’. To make things still more complicated, the order of the passive suffix can, in turn, influence the allomorph of the past tense suffix, which can be *-re*, *-le* and even *-lu*. According to my current analysis, different orders of past and passive result in the sequence *-ru-le* ‘PASSIVE-PAST’ (164) and *-le-ru* ‘PAST-PASSIVE’ (165), with the order lexically conditioned. The verbs in each list cannot take the other order, and so far I have found nothing that unifies the groups.

(164) Class A:

<i>simi-ru-le</i>	<i>*simi-le-ru</i>	‘People went (there)/se fueron.’
<i>sasi-ru-le</i>	<i>*sasi-le-ru</i>	‘People slipped/se resbalaron.’
<i>wipí-ru-le</i>	<i>*wipí-le-ru</i>	‘People fell down/se cayeron.’
<i>má-ru-le</i>	<i>*má-le-ru</i>	‘People ran/corrieron.’
<i>aké-ru-re</i>	<i>*aké-le-ru</i>	‘They swam/nadaron.’

(165) Class B:

<i>emé-le-ru</i>	<i>*emé-ru-le</i>	‘Someone got dizzy (SG)/se atarantaron (SG).’
<i>rikú-lu-ru</i>	<i>*rikú-ru-le</i>	‘People got drunk (PL)/se emborracharon (PL).’
<i>mahá-lu-ru</i>	<i>*mahá-ru-le</i>	‘People got scared/se asustaron.’
<i>isí-lu-ru</i>	<i>*isí-ru-le</i>	‘People urinated/se orinaron.’
<i>napó-lu-ru</i>	<i>*napó-ru-le</i>	‘People weeded (by hand)/desyerbó.’

There are also other morphological strategies for avoiding the ambiguity between the suffix *-ru* passive and the suffix *-ru* ‘first person plural’. First, the verbs with the first person plural *-ti* or *-ri* do not have any ambiguity between the passive *-ru* and first person

plural (166) and (167). Verbs with a suppletive verb form for plural also distinguish clearly passive and first person plural (168), as the passive form is always based on the singular root.

- (166) a. *simí-ru-le* ‘They/people went (there).’ [Passive]
 b. *simá-ri-ge* ‘We went (there).’ [First person plural]
- (167) a. *rikú-lu-ru* ‘People got drunk.’ [Passive]
 b. *rikú-ti-ge* ‘We got drunk.’ [First person plural]
- (168) a. *má-ru-le* ‘People ran (here).’ [Passive]
 b. *húmi-ti-ge* ‘We ran (here).’ [First person plural]

Verbs with the first person plural *-ru* have two additional strategies to distinguish between the ‘passive’ and the ‘1PL’: placement of the stress and the allomorph of the past tense suffix. In the passive, the stress occurs in the verbal root and the allomorph of the past tense is the unusual *-re*, whereas for first person singular the stress occurs in the suffix *-ru* and the allomorph of the past tense is the more common *-ge*.

- (169) a. *aké-ru-re* ‘People swam (here)’ [Passive]
 b. *ake-rú-ge* ‘We swam.’ [First person plural]

These same features distinguish *-ru* ‘1PL’ from *-ru* ‘PASS’ also in transitive verbs: for example, the verb *oto-rú-ge* ‘we took it’ (170a) shows the stressed 1pl suffix *-rú*, the past tense allomorph *-ge*, in the sequence *-rú-ge* ‘PASSIVE-PAST’, versus *oto-lé-ru* ‘it was taken’ (170c), which shows the stressed past tense allomorph *-lé*, the unstressed passive suffix *-ru*, occurring in the sequence *-lé-ru* ‘PAST-PASSIVE’. Note that with the 1PL form of the verb, the A and the P can both occur explicitly (170a), whereas with the passive verb they cannot (170b). When the passive *-ru* occurs, the preverbal NP *alué mukí* is interpreted as the patient and the agent can only occur in an afterthought, such as *ramué*

sile ‘we did it’ (lit. ‘We were the ones/it was us’). More examples of this subclass of verbs can be found in (171).

- (170) a. *ramué oto-rú-ge alué muki*
 1PL take-1PL-PST that woman
 ‘We took that woman.’ [from one place to another]
- b. **ramué oto-lé-ru alué muki*
- c. *alué muki oto-lé-ru=kuru, ramué si-le*
 that woman take-PST-PASS=FOC2 1PL be-PST
 ‘That woman was taken; we did it.’ (lit. it was us)

- (171) Passive 1PL
- | | | |
|-------------------|-------------------|-----------------------|
| <i>rahi-le-ru</i> | <i>rahi-rú-ge</i> | ‘burn’ |
| <i>raná-le-ru</i> | <i>rana-rú-ge</i> | ‘give birth’ |
| <i>sawí-le-ru</i> | <i>sawi-rú-ge</i> | ‘get well/give birth’ |
| <i>rewá-le-ru</i> | <i>riwi-rú-ge</i> | ‘find’ |
| <i>witá-le-ru</i> | <i>wita-rú-ge</i> | ‘defecate’ |

In previous work, these two *-ru* suffixes were interpreted as a single morpheme that shows variable ordering. For Tarahumara from Choguita, Caballero (2008:229) suggests that the variable suffix ordering can be semantically, phonologically, or arbitrarily conditioned. However, in UT the different suffix ordering is not arbitrary, but rather distinguishes the otherwise homophonous 1PL suffix from the PASSIVE suffix.

5.6. Clitics and particles

This section describes the clitics =*ku* ‘back, again’, the two enclitics marking first and second person singular in the verb =*ne* and =*mo* respectively, and the clitic =*kuru*.

5.6.1. The clitic *ku*= ‘back, again’

In UT, the proclitic *ku*= combines with different kinds of stems, such as verbs, nouns and adverbs. It indicates motion ‘back’ to the starting point, or that the action indicated by the verb is repeated ‘again’. Other variants of Tarahumara have a cognate

morpheme *ku* with similar meaning. Norogachi has the free particle *ku* that occurs before the verb and means ‘again, back’ (Lionnet, 1972:64). In the variant of Sisoguchi the adverb *ku* ‘iterative, again’ is reported (Brambila, 1976: 267). Examples (172a-b) from UT show the contrast between the verb *nawá-me* ‘arrive’ with *ku=* and without *ku=*. In (173) is an illustrative list of verbs with *ku=*, a subset of which are illustrated in (174) with full sentences.

(172) a. *né=ka nawa-gé=ne*
 1SG=FOC arrive-PST=1SG
 ‘I arrived/yo llegué.’

b. *né=ka ku=nawá=ne*
 1SG=FOC BACK-arrive=1SG
 ‘I came back/yo volví.’

(173) *ku=ayó* ‘get angry again/enojarse otra vez’
ku=ropóca ‘bend down again/agacharse otra vez’
ku=wipína ‘turn over dirt again/voltrear la tierra otra vez’
ku=séba ‘come back/llegar otra vez’
ku=ripí ‘stay again/ quedarse otra vez’
ku=nolíni ‘come back again SG/se devolvió SG’
ku=uhí-cine ‘fart again/volver a tirarse pedos’
ku=isi ‘pee again/orinar otra vez’
ku=cigó ‘return back the stealed/devolver lo robado’
ku=rahi ‘burn again/prenderse otra vez (INTR)’
ku=raná ‘give birth again (animals)/volvió a parir (animales)’
ku=sawí ‘give birth gain (human)/volvier a parir (humanos)’
ku=ací ‘laugh again/riéndose otra vez’
ku=ka’wí ‘bring wood again/acarrear leña otra vez’
ku=náta ‘remember again/ acordarse otra vez’

(174) a. ***ku=nawa-gé=ne***
 BACK=arrive-PST=1SG
 ‘Me devolví.’
 ‘I came back.’

b. *alué rió ku=má-li-ge*
 DEM man BACK=run-3-PST
 ‘Ese hombre volvió a correr.’ [en la carrera]
 ‘That man ran again.’ [in a race]

- c. *ma hemi ku=ená=ne*
 just.already here BACK=walk=1SG
 ‘Ya volví aquí.’
 ‘I am back here again.’
- d. *ma ku=eyéna=ne*
 just.already BACK=walk=1SG
 ‘Ya volví a caminar.’ [no podía caminar, estaba enferma]
 ‘I walk again’ [I was not walking because I was sick]
- e. *ku=cirú=ne culé*
 BACK=hunt=1SG coati
 ‘Volví a cazar un cholugo.’
 ‘I hunt coati again.’
- f. *rowirile ma ku=ekóta*
 scrubland just.already BACK=burn
 ‘El monte se volvió a quemar.’
 ‘The scrubland just burns again.’

In a complex verb predication the clitic =*ku* it is attached to the dependant verb, schematically [*ku*=V V].

- (175) a. *ku=remé cukú=ne*
 BACK=make.tortillas crouch=1SG
 ‘Estoy haciendo tortillas otra vez.’
 ‘I am making tortillas again.’
- b. *hípuko ma ku=uki-á ilí*
 now already BACK=rain-PROG stand.SG
 ‘Esta lloviendo otra vez.’
 ‘Now is raining again.’

The morpheme *ku*= can also occur attached to demonstratives (176a), nouns (176b, c), to a possessor (176d), to an adjective (176e), or to an commitative phrase (176d).

- (176) a. *né=ka ma ku=alé-mi si-meolá=ne*
 1SG=FOC already BACK=DEM-DEM go-FUT=1SG
 ‘Ya voy a volver allá.’ [a mi casa]
 ‘I am going to come back there.’ [to my house]

- b. *ku=bihti-ci* *atí=ne* *ma*
 BACK=house-LOC sit.SG=1SG already
 ‘Ya volví a mi casa.’
 ‘I am back at the house now.’
- c. *ku=bowi-ci* *ená=ne*
 BACK=road-LOC walk=1SG
 ‘Estoy devuelta en el camino.’
 ‘I am coming back to the road.’
- d. *ku=nana* *betel-ci* *atí=ne*
 BACK-mother house-LOC sit=1SG
 ‘Estoy de vuelta en la casa de mi mamá.’
 ‘I am back to mom’s house.’
- e. *ku=we* *rurámu=ne*
 BACK= a.lot be.cold-1SG
 ‘Tengo frío otra vez.’
 ‘I am very cold again.’
- f. *ku=okocí* *yuga* *atí=ne;* *re’é-ya*
 BACK=dog with sit.SG=1SG play-PROG
 ‘Estoy de vuelta con mi perro; jugando’
 ‘I am back with my dog; playing.’

5.6.2. The focus marker clitic (=kuru/=turu/=guru)

In UT, the focus marker has three allomorphs: =kuru, =guru, =turu (the conditioning environment for each allomorph is unknown at the moment). For convenience, I refer to this clitic as =kuru without making any claims that this is a “deep” or basic form, as the three forms appear, for now, to be in free variation (see 177). The noun phrase focus marker =ka ‘FOC’, which is described in §3.6, appears to be unrelated to =kuru/=guru/=turu, which occurs primarily following verbs (§5.6.2.1), as a boundary marker (§5.6.2.2), or as a phrasal clitic that occurs attached to the last element of different types of phrases, such as noun phrases, locative phrases, adverbial phrases, and the like (§ 5.6.2.3). The morpheme =kuru is documented also in Western Tarahumara as

the suffix *-kuru* ‘truth’ (Burgess (1984:20). I put it in the chapter on verbs because it so frequently marks the verb (§ 5.6.2.1), although it also freely occurs on other parts of speech (§ 5.6.2.3).

5.6.2.1. The clitic =*kuru* attached to verbs

The clitic =*kuru* has three allomorphs: =*kuru*, =*guru* and =*туру*. These three allomorphs are not determined, as in the case of some suffixes in UT, by verb class. The three forms can all occur on the same verb, whether the verb belongs to the lenis-conditioning Class 1 (177a,b) or the fortis-conditioning class 2 (177c).

- (177) a. *neka ayó=kuru*
 neka ayó=guru
 néka ayó=туру
 ‘Yo me enojo.’
 ‘I am angry.’
- b. *ramué=ka na’áwe=kuru*
 ramué=ka na’áwe=guru
 ramué=ka na’áwe=туру
 ‘Nosotros nos enojamos.’
 ‘We are angry.’
- c. *mué=ka wipína=kuru*
 mué=ka wipína=guru
 mué=ka wipína=туру
 ‘Tú volteas la tierra.’
 ‘You turn over the dirt.’
- (178) Q: *cucumígu=mo?*
 what.doing=2SG
 ‘What are you doing?/qué estás haciendo?’
- A2. *nocá=guru=ne*
 work=FOC=1SG
 ‘I am working/estoy trabajando.’
- A2: *napíwa=gurú=ne*
 weed=FOC=1SG
 ‘I am weeding/estoy desyerbando.’

5.6.2.2. The clitic =*kuru* on verbs as a boundary marker

The clitic =*kuru* can be used as a boundary marker when occurring attached to the main verb of a clause. It also can occur in the boundary between the speaker's turns (179).

(179) Speaker 1: *uce bile coki-la ké=kuru*
another one be.guilty-NMLZ be.PST=FOC2
'Otro fue el culpable.'
'Another one was the guilty one.' (ADJ:7)

Speaker 2: *hicika*
who/quién?

Example (180) shows the clitic =*kuru* attached to the verb of a main clause, creating a boundary after which free core arguments do not occur, only obliques and afterthoughts. In (180-181), the verb plus =*kuru* is final. In (182) *alo sabina yuga* 'with Sabina' is an oblique in a PP headed by the postposition *yuga* 'with'; it follows the verb plus =*kuru*. In example (183) the verb carries the third person A suffix *-ri* and the P NP precedes the verb. The NP *nali apalocika* 'that grandfather' that occurs after the verb with =*kuru* is interpreted as the recipient. In example (184) the NP *cuwábuga* 'all' functions as the P and it comes before the verb. The NP that occurs after the verb with =*kuru* is extra information specifying what kind of liquid was spilled.

(180) *uce bile yoli raica-le=kuru*
another one mestizo talk-PST=FOC2
'Un mestizo habló.'
'One mestizo talked.' (ADJ:11)

(181) *né=ka pe bineli eyéna=kuru=ne*
1SG=FOC only alone walk=FOC2=1SG
'Yo ando sola.'
'I walk alone.' (ADJ:35)

- (182) *pe bineli rípi=kuru=ne alo sabina yuga*
 only alone stay=FOC2=1SG DEM Sabina with
 ‘Yo me quedo sola con Sabina.’
 ‘I stay alone with Sabina.’ (ADJ:27)
- (183) *troka nola-ri=guru nali apaloci=ka*
 car bring-3=FOC that grandfather.F=FOC
 ‘El trae el carro para el abuelo.’
 ‘He brings the car for the grandfather.’ (ACCLOLA:35f)
- (184) *ma cuwabuga koli=kuru, bawi-la*
 just all spill=FOC2 water-NMLZ
 ‘Tiró todo, el caldo.’
 ‘(He) just spilled everything, the water soup.’ (ADJ:37b)

The following example shows that in a complex predicate a posture verb is the auxiliary verb, the clitic =*kuru* occurs in the auxiliary verb (185 A1). In (185 A2) the NP occurs with the clitic =*kuru*; and after a short pause, the predicate comes.

- (185) Q: *cuciá atí-ka=mo*
 what sit.SG-CONT=2SG
 ‘Qué estas haciendo?’
 ‘What are you doing?’
- A1: *múli neté atí=kuru=ne*
 basket make sit.SG=FOC2=1SG
 ‘Estoy haciendo waris.’
 ‘I am making baskets.’
- A2: *múli=guru, neté atí=ne*
 basket=FOC2 make sit.SG=1SG
 ‘Waris, estoy haciendo.’
 ‘Baskets, I am making.’

5.6.2.3. A phrasal clitic vs. a boundary marker

The clitic =*kuru* is a phrasal clitic, which can occur attached to the last element of almost any kind of phrase. It cannot occur in any element in the middle of the phrase when there are two or more elements (187). In example (186) the clitic =*kuru* occurs attached to the last element of the NP in the answers.

(186) Q. *hícika si-lé?*
 who be-PST
 ‘Who was it?/ ‘Quién fue?’

A1. *alué=guru*
 DEM=FOC2
 ‘that (one)/ese’

A2. *alué rió=guru*
 DEM hombre=FOC2
 ‘that man/‘ese hombre’

A3. *alué bilé rió=guru* ‘That one man/Ese un hombre.’
alué walú rió=guru ‘That big man/Ese hombre grande.’
alué yolí rió=guru ‘That mestizo man/Ese hombre mestizo.’

(187) **alué=guru rió* [that man/ese hombre]

The following examples show the clitic =*kuru* attached to NPs. Examples (188) and (189) illustrate the clitic =*kuru* attached to a possessive construction (188a-b provides the preceding context for 188c).

(188) a. Speaker 1: ‘My father came very angry the next day/mi padre vino muy enojado el día siguiente.’ (ADJ:55a)
 b. Speaker 2: ‘angry?/enojado?’ (ADJ:55b)
 c. Speaker 1: *mue apalóci-la=guru*
 2SG grandfather.F-POS=FOC2
 ‘your grandfather!/ ‘tu abuelo’ (ADJ:55c)

(189) Q: *taciri yami-ga=mo?*
 what look.for-CONT=2SG
 ‘What are you looking for?/Qué buscas?’

A1:⁶ *ne raná-la=guru*
 1SG kid-POSS=FOC2
 ‘my kid/mi hijo’

A2: *alué=guru*
 DEM=FOC2
 ‘him/her’ [pointing to the person]/(a) él/ella’ [apuntando a la persona]

⁶ A1 means ‘Answer 1’, A2 ‘Answer 2’, A3 ‘Answer 3’

(190) Q: *tacíri hu-ko alué*
 what be-DUB DEM
 ‘what is that?/ Qué es eso?’

A1: *múli=guru*
 basket=FOC2
 ‘(a) basket/(una) canasta’

A2: *sekolí=guru*
 pot=FOC2
 ‘(a) pot/(una) olla’

It also can occur attached to the last element of the noun phrase in a predication.

(191) *alué rió=guru si-le*
 dem man=FOC2 be-PST
 ‘It was that man/Era ese hombre.’

The clitic =*kuru* also can occur attached to the last element of a locative phrase.

(192) Q. *komiena ucáki=mo sipúca?*
 where hang=2SG skirt
 ‘Where do you hang the skirt?/Donde cuelgas la falda?’

A1. *iwí-ci=guru*
 rope-LOC=FOC2
 ‘on the cord/en la cuerda’

A2. *repá iwí-ci=guru*
 up.there rope-LOC=FOC2
 ‘up there on the rope/arriba en la cuerda.’

A3. *pacá repá iwí-ci=guru*
 inside up.there rope-LOC=FOC2
 ‘adentro (de la casa) arriba en la cuerda’
 ‘Inside (of the house) up there on the rope.’

(193) Q. *komiena ucucá-bo*
 where hang-FUT.1PL
 ‘dónde (lo) vamos a colgar?’ [mostrando el sartén]
 ‘Where we are going to hang this.’ [showing a frying pan]

A1: *alue repa-ge=guru kilábu-ci*
 DEM up.there-DIR=FOC2 nail-LOC
 ‘allá arriba en el clavo.’
 ‘Up there on the nail.’

The clitic =*kuru* can also occur attached to a temporal phrase (194 A1) and

(195A2).

(194) Q: *cuyera-ko nawa-ko?*
when-DUB come-Q
'Cuándo llegaste?'
'When (did) you come?'

A1: *rapako=guru*
yesterday=FOC2
'ayer'
'yesterday'

(195) Q: *cuyéna-ko mili-li-ru*
when-DUB kill-PST-PASS
'Cuando lo mataron?'
'When was killed?'

A1: *rapáko=guru mili-li-ru*
yesterday=FOC kill-PST-PASS
'ayer lo mataron'
'Yesterday was killed.'

A2: *rapáko=guru*
yesterday=FOC2
'ayer'
'yesterday'

When there are two elements in the temporal phrase, the clitic =*kuru* occurs on the last element of the phrase and it is not acceptable that it occurs on the first element (196). The speaker suggested that the clitic might occur in *kulí* 'the past (one)' but it would need clarification. The question in (196d) is asking for clarification and (196e) is specifying that the speaker is talking about *tarali* 'week'.

(196) a. *kulí taráli=guru*
last week=FOC2
'la semana pasada'
'last week'

- b. **kulí=guru tarali* [last week/la semana pasada]
- c. *kulí=guru*
pasada=FOC2
 ‘la pasada’
 ‘the last one’
- d. *cuyénako*
 when
 ‘Cuándo?’
 ‘when?’
- e. *tarali=guru*
week=FOC2
 ‘(una) semana’
 ‘(a) week’

This concludes the chapter about verbal morphology. We have seen suffixes marking tense, aspect, mood, and evidentiality in the UT verb. We also have seen the subject indexation system that only occurs in the past tense. We also have seen clitics that can occur in different types of phrases including the verbal phrase; their function in the verbal phrase is discussed in this chapter. The next chapter concludes this dissertation, giving future directions in the research on UT.

CHAPTER VI

CONCLUSIONS: TOWARDS FUTURE STUDIES

This final chapter is a to do list for future research that this work opens. In the process of studying, describing and discussing UT grammar I realized that the complexity of this language exceeded the capacity of this work, but at the same time can keep myself and other researchers busy for years. Along with other researchers before me, I recognize that we are just starting the job of understanding Tarahumara. Here are some of the most salient areas I have identified for future directions. There are three major areas in UT that kept asking for a deeper, more detailed study throughout this work: complex predicates, morphophonological irregularity, and the incipient personal hierarchy.

6.1. Complex predicates

Complex predicates is an area of UT grammar that sometimes seems completely connected to the morphemes already described in this work. Sometimes it feels like leaving complex predicates for future research requires leaving a morpheme half explained. One example is a group of three suffixes, *-a/ya*, *-me* and *-ga*. When they occur in simple predicates, these suffixes have aspectual meanings: *-a/ya* ‘PROGRESSIVE’, *-me* ‘PARTICIPIAL / NOMINALIZER’, and *-ga* ‘CONTINUOUS’. These three morphemes also occur in complex predicates, marking the dependent verb in a complex construction. Table 6.1 shows schematically the possibilities that I have recognized at this moment for these morphemes occurring in complex predicates.

Table 6.1. Complex predicates with *-a/-ya*, *-ga*, and *-me*

<i>-a/-ya</i>	<i>-ga</i>	<i>-me</i>
[V- <i>a</i> V]	[V- <i>ga</i> V]	[V- <i>me</i> COP]
[V- <i>sa</i> V- <i>ya</i>]	[V-TAM V- <i>ga</i>]	[V- <i>ga-me</i> V- <i>me</i> COP]
[V V- <i>a</i>]	[V- <i>ga-me</i> COP]	
	[V- <i>ga</i> V- <i>ga</i> V-TAM]	

The following examples show some of the complex predicates where *-a/ya*, *-ga*, and *-me* occur. Upon seeing these examples, the first questions that arise concern meaning: what do each of these collocations mean, how are they different from existing verb inflections, and how are they different from each other? Other questions concern syntax: what is the difference when there are two possible orders of verb forms, like in the case of [V-*a* V] and [V V-*a*] or [V-*ga* V] and [V V-*ga*]. Also, given that it is possible to have a chain of two V-*ga* forms in a row (e.g. [V-*ga* V-*ga* V]), then is it also possible to make a longer chain, for instance with three or four or even more V-*ga* forms in sequence? Another line of questions follows from morphology: which verb bears the finite morphology, and can any inflectional forms occur in any of these collocations? This extends also to the choice of lexical verb in certain constructions, for example in the [V-*me* COP] construction, only a copula can different occur in the COP slot, although any of the copulas do this. Some common groups of auxiliary verbs in UT seem to be the group of posture verbs, copulas, verbs of movement and verbs of saying.

A last line of research I can think of is the historical part of all this grammar. What verbs have grammaticalized in UT as auxiliary verbs, as opposed to those that have become verbal suffixes, like *-si* ‘go’, while others, like the posture verbs, can occur as independent verbs as well as auxiliaries. I would like to have a clearer map about the grammaticalization of auxiliary verbs in UT, including which bears the TAM-EV

morphology, the subject indexation suffixes and the like. The following examples, all from texts, illustrate the complex predicates shown in table 6.1.

- (1) a. [V-a V]
ba'wí nolí [cimi-a ilí=turu]
 water pure go-PROG stand.SG=FOC2
 'Está saliendo pura agua.' [de la quemada]
 'It is coming out only water.' (ADJ:99) [from the burn]
- b. [V V-a]
alué larigá alué mi'li-sá pe [abahá pá-a]
 DEM like.that DEM kill-WHEN just leave dump-PROG
 'Eso le hicieron, cuando lo mataron nomás lo dejaron tirado.'
 'They, like that, when (they) kill him (they) just leave (him) dumping.'
 (COL:54)
- c. [V-sa V-ya]
[bure-sa yawi-ya]
 tie.up-WHEN dance-PROG
 'El se amarró (los huaraches) cuando estaba bailando.'
 '(He) tied up (the sandals) when (he) was dancing?' (POR:160)
- (2) a. [V-ga V]
tolí [yá-ga eyéna] ru-cane
 chicken search-CONT walk say-AUD.EV
 'Andaba buscando las gallinas, oí decir.'
 'She was looking for the chickens, I heard to say.' (ACCLOLA:11)
- b. [V-TAM V-ga]
alué=ka sinalóa [eyéna-le=kuru noca-ga]
 3=FOC Sinaloa walk-PST=FOC work-CONT
 'Ese andaba trabajando en Sinaloa.'
 'That one was working in Sinaloa.' (ADJ:23)
- c. [V-ga-me COP]
pe [kale-ga-me xu=pa] pe la ani-le=pa alué=ka
 only lie-CONT-PTCP be=EXPL only AFF say-PST=EXPL 3=FOC
 'El es un mentiroso, dijo él.'
 'He is a liar; he said.' (ACCLOLA:18)
- d. [V-ga V-ga V-TAM]
[cuku-gá ena-gá ru-é=kuru] lékiri
 stand4.SG-CONT walk-CONT say-PFV=FOC slowly
 'Dijo que andaba gateando lentamente.'
 'She said that she was crawling slowly.' (ACCLOLA:19d)

- (3) a. [V-*ga-me* V-*me* COP]
alkére tabilé [moé-ga-me eyéna-me hú-ko=ba]
 that's.why no be.good-CONT-PTCP walk-PTCP be-IRR=EXPL
 ‘Por eso no anda muy bien.’
 ‘That is why she is not walking well.’ (ACCLOLA:34)
- b. [V-*me* COP]
ohko-la [boná-me ka-rá-ru=ba] cuwábuga rohá
 pine-POSS pull.out-PTCP be-REP-PASS=EXPL all tree
 ‘las ramas de lo pinos jala todos los árboles.’
 ‘The pines’ branches, [he] pulls out all the trees.’ (OXI: 230)

Another construction that deserves more detailed study is the PURPOSE OF MOTION construction, which occurs with the suffix *-mia/-mea*. In purpose of motion clauses, the main verb is the copula *ka*, which follows a verb of motion that bears *-me* ‘PARTICIPLE’ and precedes the purpose verb, which bears the suffix *-mia/-mea* ‘PURPOSE’.

Schematically, the entire construction appears to be [V-*me* COP_{FINITE} V-*mia*].

- (4) a. *paca-ge tabire rioci;*
 inside-DEM NEG people
- b. *arue cimi-me ka-ra=kuru nola-mia serio*
 DEM go-PTCP be-REP-FOC2 bring-PURP match
 ‘Cuando no hay gente dentro (de las casas) él va a traer los cerillos, dicen.’
 ‘[when] there are no people inside [the house]; he goes there to bring matches, they said.’ (OXI: 92)
- (5) *riko cimi-ame ka-ra=kuru cigo-mia serio*
 like.that go-PTCP be-REP=FOC2 steal-PURP match
 ‘Entonces (él) va a robar cerillos.’
 ‘Then [Oxi] goes to steal matches.’ (OXI: 104)
- (6) *raromuri oto-me ka-ra=guru go'-mea*
 people take-PTCP be-REP=FOC2 eat-PURP
 ‘(El) se lleva gente para comérsela.’
 ‘(He) takes people to eat it.’ (OXI: 250)

Another type of complex predicate in UT is ADVERBIAL CLAUSES. This is the “mechanisms whereby one clause can be said to modify another in a way similar to the way in which an adverb modifies a proposition. Just as with adverbs, which are single words or phrases, adverbial clauses can be labeled and categorized with respect to the semantic roles they play” (Thompson, Longacre, & Hwang, 2007:237).

- (7) *alkere oko-me ko-ri=guru [pe simi-sa]*
 because hurt-PTCP feel-3=FOC2 only go-WHEN
 ‘Por eso ella siente dolor cuando camina.’ [porque tiene clavos en la rodilla]
 ‘That is why she feels pain when she walks.’ (ACCLOLA:35)[because she has pins in the knee]
- (8) [*lige alesi=ka rahi-sa-ka] komiena apa-re-ru=pa=mo*
 then that=FOC burn-WHEN-CONT where carry.on.back-PST-PASS=Q=2SG
 ‘Entonces después de que te quemaste dónde te llevaron?’
 ‘Then after you burned where did they take you? (ADJ:62)
- (9) [*uce bile-na rio-go-ci simi-sa] eyena-ga [seba-sa]*
 another one-in.place people-?-LOC go-WHEN walk-CONT [arrive-WHEN]
 ‘Cuando él fue a un lugar donde vive la gente, andaba caminando cuando llegaron.’
 ‘When he went to another place where people live, (he) was walking around when (they) arrive.’ (ADJ:50)
- (10) *riku=guru=ne eyena gariga [walu go-sa]*
 be.drunk.sg=FOC2=1SG walk completely a.lot eat-WHEN
 ‘Ando atarantado cuando como mucho.’
 ‘I am tottering when I eat a lot.’ (ADJ:109)
- (11) [*simi-sa muni ici-mea]*
 go-WHEN beans plant-PURP
 ‘Cuando fue a plantar frijoles.’ [le picó el alacrán]
 ‘When [he] went to plant beans’ (AL:1b) [a scorpion bite him]
- (12) [*ku=nawa-sa] are ati-ge*
 back=arrive-WHEN there sit.SG-PST
 ‘Cuando regresó se sentó ahí.’
 ‘When [He] came back [he] sat there.’(AL:6a)

- (13) a. [*kuci-ga-me* *ni-sa*] *cigo*
 kids-CONT-PTCP exist-WHEN also
- b. *ruye-mala* *ka=ba*
 tell-FUT be=EXPL
 ‘Cuando tú tengas hijos aconséjalos también.’
 ‘When you have kids you will advise them too.’ (COL:39)
- (14) [*alo* *lariga* *alue* *mi’li-sa*] *pe* *abaxa* *pa-a*
 DEM like.that 3 kill-WHEN just leave dump-PROG
 ‘Cuando ellos lo mataron ahí nomás lo dejaron tirado.’
 ‘When they killed him (they) just leave him dumped/sprawled.’ (COL:54)
- (15) *abe* *xena* *reka-bu=guru=ne*
 AFF here put.lying.SG-INCH=FOC2=1SG
- ani-a-ra=guru* [*mili-sa-ka*]
 say-PROG-REP=FOC2 kill-WHEN-CONT
 ‘Sí, entiérrenme aquí dijo, cuando me maten.’
 ‘Yes, bury me here, (he) said, when (you) kill me.’ (COL:61)

This brief introduction to complex clauses given above shows us some possible lines of further research in UT. I believe that untangling the intricate characteristics of UT complex construction grammar and relating them with simple clauses or with the historical development of this area of the grammar is material for future work. Now we turn to another area of possible future research in UT, morphological irregularity.

6.2. Irregularity in UT

One of the most intricate areas of UT that I have recognized and started describing in a detailed way is the morphophonology. The high degree of irregularity in Tarahumara morphophonology and syntax has been mentioned by authors like Copeland (1992, 1994) and Brambila (1953, 1976). Copeland (1994: 6) strongly stated that there is a “widespread unmotivated variation in the shapes of Tarahumara words and morphemes.” Copeland (1994: 7) also says about morphology that “there is a great deal of individual freedom in the choice of bound forms and functors for expressing

grammatical and semantic functions.” As I showed in §5.1.1.4-5, there is extensive irregularity also in UT, but the variation is not nearly so unpredictable as has been claimed for other dialects. In future work it is important to address the allomorphy of the past tense suffix that usually occurs as *-ge* but also can occur as *-le*, *-e*, *-re*, and *-lu*. Another area that deserves attention in future research is the interaction of the verb classes with other verbal suffixes. We show an example of this interaction with the ordering of the passive and the past tense suffixes in § 4.3.

Despite being highly irregular, the relevant person and tense distinctions are still systematically encoded in UT morphology. However, a system with such a high degree of irregularity is ripe for reanalysis to make it simpler to learn (especially for second language learners). This could be a possible motivation for the use of third person forms to mark second person plural and for the loss of the personal suffixes everywhere except in the past tense verb forms. In future work, I hope to explore the genesis of the various tense markers in UT, so as to better understand why only past tense retains the full set of person distinctions. This could also have helped to motivate the reanalysis of first and second person pronouns as verbal enclitics (§ 4.4), which had the effect of introducing a type of hierarchical agreement previously unattested in the Uto-Aztecan family.

As a final note, this description of UT highlights the difference between variation and irregularity. Some have commented on the extreme degree of variability in Tarahumara grammar (e.g. the Copeland quote above), and have suggested that this makes the grammar difficult to describe. In my work, I have seen such variation in the domain of syntax (e.g. in word order, case-marking, and occurrence of verbal enclitics); in the domain of morphology, we find extreme irregularity, but with little variation (in the

sense that only one allomorph ever occurs in a given sequence of morphemes). Irregularity is unpredictable and can appear unmotivated, and we certainly cannot predict how a verb paradigm is going to look based on the verb form. But once that we know the paradigm of a verb, the shapes of the individual morphemes do not alternate with other shapes — that is, the entire paradigm is invariant. For example, we cannot predict in advance which allomorphs of the verb, the agreement suffixes, nor the past tense suffix will occur in the paradigm of the verb *raíca-me* ‘speak’: idiosyncratic allomorphs occur in all three domains. But once we know the paradigm, we see that all the persons are differentiated from each other by some means and that once you know each full word, there is no variation as to how that word is said. Unless the term “variation” refers to the derivation of (apparently unmotivated) distinct surface allomorphs from a single “deep” structure of a morpheme, there is very little variation in the UT paradigms. Rather, the lack of variation suggests that speakers learn surface forms as paradigms, rather than learning to derive paradigms by combining hypothetical deep structures of morphemes, reducing this kind of “variation” to an artifact of a particular kind of analysis. In other words, the idiosyncratic paradigms in UT argue for a different way of analyzing morphological structure, in which such idiosyncrasies are kept distinct from something like sociolinguistic variation.

6.3. An emergent hierarchical system

A last point that I want to mention here is the incipient hierarchical person marking system in UT. The referential hierarchy has been an object of concentrated theoretical and typological attention in recent years (Silverstein 1976; Hopper & Thompson, 1980; DeLancey, 1981; Givón, 2001; Croft 2003; Bickel 2008). Nominals can be ranked

depending on features such as [+/-human], [+/-personal], [+/-kinship], [+/-animate], [+/-discrete] and [+/-concrete], but also gender (male > female), size (large > small), and age (adult > child) among others (Zúñiga, 2006: 21). Zúñiga (2006: 21) proposes a simplified indexability hierarchy: SAP > 3rd person pronoun > [+human] > [+animate] > [-animate]. *Differential Object Marking* is the grammatical marking by which more highly animate and definite objects may be marked as objects, but not others. Typical parameters for placing an object higher in the hierarchy (and therefore more likely to be marked) include animacy, definiteness, and topicality, but also crucially personal deixis: 1 & 2 > 3, and sometimes 1 & 2 are also ranked *vis-à-vis* one another (Comrie, 1981; Silverstein 1976; Iemmolo, 2012).

In UT, the first hierarchy effect is the use of 1SG and 2SG verbal enclitics regardless of the role (S, A or P) of the participant, whereas other person-marking morphemes index only the subject. In this way, UT grammar clearly marks that first and second person outrank third person. This is not an uncommon pattern in the languages of the world, but to my knowledge, it has not been reported for any other Uto-Aztecan language. The second hierarchy effect is the differential marking of 1SG objects, which uniquely may be marked with the locative suffix *-ci*. This special marking suggests that, in the UT hierarchy, 1SG outranks 2SG, giving us the composite hierarchy 1SG > 2SG > 3. In my survey of the typological literature, I have been able to find only one other language in which first person P pronouns uniquely receive accusative case-marking, and this is limited to one specific syntactic context: in imperative clauses in Lardil (Australia), accusative case-marking is not found, except that “accusative *must* be marked on a first

person pronoun” (Dixon 1994.89-90).¹ In Tarahumara, as well, this unique accusative marking on first person singular is not completely consistent, but it is also found *only* on 1SG.

One might argue that another hierarchical effect in UT is the form of subject agreement, in which verbal indexation generally distinguishes number exclusively for first and second person subjects (each with a singular-plural distinction), marking the third person singular and plural subjects with the same form. Although these markers clearly treat first and second person subjects differently from third person subjects, we cannot automatically attribute this difference to the hierarchy, as the more marked subjects (first and second person) are actually higher on the hierarchy and therefore more likely to be subjects (and thus less in need of being marked), whereas the less-marked subjects (third person) are lower on the hierarchy and therefore more in need of being marked when they occur in subject role. This means that the difference is not due to the expectedness or unexpectedness of direction of information flow. These findings could be interpreted as consistent with the conclusions in Iemmolo and Schikowski’s (2012) typology of differential coding, in which differential case-marking is used as described by Comrie, but differential indexing appears to follow different principles.

As far as I know, no hierarchical grammatical phenomena have been documented for other dialects of UT, nor for any other Uto-Aztecan language. This probably means that the UT hierarchical grammar is a recent innovation. In future work, I hope to do an explicit reconstruction of the morphemes involved in the UT hierarchical patterns, and also to explore possible mechanisms by which the system was put into place. Also, since

¹ Dixon (1994.90) also indicates in a footnote that Arrernte (Australian) marks the ergative only on first person pronouns, distinguishing first person from all others in quite a different way.

both the verbal enclitics and the DOM occur variably, I need to examine the distribution of these morphemes in discourse, and perhaps stylistically and sociolinguistically as well. Understanding the origins of these systems in UT could make a contribution to understanding how hierarchical systems develop in general.

APPENDIX A

LIST OF ABBREVIATIONS

1	First person
2	Second person
3	Third person
A	The most agent like of a transitive verb
AFF	Affirmative
APPL	Applicative
AUD.EV	Auditory evidence
ASSC.MOT	Associative Motion
CONT	Continuative
DEM	Demonstrative
DES	Desiderative
DIR	Directional
DIRECT	Directive
DUB	Dubitative
EXPL	Expletive
FEM	Feminine
FOC	Focus
FOC2	Focus type 2
FUT	Future
GEN	Genitive
IMP	Imperative
IMP.PASS	Impersonal passive
INCH	Inchoative
INFER	Inferential
INTENS	Intensifier
IPFV	Imperfective
IRR	Irrealis
LOC	Locative
MASC	Masculine
MOV	Movement
NEG	Negation
NOM	Nominative
NMLZ	Nominalizer
P	The most patient like of a transitive verb
PASS	Passive
PST	Past
PFV	Perfective
PL	Plural
POSS	Possessive
POV	Posture verb
PROG	Progressive

PTCP	Participle
Q	Question
RED	Reduplication
REP	Reportative
S	The single participant of an intransitive verb
SG	Singular
SUBJ	Subject
V	Verb
VLZ	Verbalizer

APPENDIX B

ALPHABETICAL LIST OF VERBS IN UT, SHOWING VERB CLASS

VERB	GLOSS	CLASS	1PL
<i>ací-me</i>	'laugh'	Class 1	-ru '1PL'
<i>aké-me</i>	'hear'	Class 1	-ru '1PL'
<i>aní-me</i>	'say'	Class 1	-ru '1PL'
<i>apá-me</i>	'bring'	Class 1	-ri '1PL'
<i>apé-me</i>	'carry'	Class 1	-ri '1PL'
<i>asá-me</i>	'be sitting SG'	————	none
<i>atí-me</i>	'be sitting SG'	————	none
<i>atísu-me</i>	'sneeze'	Class 1	-ri '1PL'
<i>ayó-me</i>	'get angry/upset'	Class 1	-ri '1PL'
<i>bacibú-me</i>	'throw stones at (not human OBJ)'	Class 1	-ri '1PL'
<i>balámu-me</i>	'be thirsty'	Class 2	-ti '1PL'
<i>batú-me</i>	'grind'	Class 2	-ti '1PL'
<i>bahí-me</i>	'drink'	Class 1	-ri '1PL'
<i>picí-me</i>	'clean' [sweep/quitár espinas]	Class 2	-ti '1PL'
<i>bini-me</i>	'bring'	Class 1	-ru '1PL'
<i>bisú-me</i>	'skin (an animal)'	Class 1	-ri '1PL'
<i>bití-me</i>	'be lying PL'	Class 1	-ru '1PL'
<i>bo'i-me</i>	'be lying SG'	————	none
<i>bokwí-me</i>	'disappear in the distance/sink'	Class 2	-ti '1PL'
<i>buná-me</i>	'bend down (human)'	Class 1	-ri '1PL'
<i>cibú-me</i>	'hide self'	Class 2	-ti '1PL'
<i>cigó-me</i>	'steal'	Class 1	-ri '1PL'
<i>cikiré-me</i>	'cut'	Class 2	-ti '1PL'
<i>ciná-me</i>	'scream/yell'	Class 2	-ti '1PL'
<i>cirú-me</i>	'hunt'	Class 1	-ri '1PL'
<i>ciwí-me</i>	'die PL'	Class 1	-ru '1PL'
<i>cokiwá-me</i>	'guilty'	Class 1	-ri '1PL'
<i>cokiá-me</i>	'start'	Class 1	-ri '1PL'
<i>colá-me</i>	'do something bad'	Class 1	-ri '1PL'
<i>cukéri-me</i>	'be contagious'	Class 1	-ri '1PL'
<i>cukú-me</i>	'stand4 SG'	Class 1	none
<i>cukuré-me</i>	'scratch'	Class 2	-ti '1PL'
<i>e'né-me</i>	'see'	Class 1	-ri '1PL'
<i>e'kóta-me</i>	'burn (scrubland)'	Class 2	-ti '1PL'
<i>elá-me</i>	'put SG OBJ standing'	Class 1	-ri '1PL'
<i>eléna-me</i>	'bleed'	Class 1	-ru '1PL'
<i>elowí-me</i>	'be hungry'	Class 2	-ti '1PL'
<i>emé-me</i>	'fall down SG'	Class 2	none
<i>ena-me</i>	'walk SG'	Class	none
<i>ete-me</i>	'see'	Class 1	-ru '1PL'
<i>ewé-me</i>	'get lost PL'	Class 1	-ri '1PL'

<i>eyéna-me</i>	‘walk PL’	Class 1	-ri ‘1PL’
<i>galirá-me</i>	‘build a house’	Class 1	-ri ‘1PL’
<i>gapó-me</i>	‘break a bone’	Class 1	-ri ‘1PL’
<i>gasína-me</i>	‘break’	Class 1	-ri ‘1PL’
<i>goyá-me</i>	‘eat’	Class 2	-tú ‘1PL’
<i>gocí-me</i>	‘sleep’	Class 1	-ru ‘1PL’
<i>ecá-me</i>	‘plant’	Class 1	-ru ‘1PL’
<i>icí-me</i>	‘urinate’	Class 1	-ri ‘1PL’
<i>ilí-me</i>	‘be standing SG’	Class	none
<i>inámu-me</i>	‘understand’	Class 2	-ti ‘1PL’
<i>inowéla-me</i>	‘be jealous’	Class 1	-ri ‘1PL’
<i>iri-me</i>	‘stand1’	Class	‘1PL’
<i>ka-me</i>	‘be’	COP.PRES	none
<i>ka’wí-me</i>	‘transport’	Class 1	-ru ‘1PL’
<i>kí-me</i>	‘go SG’	Class 1	none
<i>kolí-me/golíme</i>	‘spill’	Class 1	-ri ‘1PL’
<i>kóli-me</i>	‘visit’	Class 1	-ri ‘1PL’
<i>licibá-me</i>	‘get tired’	Class 2	-ti ‘1PL’
<i>lucú-me</i>	‘fall off/down PL’	Class 2	-ti ‘1PL’
<i>má-me</i>	‘run SG’	Class	none
<i>maci</i>	‘know’	Class	‘1PL’
<i>macine</i>	‘go out’	Class	‘1PL’
<i>maná-me</i>	‘put face up SG’	Class 1	-li ‘1PL’
<i>maxá-me</i>	‘get scared’	Class 1	-ri ‘1PL’
<i>mayé-me</i>	‘think’	Class 1	-ri ‘1PL’
<i>me’á-me</i>	‘kill’	Class 1	-ru ‘1PL’
<i>meté-me</i>	‘cut with a machete’	Class 1	-ri ‘1PL’
<i>mocí-me</i>	‘be sitting PL’	Class 1	-ri ‘1PL’
<i>moé-me</i>	‘be good’	Class 1	-ri ‘1PL’
<i>mukú-me</i>	‘die SG’	Class	none
<i>na’áwi</i>	‘argue PL’	Class 2	-ti ‘1PL’
<i>na’yé-me</i>	‘kindle (fire)’	Class 1	-ri ‘1PL’
<i>nakósi-me</i>	‘fight’	Class 1	-ri ‘1PL’
<i>napabú-me</i>	‘put together’	Class 1	-ri ‘1PL’
<i>napiwa-me</i>	‘weed’ (with an instrument)	Class 1	-ri ‘1PL’
<i>napó-me</i>	‘weed’ (by hand)	Class 1	-ri ‘1PL’
<i>náta-me</i>	‘think/remember’	Class 1	-ru ‘1PL’
<i>nawá-me</i>	‘arrive SG’	Class 1	none
<i>nayá-me</i>	‘feed the fire’	Class 1	-ri ‘1PL’
<i>nehte-me</i>	‘kick’	Class 2	-ru ‘1PL’
<i>nepabá-me</i>	‘throw stones’ (reciprocal)	Class 2	-ti ‘1PL’
<i>neté-me</i>	‘kick’	Class 1	-ru ‘1PL’
<i>neté-me</i>	‘make’	Class 2	-ti ‘1PL’
<i>nili-me</i>	‘exist’	irr	-
<i>alanili-me</i>	‘feel’	Class	‘1PL’
<i>nixí-me</i>	‘give’	Class 1	-ri ‘1PL’

<i>nóca-me</i>	‘work PL’	Class 1	-ri ‘1PL’
<i>nocá-me</i>	‘touch’	Class 1	-ri ‘1pl’
<i>noká-me</i>	‘move around’	Aux	none
<i>noké-me</i>	‘move something’	Class 1	-ri ‘1pl’
<i>nolá-me</i>	‘bring’	Class 1	-ri ‘1PL’
<i>nolína-me</i>	‘arrive’	Class 1	-ri ‘1PL’
<i>o’tó-me</i>	‘take’	Class	-ru ‘1PL’
<i>océru-me</i>	‘grow up’	Class 1	-ri ‘1PL’
<i>ocó-me</i>	‘punch’	Class 1	-ri ‘1PL’
<i>okó-me</i>	‘hurt’	Class 2	-ti ‘1PL’
<i>opó-me</i>	‘pull’	Class 1	-ri ‘1PL’
<i>opólu-me</i>	‘cover’	Class 1	-ri ‘1PL’
<i>oporú-me</i>	‘get angry’	Class 1	-ri ‘1PL’
<i>osomá-me</i>	‘wash the head’	Class 1	-ri ‘1PL’
<i>otó-me</i>	‘take’	Class 1	-ru ‘1PL’
<i>pagó-me</i>	‘wash’	Class 2	-ti ‘1PL’
<i>pocí-me</i>	‘jump’	Class 2	-ti ‘1PL’
<i>ru-mé</i>	‘say’	Class	-tu ‘1PL’
<i>ra’í-me</i>	‘taste’	Class 2	none
<i>ra’íca-me</i>	‘speak’	Class 1	-ri ‘1PL’
<i>rabiçi-me</i>	‘play (instrument)’	Class 2	-ti ‘1PL’
<i>raná-me</i>	‘give birth’	Class 1	-ru ‘1PL’
<i>raxá-me</i>	‘burn’	Class 1	-ru ‘1PL’
<i>reká-me</i>	‘put SG OBJ lying’	Class 1	-ri ‘1PL’
<i>remé-me</i>	‘make tortillas’	Class 1	-ri ‘1PL’
<i>rewá-me</i>	‘find’	Class 1	-ru ‘1PL’
<i>rikú-me</i>	‘get dizzy’	Class 2	none
<i>ripí-me</i>	‘stay’	Class 1	-ri ‘1PL’
<i>ripú-me</i>	‘cut with a knife’	Class 1	-ri ‘1PL’
<i>ro’á-me</i>	‘pour’	Class 1	-ri ‘1PL’
<i>ro’í-me</i>	‘come back’	Class 1	-ri ‘1PL’
<i>re’ó-me</i>	‘tronar’ [truenos del cielo]	Class	none
<i>ropóca-me</i>	‘bend down (human)’	Class 1	-ri ‘1PL’
<i>rulá-ga-me</i>	‘be cold’	Class 2	-ti ‘1PL’
<i>sasíro-me</i>	‘slip’	Class 2	-ti ‘1PL’
<i>sawí-me</i>	‘get well/give birth’	Class 1	-ru ‘1PL’
<i>sebá-me</i>	‘arrive/come PL’	Class 1	-ri ‘1PL’
<i>simá-me</i>	‘go PL’	Class 1	-ri ‘1PL’
<i>tegú-me</i>	‘get dizzy/drunk PL’	Class 2	-ti ‘1PL’
<i>tici-me</i>	‘comb’	Class 2	-ti ‘1PL’
<i>tó-me</i>	‘bury’	Class 2	-ti ‘1PL’
<i>ubá-me</i>	‘to bathe’	Class 1	-ri ‘1PL’
<i>ucá-me</i>	‘put SG OBJ face down’	Class 1	-ri ‘1PL’
<i>ucé-me</i>	‘rub on something’	Class 1	-ri ‘1PL’
<i>uxí-me</i>	‘fart’	Class 1	-ri ‘1PL’
<i>weká-me</i>	‘get lost SG’	Class	none

<i>wicí-me</i>	‘fall off SG’	Class	none
<i>wicó-me</i>	‘wash clothes’	Class 1	-li ‘1PL’
<i>wipí-me</i>	‘balancear como sube y baja’	Class 1	-ri ‘1PL’
<i>wipíca-me</i>	‘turn over dirt’	Class 1	-ri ‘1PL’
<i>wipicá-me</i>	‘desgranar frijoles’	Class 2	-ti ‘1pl’
<i>witá-me</i>	‘defecate’	Class 1	-ru ‘1PL’
<i>witiliti-me</i>	‘be hanging’	Class 1	-ri ‘1PL’
<i>xá-me</i>	‘be standing PL’	Class 1	-ri ‘1PL’
<i>xawá-me</i>	‘put PL OBJ standing’	Class 1	-ri ‘1PL’
<i>xúmi-me</i>	‘run PL’	Class 2	-ti ‘1PL’
<i>yá-me</i>	‘give’	Class 1	-ri ‘1PL’
<i>yami-me</i>	‘look for’	Class 1	-ru ‘1PL’

APPENDIX C

ALPHABETICAL LIST OF CLASS 1 VERBS IN UT

VERB	GLOSS	CLASS	1PL
<i>ací-me</i>	'laugh'	Class 1	-ru '1PL'
<i>aké-me</i>	'hear'	Class 1	-ru '1PL'
<i>aní-me</i>	'say'	Class 1	-ru '1PL'
<i>apá-me</i>	'bring'	Class 1	-ri '1PL'
<i>apé-me</i>	'carry'	Class 1	-ri '1PL'
<i>atísu-me</i>	'sneeze'	Class 1	-ri '1PL'
<i>ayó-me</i>	'get angry/upset'	Class 1	-ri '1PL'
<i>bacibú-me</i>	'throw stones at (not human OBJ)'	Class 1	-ri '1PL'
<i>bahí-me</i>	'drink'	Class 1	-ri '1PL'
<i>bini-me</i>	'bring'	Class 1	-ru '1PL'
<i>bisú-me</i>	'skin (an animal)'	Class 1	-ri '1PL'
<i>bití-me</i>	'be lying down PL'	Class 1	-ru '1PL'
<i>buná-me</i>	'bend down (human)'	Class 1	-ri '1PL'
<i>cigó-me</i>	'steal'	Class 1	-ri '1PL'
<i>cirú-me</i>	'hunt'	Class 1	-ri '1PL'
<i>ciwí-me</i>	'die PL'	Class 1	-ru '1PL'
<i>cokiwá-me</i>	'guilty'	Class 1	-ri '1PL'
<i>cokiá-me</i>	'start'	Class 1	-ri '1PL'
<i>colá-me</i>	'do something bad'	Class 1	-ri '1PL'
<i>cukéri-me</i>	'be contagious'	Class 1	-ri '1PL'
<i>cukú-me</i>	'stand4 SG'	Class 1	none
<i>e'né-me</i>	'see'	Class 1	-ri '1PL'
<i>elá-me</i>	'put SG OBJ standing'	Class 1	-ri '1PL'
<i>eléna-me</i>	'bleed'	Class 1	-ru '1PL'
<i>ete-me</i>	'see'	Class 1	-ru '1PL'
<i>ewé-me</i>	'get lost PL'	Class 1	-ri '1PL'
<i>eyéna-me</i>	'walk PL'	Class 1	-ri '1PL'
<i>galirá-me</i>	'build a house'	Class 1	-ri '1PL'
<i>gapó-me</i>	'break a bone'	Class 1	-ri '1PL'
<i>gasína-me</i>	'break'	Class 1	-ri '1PL'
<i>gocí-me</i>	'sleep'	Class 1	-ru '1PL'
<i>ecá-me</i>	'plant'	Class 1	-ru '1PL'
<i>icí-me</i>	'urinate'	Class 1	-ri '1PL'
<i>inowéla-me</i>	'be jealous'	Class 1	-ri '1PL'
<i>ka'wí-me</i>	'transport'	Class 1	-ru '1PL'
<i>kí-me</i>	'go SG'	Class 1	none
<i>kolí-me/golíme</i>	'spill'	Class 1	-ri '1PL'
<i>kóli-me</i>	'visit'	Class 1	-ri '1PL'
<i>maná-me</i>	'put face up SG'	Class 1	-li '1PL'
<i>maxá-me</i>	'get scared'	Class 1	-ri '1PL'
<i>mayé-me</i>	'think'	Class 1	-ri '1PL'

<i>me'á-me</i>	'kill'	Class 1	-ru '1PL'
<i>meté-me</i>	'cut with a machete'	Class 1	-ri '1PL'
<i>mocí-me</i>	'be sitting PL'	Class 1	-ri '1PL'
<i>moé-me</i>	'be good'	Class 1	-ri '1PL'
<i>na'yé-me</i>	'kindle (fire)'	Class 1	-ri '1PL'
<i>nakósi-me</i>	'fight'	Class 1	-ri '1PL'
<i>napabú-me</i>	'put together'	Class 1	-ri '1PL'
<i>napiwa-me</i>	'weed' (with an instrument)	Class 1	-ri '1PL'
<i>napó-me</i>	'weed' (by hand)	Class 1	-ri '1PL'
<i>náta-me</i>	'think/remember'	Class 1	-ru '1PL'
<i>nawá-me</i>	'arrive SG'	Class 1	none
<i>nayá-me</i>	'feed the fire'	Class 1	-ri '1PL'
<i>neté-me</i>	'kick'	Class 1	-ru '1PL'
<i>nixí-me</i>	'give'	Class 1	-ri '1PL'
<i>nóca-me</i>	'work PL'	Class 1	-ri '1PL'
<i>nocá-me</i>	'touch'	Class 1	-ri '1pl'
<i>noké-me</i>	'move something'	Class 1	-ri '1pl'
<i>nolá-me</i>	'bring'	Class 1	-ri '1PL'
<i>nolína-me</i>	'arrive'	Class 1	-ri '1PL'
<i>o'tó-me</i>	'take'	Class 1	-ru '1PL'
<i>océru-me</i>	'grow up'	Class 1	-ri '1PL'
<i>ocó-me</i>	'punch'	Class 1	-ri '1PL'
<i>opó-me</i>	'pull'	Class 1	-ri '1PL'
<i>opólu-me</i>	'cover'	Class 1	-ri '1PL'
<i>oporú-me</i>	'get angry'	Class 1	-ri '1PL'
<i>osomá-me</i>	'wash the head'	Class 1	-ri '1PL'
<i>otó-me</i>	'take'	Class 1	-ru '1PL'
<i>ra'íca-me</i>	'speak'	Class 1	-ri '1PL'
<i>raná-me</i>	'give birth'	Class 1	-ru '1PL'
<i>raxá-me</i>	'burn'	Class 1	-ru '1PL'
<i>reká-me</i>	'put SG OBJ lying'	Class 1	-ri '1PL'
<i>remé-me</i>	'make tortillas'	Class 1	-ri '1PL'
<i>rewá-me</i>	'find'	Class 1	-ru '1PL'
<i>ripí-me</i>	'stay'	Class 1	-ri '1PL'
<i>ripú-me</i>	'cut with a knife'	Class 1	-ri '1PL'
<i>ro'á-me</i>	'pour'	Class 1	-ri '1PL'
<i>ro'í-me</i>	'come back'	Class 1	-ri '1PL'
<i>ropóca-me</i>	'bend down (human)'	Class 1	-ri '1PL'
<i>sawí-me</i>	'get well/give birth'	Class 1	-ru '1PL'
<i>sebá-me</i>	'arrive/come PL'	Class 1	-ri '1PL'
<i>simá-me</i>	'go PL'	Class 1	-ri '1PL'
<i>ubá-me</i>	'to bath'	Class 1	-ri '1PL'
<i>ucá-me</i>	'put SG OBJ face down'	Class 1	-ri '1PL'
<i>ucé-me</i>	'rub on something'	Class 1	-ri '1PL'
<i>uxí-me</i>	'fart'	Class 1	-ri '1PL'
<i>wicó-me</i>	'wash clothes'	Class 1	-li '1PL'

<i>wipí-me</i>	‘balancear como sube y baja’	Class 1	-ri ‘1PL’
<i>wipíca-me</i>	‘turn over dirt’	Class 1	-ri ‘1PL’
<i>witá-me</i>	‘defecate’	Class 1	-ru ‘1PL’
<i>witiliti-me</i>	‘be hanging’	Class 1	-ri ‘1PL’
<i>xá-me</i>	‘be standing.PL’	Class 1	-ri ‘1PL’
<i>xawá-me</i>	‘put PL OBJ standing’	Class 1	-ri ‘1PL’
<i>yá-me</i>	‘give’	Class 1	-ri ‘1PL’
<i>yami-me</i>	‘look for’	Class 1	-ru ‘1PL’

APPENDIX D

ALPHABETICAL LIST OF CLASS 2 VERBS IN UT

VERB	GLOSS	CLASS	1PL
<i>balámu-me</i>	'be thirsty'	Class 2	-ti '1PL'
<i>batú-me</i>	'grind'	Class 2	-ti '1PL'
<i>pici-me</i>	'clean'[sweep/quitar espinas]	Class 2	-ti '1PL'
<i>bokwí-me</i>	'disappear in the distance/sink'	Class 2	-ti '1PL'
<i>cibú-me</i>	'hide self'	Class 2	-ti '1PL'
<i>cikiré-me</i>	'cut'	Class 2	-ti '1PL'
<i>ciná-me</i>	'scream/yell'	Class 2	-ti '1PL'
<i>cukuré-me</i>	'scratch'	Class 2	-ti '1PL'
<i>e'kóta-me</i>	'burn (scrubland)'	Class 2	-ti '1PL'
<i>elowí-me</i>	'be hungry'	Class 2	-ti '1PL'
<i>emé-me</i>	'fall down SG'	Class 2	none
<i>goyá-me</i>	'eat'	Class 2	-tú '1PL'
<i>inámu-me</i>	'understand'	Class 2	-ti '1PL'
<i>licibá-me</i>	'get tired'	Class 2	-ti '1PL'
<i>lucú-me</i>	'fall off/down PL'	Class 2	-ti '1PL'
<i>na'áwi</i>	'argue PL'	Class 2	-ti '1PL'
<i>nehte-me</i>	'kick'	Class 2	-ru '1PL'
<i>nepabá-me</i>	'throw stones' (reciprocal)	Class 2	-ti '1PL'
<i>neté-me</i>	'make'	Class 2	-ti '1PL'
<i>okó-me</i>	'hurt'	Class 2	-ti '1PL'
<i>pagó-me</i>	'wash'	Class 2	-ti '1PL'
<i>poci-me</i>	'jump'	Class 2	-ti '1PL'
<i>ru-mé</i>	'say'	Class 2	-tu '1PL'
<i>ra'í-me</i>	'taste'	Class 2	none
<i>rabiçi-me</i>	'play (instrument)'	Class 2	-ti '1PL'
<i>rikú-me</i>	'get dizzy'	Class 2	none
<i>rulá-ga-me</i>	'be cold'	Class 2	-ti '1PL'
<i>sasíro-me</i>	'slip'	Class 2	-ti '1PL'
<i>tegú-me</i>	'get dizzy/drunk PL'	Class 2	-ti '1PL'
<i>tici-me</i>	'comb'	Class 2	-ti '1PL'
<i>tó-me</i>	'bury'	Class 2	-ti '1PL'
<i>wipicá-me</i>	'desgranar frijoles'	Class 2	-ti '1pl'
<i>xúmi-me</i>	'run PL'	Class 2	-ti '1PL'

APPENDIX E

LIST OF SINGULAR/PLURAL SUPPLETIVE VERBS IN UT

Singular	Plural	Gloss
<i>nawá-me</i>	<i>sébi-me</i>	‘arrive’
<i>wicí-me</i>	<i>lucú-me</i>	‘fall off’
<i>emé-me</i>	<i>lucú-me</i>	‘fall down’
<i>rikú-me</i>	<i>tegú-me</i>	‘be dizzy/drunk’
<i>kí-me</i>	<i>simá-me</i>	‘go’
<i>má-me</i>	<i>xúmi-me</i>	‘run’
<i>mukú-me</i>	<i>ciwí-me</i>	‘die’
<i>cukú-me</i>	<i>ucú-me</i>	‘stand ⁴ ’ (animals)
<i>bo’í-me</i>	<i>bití-me</i>	‘be lying’
<i>ilí-me</i>	<i>xá-me</i>	‘stand ¹ ’ (humans)
<i>asá-me</i>	<i>mocí-me</i>	‘be sitting’
<i>atí-me</i>		
<i>weká-me</i>	<i>ewé-me</i>	‘get lost’
	<i>na’áwili-me</i>	‘argue’
<i>elá-me</i>	<i>xawá-me</i>	‘put SG/PL OBJ standing’
<i>reká-me</i>	<i>maná-me</i>	‘put SG/PL OBJ lying’

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