

A grammatical sketch of Upper Necaxa Totonac

by

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Abbreviations and symbols

1, 2, 3 = first-, second-, third-person	LOC = locative
ADD = additive	MTV = mirative
AGT = agentive nominalizer	NEG = negative
AJENO = in the domain of others	NM = nominalizer
ALTV = allative	NREL = non-human relativizer
AMB = ambulative	OBG = obligation
APL = adjectival plural	OBJ = object
BEN = benefactive	OPT = optative
Ch. = Chicontla	PF = perfect
CLS = classifier	PFV = perfective
CMT = comitative	PL = plural
COL = collective plural	PLC = place of
CS = causative	PO = possessive
DSD = desiderative	PRG = progressive
DST = distal	PRT = particle
DT = detransitive	PRX = proximal
DTB = distributive	PST = past
DTV = determinative	Pt. = Patla
DUB = dubitative	QTV = quotative
DUB = dubitative	RCP = reciprocal
DVB = deverbative	RPT = repetitive
FUT = future	RT = roundtrip
GNC = generic	SEM = semblative
HREL = human relativizer	SG = singular
IDF = indefinite	SMT = simultaneous
IDPH = ideophone	ST = stative
IMPF = imperfective	STM = stimulus
INCH = inchoative	TRNS = transitivizer
INST = instrumental	UNR = unrealized
INTJ = interjection	VBL = verbalizer

Data are drawn from both the Patla and Chicontla dialects of Upper Necaxa Totonac; where the point of origin of a particular example is particular to one or the other dialect, this is indicated in parentheses. Spanish words appearing in examples are given in italics in the first line and then glossed in the same way as Totonac words in the interlinear analysis.

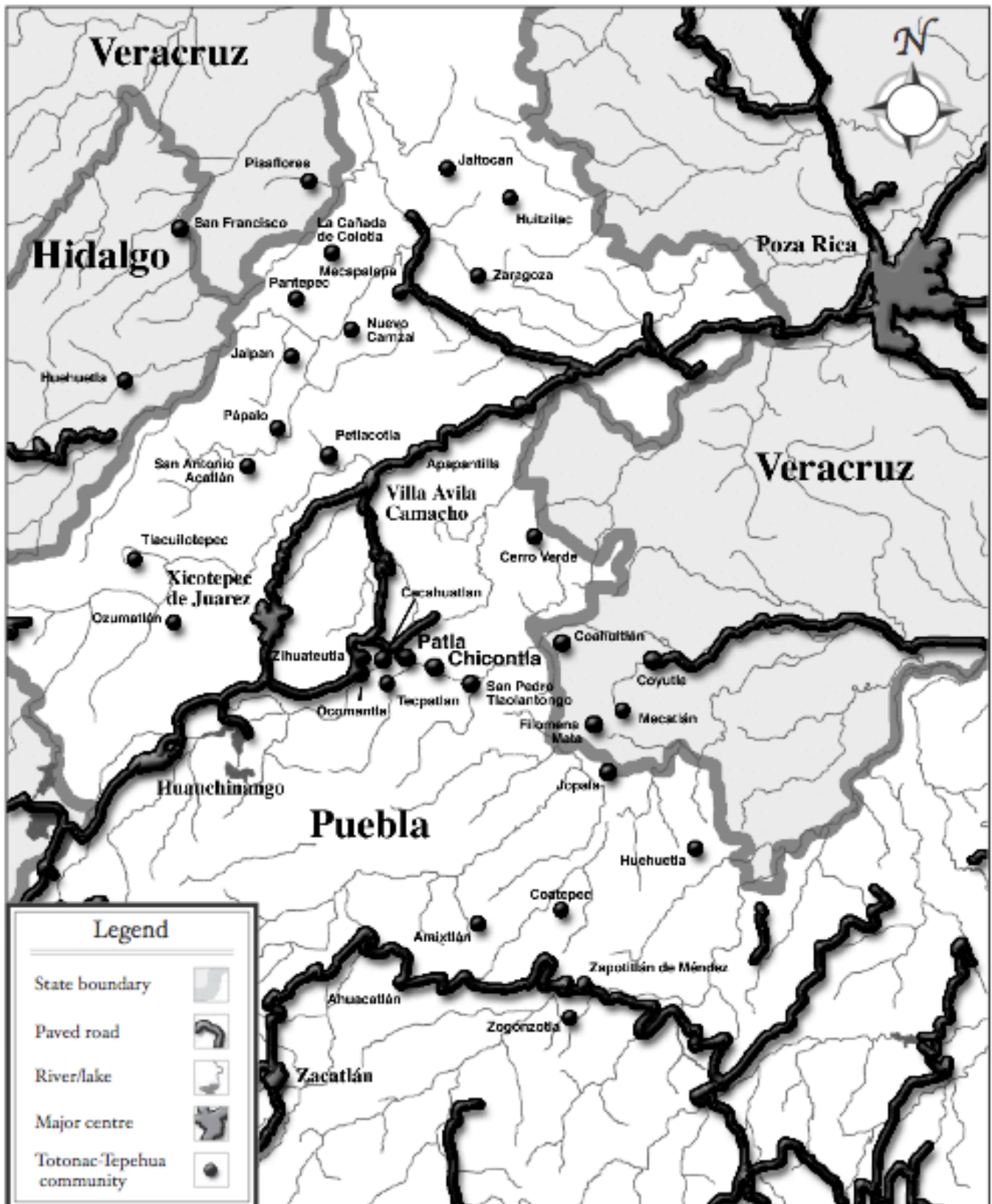
0. Introduction

Upper Necaxa Totonac (a.k.a. Patla-Chicontla Totonac) is a member of the Totonac-Tepehua language family, an easily recognizable genetic grouping of languages with (to date) no demonstrable ties to any other Mesoamerican language. Relatively little work has been done on the family and the relations between individual languages are still unclear beyond the initial branching of the family into Tepehua and Totonacan, although impressionistically the Totonacan branch has been split into four divisions — Misantla, Papantla, Sierra, and Northern (see also Arana 1953 and García Rojas 1978, who group Northern and Sierra into a single unit). Divisions within these groupings have typically been classified as dialectal variation, although these often differ from one another enough to prevent naïve mutual intelligibility.

Upper Necaxa Totonac (UNT) is the native language of some 3,000 people — most in their forties or older — in the villages of Patla, Chicontla, and Cacahuatlan, located in the Necaxa River Valley in the Sierra Norte of Puebla State (see Map 1).¹ It is classified as a member of the Northern group of languages, although it is located in an area where both Sierra and other Northern Totonac varieties are spoken and where many speakers have close contact with speakers of Papantla Totonac. The Upper Necaxa Valley is bordered by Nahuatl-speaking communities in the uplands to the north and south, by speakers of other varieties of Northern Totonac to the west, and by languages belonging to the Sierra group to the east. The Totonac spoken in the Upper Necaxa communities is highly distinctive, both in its phonology and in its grammar and lexicon, and is easily recognized by speakers of other variants. Within UNT, there is some minor dialectal variation in pronunciation and lexical choice between Patla and Chicontla. Although it is used on a daily basis by a large number of adults, the language of commerce, government, and education in the Upper Necaxa communities has shifted heavily towards Spanish, and only a handful of children learn the language as a mother tongue.

The data used in this grammatical sketch were collected in the field between the autumn of 1998 and the summer of 2003, and during two visits to the University of Alberta in Edmonton by pairs of speakers in the summers of 2001 and 2002. Wherever possible, example sentences are drawn from connected oral texts or example sentences for headwords elicited as part of the Upper Necaxa Totonac Dictionary Project, although some of the data sets used below are based on targeted elicitations. Special thanks are due to Longino Barragán Sampayo, Álvaro Barragán Álvarez, Porfirio Sampayo Macín, Rosendo Melo Márquez, Catalina Fuentes Muñoz, Luis Cabrera Vite, Luciano Cabrera Trinidad, and the late Luciano Romero Aguilar. The stories and narratives that are the sources of many of the examples were told by Marcelino Mendoza Ortega, the late Manuel Romero Morales, Braulio Cevedeo Cristobal, and Juan Ramírez Cortez. My sincerest thanks also go to my many friends in Patla and Chicontla who have extended their hospitality over the years. *La'halhuma:tzá!* Thanks also go to my graduate students Ryan and Isabel Klint for their hard work and dedication to the UNT Project and to Elizabeth Escalona Gutiérrez for her contribution to our efforts. Funding for this research has been provided by the Social Sciences and Humanities Research Council of Canada, the Wenner-Gren Foundation for Anthropological Research, the Organization of American States, the University of Alberta, and the University of Toronto.

¹ According to some consultants, UNT is (or was) also spoken in San Pedro Tlaloantongo, the community immediately downriver from Chicontla. However, local accounts differ as to the degree of dialect difference between these communities, and many speakers claim that the speech of San Pedro has more in common with the Totonac downriver in Coyutla and Filomena Mata, which is clearly a distinct language. Given the moribund state of the San Pedro variant, it has been difficult to get an accurate picture of its exact relation to the Totonac spoken in the Upper Necaxa communities.



Map 1: Upper Necaxa Totonac and its neighbours

1. Phonology

1.1. Consonants

UNT has a fairly simple consonant system with a single series each of stops, affricates, fricatives, approximates, and nasal phonemes; there is no voicing distinction within any of these series. The full system is given in Table 1:

	stop	affricate	fricative	approx.	nasal
labial	p			w	m
alveolar	t	ts (ts')	s s'		n
lateral-alveolar			ɬ ɬ'	l (r)	
post-alveolar		tʃ	ʃ ʃ'	y	(ɲ)
velar	k		x		(ŋ)
glottal	ʔ				

Table 1: Upper Necaxa consonantal inventory

The consonant inventory differs from that of other languages of the family in three respects. The first is the absence of the voiceless lateral affricate, /tɬ/, which has neutralized in UNT with /t/ in all environments. The second difference is the wholesale diachronic shift from the uvular stop *q to the glottal stop /ʔ/. This segment still has many of the phonological properties of the uvular stop in other Totonacan languages, including vowel-lowering (Section 1.2) and nasal-assimilation (see below). Finally, UNT has a series of ejective fricatives and no ejective stops; these sounds are derived historically from fricative-uvular clusters that coalesced when the uvular stop became a glottal stop. The segment /ts'/ is extremely rare, having been found in one or two forms as the result of the application of sound symbolism (Section 1.4) to words containing ejective fricatives (e.g. *s'áta* 'small' > *ts'áta* 'itty-bitty'). Other sounds enclosed in parentheses in the chart are found exclusively in borrowings.

The most important phonological processes affecting UNT consonants are place assimilations of nasals and the fricative /ʃ/. Nasals assimilate in place to the following consonant (e.g. *kin-* 'my' + *puská:t* 'wife' > *kimpuská:t* 'my wife'); when adjacent to a glottal stop, /n/ is frequently realized as a velar [ŋ] (*ʔayán* 'turtle' > *kiŋʔayán* 'my turtle'), a remnant of the historical source of the glottal stop in *q. Likewise, the fricative /ʃ/ becomes /s/ when it precedes the segments /s/, /s'/, and /ts/ (*if-* 'his' + *sasán* 'skunk' > *isasán* 'his skunk'; *if-* + *s'áta* 'child' > *is'áta* 'his child'; *if-* + *tsí:* 'mother' > *istsí:* 'his mother'). There are very few other synchronic processes affecting the realization of consonants, although there are some remnants of a process of final-devoicing of approximants which seems to account for the absence of /y/ and the near absence of /l/ and /w/ in word-final position. Word-final velar fricatives are also strongly lenited and are typically realized as voiceless copies of the preceding vowel. There are one or two morphophonemic processes that affect consonants, discussed in the description of the morphemes involved in Section 2 below.

1.2. Vowels

UNT has a five-vowel system, /i, e, a, o, u/, with each vowel showing phonemic distinctions for length and laryngealization, as shown in Table 2:

	front	central	back
high	i, i̟		u, u̟
	i:, i̟:		u:, u̟:
mid	e, e̟		o, o̟
	e:, e̟:		o:, o̟:
low		a, a̟	
		a:, a̟:	

Table 2: Upper Necaxa vocalic inventory

Historically, this was probably a three-vowel system; most instances of /e/ and /o/ can be accounted for by a process of vowel-lowering in the environment of /x/ and /ʔ/ (a reflex of *q).

The same process of vowel-lowering in the environment of /ʔ/ is also a synchronic phonological phenomenon, observed in cases such as *li:-* ‘INSTRUMENTAL’ + *?ama:nán* ‘play’ > *le:?ama:nán* ‘play with something’. Accented long modal vowels in word-final position undergo devoicing of their second mora (*tʃu:ya:* ‘be crazy’ > [tʃu:ya̟]); other long vowels are generally shortened in this position, and short modal vowels are often laryngealized as well. There are few other phonological processes that affect vowels, although a number of morphophonemic processes such as vowel harmony apply to particular affixes. These are noted in relevant places below.

1.3. Stress, tone, and prosody

Stress in UNT is phonemic and serves both to differentiate between words of different lexical classes and to mark person-aspectual distinctions on certain classes of verb. In general, stress is placed on the final syllable of words that end in a long vowel or a closed syllable, and (except in verbs) on the penultimate syllable of words ending in a short vowel. The stress on verbs is always on the final syllable, with the exception of verbs in the perfective aspect or in the second person, in which case the stress falls on the penultimate syllable.

The principal phonetic correlates of stress in UNT are increased duration and, to a lesser extent, amplitude of the syllabic nucleus, stressed short vowels being realized with the same duration as long vowels. Stressed long vowels are, however, not consistently longer than stressed long vowels. Stress tends to be marked in these cases by a rising tonal contour. Otherwise, UNT has phonemic tone only in one contrasting pair of words — *tʃa:án* ‘ant’ vs. *tʃaá:n* ‘ripe’ — where the stress on the long vowel in the word *tʃaá:n* causes a rising tone on the end of the syllable, as compared to the flat tone on *tʃa:án*.

The prosodic feature most relevant for the grammar is a phrase-level rising intonation, which is the sole grammatical marker of the yes/no question (discussed in Section 3.1.3).

1.4. Sound symbolism

Like other Totonacan languages, UNT make productive use of sound symbolism— that is, a set of conventionalized consonantal alternations that correlate with relative size, intensity, or force. This involves a three-way fricative alternation, as illustrated by the ideophones in (1):

- (1) a. *lanks* ‘hand hitting something hard’
lanʔf ‘a blow striking with great force’
lanʔʔ ‘something being kicked with great force’

- b. *spipispipi* ‘something small trembling’
ʃpipiʃpipi ‘something shivering or shaking slightly’
ʔpipiʔpipi ‘someone shaking, someone having convulsions’

As in these examples, the alternation $s \sim ʃ \sim ʔ$ (and occasionally $ts \sim tʃ/x$) is correlated with increasingly more energetic or forceful action, or greater size of an event-participant. The same pattern, though not synchronically productive, is found in a number of verbs and adjectives as well, although in most cases only a two-way $ʔ \sim ʃ$ or $s \sim ʃ$ alternation is attested:

- (2) a. *ʔpipí* (vi) ‘vibrate, shake very slightly’
ʃpipí (vi) ‘tremble, shake’
- b. *asása* (adj) ‘bare, naked (diminutive)’
afása (adj) ‘bare, naked’
- c. *máʔsú:* (vt) ‘peel off a fine skin’
máʔfú: (vt) ‘peel off a thick skin’

The pair in (2a) here correspond to the ideophones shown in (1b) (there is no verb *sipí* that I have been able to elicit), while the adjective and verb pairs in (b) and (c) vary with the size of the person described or the thickness of the skin being peeled off. Although the phenomenon of consonant alternations of this kind has been found in only a few forms to date, I strongly suspect that more deliberate investigation will turn up many more instances.

2. Morphology

2.1. Noun

In contrast to the verb, the noun in UNT is relatively simple and has no inflectional categories. Nouns may be optionally marked for plural number (2.1.1) and take affixes for person and number of possessor in possessive constructions (2.1.2). UNT also has a variety of pronominal and demonstrative forms (2.1.3). The order of elements in the noun phrase is relatively fixed and most often follows the pattern in (3):

- (3) (DETERMINER) (NUMERAL) (MODIFIER) NOUN (MODIFIER) (POSSESSOR)

Of these elements, only the noun is obligatory, although nouns may be elided in favour of adjectives in certain limited discourse contexts when an antecedent is recoverable from context. Modifiers most frequently precede the noun, as in (4a), but may also follow, as in (b):

- (4) a. *xa: ika:ləʔatí ʃalaktampiʔín tʃiʃkuwín*
xa: ik-ka:-ləʔatí ʃa-lak-tampiʔ-nin tʃiʃku-win
 NEG 1SG.SUBJ-PL.OBJ-like DTV-APL-miser-PL man-PL
 ‘I don’t like cheap people’
- b. *iftaputsá tsamá: séʔnu ʃastalánʔa tu: xa: ʔa:taʃkúta* (Pt.)
if-ta-putsá tsamá: séʔnu ʃa-stalánʔa
 PST-3PL.SUBJ-look.for:IMPF that banana DTV-white

tu: xa: ʔa:-ta-ʃkut-a
 NREL NEG SMT-untie-IMPF

‘they would look for a young banana plant whose leaves were not unfurled’

The syntax of the noun phrase is complicated somewhat by two morphemes that operate at the phrasal level — the locative clitic *nak=* (2.1.4) and the determinative morpheme *fa-* (2.1.5). Two important prefixes used with nouns are *li:-* ‘GENERIC’ and *ka:-* ‘place of’, discussed below in Sections 2.1.7 and 2.1.8.

2.1.1. Number

Nouns in UNT are not obligatorily inflected for number, the number of argument noun phrases being more consistently marked on the verb, either by overt subject- and object-affixes as in (5a), or implicitly through the use of other types of markers, as in (b):

- (5) a. *ika:putsayá:uw tʃitʃí*
ik-ka:-putsa-yá:-w tʃitʃí
 1SG.SUBJ-PL.OBJ-search-IMPF-1PL.SUBJ dog
 ‘we_{EXC} look for the dogs’
- b. *lakmasto:laʔó:ʔ séʔny* (Pt.)
lak-mas-to:la-ʔó-ʔ séʔny
 DTB-rot-sit-all-PFV banana
 ‘all the bananas are sitting there rotten’

In the second example here, the distributive *lak-* implies that the state or action denoted by the verb applies to various members of a group, while the suffix *-ʔo* indicates that all of the verb’s objects were affected (or were completely affected, see Section 2.3.7.2 below).

In addition, nouns may be marked for number by one of a variety of pluralizing affixes. Nouns referring to non-humans and a few nouns referring to humans are pluralized by a suffix, */-n(V)/* where V represents a harmonic copy of the last vowel in the stem, as in:

- | | | |
|----------------------------------|---|-------------------------------------|
| (6) <i>tʃik</i> ‘house’ | > | <i>tʃikni</i> ‘houses’ |
| <i>maʔát</i> ‘mushroom’ | > | <i>maʔátna</i> ‘mushrooms’ |
| <i>pi:ʃká:ʔ</i> ‘civic official’ | > | <i>pi:ʃká:ʔna</i> ‘civic officials’ |
| <i>akqakulúʔ</i> ‘scorpion’ | > | <i>akqakulúʔny</i> ‘scorpions’ |
| <i>stáya</i> ‘squirrel’ | > | <i>stayán</i> ‘squirrels’ |
| <i>slulúku</i> ‘lizard’ | > | <i>slulukún</i> ‘lizards’ |
| <i>púksni</i> ‘Spanish cedar’ | > | <i>puksnín</i> ‘Spanish cedars’ |

As shown in (6), consonant-final stems take the *[-nV]* form of the suffix, while vowel-final stems simply take *[-n]*. Plurals of non-humans are textually infrequent and some younger speakers are unable to reliably produce these forms.

Plurals of nouns referring to humans are frequently irregular (e.g. *tʃiʃkú* ‘men’ > *tʃiʃkuwín* ‘men’; *tsumaxát* ‘woman’ > *tsumaxán* ‘women’), but otherwise most nouns referring to humans use the suffix *-nin*, as do certain animal names and the words for many bodyparts:

- (7)
- | | | |
|----------------------------------|---|--------------------------------------|
| <i>kimakán</i> ‘my hand’ | > | <i>kimakanín</i> ‘my hands’ |
| <i>kiláknj</i> ‘my lower leg’ | > | <i>kilaknín</i> ‘my lower legs’ |
| <i>kutʃu:nún</i> ‘doctor’ | > | <i>kutʃu:nunín</i> ‘doctors’ |
| <i>puʃnún</i> ‘picker’ | > | <i>puʃnunín</i> ‘pickers’ |
| <i>ma:ʔeʔtawáʔe:nj</i> ‘teacher’ | > | <i>ma:ʔeʔtawáʔe:ninín</i> ‘teachers’ |
| <i>lu:ntún</i> ‘lame person’ | > | <i>lu:ntunín</i> ‘lame people’ |

A few nouns referring to humans also take the distributive/adjective plural prefix *lak-/lqʔ-*, as in *lqʔo:lu:nín* ‘old men’ or *lqʔawatʃán* ‘boys’.

Nouns referring to humans, particularly kinship terms, can also be marked for collective plurality with the prefix *na-*, as in:

- (8)
- a. *tala:kiʔni:te:ʔá nataʔónu* (Ch.)
 ta-la:-kiʔni:-te:ʔá **na**-táʔo-nu
 3PL.SUBJ-RCP-scold-AMB COL-old.woman-PL
 ‘the old women go along arguing with each other’
- b. *póʔtu tamíʔ Jnataʔónu* (Ch.)
 póʔtu ta-míʔ iʃ-**na**-táʔo-nu
 all 3PL.SUBJ-come 3PO-COL-old.woman-PL
 ‘all of his wives came’
- c. **póʔtu tamíʔ Jtaʔónu*
 *‘all of his wives came’

The use of the collective plural seems to be more or less obligatory in those circumstances, such as (8b), where the collective is definable in relatively absolute terms. Otherwise, *na-* is optional, though it is used with high frequency with plural kinship terms when these refer to all the members of the group of relatives of a particular type.

2.1.2. Possession

Possession in UNT is indicated by a combination of a person-prefix and a number-suffix attached to the possessed noun, as shown in Table 3:

	singular	plural
1	kinkúʃi	kinkuʃikán
2	minkúʃi	minkuʃikán
3	ifkúʃi	ifkuʃikán

Table 3: Possessive paradigm ($\sqrt{kúʃi}$ ‘corn’)

The first- and second-person prefixes have the allomorphs [ki-] and [mi-], respectively, which appears before nasals and liquids; the final /n/ in these prefixes also undergoes place assimilation to a following nasal. The third-person prefix becomes [is-] before alveolar fricatives and affricates. In ordinary speech, *if-* is usually realized as [ʃ-].

Possessor noun-phrases rigidly follow the possessed noun, which continues to bear possessive affixes:

- (9) a. *iftʃík ʔawátʃa*
if-tʃik ʔawátʃa
 3PO-house boy
 ‘the boy’s house’
- b. *iftʃikán lakstín*
if-tʃik-kán lakstín
 3PO-house-PL.PO children
 ‘the children’s house’

Possessive affixes are also frequently used with quantifiers and numerals to indicate particular groups or collectivities, as in (10):

- (10) a. *kimpóʔtukán*
kin-póʔtu-kan
 1PO-all-PL.PO
 ‘all of us’
- b. *ifʔeʔatoxonkan*
if-ʔeʔa-toxón-kan
 3PO-CLS-seven-PL.PO
 ‘the seven of them (people)’

(10b) also illustrates the use of numeral classifiers. These are discussed in more detail in Section 2.2.3 below.

A large class of nouns in UNT is inherently possessed—that is, they can not be expressed without overt marking for a possessor. This class includes bodyparts, kinship terms, expressions of part-whole relations, and objects which can not exist in the absence of their possessor. These nouns are always used with one of the possessive affixes given in Table 3, and when elicited in isolation, they are given with the third-person possessive prefix, as in (11):

- (11) *ifnáp* ‘aunt’
ifna.má ‘grandmother’
iftse:ʔé:n ‘leg’
ifʔóʃa ‘skin, leather’
ifpa:ʃtapún ‘kidney’ (lit. ‘belly-bean’)
ifʔóʔsnj ‘tip, protruding portion’
iftampín ‘lower part, underside’
ifli.má:n ‘oneself’
iftapáʔ ‘price, value’

A number of ordinary nouns in UNT shift meaning and become kinship terms or part-whole expressions when marked with a possessive prefix:

- | | | |
|-------------------------------------|---|--|
| (12) <i>tʃiʃkú</i> ‘man’ | > | <i>iftʃiʃkú</i> ‘her husband’ |
| <i>puská:t</i> ‘woman’ | > | <i>ifpuská:t</i> ‘his wife’ |
| <i>ʔawátʃa</i> ‘boy’ | > | <i>ifʔawátʃa</i> ‘his son’ |
| <i>ʔe:stín</i> ‘north (uphill)’ | > | <i>ifʔe:stín</i> ‘its dorsal fin, ridge (of hill)’ |
| <i>táʔtsi</i> ‘toasted squash seed’ | > | <i>iftáʔtsi</i> ‘its seed’ |

In the first three examples, the semantic relation between the meaning of the possessed and the non-possessed noun is obvious. In the case of *ʔe:stín* ‘north (uphill)’, the basic meaning is that of the inherently-possessed part-whole expression, the possessor-less reading following from the fact that the principal UNT villages lie in a deep valley on the north side of a river, making north the direction up the nearest major slope. *táʔci* ‘toasted squash seed’ takes on a generic sense when possessed: saying ‘seed’ is impossible without the expression of a possessor, either specific — *if-*, plus the expression of the plant whose seed it is—or generic, using the determinative *ʃa-* (see Section 2.1.5 below).

Possessive pronouns are formed from the addition of the possessive affixes to an empty base, *la* — *kilá* ‘mine’, *milá* ‘yours’, *iflá* ‘his/hers/its’, *kilakán* ‘ours’, *milakán* ‘yours’, *iflakán* ‘theirs’. The third-person possessive pronouns seem likely to be the source of the third-person pronouns, *ʃlá* ‘he/her/it’ and *ʃlakán* ‘they’ (Section 2.1.3.1).

2.1.3. Pronouns

2.1.3.1. Personal pronouns

As verbs in UNT are explicitly marked for person and number of subjects and direct objects (Section 2.3.1), personal pronouns are rarely used except for emphasis or in zero-copular expressions where there can be no overt person-affixes (Section 3.1.1). The UNT personal pronouns are given in Table 4:

	singular	plural
1	kit	kinán (Pt.) kinankán (Ch.)
2	wiʃ	wiʃinán
3	ʃla u:tsá	ʃlakán u:tunún

Table 4: Personal pronouns

The two dialects differ here in that the Patla dialect uses the simpler form *kinán*, while the Chicontla dialect has added what looks like the possessive plural suffix *-kan*. The *kinankán* form does not exist in the Patla dialect. UNT pronouns make no distinctions for gender or case.

Of the two third-person pronouns, *u:tsá* is textually more frequent and has a demonstrative reading. It also appears as an abstract pronoun in constructions such as (13):

- (13) ma:ʃ tsax lakasku:wakanj:, u:tsá li:kaʔwán
 ma:ʃ tsax lakasku:wa-kan-nj: u:tsá li:-kaʔwán
 DUB only give.evil.eye-IDF-PF that INST-cry
 ‘perhaps they have given her the evil eye, that is why she is crying’

The other third-person pronoun, *ʃla*, rarely appears in texts and, like first- and second-person pronouns, is found most frequently in copular constructions (Section 3.1.1).

2.1.3.2. Determiners

Although UNT has no definite or indefinite articles, it does have a set of determiners which can either appear as the rightmost element in a noun phrase, as in (14a), or stand alone in argument position acting as third-person pronouns (14b):

- (14) a. *kana:tʃá iкта:wá wamá: kinkumpaléx sandía*
 ik-ʒn-a:-tʃá ik-ta:-wá **wamá:** kin-kumpaléx sandía
 1SG.SUBJ-go-IMPF-DST 1SG.SUBJ-CMT-eat this 1PO-compadre watermelon
 ‘I’m going there to give my *compadre* watermelon’
- b. *wamá: waniniʔonj:tsá sandía*
wamá: wa-nin-ni-ʔo-nj:=tsá sandía
 this eat-IDO-BEN-all-PF=now watermelon
 ‘it eats all of the edible parts of the watermelon’

Determiners are formed from the elements *w-* ‘DEMONSTRATIVE’, *a:-* ‘PROXIMATE’, *an-* ‘MEDIAL’, *ax-* ‘DISTANT’, *tsa-* ‘DEFINITE’, and the base *-ma:*, which is probably a reflex of the stative posture verb *ma:ʔ* ‘lie’. These forms are shown in Table 5.

	NON-DEMONSTRATIVE	DEMONSTRATIVE	DEFINITE
PROXIMATE	a:má:	wamá:	tsamá:
MEDIAL	anmá:	wanmá:	—
DISTANT	axmá:	waxmá:	—

Table 5: UNT determiners

The literal spatial senses of these words are often over-ridden by discourse factors such as topicality, givenness, or uniqueness of the referent, all of which tend to favour the selection of the proximate demonstrative, *wamá:*. The textually most frequent determiner is the definite *tsamá:*, which is becoming grammaticalized as a definite article under influence from Spanish.

2.1.3.3. Interrogative and relative pronouns

UNT uses many of the same elements for interrogation as for relativization, as in Table 6:

INTERROGATIVE		RELATIVE	
ANIMATE	tí:	ANIMATE	tí:
INANIMATE	tu:	INANIMATE	tu:
MANNER	tʃi:	ADJUNCT	tʃi:
PLACE	xa:	PLACE	xa:
TIME	xá:kʃni	TIME	akʃní

Table 6: Interrogative and relative pronouns

Interrogative pronouns come at the beginning of the clause, while relative pronouns appear at the left edge of the embedded clause. The syntax of these sentence types are discussed in more detail in Section 3 below.

The alternation *ti*: ‘animate’, *tu*: ‘inanimate’, *tʃi*: ‘manner’ is also found in the set of three indefinite pronouns — *kati:wáʔ* ‘someone, anyone’, *katu:wáʔ* ‘something, anything’, and *katʃi:wáʔ* ‘some way, any way’:

- (15) a. xa: kaʔáwə tsamá:, kati:wáʔ naʔaʔtsiná:n
 xa: ka-ʔáwə tsamá: **kati:wáʔ** na-ʔaʔtsin-a:-n
 NEG OPT-make:2SG.SUBJ:PFV that someone FUT-see-IMPF-2OBJ
 ‘don’t do that, someone will see you’
- b. katu:wáʔ li:ləʔatʃu:ya:kán məʔa:stsá
katu:wáʔ li:-ləʔatʃu:ya:-kán məʔa:s=tsá
 something INST-hallucinate-IDF long.ago=now
 ‘they_{IDF} would hallucinate anything back then’
- c. ma:ntsá katʃi:wáʔ kiwanimá:ʔ
 ma:n=tsá **katʃi:wáʔ** kin-wan-ni-ma:ʔ
 only=now anyway 1OBJ-say-BEN-PRG
 ‘he’s just speaking to me in any old way’

2.1.4. Bodyparts

While independent expressions of bodyparts in UNT are clearly nouns, they appear to be bi-morphemic, consisting of a prefixal element combined with an empty base, *-ni* (realized as *-n* if the prefix is vowel-final), as shown in Table 7 on the next page. The prefixal or combining forms of bodyparts (with the exception of *kínj* ‘nose’) are all transparently related to their full forms, although a number of prefixes that contain /k/ have an alternate form with /ʔ/ (historically *q). This is probably a reflex of an earlier harmonic process in Proto-Totonacan that uvularized velar stops in affixes when these appeared with stems containing uvular sounds; this process is still seen in the selection of the allomorphs of the adjectival plural (2.2.1.1) and distributive morpheme (2.3.7.11), and traces of it are found to a greater or lesser extent in other languages of the family as well. The table also shows that many bodyparts in UNT have one or more paronymic uses when applied to non-humans and/or inanimate objects. In all there are around 75 of these terms referring to human bodyparts, as well as a dozen or so more general paronymic expressions such as *tampín* ‘bottom, underside’ and *tampán* ‘base’. All of these elements are inherently possessed when expressed in independent form and participate in a variety of expressions when affixed to verbs (see Section 2.3.6 for further discussion).

Aside from serving as the names of bodyparts and parts of objects, paronymic expressions are also used to describe relative spatial location of one object with respect to another, as in (16):

- (16) a. líbru ʃəkpún mesa wi:ʔ
 líbru **if-əkpún** mesa wi:ʔ
 book 3PO-crown table sit
 ‘the book is on the table’

BODYPART	COMBINING FORM	PARTONYMIC EXTENSIONS
<i>qʔán</i> ‘ear’	<i>qʔá-</i>	branch (tree), handle (cup)
<i>akpún</i> ‘crown of head’	<i>akpú-</i>	top of object, crown of hill
<i>tʃa:n</i> ‘shin’	<i>tʃa:-</i>	trunk of tree, shaft of object
<i>tʃe:ʔé:n</i> ‘leg’	<i>tʃe:ʔe:-</i>	—
<i>ʔéʔni</i> ‘mouth (interior)’	<i>ʔéʔ-</i>	opening, irregular upper surface, surface (liquid)
<i>ʔe:n</i> ‘back’	<i>ʔe:-</i>	back of animal, roof of house
<i>kíʔni</i> ‘mouth (exterior)’	<i>kíʔ-</i>	rim (cup), mouth (bottle), edge
<i>kínj</i> ‘nose’	<i>kinka-, ʔenʔa-</i>	point, peak
<i>kufá:n</i> ‘chest’	<i>kufa:-</i>	—
<i>lakán</i> ‘face’	<i>laka-, laʔa-</i>	planar surface
<i>lákni</i> ‘leg’	<i>lak-</i>	lower portion of field (Ch.)
<i>makán</i> ‘hand, finger’	<i>maka-, maʔa-</i>	paw, talons, handle (bucket)
<i>máknj</i> ‘body’	<i>mak-, maʔ-</i>	bulky part of object, area behind or around object
<i>pa:n</i> ‘abdomen’	<i>pa:-</i>	wide midriff of object
<i>peʔén</i> ‘arm’	<i>peʔe-</i>	wing, foreleg, sleeve
<i>pi:n</i> ‘breast, chest’	<i>pi:-</i>	front side of leaf
<i>pu:n</i> ‘vagina’	<i>pu:-</i>	interior, container
<i>tánj</i> ‘buttocks, anus’	<i>tan-, ta:-</i>	hindquarters, stem (corn cob)
<i>tampá:n</i> ‘base’	<i>tampa:-</i>	—
<i>tampín</i> ‘bottom’	<i>tampi-</i>	—
<i>ta:pá:n</i> ‘side’	<i>ta:pa:-</i>	larger vertical face of object
<i>tu:xán</i> ‘foot, paw’	<i>tu:-, tantu:-</i>	foot (furniture)
<i>tsqʔósnj</i> ‘knee’	<i>tsqʔos-</i>	—

Table 1: Common UNT bodyparts and paronymic extensions

- b. líbru ʃtampún mesa wi:ʔ
 líbru **if-tampún** mesa wi:ʔ
 book 3PO–interior.bottom table sit
 ‘the book is right under the table’
- c. nakwi:lí: ʃpeʔstún mesa
 na–ik–wi:lí: **if-peʔstún** mesa
 FUT–1SG.SUBJ–put 3PO–shoulder table
 ‘I’m going to put it next to the table/
- d. tamaʔawáslj ʃtampín mesa mintʃá
 tamaʔawás–lj **if-tampín** mesa min–tʃá
 fall–PFV 3PO–underside table come–DST
 ‘the book fell and ended up under the table’

As shown by these examples, bodyparts and paronymics can appear as relational elements in both locative expressions such as (16a) and (b), and in ordinary expressions of events (16c). In either case, the bodypart serves a role similar to a preposition in English and other more familiar languages.

2.1.5. Locative *nak=*

The closest thing that UNT has to a preposition is the locative clitic, *nak=*, which is used primarily to introduce locative adjunct noun phrases, as in (17a):

- (17) a. *naktʃukutsá kinʔá:ʃ ʔe: nakmoxó: ʃatʃítʃi nakʃka:n*
 na-ik-tʃuku=tsá kin-ʔá:ʃ ʔe: na-ik-moxó:-Ø
 FUT-1SG.SUBJ-cut=now 1PO-gourd and FUT-1SG.SUBJ-immersed-IMP

ʃa-tʃítʃi nak=ʃka:n
 DTV-hot LOC=water

‘I’m going to cut open my gourd and put it in hot water’

- b. *naktʃukutsá kinʔá:ʃ ʔe: nakpu:moxó: ʃatʃítʃi ʃka:n*
 na-ik-tʃuku=tsá kin-ʔá:ʃ ʔe: na-ik-pu:-moxó:-Ø
 FUT-1SG.SUBJ-cut=now 1PO-gourd and FUT-1SG.SUBJ-inside-immersed-IMP

ʃa-tʃítʃi ʃka:n
 DTV-hot water

‘I’m going to cut open my gourd and put it in hot water’

In most cases, the *nak=* adjunct can be replaced by a bare NP and a bodypart prefix such as *pu:-* ‘vagina’ (meaning more generically ‘inside’) as in (17b), although incorporation of the bodypart does not always transitivise the verb, in which case the NP retains overt locative marking with *nak=*. The meaning of *nak=* is vague — corresponding to the full range of English spatial prepositions — and incorporated bodypart locatives such as that in (17b) are more frequent than expressions such as that in (17a).

The position of *nak=* in the noun phrase is variable and, as shown in (18), it may be attached either to the noun itself (a), to a modifier of the noun (b), or to a phrase-initial deictic element such as *tsamá:* ‘that’ (c):

- (18) a. *iktawakáʃ tsamá: ʃaʔáʃá nakíwǐ*
 ik-ta-wakáʃ tsamá: ʃa-ʔáʃá **nak=**kíwǐ
 1SG.SUBJ-INCH-be.high that DTV-big LOC=tree
 ‘I climbed up into that tall tree’

- b. *iktawakáʃ tsamá: naʃaʔáʃá kíwǐ*
 c. *iktawakáʃ naktsamá: ʃaʔáʃá kíwǐ*

By far the most preferred option is (a), although many younger speakers have begun to shift to the construction shown in (c), possible due to influence from Spanish. The semantic differences between the three positions of the locative are subtle and await further investigation.

The locative *nak=* is also frequently iterated within the noun phrase, particularly in locative expressions involving a possessor NP, such as that shown in (19a):

- (19) a. iktawakáɬnaʃpɛʔén kɪwɪ
 ik-ta-wakáɬ nak=iʃ-pɛʔén nak=kɪwɪ
 1SG.SUBJ-INCH-be.high LOC=3PO-arm LOC=tree
 ‘I climbed up onto the branch of the tree’
- b. iktawakáɬnaʃpɛʔén kɪwɪ

As show by (19b), however, the same sentence without the second use of *nak=* is grammatical as well. Speakers show strong individual preferences for either the expression in (a) or (b), but uniformly accept both.

2.1.6. Determinative *ʃa-* (DTV)

The prefix *ʃa-* ‘DETERMINATIVE’ has two principal functions in the noun phrase. Most frequently, it is attached to adjectives, indicating that the property designated by the adjective is criterial for determining the referent of the noun phrase:

- (20) nakma:makʃtimí: tsamá: ʃastáʔa kapéx
 na-ik-ma:-makʃtim-í: tsamá: ʃa-stáʔa kapéx
 FUT-1SG.SUBJ-CS-body-flat-CS this DTV-unripe coffee
 ‘I’m going to put the unripe coffee in a pile’

The determinative can also be used to allow adjectives to stand alone as anaphoric heads of noun phrases or as the predicates of relative clauses, as in (21)

- (21) mat laksáklɪ tu: ʃastáʔa
 mat lak-sak-lɪ tu: ʃa-stáʔa
 QTV DTB-choose-PFV NREL DTV-unripe
 ‘he chose one that was unripe’

Like NPs headed by adjectives, such constructions are restricted to contexts in which the identity of the referent is recoverable from discourse.

ʃa- is also used to form noun–noun attributive constructions, but in these cases it is attached to the head of the NP rather than the modifier, which is post-posed and may itself be complex, as in (22):

- (22) ʃaʃká:n tsamá: iʃpɛʔni kɪwɪ nali:ɬawáyə miləʔastapún
 ʃa-ʃká:n tsamá: iʃ-pɛʔni kɪwɪ na-li:-ɬawá-yə min-ləʔastapún
 DTV-water that 3PO-leaf tree FUT-INST-do-IMPF:2SG.SUBJ 2PO-eyes
 ‘you will do it by putting the dew of the leaves of the tree into your eyes’

Here the head of the NP, *ʃka:n* ‘water’, bears the determinative prefix and is qualified by the phrase *tsamá: iʃpɛʔni kɪwɪ* ‘the leaves of the tree’.

Other uses of *ʃa-* include the formation of comparative constructions (discussed briefly in Section 2.2.1) and the expression of generic possessors of inherently possessed nouns (e.g. *ʃapúʃku* ‘an oldest brother’). Although there are some differences, *ʃa-* closely resembles the cognate morpheme in Papantla, discussed in detail in Levy (2002b).

2.1.7. *li:-* ‘GENERIC’ (GNC)

When added to nouns, the prefix *li:-* ‘GENERIC’ forms noun phrases without specific referents, or where the actual individual involved is unknown or can not be identified:

- (23) a. *li:mexi:kánu ta-láʔʔtapalí:ʔ a:ʔempa:tín partido*
li:-mexi:ká-nu ta-láʔʔtapalí:-ʔ a:-ʔempa:-tín partido
 INST–Mexican–PL 3PL.SUBJ–exchange–PFV ADD–CLS–one party
 ‘Mexicans changed to another party’
- b. *naka:maʔní: tsamá: li:tsinkwáxná kimaʔwaʔóʔ kinkáʔli*
na-ik-ka:-maʔní: tsamá: li:-tsinkwá-xná kin-maʔ-wa-ʔó-ʔ
 FUT–1SG.SUBJ–PL.OBJ–kill that GNC–eyra–PL 1OBJ–AJENO–eat–all–PFV
- kin-káʔli*
 1PO–hen

‘I’m going to kill those eyras, they ate all of my chickens’

In many cases, generic noun phrases in *li:-* serve adverb-like functions rather than acting as syntactic arguments:

- (24) a. *ʃiʔtín ʃaʔka:yáwa ʃi:ma:wá la: li:lú:wa*
ʃi-ʔtín ʃa-ʔka:yáwa ʃi:ma:wá la: li:-lú:wa
 3PO–faeces DTV–green fly do GNC–worm
 ‘the faeces of the greenbottle fly becomes worms’
- b. *nakla:tamá: ʃali:stánku*
na-ik-la:tamá: ʃa-li:-stánku
 FUT–1SG.SUBJ–act DTV–GNC–younger.sibling
 ‘I’m going to serve as *stanku* (civic official)’
- c. *nakinaníní kilaʔʃóʔo li:skuna:ta:tá*
na-kin-an-nin-ní kin-láʔʃóʔo li:-skuna:ta:tá
 FUT–1OBJ–go–DT–BEN 1PO–substitute GNC–godfather
 ‘my substitute is going to stand in for me as godfather’
- d. *le:ʔeʔatá:ti pi:líka*
le:-ʔeʔa-tá:ti pi:lí-ka
 GNC–CLS–four roll.over–IDF
 ‘he was rolled by four (people)’
- e. **ʔeʔatá:ti pi:líka*
 *‘he was rolled by four (people)’ (‘they rolled four people’)
- f. **nakla:tamá: ʃastánku*
 *‘I’m going to serve as *stanku* (civic official)’

The verbs in all of these examples are intransitive, and the second NP is only possible given the presence of *li:-* on the noun. In (a) – (d), generic non-argument NPs appear in the clause over and above the basic valence of the verb, either because it is intransitive (a, b), is transitive but has its direct object slot filled by another argument (c), or because, as in (d), the sub-

ject has been suppressed by the indefinite actor suffix (Section 2.3.1.3). NPs expressing the same participant in the event are inadmissible without the prefixation of *li:-* (d, f).

li:- has the opposite effect when added to adverbs and adjectives, forming abstract nouns:

- (25) a. *laʔá: fli:tsínka*
laʔá: iʃ-li:-tsínka
 much 3PO-GNC-heavy
 ‘it is very heavy’ (lit. ‘its weight is much’)
- b. *xa: le: lakatʃa:nkán fli:məʔát* (Ch.)
xa: le: laka-tʃa:n-kán iʃ-li:-məʔát
 NEG able face-arrive.there-IDF 3PO-GNC-far
 ‘one can’t see far’

Like other generic nouns formed with *li:-*, these words function either as arguments (a) or as adverbials (b) in a sentence. The generic *li:-* may be related in some fashion to the instrumental prefix *li:-* (Section 2.3.5.2), although this is a topic for further investigation.

2.1.8. *ka:-* ‘place of’ (PLC)

The prefix *ka:-* is most commonly added to the plural form of nouns to form words denoting a place full of or typified by the referent of the nominal base:

- (26) *kíwɪ* ‘tree’ > *ka:kíwɪn* ‘bush, forest’
ʔeʔú: ‘limestone’ > *ka:ʔeʔú:n* ‘place of limestone’
tʃik ‘house’ > *ka:laktʃíkni* ‘town’
kukát ‘oak’ > *ka:kukátɲa* ‘El Encinal’ (village)

As in the last example, *ka:-* is frequently used in the derivation of place names. In a few cases, *ka:-* is prefixed to nouns to form adverbs meaning ‘by means of’ as in *ka:tuxán* ‘on foot (*tuxán*)’, *ka:makán* ‘by hand (*makán*)’, or *ka:matʃí:t* ‘with a machete (*matʃí:t*)’:

- (27) *məʔtʃuyá:ʔ, kintantu:ya:wá:ʔ kəmatʃít*
məʔtʃuyá:-ʔ kin-tantu:-ya:wá:-ʔ ka:-matʃít
 err-PFV 1PO-foot-stand-PFV PLC-machete
 ‘he slipped up and hit me in the foot with a machete’

These words are behaving syntactically like adverbs rather than nouns and do not have plural forms or numeral classifiers.

Adverbs are also formed by adding *ka:-* to non-nominal bases:

- (28) *katsán* (vi) ‘feel pain’ > *ka:katsán* ‘rough (terrain)’
kákswa (adj) ‘quiet, still’ > *ka:kákswa* ‘quiet (place)’
púkswa (adj) ‘dark’ > *ka:púkswa* ‘dark (place)’
s’ewíwɪ (adj) ‘cool’ (liquids) > *ka:s’ewíwɪ* ‘cool (place, climate)’
laʔalí: (adv) ‘tomorrow’ > *ka:laʔalí:* ‘day after day’

These words are typical adverbs in terms of their distribution and quantification:

- (29) a. *tsisáx xa: le: katitáftu, ka:púkswa xa: tu: fʔa:ná:n tu: li:ma:s'okán*
tsisáx xa: le: ka-ti-táftu ka:-puks-wa xa: tu:
 late NEG do OPT-UNR-out:2SG.SUBJ:PFV PLC-dark-SEM NEG NREL

if-ʔa:ná:n tu: li:-ma:-s'o-kán
 PST-exist NREL INST-CS-illuminate-IDF

‘you couldn’t go out at night, there wasn’t anything to use for light’

- b. *ka:lanʔatunká*
ka:-lanʔ-a=tunká
 PLC-be.shady-IMPF=very
 ‘it’s very shady’

It (29a), the adverb *ka:púkswa* ‘dark (place)’ appears as an adverbial expression of place, while in (b) the word *ka:lanʔa* ‘shady (place)’ is quantified with the clitic *=tunká* ‘very’, which is reserved for adverbs, adjectives, and certain verbs expressing gradable semantic predicates.

2.2. Modifiers: Adjectives, adverbs, and numerals

2.2.1. Adjectives

Although other members of the Totonac family have been claimed to have either no adjectives (Coatepec — McQuown 1990; Misantla — MacKay 1999) or a small class of underived modifiers (Papantla — Levy 1992), UNT has a robust adjectival class (see Beck 2000 for further discussion). The normal position for the adjective in the noun phrase is immediately preceding the head noun, as in (30):

- (30) a. *mat tama:ʃtumá:ná:ʔ naiʃtuxán aʔtín ʔáʔa tʃiwíʃ*
mat ta-ma:-ʃtu-má:-ná:ʔ nak=iʃ-tuxán aʔ-tín ʔáʔa tʃiwíʃ
 QTV 3PL.SUBJ-CS-out-PRG-PL.ST LOC=3PO-foot CLS-one big rock
 ‘they say they are taking it out from under the base of a large stone’
- b. *ʔtun ləʔmakamín ʔe: ʃastáʔa suwá:ʔ*
ʔtun ləʔ-maka-mín ʔe: ʃa-stáʔa suwá:ʔ
 IDPH ALTV-hand-come and DTV-unripe black.sapote
 ‘wham! he throws it to him and (it is) an unripe black sapote’
- c. *mat máʔatsá ʃtaʔa:wa:ní: ʃtaputsamá:ná:ʔ ʃatséya tiyá*
mat máʔa=tsá iʃ-ta-ʔa:wa:n-ní: iʃ-ta-putsa-má:-ná:ʔ
 QTV far=now PST-3PL.SUBJ-wander-PF PST-3PL.SUBJ-search-PRG-PL.ST
- ʃa-tséya tiyá*
 DTV-good earth

‘they had traveled far, they were looking for good land’

However, adjectives can also appear in other positions, as in (31):

- (31) a. *ika:ləʔtsíʃ tсамá: tsumaxán ləʔo:ntí:n*
ik-ka:-ləʔtsín-ʃ tсамá: tsumaxán ləʔ-ʔo:ntí:-n
 1SG.SUBJ-PL.OBJ-see-PFV this girl:PL APL-get.fat-DVB
 ‘I saw the fat girls’
- b. *ikləʔtsíʃ ləʔatín tʃitʃí ʃaʔáʃa*
ik-ləʔtsín-ʃ ləʔa-tín tʃitʃí ʃa-ʔáʃa
 1SG.SUBJ-see-PFV CLS-one dog DTV-big
 ‘I saw the big dog’

The communicative distinction between the two orderings is unclear, although speakers report it has to do with “emphasis,” the adjective-final construction placing more emphasis on the property. As seen in these examples, adjectives appear in text modifying nouns both with and without the determinative *ʃa-*, although the latter alternative seems to be much more frequent.

Adjectives, like verbs, can be affixed with bodypart prefixes that the particular part of an object that the quality denoted by the adjective applies to:

- (32) a. *a:lakaʃkilíki tсамá: ʔawátʃa*
a:-laka-ʃkilíki tсамá: ʔawátʃa
 ADD-face-dirty that boy
 ‘the boy has a dirty face’
- b. *tʃa:sukúku tсамá: ʔentín kíwǐ*
tʃa:-sukúku tсамá: ʔen-tín kíwǐ
 shin-perforated that CLS-one tree
 ‘the tree’s trunk is full of holes’
- c. *lakasukúku wamá: lúʃu*
laka-sukúku wamá: lúʃu
 face-perforated this cloth
 ‘this cloth has lots of little holes in it’

In addition to bearing bodypart prefixes, the adjectives in these sentences are used as syntactic predicates. As seen in (33), adjectives in predicate position require a copula, zero in the present tense but over in the past and the future:

- (33) a. *lú:kux tʃíʃkú*
lú:kux tʃíʃkú
 brave man
 ‘the man is brave’
- b. *lú:kux ʃwanǐ: tʃíʃkú*
lú:ku: íʃ-wan-nǐ: tʃíʃkú
 brave PST-be-PF man
 ‘the man was brave’
- c. *lú:kux nawán tʃíʃkú*
lú:kux na-wan tʃíʃkú
 brave FUT-be man
 ‘the man will be brave’

Adjectives also have uses as secondary predicates, appearing in the preverbal slot usually reserved for adverbs, as in (34):

- (34) a. lakpa:ʔtanʔalán tamá:ná:ʔ
 lak-pa:-**ʔtanʔalá**-n ta-an-má:-ná:ʔ
 APL-belly-uncovered-PL 3PL.SUBJ-go-PRG-PL.ST
 ‘they are coming with their shirts open’
- b. kimáʔas’awimá:ʔ tsinkatunká ikle:má:ʔ
 kin-máʔa-s’awi-má:ʔ **tsinka**=tunká ik-le:n-má:ʔ
 IOBJ-hand-defeat-PRG heavy=very 1SG.SUBJ-take-PRG
 ‘he’s getting ahead of me in work, I’m carrying something very heavy’
- c. ka:ná: wi:léʔʃwa stákl̥i iʃpeʔén kíw̥i
 ka:ná: **wi:léʔʃ-wa** sták-l̥i iʃ-peʔén kíw̥i
 truly twisted-SEM grow-PFV PST-arm tree
 ‘the tree’s branch grew very twisted’

This use of adjectives is textually quite frequent, and creates a certain distributional overlap between adjectives and adverbs.

UNT has no special inflection for the comparison of adjectives, the most common strategy for forming comparative constructions being the use of the adverb *a:ʔfulá*: ‘more’ as in (35):

- (35) a. kit a:ʔfulá: maʔát naikán ʔe: wamá: tʃiʃkú
 kit **a:ʔfulá: maʔát** na-ik-án ʔe: wamá: tʃiʃkú
 I more far FUT-1SG.SUBJ-go and this man
 ‘I’m going farther than this man’
- b. a:ʔfulá: ʃatséx wamá: kawa:yúx
a:ʔfulá: ʃa-tséx wamá: kawa:yúx
 more DTV-good this horse
 ‘this horse is better’

Superlative constructions are formed using the determinative *ʃa-*, as in (36):

- (36) a. ʃatséx lúʃu ikʔawáʔ ka:makán
ʃa-tséx lúʃu ik-ʔawá-ʔ ka:makán
 DTV-good cloth 1SG.SUBJ-make-PFV by.hand
 ‘I made the finest cloth by hand’
- b. iklakma:ʃtumá:ʔ tu: ʃatséx
 ik-lak-ma:-ʃtu-má:ʔ tu: **ʃa-tséx**
 1SG.SUBJ-DTB-CS-out-PRG NREL DTV-good
 ‘I’m picking out the best’
- c. ʃatséx kúʃu ʃta:ma:wa:ní: ʃlakpa:yá:ʔ mú:ʃni lame:táx (Ch.)
ʃa-tséx kúʃu iʃ-ta:ma:wa:-ní: iʃ-lakpa:-yá:ʔ mú:ʃni lame:táx
 DTV-good liquor PST-buy-PFV 3PO-cheek-stand monkey bottle
 ‘he had bought the best liquor, the bottle had a monkey on it’

Such expressions are not specifically superlative, but rather rely on the semantics of the determinative prefix as singling out the one instance of a particular thing to which the quality

denoted by the adjective applies. The implication is that the selected object is that best typified by the adjective, and hence the one that possesses the superlative degree of quality.

2.2.1.1. *lak-/laʔ-* ‘ADJECTIVAL PLURAL’ (APL)

Adjectives in UNT show agreement in number with their nominal heads, their plural forms taking the prefix *lak-/laʔ-*, as shown in (37):

- (37) a. tamín tsamá: laʔáʔa tjitjín
 ta-mín tsamá: **laʔ-ʔáʔa** tjitjín-n
 3PL.SUBJ-come that APL-big dog-PL
 ‘some big dogs came’
- b. xa: ika:laʔatí jalaktampiín tjiʃkuwín
 xa: ik-ka:-laʔatí ja-**lak-tampiín** tjiʃku-wín
 NEG 1SG.SUBJ-PL.OBJ-like DTV-APL-miser-PL man-PL
 ‘I don’t like cheap people’
- c. naʃtuxankán mat ʔú:wə iʃka:tantu:tʃukuní: tjiwíʃ ʃalaklaxaxán
 nak=iʃ-tuxan-kán mat ʔú:wə iʃ-ka:-tantu:-tʃuku-ní:
 LOC=3PO-foot-PL.PO QTV many PST-PL.OBJ-foot-cut-PF
- tjiwíʃ ja-**lak-laxaxá-n**
 rock DTV-APL-sharp-PL
- ‘the sharp stones had cut their feet a lot’

The choice of allomorph is based on a process of consonant harmony which selects the *laʔ-* allomorph with stems that contain a glottal stop. In formal terms, the adjectival plural prefix bears a strong resemblance to the distributive prefix found on verbs (Section 2.3.7.11), although there is no clear evidence that its use with adjectives still has a distributive as opposed to a more straightforward plural meaning.

As with nouns, number marking on adjectives is optional, as shown in (38):

- (38) a. ika:laʔtsíʃ lú:ku: tjiʃkuwín
 ik-ka:-laʔtsín-ʃ **lú:ku:** tjiʃku-wín
 1SG.SUBJ-PL.OBJ-see-PFV brave man-PL
 ‘I see the brave men’
- b. ika:laʔtsíʃ laklú:ku: tjiʃkuwín
 ik-ka:-laʔtsín-ʃ **lak-lú:ku:** tjiʃku-wín
 1SG.SUBJ-PL.OBJ-see-PFV APL-brave man-PL
 ‘I see the brave men’
- c. ika:laʔtsíʃ laklú:ku: tjiʃkú
 ik-ka:-laʔtsín-ʃ **lak-lú:ku:** tjiʃkú
 1SG.SUBJ-PL.OBJ-see-PFV APL-brave man
 ‘I see the brave men’

- d. ika:l̥aʔtsíʃ lú:ku: tʃiʃkú
 ik-ka:-l̥aʔtsín-ʃ **lú:ku:** tʃiʃkú
 1SG.SUBJ-PL.OBJ-see-PFV brave man
 ‘I see the brave men’

Also optional is the use of the plural suffix seen in (38b) and (c). Speakers readily offer forms both with and without this suffix, though they show a slight preference for its use with pluralized adjectives referring to people and adjectives dislocated either to the right of the nominal head or outside the noun phrase entirely (as in example (35) above). A great deal more work needs to be done to determine the conditions on the distribution of this affix.

2.2.1.2. *a:-* ‘ADDITIVE’ (ADD)

The prefix *a:-* is used to indicate an increased or high degree of a property, as in (39):

- (39) a. a:tʃaa:ntsá
 a:-tʃaá:n=tsá
 ADD-ripe=now
 ‘it is riper now’
- b. xa: ikatsí: tu: kle:má:ʃ, xa: a:tsínka
 xa: ik-katsí: tu: ik-le:n-má:ʃ xa: a:-tsínka
 NEG 1SG.SUBJ-know NREL 1SG.SUBJ-take-PRG NEG ADD-heavy
 ‘I don’t know what I’m taking, it’s not very heavy’
- c. makti:nipáʃ a:l̥aʔatín wampaláx
 makti:-ni-pá:ʃ a:-l̥aʔa-tín wampa:lá:x
 take.away-BEN-RPT ADD-CLS-one again
 ‘he took one away from yet another (ant)’

The use of the additive with classifiers shown in (40) is relatively more frequent and illustrates more clearly the additive meaning of the prefix, which in its uses with adjectives seems to overlap with the meaning of the clitic =*tunká* ‘very’.

2.2.1.3. *-wa* ‘SEMBLATIVE’ (SEM)

The semblative suffix *-wa* forms adjectives from adverbs, as shown in (40):

- (40) *aʔslapúx* ‘having the head covered’ > *aʔslapúxwa* ‘covered (head)’
tʃaláx ‘brittley’ > *tʃaláxwa* ‘brittle, fragile’
káks ‘quietly, still, immobilely’ > *kákswa* ‘quiet, still, immobile’
kupúks ‘bent over’ > *kupúkswa* ‘bent over’
l̥aʔatséʔ ‘hidden’ > *l̥aʔatséʔwa* ‘hidden’
líks ‘whinily’ > *líkswa* ‘whiny, spoiled (of children)’
pám ‘very fat, very pudgy’ > *pámwa* ‘very fat, very pudgy’
ʃít ‘too heavy to move’ > *ʃítwa* ‘too heavy to move’
salá:s ‘full of tiny holes’ > *salá:swa* ‘full of tiny holes’
skulíx ‘obediently, industriously’ > *skulíxwa* ‘obediente, hardworking’

In a number of cases, there appears to be little or no difference in meaning between the adjective and the adverb from which it is derived. There is, however, an important distributional difference, illustrated in (41):

- (41) a. ka:ná: wi:léʔʃ stákli iʃpeʔén kíwi
 ka:ná: **wi:léʔʃ** sták-li iʃ-peʔén kíwi
 truly twisted grow-PFV PST-arm tree
 ‘the tree’s branch grew very twisted’
- b. ka:ná: wi:léʔʃwa stákli iʃpeʔén kíwi
 ka:ná: **wi:léʔʃ-wa** sták-li iʃ-peʔén kíwi
 truly twisted-SEM grow-PFV PST-arm tree
 ‘the tree’s branch grew very twisted’
- c. ʔapi:wi:léʔʃwa wakáf
 ʔapi:-**wi:léʔʃ-wa** wakáf
 horn-twisted-SEM cow
 ‘a corn with twisted horns’
- d. *ʔapi:wi:léʔʃ wakáf
 ʔapi:-**wi:léʔʃ** wakáf
 horn-twisted cow
 *‘a corn with twisted horns’

While both forms can appear in the pre-verbal adverb slot ((41a) and (b)), only the *-wa* form can act as the modifier of a noun ((41c) and (d)). What the semantic distinction between the use of the adverb and adjective in pre-verbal position is, if there is one, remains to be seen.

Although the semblative suffix seems only to be productively affixed to adverbs, it does appear on a few adjectival roots as well, giving the sense of a lesser degree of the property described by the stem:

- (42) *tʃaá:n* ‘cooked’ > *tʃaá:wa* ‘half-cooked’
ʔmukukú ‘yellow’ > *ʔmukukúwa* ‘yellowish’
ʃnapapáwa ‘white’ > *ʃnapapáwa* ‘whitish’

With the exception of *tʃaá:n* ‘ripe’ all of the other adjectives that take *-wa* are colours. A few other colour terms are formed by a combination of *-wa* and an noun, as in (43):

- (43) *kapéx* ‘coffee’ > *kapéxwa* ‘brown’
la:ʃá:f ‘orange’ > *la:ʃá:fwa* ‘orange’
ʔkakán ‘ash’ > *ʔkakánwa* ‘ash-colored’

Words formed in this way are used to denote to the colour of the object named by the noun.

2.2.2. Adverbs and ideophones

UNT has a relatively numerous and semantically heterogeneous class of lexical adverbs. The class includes cross-linguistically typical items such as *kas* ‘fast’ and *paláx* ‘quickly’, as well as more unusual words such as those in (44):

- (44) *xú:lux* ‘hanging in bunches (small objects)’
kanít ‘with teeth showing’
la:tá?a ‘looking greasy, shiny with grease’
luxtúx ‘rearing up and jumping (of crickets and frogs)’
ła:mán? ‘rounded, full’
ʔat ‘close together, tight’
ʔé?é ‘having the smell of burnt hair, fingernails, horn, meat, or beans’
snu:n ‘on the verge of death’
stíʔ ‘spreadout (small objects), distributed evenly’
wiʔéʔ ‘having long, messy hair; being jumbled up (clothes)’

As can be seen from some of the examples in this list, many of these words are translatable as adjectives in languages like English, although — as noted in the previous section — most of these have (apparently) synonymous adjectival forms with *-wa* (e.g. *ʔat* ‘close together’, *ʔátwa* ‘close together’)

Lexical adverbs most commonly appear in preverbal position, as in (45):

- (45) a. *mą?á:ya: ʔawakaní: pu:sikwalán*
mą?á:ya: *ʔawa-kan-ní: pu:sikwalán*
 long.ago make-IDF-PF church
 ‘the church was built long ago’
- b. *le:ʔtsá ikwayán*
le:ʔtsá *ik-wayán*
 much 1SG.SUBJ-eat-DT
 ‘I eat a lot’

Distributionally, however, adverbs share this position with adjectives and frequently the only way to distinguish between adverbs and adjectives appearing in this position is the inability of an adverb to be prefixed by the determinative *fa-* and by its ability to take the semblative suffix *-wa* to form a pre-nominal modifier (although this latter test does not apply to all adverbs). Beyond this, adverbs seem to resist affixation and as a class have no common morphological features. There are a rather large number of adverbs ending in */-x/* which appear to be derived from verbs — for example, *xafáx* ‘breathlessly’ (from *xasá:* ‘pant’) or *slumáx* ‘glued’ (from *slumá:* ‘glue something’) — but it is unclear to what extent this is a historical relic or a productive synchronic process.

A syntactic property that seems to be unique to adverbs is a rather limited ability to incorporate into verbs, as shown in (46):

- (46) a. *tʃi: xiks kima:wí:*
tʃi: xiks kin-ma:-wan-ní:
 how bothered 1OBJ-CS-be-CS
 ‘how he bothers me!’
- b. *ikma:xikswi:ʔtunká kistánku*
ik-ma:-xiks-wan-ni:-ʔ-tunká kin-stánku
 1SG.SUBJ-CS-bothered-be-CS-PFV-lots 1PO-younger.brother
 ‘I teased my little brother a lot’

Speakers showed decidedly different tolerance levels for this process and many will reject sentences with incorporated forms when these are offered to them. Nonetheless, it is a fairly robust phenomenon both in texts and elicitation, and the limits on it have yet to be explored.

A particularly interesting subclass of adverbs is ideophones. These are words that pattern syntactically with ordinary adverbs in that they are pre-verbal predicate-modifiers, but are somewhat more expressive in their meanings, which tend to evoke a sound, sensory-image, or scene, as in (47):

- (47) a. *tsanʔtsanʔ yuxmá:ʔ ʃka:n*
tsanʔtsanʔ yux–má:ʔ ʃka:n
 IDPH go.down–PRG water
 ‘the water is dripping’
- b. *xiʔixiʔi tantu:wán akʃní ʔa:wá:n* (Pt.)
xiʔixiʔi tantu:–wán akʃní ʔa:wá:n
 IDPH foot–say when wander
 ‘his feet make noise as he walks along on loose pebbles’
- c. *sla:tasla:ta kiʔwán lú:wa*
sla:tasla:ta kiʔ–wán lú:wa
 IDPH mouth–say snake
 ‘the snake flicks out its tongue’

The first of the ideophones in (47), *tsanʔtsanʔ*, is the sound of dripping water. It is clearly onomatopoeic and evokes a very specific type of sound, as is *xiʔixiʔi* in (b), the sound of someone walking on loose pebbles. The ideophone in (c), *sla:tasla:ta* ‘snake flicking out its tongue’, while non-onomatopoeic, is not only highly evocative, but carries with it the notion of a specific type of actor — that is, it can only refer to a snake and even appears in sentences where the identity of the actor is encoded only by the ideophone itself. Currently there are nearly 300 ideophones in the UNT lexical database. A few more examples are given in (48):

- (48) *tʃenʔetʃenʔe* ‘a large bottle filled with liquid being shaken’
xalaxala ‘red-hot rocks crackling from heat’
ʔalaʔala ‘someone crawling along on all fours’
tsanna ‘insects buzzing’
lamama ‘coals glowing red’
ʔanaʔana ‘someone running around in a panic because they are late’
pənʔupənʔu ‘someone toothless chewing food’
tampilili ‘something long rolling away’
tanʔolulu ‘something round rolling away’
wayaya ‘someone leaving after doing something bad or which the speaker didn’t like’

Many of these words, like the example in (47d) above, are not onomatopoeic. Sounds are the most common but by no means the only type of thing represented by UNT ideophones.

Ideophones are set off from other adverbs by the fact that they are freely and productively reduplicable. There are two lexically-determined reduplicative patterns, the more common of the two being full reduplication, illustrated in (51):

- (49) *tʃiktʃik* ‘tree shaking in wind’
pʔʔpʔʔ ‘someone making tortillas’
kalanʔkalanʔ ‘someone biting through hard food’

laksliwilakslwi ‘a four-legged animal limping along on three legs’
paṅṭupaṅṭu ‘someone toothless chewing food’

Fully reduplicated ideophones seem to be those that are most punctual or cyclical in meaning (that is, they designate things that happen all at once or over and over) and the reduplication tends to have an iterative meaning, as in (50)

- (50) a. *teḷ iktawí:ḷ ka:s’ewíwǐ antsá*
teḷ ik-ta-wí:ḷ ka:-s’ewíwǐ antsá
 IDPH 1SG.SUBJ-INCH-sit PLC-cool here
 ‘I plop myself down here where it’s cool’
- b. *mat a:tfulǎtsá teḷteḷ litati:tá tsamá: misín*
 mat a:tfulǎ=tsá **teḷteḷ** litati:tá tsamá: misín
 QTV more=now IDPH bounce.on.buttocks that nagual
 ‘the *nagual* goes bouncing along on its buttocks over and over’

Reduplication can also correlate with the number of the subject, as in (51):

- (51) a. *patʃ makawán*
patʃ maka-wán
 IDPH hand-say
 ‘the pebble falls’
- (b) *patʃpatʃ tamakawán*
patʃpatʃ ta-maka-wán
 IDPH 3PL.SUBJ-hand-say
 ‘the pebbles fall’

As with all ideophones, reduplication of these words can be applied more than once:

- (52) *kunikunikuni ǎní:*
kunikunikuni ǎn-ní:
 IDPH go-PF
 ‘the caterpillar had crawled off’

Even when multiply reduplicated, ideophones have no word-level stress and all syllables seem to be given equal prosodic weight.

The second pattern of reduplication involves -CV suffixation and seems more frequently to mark intensity, locative distributivity, and/or duration, as in (53):

- (53) *tfululu* ‘water trickling’
lununu ‘someone strutting around showing off’
milili ‘wind blowing’
mululu ‘water welling up out of the ground’
spatata ‘a viscous substance oozing (mud, pus)’
swatata ‘many small things moving in a line’
tsanna ‘insects buzzing’

Like fully reduplicated ideophones, this class may also undergo multiple reduplication:

- (54) a. *swatatata tamá:ná:t̚ tʃa:án*
swatatata ta-*an*-má:-ná:t̚ tʃa:án
 IDPH 3PL.SUBJ-go-PRG-PL.ST ant
 ‘the ants march in a line’
- b. *tsannannanna kiná?awán*
tsannannanna kin-*a?á*-wán
 IDPH 1OBJ-ear-say
 ‘it buzzes in my ear’

This type of multiple-reduplication is much more frequent in texts for the words in (53) than it is for those in (49) and is offered more freely in elicitations. In both cases, the reduplication seems transparently iconic in the sense that each repetition marks an additional degree of intensity, distributivity, or duration.

A few ideophones have identical non-reduplicated forms but differ in meaning and in reduplicative pattern:

- (55) *xalaxala* ‘a wheelbarrow jolting its load as it rolls along’
xalala ‘red-hot rocks crackling from heat’
lamalama ‘a fire flaming’
lamama ‘coals glowing red’
pon?ʃpon?ʃ ‘large objects dropping into water’
pon?ʃufu ‘water falling in streams’

Ideophones are discussed in more detail in Beck (to appear).

2.2.3. Numerals and numeral classifiers

Like many other Mesoamerican languages, UNT makes use of a vigesimal numeral system. The numerals from 1 to 100 are given in (57):

- | | |
|--|--------------------------------------|
| (56) 1 <i>a?tin</i> | 11 <i>a?kauxtín</i> |
| 2 <i>a?tu:</i> | 20 <i>a?puśám</i> |
| 3 <i>a?tu:tún</i> | 30 <i>puśamakáux</i> |
| 4 <i>a?tá:t̚i</i> | 40 <i>tu:puśám</i> |
| 5 <i>a?kitsís</i> | 50 <i>tu:puśamakáux, itát siéntu</i> |
| 6 <i>a?tśaśán</i> | 60 <i>tu:tunpuśám</i> |
| 7 <i>a?toxón</i> | 70 <i>tu:tunpuśamakáux</i> |
| 8 <i>a?tsayán</i> (Ch.), <i>a?tseyén</i> (Pt.) | 80 <i>ta:tipuśám</i> |
| 9 <i>a?maxá:t̚sa</i> | 90 <i>ta:tipuśamakáux</i> |
| 10 <i>a?káux</i> | 100 <i>a?tín siéntu</i> |

The use of Totonac numerals is, on the whole, on the decline in both Patla and Chicontla and even fluent speakers regularly use Spanish numbers when speaking to each other. Numbers from 100 and up are always in Spanish and most speakers are unable to formulate them in Totonac at all; those that can vary somewhat in the strategies they use (the most frequent form of 100 being *a?káux ma?káux* ‘ten times ten’, rather than *kitsispuśám* ‘five-twenties’ that the vigesimal system would predict).

Numbers under 20 require a classificatory prefix that depends on the shape and, to a lesser extent, the material of the object being counted. The prefix used in (56) is the “default” classifier, *a?*. So far, twenty-nine numeral classifiers have been recorded:

<i>qʔ-</i> [generic]	<i>pi:f-</i> ‘bouquet, bunch (plants)’
<i>qk-</i> ‘hide, skin, large heavy cloth’	<i>pu:-</i> ‘clothing, net, sling’
<i>kiʔ-</i> ‘bunch (bananas)’	<i>pu:lak-</i> ‘plant’
<i>kiʔqk-</i> ‘ladder’	<i>tsan-</i> ‘roll (plants, sticks)’
<i>kiʔmak-</i> ‘full bunch (bananas)’	<i>ʃeʔ-</i> ‘times ago’
<i>lqʔa-</i> (1), <i>tan-</i> (2+) ‘animal’	<i>tapa:-</i> ‘armload (both arms)’
<i>lqʔapu:-</i> ‘face of object’	<i>tʃa:-</i> (1–3), <i>ʔeʔa-</i> (3+) ‘person’
<i>laka-</i> ‘planar surface, area’	<i>tʃa:-</i> ‘chili’
<i>maqʔ-</i> ‘time, event’	<i>tʃastu-</i> ‘corner’
<i>maqʔʃpa:-</i> ‘armload (one arm)’	<i>ʔe:-</i> ‘bulky object, avocado’
<i>mak-</i> ‘tortilla, bar of soap, bun, cheese’	<i>ʔe:sti-</i> ‘clove (garlic)’
<i>mu:s-</i> ‘bunch (bananas, grapes)’	<i>ʔeʔ-</i> ‘chunk, flower, mushroom, date (day)’
<i>pa:-</i> ‘bottle, gourd with neck, basket’	<i>ʔempa:-</i> ‘kind’
<i>peʔ-</i> ‘leaf, cactus pad, paper, door’	<i>ʔen-</i> ‘long thing, bean pod’

Table 8: UNT numeral classifiers

The numeral classifiers for animals and humans have two forms, depending on the number they are prefixed with. One animal is counted *lqʔatín*, while two or more use the prefix *tan-*. For people, *tʃa:-* is used for one or two, *ʔeʔa-* is used for four or more; three people can be counted either *tʃa:tu:tún* or *ʔeʔatu:tún*.

Numerals typically come first in the noun phrase, followed by modifiers, as in (57):

- (57) a. *kiʔmaktín másni séʔnu* (Pt.)
kiʔmak-tín más-ni séʔnu
 CLS-one rot-DVB banana
 ‘a bunch of bananas’
- b. *kakimáʃki pa:kitsís lame:táx* (Ch.)
 ka-kin-máʃki **pa-kitsís** lame:táx
 OPT-1OBJ-give:2G.SUBJ:PFV CLS-five bottle
 ‘give me five bottles’

Classifier + numeral expressions can also act as anaphora or indefinite pronouns, as in (58):

- (58) *u:tsá ʔawáʔ tʃa:tín*
u:tsá ʔawá-ʔ tʃa:-tín
 that make-PFV CLS-one
 ‘some person (other than me) did that’

Like adjectives, classifier expressions can also function as adverbs:

- (59) a. *a:maqʔtín naktʃaspitapa:lá:*
a:maqʔ-tín na-ik-tʃaspita-pa:lá:
 ADD-CLS-one FUT-1SG.SUBJ-return-RPT
 ‘I’ll come back again’

- b. *aʔtu: nakɬó:* (Pt.)
aʔ-tu: na-ik-ɬawá
 CLS-two FUT-1SG.SUBJ-make
 ‘I’ll break it in two’

Although proficient speakers consistently agree on the correct classifier to use with a particular noun, there is a tendency to replace all of these with the generic *aʔ-* in casual speech and many younger speakers are unable to produce the less frequent forms without prompting.

2.3. Verb

One of the most striking features of UNT is the complexity of its verbal morphology. In addition to inflection for person and number of syntactic arguments (2.3.1), verbs are marked for a variety of tense (2.3.2) and aspectual categories (2.3.3), as well as for three moods (2.3.4). UNT also has a wide range of valency-altering morphemes (2.3.5), including a variety of causatives and applicatives. As in other Totonacan languages, bodyparts are frequently incorporated into verb stems as prefixes (2.3.6), performing a wide range of grammatical functions. Finally, UNT has a number of quasi-inflectional affixes expressing a range of adverb-like meanings (2.3.7), and it makes use of deverbalizing morphemes to form participle-like expressions from transitive and intransitive verbs.

2.3.1. Person-affixes

UNT has a rich system of person markers which include both prefixes and suffixes, the latter of which interact in complex ways with the aspectual markers described in Section 2.3.3 below. Subject-affixes (Section 2.3.1.1) mark agreement for person and number of subject, while object-affixes (Section 2.3.1.2) distinguish only person, number of object being marked with a separate morpheme. In addition, Totonac verbs take special inflections for indefinite actors, discussed in Section 2.3.1.3 below.

2.3.1.1. Subject-markers

Verbs are inflected for the number and person of subjects with the elements in Table 9:

	SG	PL
1	ik-	(ik-) -w
2	—	-tit
3	∅	ta-

Table 9: UNT subject-markers

No single marker for second-person singular subjects is shown here because, as in all Totonacan languages, the second person is highly variable and often irregular. In general, the realization of the second-person singular subjects depends on the conjugation class and aspect of the particular verb. Thus, for the verbs *taʃtú* ‘leave’ (Class 1), *tuks-* ‘hit’ (Class 2a), *tʃan* ‘plant’ (Class 2b) and *laʔtsín* ‘see’ (Class 3), we have the following second-singular forms:

	IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
Class 1	taʃtúya	táʃtu	taʃtuní:ta	taʃtupá:
Class 2a	túksa	túksti	tuksní:ta	tukspá:
Class 2b	tʃána	tʃánti	tʃaní:ta	tʃampá:
Class 3	laʔtsína	laʔtsi	laʔtsiní:ta	laʔtsimpá:

Table 10: Second-person subject forms

The second-singular subject markers in this table are variously: 1) laryngealization and shortening of the vowel of the imperfective aspect suffix, $-(y)a$: (Class 1 and 2b); 2) leftward shift of stress (Class 1 and 3 perfective); 3) loss of the final-n and final-laryngealization (Class 3 perfective); and 4) cumulative expression with the perfective (Class 2a and b), perfect (all classes), and progressive morphemes (all classes), the latter also involving the use of the suppletive second person form of the progressive (see Section 2.3.3.4 below). Suppletion is also found in both the second-person singular and plural of a relatively large number of verbs, particularly those based—historically or synchronically—on the verbs *an* ‘go’ and *min* ‘come’, whose second-person forms are shown in Table 11:

	IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
SG	pína	pit	piní:ta	pimpá:
PL	pina:tít	pintít	piní:ta:ntít	pimpá:na:ntít
SG	tána	tət	taní:ta	tampá:
PL	tana:tít	tatít	taní:ta:ntít	tampá:na:ntít

Table 11: Second-person forms for *an* ‘come’ and *min* ‘go’

Other common verbs with irregular second-person forms are *tfa:n* ‘arrive there’ (IMPF:SG *tʃipína*, PL *tʃipina:tít*), *tʃin* ‘arrive here’ (IMPF:SG *tʃitána*, PL *tʃitana:tít*), *ʒeʃmát-* ‘hear, understand’ (IMPF:SG *ʒeʃpáta*, PL, *ʒeʃpata:tít*), and verbs based on these stems.

Another notable feature of the UNT person-marking system is the presence of the exclusive/inclusive distinction in the first-person plural, illustrated in (60):

- (60) (a) iktúksa
 ik–tuks–a
 1SG.SUBJ–hit–IMPF
 ‘I hit him’
- (b) tuksyá:uw
 tuks–ya:–w
 hit–IMPF–1PL.SUBJ
 ‘we_{INC} hit him’
- (c) iktuksyá:uw
 ik–tuks–ya:–w
 1SG.SUBJ–hit–IMPF–1PL.SUBJ
 ‘we_{EXC} hit him’

The distinction between the two first-person plurals is marked by the presence of the first-person singular prefix in the exclusive verbform. Note also the morphophonemic interaction between the first-person plural suffix, underlying *-w*, and the imperfective marker, *-ya:*, which creates what is essentially an extra-long /au/ diphthong with a de-voiced final portion. This ending is realized in informal speech in Patla as simply [a:ʌ].

2.3.1.2. Object-markers

The object person-markers are shown in Table 12:

1	2	3
kin-	-n	Ø

Table 12: UNT object-markers

Unlike subject-markers, object-markers make no distinction for number. Object plurality is marked using the object-plural prefix *ka:-*, resulting in forms such as those in (61):

- (61) *tuksá:n* ‘he hits you’ *ka:tuksá:n* ‘he hits you guys’ *kinka:tuksá:n* ‘he hits us’
tatuksá:n ‘they hit you’ *ka:tatuksá:n* ‘they hit you guys’ *kinka:tatuksá:n* ‘they hit us’

In the absence of a specific first-person plural object marker, UNT makes use of a combination of the first-person object prefix (*kin-*), the second-person object suffix (*-n*), and the plural object prefix (*ka:-*). UNT does not allow the co-occurrence of the plural-object and third-person plural subject prefixes in clauses with third person subject and object, as in (62):

- (62) a. *tsamá: ma:skuxu:nunín ka:ma:wí:skuxnín*
tsamá: ma:skuxu:nū-nín ka:-ma:-wa-í: skuxnĭ-n
 that foreman-PL PL.OBJ-CS-eat-CS municipal.agent-PL
 ‘the municipal agents feed the foremen’
- b. *tsamá: ma:skuxu:nunín tama:wí:skuxnín*
tsamá: ma:skuxu:nū-nín ta-ma:-wa-í: skuxnĭ-n
 that foreman-PL 3PL.SUBJ-CS-eat-CS municipal.agent-PL
 ‘the municipal agents fed the foremen’
- c. **tsamá: ma:skuxu:nunín tama:wí:skuxnín*
tsamá: ma:skuxu:nū-nín ka:-ta-ma:-wa-í: skuxnĭ-n
 that foreman-PL PL.OBJ-3PL.SUBJ-CS-eat-CS municipal.agent-PL
 *‘the municipal agents fed the foremen’

In sentences with both third-person plural subjects and third-person plural objects, speakers may choose to indicate the plurality of one or the other, but not both. The choice seems to be governed by issues of topicality and focus, with the more salient of the two arguments controlling verbal agreement.

An additional complication in the marking of object plurality arises in those verb forms in which both subject and object are non-third persons and one or both of these are plural. In these cases, speakers use special verb forms which are three-way ambiguous, given in (64):

- (63) (a) *ika:túksnĭ*
ik-ka:-tuks-nĭ
 1P.SUBJ-PL.OBJ-hit-2OBJ:PFV
 ‘I hit you guys’ or ‘we_{EXC} hit you’ or ‘we_{EXC} hit you guys’
- (b) *kila:túkswĭ*
kin-la:-tuks-wĭ
 1OBJ-RCP-hit-1PL.SUBJ:PFV
 ‘you hit us’ or ‘you guys hit us’ or ‘you guys hit me’

In the example in (63a) with first person subjects and second person objects, the form is that expected for the reading ‘I hit you guys’; in the second example in (b) with second person subjects and first person objects, the verb uses an idiosyncratic form involving the first-person object prefix and the reciprocal suffix *la:-*. Both of these verb forms are discussed in more detail in Beck (2001).

2.3.1.3. Indefinite actors

In addition to the inflections for subjects illustrated above, UNT also has special inflections for verbs whose actors are indefinite, non-specific, or non-referential. These forms combine ordinary person morphology with the suffix *-kan* according to the pattern in Table 13:

	1	2	3
SG	<i>kintukskán</i>	<i>tukskáŋa</i>	<i>tukskán</i>
PL	—	—	<i>ka:tukskán</i>

Table 13: Indefinite actor paradigm (imperfective aspect \sqrt{tuks} ‘hit’)

Indefinite actor forms are open to two interpretations—action by an indefinite or generic actor or actors (\approx the impersonal “they” in English) or the reflexive, giving the form *kintukskán* either the reading ‘they_{IDF} hit me’ or ‘I hit myself’. Under neither interpretation is it possible to combine *-kan* with the first-person or second-person plural. The indefinite actor suffix is used with all tenses and interacts with the aspect suffixes to give the forms in Table 14:

IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
<i>tukskán</i>	<i>túkska</i>	<i>tukskanĭ:</i>	<i>tuksmá:kə</i>

Table 14: Indefinite actor aspectual paradigm

The indefinite actor marker can also appear in reciprocal forms (*la:tukskán* ‘they_{IMP} hit each other’ — cf. *tala:túksa* ‘they hit each other’) and on intransitive verbs (*ní:kə* ‘they died’).

Formally, *-kan* combines with the object person-markers in the first-person and third-person — thus approximating a subjectless passive — and with subject markers in the second person. Second persons seem to be actual syntactic subjects of these expressions, rather than the indefinite actors, as shown by the sentence in (64):

- (64) *kit ikle:nkutún pero ʔe: wiʃ ma:məʔtaʔaʃni:pá:kə*
kit ik-le:n-kutún pero ʔe: wiʃ ma:-məʔtaʔaʃ-ni:-pá:-kə
 I 1SG.SUBJ-carry-DSD but and you CS-guard-CS-PRG:2SUBJ-IDF
 ‘I want to take it, but now they’re making you guard it’

The sentence in (64) shows a verb referring to an event with a second-person undergoer in the progressive aspect, and the verb takes the progressive aspectual form *-pa:* (rather than the form *ma:*- shown in Table 14 above) which signals agreement with a second-person subject. While first- and third-person forms of the progressive show no agreement for person, they do show agreement for number, as shown in (65) (see Section 2.3.3.4 for further discussion of progressive forms):

- (65) a. *tamusu:m̩a:ná:ɬ*
 ta-musu:-m̩a:-ná:ɬ
 3PL.SUBJ-kiss-PRG-PL.ST
 ‘they are kissing her/them’
- b. *kinka:musu:má:k̩a*
 ka:-musu:-má:-k̩a
 PL.OBJ-kiss-PRG-IDF
 ‘they_{IDF} are kissing them’

The progressive morpheme in (65a) takes the plural marker *-na:*, agreeing in number with its plural subject, whereas the form in (b) with a third-person plural undergoer and an indefinite actor takes the singular form of the aspectual marker, indicating that the subject of this verb is not the plural *ka:*-. The different syntactic status given to second- versus first- and third-persons seems to indicate that there is a person-hierarchy at work here, and that the indefinite actor might be best analyzed as a low-ranking fourth person category which is prohibited from being syntactic subject in clauses with a second-person undergoer.

2.3.2. Tense

Tense-marking in UNT is relatively straightforward and involves few morphophonemic complications. The verb is inflected for one of three tenses, as shown in Table 15:

	PRESENT	PAST	FUTURE
1SG	<i>iktaftú</i>	<i>ɬaktaftú</i>	<i>naiktaftú</i>
2SG	<i>taftúya</i>	<i>iftaftúya</i>	<i>nataftúya</i>
3SG	<i>taftú</i>	<i>iftaftú</i>	<i>nataftú</i>
1PL.EXC	<i>iktaftuyá:uw</i>	<i>ɬaktaftuyá:uw</i>	<i>naiktaftuyá:uw</i>
1PL.INC	<i>taftuyá:uw</i>	<i>iftaftuyá:uw</i>	<i>nataftuyá:uw</i>
2PL	<i>taftuyá:tít</i>	<i>iftaftuyá:tít</i>	<i>nataftuyá:tít</i>
3PL	<i>tataftú</i>	<i>iftataftú</i>	<i>natataftú</i>

Table 15: Tense paradigms (*√taftú* ‘leave’)

As shown in Table 15, the present tense is non-marked, while the past takes the prefix *if-* and the future takes the prefix *na-*. These prefixes are relatively inert morphologically, although the past-tense prefix interacts with the first-person subject prefix, *ik-*, to become *ɬak-*, while the future forms of the first-person singular and plural exclusive are usually realized as *nak-*.

Of the twelve possible combinations of tense and aspect in the UNT verb, only the eight shown in Table 16 are actually realized:

	IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
PRESENT	✓	✓	✓	✓
PAST	✓	*	✓	✓
FUTURE	✓	*	*	*

Table 16: Permissible tense-aspect combinations

The present tense is freely combinable with all the aspects, while the future tense can only be realized in the imperfective. The past tense combines with all of the aspects except the perfective, the combination of the past-tense prefix and the perfective suffix being the formal realization of the counterfactual mood (2.3.3.5).

2.3.3. Aspect

Verbs in UNT distinguish two major aspectual inflection classes — active and stative. Active verbs show inflection for four aspectual categories — imperfective, perfective, perfect, and progressive — while stative verbs have only imperfective and inchoative forms. The following sections will begin with the aspectual inflection of active verbs, and stative verbs will not be dealt with until Section 2.3.3.5 below.

Aspect on active verbs is expressed by suffixes which interact morphophonemically both with the stem and with the person-markers shown in Section 2.3.1 above. These interactions divide UNT verbs in three sub-classes according to the forms they take in the perfective and imperfective aspects. The membership of these sub-classes can be predicted largely on phonological grounds. Class 1 and Class 2 stems are C- and V-final, respectively, and Class 2 is subdivided into Class 2a (C-final) and Class 2b (*n*-final) stems. Class 3 contains all verbs ending, synchronically or diachronically, in the detransitive suffix *-nVn* (Section 2.3.5.3) and an idiosyncratic group of *n*-final stems. This class is a retention of an older pan-Totonacan pattern which divided verbs into C-final, V-final, and *n*-final classes, and the regularization of *n*-final stems into Class 2 represents an important UNT innovation that sets it off from its sister languages. The specific characteristics of each inflection class are discussed in the context of each of the aspects.

2.3.3.1. Imperfective

Imperfective aspect in UNT corresponds in its meaning very closely to the category as defined in Comrie (1976) and Dahl (1985), and is used to refer to on-going, incipient, and habitual events in the present tense, past habitual events or past events construed as incomplete or temporally unbounded, and to all events in the future. It is marked with the suffix *-ya:*, which has the allomorphs *-ya*, *-a*, and \emptyset , depending on the inflection class of the verb and the person/number of the subject and object. The paradigm for intransitive verbs and transitive verbs with third-person singular objects is shown in Table 17. The allomorphy of the imperfective suffix appears to be the result (at least diachronically) of a morphophonemically conditioned process of syncope which deletes *-ya:* unless it is “protected” by some other morpheme such as a subject suffix (*taftuyá:uw* ‘we leave’) or an object -marker (*musu:yá:n* ‘s/he kisses you’). The persistence of *-a* in Class 2 and 3 (consonant-final) stems is likely due to the overall preference of UNT, all other things being equal, for CV syllable-structure.

	Class 1 $\sqrt{taftú}$ ‘leave’	Class 2a \sqrt{paf} ‘bathe’	Class 2b $\sqrt{tʃan}$ ‘plant’	Class 3 $\sqrt{laʔtsín}$ ‘see’
1SG	iktaftú	ikpáfa	iktʃán	iklaʔtsín
2SG	taftúya	páfa	tʃána	laʔtsína
3SG	taftú	páfa	tʃán	laʔtsín
1PL.EXC	iktaftuyá:uw	ikpafá:uw	iktʃaná:uw	iklaʔtsiná:uw
1PL.INC	taftuyá:uw	pafá:uw	tʃaná:uw	laʔtsiná:uw
2PL	taftuyá:tít	pafá:tít	tʃána:tít	laʔtsína:tít
3PL	tataftú	tapáfa	tatʃán	talaʔtsín

Table 17: Imperfective aspectual paradigms

The imperfective suffix interacts with the person-markers as shown in Table 18, which shows the full transitive paradigm for a Class 1 verb. Transitive inflection for Classes 2 and 3 is essentially the same, except for the elision of the /y/ in the aspect marker following the stem-final consonant (hence, *ka:laʔtsiná:n* ‘s/he sees you’, etc.).

	singular objects		
	1	2	3
1SG	—	ikmusu:yá:n	ikmusú:’
2SG	kimusú:ya	—	musú:ya
3SG	kimusú:	musu:yá:n	musú:
1PL.EXC	—	ika:musú:n	ikmusu:yá:uw
1PL.INC	—	—	musu:yá:uw
2PL	kila:musu:yá:uw	—	musu:ya:tít
3PL	kintamusú:	tamusu:yá:n	tamusú:ʔ
	plural objects		
1SG	—	ika:musú:n	ika:musú:
2SG	kila:musu:yá:uw	—	ka:musú:ya
3SG	kinka:musu:yá:n	ka:musu:yá:n	ka:musú:
1PL.EXC	—	ika:musú:n	ika:musu:yá:uw
1PL.INC	—	—	ka:musu:yá:uw
2PL	kila:musu:yá:uw	—	ka:musu:ya:tít
3PL	kinka:tamusu:yá:n	ka:tamusu:yá:n	tamusu:yá:n

Table 18: Imperfective transitive forms ($\sqrt{musú}$: ‘kiss someone’)

2.3.3.2. Perfective

Like the imperfective, the perfective aspect is fairly typical in comparison with perfective morphemes in other languages, being used mainly to refer to completed events in the past or recent past (hence, its consistent glossing into Spanish as a preterit). Although the perfective aspect is incompatible the future-tense inflection, it can be used to refer to projected future events when these are viewed as a temporally-bounded process, as in (66):

- (66) xa: ma:púpu:, ʃkutánlĭ
 xa: ma:-púpu-u: ʃkután-**lĭ**
 NEG CS-boil:2SG.SUBJ:PFV-CS boil-PFV
 ‘don’t boil it, it goes sour!’

Some verbs, such as *ʃtatá:* ‘sleep’ can be used in the perfective aspect to refer to a temporally non-bounded or incomplete state, giving an inceptive reading:

- (67) kaks tawí:la, ʃtata:ʃtsá
 kaks ta-wí:la ʃtata:-**ʃ**=tsá
 quietly INCH-sit:2SG.SUBJ sleep-PFV=now
 ‘be quiet! he’s asleep now’

Perfective aspect is also the most common aspectual inflection used in imperatives and other constructions with the optative mood (Section 2.3.3.5).

The perfective paradigms are the most varied of the UNT aspectual paradigms and are based on the suffix *-lĭ*. Unlike the other aspectual suffixes, the perfective appears to follow suffixal person-markers rather than to precede them. Paradigms of intransitive verbs and transitive verbs with third-person singular objects for the three classes are given in Table 19:

	Class 1 <i>√taʃtú</i> ‘leave’	Class 2a <i>√paʃ-</i> ‘bathe’	Class 2b <i>√tʃʌn</i> ‘plant’	Class 3 <i>√laʃtsín</i> ‘see’
1SG	iktaʃtúʃ	ikpáʃlĭ	iktʃʌnlĭ	iklaʃtsíʃ
2SG	táʃtu	páʃtĭ	tʃʌntĭ	láʃtsĭ
3SG	taʃtúʃ	páʃlĭ	tʃʌnlĭ	laʃtsíʃ
1PL.EXC	iktaʃtúw	ikpáʃwĭ	iktʃʌnwĭ	iklaʃtsíuw
1PL.INC	taʃtúw	paʃwĭ	tʃʌnwĭ	laʃtsíuw
2PL	taʃtutít	paʃtít	tʃʌntít	laʃtsintít
3PL	tataʃtúʃ	tapáʃlĭ	tatʃʌnlĭ	taláʃtsíʃ

Table 19: Perfective aspectual paradigms

Of particular note here is the variability of the second-singular subject marker, realized either as *-tĭ* (Class 2) or as a leftward stress shift (Class 1) or a leftward stress-shift, deletion of the stem-final nasal, and laryngealization (Class 3). As seen in this table, the perfective aspect is the aspect that most strongly differentiates the three inflection classes. The transitive paradigms for the three inflection classes are given in Tables 20, 21, and 22 below:

	singular objects		
	1	2	3
1SG	—	ikmusú:n	ikmusú:ɬ
2SG	kimúsu	—	músu
3SG	kimusú:ɬ	musú:n	musú:ɬ
1PL.EXC	—	ika:musú:n	ikmusú:w
1PL.INC	—	—	musú:w
2PL	kila:musú:w	—	musu:tít
3PL	kintamusú:ɬ	tamusú:n	tamusú:ɬ

	plural objects		
1SG	—	ika:musú:n	ika:musú:ɬ
2SG	kila:musu:w	—	ka:músu
3SG	kinka:musú:n	ka:musú:n	ka:musú:ɬ
1PL.EXC	—	ika:musú:n	ika:musú:w
1PL.INC	—	—	ka:musú:w
2PL	kila:musú:w	—	ka:musu:tít
3PL	kinka:tamusú:n	ka:tamusún	tamusúɬ

Table 20: Class 1 perfective transitive forms (*√musú*: ‘kiss someone’)

As in the Class 1 intransitive forms, the basic form of the perfective suffix in Table 20 is [-ɬ], most likely derived from the full form of the perfective suffix, [-li], seen in the Class 2 forms, through two morphophonemic processes. The first of these is a process of syncope creating a closed final syllable. The same process is observed in the formation of plural nouns (Section 2.1.1) and the distribution of the allomorphs of the deverbative suffix in instrumental nominalization (Section 2.3.8.4). The second process involved is a word-final devoicing process which applies — at least on the phonetic level — in a number of environments in UNT to vowels and approximants; this acts to change the now word-final [-l] to the voiceless [ɬ]. This gives us the derivation [musú:li] > [musú:l] > [musú:ɬ]. These processes apply to the perfective suffix in all persons and is triggered by the suffix’s absolute final position (as opposed to other aspectual suffixes, which precede the person-affixes and so are in final position only in the third-person and first-person singular). Additional morphophonemic processes at work in this paradigm include a process of simplification of consonant clusters disallowed by UNT phonotactics. The first-person plural subject forms, for example, are the result of the simplification of a potential [wɬ] cluster ([-w] + [-ɬ] > [-w]). The second-person object forms come from simplification of [nɬ] ([-n] + [-ɬ] > [-n]), and the second-person plural subject form could come from simplification of [-tɬ] ([-tit] + [-ɬ] > [-tit]). As always, the second-person singular form is mysterious, although it involves a combination of leftward stress-shift and final laryngealization which is typical of the UNT second-person in other verb forms.

The Class 2 perfective transitive paradigm is given in Table 21:

	singular objects		
	1	2	3
1SG	—	iktúksnĭ	iktúkslĭ
2SG	kintúkstĭ	—	túkstĭ
3SG	kintúkslĭ	túksnĭ	túkslĭ
1PL.EXC	—	ika:túksnĭ	iktúkswĭ
1PL.INC	—	—	túkswĭ
2PL	kila:túkswĭ	—	tukstít
3PL	kintatúkslĭ	tatúksnĭ	tatúkslĭ
	plural objects		
1SG	—	ika:túksnĭ	ika:túkslĭ
2SG	kila:túkswĭ	—	ka:túkstĭ
3SG	kinka:túksnĭ	ka:túksnĭ	ka:túkslĭ
1PL.EXC	—	ika:túksnĭ	ika:túkswĭ
1PL.INC	—	—	ka:túkswĭ
2PL	kila:túkswĭ	—	ka:tukstít
3PL	kinka:tatúksnĭ	ka:tatúksnĭ	tatúkslĭ

Table 21: Class 2 perfective transitive forms (\sqrt{tuks} ‘hit something’)

This paradigm contains the full form of the perfective suffix, [-lĭ], which is protected from the morphophonemic processes described in the previous paragraph by a phonotactic constraint banning word-final consonant clusters (thus ruling out hypothetical forms such as **tuksl* or **tuksł*). The remaining forms (with the exception of the second-person subject forms) can be explained in terms of cluster simplification processes. Thus, the first-person plural subject forms are the result of a reduction of a [wł] cluster ([-w] + [-lĭ] > [-wĭ]) and the second-person object forms from the reduction of [nl] ([-n] + [-lĭ] > [-nĭ]). The second-person subject forms, on the other hand, appear to make use of a suppletive form of the second-person, [-t]. The form of the second-person singular may still involve [tl] cluster simplification ([-t] + [-lĭ] > [-tĭ]), but the second-person plural subject marker seems either to replace the perfective suffix or to cause its loss following the pattern found in the Class 1 paradigm.

The Class 3 perfective paradigm is given in Table 22 below. As in the imperfective, the Class 3 perfective resembles the Class 1 paradigm, although it is complicated by the interaction of the person-markers with the stem-final /n/. One result of the interaction of the stem-final consonant and the second-person object suffix, -n, is homophony between perfective forms with second-person objects and imperfective forms with third-person objects — hence, *iklqʔtsín* ‘I see him/her/it’ or ‘I saw you’; *lqʔtsín* ‘s/he sees him/her/it’ or ‘s/he sees you’; *talqʔtsín* ‘they see him/her/it’ or ‘they see you’. Disambiguation is, of course, usually not a problem in context.

singular objects			
	1	2	3
1SG	—	ikl̥aʔtsín	ikl̥aʔtsíɸ
2SG	kil̥aʔtsj	—	l̥aʔtsj
3SG	kil̥aʔtsíɸ	l̥aʔtsín	l̥aʔtsíɸ
1PL.EXC	—	ika:l̥aʔtsín	ikl̥aʔtsíuw
1PL.INC	—	—	l̥aʔtsíuw
2PL	kila:l̥aʔtsíuw	—	l̥aʔtsintít
3PL	kintal̥aʔtsíɸ	tal̥aʔtsín	tal̥aʔtsíɸ
plural objects			
1SG	—	ika:l̥aʔtsín	ika:l̥aʔtsíɸ
2SG	kila:l̥aʔtsíuw	—	ka:l̥aʔtsj
3SG	kinka:l̥aʔtsín	ka:l̥aʔtsín	ka:l̥aʔtsíɸ
1PL.EXC	—	ika:l̥aʔtsín	ika:l̥aʔtsíuw
1PL.INC	—	—	ka:l̥aʔtsíuw
2PL	kila:l̥aʔtsíuw	—	ka:l̥aʔtsintít
3PL	kinka:tal̥aʔtsín	ka:tal̥aʔtsín	tal̥aʔtsíɸ

Table 22: Class 3 perfective transitive forms ($\sqrt{l̥aʔtsín}$ ‘see something’)

2.3.3.3. Perfect

As in most languages where the category exists, the perfect is used to refer to situations or actions that occurred in the past relative to the speech act (present perfect) or to some point in time in the past (past perfect) to which they are relevant (Dahl 1985). Formally, the perfect paradigm is marked by the suffix *-ni:tan* (with allomorphs *-ni:ta* and *-ni:*) and does not

	Class 1 $\sqrt{taftú}$ ‘leave’	Class 2a \sqrt{paf} - ‘bathe’	Class 2b $\sqrt{tʃan}$ ‘plant’	Class 3 $\sqrt{l̥aʔtsín}$ ‘see’
1SG	iktaftun̥j:	ikpafn̥j:	iktʃan̥j:	ikl̥aʔtsin̥j:
2SG	taftun̥j:ta	pafn̥j:ta	tʃan̥j:ta	l̥aʔtsin̥j:ta
3SG	taftun̥j:	pafn̥j:	tʃan̥j:	l̥aʔtsin̥j:
1PL.EXC	iktaftun̥j:tá:uw	ikpafn̥j:tá:uw	iktʃan̥j:tá:uw	ikl̥aʔtsin̥j:tá:uw
1PL.INC	taftun̥j:tá:uw	pafn̥j:tá:uw	tʃan̥j:tá:uw	l̥aʔtsin̥j:tá:uw
2PL	taftun̥j:ta:ntít	pafn̥j:ta:ntít	tʃan̥j:ta:ntít	l̥aʔtsin̥j:ta:ntít
3PL	tataftun̥j:	tapafn̥j:	tatʃan̥j:	tal̥aʔtsin̥j:

Table 23: Perfect aspectual paradigms

singular objects			
	1	2	3
1SG	—	ikmusu:ni:tán	ikmusu:ni:
2SG	kimusu:ni:tá	—	musu:ni:tá
3SG	kimusu:ni:	musu:ni:tán	musu:ni:
1PL.EXC	—	ika:musu:ni:tán	ikmusu:ni:táuw
1PL.INC	—	—	musu:ni:táuw
2PL	kila:musu:ni:táuw	—	musu:ni:tantít
3PL	kintamusu:ni:	tamusu:ni:tán	tamusu:ni:
plural objects			
1SG	—	ika:musu:ni:tán	ika:musu:ni:
2SG	kila:musu:ni:táuw	—	ka:musu:ni:tá
3SG	kinka: musu:ni:tán	ka:musu:ni:tán	ka:musu:ni:
1PL.EXC	—	ika:musu:ni:tán	ika:musu:ni:táuw
1PL.INC	—	—	ka:musu:ni:táuw
2PL	kila:musu:ni:táuw	—	ka:musu:ni:tantít
3PL	kinka:tamusu:ni:tán	ka:tamusu:ni:tán	tamusu:ni:

Table 24: Perfect transitive forms ($\sqrt{musú}$: ‘kiss someone’)

differentiate the verbal inflection classes. As with the imperfective suffix, the allomorphy of the perfect suffix appears to be the product of a process of syncope which is blocked by the presence of other affixes, the only complete realization of the suffix as *-ni.tan* being found in the second-person plural forms. This pattern is also apparent in the transitive paradigm, which is identical for all three inflection classes, as shown in Table 24 above.

	Class 1 $\sqrt{taftú}$ ‘leave’	Class 2a \sqrt{paf} - ‘bathe’	Class 2b $\sqrt{tʃan}$ ‘plant’	Class 3 $\sqrt{laʔtsín}$ ‘see’
1SG	iktaftumá:ʔ	ikpafmá:ʔ	iktʃámá:ʔ	iklaʔtsimá:ʔ
2SG	taftupá:	pafpá:	tʃampá:	laʔtsimpá:
3SG	taftumá:ʔ	pafmá:ʔ	tʃámá:ʔ	laʔtsimá:ʔ
1PL.EXC	iktaftumá:ná:uw	ikpafmá:ná:uw	iktʃámá:ná:uw	iklaʔtsimá:ná:uw
1PL.INC	taftumá:ná:uw	pafmá:ná:uw	tʃámá:ná:uw	laʔtsimá:ná:uw
2PL	taftupá:na:ntít	pafpá:na:ntít	tʃampá:na:ntít	laʔtsimpá:na:ntít
3PL	tataftumá:ná:ʔ	tapafmá:ná:ʔ	tatʃámá:ná:ʔ	taláʔtsimá:ná:ʔ

Table 25: Progressive aspectual paradigms

2.3.3.4. Progressive

As with the other aspects, the UNT progressive aspect is fairly unremarkable in cross-linguistic terms, being used to express on-going action and states at the time of the speech act (present progressive) or at some time in the past to which the utterance applies (past progressive). The progressive aspectual marker in UNT is based historically on the stative posture verb *ma:ʔ* ‘be lying’ (2.3.3.5). The paradigm for intransitive verbs and verbs with third-person singular objects is shown in Table 25 on the previous page. The two most notable features of the paradigm are the suppletive allomorphy found in the second person and the special plural inflection found in forms of all persons with plural subjects. In the case of second-persons, the progressive morpheme takes the form *-pa:*, also seen in the inflection of the verb *ma:ʔ* itself. Plural subjects of any person require an additional morpheme, *-na:n*, most frequently realized as *-na:ʔ*, also found in the plural forms of other stative posture verbs. An interesting feature of the allomorphy of the plural marker is the fact that the stem final /ʔ/ of *ma:ʔ* persists in the plural form *m̩a:ná:ʔ*. This is evidence that the original form of the stative base *ma:ʔ* (and other posture verbs) may have included the perfective morpheme *-ʔ*, a hypothesis supported by the form of the indefinite-actor suffix used with progressives (*-ka*, see Table 14 above). Plural-subject forms also show laryngealization of the first vowel in the base form of the morpheme (i.e. *musu:má:ʔ* ‘he is kissing her’ vs. *tamusu:m̩a:ná:ʔ* ‘they are kissing her’). Like the perfect suffix, the progressive morpheme has a certain amount of morphophonemic interaction with the person-suffixes, shown in Table 26. Also like the perfect aspect, the progressive aspectual

	singular objects		
	1	2	3
1SG	—	ikmusu:má:n	ikmusu:má:ʔ
2SG	kimusu:pá:	—	musu:pá:
3SG	kimusu: má:ʔ	musu:má:n	musu:má:ʔ
1PL.EXC	—	ika:musu:má:n	ikmusu:m̩a:ná:uw
1PL.INC	—	—	musu:m̩a:ná:uw
2PL	kila:musu:m̩a:ná:uw	—	musu:p̩a:na:ntít
3PL	kintamusu:m̩a:ná:ʔ	tamusu:m̩a:ná:n	tamusu:m̩a:ná:ʔ
	plural objects		
1SG	—	ika:musu:má:n	ika:musu:má:ʔ
2SG	kila:musu:m̩a:ná:uw	—	ka:musu:pá:
3SG	kinka:musu:m̩a:ná:n	ka:musu:má:n	ka:musu:má:ʔ
1PL.EXC	—	ika:musu:má:n	ika:musu:m̩a:ná:uw
1PL.INC	—	—	ka:musu:m̩a:ná:uw
2PL	kila:musu:m̩a:ná:uw	—	ka:musu:p̩a:na:ntít
3PL	kinka:tamusu:m̩a:ná:n	ka:tamusu:m̩a:ná:n	tamusu:m̩a:ná:ʔ

Table 26: Progressive transitive forms ($\sqrt{\text{musú}}$: ‘kiss someone’)

inflections are essentially the same for all three inflection classes of active verb, barring the assimilation of the final /n/ of Class 2b and Class 3 verbs to the initial nasal of the suffix.

2.3.3.5. Stative verbs

In addition to the large class of active verbs, Upper Necaxa also has a smaller class of stative verbs which are distinctive both in their syntactic distribution and their aspectual inflections. The class of stative verbs contains two sub-classes — a) a set of verbs with a locative meaning derived by a combination of bodypart-prefixes and a small group of bound roots; and b) a closed set consisting of four posture verbs *wi:t* ‘sit’, *ya:t* ‘stand’, *ma:t* ‘lie’, and *waká:t* ‘be high’ plus those verbs derived from these roots through affixation and compounding.

Ordinary stative verbs are fully inflected for all three tenses, take the same person-markers as do active verbs, and may be transitive or intransitive, as in (68):

- (68) a. *ikaʔanú: aʔasliwít*
ik-*aʔa*-*nú:* *aʔasliwít*
 1SG.SUBJ-ear-in earring
 ‘I’m wearing earrings’
- b. *ifʔełnú: cable*
if-*ʔeł*-*nú:* *cable*
 PST-mouth-in cable
 ‘the cable was unplugged’
- c. *kimpeʔstutawáka*
kim-*peʔstu*-*wáka*
 1OBJ-shoulder-be.high:2SUBJ
 ‘you have me on your shoulders’

Unlike active verbs, ordinary stative verbs can also act as adverbs in a sentence, appearing immediately before the verb without inflection:

- (69) *xa: ʔełnú: kamaʔstéʔti*
xa: ʔeł-nú: ka-maʔstéʔ-ti
 NEG mouth-in OPT-leave-2SG.SUBJ:PFV
 ‘don’t leave it plugged in!’

The most notable difference between stative and active verbs, however, lies in their aspectual inflections. Because stative verbs denote states without beginning- or end-points, they are inherently imperfective and do not accept inflection for any of the other aspects marked on active forms. Instead, ordinary stative verbs form active verbs by prefixation of *ta-* ‘INCHOATIVE’ and *ma:-* ‘CAUSATIVE’, as shown in (70):

- (70) a. *xa: akstú tsamá: tjiwíf*
xa: ak-stú tsamá: tjiwíf
 NEG head-out this stone
 ‘the rock isn’t sticking out of the ground’

- b. *nataktú iʃtanʔe:ʃéʔ wamá: kǐwǐ*
 na-**ta-ak-ftú** iʃ-tanʔe:ʃéʔ wamá: kǐwǐ
 FUT-INCH-head-out 3PO-roots this tree
 ‘the roots of this tree will come unburied’
- c. *namá:kʃtukán ʃtanʔeʃéʔ kǐwǐ*
 na-**ma:-ak-ftu-kán** iʃ-tanʔeʃéʔ kǐwǐ
 FUT-CS-head-out-IDF 3PO-root tree
 ‘they are going to pull up all the roots of the tree’

The forms in (70a) and (b) are inflectionally identical to active verbs and take all four active aspectual suffixes (e.g. *taktúʃ* ‘it came unburied’, *taktunǐ* ‘it has come unburied’, *taktumá:ʃ* ‘it is coming unburied’) Note also that the causative forms of statives do not require the suffixal portion of the causative circumfix found on active verbs (see Section 2.3.5.1 below).

The stative posture verbs, *wi:ʃ* ‘sit’, *ya:ʃ* ‘stand’, *ma:ʃ* ‘lie’, and *wakáʃ* ‘be high’, differ from ordinary stative in a number of respects. One of these is their person-paradigms, shown in Table 27.

	<i>wi:ʃ</i> ‘sit’	<i>ya:ʃ</i> ‘stand’	<i>ma:ʃ</i> ‘lie’	<i>wakáʃ</i> ‘be high’
1SG	ikwi:ʃ	ikyá:ʃ	ikmá:ʃ	ikwakáʃ
2SG	wí:lǎ	yǎ	pǎ:	wǎkǎ
2SG	wi:ʃ	ya:ʃ	ma:ʃ	wakáʃ
1PL.EXC	ikwi:la:ná:uw	ikya:ná:uw	ikmǎ:ná:uw	ikwakǎná:uw
1PL.INC	wi:la:ná:uw	ya:ná:uw	mǎ:ná:uw	wakǎná:uw
2PL	wi:la:na:ntít	ya:na:ntít	pǎ:na:ntít	wakǎna:ntít
3PL	tawi:laná:ʃ	taya:ná:ʃ	tamǎ:ná:ʃ	tawakǎná:ʃ

Table 27: Stative posture verbs

The most notable feature of these paradigms is the presence of the plural marker, *-na:n*. In other respects, the person-marking of stative posture verbs makes use of the standard subject and object-affixes found in other types of verbs.

Like ordinary statives, stative posture verbs are inherently imperfective. Posture verbs also use the prefix *ta-* to form inchoatives, but the resulting forms remain stative in terms of their inflectional patterns, as shown in (71):

- (71) a. *ʔe:wakáʃ spu:n naktʃík*
ʔe:-wakáʃ spu:n nak=tʃík
 back-be.high bird LOC=house
 ‘the bird is up on the house’
- b. *taʔe:wakáʃ spu:n naktʃík*
ta-ʔe:-wakáʃ spu:n nak=tʃík
 INCH-back-be.high bird LOC=house
 ‘the bird alights on the house’

- c. taʔe:wakánáʔ spu:n naktʃík
ta-ʔe:-waka-na:ʔ spu:n nak=tʃík
 3PL.SUBJ-back-be.high-ST.PL bird LOC=house
 ‘the birds are up on the house’
- d. tataʔe:wakánáʔ spu:n naktʃík
ta-ta-ʔe:-waka-na:ʔ spu:n nak=tʃík
 3PL.SUBJ-INCH-back-be.high-PL.ST bird LOC=house
 ‘the birds alight on the house’
- e. taʔe:tawakáʔ spu:n naktʃík
ta-ʔe:-tawaka-ní: spu:n nak=tʃík
 3PL.SUBJ-back-go.high-PF bird LOC=house
 ‘the birds have alighted on the house’

As seen in these examples, both the basic imperfective form of the verb *wakáʔ* ‘be high’ and its inchoative form *tawakáʔ* ‘get up high’ make use of the stative plural marker *-na:n*. The final form in this set, (71e), represents the active form of the verb which, unlike the stative forms in (a) – (d), accepts the full range of aspectual markings. Unlike other stative verbs which form their active counterparts with the inchoative prefix *ta-*, the four posture verbs have suppletive active forms, shown in Table 28:

stative form	active form
<i>wi:ʔ</i> ‘be sitting’	<i>wi:lá</i> ‘sit down’
<i>ya:ʔ</i> ‘be standing’	<i>ta:yá</i> ‘stand up’
<i>ma:ʔ</i> ‘be lying down’	<i>tamá:</i> ‘lie down’
<i>wakáʔ</i> ‘be high’	<i>tawaká</i> ‘get up high’

Table 28: Active counterparts to stative posture verbs

Two of the stative verbs, *wi:ʔ* ‘be sitting’ and *ya:ʔ* ‘be standing’, also have special transitive forms, *wi:lí:* ‘put something’ and *ya:wá:* ‘stand something up’, respectively; the other two verbs have transitive forms with the causative prefix *ma:-* (Section 2.3.5.1).

In terms of their uses, stative posture verbs are most commonly found in locative expressions corresponding to ‘there are’ or ‘it is’ type sentences in English:

- (72) a. ləʔá: ma:ʔ maʔát xa: ika:wanín
 ləʔá: **ma:ʔ** maʔát xa: ik-ka:-wan-ní-n
 lots lie mushroom where 1SG.SUBJ-PL.OBJ-say-BEN-2OBJ
 ‘there are a lot of mushrooms where I told you guys’
- b. tawakáná:ʔ taʔmá:n ti: ka:putsamá:ka
ta-waka-na:ʔ taʔmá:n ti: ka:-putsa-má:-ka
 3PL.SUBJ-be.high-PL.ST tall HREL PL.OBJ-look.for-PRG-IDF:2SG.SUBJ
 ‘the ones they are looking for are up there’

- c. yá:ʔ matʃí:ta istsastún naktʃík
ya:ʔ matʃí:ta iʃ–tsastún nak=ʔʃík
 stand machete 3PO–corner LOC=house
 ‘the machete is standing in the corner of the house’
- d. ikmakaxikwán xa:sá: wi:ʔ tu: wi:ʔ
 ik–maka–xikwán xa:sá: **wi:ʔ** tu: **wi:ʔ**
 1SG.SUBJ–hand–be.afraid maybe sit NREL sit
 ‘I’m afraid to put my hand in, there might be something there’

The generic choice (that is, the verb that is selected when no particular posture or position is to be expressed) is *wi:ʔ*, which is also used in possessive expressions such as *wi:ʔ kinkawa:yúx* ‘I have a horse’ (lit. ‘there sits my (*kin-*) horse’).

Stative posture verbs are also frequently used as bases for compounding with adverbs and other verbs to get something like a stative-progressive aspectual reading (i.e., ‘sitting/standing/lying/being high doing X’):

- | | | |
|--|---|--|
| (73) <i>wa</i> ‘eat’ + <i>wi:ʔ</i> | > | <i>wawí:ʔ</i> ‘be sitting eating something’ |
| <i>máʔtqʔqʔnán</i> ‘guard’ + <i>wi:ʔ</i> | > | <i>máʔtqʔqʔnawí:ʔ</i> ‘be sitting guarding’ |
| <i>kaʔwán</i> ‘cry’ + <i>ya:ʔ</i> | > | <i>kaʔawayá:ʔ</i> ‘be standing crying’ |
| <i>lqʔʃtoʔó</i> ‘nail’ + <i>wakáʔ</i> | > | <i>lqʔʃtoʔowakáʔ</i> ‘have nailed up’ |
| <i>lqʔas’ó</i> ‘be lit up (face)’ + <i>wi:ʔ</i> | > | <i>lqʔas’owí:ʔ</i> ‘have one’s face lit up’ |
| <i>ʔawá</i> ‘do, make’ + <i>wi:ʔ</i> ‘sit’ | > | <i>ʔawawí:ʔ</i> ‘be seated doing something’ |
| <i>máʔawi:lú</i> ‘whistle’ + <i>ya:ʔ</i> ‘stand’ | > | <i>máʔawí:luyá:ʔ</i> ‘be standing whistling’ |
| <i>kinkamín</i> ‘point here’ + <i>ma:ʔ</i> ‘lie’ | > | <i>kinkamimá:ʔ</i> ‘lie pointing at speaker’ |
| <i>kiʔwán</i> ‘talk’ + <i>wakáʔ</i> ‘be high’ | > | <i>kiʔwawakáʔ</i> ‘be up high talking’ |

These compounds both describe the subject’s literal posture and indicate that the subject is in the state or in the process of performing the action denoted by the active verb (*wi:ʔ* again serving as a generic stative expression). Like their stems, these compounds form the perfective affixing *ta-* ‘INCHOATIVE’ to the posture verb, and substitute the active form of the stative base in order to take other aspectual inflections.

- (74) a. taka:ʃwi:la:ná:ʔ tʃiwíʃ, xa: katitapu:spítli
ta-ka:ʃ-wi:la:-ná:ʔ tʃiwíʃ xa: ka-ti-ta-ʔpu:spít-li
 3PL.SUBJ–well–sit–PL.ST stone NEG OPT–UNR–INCH–turned.over–PFV
 ‘the stones are well-placed, they won’t turn over’
- b. taka:ʃtawi:la:ná:ʔ tʃiwíʃ, xa: katitamáʔawásli
ta-ka:ʃ-ta-wi:la:-ná:ʔ tʃiwíʃ xa: ka-ti-ta-máʔawás-li
 3PL.SUBJ–well–INCH–sit–PL.ST stone NEG OPT–UNR–INCH–fall–PFV
 ‘the stones have been well-placed, they won’t fall’
- c. taka:ʃwi:lá: tʃiwíʃ, xa: katitamáʔawásli
ta-ka:ʃ-wilá tʃiwíʃ xa: ka-ti-ta-máʔawás-li
 3PL.SUBJ–well–sit stone NEG OPT–UNR–INCH–fall–PFV
 ‘the stones are well-placed, they won’t fall’

As noted in Section 2.3.3.4, compounds of active verbs with *ma:ʔ* ‘lie’ have been reanalyzed as progressive aspectual inflection. The inchoative (*tamá:ʔ*) and active (*tamá:*) forms of *ma:ʔ* ‘lie’, however, do appear in aspectual compounds such as that shown in (75):

- (75) kiwaníka tsax kaikatsi:tamá:ɬ
 kin-wan-ní-ka tsax ka-ik-katsi:-**ta-má:ɬ**
 1OBJ-say-BEN-IDF just OPT-1SG.SUBJ-know-INCH-lie
 ‘they told me just so that I would know’

As with the stative posture verbs, the semantic distinction between the stative form in (74a) and the active imperfective form in (74c) or between the form in (75) and the simple progressive form, *katsi:má:ɬ*, is subtle and difficult to capture in English translation.

In addition to stative posture verbs, UNT also forms aspectual compounds using the active verb *wi:li:* ‘put’ (diachronically a transitivized form of *wi:ɬ*). Compounds built on *wi:li:* have a resultative reading, indicating that something has been “put” into the resultant state indicated by the first member of the verbal compound:

- (76) a. póʔtu naka:ʃteʔwi:li:ʔó kilakstín ʔe: xa: maʔtín katika:láʔmíɬ
 póʔtu na-ik-ka:-ʃteʔ-**wi:li:**-ʔó kin-lakstín ʔe:
 all FUT-1SG.SUBJ-PL.OBJ-leave-put-all 1PO-children and

 xa: maʔ-tín ka-ti-ik-ka:-láʔ-mín-ɬ
 NEG CLS-tin OPT-UNR-1SG.SUBJ-PL.OBJ-ALTV-come-PFV
 ‘I’m going to abandon all my children and never come back to them’
- b. kalaktʃukuwí:li: kiní:t, nakmaktʃaá:
 ka-lak-tʃuku-**wí:li:** kiní:t na-ik-mak-tʃaá:
 OPT-DTB-chop-put:2SG.SUBJ:PFV meat FUT-1SG.SUBJ-body-cook
 ‘cut up the meat! I’ll cook it’

The use and formation of these types of complex aspectual expression are complex and subject to a great deal of nuance on the part of the speaker. It is, however, a productive process and forms an important part of the grammar. The limits on it have yet to be explored.

2.3.4. Mood

UNT makes use of three basic modal categories, the optative (Section 2.3.4.1), the unrealized (2.3.4.2), and the counterfactual (2.3.4.3).

2.3.4.1. Optative

The most prevalent mood-marker in UNT is the morpheme *ka-*, which on its own marks the optative mood. Like the tense markers, *ka-* immediately precedes the subject person-prefixes on the verb, although unlike tense affixes, *ka-* can optionally be affixed to preverbal adverbs, as shown in (77):

- (77) a. láʔstónʔ katápa:
 láʔstónʔ **ka-tá-pa:**
 stretched.out OPT-INCH-lie:2SUBJ:PFV
 ‘lie down!’

- b. *ka*ʔstónʔ tápa:
 ka-láʔstónʔ **ta**-pa:
 OPT-stretched.out INCH-lie:2SUBJ:PFV
 ‘lie down!’

It is not clear what, if any, difference in meaning there is between the two positions of *ka*-. To date no examples of *ka*- affixed to adverbs have been found when more than a single adverb is present, nor has *ka*- been found affixed to other pre-verbal elements such as the negative morpheme *xa*.; particles such as *mat* ‘QUOTATIVE’, *tju*: ‘DESPECTATIVE’, or *tji*: ‘how’; or the relative pronouns *ti*: and *tu*..

The most frequent use of *ka*- is in the expression of imperatives, as in (78):

- (78) a. *kalaktjintá jumpé:pj kamáʔni*:
ka-lak-tjintá jumpé:pj **ka**-máʔni:
 OPT-foot-step.on:2SG.SUBJ:PFV cockroach OPT-kill:2SUBJ:PFV
 ‘step on the cockroach and kill it!’
- b. *kama:wáká naktjiwíʃ ʔe nakwi:li:ní*
ka-ma:-wáká nak=tjiwíʃ ʔe: na-ik-wi:li:-ní
 OPT-CS-be.high:2SG.SUBJ:PFV LOC=rock and FUT-1SG.SUBJ-put-BEN
 ‘put them up on the rock and I will hit them!’
- c. *Jatséx kawé: pero kalakapala:tít*
 ja-tséx **ka**-an-e:-w pero **ka**-lakapala:-tít
 DTV-good OPT-go-OBG-1PL.SUBJ but OPT-hurry-2PL.SUBJ
 ‘we should go but hurry up you guys!’
- d. *kalakamusu:tít*
ka-laka-musu:-tít
 OPT-face-kiss-2PL.SUBJ
 ‘you guys kiss him/her!’

It is also used in the formation of negative imperatives, as in (79):

- (79) a. *xa: kaláʔtjénʔe: mirefresco naʔpaʃmín*
 xa: **ka**-láʔtjénʔe: min-refresco na-aʔ-paʃ-mín
 NEG OPT-shake:2SG.SUBJ:PFV 2PO-soft.drink FUT-head-bathe-come
 ‘don’t shake your soft drink, it will bubble over!’
- b. *xa: kasáma: tu:k tjaʔli:má:ɬ natalakjapá:*
 xa: **ka**-sáma: tu: ik-tjaʔli:-má:ɬ na-ta-lakjapá:
 NEG OPT-touch:2SG.SUBJ:PFV NREL 1SG.SUBJ-paint-PRG FUT-INCH-smudge
 ‘don’t touch what I’m painting, it will smudge!’
- c. *xa: ʔeɬnú: kamaʔjtéʔtj*
 xa: ʔeɬ-nú: **ka**-maʔjtéʔ-tj
 NEG mouth-in OPT-leave-2SG.SUBJ:PFV
 ‘don’t leave it plugged in!’

By far the most frequently used aspect in such expressions is the perfective, although this is not the only option (see examples (83b) and (c) below). Another common way of expressing negative imperatives is through the use of the unrealized mood-marker, *ti-* (Section 2.3.4.2).

Another complication found with the use of the optative as an imperative revolves around the reciprocal morpheme, *la:-*, which is used to soften commands with first person objects by effectively turning them into reciprocal expressions (i.e., changing ‘do X to/for me!’ to ‘let’s X to/for each other!’), as in (80):

- (80) a. pus kala:ʃkútʋj naktʋʋʋʋé:
 pus **ka**-la:-ʃkút-ʋj na-ik-tʋʋʋʋé:
 INTJ OPT-RCP-untie-1PL.SUBJ FUT-1SG.SUBJ-pursue
 ‘so untie me then and I’ll go after him’
 (lit. ‘let’s untie each other ...’)
- b. xa: kala:mʋʋní:w, *porque* xa: kit ikwamá:ʃ misandía
 xa: **ka**-la:-mʋʋní:-w porque xa: kit ik-wan-má:ʃ min-sandía
 NEG OPT-RCP-kill-1PL.SUBJ because NEG I 1SG.SUBJ-eat-PRG 2PO-watermelon
 ‘Don’t kill me, I’m not the one who is eating your watermelons!’
 (lit. ‘let’s not kill each other ...’)

Such expressions can be either affirmative or negative and are textually quite frequent, although direct commands with first-person singular objects and second-person singular subjects (*kakiʃkútj* ‘untie me!’) are grammatical. Imperatives with second-person subjects and first-persons objects where one or both of the objects is plural follow the same pattern as transitive verbs in the indicative mood, described in Section 2.3.1.2 above.

In addition to forming imperative expressions with second person subjects, *ka-* can be used with other types of subject to form exhortatives (81a) and to express the speaker’s desire that certain actions be realized (b) or that certain results be achieved (c):

- (81) a. kʋmpa:lá:uw katapa:nú:w wa:tsá
ka-ʋn-pa:lá:-w ka-tapa:nú:-w wa:tsá
 OPT-go-RPT-1PL.SUBJ OPT-get.away-1PL.SUBJ here
 ‘let’s go again, let’s get out of here!’
- b. katamaʋaya:wá:ʃ tsamá: tʃiwíʃ
ka-ta-mʋʋa-ya:wá:-ʃ tsamá: tʃiwíʃ
 OPT-3PL.SUBJ-hand-stand-PFV that rock
 ‘let them lift that rock!’
- c. katama:pa:nú:ʃ tsamá: tʃiwíʃ
ka-ta-ma:pa:nú:-ʃ tsamá: tʃiwíʃ
 OPT-INCH-remove-PFV that rock
 ‘Let that stone be removed!’

Similarly, *ka-* can be used in subordinate clauses to form embedded jussive expressions with subjects of any person, as in (82):

- (82) a. tsax klakaskín kaskúxtj wa:tsá, kapáʋʋtj wamá: tʃiwíʃ
 tsax ik-lakaskín **ka**-skúx-tj wa:tsá **ka**-páʋʋ-tj
 only 1SG.SUBJ-want OPT-work-2SG.SUBJ:PFV here OPT-break-2SG.SUBJ:PFV

wamá: tjiwíj
this rock

‘I just want you to work here, to break this rock’

- b. kiwaní mat kit kaika:wáɬ tsamá: sandía
kin-wan-ní mat kit **ka-ik-ka:-wá-ɬ** tsamá: sandía
1OBJ-say-BEN QTV I OPT-1SG.SUBJ-PL.OBJ-eat-PFV that watermelon
‘she tells me to eat these watermelons’

- c. u:tsá klakaskín, u:tsá kaka:lé:ɬ tsamá: kilakstín naksikwalán
u:tsá ik-lakaskín u:tsá **ka-ka:-lé:n-ɬ** tsamá:
that 1SG.SUBJ-want that OPT-PL.OBJ-take-PFV that

kin-lakstín nak=sikwalán
1PO-children LOC=church

‘what I want is that he take my children to the church (to be baptized)’

Another common use of *ka-* is to form purposive clauses like those shown in (83):

- (83) a. ka:ɬawaníɬ misa katali:ləʔspútli
ka:-ɬawa-ní-ɬ misa **ka-ta-li:-ləʔ-spút-li**
PL.OBJ-do-BEN-PFV mass OPT-3PL.SUBJ-INST-die-PFV
‘he performed a mass on them so that they would die’
- b. kamaʔʃtɛʔa ká:ɬtu kas'ontʃitʃínli
ka-məʔʃtɛʔ-a ká:ɬtu **ka-s'on-tʃitʃín-li**
OPT-leave-IMPV broth OPT-luke-get.warm-PFV
‘leave the soup so that it cools off!’
- c. kiwaníka tsax kaikatsi:tamá:ɬ
kin-wan-ní-ka tsax **ka-ik-katsi:-ta-má:ɬ**
1OBJ-say-BEN-IDF just OPT-1SG.SUBJ-know-INCH-lie
‘they told me just so that I would know’

Examples (b) and (c) are examples in the database of optative expressions in a non-perfective aspect. The prefix *ka-* is not compatible with either the past or future tense markers.

2.3.4.2. Unrealized

The unrealized mood-marker, *ti-*, is most generally used to indicate that a particular event, although possible, has not taken place:

- (84) a. pus, xa: məʔtín ika:ləʔtsín paɬ timín la:tanú: naiɬcuartokán
pus xa: məʔ-tín ik-ka:-ləʔtsín paɬ **ti-mín** la:-ta-nú:
INTJ NEG CLS-one 1SG.SUBJ-PL.OBJ-see if UNR-come do-INCH-in

nak=ij-cuarto-kán
FUT-3PO-room-PL.PO

‘well, not once have I seen someone go into their rooms’

- b. xa: tiwáɫ tsamá: tsumaxát
 xa: **ti**-wá-ɫ tsamá: tsumaxát
 NEG UNR-eat-PFV that girl
 ‘it didn’t eat the girl’
- c. pú:la natiwayá:uw wamá: jatáɫtsj moʔó:t
 pú:la na-**ti**-wa-yá:-w wamá: ja-táɫtsj moʔó:t
 first FUT-UNR-eat-IMPF-1PL.SUBJ this DTV-seed palm
 ‘first, we’re going to eat this palm fruit’

The unrealized affix is compatible with both the imperfective (84a) and the perfective (b) aspect and occurs in at least one example in my corpus in the future tense (c). One particularly common use of *ti-* is in combination with the negative particle *xa:* to negate future events, although in these cases the preferred aspect is the perfective, as in (85):

- (85) a. xa:tsá iktimaʔstéʔni, tʃu:wá nakwayá:n
 xa:=tsá ik-**ti**-maʔstéʔ-ni tʃu:wá
 NEG=now 1SG.SUBJ-UNR-leave-2SG.SUBJ:PFV now

 na-ik-wa-yá:-n
 FUT-1SG.SUBJ-eat-IMPF-2OBJ
 ‘I’m not going to let you go, now I’m going to eat you’
- b. xɛ:, xa: kintilé:ɫ
 xɛ: xa: kin-**ti**-lé:n-ɫ
 no NEG 1OBJ-UNR-take-PFV
 ‘no, he won’t take me’

Note, however, that in (84b) above the same combination of *xa:*, *ti-*, and the perfective aspect is used to negate a past event (i.e. ‘X didn’t happen’), the future versus past tense readings being context-dependent.

The combination of *ti-* and the negative particle is also used to form an indirect (polite) imperative construction:

- (86) a. ʔe: xa: tila:maʔni:yá:uw *porque* naktʔʔe:pa:lá:
 ʔe: xa: **ti**-la:-maʔni:-yá:-w *porque* na-ik-tʔʔe:-pa:lá:
 and NEG UNR-RCP-kill-IMPF-1PL.SUBJ *porque* FUT-1SG.SUBJ-pursue-RPT
 ‘don’t kill me, I’ll go after him again!’
- b. xa: titapá:yá wa:tsá *porque* kánáw nakxíku
 xa: **ti**-ta-pá:-yá wa:tsá *porque*
 NEG UNR-INCH-lie-IMPF:2SG.SUBJ here because

 ik-an-á:-w nak=xíku
 1SG.SUBJ-go-IMPF-1PL.SUBJ LOC=Xicotepec
 ‘you’re not going to bed here because we_{EXC} are going to Xicotepec’

The literal meaning of these expressions seems to be ‘we/you are not going to do X’, but in context they have the pragmatic force of commands.

Another use of *ti-* is in the formation of negative questions:

- (87) a. kaláʔtsj xa:k tiwanín?
 ka-láʔtsj xa: ik-ti-wan-ní-n
 OPT-see:2SG.SUBJ:PFV NEG 1SG.SUBJ-UNR-say-BEN-2OBJ
 ‘look! didn’t I tell you?’
- b. xa: katiwáʔ?
 xa: ka-ti-wá-ʔ
 NEG OPT-UNR-eat-PFV
 ‘didn’t he eat?’

ti- also appears in expressions of unrealized/hypothetical conditions, as in (88):

- (88) paʔ xa: kintijoʔóya xa:k téʔ iktiskúxa
 paʔ xa: kin-ti-ʔoʔó-ya xa: ik-ti-an-ʔ
 if NEG 1OBJ-UNR-pay-IMPF:2SG.SUBJ NEG 1SG.SUBJ-UNR-go-PFV
- ik-ti-skúx-a
 1SG.SUBJ-UNR-work-IMPF
- ‘if you don’t pay me I won’t go to work’

To date my corpus does not contain examples of this kind of conditional sentence that do not also contain the negative particle *xa:* as well as *ti-*.

Other conditional expressions are formed by the combination of the negative particle *xa:*, *ti-* and the optative morpheme, *ka-*:

- (89) a. kawé: *porque* páʔ xa: katilakapalá:uw kimpəʔtukán naʔʔsputáuw wa:tsá
 ka-an-é:-w porque páʔ xa: ka-ti-lakapalá:-w
 OPT-go-OBG-1PL.SUBJ because if NEG OPT-UNR-hurry-1PL.SUBJ
- kim-pəʔtu-kán na-naʔʔsput-á:-w wa:tsá
 1PO-all-PL.PO FUT-die-IMPF-1PL.SUBJ here
- ‘let’s go because if we don’t hurry all of us will die here’
- b. xa: katila:məʔʔtəʔwǐ nakli:wi:li:nipa:la:yá:n a:əʔtín kimakán
 xa: ka-ti-la:-məʔʔtəʔ-wǐ
 NEG OPT-UNR-RCP-leave-1PL.SUBJ:PFV
- na-ik-li:-wi:li:-ni-pa:la:-yá:-n a:-əʔ-tín kin-makán
 FUT-1SG.SUBJ-INST-put-BEN-RPT-IMPF-2OBJ ADD-CLS-one 1PO-hand
- ‘if you don’t let me go, I will hit you with my other hand’

The same combination of affixes and the negative particle also yields expressions of unrealized possibilities, as in (90):

- (90) a. xa:tsá katispútlj ka:kiʔtamakúx
 xa:tsá ka-ti-spút-lj ka:-kiʔtamakúx
 NEG=now OPT-UNR-finish-PFV PLC-day
 ‘now the world won’t end’

- b. xa: katima:ǵʔa:ní:ǵ tsamá: animá:ǵ tu: naki:tʃipá tsamá: muǵéku
xa: **ka-ti**-ma:-ǵʔa:n-ní:-ǵ tsamá: animá:ǵ tu: na-ki:-tʃipá
 NEG OPT-UNR-CS-fall-CS-PFV that animal NREL FUT-RT-grab
 tsamá: muǵéku
 that doll
 ‘the animal that is going to come by to grab that doll won’t knock it over’
- c. xa: katikatsí:ǵ tʃi: natsa:layá:uw
xa: **ka-ti**-katsí:-ǵ tʃi: na-tsa:la-yá:-w
 NEG OPT-UNR-know-PFV how FUT-flee-IMPF-1PL.SUBJ
 ‘he won’t know that we fled’
- d. pero s’ǵtakús wiǵ xa: le: katila:lé:uw
 pero s’ǵta=kús wiǵ **xa:** le: **ka-ti**-la:-lé:n-w
 but small=still you NEG do OPT-UNR-RCP-take-1PL.SUBJ
 ‘but you are still a child, you won’t be able to carry me’

Unlike the use of *ti-* on its own (which merely indicates that the event is as yet unrealized), the use of *ti-* plus the optative in the expressions in (90) seems to imply the impossibility, or at least improbability, of the event. The same does not seem to be true of the sentences in (89), although it should be noted that in both cases the conditional clause concerns the actions of second persons. It may mean that the expression of reduced probability when speaking of the future actions of second persons is another politeness strategy.

2.3.4.3. Counterfactual

The combination of the past tense prefix and the perfective aspect yields a counterfactual mood used for things that didn’t happen and which would have changed the current state of affairs had they come to pass:

- (91) a. tu: xa: li:táǵtu, waní, iǵtáǵtu
 tu: xa: li:-táǵtu wan-ní **if-táǵtu**
 NREL NEG INST-out:2SG.SUBJ:PFV say-BEN PST-out:2SG.SUBJ:PFV
 ‘why didn’t you get out! he said to her, if only you had gotten out’
- b. iǵlí:tǵ milakasmú:
if-lí:tǵ min-lakasmú:
 PST-bring:2SG.SUBJ:PFV 2PO-sweetheart
 ‘you should have brought your girlfriend’
- c. ʃli:pu:lakǵku:yú:ǵ ti: wánlǵ
if-li:-pu:lak-ǵku:yú:-ǵ ti: wán-lǵ
 PST-INST-interior-burn-PFV HREL say-PFV
 ‘the one who spoke would have burned his insides with it (a hot poker)’
- d. xa:ǵ kátsi:
xa: **if-kátsi:**
 NEG PST-know:2SG.SUBJ:PFV
 ‘who knows?’ (lit. ‘if only you knew!’)

In (91a), a man is lamenting that his wife didn't heed his advice to leave their home while he was away and was consequently eaten by a cannibal witch. In sentence (b), the speaker is expressing regret that the addressee's fiancé didn't come to a party, while in example (c) a storyteller is underlining the peril faced by one of the characters and offering motivation for that character's agreeing to terms set out by the person carrying the hot poker. The final example is a set expression used when the speaker does not know the answer to a question (possible a calque of the expression *¿quién sabe?* 'who knows?' used in Mexican Spanish in the same situations). Counterfactual expressions are extremely infrequent in narratives and a more in depth examination of them will have to await further elicitation and the transcription of more naturalistic language data.

2.3.5. Valency-altering affixes

UNT has a wide variety of affixes whose syntactic function is to alter the basic valency of verbal stems. These affixes include two causative morphemes (Section 2.3.5.1), four applicatives (2.3.5.2), and two morphemes whose function is to reduce a stem's transitivity (2.3.5.3). Bodypart prefixes can also affect a stem's valency, but discussion of these will be deferred until Section 2.3.6 below.

2.3.5.1. Causatives

UNT has two affixes which fall under this heading, the prefix *məʔa-* 'STIMULUS' and the circumfix *ma:- -ni:* 'CAUSATIVE'.

məʔa- 'STIMULUS' (STM)

The prefix *məʔa-* 'STIMULUS' is added to verbs that denote processes internal to the actor to form expressions in some external event-participant is the stimulus for the process described by the stem, as (92):

- (92) a. tsamá: mu:ʃtúnj məʔaxikwánlj tsamá: ʔawátʃa
 tsamá: mu:ʃtú-nj **məʔa**-xikwán-lj tsamá: ʔawátʃa
 that drown-DVB STM-be.afraid-PFV that boy
 'the drowned person frightened the boy'
- b. tʃitʃinj məʔapáʔa ʃanáʃ
 tʃitʃin-nj **məʔa**-páʔa-a ʃanáʃ
 heat-AGT STM-flower-IMPF flower
 'the sun makes the flowers bloom'
- c. kiməʔali:pu:wanj: tsamá: tsumaxát
 kin-**məʔa**-li:pu:wán-nj: tsamá: tsumaxát
 IOBJ-STM-sad-PF that girl
 'that girl has made me sad'

As shown by example (92c), the actor/stimulus in these sentences is the grammatical subject, while the undergoer is the direct object and is marked on the verb using object-morphology.

Verbs in the current corpus with attested *məʔa-* forms include:

- | | | | |
|------|--------------------------------|---|--|
| (93) | <i>xikwán</i> ‘be afraid’ | > | <i>m̩ʔaxikwán</i> ‘scare someone’ |
| | <i>kún</i> ‘swell’ | > | <i>m̩ʔakún</i> ‘make something swell’ |
| | <i>tsukú</i> ‘start’ | > | <i>m̩ʔatsukú</i> ‘get someone started’ |
| | <i>ʔatfí:</i> ‘be drunk’ | > | <i>m̩ʔaʔatfí:</i> ‘make someone drunk’ |
| | <i>ʔoxonún</i> ‘cough’ | > | <i>m̩ʔaʔoxonún</i> ‘make someone cough’ |
| | <i>li:tsí:n</i> ‘smile, laugh’ | > | <i>m̩ʔali:tsí:n</i> ‘make someone laugh’ |
| | <i>ʔtatá :</i> ‘sleep’ | > | <i>m̩ʔaʔtatá :</i> ‘put someone to sleep’ |
| | <i>pikfnín</i> ‘have an itch’ | > | <i>m̩ʔapikfnín</i> ‘make someone itch’ |
| | <i>sták-</i> ‘grow’ | > | <i>m̩ʔasták-</i> ‘raise or grow something’ |
| | <i>tasá</i> ‘yell’ | > | <i>m̩ʔatasá</i> ‘make someone yell’ |

It is suggestive that *m̩ʔa-* ‘STIMULUS’ is homophonous with one of the combining forms of *makán* ‘hand’ (*maka-*, *m̩ʔa-*), although whether this is more than just coincidence will have to wait for serious reconstructive work on the family.

ma:- -ni: ‘CAUSATIVE’ (CS)

An extremely productive morpheme is the causative circumfix, *ma:- -ni:*, which can be applied to both intransitive and transitive stems augmenting the verb’s valency by one and adding the notion of an external causer to the event denoted by the verb. Some examples of the causatives of intransitive verbs are given in (94):

- (94) a. *kima:ʔka:kní:ya*
kin-ma:-ʔka:k-ní:-ya
 1OBJ-CS-be.hot-CS-IMPV:2SG.SUBJ
 ‘you are making me hot’
- b. *ma:tuxní:ʔ iʃkawa:yúx*
ma:-tux-ní:-ʔ iʃ-kawa:yúx
 CS-run-CS-PFV 3PO-horse
 ‘he made his horse run’
- c. *yu:nu: makawán ʔʔtín stilímpu akʃní ma:ʔi:ni:kán*
yu:nu: maka-wán ʔʔ-tín stilímpu akʃní ma:-ʔi:-ni:-kán
 IDPH hand-say CLS-one top when CS-dance-CS-IDF
 ‘the top whirs when they make it spin’
- d. *kama:s’olú:ni: li:kwá xa: nas’olu:tamá: naktáma*
ka-ma:-s’olú:-ni: li:kwá xa: na-s’olu:-tamá: nak=táma
 OPT-CS-urinate-CS so.that NEG FUT-urinate-bed LOC=bed
 ‘make him pee so he won’t wet the bed’

In these sentences, the causativized verb takes the causer as the subject and realizes the argument that was the subject of the stem as the direct object. Note that the causative suffix, *-ni:*, appears with both consonant (94 a, b) and vowel-final (c, d) stems and is not altered by the quality of the last vowel in the stem.

A number of intransitive stems, however, take a different form of the causative suffix, consisting of a long harmonic vowel without the initial /n/, as in (95):

- (95) a. nakma:mifí: kapéx laʔá: ʃli:tʃítʃi
 na-ik-**ma**:-mif-**i**: kapéx laʔá: if-li:-tʃítʃi
 FUT-1SG.SUBJ-cool-CS coffee lots 3PO-GNC-warm
 ‘I’m going to cool off this coffee, it’s too hot’
- b. ma:ʃneʔé:ʃ tʃitʃiní ʃanát, nastʔampa:lá: takʃtsaxpa:lá:
ma:-ʃneʔ-**é**:ʃ tʃitʃin-ní ʃanát na-stʔan-pa:lá: ta-akʃtsax-pa:lá:
 CS-wilt-CS-PFV heat-AGT flower FUT-revive-RPT INCH-stand.straight-RPT
 ‘the sun wilted the flower, it will revive again, it will stand up again’
- c. ifka:mʔa:ʔpaʃi:kutún tsamá: paléx ʃalán *Monte de Chila*
 if-ka:-**ma**:-aʔ-paʃ-**i**-kutún tsamá: paléx ʃalá nak=Monte.de.Chila
 PST-PL.OBJ-CS-head-bathe-CS-DSD that priest belong.to LOC=Mount.Chila
 ‘the priest from Mount Chila wanted to baptize them’
- d. nakma:yuxu:yá:n, *pero* kit nakwayá:n
 na-ik-**ma**:-yux-**u**:-yá:-n pero kit
 FUT-1SG.SUBJ-CS-go.down-CS-IMPF-2OBJ but I

 na-ik-wa-yá:-n
 FUT-1SG.SUBJ-eat-IMPF-2OBJ
 ‘I’ll get you down, but I’m going to eat you’
- e. ma:ʔosu:má:ʃ pu:ʃún lakama:wakáʃ
ma:-ʔos-**u**:-má:ʃ pu:ʃún laka-ma:-wakáʃ
 CS-fly-CS-PRG mud face-CS-be.high
 ‘he’s splashing mud up on the door’

Unlike the plural and detransitive suffixes, the harmony here is only partial. When the last vowel in the verb stem is /i/ (95a), /e/ (b), or /a/ (c), the causative suffix is realized as /-i:/; otherwise, when the stem vowel is /u/ (d) or /o/ (e), the causative is realized as /-u:/. The same pattern is seen with the vowel-final stems in (96):

- (96) a. nakima:ʔeʃsmáni:kán kinkútʃu
 na-kin-**ma**:-ʔeʃ-smáni:-**i**:kán kin-kútʃu
 FUT-OBJ-CS-mouth-get.accustomed-CS-IDF 1PO-liquor
 ‘they are going to get me used to drinking hard liquor’
- b. ʃtumʃtum katsi:ʔokán tʃi: ma:pupu:kán kapéx
 ʃtum-ʃtum katsi:-ʔo-kán tʃi: **ma**:-pupu-**u**:-kán kapéx
 different-different know-all-IDF how CS-boil-CS-IDF coffee
 ‘everyone knows a different way to prepare coffee’
- c. ma:ʃtatí:ʃkis’átaperoxa:ʃtata:kutún
ma:-ʃtata:-**i**:ʃ kin-s’átʔa pero xa: ʃtata:-kutún
 CS-sleep-CS-PFV child but NEG sleep-DSD
 ‘I put my child to bed but he doesn’t want to sleep’

Note that in (96c), a stem-final /a/ is assimilated to the causative suffix, becoming /i/. The example in (96c) is also interesting in that it shows one of a handful of stems, *ʃtata*: ‘sleep’, that has a form in both *mʔa-* and *ma:-ni*-. The semantic difference between the two types of

causatives is relatively straightforward, *mąʔaʔtatí:* ‘put someone to sleep, make someone sleepy’ expressing the stimulus for the action, and *ma:ʔtatá:* ‘make someone sleep, put someone to bed’ expressing an external cause.

Transitive causatives are also formed using both types of causative suffix, the preferred pattern being the application of the full form, *-ní:*, as in (97):

- (97) a. kit ikl̥ʔmaká:ʔ séra ikma:ʃka:ní:ʔ
 kit ik-l̥ʔ-maká:-ʔ séra ik-ma:-ʃka:-ní:-ʔ
 I 1SG.SUBJ-ALTV-send-PFV bee 1SG.SUBJ-CS-bite-CS-PFV
 ‘I sent bees after him, I made them sting him’
- b. ikma:l̥ʔʃʔaní: kíw̥j̥ kintasákwa
 ik-ma:-l̥ʔʃʔa-ní: kíw̥j̥ kin-tasákwa
 1SG.SUBJ-CS-split-CS tree 1PO-peon
 ‘I made my peon split firewood’
- c. ikma:ʔʃʔsʔawiní:ʔ kinamígo iʃlakasmú
 ik-ma:-ʔʃʔsʔawi-ní:-ʔ kin-amígo iʃ-lakasmú
 1SG.SUBJ-CS-trick-CS-PFV 1PO-friend 3PO-sweetheart
 ‘I made my friend_i’s girlfriend trick him_i’
- d. ka:ma:l̥ʔʔaponʔní: mintʃitʃí kuyúx
 ka:-ma:-l̥ʔʔaponʔ-ní: min-tʃitʃí kuyúx
 PL.OBJ-CS-dig.out-CS 2PO-dog armadillo
 ‘he’s making your dogs dig out the armadillo’
- e. ikma:l̥ʔʔpu:sní:ʔ iʃpeʔén kinkulá:ntu
 ik-ma:-l̥ʔʔpu:s-ní:-ʔ iʃ-peʔén kin-kulá:ntu
 1SG.SUBJ-pluck-CS-PFV 3PO-arm 1PO-cilantro
 ‘I had the leaves plucked off my cilantro’

Again, the full form of the suffix applies to stems that end in both consonants and vowels and resists vowel harmony. A few transitive stems take the short harmonic form of the suffix, which behaves in exactly the way it does with intransitive stems:

- (98) mat tʃi: amá: ma:tʃipi:ní: *campana* ya:ʔ
 mat tʃi: amá: ma:-tʃipa-i:-ní: *campana* ya:ʔ
 QTV how thus CS-grab-CS-PF bell stand
 ‘they made him grab onto the bell and stand there’

At this point I have no examples of transitive stems taking the short form of the causative suffix whose last vowel is /u/ or /o/, so it is not certain that this form is actually harmonic when applied to transitive verbs. Given the unpredictable distribution of the suffix in both transitive and intransitive verbs, it is not clear if this is an accidental gap in the data or if there is some underlying diachronic process responsible.

When added to a transitive stem, the causative circumfix creates a ditransitive verb, with the additional argument, the causer of the event, acting as syntactic subject. An unusual characteristic of the UNT causativized verbs, however, is that the argument that corresponds to the subject of the original stem — the causee — is realized as the direct object, as shown in (99):

- (99) a. u:tsá mat ka:ma:li:mini:ɬ kǐwǐ
 u:tsá mat **ka:**-ma:-li:min-ní:-ɬ kǐwǐ
 that QTV PL.OBJ-CS-bring-CS-PFV tree
 ‘that’s why I made them bring the wood’
 *‘that’s why I made him bring the wood (logs)’
- b. ka:ma:slu:ma:ni:kán *bandera* lakstín nakskwéla
ka:-ma:-slu:ma:-ni:-kán bandera lakstín nak=skwéla
 PL.OBJ-CS-gluе-CS-IDF flag children LOC=school
 ‘they make the children glue together flags in school’
- c. *ka:ma:slu:ma:ni:kán *bandera* ʔawátʃa nakskwéla
ka:-ma:-slu:ma:-ni:-kán bandera ʔawátʃa nak=skwéla
 PL.OBJ-CS-gluе-CS-IDF flag boy LOC=school
 *‘they make the boy glue together flags in school’

The verbs in these expressions each bear the plural object marker, *ka:-*. In (99a), the interpretation of the sentence is one where the causee, the unnamed “them,” is plural; the alternate interpretation, where the causee is singular, is rejected by speakers. The next sentence (b) shows singular object agreement with the first-person causee, in spite of the presence of a plural patient/theme. In (c) and (d), we see that the sentence with a plural causee, *lakstín* ‘children’, is acceptable whereas the sentence with a singular causee, *ʔawátʃa* ‘boy’, is not. Further evidence comes from the encoding of first- and second-person causees, which appear as object-markers on the verb:

- (100) a. kinka:ma:pu:su:nu:ní:n ponʔó:s
kin-ka:-ma:-pu:-su:nu:-ní:-n ponʔó:s
 1OBJ-PL.OBJ-CS-inside-inflate-CS-2OBJ balloon
 ‘they made us inflate the balloon’
- b. kit ikle:nkutún, *pero* ʔe: wif ma:mǎʔtaʔaɬni:pá:ka
 kit ik-le:n-kutún pero ʔe: wif ma:-mǎʔtaʔaɬ-ni:-**pá:**-ka
 I 1SG.SUBJ-carry-DSD but and you CS-guard-CS-PRG:2SUBJ-IDF
 ‘I want to take it, but now they’ve sent you here to guard it’

In (100a), the first-person plural causee is marked on the verb with person-clitics (rather than being realized as the independent pronoun, *kinán*), while in (b) the second-person causee, rather than the theme, is realized as the subject of the indefinite actor form of the verb.

UNT causatives are also interesting in that they can be combined with the various applicative affixes (Section 2.3.5.2), in many cases creating verbs with multiple objects:

- (101) a. mat ma:suyu:níɬ ti: ma:wí:
 mat **ma:**-suyu-**u:**-níɬ ti: ma:-wa-í:
 QTV CS-visible-CS-BEN-PFV HREL CS-eat-CS
 ‘he showed it to his wife’ (lit. ‘to the one who feeds him’)
- b. pus tawáɬ u:tsá ika:li:ma:li:mini:ɬ kǐwǐ
 pus ta-wáɬ u:tsá ik-ka:-**li:**-**ma:**-li:min-ní:-ɬ kǐwǐ
 INTJ 3PL.SUBJ-eat-PFV that 1SG.SUBJ-PL.OBJ-INST-CS-bring-CS-PFV tree
 ‘well, they ate him (the burro) that’s why I made them bring the firewood’

- c. tsex tali:ma:panʔe:ní, tamaká:n *cohete*
 tsex ta-**li**:-**ma**:-panʔ-**i**:-**ní**-ɬ ta-maká:n cohete
 good 3PL.SUBJ-INST-CS-explode-BEN-PFV 3PL.SUBJ-send rocket
 ‘they made them explode for him because of it, they fired rockets’

The first example shows a ditransitive verb built from the bound stative stem *suyu* ‘be.visible’ by the addition of the causative — creating the transitive *ma:suyú*: ‘make visible, show something’ — and the applicative suffix, *-ní*. Sentence (b) shows the application of the instrumental prefix, *li:-*, to the causative of the transitive verb *li:mín* ‘bring something’, resulting in a verb with three objects (the object brought, the causee, and the motive). In sentence (c), the addition of both the applicative *-ní* and the instrumental *li:-* to the causative of the intransitive verb *panʔ* ‘explode, burst’, also results in a verb, *li:ma:panʔe:ní* ‘explode something for someone for some reason’ with three objects. Verbs with four objects have also been elicited, although I have not collected any to date that involve the causative circumfix.

In a few cases, the causative circumfix is added to adjectives to form verbs, as in (102):

- (102) a. tʃu:wá, tsamá: kúʃi nama:ɬuwi:yá:uw
 tʃu:wá tsamá: kúʃi na-**ma**:-ɬuwa-**i**:-yá:-w
 now that corn FUT-CS-much-CS-IMPV-1PL.SUBJ
 ‘now we are going to propagate that corn’
- b. akɬkunuku:ʃanát li:ma:ka:ni:kán
 akɬkunuku:-ʃanát li:-**ma**:-ka:ni-**i**:-kán
 magnolia.tree-flower INST-CS-delicious-CS-IDF
 ‘they give it flavour with the magnolia tree flower’

Such forms are uncommon and in all such cases, the causative suffix takes its short form.

Although for active verbs the causative morpheme is realized uniformly as a circumfix, the causative of stative verbs, as noted in Section 2.3.3.5 above, is realized with only the causative prefix, *ma:-*:

- (103) a. nama:ʃtoʔokán ʃtanʔe:ʃéʔ kíwɨ
 na-**ma**:-ak-ʃtu-kán iʃ-tanʔe:ʃéʔ kíwɨ
 FUT-CS-head-out-IDF 3PO-root tree
 ‘they are going to pull up all the roots of the tree’
- b. nakma:ʔtʃó: tsamá: ɬa:mánʔ (Pt.)
 na-ik-**ma**:-aʔ-tʃó: tsamá: ɬa:mánʔ
 FUT-1SG.SUBJ-CS-head-covered that pot
 ‘I’m going to cover the pot’

The fact that the causative prefix appears on its own in such forms is suggestive that, at one stage in the language’s history, the prefix and suffix were separate elements. This hypothesis is supported by a number of forms where the suffix *-ni:/-i:* acts on its own as a transitivizer:

- (104) a. nakpi:ʃka:yuxú: tsamá: puréku
 na-ik-pi:ʃ-ka:-yux-ú: tsamá: puréku
 FUT-1SG.SUBJ-neck-go.down-TRNS that sheep
 ‘I’m going to cut the head off that sheep’

- b. tʃu:nóʃ ki:lá:l bolsa, ʃakli:lku:yu:kutumá:l taki:lʃlitmá:l
 tʃu:nóʃ ki:l-lá:l bolsa ʃak-li:-lku:-yu:-kutun-má:l
 shrivel mouth-do-PFV bag PST:1SG.SUBJ-INST-burn-TRNS-DSD-PRG

ta-ki:l-ʃlit-má:l
 INCH-mouth-fray-PRG

‘the mouth of the bag shriveled up, I wanted to burn it because it was fraying’

- c. ləʔtapa:lí:kə wamá: tʃiʃkú, u:tsá li:ní:l
 ləʔtapa:l-í-kə wamá: tʃiʃkú u:tsá li:-ní:l
 witch-TRNS-IDF this man that INST-die
 ‘they bewitched this man, that’s why he died’

In the first two examples, the suffix appears associated with an intransitive root, *yux-* ‘go.down’ in (a) and *ʃku:* ‘burn’ in (b). The next example shows the suffix attached to nouns, again creating transitive verbs. The same morpheme is probably also diachronically the source of the transitive forms of the stative posture verbs *wi:l* ‘sit’ and *ya:l* ‘stand’ — *wi:lí:* ‘put something’ and *ya:wá:* ‘stand something’, respectively. There are also a few instances in the database of nouns taking *-ni:* to form intransitive verbs, as in (105):

- (105) ika:taní:uw akʃní ikmə:ʔpafi:ní:l
 ik-ka:ta-ní:-w akʃní ik-ma:-əʔ-paf-i:-ní:l
 1SG.SUBJ-year-TRNS-1PL.SUBJ when 1SG.SUBJ-CS-head-bathe-CS-BEN-PFV
 ‘we had a party when I baptized him’

All of these uses of *-ni:* are fossils and the suffix is not in productive use in the synchronic grammar. There is, however, a potentially cognate suffix, *-li:*, ‘VERBALIZER’ which is added to the infinitive form of borrowed Spanish verbs and is used quite freely (more so in Patla than in Chicontla):

- (106) ka:ʔe:lʃoʔokán tʃiʃkuwín ti: taapoyarlí: iʃcandidato
 ka:-ʔe:l-ʃoʔo-kán tʃiʃku-wín ti: ta-apoyar-lí: iʃ-candidato
 PL.OBJ-mouth-pay-IDF man-PL HREL 3PL.SUBJ-support-VBL 3PO-candidate
 ‘they promise to pay off the men who support their candidate’

There is also at least one native verb which appears to contain this suffix:

- (107) nakinəʔʃteʔlí:ya
 na-kin-əʔ-ʃteʔ-lí:-ya
 FUT-1OBJ-head-leave-VBL-IMPF:2SG.SUBJ
 ‘you are going to abandon me’

In this case, *-li:* is affixed to the transitive stem, *ʃteʔ-* ‘leave’, without affecting its transitivity.

2.3.5.2. Applicatives

UNT has a number of affixes which add objects to verbs — the suffix *-ní* ‘BENEFACTIVE’ and the prefixes *li:-* ‘INSTRUMENTAL’, *ta:-* ‘COMITATIVE’, and *ləʔ-* ‘ALLATIVE’.

-ní ‘BENEFACTIVE’

The suffix *-ní* adds an object to intransitive and transitive verbs, the new event-participant generally playing the role of beneficiary, maleficiary, recipient, or experiencer:

- (108) a. tsukukana:tʃás’oli:nikánʔe:tsukukántampi:ʃi:kán
 tsuku–kan–a:–tʃá s’oli:–**ní**–kán ʔe: tsuku–kán tampi:–ʃi:–kán
 begin–IDF–IMPF–DST blow–BEN–IDF and begin–IDF base–dance–IDF
 ‘they begin to play for him there and start to dance around below him’
- b. tsex paʃ kiʃoʔoníya tʃi: kli:wán ikmaʃki:yá:n
 tsex paʃ kin–ʃoʔo–**ní**–ya tʃi: ik–li:–wán
 good if 1OBJ–pay–BEN–IMPF:2SG.SUBJ how 1SG.SUBJ–INST–say
 ik–maʃki:–yá:–n
 1SG.SUBJ–give–IMPF–2OBJ
 ‘good, if you pay me what I ask, I’ll give it to you’
- c. kintuksníka kinʔawátʃa
 kin–tuks–**ní**–ka kin–ʔawátʃa
 1OBJ–hit–BEN–IDF 1OBJ–boy
 ‘they hit my son’
- d. tama:wa:níka iʃlúʃu tsamá: ʔawátʃa
 tama:wa:–**ní**–ka iʃ–lúʃu tsamá: ʔawátʃa
 buy–BEN–IDF 3PO–clothes that boy
 ‘they bought the boy his clothes’
- e. wiʃ xa: tu: xikwaníya?
 wiʃ xa: tu: xikwan–**ní**–ya
 you NEG NREL be.afraid–BEN–IMPF:2SG.SUBJ
 ‘aren’t you afraid of anything?’

In addition, *-ní* is also used for the addressee in verbs of speaking:

- (109) a. tʃu:n ma:ntsá tʃu:ntsá kinte:waniʃ wayaya aʃ
 tʃu:n ma:n=tsá tʃu:ntsá kin–te:–wan–**ní**–ʃ wayaya aʃ
 PRT only=now thus 1OBJ–PATH–say–BEN–PFV IDPH go–PFV
 ‘he just came by to say mean things to me and took off’
- b. kiskiníʃ máнку
 kin–skin–**ní**–ʃ máнку
 1OBJ–request–BEN–PFV mango
 ‘he asked me for a mango’

The objects added to the clause by *-ní* can also play a number of other related semantic roles, depending on the verb in question. In fact, of all the morphemes considered in this section, *-ní* is the least specific as to the semantic role of the new participant, making it in a certain sense a generic applicative as opposed to the other applicative morphemes, which consistently specify the same semantic role for the participant they introduce.

***li:-* ‘INSTRUMENTAL’**

One of the most productive valency-increasing morphemes is the instrumental applicative prefix *li:-*, which adds an object to a clause expressing either an instrument or a motive. The instrumental use of *li:-* is illustrated in (110):

- (110) a. matʃí:ta ʃli:taʃ'o: numá:ʃ
 matʃí:ta ɪʃ-**li:-**taʃ'o:-nun-má:ʃ
 machete PST-INST-stoke-DT-PRG
 ‘he was using the machete for stoking (the fire)’
- b. naki:ma:xo:nikán wamá: ʔaʃwáʔ nakʃká:n nali:ma:ku:tu:kána
 na-ki:-ma:-xo:-ni-kán wamá: ʔaʃwáʔ nak=ʃká:n
 FUT-RT-CS-down.in-BEN-IDF this egg LOC=water

 na-**li:-**ma:-ku:tu:-kán-a
 FUT-INST-CS-up.out-IDF-IMPF:2SG.SUBJ
 ‘they will go put this egg in the water for it (a water-spirit) and cure you with it’
- c. tsex wakán wamá:, tsex li:ʔaskán talakán li:ʔaskán (Ch.)
 tsex wa-kán wamá: tsex **li:-**ʔas-kán talakán **li:-**ʔas-kán
 good eat-IDF this good INST-be.satiated-IDF well INST-be.satiated-IDF
 ‘you can eat this, you will be satisfied by it, you will be very satisfied’

The use of *li:-* to express a motive for an event is shown in (111):

- (111) a. ʎaʔtapaʃí:kə wamá: tʃiʃkú, u:tsá li:ní:ʃ
 ʎaʔtapaʃ-í:-kə wamá: tʃiʃkú u:tsá **li:-**ní:-ʃ
 witch-TRNS-IDF this man that INST-die
 ‘they bewitched this man, that’s why he died’
- b. pus u:tsá ika:li:məʔni:kutún, wan tsamá: ʔawátʃa
 pus u:tsá ik-ka:-**li:-**məʔni:-kutún wan tsamá: ʔawátʃa
 INTJ that 1SG.SUBJ-PL.OBJ-INST-kill-DSD say that boy
 ‘“that’s why I want to kill them,” said the boy’

In most cases, the semantic role of the applicative object added to a particular verb by *li:-* is open to either the instrument or the motive interpretation, depending on context and the referent of the object noun phrase:

- (112) a. li:wi:li:níʃ ɪʃmakán
li:-wi:li:ní-ʃ ɪʃ-makán
 INST-hit-PFV 3PO-hand
 ‘he hit it with his hand’
- b. xa: ʔeʃmáta ʔawátʃa, u:tsá li:wi:li:ní:kə
 xa: ʔeʃmát-a ʔawátʃa u:tsá **li:-**wi:li:ní-kə
 NEG understand-IMPF boy that INST-hit-IDF
 ‘the boy doesn’t obey, that’s why they hit him’

In both of these examples, the *li:-* prefix is added to the verb *wi:li:ní* ‘hit’; in sentence (a) the applicative object is interpreted as an instrument, while in (b) it is interpreted as a motive.

In addition to adding instruments or motives, *li:-* has a few other functions when combined with verbs of different types. When combined with verbs of telic motion, for instance, *li:-* adds an object indicating what has been brought or taken as a result of the movement:

- (113) a. *wamá: tu: tale:m̩á:ná:ɬ kuwésa tsax wakán*
wamá: tu: ta-li:-ǵn-m̩á:-ná:ɬ kuwésa tsax wa-kán
 this NREL 3PL.SUBJ-INST-go-PRG-PL.ST must only eat-IDF
 ‘what they are carrying in their mouths, you must be able to eat it’
- b. *tu: tsa li:tampá: li:xikwaní*
tu: tsa li:-tan-pá: li:-xikwan-ní
 NREL there INST-come:2SUBJ-PRG:2SUBJ INST-be.afraid-BEN
 ‘what you are bringing here is dangerous’
- c. *akʃnǐ tʃa:ɬ ti: i: sandía, mat li:tʃá:ɬ ifli:kán*
akʃnǐ tʃa:n-ɬ ti: i: sandía mat
 when arrive.there-PFV HREL cultivate watermelon QTV

li:-tʃá:n-ɬ if-li:kán
 INST-arrive.there-PFV 3PO-iron
 ‘when the watermelon-farmer got there, she’d brought her shotgun’
- d. *tsex tali:tʃíɬ kǐwǐ*
tsex ta-li:-tʃín-ɬ kǐwǐ
 good 3PL.SUBJ-INST-arrive.here-PFV tree
 ‘they did bring the firewood’

When combined with verbs of speaking, *li:-* either adds an object corresponding to what was spoken or communicated, or adds a topic of communication to the clause:

- (114) a. *xa: talakakatsí:ɬ tu: tsex ifli:tʃiwinán tsamá: kapsnáp*
xa: ta-laka-katsí:-ɬ tu: tsex if-li:-tʃiwinán tsamá: kapsnáp
 NEG 3PL.SUBJ-face-know-PFV NREL good PST-INST-speak that paper
 ‘they didn’t understand what the paper said’
- b. *tsex paɬ kɪʃoʔoníyǎ tʃi: kli:wán ikmaʃki:yá:n*
tsex paɬ kin-ʃoʔo-ní-yǎ tʃi: ik-li:-wán
 good if 1OBJ-pay-BEN-IMPF:2SG.SUBJ how 1SG.SUBJ-INST-say

ik-maʃki:-yá:-n
 1SG.SUBJ-give-IMPF-2OBJ
 ‘good, if you pay me what I ask, I’ll give it to you’
- c. *tʃa:tín puská:t li:ʔawaxnít kili:wán*
tʃa:-tín puská:t li:ʔawaxnít kin-li:-wán
 CLS-one woman horribly 1OBJ-INST-say
 ‘one woman says terrible things about me’

Such expressions are highly lexicalized, and there are a few other verbs in which the applicative object has a completely idiosyncratic semantic role. For the most part, however, the object added by *li:-* follows the pattern shown in (110) and (111) above.

***ta:-* ‘COMITATIVE’ (CMT)**

Another highly productive, although textually less frequent, applicative morpheme is the comitative *ta:-*. When prefixed to a verb stem, *ta:-* adds an object referring to someone who performs the action denoted by the verb in conjunction with the actor/subject, as in (115):

- (115) a. tu: klakaskín nakinta:pína
 tu: ik-lakaskín na-kin-**ta:-**pína
 NREL 1SG.SUBJ-want FUT-1OBJ-CMT-go:2SUBJ:IMPF
 ‘what I want is for you to go with me’
- b. kit tsex nakta:ʔama:nán s’awinǐ, mat wan tsamá: tʃiʃkú
 kit tsex na-ik-**ta:-**ʔama:nán s’awinǐ mat wan tsamá: tʃiʃkú
 I good FUT-1SG.SUBJ-CMT-play devil QTV say that man
 ‘I can play (cards) with the Devil, said the man’
- c. tʃu:wá wamá: kapít kala:ta:ma:ku:tu:yá:uw
 tʃu:wá wamá: ka-pít
 now this OPT-go:2SG.SUBJ:PFV

 ka-la:-**ta:-**ma:-ku:tu:-yá:-w
 OPT-RCP-CMT-CS-up.out-IMPF-1PL.SUBJ
 ‘now go, help me get them out’

The comitative is also a part of a few common lexicalized expressions:

- (116) a. xa: talakaʔí: xa: tata:tawi:lakutún tsamá: *soldado*
 xa: ta-lakaʔí: xa: ta-**ta:-**ta-wi:la-kutún tsamá: soldado
 NEG 3PL.SUBJ-like NEG 3PL.SUBJ-CMT-INCH-sit-DSD that soldier
 ‘they don’t like the soldier, they don’t want to marry him’
- b. iʃka:ta:skúxa li:reyes
 iʃ-ka:-**ta:-**skúx-a li:-reyes
 PST-PL.OBJ-CMT-work-IMPF INST-king
 ‘he worked for kings’
- c. kəna:tʃá ikta:wá wamá: kinkumpaléx *sandía*
 ik-ən-a:-tʃá ik-**ta:-**wá wamá: kin-kumpaléx sandía
 1SG.SUBJ-go-IMPF-DST 1SG.SUBJ-CMT-eat this 1PO-compadre watermelon
 ‘I’m going to go share this watermelon with my *compadre*’

(116a) gives an example of the verb *ta:tawi:lá* ‘marry someone’, which literally means to sit with someone. The sentence in (b) contains the verb *ta:skúx-* ‘work for someone’ (literally, ‘work with someone’), while (c) exemplifies the verb *ta:wá* ‘share some food with someone, invite someone to eat something’ (literally, ‘eat something with someone’).

The comitative can also be added to nouns, giving a reading something like the English nominal prefix *co-*, as in the examples in (117):

- (117) a. ifta:puská:n ka:waní
 if-**ta:**-puská:n ka:-wan-ní
 3PO-CMT-woman:PL PL.OBJ-say
 ‘she said it to the other women’
- b. pus mat tju: tju:ntsá ka:wili:ní fta:lakstín
 pus mat tju: tju:ntsá ka:-wi:li:ní if-**ta:**-lakstín
 INTJ QTV PRT thus PL.OBJ-hit 3PO-CMT-children
 ‘well, he fought just the same with the other children’

In both of these sentences, the use of *ta:-* and the possessive prefix gives a reading of ‘his/her cohort’ or ‘those who are the same as him/her’.

la?- ‘ALLATIVE’ (ALTV)

The prefix *la?* can be affixed to verbs denoting telic or directed motion to add a goal or destination, as in (118):

- (118) a. natfipá naifmakanín akfní nalaʔtʃá:n mupéku tsamá: animá:ʔ
 na-tfipá nak=if-makan-nín akfní na-**la?**-tʃá:n mupéku
 FUT-grab LOC=3PO-hand-PL when FUT-ALTV-arrive.there doll

 tsamá: animá:ʔ
 that animal
 ‘the doll_i will grab the animal_j’s hands when it_j gets to it_i’
- b. ʔe: tju:ntsá talaʔáʔ xa: iftama:ki:ní: iflu:wakán
 tju:ntsá ta-**la?**-án-ʔ xa: if-ta-ma:ki:-ní: if-lu:wa-kán
 thus 3PL.SUBJ-ALTV-go-PFV NEG PST-3PL.SUBJ-keep-PF 3PO-snake-PL.PO
 ‘so they went to where they kept their snake’
- c. ʔtun laʔmakamín ʔe: ʃastáʔa suwá:ʔ
 ʔtun **la?**-maka-mín ʔe: ʃa-stáʔa suwá:ʔ
 IDPH ALTV-hand-come and DTV-unripe sapote
 ‘wham he threw it to him, and (it was) an unripe sapote’
- d. mat tsax laʔtoxo:ma:tʃá ʃka:n tʃi: mat ki:la:má:ʔ
 mat tsax **la?**-toxo:-ma:-tʃá ʃka:n tʃi: mat ki:-la:-má:ʔ
 QTV only ALTV-be.immersed-PRG-DST water how QTV RT-do-PRG
 ‘he went out over the water the way he was doing (swinging)’
- e. ní:ʃ akfní wamá: iflaʔtʃá:n veinticinco de diciembre ifli:tunku:witsá
 akfní wamá: if-**la?**-tʃá:n veinticinco de diciembre if-li:tunku:wi=tsá
 when this PST-ALTV-arrive twenty-five of December 3PO-dawn=now
 ‘when the twenty-fifth of December comes, it is Christmas’

As shown in (118e), *la?* can also be combined with the verb *tʃa:n* ‘arrive there’ to express the arrival of a particular date. On the whole, the allative morpheme seems not to be productive in terms of being applicable to a wide range of stems, but is textually frequent with the set of stem that it does combine with.

2.3.5.3. Valency-reducers

UNT has three affixes that generally affect the valency of a verb stem by reducing it. In two cases, *-nVn* ‘DETRANSITIVIZER’ and *la:-* ‘RECIPROCAL’, the argument suppressed by the verb is an object, while in the third case, *ta-* ‘INCHOATIVE’, it is a subject. All three of these morphemes have a broad range of uses and their syntax and semantics is quite complex; the treatment given here touches only on the most regular and salient aspects of their behaviour.

-nVn ‘DETRANSITIVIZER’ (DT)

The suffix *-nVn* is added to verbs to mark a reduction in semantic transitivity (Hopper & Thompson 1980), in most cases reducing the valency of the stem by one. The suffix has three forms, depending on the last vowel in the stem:

- | | | |
|--|---|---|
| (119) <i>lakamusú:</i> ‘kiss someone’ | > | <i>lakamusu:nún</i> ‘go kissing’ |
| <i>tʃaf-</i> ‘carry something in arms’ | > | <i>tʃafnán</i> ‘carry, carry saint in procession’ |
| <i>sipí:</i> ‘grind something’ | > | <i>sipí:nín</i> ‘grind’ |

Verbs affixed with the detransitive suffix follow the inflectional patterns for Class 3 verbs (Section 2.3.3).

The most common use of the detransitive suffix is to express actions directed towards generalized or unspecified objects, giving an activity or habitual reading to the verb:

- (120) a. *ʃli:ká:nə ǵʔs’awinín*
ʃli:ká:nə ǵʔ-s’awi-nín
 true head-defeat-DT
 ‘it’s true, he does trick (people)’
- b. *tá:tʃa, waní: wíʃ ʔaʃa:wanampá:*
tá:tʃa wan-ní: wíʃ ʔaʃa:-wan-nan-pá:
 INTJ be-PF you steal-eat-DT-PRG:2SUBJ
 ‘aha! it was you stealing and eating!’
- c. *ifməʔtaʔǵá:nán naktʃík*
if-məʔtaʔǵá-nán nak=tʃík
 PST-guard-DT LOC=house
 ‘he stood on guard in the house’

A number of verbs such as *ʔoxonún* ‘cough’ have only detransitive forms, while a handful of verbs have transitive forms with the *-nVn* suffix (e.g. *mǵʔanán* ‘plant by scattering’, from *mǵʔán* ‘throw something’) denoting frequent or important activities based on the action expressed by the root. There are also a number of expressions formed from nouns and adjectives denoting processes or activities strongly associated with the meaning of the root, as in (121):

- (121) a. *iftaǵn tsamá: iftalakasmúnún*
if-ta-ǵn tsamá: if-ta-lakasmu-nún
 PST-3PL.SUBJ-go that PST-3PL.SUBJ-sweetheart-DT
 ‘they went off to be with their boyfriends’

- b. xikslí:wə skuxkán akʃní tʃitʃinín
 xikslí:wə skux-kán akʃní tʃitʃi-**nín**
 difficult work-IDF when warm-DT
 ‘it’s hard to work when the sun is beating down’

In addition, a few motion verbs take *-nVn*, giving them a habitual or non-telic reading:

- (122) a. nakaʃán ta:skuxá:n
 na-ik-ʃn-**nán** ta:-skux-á:-n
 FUT-1SG.SUBJ-go-DT CMT-work-IMPf-2OBJ
 ‘I will go to work for you’
- b. ikáʔspútʃi iktaakʃtununʔóʃ
 ik-áʔspút-ʃi ik-taakʃtu-**nun**-ʔó-ʃ
 1SG.SUBJ-finish-PFV 1SG.SUBJ-climb.hill-DT-all-PFV
 ‘I finished climbing up the hill’

There are also a few verbs that have irregular detransitive forms, the most common being *wayán* ‘eat, dine’ (from *wa* ‘eat’) and *tʃana:nán* ‘plant, sow’ (from *tʃan* ‘plant something’):

- (123) a. xa:tsá le: xa: nawayán
 xa:=tsá le: xa: na-wa-**yán**
 NEG=now do NEG FUT-eat-DT
 ‘now he wouldn’t be able to eat’
- b. ʃtaputsama:ná:ʃ ʃatséya tiyá antsá xa: tsex natatʃana:nán
 iʃ-ta-putsa-ma:-ná:ʃ ʃa-tséya tiyá antsá xa:
 PST-3PL.SUBJ-look.for-PRG-PL.ST DTV-good land there where

 tsex na-ta-tʃana:n-**nán**
 good FUT-3PL.SUBJ-plant-DT
 ‘they were looking for good land there where they could plant’

When affixed to a transitive verb, the detransitive suffix typically suppresses the direct object. When affixed to ditransitive verbs, the suffix seems to suppress the affected object — that is, a patient or a benefactive:

- (124) a. tsamá: tʃiʃkú ma:taxí:ʃ ʔoʃkitsís tsamá: puská:t
 tsamá: tʃiʃkú ma:taxí:-ʃ ʔoʃ-kitsís tsamá: puská:t
 that man charge-PFV CLS-five that woman
 ‘that man charged the woman five pesos’
- b. kima:taxi:ma:ʃtsá iʃtumí:n tu:k lakle:ní:
 kin-ma:taxi:-ma:ʃ=tsá iʃ-tumí:n tu: ik-lakle:n-ní:
 1OBJ-charge-PRG=now 3PO-money NREL 1SG.SUBJ-owe-PF
 ‘he is charging me the money I owed him’
- c. tsamá: tʃiʃkú ma:taxi:nín ʔoʃkitsís
 tsamá: tʃiʃkú ma:taxi:-**nín** ʔoʃ-kitsís
 that man charge-DT CLS-five
 ‘that man charges five pesos’

The detransitive suffix is also compatible with the indefinite actor suffix:

- (125) ma:ntsá xa: sta:nankán la:wí:ʔ ʔóta xa:tsá ʔnskúxa naiʔlá
 ma:n=tsá xa: sta:-**nan**-kán la:-wí:ʔ ʔót-a xa:=tsá
 only=now where sell-DT-IDF do-stand drink-IMPF NEG=now
 ʔn-skúx-a na=iʔ-lá
 go-work-IMPF LOC=3PO-one

‘he’s only there where they’re selling (alcohol), he doesn’t work his land anymore’

Diachronically, it seems likely that the detransitive suffix has its origins in an indefinite patient/theme suffix, perhaps the object-form of a fourth category of grammatical person corresponding to the fourth person marked by *-kan*. In the synchronic grammar, however, *-nVn* approximates a marker of an objectless suppressive voice (Mel’čuk 1993a)

la:- ‘RECIPROCAL’ (RCP)

The reciprocal prefix *la:-* is most commonly used to indicate coreferentiality of the plural subject of a transitive verb with its direct object, as in (126):

- (126) a. la:túkswǐ
la:-túks-wǐ
 RCP-hit-1PL.SUBJ:PFV
 ‘we_{INC} hit each other’
- b. ik-la:túkswǐ
 ik-**la:-**túks-wǐ
 1SG.SUBJ-RCP-hit-1PL.SUBJ:PFV
 ‘we_{EXC} hit each other’
- c. la:tukstít
la:-tuks-tít
 RCP-hit-2PL.SUBJ
 ‘you guys hit each other’
- d. ta-**la:-**túks-lǐ
 3PL.SUBJ-RCP-hit-PFV
 ‘they hit each other’
- e. **la:-**túks-ka
 RCP-hit-IDF
 ‘they_{IDF} hit each other’

There are also a number of verbs where the reciprocal marker indicates a mutual relation between syntactic objects. These seem to be derived from transitive stative bases and show the following derivational pattern:

- (127) a. iʔpeʔʔstóʔa kintʔík mintʔík
 iʔ-peʔʔ-stóʔ-a kin-tʔík min-tʔík
 PST-arm-joined-IMPF 1PO-house 2PO-house
 ‘my house was right next to your house’

- b. *la:tapeʔstóʔa kintʃiknikán*
la:-ta-peʔ-stóʔ-a *kin-tʃik-nj-kán*
 RCP-INCH-arm-joined-IMPF 1PO-house-PL-PL.PO
 ‘our houses were built right next to each other’
- c. *nasta:kán, la:ma:peʔstóʔwi:li:kanj: papaya*
na-sta:-kán *la:-ma:-peʔ-stóʔ-wi:li:-kan-nj:* *papaya*
 FUT-sell-IDF RCP-CS-arm-joined-put-IDF-PF *papaya*
 ‘they are going to sell the papayas, they’ve stacked them on top of one another’

The first example shows a transitive clause based on the stative verb *peʔstóʔ* ‘be beside’. Application of the reciprocal prefix to this verb results in the expression in (b), which has a plural subject and no overt object (the absence of plural subject morphology in this example is likely due to the inanimacy of the subject). The example in (c) shows the causative of the stative base, *ma:peʔstóʔ* ‘put beside’ in its resultative form compounded with the verb *wi:li:* ‘put’ (see Section 2.3.3.5 above). In this sentence, *la:-* indicates that the objects are in a mutual relation one to the other.

As noted in Section 2.3.1.2, the reciprocal prefix also functions as part of the transitive subject-object paradigm, appearing in verb forms such as (128) in which the subject is second person, the object is first person, and one or both is plural:

- (128) *kila:túkswi*
kin-la:-tuks-wi
 1OBJ-RCP-hit-1PL.SUBJ:PFV
 ‘you_{SG} hit us’ or ‘you guys hit us’ or ‘you guys hit me’

The *la:-* prefix is also used to soften imperative expressions with first-person objects:

- (129) a. *kila:ki:tasati:níuw*
ki-la:-ki:-tasati:-ní-w
 1OBJ-RCP-RT-call-BEN-1PL.SUBJ
 ‘go call him for me’ (lit. ‘you_{SG/PL} go call him for me/us’)
- b. *pus ka-la:-ʃkút-wi na-k-tóʔóé:*
pus *ka-la:-ʃkút-wi* *na-ik-tóʔóé:*
 INTJ OPT-RCP-untie-1PL.SUBJ:PFV FUT-1SG.SUBJ-pursue
 ‘so untie me then and I’ll go after him’
 (lit. ‘so let’s untie each other and I’ll go after him’)

Although regular imperative forms (e.g., *kakiʃkúti* ‘untie me!’) are perfectly grammatical and attested, the preference, particularly in narratives, seems to be for the forms with *la:-* shown in (130). Similarly, UNT speakers make use of the reciprocal marker to avoid direct expressions of obligation of hearer to speaker, or negative affectedness of speaker by hearer:

- (130) a. *tʃi: lí:wə la:wanij:táuw nala:majki:ya:uw?*
tʃi: lí:wə *la:-wa-ni-nj:tá-w* *na-la:-majki:-ya:-w?*
 how intent RCP-say-BEN-PF-1PL.SUBJ FUT-RCP-give-IMPF-1PL.SUBJ
 ‘so why did you say you would give her to me?’
 (lit. ‘so why did we say to each other we would give her to each other?’)

- b. xa:tsá ali:stá:n la:s'awiuwtsá
 xa:=tsá ali:stá:n **la:**s'awi-w=tsá
 NEG=now after RCP-defeat-1PL.SUBJ=now
 'not now, after you've beaten me' (lit. 'not now, after we've defeated each other')

In the first of these sentences, the winner of a bet is responding to the loser's lament that he has lost his wife in their poker game; in the next sentence (from the same story), the loser is reassuring the winner that he will not renege on their agreement. In both cases, the reciprocal marker seems to be used to soften expressions that might imply that the hearer has some sort of obligation either financial (payment of a debt) or social (apology or reparation) to the speaker. These uses of *la:-* are discussed in more detail in Beck (2000).

ta- 'INCHOATIVE' (INCH)

The prefix *ta-* 'INCHOATIVE' has a wide range of uses, many of which seem quite well-removed from its aspectual sense, illustrated in Section 2.3.3.5 above for stative and stative posture verbs and here in (131) for the active stem *mąʔtaʔáʔ*- 'guard, watch over':

- (131) a. xa: le: tʃi: la:yáuw, *porque* tsamá: mintá:tą kinka:mąʔtaʔáʔmá:n
 xa: le: tʃi: la:~yá:~w *porque* tsamá: min-tá:tą
 NEG do how do-IMPF-1PL.SUBJ because that 2PO-father

kin-ka:~**mąʔtaʔáʔ**~má:~n
 1OBJ-PL.OBJ-guard-PRG-2OBJ

'there's no way to do it because your father is watching us'

- b. mąʔʃteʔa tamaʔtaʔáʔlį tsamá: *sandía*
 mąʔʃteʔ-a **ta-mąʔtaʔáʔ**-lį tsamá: sandía
 let.go-IMPF INCH-guard-PFV that watermelon
 'he left it (there) and set himself to guard the watermelons'

As with stative verbs, the addition of the *ta-* prefix gives an inchoative reading. Also like stative verbs, the transitivity of the root *mąʔtaʔáʔ*- 'guard, watch over' remains unaffected by the presence of the prefix. This pattern, where *ta-* functions only as an aspectual marker, seems to be restricted to those stems denoting actions of low semantic transitivity (Hopper & Thompson 1980) which do not include the notion of causation on the part of the subject.

More commonly, the presence of *ta-* reduces the valency of a transitive active stem, giving a reflexive-like reading, as in (132):

- (132) a. Longino lakaswí:klį Reyes
 Longino **laka-swí:k**-lį Reyes
 Longino face-scrape-PFV Reyes
 'Longino shaved Reyes'
- b. iktalakaswi:klitsá
 ik-**ta-laka-swí:k**-lį=tsá
 1SG.SUBJ-INCH-face-scrape-PFV=now
 'I've shaved myself'

- c. kutʃu:nú nakutʃu:yá:n
 kutʃu:-nú na-**kutʃu**:-yá:-n
 cure-AGT FUT-cure-IMPF-2OBJ
 ‘the medicine man will cure you’
- d. ʃkiʃtsukút ʃtakuwi:ní Patla ʃamexikánu, ʔe: wanikutun páʃmə tu: li:takutʃukán
 iʃ-kiʃ-tukú-ut iʃ-takuwi:ní Patla ʃa-mexikánu
 3PO-mouth-begin-NM 3PO-name Patla DTV-Nahuatl

 ʔe: wan-ni-kutun páʃmə tu: li:-**ta-kutʃu**-kán
 and say-BEN-DSD plants NREL INST-INCH-cure-IDF

 ‘the origin of the name of Patla is Nahuatl and means “plants with which you cure yourself”’
- e. tsukúʃ mat páʔʃa tsamá: tʃiwíʃ
 tsukú-ʃ mat **páʔʃ**-a tsamá: tʃiwíʃ
 begin-PFV QTV break-IMPF that rock
 ‘he began to smash the rock’
- f. paʃ natapáʔʃa minkiʃtʃúxpí, pus, naka:ʃlawapa:la:yá:uw
 paʃ na-**ta-páʔʃ**-a min-kiʃtʃúxpí pus na-ka:ʃlawapa-la:yá:-w
 if FUT-INCH-break-IMPF 2PO-beak INTJ FUT-fix-RPT-IMPF-1PL.SUBJ
 ‘if your beak breaks, well, we will fix it’

The sense of these uses seems to be that the subject (the object of the unaffixed form) comes into the state that would result from the action. In the first two examples, the reading is more or less reflexive, although the notion of agency (the actor directly and willfully affecting it-self) is somewhat less in (132d) than in (b). The third example, however, is clearly non-agentive, giving a decausative or anti-causative reading to the event.

The same pattern is seen with transitive verbs of non-translational motion, as in (133):

- (133) a. iʃpuská:t lakla:ní ʃpá:n ʔe: li:míʃ napi:likán
 iʃ-puská:t lakla:-ní iʃ-pá:n ʔe: li:mín-ʃ na-**pi:li**-kán
 3PO-woman be.broken-BEN 3PO-stomach and bring-PFV FUT-roll-IDF
 ‘his wife has a problem with her stomach and she came so that they will roll her’
- b. tapi:limá:ʃ páʃnǐ nakpu:ʃún
ta-pi:li-má:ʃ páʃnǐ nak=pu:ʃún
 INCH-roll-PRG pig LOC=mud
 ‘the pig is rolling around in the mud’
- c. kistiwi má:ʃ kimpúʃky
 kin-**stiwi**-má:ʃ kin-púʃky
 1OBJ-swing-PRG 1PO-older.brother
 ‘my brother is swinging me’
- d. pus xa: le: ikyúxa, *porque* iktastiwi má:ʃ
 pus xa: le: ik-yúx-a *porque* ik-**ta-stiwi**-ma:ʃ
 INTJ NEG do 1SG.SUBJ-go.down-IMPF because 1SG.SUBJ-INCH-swing-PRG
 ‘well, I can’t come down because I’m swinging’

In these examples, the primary function of the prefix seems to be the reduction of transitivity rather than the marking of inchoative aspect. The same is true of expressions referring to physical injuries:

- (134) a. *fla kinte:tanʔsta:yá:ɬ kintsɔʔosmu:yóʔli*
fla kin-te:-tanʔsta:yá:-ɬ kin-tsɔʔos-mu:yóʔli-li
 he 1OBJ-PATH-push-PFV 1OBJ-knee-twist-PFV
 ‘he pushed me and twisted my knee’
- b. *tamu:yóʔli istsɔʔósnɪ*
ta-mu:yóʔli-li iʃ-tsɔʔósnɪ
 INCH-twist-PFV 3PO-knee
 ‘his knee twisted’
- c. *iktatsɔʔosmu:yóʔli*
ik-ta-tsɔʔos-mu:yóʔli-li
 1SG.SUBJ-INCH-knee-twist-PFV
 ‘I twisted my knee’

The transitive forms of these verbs express the injured person as direct object (*kin-*) and the causer of the injury (*fla*) as the subject; the damaged bodypart is expressed by a bodypart prefix (*tsɔʔos-*). Affixing *ta-* removes the causer/agent from the expression, allowing either the bodypart itself (b), or the injured party (c) to be realized as the subject.

2.3.6. Bodypart prefixes

Some of the most prolific prefixes in UNT are those prefixes that denote bodyparts. As mentioned in Section 2.1.4, independent expressions of bodyparts and several other paronymics in UNT are formed from a prefixal element and an empty suffix *-n(i)*. The same prefixal elements appear affixed to verbs and have a wide range of functions, the most straightforward being the designation of the affected part of the undergoer of an action, as in (135):

- (135) a. *lanʔs mat lakpa:lásli*
lanʔs mat lakpa:-lás-li
 IDPH QTV cheek-slap-PFV
 ‘whack! he_i hit him_j on the cheek’
- b. *tanya:wá:ɬ li:ʃtɔʔó:n*
tan-ya:wá:-ɬ li:ʃtɔʔó:n
 buttocks-stand-PFV needle
 ‘he_i stuck a needle in his_j buttocks’

In most cases, the bodypart + verb expressions alternate with expressions using the same verb stem and the independent form of the paronymic:

- (136) a. *kʔe:katsán, kakinʔe:ɬítɪ*
ik-ʔe:-katsán ka-kin-ʔe:-ɬít-tɪ
 1SG.SUBJ-back-hurt OPT-1OBJ-back-press-2SG.SUBJ:PFV
 ‘my back hurts, press on it for me!’

- b. kaʎíʎi kinʔé:n
 ka-ʎíʎi-tj kin-ʔe:n
 OPT-press-2SG.SUBJ:PFV 1PO-back
 ‘press on my back!’

In these cases, the direct object of the verb changes from the undergoer whose part is affected, as in (a), to the part itself, as in (b). The identity of the undergoer is expressed by the possessive prefix, which is obligatory (bodyparts being inherently possessed).

While the use of the bodypart prefixes shown in (136) is quite literal, bodyparts in Totonac have been extended from referring to human bodyparts to referring to the parts of animals and inanimate objects. A few examples of the latter case are given in (137):

- (137) a. tsamá: tʃa:kám tʃa:ʎukú: kíwji antsá kama:lá:
 tsamá: tʃa:kám tʃa:-ʎukú: kíwji antsá kama:lá:
 that woodpecker shin-perforate tree there give.birth
 ‘the woodpecker is making a hole in the trunk of the tree, it nests there’
- b. naktʃa:ʎpíta kíwji
 na-ik-tʃa:-ʎpít-a kíwji
 FUT-1SG.SUBJ-shin-carve-IMPF tree
 ‘I’m going to carve the stick’
- c. naklakaʎpíta kimesa
 na-ik-laka-ʎpít-a kin-mesa
 FUT-1SG.SUBJ-face-carve 1PO-table
 ‘I am going to carve the top of my table’
- d. nakpu:ponʔnú:n xa: naʎn ʃká:n
 na-ik-pu:-ponʔnú:n xa: na-ʎn ʃká:n
 FUT-1SG.SUBJ-vagina-dig where FUT-go water
 ‘I will dig a ditch where the water will run’

In (137a), the prefix *tʃa:-* ‘shin’ (also the numeral classifier for three or fewer humans) is used to designate the extended tubular part of the tree (i.e. its trunk), while in (b) it indicates the fact that it is a stick that is being carved as opposed to a block of wood, a log, or a board. When the carving is done on a flat surface such as a tabletop, the prefix *laka-/lqʔa-* ‘face’ is used; more generally, *laka-* is used to designate any flat part of an object that is extended in two dimensions, including walls or the flat surfaces of rocks and cliffs. The last prefix shown (d), *pu:-* ‘vagina’, is a particularly productive one with a highly abstract meaning centred around the notion of containment. Note also that the meaning of the bodypart prefixes in (137) show a decreasing literality of meaning, running the gamut from the designation of a specific location for the action (as in the examples in 136) in (137a) through more general expressions related to the shape of the affected part and finally to a general sense of ‘downwardness’ or ‘containment’ in (d), where the prefix merely indicates that the digging action will create a hollow or channel in which the water will flow. This non-literal use of bodypart prefixes is also seen with stative bases such as those in (138):

- (138) a. nakpu:ku:tu:ʔó wamá: lúʃu nakincaja
 na-ik-pu:-ku:tu:-ʔó wamá: lúʃu nak=kin-caja
 FUT-1SG.SUBJ-vagina-up.out-all this cloth LOC=1PO-box
 ‘I’m going to take all this cloth out of my drawer’

- b. kapú:xo: áʔtsj nakuftáʔ
 ka-**pu:**-xo: áʔtsj nak=kuftáʔ
 OPT-vagina-down.in pillow LOC=sack
 ‘put the pillow in the sack!’
- c. xa: ákʃtú tsamá: tʃiwíʃ
 xa: **ak**-ʃtú tsamá: tʃiwíʃ
 NEG head-out that rock
 ‘the top of the rock isn’t sticking out’

Bodypart expressions are also frequently combined with stative posture verbs to create expressions relating the relative spatial location of two objects, as in (139):

- (139) a. kíwǐ ákpuyá:ʔ sipéx
 kíwǐ **akpu**-yá:ʔ sipéx
 tree crown-stand hill
 ‘the tree is standing on top of the hill’
- b. wamá: tíʔmáx lakawí:ʔ místu
 wamá: tíʔmáx **laka**-wí:ʔ místu
 this blanket face-sit cat
 ‘the cat is sitting on the blanket’
- b. tʃíʃkú ʔe:yá:ʔ tʃík
 tʃíʃkú **ʔe**-yá:ʔ tʃík
 man back-stand house
 ‘the man is on the roof of the house’
- d. líbru taákpui:laná:ʔ mesa
 líbru ta-**akpu**-wi:la-ná:ʔ mesa
 book 3PL.SUBJ-crown-sit-PL.ST table
 ‘the books are on top of the table’

In such expressions the verb stem describes the posture of one of the objects (the figure) while the prefix describes the specific location of the figure with respect to the second object (the ground). The fact that it is the figure, rather than the ground, that is the syntactic subject of such expressions is shown by (d), where it is the book rather than the table which triggers number agreement on the stative base.

As noted in Section 2.3.5 above, bodypart prefixes often have an applicative-like function in that they can add an additional grammatical object to a stem. The prefix that does this most frequently is *pu:-*, which adds an object referring to a container or a container-like instrument, as shown in (140a) and (b). Other bodyparts also function in this way, as in (c) and (d):

- (140) a. maʔa:stsá ʃpu:tʃipakán skí:tj paʔo:ʃú:t ʔe: ʃtapu:wi:li:kán ʃka:n
 maʔa:s=tsá íʃ-**pu:**-tʃipa-kán skí:tj paʔo:ʃú:t ʔe:
 long.ago=now PST-vagina-grab-IDF fish crate and
- íʃ-ta-pu:-wi:li:-kán ʃka:n
 3PO-INCH-put-IDF water
- ‘in the old days they caught fish in crates and fishing weirs’

- b. kintapu:lé:ʔ iʃkuʃtaʔkán
 kin-ta-**pu:**-lé:n-ʔ iʃ-kuʃtaʔ-kán
 1OBJ-3PL.SUBJ-vagina-take-PFV 3PO-sack-PL.PO
 ‘they carried me in their sack’
- c. kimpí:ma:ʃtú ʔtúku
 kin-**pi:**-ma:-ʃtú ʔtúku
 1OBJ-breast-CS-out spine
 ‘he took the spine out of my chest’
- d. tsakát ikta:pu:ləʔmakamíʔ tʃiwíʃ kistánku tsamá: tʃiʃkú
 tsakát ik-ta:-**pu:ləʔ**-maka-mín-ʔ tʃiwíʃ kin-stánku
 sling 1SG.SUBJ-CMT-interior-hand-come-PFV rock 1PO-younger.sibling
- tsamá: tʃiʃkú
 that man

‘my younger brother and I shot that man with a rock using slings’

On the whole, the valency-increasing effect of bodypart prefixes is erratic and seems to be highly lexicalized, restricted to only a particular set of prefix-stem combinations.

2.3.7. Quasi-inflectional affixes

A extremely frequent set of affixes in UNT correspond to what Mel’čuk (1993b) defines as “quasi-inflectional” affixes — that is, affixes which, like inflection, are completely productive and which can in no sense be considered to derive new lexemes, but which at the same time do not express obligatory morphological categories and can not be considered paradigmatic or opposed to each other or to putative zeros. These include a number of affixes that have essentially “adverbial” meanings (*-pa:lá:* ‘REPETITIVE’, *-ʔo* ‘all, completely’) or express manner or direction of motion (*-te:ʔá* ‘AMBULATIVE’, *te:-* ‘in passing’, *ki:-* ‘ROUNDTRIP’, *-tʃá* ‘DISTAL’, *-tʃi* ‘PROXIMATE’), those that have modal functions (*-kutun* ‘DESIDERATIVE’, *-e:* ‘OBLIGATION’), and the prefixes *məʔ-* ‘in the domain of others’, *lak-/ləʔ-* ‘DISTRIBUTIVE’ and *ʔa:-* ‘SIMULTANEOUS’.

2.3.7.1. *-pa:lá:* ‘REPETITIVE’ (RPT)

The suffix *-pa:lá:* is used most frequently to indicate the repetition of an action and immediately precedes the aspect and person-markers:

- (141) a. nakəʔs’awipa:lá: na: kit ma:skí s’awiní
 na-ik-əʔ-s’awi-**pa:lá:** na: kit ma:skí s’awiní
 FUT-1SG.SUBJ-head-defeat-RPT also I even devil
 ‘I’ll trick him even if he is the Devil’
- b. tsa:lapa:la:nj:tsá
 tsa:la-**pa:la:**-nj:=tsá
 flee-RPT-PF=now
 ‘he had fled again’

- c. tamaknu:pá:† wamá: nak=ʃá: tsamá: kǐwǐ tsamá: tʃiʃkú
 ta-maknu:-**pá:†** wamá: nak=ʃá: tsamá: kǐwǐ tsamá: tʃiʃkú
 INCH-put.in-RPT:PFV this LOC=sweat.lodge that tree that man
 ‘the man put wood into the sweatlodge again’
- d. tsamá: tʃatʃaʔát u:tsá wamá:† tsamá: ʃka:n ʔe: naʃtáni taʃtunima:pá:†
 tsamá: tʃatʃaʔát u:tsá wa-má:† tsamá: ʃka:n ʔe: nak=iʃ-táni
 that toad that eat-PRG that water and LOC=3PO-buttocks

ta-ʃtu-ni-ma:-**pá:†**
 INCH-out-BEN-PRG-RPT:PFV

‘the toad, he is drinking the water and it is coming out again through his buttocks’

As is apparent from these examples, the repetitive suffix has two forms, depending on the aspectual suffix it appears with — the full form *pa:lá:* that appears in the imperfective (a) and the perfect (b), and the shorter form, *pa:†*, associated with the perfective (c). Interestingly, it is the form found with the perfective that is used with the progressive, as shown in (d). This seems to indicate that the progressive aspect (and the stative posture verbs that it is based on) may have originally been formed with the perfective suffix. This hypothesis is confirmed by verbforms that combine the repetitive suffix with the progressive or perfective aspect and the indefinite agent suffix, as in (142):

- (142) a. ʔe: tʃu: iʃkawa:yúx maʃki:má:kə, ʔs’awima:pa:lá:kə
 ʔe: tʃu: iʃ-kawa:yúx maʃki:-má:-kə ʔs’awi-ma:-**pa:lá:-kə**
 and PRT 3PO-horse give-PRG-IDF head-defeat-PRG-RPT-IDF
 ‘and they were selling [him] his own horse, they were tricking him again’
- b. antsá maʔni:pa:lá:kə tsamá: táʔo
 antsá maʔni:-**pa:lá:-kə** tsamá: táʔo
 there kill-RPT-IDF that old.woman
 ‘again, they killed the old woman there’

In these examples, the perfective aspect is marked on the indefinite agent suffix (which takes the same form in these two aspects) and the repetitive appears in its full form. Note also that (142a) illustrates a second use of *-pa:lá:*, to mark either the repetition of a statement in discourse or to indicate that the speaker considers the information in the utterance to be given and well-known to the listener.

2.3.7.2. -ʔo ‘all, completely’

The suffix *-ʔo* ‘all, completely’ appears after the verb stem and valence-markers, immediately preceding the aspectual suffixes:

- (143) a. tatsukú† taní: ásta xa: tani:ʔó†
 ta-tsukú-† ta-ní: ásta xa: ta-ni:-**ʔó-†**
 3PL.SUBJ-begin-PFV 3PL.SUBJ-die until where 3PL.SUBJ-die-all-PFV
 ‘they began to die up to the point where they all died’

- b. $\text{ʔe: kimãʔwaʔoʔtsá tsamá: kis'áta}$
 $\text{ʔe: kin-mãʔ-wa-ʔo-ʔ=tsá tsamá: kin-s'áta}$
 and 1OBJ-AJENO-eat-all-PFV=now that 1PO-child
 ‘and it ate all of my children’
- c. $\text{pus mat xú:ta tʃi: mat li:tapu:nu:ʔóʔ ufúm}$
 $\text{pus mat xú:ta tʃi: mat li:-tapu:nu:-ʔó-ʔ ufúm}$
 INTJ QTV INTJ how QTV INST-swarm-all-PFV wasp
 ‘well, they say, he was completely swarmed by wasps’
- d. $\text{kimãʔti:ʔoʔtsá kintumí:n tʃu:wá}$
 $\text{kin-mãʔti:-ʔo-ʔ=tsá kin-tumí:n tʃu:wá}$
 1OBJ-take.away-all-PFV-now 1PO-money now
 ‘now he took all my money’
- e. bueno, tawayanʔóʔ
 $\text{bueno ta-wa-yan-ʔó-ʔ}$
 well 3PL.SUBJ-eat-DT-all-PFV
 ‘well, they ate everything’

As a quantifier *-ʔo* takes scope over the subject in intransitive verbs — (143a) and (c) — and the direct object in transitive verbs — (b) and (d). Note that the suffix has the readings ‘all of some collective plurality’ (a, b), ‘all of some quantity’ (d), and ‘completely, exhaustively’ (c). As shown in (143e), the presence of *-nVn* ‘DETRANSITIVIZER’ is compatible with *ʔo-*.

2.3.7.3. *-te:ʔá* ‘AMBULATIVE’ (AMB)

The suffix *-te:ʔá* has the sense of carrying out an action while moving along a path or performing an action at intervals along that path:

- (144) a. $\text{mat ifxilite:ʔáʔ min}$
 $\text{mat if-xili-te:ʔá-ʔ min}$
 QTV PST-thunder-AMB-PFV come
 ‘they say it came along making a noise like thunder’
- b. $\text{tsumaxát tʃa:tín ixta:tín mat xla mat le:ʔ dulces wi:li:te:ʔáʔ xa: ka:lélʔ xta:tá}$
 $\text{tsumaxát tʃa:-tín ix-ta:tín mat xla mat le:n-ʔ dulces}$
 girl CLS-one 3PO-sibling QTV ʔe QTV take-PFV sweets

 $\text{wi:li:-te:ʔá-ʔ xa: ka:-lé:n-ʔ ix-ta:tá}$
 put-AMB-PFV NEG PL.OBJ-take-PFV 3PO-father
 ‘one of his sisters, she brought sweets and went along dropping them where their father was taking them’
- c. $\text{tʃa:ʔtúnu tʃi: naka:ki:te:te:ʔakán ti: ka:maklate:ʔakán ka:le:maka:nkán pu:tʃiwín}$
 $\text{tʃa:-ʔtúnu tʃi: na-ka:-ki:-te:-te:ʔa-kán ti: ka:-makla-te:ʔa-kán}$
 CLS-each how FUT-PL.OBJ-RT-take -AMB-IDF HREL PL.OBJ-find-AMB-IDF

ka:-le:n-maka:n-kán pu:tjiwín
 PL.OBJ-take-send-IDF townhall

‘each person, they’d go off to get them, those they found they took to the townhall’

- d. xa:tsá tu: ?anán tsamá: sputʔoʔtsá spute:ʔaʔoʔtsá
 xa:=tsá tu: ?anán tsamá: sput-ʔo-ʔ=tsá sput-**te:ʔa**-ʔo-ʔ=tsá
 NEG=now NREL exist that end-all-PFV=now end-AMB-all-PFV=now
 ‘there’s no more of that now, it’s all over, it’s all going along disappearing’

As seen in (144c), *-te:ʔa* can be combined with the directional prefix *ki:-* ‘ROUNDTRIP’ and the suffix *-ʔo* ‘all, completely’, which follows the ambulative in (d). Example (d) is also notable for its figurative use of *-te:ʔa*, where the path of movement is through time rather than space.

2.3.7.4. *te:-* ‘in passing’ (PATH)

The prefix *te:-* appears between the person-markers and the verb stem and carries the meaning that the action designated by the verb was performed by the actor on the way to somewhere else:

- (145) a. ?e: tʃu:wá antsá wif nate:skúxa antsá tʃi: napínə namintʃík
 ?e: tʃu:wá antsá wif na-**te:-**skúx-a antsá tʃi:
 and now there you FUT-PATH-work-IMPF there how

na-pín-a nak=min-tʃík
 FUT-GO:2SUBJ-IMPF:2SUBJ LOC=2PO-house

‘and now you’ll go by there to work as you go home

- b. tʃu:n ma:ntsá tʃu:ntsá kinte:waniʔ wayaya ʔ
 tʃu:n ma:n=tsá tʃu:n=tsá kin-**te:-**wan-ní-ʔ wayaya ʔn-ʔ
 PRT only=now thus 1OBJ-PATH-say-BEN-PFV IDPH go-PFV
 ‘he just came by to say mean things to me and took off’

- c. tʃu:wá nalaʔtsiná:uw akʃní tu: nate:wanikána
 tʃu:wá na-laʔtsin-á:-w akʃní tu:
 now FUT-see-IMPF-1PL.SUBJ when NREL

na-**te:-**wan-ni-kán-a
 FUT-PATH-SAY-BEN-IDF-IMPF:2SUBJ

‘now we’ll see what they come by to tell you’

- d. nakte:məʔstéʔa
 na-ik-**te:-**məʔstéʔ-a
 FUT-1SG.SUBJ-PATH-leave.something-IMPF
 ‘I’ll pass by to drop it off’

Historically, it seems likely that *te:-* has its origins in the word *tej* ‘road’.

2.3.7.5. *ki:-* ‘ROUNDTRIP’ (RT)

In its literal use, the morpheme *ki:-* indicates that an actor set out from one location to perform an action and then returned to the point of origin, as in (146):

- (146) a. *kaki:táya lá:su*
 ka-**ki:-**táya lá:su
 OPT-RT-take:2SUBJ:PFV rope
 ‘go get a rope (and bring it back)!’
- b. *ki:li:paraxaxnanʔón ma:skí wif*
 ik-**ki:-**li:-paraxaxnan-ʔó-n ma:skí wif
 1SG.SUBJ-RT-INST-gamble-all-2OBJ even you
 ‘I went and gambled away everything, even you’

Because of the implication that, if an actor has gone to do something and then returned, the action must be complete, *ki:-* seems to be grammaticalizing as a completive morpheme, appearing in contexts where there is no clearly stated or implied point of origin:

- (147) a. *ki:waniʔ profesor pus kit iktatsóʔli*
ki:-wan-ní-ʔ profesor pus kit ik-ta-tsóʔ-li
 RT-say-BEN-PFV teacher INTJ I 1SG.SUBJ-INCH-write-PFV
 ‘he went to say to the teacher, “I’m enrolling”’
- b. *ki:skínli taskuxút*
ki:-skín-li ta-skux-út
 RT-ask.for-PFV INCH-work-NM
 ‘he went to ask for work’
- c. *antsá ki:tawi:lapá:ʔ tsamá: iʔtsí: tsamá: ʔawátʃa*
 antsá **ki:-**ta-wi:la-pá:ʔ tsamá: iʔ-tsí: tsamá: ʔawátʃa
 there RT-INCH-sit-RPT:PFV that 3PO-mother that boy
 ‘the boy’s mother went back to live there for a time’
- d. *tsamá: kunéxu ki:tawí:ʔ xa: wi:ʔ ʔʔín tsamá: ʔáʔa ní:du*
 tsamá: kunéxu **ki:-**ta-wí:ʔ xa: wi:ʔ ʔʔ-tín tsamá: ʔáʔa ní:du
 that rabbit RT-INCH-sit where sit CLS-one that big nest
 ‘the rabbit went to be where there was a big nest’

In the last of these examples, the notion of ‘return to point of origin’ is actually negated by context, as the rabbit is found in the story at the location of the nest in question. The completive use of *ki:-* is textually frequent, although sentences in isolation with *ki:-* are almost inevitably translated with the literal ‘roundtrip’ meaning.

2.3.7.6. *-tʃá* ‘DISTAL’ (DST)

The suffix *-tʃá* appears near the end of the suffix-string between the aspect and the person-markers, and indicates that the action takes place at a location distant from that of the speaker:

- (148) a. xa: tsex tu: kin_a?spulatfá naʃká:n
 xa: tsex tu: kin-_a?spula-**tfá** nak=ʃka:n
 NEG good NREL I OBJ-happen-DST LOC=water
 ‘it isn’t good what happened to me down by the water’
- b. mat tsax la?toxoxo:ma:tfá ʃka:n tʃi: mat ki:la:má:ʃ
 mat tsax la?toxoxo:-ma:ʃ-**tfá** ʃka:n tʃi: mat ki:-la:-má:ʃ
 QTV only goal-be.immersed-PRG-DST water how QTV RT-do-PRG
 ‘he was reaching the water there the way he was doing it (swinging)’
- c. katapá:nu: nakintéx ka:na:tfá
 ka-tapá:nu: nak-kin-téx ik-_an-a:-**tfá**
 OPT-remove:2SG.SUBJ:PFV LOC=1PO-path 1SG.SUBJ-go-IMPF-DST
 ‘get out of my way! I’m going there’
- d. kiskjinikantfá a?tín regalo
 kin-skjin-ni-kan-**tfá** a?-tín regalo
 I OBJ-ask.for-BEN-IDF-DST CLS-one gift
 ‘they asked me for a gift’
- e. tsukukana:tfás’oli:nikán?e:tsukukántampi:ʃi:kán
 tsuku-kan-a:-**tfá** s’oli:-ni-kán ?e: tsuku-kán tampi:-ʃi:-kán
 begin-IDF-IMPF-DST blow-BEN-IDF and begin-IDF base-dance-IDF
 ‘they begin to play for him there and start to dance around below him’

As shown by examples (148a) and (b), *-tfá* can be used for both distal static locations and for distal goals/destinations. Unlike the other quasi-inflectional affixes, *-tfá* affects the realization of the aspectual suffixes, particularly that of the imperfective aspect maker which is often conserved in environments where it would otherwise be realized as a zero, as in (c) (cf. *ikán* ‘I go’). The suffix also changes the aspectual forms of *-kan* ‘indefinite agent’, as shown in (d) and (e) (compare (148d) and *kiskjinika a?tín regalo* ‘they asked me for a present’, (148e) and *tsukukán s’oli:nikán* ‘they begin to play for him’).

Another unique feature of *-tfá* is that, like the verb *tsa:n* ‘arrive there’ (its probable historical source), it is suppletive in the second person, as shown in (149):

- (149) a. iktfá:n
 ik-**tfá:n**
 1SG.SUBJ-arrive.there
 ‘I arrive there’
- b. tʃipína
tʃipín-a
 arrive.there:2SUBJ-IMPF:2SG.SUBJ
 ‘you arrive there’
- c. iktʃa:ná:uw
 ik-**tʃa:n-á:-w**
 1SG.SUBJ-arrive.there-IMPF-1PL.SUBJ
 ‘we arrive there’
- d. tʃipína
tʃipín-a:-ntít
 arrive.there:2SUBJ-IMPF-2PL.SUBJ
 ‘you guys arrive there’
- e. kile:na:tfá
 kin-li:-_an-a:-**tfá**
 I OBJ-INST-go-IMPF-DST
 ‘he takes me there’
- f. kili:pina:tfí
 kin-li:-pin-á:-**tfí**
 I OBJ-INST-go:2SUBJ-IMPF-DST:2SG.SUBJ
 ‘you take me there’

- g. ikwi:lana:ntfáuw
ik-wi:la-na:n-**tfá**-w
1SG.SUBJ-sit-PL.ST-DST-1PL.SUBJ
'we sit there'
- h. wi:lana:ntfipitít
wi:la-na:n-**tfipi**-tít
sit-PL.ST-DST:2PL.SUBJ-2PL.SUBJ
'you guys sit there'

One result of this suppletion is that second-person singular forms of verbs suffixed with *-tfá* because homophonous with second person forms of verbs suffixed with the next morpheme to be discussed, *-tfí* 'PROXIMAL'.

2.3.7.7. *-tfí* 'PROXIMAL' (PRX)

Like the distal *-tfá*, the proximal *-tfí* is affixed near the end of the suffix string following the aspectual suffixes but preceding the person-markers. As seen in (150a), *-tfí* also affects the realization of the aspect markers, preserving their full, non-truncated forms:

- (150) a. ki:la:nj:tañtjitsá maʔtín
ki:-la:-nj:tañ-**tfí**=tsá maʔ-tín
RT-do-PF-PRX=now CLS-one
'he's already come once'
- b. mat waní, kis'áta, kis'áta katántjī
mat wan-ní kin-s'áta kin-s'áta ka-tán-**tfí**
QTV say-BEN 1PO-child 1PO-child OPT-come:2SUBJ-PRX:2SG.SUBJ
'she said to her, "my child, my child, come here"'
- c. ʔe: tʃu:wá kinki:ta:wátjī
ʔe: tʃu:wá kin-ki:-ta:-wá-**tfí**
and now 1OBJ-RT-CMT-eat-PRX:2SG.SUBJ
'and now you came to give it (food) to me here'

Because of the suppletion shown by *-tfá* 'DISTAL' in the second person, verbs with second person singular subjects taking *-tfí* are homophonous with the same verbs taking *-tfá*. In both cases, the affix loses its accent, the leftward stress-shift and laryngealization of the vowel marking the second person subject.

2.3.7.8. *-kutún* 'DESIDERATIVE' (DSD)

The suffix *-kutún* 'DESIDERATIVE' is added to the stem following any valence-altering suffixes and preceding the aspectual markers to indicate that the subject desires the realization of the action:

- (151) a. tʃu:wá tu: klakaskín, ikle:nkutún ʔe:tín tsamá: kuftáʔ kújī
tʃu:wá tu: ik-lakaskín ik-le:n-**kutún** ʔe:-tín tsamá: kuftáʔ kújī
now NREL 1SG.SUBJ-want 1SG.SUBJ-take-DSD CLS-one that sack corn
'now what I want is, I want to take a sack of corn'
- b. ta:la:kutumá:kā tsamá: coyote
ta:la:-**kutun**-má:-kā tsamá: coyote
shoot-DSD-PRG-IDF that coyote
'he is wanting to shoot the coyote'

- c. xa:tsá le:nkutúnli ma:janán
 xa:=tsá le:n-**ku**tún-li ma:janán
 NEG=now take-DSD-PFV be.ashamed
 ‘he didn’t want to take him anymore, he was ashamed’

2.3.7.9. -e: ‘OBLIGATION’ (OBG)

The morpheme -e: is affixed to the stem preceding the aspectual morphology and conveys the notion that the subject of the sentence is acting out of a sense of necessity or obligation. The affix expresses meanings equivalent to a wide range of English modals, including ‘ought to’, ‘should’, and ‘have to’:

- (152) a. mat natama:e:yá:w tsaláx
 mat na-tama:-**e**:yá:-w tsaláx
 QTV FUT-lie.down-OBG-IMPF-1PL.SUBJ short.time
 ‘we ought to lie down for a while’
- b. klaʔatíʔ kli:tama:wa:é:ʔ
 ik-láʔatí-ʔ ik-li:-tama:wa:-**e**:ʔ
 1SG.SUBJ-like-PFV 1SG.SUBJ-INST-buy-OBG-PFV
 ‘I liked it, that’s why I had to buy it’
- c. tʃu:wá wa:tsá natawakaé:ya
 tʃu:wá wa:tsá na-tawaka-**e**:ya
 now here FUT-go.high-OBG-IMPF:2SG.SUBJ
 ‘now you will have to hang there’

Although it is still productive, this affix is textually infrequent, having been largely replaced by the particle *kwésa* (from Spanish *a fuerza* ‘by force, necessarily’). The most frequent uses of -e: appear to be in fixed expressions such as those shown in (153);

- (153) a. pus, kala:ʔé:ʔ kit nakmaká:n
 pus ka-la:-**e**:ʔ kit na-ik-maká:n
 INTJ OPT-do-OBG-PFV I FUT-1SG.SUBJ-send
 ‘well, whatever happens, I’m going to send him’
- b. kawé: *porque* páʔ xa: katilakapala:yá:uw kimpoʔtukán naʔsputá:uw wa:tsá
 ka-ʔn-**e**:w *porque* páʔ xa: ka-ti-lakapala:-yá:-w
 OPT-go-OBG-1PL.SUBJ because if NEG OPT-UNR-hurry-IMPF-1PL.SUBJ

 kim-poʔtu-kán na-láʔsput-á:-w wa:tsá
 1PO-all-PL.PO FUT-die-IMPF-1PL.SUBJ here

 ‘let’s go, because if we don’t we’re all going to die here’

The fossilized expression *kawé:* shown in (153b) is common in informal speech and has roughly the same import as the expressions “we should get going” or “let’s get moving”.

2.3.7.10. *maqʔ-* ‘in the domain of others’ (AJENO)

The prefix *maqʔ-* is an extremely productive morpheme which adds to the meaning of the verb the notion that the action is performed outside the actor’s normal domain; it is used most

typically when the actor is working on someone's behalf, doing something on another's property, or when the endpoint of the action does not properly belong or pertain to the actor:

- (154) a. *mąʔskúxa* Juan
mąʔ–*skúx*–*a* Juan
 AJENO–work–IMPF Juan
 ‘Juan works for someone else’
- b. *mąʔ ta nú:ɬ* Juan
mąʔ–*ta*–*nú:ɬ* Juan
 AJENO–INCH–into–PFV Juan
 ‘Juan went into someone else’s house’
- c. *mąʔma:pupú: ʃka:n* María
mąʔ–*ma:*–*pup*–*ú:* ʃka:n María
 AJENO–CS–boil–CS water Maria
 ‘Maria boils water in someone else’s house’
- d. *mąʔlaʔatí iʃpuská:t*
mąʔ–*laʔatí* *iʃ*–*puská:t*
 AJENO–like 3PO–woman
 ‘he desires someone else’s wife’

Although *mąʔ*- is reported by Levy (2002a) to have a valency-increasing effect on a number of intransitive verbs in Papantla Totonac, the only such examples I have found in UNT are the idiomatic *mąʔta:yá* ‘help someone’ (from *ta:yá* ‘to stand’) and *mąʔwá* ‘eat something of someone else’s’ (from *wá* ‘eat something’), shown in (155):

- (155) a. *nakwayá:n*
na–*ik*–*wa*–*yá:*–*n*
 FUT–1SG.SUBJ–eat–IMPF–2OBJ
 ‘I am going to eat you’
- b. *ʔe: kin-mąʔ-wa-ʔo-ɬ=tsá tsamá: kin-s’áta*
ʔe: kin-mąʔ–*wa*–*ʔo*–*ɬ=tsá* *tsamá:* *kin*–*s’áta*
 and 1OBJ–AJENO–eat–all–PFV that 1PO–child
 ‘and he ate all of my children on me’

In all other cases, verbs affixed with *mąʔ*- retain the valency of the original stem.

2.3.7.11. *lak-/laʔ*- ‘DISTRIBUTIVE’ (DTB)

The distributive prefix *lak-/laʔ*- is a particularly frequent morpheme, although the range of its meanings seem to be highly lexicalized. It’s most transparent use as a distributive morpheme can be seen in examples such as those in (156), in which the prefix seems to impart the notion of an action’s being performed distributively over a number of objects or collectively to a homogenous group of objects:

- (156) a. *kaləʔsləʔtj wamá: kapéx lí:kwa xa: nalakʔkú:*
 ka-**ləʔ**-sləʔ-tj wamá: kapéx lí:kwa xa: na-**lak**-ʔkú:
 OPT-DTB-stir-2SG.SUBJ.PFV this coffee so.that NEG FUT-DTB-burn
 ‘stir the coffee beans around so that they don’t burn!’
- b. *tsukúʔ mat ləʔʔaká ifməʔsín tsamá: ta:li:ka:na:táʔo*
 tsukú-ʔ mat **ləʔ**-ʔaká if-məʔsín tsamá: ta:li:ka:na:táʔo
 begin-PFV QTV DTB-sharpen 3PO-nails that Talikanataho
 ‘Talikanataho began to sharpen her nails’
- c. *wif katsí:yə paʔ naikán nakləʔka:nán*
 wif katsí:-yə paʔ na-ik-án na-ik-**ləʔ**-ka:-nán
 you know-IMPF:2SG.SUBJ if FUT-1SG.SUBJ-go FUT-1SG.SUBJ-DTB-chop-DT
 ‘it’s up to you if I go to cut the weeds’
 (lit. ‘you know if I’ll go to cut weeds’)
- d. *naklakníka kistapún*
 na-ik-**lak**-ník-a kin-stapún
 FUT-1SG.SUBJ-DTB-hit.with.stick-IMPF 1PO-bean
 ‘I’m going to thresh my beans’

Each of the verbs shown in (156) has an unaffixed form without the distributive prefix. In (a), the verbs *sləʔ* ‘stir something’ and *ʔku:* ‘burn_{INTR}’ take the distributive prefix because they are used to describe processes applied to a number of small objects (coffee beans), while in (b) *ʔaká* ‘sharpen’ takes the prefix because the action is applied in sequence to a series of objects (the fingernails). The verb in (c), *ləʔká:* ‘cut weeds’, is a lexicalized expression derived from the verb *ka:* ‘chop something’ and is used to describe a particular manner of clearing weeds off of land by using a machete to cut away at the base of plants in a scything motion. Similarly, *lakník-* ‘thresh’, derives from *nik-* ‘hit something with a stick’ and has been lexicalized to express a process in which collections of objects such as bean pods are struck repeatedly.

In many cases, the meaning of *lak-/ləʔ-* when combined with certain stems seems to have grammaticalized beyond a transparent notion of distributivity to a more general meaning of intensiveness, as in (157):

- (157) a. *katasaníuw ti: tsex nakinka:məʔtaya:yá:n ti: ləʔpáʔʔa tsamá: tʔiwíʔ*
 ka-tasa-ní-w ti: tsex na-kin-ka:-məʔtaya:-yá:-n
 OPT-call-BEN-1PL.SUBJ HREL good FUT-1OBJ-PL.OBJ-help-IMPF-2OBJ
- ti: **ləʔ**-páʔʔ-a tsamá: tʔiwíʔ
 HREL DTB-break.open-IMPF that rock
- ‘let’s call the one who can help us, the one who smashes that rock’
- b. *púrotsamá:kristiánujalánMontedeChilana:tatsukúʔtaləʔspúta*
 púro tsamá: kristiánu jalá nak=Monte.de.Chila na:
 poor that person belong.to LOC=Monte.de.Chila also
- ta-tsukú-ʔ ta-**ləʔ**-spút-a
 3PL.SUBJ-begin-PFV 3PL.SUBJ-DTB-finish-IMPF
- ‘the unfortunate people of Monte de Chila also began to die’

In (157a), the verb *pqʔʔ*- ‘break open’ becomes more intense when combined with *lqʔ*-, making the affixed form of the verb something like ‘smash’. The verb in (b), *lqʔspút*- ‘die, be destroyed’, is derived from the verb *sput*- ‘end, finish’; although it is shown with a collective plural subject here, it can be used with singular subjects as well. As noted in Section 2.2.1, the distributive morpheme may be the same element as the adjective plural marker, and both may be ultimately derived from the combining form of the bodypart *lákni* ‘lower leg’. A definitive answer to this question will have to await an accurate reconstruction of Proto-Totonacan.

2.3.7.12. *ʔa*- ‘SIMULTANEOUS’ (SMT)

The prefix *ʔa*- is used to indicate that the event or process denoted by the verb stem occurs simultaneously or is in effect at the same time as the event in a conjoined clause:

- (158) a. *li:waná: xa: na: kinʔa:ʃoʔóya, iktianán iklakskuxniyá:n*
li:waná: xa: na: kin-ʔa:ʃoʔó-ya ik-ti-an-nán
 while NEG still 1OBJ-SMT-pay-IMPF:2SG.SUBJ 1SG.SUBJ-UNR-go-DT

ik-lak-skux-ni-yá:-n
 1SG.SUBJ-DIST-work-BEN-IMPF-2OBJ

‘as long as you don’t pay me, I won’t go to work for you’

- b. *iklqʔtsiní: kit tsamá: lakstín tsumaxán ti: xa: na: ti: iʃʔa:ka:skín*
ik-lqʔtsin-ní: kit tsamá: lakstín tsumaxán ti: xa: na:
 1SG.SUBJ-see-PF I that children girl:PL HREL NEG still

ti: iʃ-ʔa:ka:-skín
 HREL PST-SMT-PL.OBJ-ask.for

‘I’ve seen the young girls that still haven’t been asked for in marriage yet’

This morpheme is textually infrequent and is so far only attested in the Patla dialect.

2.3.8. Derivation from verbs

UNT has large number of processes that derive words of different lexical classes from verbs. The most widespread and productive of these is based on the deverbative suffix *-ni* (Section 2.3.8.1). Words formed with this suffix are variously adjectives or nouns. A morphological process — prosodic apophony — which exclusively derives deverbal nouns are discussed in Sections 2.3.8.2, and 2.3.8.3 describes a somewhat less-common nominalizing suffix. UNT also has regular processes that form instrumental and agentive nouns; these will be dealt with in Sections 2.3.8.4 and 2.3.8.5 below.

2.3.8.1. *-ni* ‘DEVERBATIVE’ (DVB)

Verbs in UNT take a deverbative suffix *-ni* to form words which have syntactic properties either of adjectives or of nouns. The meaning, form, and behaviour of these words depend to a large extent on the particular stem to which the suffix is attached. In general, a single stem will have a preferred use — that is, it will be either adjectival or nominal — but in a few cases there are stems that have both an adjectival and a nominal form. Verb stems also vary in terms of whether or not they require, in addition to *-ni*, the presence of the inchoative prefix *ta*-. In-

transitive stems denoting a state or process (with the exception of motion verbs), take the suffix by itself, whereas transitive verbs and verbs denoting a resultant state also take the inchoative prefix.

Deverbals formed from intransitive verbs that describe a state or a process require only the deverbative suffix. When these are given adjectival readings, they pattern syntactically like adjectives and may be used to modify nouns, as in (159a), or in the role of syntactic predicate in copular constructions, as in (b):

- (159) a. tsamá: ʃapu:lǎʔwaxáxa ʃamásni tʃik
 tsamá: ʃa-pu:lǎʔ-waxáxa ʃa-más-ni tʃik
 that DTV-inside-hollow DTV-rot-DVB house
 ‘it’s empty, the broken-down house’
- b. ʃalakla:njtsá tu: ta:ma:wá:ʔ
 ʃa-lakla:-ni=tsá tu: ta:ma:wá:ʔ
 DTV-rot-DVB=now NREL buy-PFV
 ‘what I bought is rotten’

In texts and elicited examples, adjectival deverbals almost always appear with the determinative prefix *ʃa-*. A number of adjectival deverbals is given in (160):

- | | | |
|---|---|---|
| (160) <i>ǎʔwiti:</i> ‘crazy, out of one’s senses’ | > | <i>ǎʔwiti:ni</i> ‘crazy, out of one’s senses’ |
| <i>xikwán</i> ‘be afraid’ | > | <i>xikwáni</i> ‘terrified’ |
| <i>kiʔtʃu:yá:</i> ‘joke’ | > | <i>kiʔtʃu:yá:ni</i> ‘joking, crazy-talking’ |
| <i>kukyúx-</i> ‘have hair fall out’ | > | <i>kukyúxni</i> ‘bald’ |
| <i>kún</i> ‘swell’ | > | <i>kúni</i> ‘swollen’ |
| <i>laklá:</i> ‘rot, be broken’ | > | <i>laklá:ni</i> ‘rotten, broken’ |
| <i>la:mǎʔʃtǎʔ-</i> ‘separate’ | > | <i>la:mǎʔʃtǎʔni</i> ‘separated, broken apart’ |
| <i>la:tapeʔʃtǎʔ-</i> ‘be placed side by side’ | > | <i>la:tapeʔʃtǎʔni</i> ‘side by side’ |
| <i>más-</i> ‘rot’ | > | <i>másni</i> ‘rotten’ |
| <i>páʃ-</i> ‘bathe’ | > | <i>páʃni</i> ‘bathed’ |
| <i>pu:ʔkú:</i> ‘burn inside a container’ | > | <i>pu:ʔkú:ni</i> ‘burnt inside a container’ |
| <i>pún</i> ‘sprouted’ | > | <i>púni</i> ‘sprouted’ |
| <i>yúx-</i> ‘go down’ | > | <i>yúxni</i> ‘fallen’ |
| <i>li:tsí:n</i> ‘smile, laugh’ | > | <i>li:tsí:ni</i> ‘smiling, laughing’ |

There are also a few deverbals which take a shortened form of the deverbative suffix, [-n]:

- | | | |
|--|---|-------------------------------|
| (161) <i>tʃaá:n</i> ‘ripen, cook’ | > | <i>tʃaá:n</i> ‘ripen, cook’ |
| <i>ʔo:ntí:</i> ‘get fat’ | > | <i>ʔo:ntí:n</i> ‘fat’ |
| <i>lǎʔawán</i> ‘wake up, come to life’ | > | <i>lǎʔawán</i> ‘daring, bold’ |
| <i>ni:</i> ‘die’ | > | <i>ni:n</i> ‘dead’ |
| <i>pu:tí:</i> ‘dry up’ | > | <i>pu:tí:n</i> ‘dry’ |

This type of allomorphy was seen earlier with plural suffixation (Section 2.1.1) and is seen with the deverbative suffix when it is used in instrumental nominal derivation (Section 2.3.8.4), but in these cases the choice of allomorph is phonologically determined by the stem (the short form of the affix appearing with vowel-final stems). In (161), although all of the verb stems are either V- or N-final, the choice seems to be lexicalized. This may be an indication that the automatic affixation of the full form of the deverbative is displacing the phonological rule governing application of the short allomorph in the synchronic grammar.

The same semantic class of stems (intransitive states and processes) also gives rise to deverbals that function syntactically as nouns, as in (162):

- (162) a. *namaʔankán lónʔni naktéx*
 na-maʔan-kán **lónʔ-ni** nak=téx
 FUT-throw.away-IDF cold-DVB LOC=road
 ‘they are going to remove the snow from the road’
- b. *la:má:ʔ ləʔʔ’ó:ni ʃtampín nakpáʔka, natʃitʃinitsá*
 la:-má:ʔ **ləʔʔ-ʔ’ó:-ni** iʃ-tampín nak=páʔka na-tʃitʃin-ni=tsá
 do-lie DTB-burn-DVB 3PO-bottom LOC=comal FUT-heat-BEN=now
 ‘there are flames underneath the *comal*, now it will heat up’

Unlike the adjectival uses of deverbals, these words appear in argument position in the sentence and do not always bear the determinative prefix. On the whole, nominal deverbals of this type are less well-attested than adjectival and tend to have rather specific and clearly lexicalized meanings, as in (163):

- | | | |
|--------------------------------------|---|---|
| (163) <i>kun</i> ‘swell’ | > | <i>kúni</i> ‘caterpillar’ |
| <i>ʔot-</i> ‘drink _{INTR} ’ | > | <i>ʔótni</i> ‘a drunk’ |
| <i>ləʔspút-</i> ‘die, be destroyed’ | > | <i>ləʔspútni</i> ‘dead person’ |
| <i>lónʔ-</i> ‘be cold (climate)’ | > | <i>lónʔni</i> ‘cold (climate), ice, snow’ |
| <i>ʔ’o:</i> ‘burn’ | > | <i>ləʔʔ’ó:ni</i> ‘flames’ |
| <i>tʃu.yá:</i> ‘be crazy’ | > | <i>tʃu.yá.ni</i> ‘crazy person’ |

Just as there are some adjectival forms that appear with the shortened allomorph, there are also a few nominal forms that take [-n]:

- | | | |
|---------------------------------------|---|---------------------------------------|
| (164) <i>ʔatʃi:</i> ‘drink (alcohol)’ | > | <i>ʔatʃi:n</i> ‘a drunk’ |
| <i>ʃi:</i> ‘dance’ | > | <i>ʃi:n</i> ‘dancer’ |
| <i>ni:</i> ‘die’ | > | <i>ni:n</i> ‘dead person’ |
| <i>la:kiʔni:</i> ‘argue’ | > | <i>la:kiʔni:n</i> ‘argument, quarrel’ |

Once again, even though the stems in this group meet the usual criteria for the short form of the suffix (V- or N-finality), there are stems in the list of regular forms in (163) that do so as well. Thus, the choice of the short allomorph seems to be lexicalized.

The careful reader will have noticed that there are two stems which appear both in the list of adjectival deverbal and in the list of nominal deverbal — *kun* ‘swell’ and *ni:* ‘die’. These stems are illustrated in (165):

- (165) a. *lakúni tsamá: iʃtuxán*
lak-kún-ni tsamá: iʃ-tuxán
 APL-swell-DVB that 3PO-foot
 ‘their feet are swollen’
- b. *aʔawamá:ʔ kúni kimpín*
 aʔa-wa-má:ʔ **kún-ni** kin-pín
 ear-eat-PRG swell-DVB 1PO-chili
 ‘a caterpillar is eating the leaves of my chili plant’

- c. Janí:n tsíya ʔkpuksantamá:ʔ
Ja-ní:-n tsíya ʔkpuksan-ta-má:ʔ
 DTV=die=DVB mouse stink-INCH-lie
 ‘the dead mouse is lying there rotting’
- d. Jantíʔ naʔawa:nán nama:sta:nán nawaní ni:n xa:tsá kaskuwá:ʔ ti: isku:wamá:ʔ
 Jantíʔ na-ʔawa:nán na-ma:sta:nán na-wan-ní **ní:-n**
 shaman FUT=hold.ceremony FUT=offer.food FUT=say=BEN die=DVB
- xa:=tsá ka-skuwá:-ʔ ti: iʃ-sku:wa-má:ʔ
 NEG=now OPT=curse-PFV HREL PST=curse-PRG
- ‘the shaman is going to hold a ceremony for the dead, offer them food, and tell them not to curse the one they were cursing anymore’

As in (159) and (162) above, the adjectival deverbals takes the determinative prefix while the nominal deverbal appears on its own. In both cases, and particularly for *kun*, the meaning of the nominal is not entirely predictable from the meaning of the verb stem itself, suggesting that nominal uses of deverbals in general may be conventionalized.

Transitive verb stems and verbs with an inherently resultative meaning form deverbals using a second pattern of affixation. This pattern, in addition to the deverbative suffix, makes use of the inchoative prefix *ta-*. These words refer to the resultant state of an action and also vary between nominal and adjectival. Some examples of adjectival deverbals of this class are given in (166):

- (166) a. ʔe:tín kuʔtáʔ tsamá: kúʃi, ʔatapáʃni kúʃi
 ʔe:-tín kuʔtáʔ tsamá: kúʃi **Ja-ta-páʃ-ni** kúʃi
 CLS=one sack that corn DTV-INCH=degrain=DVB corn
 ‘a sack of corn, corn kernels’
- b. ʔataʃ'a:ntsá kúʃi
Ja-ta-ʃ'a:-n=tsá kúʃi
 DTV-INCH=husk=DVB=now corn
 ‘husked corn’

Some of the stems that form adjectival deverbals with *ta-* are given in (167):

- | | | |
|----------------------------------|---|---------------------------------------|
| (167) ʔonʔʃ- ‘braid’ | > | taʔónʔʃni ‘braided’ |
| ʔʔpáʃ- ‘be baptized’ | > | taʔʔpáʃni ‘baptized’ |
| ʔos- ‘fly’ | > | taʔósni ‘flying’ |
| kiʔpáʔʔ- ‘break something’s rim’ | > | takiʔpáʔʔni ‘broken around its rim’ |
| laʔwéʔ- ‘stir something’ | > | taláʔwéʔni ‘stirred’ |
| páʔ- ‘sweep something’ | > | tapáʔni ‘swept, cleaned’ |
| tapa:nú: ‘be cleared away’ | > | tapa.nú.ni ‘having been cleared away’ |
| pás- ‘de-grain (corn)’ | > | tapásni ‘in grains’ |
| wi:léʔʔ- ‘twist (thick object)’ | > | tawi:léʔʔni ‘twisted (thick object)’ |

Note that this list includes *taʔósni* ‘flying’, derived from *ʔos-* ‘fly’. While it might seem that this stem, denoting a process rather than a resultant state, might belong to the other type of deverbals, it seems to be generally true of the deverbals of verbs of motion that they require the inchoative prefix.

The database also contains six stems that form deverbals using *ta-* and the short form of the deverbative suffix:

- | | | |
|---|---|--|
| (168) <i>qʔá:n</i> ‘fall from vertical’ | > | <i>taqʔá:n</i> ‘knocked over’ |
| <i>ʔe:tsí:</i> ‘wrap something up’ | > | <i>taʔe:tsí:n</i> ‘wrapped up’ |
| <i>i:</i> ‘harvest something’ | > | <i>taí:n</i> ‘picked and left to be gathered up’ |
| <i>fú:</i> ‘peel something’ | > | <i>tafú:n</i> ‘peeled, skinned’ |
| <i>fʔá:</i> ‘husk (corn)’ | > | <i>tafʔá:n</i> ‘husked (corn)’ |

Like the bare deverbals that take the short form of the suffix, this group of stems seem to be idiosyncratic and probably represents a historical relic of an earlier productive process.

Also like bare deverbals, some deverbals with *ta-* function as nouns, as in (169):

- (169) a. *tʃu:ntsá* *ʃtakatsi:nkán* *ʃwaní:* *wa:tsá*
tʃu:ntsá *ij-ta-katsi-n-kán* *ij-wan-ní:* *wa:tsá*
 thus 3PO-INCH-know-DVB-PL.PO 3PO-be-PF here
 ‘that’s the way their ideas were here’
- b. *pero* *tʃuwá:* *ʃtumtsá* *talakapa:stáknj* *porque* *tu:* *ʃlá* *antigüa* *xa:tsá* *tʃu:ntsá* *tʃi:* *tʃuwá:*
 pero *tʃuwá:* *ʃtum=tsá* ***ta-lakapa:sták-nj*** *porque* *tu:*
 but now different=now INCH-think-DVB *porque* NREL

ij-lá *antigüa* *xa:=tsá* *tʃu:ntsá* *tʃi:* *tʃuwá:*
 3PO-one olden NEG-now thus how now
 ‘but now the thinking is different because the old ways aren’t the way it is now’

Verb stems that form deverbals with nominal readings include those in (170):

- | | | |
|--|---|---|
| (170) <i>tʃít-</i> ‘mill something (sugar cane)’ | > | <i>tatʃítñj</i> ‘sugar cane syrup’ |
| <i>nɛʔnín</i> ‘clear (land)’ | > | <i>tanɛʔñj</i> ‘cleared land’ |
| <i>snát-</i> ‘embroider something’ | > | <i>tasnátñj</i> ‘embroidery’ (Pt.) |
| <i>ʔeʃmát-</i> ‘hear something’ | > | <i>taʔeʃmátñj</i> ‘noise’ |
| <i>laksák-</i> ‘choose something’ | > | <i>talaksákñj</i> ‘choice, selection’ |
| <i>máʔstóʔ-</i> ‘meet, gather’ | > | <i>tamáʔstóʔñj</i> ‘meeting, gathering’ |
| <i>lqʔponʔ-</i> ‘dig’ | > | <i>talqʔponʔñj</i> ‘loosened soil’ |

There are also several nominal *ta-*deverbals that take the short form of the suffix:

- | | | |
|--|---|---|
| (171) <i>tʃanán</i> ‘plant, cultivate’ | > | <i>tatʃanán</i> ‘orchard’ |
| <i>tʃiwín</i> ‘speak’ | > | <i>tatʃiwín</i> ‘word’ |
| <i>ʔqʔ:</i> ‘believe something’ | > | <i>taʔqʔ:</i> ‘belief’ |
| <i>ʔe:tsí:</i> ‘wrap something up’ | > | <i>taʔe:tsí:n</i> ‘bundle, wrapped lunch’ (Ch.) |
| <i>ʔeʔamán</i> ‘joke with someone’ | > | <i>taʔeʔamán</i> ‘a joke’ |
| <i>katsí:</i> ‘know something’ | > | <i>takatsí:n</i> ‘conduct’ |
| <i>pa:tí:</i> ‘suffer’ | > | <i>tapa:tí:n</i> ‘suffering’ |
| <i>pa:fwá</i> ‘be happy’ | > | <i>tapa:fwán</i> ‘happiness’ |
| <i>pi:ʃlí:</i> ‘sing’ | > | <i>tapi:ʃlí:n</i> ‘song’ |

At least one stem has both an adjectival and a nominal deverbal form, as shown in (172):

- (172) a. le:má:ʔ fataʔe:ʔfí:n iʃkuwi:wá (Pt.)
 le:n-má:ʔ **fa-ta-ʔe:-ʔfí:-n** iʃ-kuwi:wá
 take-PRG DTV-INCH-back-tie-DVB 3PO-lunch
 ‘he’s taking his wrapped-up lunch’
- b. le:má:ʔ fataʔe:ʔfí:n (Ch.)
 le:n-má:ʔ **fa-ta-ʔe:-ʔfí:-n**
 take-PRG DTV-INCH-back-tie-DVB
 ‘he’s taking his wrapped-up lunch’

In this case, the meaning of the nominal form seems clearly derived from the adjectival form, sentence (172b) being an elliptical form of sentence (a) and, thus, suggestive of the diachronic origin of the nominal use of the deverbal.

2.3.8.2. Prosodic apophony

A particularly common derivational process for forming nouns from verbs is the process of prosodic apophony illustrated in (173):

- | | | |
|---|---|--|
| (173) <i>aʔpi:ʃfí:</i> ‘strangle something’ | > | <i>aʔpi:ʃfí</i> ‘snare’ |
| <i>akní:</i> ‘admire something’ | > | <i>akní</i> ‘respect’ |
| <i>kutjú:</i> ‘cure someone’ | > | <i>kútjú</i> ‘liquor’ |
| <i>maqawí:lú</i> ‘whistle’ | > | <i>maqawí:ly</i> ‘clay whistle’ |
| <i>ma:pa:ʔfí:</i> ‘tie around middle’ | > | <i>ma:pá:ʔfí</i> ‘wall of traditional house’ |
| <i>lakafukú</i> ‘stick finger in eye’ | > | <i>lakafúku</i> ‘person without eyes’ |
| <i>la:tastúk-</i> ‘be joined together’ | > | <i>la:tastúka</i> ‘joint, articulation’ |
| <i>tapi:ʃnú:</i> ‘put through something’ | > | <i>tapi:ʃnu</i> ‘necklace’ |

For vowel-final stems, this process shifts the accent to the penultimate syllable and laryngealizes the final vowel; long final vowels are realized as short. Consonant-final stems (of which there are only a few attested with this type of nominalization) add a short final /a/, possibly the imperfective suffix, before undergoing the same process. Stems ending in /n/ drop this consonant and then behave like vowel-final stems, as shown in (174):

- | | | |
|--|---|--|
| (174) <i>makwán</i> ‘be sufficient, serve purpose’ | > | <i>mákwá</i> ‘remedy’ |
| <i>aʔpún</i> ‘bud (tree)’ | > | <i>aʔpu</i> ‘a bud (tree)’ |
| <i>li:néʔnín</i> ‘fell trees to clear land’ | > | <i>li:néʔni</i> ‘land with trees to be felled’ |
| <i>ta:li:ʔsín</i> ‘laugh with someone’ | > | <i>ta:lí:ʔsi:</i> ‘a group laugh, laughter’ |
| <i>maqʔskítí</i> ‘cook for another person’ | > | <i>maqʔskítí</i> ‘a cook’ |
| <i>skát-</i> ‘learn something’ | > | <i>skátá</i> ‘one who learns’ |

There are also a few cases where final laryngealization takes place but there is no accent-shift:

- | | | |
|--|---|------------------------------|
| (175) <i>latamá:</i> ‘live, practice a custom’ | > | <i>latamá</i> ‘life’ |
| <i>skawí</i> ‘weave something’ | > | <i>skawí</i> ‘woven hanging’ |

The application of prosodic apophony to form nouns is widespread in terms of the number of stems to which it applies, but is highly lexicalized in terms of its distribution and semantic import, suggesting that it may not be a synchronically productive strategy for noun-formation.

Although prosodic apophony is primarily a nominalization process, there are a few cases where its application creates words that are clearly adjectives, as in (176):

- (176) a. mat tama:ʃtumq:ná:ʃ naiʃtuxán aʔtín ʔáʃa tʃiwíʃ
 mat ta-ma:-ʃtu-ma:-ná:ʃ nak=iʃ-tuxán aʔ-tín ʔáʃa tʃiwíʃ
 QTV 3PL.SUBJ-CS-out-PRG-PL.ST LOC=3PO-foot CLS-one be.big:NM rock
 ‘they were taking it out from under a big rock’
- b. ʃatʃa:ʃúku tsamá: kʃwí
 ʃa-tʃa:-ʃúku tsamá: kʃwí
 DTV-shin-perforate:NM that tree
 ‘that tree is hollow’
- c. wə:ʔ ʃatʃipí ʃka:n mimá:ʃ, li:ʃtipínli tə:səʔín tʃi: la:má:ʃ
 wə:ʔ ʃa-tʃipí ʃka:n min-má:ʃ li:-ʃtipín-li tə:səʔín
 totally DTV-be.dirty:NM water come-PRG INST-be.dirty-PFV downpour
 tʃi: la:-má:ʃ
 how do-PRG

‘totally dirty water is coming, it got muddy because of the way it rained so hard’

Words in this group include the following:

- | | | |
|--|---|-----------------------------------|
| (177) <i>tʃa:ʃúkú:</i> ‘perforate (trunk)’ | > | <i>tʃa:ʃúku</i> ‘hollow (tree)’ |
| <i>tʃitʃín</i> ‘heat up’ | > | <i>tʃitʃí</i> ‘hot’ |
| <i>ʔáʃán</i> ‘increase in size’ | > | <i>ʔáʃa</i> ‘big’ |
| <i>ʔewíwín</i> ‘cool off’ | > | <i>ʔewíwí</i> ‘cold’ |
| <i>ʃtipín</i> ‘dirty (liquid)’ | > | <i>ʃtipí</i> ‘dirty (of liquids)’ |
| <i>ʃu:wán</i> ‘increase’ | > | <i>ʃú:wə</i> ‘much, many, a lot’ |
| <i>sípín</i> ‘be finely ground’ | > | <i>sípí</i> ‘very finely ground’ |
| <i>tsínkán</i> ‘be heavy’ | > | <i>tsínka</i> ‘heavy’ |

A number of adjectives derived by prosodic apophony also bear the inchoative prefix *ta-*:

- | | | |
|--|---|--|
| (178) <i>pa:wá</i> ‘pecked at mid-section’ | > | <i>tapá:wə</i> ‘pecked at (corn)’ |
| <i>pít-</i> ‘press something’ | > | <i>tapíta</i> ‘pressed’ |
| <i>pu:sítku:tú:</i> ‘hollow something out’ | > | <i>tapu:sítkú:tu</i> ‘hollowed out’ |
| <i>sipí:</i> ‘grind something’ | > | <i>tasípí</i> ‘finely ground’ |
| <i>siwí</i> ‘twist together’ | > | <i>tasíwí</i> ‘twisted together, braided’ |
| <i>swəʔá</i> ‘grind something in <i>metate</i> ’ | > | <i>taswəʔə</i> ‘ground’ |
| <i>s’oʔá:</i> ‘hug something’ | > | <i>tas’oʔə</i> ‘hugged’ |
| <i>ta.ma:ʃtú</i> ‘castrate something’ | > | <i>tata.má:ʃtu</i> ‘castrated’ |
| <i>tsílí</i> ‘fry something’ | > | <i>tatsílí</i> ‘fried’ |
| <i>wa</i> ‘eat something’ | > | <i>táwə</i> ‘eaten by insects, moth-eaten’ |
| <i>ʃmú:t-</i> ‘bend something’ | > | <i>taʃmú:ta</i> ‘flexible’ |
| <i>ʃtəʔó</i> ‘jab something’ | > | <i>taʃtəʔə</i> ‘nailed’ |
| <i>ʃetí</i> ‘crush to remove seeds’ | > | <i>taʃéti</i> ‘de-seeded’ |

As with deverbals, the presence of *ta-* indicates that the adjective refers to the resultant state of the undergoer of the action denoted by the verb.

2.3.8.3. *-(V)t* ‘NOMINALIZER’ (NM)

Nouns may be formed from intransitive verbs using the suffix *-(V)t*. These nouns express either a state or object created by the process denoted by the verb, or refer to an object, substance, or sensation which is definitive of or typified by that process:

(179) <i>qʔaʔumán</i> ‘have a cold’	>	<i>qʔaʔumát</i> ‘cold’
<i>kiʔtsukú</i> ‘be founded’	>	<i>kiʔtsukút</i> ‘origin’
<i>sput-</i> ‘end, run out’	>	<i>sputút</i> ‘end (time)’
<i>aksa:sá:</i> ‘get grey hair on head’	>	<i>aksa:sá:t</i> ‘grey hair on head’
<i>ʔeʔpupú</i> ‘foam up (bottle, pot)’	>	<i>ʔeʔpupút</i> ‘foam on bottle or pot’
<i>tʃox-</i> ‘(to)spit’	>	<i>tʃoxót</i> ‘saliva’
<i>lonʔ-</i> ‘be cold’	>	<i>lonʔót</i> ‘malaria’
<i>mʌʔlíp-</i> ‘flash (lightening)’	>	<i>mʌʔlipít</i> ‘lightening’

The suffix takes the form *-(V)t*, where V is a harmonic copy of the last vowel in the stem, when the verb ends in a consonant (*mʌʔlíp-* > *mʌʔlipít*), otherwise the form of the suffix is *-t*. *N*-final verbs belonging to the Class 3 aspectual conjugation (see Section 2.3.3 above) such as *qʔaʔumán* drop the *-n* and take the short *-t* form of the suffix.

2.3.8.4. Instrumental nominalization

UNT forms nouns denoting instruments from verbs denoting the actions the instrument is designed to perform by the combination of the deverbative suffix *-ni* with one of two prefixes, the instrumental *li:-* or the bodypart prefix *pu:-*. Of the two, *li:-* is the more generic and seems to be used to form nouns referring to a wide range of instruments, as shown in (180):

(180) <i>ka:flawá</i> ‘fix up, decorate something’	>	<i>li:ka:flawán</i> ‘decoration’
<i>lʌʔanɛʔé:</i> ‘fan someone’s face’	>	<i>li:lʌʔanɛʔé:n</i> ‘fan’
<i>faká</i> ‘file something’	>	<i>li:fakán</i> ‘file’
<i>mɛʔeʔá</i> ‘be afraid’	>	<i>li:mɛʔeʔán</i> ‘scarecrow’
<i>tʃʌn</i> ‘plant something’	>	<i>li:tʃʌni</i> ‘planting stick’
<i>lʌʔas’áʔ-</i> ‘stir (sugar cane syrup)’	>	<i>li:lʌʔas’áʔni</i> ‘instrument used to stir’
<i>tsóʔ-</i> ‘paint, write’	>	<i>li:tsóʔnu</i> ‘paint, ink, dye’
<i>slʌʔ-</i> ‘play (stringed instrument)’	>	<i>li:slʌʔna</i> ‘stringed instrument’

As with the plural suffix (Section 2.1.1), the form of the deverbative suffix depends on the verb stem. Vowel-final stems take [-n] (*ka:flawá* ‘fix up’ > *li:ka:flawán* ‘decoration’) while consonant-final stems take [-ni] (*tʃʌn* ‘plant’ > *li:tʃʌni* ‘planting stick’). As shown by the last two examples in (180), there are also a few lexicalized forms in which the suffix shows vowel-harmony.

A few instrumental nouns have the *li:-* prefix but do not take the nominalizing suffix:

(181) <i>ʔamá:n</i> ‘play something (game)’	>	<i>le:ʔamá:n</i> ‘toy’
<i>ʃʌ:ʌn</i> ‘take a steambath’	>	<i>li:ʃʌ:ʌn</i> ‘exfoliator, scrubber for bathing’
<i>s’ólí</i> ‘make something whistle’	>	<i>li:s’ólí</i> ‘wind instrument’
<i>nɛʔe</i> ‘fan someone’	>	<i>li:nɛʔe</i> ‘leaf used as fan in sweatlodge’

It seems probable that these nominalizations are based on the *li:-*prefixed forms of verbs (i.e. *ʔamá:n* ‘play something’ > *le:ʔamá:n* ‘play with something’ > *le:ʔamá:n* ‘toy’) and are nominalized by the process of prosodic apophony described in the previous section.

The second type of instrumental nominalization involves the bodypart prefix *pu:-* ‘vagina’ and is used to form nouns that express an instrument inside of which the process described by the verb takes place:

- | | | |
|--|---|--|
| (182) <i>tsapá:</i> ‘grind’ | > | <i>pu:tsapá:n</i> ‘mill’ |
| <i>kutfú:</i> ‘heal someone’ | > | <i>pu:kutfú:n</i> ‘medical clinic’ |
| <i>lqʔtʃi:</i> ‘tie something up’ | > | <i>pu:lqʔtʃi:n</i> ‘jail’ |
| <i>ma:ʔkú:</i> ‘set something on fire’ | > | <i>pu:ma:ʔkú:n</i> ‘brazier’ |
| <i>tsan</i> ‘plant something’ | > | <i>pu:tsá:nj</i> ‘time for planting corn (June)’ |
| <i>típ-</i> ‘shoot something with bow’ | > | <i>pu:típni</i> ‘bow (weapon)’ |
| <i>takút-</i> ‘cross river’ | > | <i>pu:takútnj</i> ‘boat’ (Ch.) |
| <i>takút-</i> ‘cross river’ | > | <i>pu:takútnu</i> ‘boat’ (Pt.) |
| <i>páx-</i> ‘thresh beans’ | > | <i>pu:páxnq</i> ‘rack for threshing beans’ |

The deverbative suffix here follows the same pattern as it does with *li:-* instruments, taking the form [-n] with vowel-final stems and [-nj] following a consonant. Also like the other instrumental forms, there are one or two where the suffix shows vowel harmony.

As with the *li:-* instrumental nouns, there are one or two *pu:-* instruments that appear without the deverbative suffix:

- | | | |
|---|---|-----------------------------------|
| (183) <i>ʔamá:n</i> ‘play something (game)’ | > | <i>pu:ʔamá:n</i> ‘carnival rides’ |
| <i>wayán</i> ‘eat _{INTR} ’ | > | <i>pu:wáyq</i> ‘dishes’ |

Once again, these are probably derived directly from the *pu:-* prefixed verbs via prosodic apophony rather than taking the prefix as part of the nominalization process.

Both *li:-* and *pu:-* are also used in a separate nominalizing process which makes use of the indefinite actor suffix, *-kan*:

- | | | |
|---|---|---|
| (184) <i>tʃi:</i> ‘tie’ | > | <i>li:tʃi:kán</i> ‘traditional woman’s belt’ |
| <i>tʃiwinán</i> ‘speak’ | > | <i>li:tʃiwinánkán</i> ‘story, legend, tale’ |
| <i>lqʔʃtqʔó</i> ‘fasten together’ | > | <i>li:lqʔʃtqʔókán</i> ‘nail’ |
| <i>tsqʔnún</i> ‘write _{INTR} ’ | > | <i>pu:tsqʔnunkán</i> ‘something to write in/on’ |
| <i>laktsikí:</i> ‘strain something’ | > | <i>pu:laktsiki:kán</i> ‘strainer’ |

The nouns shown here also denote instruments and are based on the indefinite actor form of the verb plus one of the two instrument prefixes. This nominalization strategy seems to be favoured by older speakers, particularly in cases where a novel term is being coined (e.g., *pu:tsqʔnunkán* ‘something used to write in/on’ which was offered by one speaker to refer to a computer). This may be an indication that the process involved in the formation of the other types of instrumental nouns are not synchronically productive.

2.3.8.5. *-nV̆* ‘AGENTIVE NOMINALIZER’ (AGT)

Nouns denoting the person or thing that performs a particular action are formed by adding the suffix *-nV̆* to the root of the verb denoting that action, as in:

- | | | |
|--|---|-----------------------------------|
| (185) <i>qʔsuyú</i> ‘lasso something’ | > | <i>qʔsuyunú</i> ‘one who lassoes’ |
| <i>tʃukú</i> ‘cut something’ | > | <i>tʃukunú</i> ‘one who cuts’ |
| <i>tampu:ʔnún</i> ‘(to)drum’ | > | <i>tampu:ʔnú</i> ‘drummer’ |
| <i>qʔsaní</i> ‘lie to someone about someone’ | > | <i>qʔsaninú</i> ‘liar’ |
| <i>máʔní:</i> ‘kill something’ | > | <i>máʔni:nú</i> ‘murderer’ |

<i>xilí</i> ‘(to)thunder’	>	<i>xiliní</i> ‘thunder’
<i>ʔaʔá:n</i> ‘steal something’	>	<i>ʔaʔa.ná</i> ‘thief’
<i>ma:ʃanán</i> ‘be shy, be ashamed’	>	<i>ma:ʃaná</i> ‘shy person’
<i>lamá:</i> ‘burn’	>	<i>lama.ná</i> ‘flame’
<i>ʔka:knán</i> ‘be hot (climate)’	>	<i>ʔka:kná</i> ‘heat (climate)’

The vowel in the suffix is a harmonic copy of the last vowel in the root and is accented (differentiating it from the plural suffix and the deverbative suffix described in the previous section). Verbs bearing the detransitivizing suffix *-nVn* drop this ending before adding the agentive nominalizer (e.g. *tampu:ʔnún* > *tampu:ʔnú*, *ma:ʃanán* > *ma:ʃaná*).²

3. Syntax

3.1. Simple sentence

As shown by many examples in the preceding discussion, the ordering of main constituents in the UNT clause is extremely flexible. There are attested examples in the database of sentences with every possible ordering of verb, subject, and the various types of object. The only strong preference shown for constituent-ordering seems to be for a predicate-initial structure in which the first element of the clause is the verb — preceded by any lexical adverbs and particles in the sentence — followed by the NP constituents, as in (186):

- (186) a. *tsisáx tʃu:wá mat taʔtutsá tsamá: táʔo* (Ch.)
tsisáx tʃu:wá mat ta-ʃtu=tsá tsamá: táʔo
 early.morning now QTV INCH-out=now that old.woman
 ‘now early in the morning the old woman came by’
- b. *le:ʔ tsamá: puská:t tsamá: múʃni*
le:n-ʔ tsamá: puská:t tsamá: múʃni
 take-PFV that woman that monkey
 ‘the monkey carried off the woman’

Ordering of S and O seems to show no strong tendency in the direction of SO or OS, although in elicitation speakers have a tendency to use VSO order and this also tends to be the way that isolated sentences with two NPs are interpreted (that is, a sentence such as *túksli Pedro Juan* will more often be interpreted as ‘Pedro hit Juan’ than as ‘Juan hit Pedro’). In texts, however, the incidence of transitive sentences with both overt NP subject and object is extremely rare and those that do occur, like that given in (186b), can follow either order.

Although verb-initial order is the unmarked order, subjects can precede the verb when these are focused, as in (187):

- (187) a. *tsamá: is’áʔa animá:ʔ xa: tu: skatkutún*
tsamá: is-s’áʔa animá:ʔ xa: tu: skat-kutún
 that 3PO-child animal NEG NREL learn-DSD
 ‘the animal’s child doesn’t want to learn anything’

² P. Levy (p.c.) analyzes a similar pattern in Papantla as a result of a derivational sequence: ROOT + *-nin* ‘INDEFINITE OBJECT’ + *-ʔ* ‘NOMINALIZER’, followed by cluster simplification /nʔ/ → /ʔ/ and /iʔ/ → /i/. This analysis would work for most cases in UNT as well.

- b. pus tsamá: táʔo, mat maʔala:má:ʔ sandía (Ch.)
 pus **tsamá:** **táʔo** mat maʔa-la:-má:ʔ sandía
 INTJ that old.woman QTV STM-do-PRG watermelon
 ‘well, that old woman, she is growing watermelon’
- c. tu: tsamá: ka:li:tampá: tawanán
tu: **tsamá:** **ka:-li:tan-pá:** ta-wanán
 NREL that PL.OBJ-bring:2SUBJ-PRG:2SUBJ 3PL.SUBJ-eat.people
 ‘those (animals) that you are bringing eat people’

Structures like those in (187) are particularly frequent at the beginning of discourse episodes and narratives, and may perform a topic-setting function.

Personal pronouns are rarely used, and when these do appear in discourse they tend to be focused and are thus also frequently found in sentence-initial position, as in (188):

- (188) a. ʔe: kit kala:ma:yuxú:w nakán ikankutún iktáʔtʃoʔó
 ʔe: **kit** ka-la:-ma:-yux-ú:-w na: ik-án
 and I OPT-RCP-CS-go.down-CS-1PL.SUBJ also 1SG.SUBJ-go

 ik-án-kutún ik-táʔtʃoʔó
 1SG.SUBJ-go-DSD 1SG.SUBJ-have.fun
 ‘and get me down, too, I’m going, I want to go have fun’
- b. wif xa: tu: xikwaníya?
wif xa: tu: xikwan-ní-ya
 you NEG NREL be.afraid-BEN-IMPF:2SG.SUBJ
 ‘aren’t you afraid of anything?’
- c. kit nu:n ti: kintama:wa:ní kilúfu
kit nu:n ti: kin-tama:wa:-ní kin-lúfu
 I NEG HREL 1OBJ-buy-BEN 1PO-clothes
 ‘me, no one has bought me my clothes’

Sentence-initial position is also used for question words in information-questions (Section 3.1.3), a function consistent with communicative focus. On the whole, word-order in UNT seems to have more to do with the marking of information or communicative structure than with marking syntactic or grammatical relations, and a great deal more work needs to be done before further generalizations can be made with any degree of confidence.

3.1.1. Copular clauses

Nominal and adjectival predicates in UNT require the use of a copular predicate. In the present tense the copula is usually zero, but in the past and the future it is overt, as shown in the sentences in (189):

- (189) a. kit ma:ʔeʔtawáʔae:ní
 kit ma:-ʔeʔ-tawáʔa-e:-ní
 I CS-mouth-practice-CS-AGT
 ‘I am a teacher’

- b. kit ma:ʔeɬtawəʔae:ní ʃakwaní:
 kit ma:-ʔeɬ-tawəʔa-e:-ní **ʃak-wan-ní:**
 I CS-mouth-practice-CS-AGT PST:1SG.SUBJ-be-PF
 ‘I was a teacher’
- c. kit ma:ʔeɬtawəʔae:ní nakwán
 kit ma:-ʔeɬ-tawəʔa-e:-ní **na-ik-wán**
 I CS-mouth-practice-CS-AGT FUT-1SG.SUBJ-be
 ‘I will be a teacher’

The copula is based on the verb *wan* ‘be’ which also appears in present-tense copular constructions when it is required for the expression of bound verbal morphology (other than person-markers) such as the desiderative suffix *-kutun*, shown in (190):

- (190) tsamá: ʔawátʔa púʃku wankutún
 tsamá: ʔawátʔa púʃku **wan-kutún**
 that boy chief be-DSD
 ‘the boy wants to be chief (someday)’

The subject-initial, verb-final order shown in these examples is the preferred word-order for copular constructions with predicate nominals.

Adjectival predicates follow the same pattern as nominal predicates in terms of the realization of the copula, as shown in (191):

- (191) a. lú:kux tʃiʃkú
 lú:kux tʃiʃkú
 brave man
 ‘the man is brave’
- b. lú:kux ʃwaní: tʃiʃkú
 lú:kux **ɪʃ-wan-ní:** tʃiʃkú
 brave PST-be-PF man
 ‘the man was brave’
- c. lú:kux nawán tʃiʃkú
 lú:kux **na-wán** tʃiʃkú
 brave FUT-be man
 ‘the man will be brave’

The word-order in these examples, which were elicited in isolation, is subject-final rather than subject-initial; the subject-initial order shown in (189) and (190) above was also accepted when offered to the consultant. Copular sentences with adjectival predicates and pronominal subjects, such as (192), are uniformly subject-initial:

- (192) kit lú:kux ʃakwaní:
kit lú:kux ʃak-wan-ní:
 I brave PST:1SG.SUBJ-be-PF
 ‘I was brave’

As in the previous datasets, the past tense of the copula here is formed in the perfect aspect. Other aspects and moods are also possible with the copula, as shown in (193):

- (193) a. tá:tʃa, waní: wif ʔaʎa:wanampá:
 tá:tʃa **wan-ní:** wif ʔaʎa:n-wa-nan-pá:
 aha be-PF you steal-eat-DT-PRG:2SUBJ
 ‘aha! so it’s you whose stealing and eating’
- b. *pero* xa: tsex katiwánli
 pero xa: tsex **ka-ti-wán-li**
 but NEG good OPT-UNR-be-PFV
 ‘but it won’t be okay’

The first example in (193a) shows the present perfect form of the copula, which seems to be restricted to cleft-like constructions with impersonal subjects. The example in (b) shows the copula in the perfective aspect of the optative-unrealized mood. Other aspectual possibilities are as yet unattested.

3.1.2. Negation

Negation in UNT is relatively straightforward, making use of the negative particle *xa:* in preverbal position:

- (194) a. xa: wáʎ tsamá: tʃáux, xa: waʎ
xa: wáʎ tsamá: tʃáux, **xa:** wa-ʎ
 NEG eat-PFV that tortilla NEG eat-PFV
 ‘he didn’t eat the tortillas, he didn’t eat them’
- b. pus, xa:k manóʔʎa tu: ya: animá:ʎ wamá:ʎ tsamá: *sandía*
 pus **xa:** ik-manóʔʎ-a tu: ya: animá:ʎ wa-má:ʎ tsamá: sandía
 INTJ NEG 1SG.SUBJ-find-IMPF NREL PRT animal eat-PRG that watermelon
 ‘well, I can’t find out what kind of animal is eating the watermelon’

In general, there is no other syntactic or morphological change in the sentence involved with negation, although the negative morpheme is frequently associated with some of the non-indicative moods discussed in Section 2.3.4 above.

In addition to negating propositions, *xa:* is used with the human and non-human relative pronouns to form expressions corresponding to English *no one* and *nothing*, as in (195):

- (195) a. xa:tsá ti: iʃlʔtsinkutún tsamá: paléx
xa:=tsá **ti:** iʃ-lʔtsin-kutún tsamá: paléx
 NEG=now HREL PST-see-DSD that priest
 ‘now no one wanted to see the priest’
- b. xa: tu: mintumí:n tu: tsex nali:pína
xa: **tu:** min-tumí:n tu: tsex na-li:pína
 NEG NREL 2PO-money NREL good FUT-bring:2SG.SUBJ:IMPF
 ‘you have no money to bring’
- c. ʔe: xa: ti: ti: iʃmʔtayá:
 ʔe: **xa:** **ti:** ti: iʃ-mʔtayá:
 and NEG HREL HREL PST-help
 ‘and there was no one that helped him’

The negative particle is also used to express inability in combination with the particle *le:*

- (196) *xa: le: katima:ʔeʔtawəʔé:ʔ* (Ch.)
xa: le: ka-ti-ma:-ʔeʔ-tawəʔa-é:-ʔ
 NEG able OPT-UNR-CS-mouth-practice-CS-PFV
 ‘he was not able to teach him’

The particle *le:* is pronounced *la:* in Patla, reflecting its probable etymology in the verb *la:* ‘do’. Synchronically, however, *le:* is invariant and can not be inflected for person, tense, aspect or mood, all of these categories being marked on the accompanying verb.

3.1.3. Questions

As noted in Section 2.1.3.3 above, UNT has a set of interrogative pronouns that are used to form information questions. These pronouns appear sentence-initially in focus position, as shown in (197):

- (197) a. *ti: wan?*
ti: wan
 who be
 ‘who is it?’
- b. *tu: ʔawawí:lə wa:tsá?*
tu: ʔawa-wí:lə wa:tsá
 what make-sit:2SG.SUBJ here
 ‘what are you sitting here doing?’
- c. *tʃi: naʔawayá:uw*
tʃi: na-ʔawa-yá:-w
 how FUT-make-1PL.SUBJ
 ‘what are we going to do?’
- d. *xa: laktantít?*
xa: lak-tan-tít
 where foot-come:2SUBJ-2PL.SUBJ
 ‘where did you come (through)?’
- e. *xáʃni wánti?*
xáʃni wán-ti
 when say-2SG.SUBJ:PFV
 ‘when did you say it?’

Because of the homophony of the interrogative and relative pronouns, the sentences in (197) are identical in form to relative clauses (see Section 3.2.2 below), and a phrase such as that shown in (197b) could, with the right context and intonation, be interpreted as a headless relative ‘what I am doing here’. Note also the homophony of the locative interrogative/relative pronoun *xa:* and the negative morpheme. Potential ambiguity is avoided in practice by using the particle *tʃu:* in most questions about location:

- (198) xa: tʃu: pínǎ?
xa: **tʃu:** pínǎ
 where PRT go:2SG.SUBJ
 ‘where are you going?’

The particle *ya:* is also frequently used with *ti:* and *tu:* to form questions that would be translated into English with *which* or *what kind of*:

- (199) a. ti: ya: kristiánu ya:ɬ naktéx?
ti: **ya:** kristiánu ya:ɬ nak=téx?
 who PRT person stand LOC=road
 ‘who is standing in the road?’ (lit. ‘which person ... ?’)
- b. tu: ya: ma:pá:tʃǎ?
tu: **ya:** ma:pá:tʃǎ
 what PRT wall
 ‘what kind of walls (does it have)?’

The use of interrogative pronouns seems to be restricted to questioning constituents of main clauses; there are no clear examples of interrogatives asking about constituents of embedded clauses in the texts analyzed to date, and attempts to elicit these usually get periphrastic responses moving the questioned element into the matrix clause.

Yes/no questions in UNT are identical in form to the corresponding affirmative statement, being distinguished only by a rising intonation at the end of the phrase:

- (200) a. ʔe:tsinkatunká mintakúka
 ʔe:-tsinka=tunká min-takúka
 back-heavy=very 2PO-load
 ‘your load is very heavy’
- b. ʔe:tsinkatunká mintakúka↗
 ʔe:-tsinka=tunká min-takúka
 back-heavy=very 2PO-load
 ‘is your load very heavy?’

Other than the intonational cue, there is no other interrogative marker in this type of question.

3.2. Complex sentences

3.2.1. Coordination

The most common coordinating conjunctions in UNT are *ʔe:* ‘and’ and *ʔo:* ‘or’. These are probably borrowed from Spanish *y* ‘and’ and *o* ‘or’, and function syntactically in much the same way as coordinating conjunctions do in Spanish and English, uniting clauses, as in (201a) and (b), or elements in a noun phrase, as in (c):

- (201) a. tsamá: puská:t lǎʔatʃu:yá:ɬ tsí:sǎ naka:takúftu ʔe: xikwánli
 tsamá: puská:t lǎʔatʃu:yá:ɬ tsí:sǎ nak=ka:takúftu ʔe: xikwán-li
 that woman hallucinate-PFV early LOC=forest and be.afraid-PFV
 ‘the woman had a vision in the wee hours in the bush and was afraid’

- b. ?anán tu: ʃlǎʔʃtu katsí: maklá tu: maʔaʔa:nkán ʔo: tu: maʔatsanʔá
 ?anán tu: ʃl-ǎʔʃtu katsí: maklá tu: maʔ-ʔaʔa:n-kán
 exist NREL 3PO-function know find NREL AJENO-steal-IDF
- ʔo: tu: maʔatsa:nʔ-á
 or NREL lose-IMPF

‘there are those whose don is to know how to find what was stolen or what is lost’

- c. antsá ʃtawi:laná:ʔ tsamá: tʃa:tú: tsamá: ʔawátʃa ʔe: tsumaxát
 antsá ʃl-ta-wi:la-ná:ʔ tsamá: tʃa:-tú: tsamá: ʔawátʃa ʔe: tsumaxát
 there PST-3PL.SUBJ-sit-ST.PL that CLS-two that boy and girl
 ‘the two of them lived there, a boy and a girl’

So far no examples have turned up of coordination of other types of words or phrases such as adjectives, adverbs, or classifier-numeral constructions.

There are also two discontinuous coordinating conjunctions. The first of these is based on the conjunctions *ʔo:* ‘or’ and *paʔ* ‘if’, making the equivalent of the English *either ... or*:

- (202) ʔo: paʔ tala:li:ma:kiʔwakáʔ ʔo: paʔ tala:li:lakaʔtukúʔ
 ʔo: paʔ ta-la:-li:-ma:-kiʔ-wakáʔ ʔo: paʔ ta-la:-li:-laka-ʔtukú-ʔ
 or if 3PL.SUBJ-RCP-INST-CS-be.high or if 3PL.SUBJ-RCP-INST-face-stab-PFV
 ‘either they smashed each other in the mouth or they stabbed each other in the face’

The second is based on the adverb *na:* ‘also’ and is similar to the English *both ... and also*:

- (203) natʃipá na: ʃmakan na: ʃtuxanín
 na-tʃipá na: ʃl-makan na: ʃl-tuxan-nín
 FUT-grab also 3PO-hand also 3PO-foot-PL
 ‘it going to grab both his hands and also his feet’

Neither of these constructions is textually frequent.

3.2.2. Subordination

Finite subordinate clauses in UNT are all built on the same pattern, that of a relative pronoun or complementizer followed by a clause containing a morphologically ordinary finite verb. Because third-person morphology is zero and arguments are frequently dropped in discourse, there are no obvious gaps or other structural features of relative clause constructions that separate them from other types of subordinate clauses, and the most useful way to categorize subordinate clauses for our purposes here seems to be in terms of the syntactic function that the construction as a whole plays in the matrix clause containing it. The discussion below will thus begin with finite subordinate clauses acting as modifiers of nouns — i.e., relative clauses (Section 3.2.2.1) — and then move on to a discussion of clauses acting as syntactic arguments — complement clauses (Section 3.2.2.2) — and clauses expressing notions of time, place, manner, motive, purpose, and condition — adverbial clauses (Section 3.2.2.3).

3.2.2.1. Relative clauses

Relative clauses in UNT are built on morphologically ordinary verbs introduced by the relative pronouns *ti:* or *tu:*. Humans, supernatural beings, and animals that are considered to

be sufficiently animate are relativized using the pronoun *ti:* and immediately follow the noun they modify, as shown in (204):

- (204) a. *kmaʔní:ʔ kit misín ti: ifmín ka:wá lakstín*
ik-maʔní:-ʔ kit misín ti: if-min ka:-wá lakstín
 1SG.SUBJ-kill-PFV I nagual HREL PST-come PL.OBJ-eat children
 ‘‘I killed the *nagual* that was coming to eat the children’’
- b. *kaʔaʔáuw tsamá: táʔo ti: ʃtaʔanán*
ka-laʔ-án-w tsamá: táʔo ti: if-taʔanán
 OPT-ALTV-go-1PL.SUBJ that old.woman HREL PST-make.tortilla
 ‘let’s go to that old woman who makes tortillas’
- c. *ʔeʔatu:tún ʃtawi:laná:ʔ ti: xa: iftaaʔpaʃní:*
ʔeʔa-tu:tún if-ta-wi:la-ná:ʔ ti: xa: if-ta-aʔ-paʃ-ní:
 CLS-three PST-3PL.SUBJ-sit-ST.PL HREL NEG PST-INCH-head-bathe-PF
 ‘there were three that hadn’t had baptism’
- d. *pus tsex tʃu:wá wiʃ katsí:ya ti: ya: tsumaxát nali:pína nata:tamaʔaftóʔa*
pus tsex tʃu:wá wiʃ katsí:-ya ti: ya: tsumaxát
 INTJ good now you know-IMPF:2SG.SUBJ HREL PRT girl

na-li:pína na-ta:-ta-maʔa-ʃtóʔ-a
 FUT-take:IMPF:2SG.SUBJ FUT-CMT-INCH-hand-join-IMPF
 ‘well now you can decide which girl you will take to marry’

As shown by these examples, both subjects (204a – c) and objects (d) of the embedded clause can be relativized, and the head can be either an overt noun or a classifier–numeral expression (c). As with questions, UNT makes the distinction between ‘what’ and ‘which one’ by using the particle *ya:*, as shown in (d).

Non-humans and animals considered low in animacy are relativized using *tu:*:

- (205) a. *mat min lú:wə tu: mat ifmín ka:wá kristiánu*
mat min lú:wə tu: mat if-mín ka:-wá kristiánu
 QTV come snake NREL QTV PST-come PL.OBJ-eat person
 ‘they say that a snake would come and eat people’
- b. *wapá:ʔ tsamá:, ʃapitsunáx tsamá: kúʃi tu: ʃle:má:ʔ*
wa-pá:ʔ tsamá: ʃa-pitsunáx tsamá: kúʃi tu: if-le:n-má:ʔ
 eat-RPT that DTV-piece that corn NREL PST-take-PRG
 ‘he eats another piece of that corn that it was carrying’
- c. *ʔe: nalaʔtsína páʔ xa: nakli:mín tsamá: kíwɨ tu: nakli:ʔawayá:uw tsamá: tʃík*
ʔe: na-laʔtsín-a páʔ xa: na-ik-li:mín tsamá: kíwɨ
 and FUT-see-IMPF:2SG.SUBJ if NEG FUT-1SG.SUBJ-bring that tree

tu: na-ik-li:-ʔawa-yá:-w tsamá: tʃík
 NREL FUT-1SG.SUBJ-INST-make-IMPF-1PL.SUBJ that house
 ‘and you’ll see if I don’t bring the wood we are going to make the house with’

Again, the eligible targets of relativization are subjects and objects, including objects licensed by applicatives such as the instrumental prefix, *li:*, shown here in (205c) adding an instrumental object (a material) to the otherwise mono-transitive verb *lawá* ‘make something’. The material, *kíwí* ‘wood’, is realized as the governor of the embedded clause and is co-referential with the relative pronoun *tu:*. Relative clauses formed on non-arguments such as possessors and locations are not attested in texts and are only inconsistently offered in response to Spanish-language models in elicitation.

3.2.2.2. Complement clauses

Complement clauses can be grouped into two semantic types — those whose reference is an argument of the embedded clause, or headless relative clauses, and those referring to an event or state of affairs, sentential complements. Headless relatives, especially those referring to humans, are frequent in texts such as those shown in (206):

- (206) a. *katasaníuwtsamá: ti: nakinka:mąʔta:yayá:n*
 ka-tasa-ní-w tsamá: **ti:** **na-kin-ka:-mąʔta:ya-yá:-n**
 OPT-call-BEN-1PL.SUBJ that HREL FUT-1OBJ-PL.OBJ-help-IMPF-2OBJ
 ‘let’s call the one who is going to help us’

- b. *mat iftawi:laná:ʔ aʔtín nakpueblo ti: ftali:skuxmą:ná:ʔ tsamá: sandía*
 mat if-ta-wi:la-ná:ʔ aʔ-tín nak=pueblo
 QTV PST-INCH-sit-ST.PL CLS-one LOC=village

ti: **if-ta-li:-skux-mą:-ná:ʔ** **tsamá: sandía**
 HREL PST-3PL.SUBJ-INST-work-PRG-ST.PL that watermelon

‘there lived in the village those who worked with (i.e. grew) watermelons’

A particularly common headless relative in the speech of older people is the expression referring to one’s wife, *ti: ma:wí:*, literally ‘the one who feeds him’:

- (207) *ʔe: nali:píng tsamá: ti: kima:wí:*
 ʔe: na-li:píng tsamá: **ti:** **kin-ma:-wa-í:**
 and FUT-take:IMPF:2SG.SUBJ that HREL 1OBJ-CS-eat-CS
 ‘and you will take my wife’

Syntactically, this is a perfectly ordinary headless relative construction, and personal deixis (that is, making clear whose wife is being spoken of) is accomplished by object-inflection. Thus, *ti: kima:wí:* ‘my wife’, *ti: ma:wí:yá:n* ‘your wife’, *ti: ma:wí:* ‘his wife’, and so on; by the same token, a woman would refer to her husband as *ti: ikma:wí:* ‘the one that I feed’.

Headless relatives with the non-human pronoun *tu:* are also attested, although for discourse reasons they are somewhat less frequent than animate headless relatives:

- (208) a. *ifmín tu: ifwamá:ʔ*
 if-mín **tu:** if-wa-má:ʔ
 PST-come NREL PST-eat-PRG
 ‘the thing that was eating it came’

- b. wa: wi:latfá tu: putsapá:
 wa: wi:la-tfá tu: putsa-pá:
 there sit-DST NREL look.for-PRG:2SUBJ
 ‘over there is what you are looking for’
- c. xa: aʔaʔeʃpapá: tu:tsá kiʔwamá:ʔ?
 xa: aʔa-ʔeʃpa-pá: tu:=tsá kiʔ-wa-má:ʔ
 NEG ear-understand:2SG.SUBJ-PRG:2SUBJ NREL=now say-eat-PRG
 ‘don’t you understand what he is saying?’

As with relative clauses governed by nouns, headless relatives with *ti:* and *tu:* can be formed on any argument of the embedded clause.

Non-arguments such as manners and locations form complement clauses with the other relative pronouns given in Table 6 — *tʃi:* ‘how’, *xa:* ‘where’, and *akʃní* ‘when’, as in (209):

- (209) a. tasta:lá: tsamá: ufúm, xa:tsá katsí: tʃi: tsex natamaʔta:yá
 ta-sta:lá: tsamá: ufúm xa:=tsá katsí: tʃi: tsex na-ta-maʔta:yá
 3PL.SUBJ-follow that wasp NEG=now know how good FUT-INCH-help
 ‘the wasps follow him, he doesn’t know how he will save himself’
- b. tapaʔsí: xa: wanikán Jopala, u:tsá iʃmunicipio
 tapaʔsí: xa: wan-ni-kán Jopala u:tsá iʃ-municipio
 belong.to where say-BEN-IDF Jopala that 3PO-municipality
 ‘it belongs to [the place] that is called Jopala, that’s its municipal seat’
- c. tsamá: ma:skuxu:nunín u:tsá iʃtama:katsi:ni:nín akʃní iʃʔu:waskuxkán
 tsamá: ma:skuxu:nu-nín u:tsá iʃ-ta-ma:-katsi:-ni:-nín
 that foremen-PL that PST-3PL.SUBJ-CS-know-CS-DT
- akʃní** iʃ-ʔu:waskux-kán
 when PST-do.community.work-IDF

‘the foremen, they let (people) know when the community work was to be done’

Except for the relative pronoun, these embedded clauses are identical to ordinary matrix clauses. They are also identical to certain types of adverbial clause, discussed in Section 3.2.2.3 below.

Sentential complements — that is, complement clauses which refer to events and are syntactic arguments of a matrix verb — are most frequently formed using the conjunction *paʔ* ‘if’, which is also used for many types of conditional clause (see 3.2.2.3 below):

- (210) a. wiʃ katsí:yá paʔ tsex nata:taʃtúya
 wiʃ katsí:-yá paʔ tsex na-ta:-ta-ʃtú-ya
 you know-IMPF:2SG.SUBJ if good FUT-CMT-INCH-out-IMPF:2SG.SUBJ
 ‘you know whether you can come out ahead with him’
- b. iʃka:máʔtaʔáʔa ʔe: xa: iʃka:tasuyuní paʔ iʃka:máʔtaʔáʔa
 iʃ-ka:-máʔtaʔáʔa-a ʔe: xa: iʃ-ka:-tasuyu-ní
 PST-PL.OBJ-guard-IMPF and NEG PST-PL.OBJ-be.visible-BEN

pał iʃ-ka:-məʔtaʔáʔá-a
if PST-PL.OBJ-guard-IMPF

‘he watches them and they don’t see that he is watching them’

- c. pus xu:, waxtsananú xa: ti: iʃkatsí: pał iʃwí:ʔ tsamá: kúʃi
pus xu:, waxtsananú xa: ti: iʃ-katsí: **pał** iʃ-wí:ʔ tsamá: kúʃi
INTJ MTV long.ago NEG HREL PST-know if PST-sit that corn
‘well, look, long ago no one knew that there was corn’

Complement clauses can share some (210a), all (b), or none (c) of the other arguments of the matrix clause in which they appear, and there appear to be no strong constraints on the interpretation of embedded clauses with elided arguments, their reading depending on a number of factors such as animacy and topicality.

3.2.2.3. Adverbial clauses

For our purposes here, adverbial clauses are subordinate clauses that express time, place, manner, motive, purpose, or condition. Like other forms of subordinate clause, adverbial clauses take the form of morphologically ordinary clauses introduced by a complementizer. UNT has two complementizers that form temporal clauses, *akfni* ‘when’ and *li:waná:* (Pt.)/*li:wán* (Ch.) ‘while’:

- (211) a. ikte:ąktʃintama:pí:ʔ akfni te:taʃtúʔ tsamá: tumí:n
ik-te:-ąk-tʃinta-ma:-pí:-ʔ **akfni** te:-ta-ʃtú-ʔ
1SG.SUBJ-PATH-head-kick-CS-extended-PFV when PATH-INCH-out-PFV

tsamá: tumí:n
that money

‘I stepped on the money and flattened it when I passed by’

- b. li:waná: naxáʃa nakławá tu: nawáya (Pt.)
li:waná: na-xáʃ-a na-ik-ławá
while FUT-rest-IMPF:2SG.SUBJ FUT-1SG.SUBJ-make

tu: na-wá-ya
NREL FUT-eat-IMPF:2SG.SUBJ

‘while you rest, I’ll make your food’

- c. li:wán nakpáʃa, li:wán nałáwa líwa (Ch.)
li:wán na-ik-páʃ-a **li:wán** ka-łáwa lí:wa
while FUT-1SG.SUBJ-bathe-IMPF while OPT-make:2SG.SUBJ:PFV food
‘while I bathe, you make the food’

Of these, only *akfni* is at all frequent in texts or elicitation, whereas *li:waná:/li:wán* appears in only a few examples. This word may in fact be more of a temporal adverb (at least in its origins) rather than a subordinating conjunction, as suggested by the example in (211c), where it appears in both clauses, making it unclear which clause is subordinate to which. Other temporal notions encoded by complementizers like *before* and *until* in English are encoded by adverbs such as *ali:stá:n* ‘and then, later’ which do not have a complementizing function.

Adverbial clauses expressing place are, like locative complement clauses, introduced by *xa:* ‘where’, as shown in (212):

- (212) pǒʔtu tu: iʃtaɫaʔpu:wán iʃtawá antsá xa: iʃtaki:tʃá:n
 pǒʔtu tu: iʃ-ta-ɫaʔpu:wán iʃ-ta-wá antsá
 all NREL PST-3PL.SUBJ-desire PST-3PL.SUBJ-eat there
- xa:** iʃ-ta-ki:-tʃá:n
 where PST-3PL.SUBJ-RT-arrive.there

‘they ate everything they desired there [in the place] where they arrived’

These clauses are formally identical to clauses like that in (209b) which function as complements rather than as modifiers of verbs. The same is true of adverbials of manner introduced by *tʃi:* ‘how’ such as that shown in (213):

- (213) tsex paɫ kiʃoʔoníyǎ tʃi: kli:wán ikmaʃki:yá:n, mat wan
 tsex paɫ kin-ʃoʔo-ní-yǎ **tʃi:** ik-li:-wán
 good if 1OBJ-pay-BEN-IMPF:2SG.SUBJ how 1SG.SUBJ-INST-say
- ik-maʃki:-yá:n mat wan
 1SG.SUBJ-give-IMPF-2OBJ QTV say

“‘well, if you pay me as I say, I’ll give it to you,” he says’

Unlike *xa:*, *tʃi:* is also very often used in a non-complementizing function as a simple adverbial particle with the meaning of ‘thusly’ or ‘and how!’.

UNT has a number of ways of forming adverbials of motive or cause. One of these involves the subordinating conjunction *tʃu:nú:* ‘because’, shown in (214):

- (214) mat paʃki:kán tʃu:nú: mat maʔní:ɬ lú:wǎ
 mat paʃki:-kán **tʃu:nú:** mat maʔní:ɬ lú:wǎ
 QTV love-IDF because QTV kill-PFV snake
 ‘they love him because it is said that he killed the snake’

Another (infrequent) option is the use of the conjunction *tʃi:*, as in (215):

- (215) xa: katiǎɬ tʃi: wa: wánkǎ naɫu:waskuxkán tʃu:wá
 xa: ka-ti-ǎn-ɬ **tʃi:** wa: wán-kǎ na-ɫu:waskux-kán tʃu:wá
 NEG OPT-CTF-go-PFV how here say-IDF FUT-do.community.work-IDF now
 ‘he’s not going to go since they told him here they’re going to do community work’

More frequently, however, speakers make use of a construction involving the instrumental prefix *li:-* (Section 2.3.5.2), as shown in (216):

- (216) u:tsá kili:wi:li:kanǎ: namintsá tsamá: lú:wǎ tu: nakiwá
 u:tsá kin-**li:**-wi:li:-kan-nǎ: na-min=tsá tsamá: lú:wǎ
 that 1OBJ-INST-put-IDF-PF FUT-come=now that snake

tu: na-kin-wá
 NREL FUT-OBJ-eat

‘they put me here because the snake that will eat me is coming’

In sentences like these, an instrumental prefix indicating motive is added to what corresponds to the matrix clause in an English translation, and the clause expressing the motive is simply juxtaposed (either preceding or following), without any indication of syntactic subordination. In most cases the “matrix” clause is accompanied by the pronominal *u:tsá* ‘that’, which may actually be serving as an anaphor for the motive clause — again, suggesting that what is involved here is not actually syntactic subordination.

Interestingly, many speakers have adopted the Spanish conjunction *porque* ‘because’ for use either in addition to or in place of the native instrumental prefix construction, as in (217):

- (217) a. nali:tʃi:yá:uw *porque* xa: tsex tu: ʃawamá:ʃ
 na-**li:**-tʃi:-yá:-w **porque** xa: tsex tu: ʃawa-má:ʃ
 FUT-INST-tie-IMPF-1PL.SUBJ because NEG good NREL make-PRG
 ‘we’re going to put you in prison because what you are doing is not good’
- b. naikwayá:n *porque* iktsí:nksa
 na-ik-wa-yá:-n **porque** ik-tsí:nks-a
 FUT-1SG.SUBJ-eat-IMPF-2OBJ because 1SG.SUBJ-be.hungry-IMPF
 ‘I’m going to eat you because I am hungry’

Sentences like (217a) are like that in (216) except that *porque* has been added to mark the explicit subordination of the motive clause; many such sentences also have the pronominal *u:tsá*, but here it seems to be less frequent than in clauses such as (216). (217b), on the other hand, has dropped the instrumental prefix altogether and simply uses the conjunction, looking very much like a Spanish-based calque. This type of sentence is particularly common among younger speakers and highly proficient bilinguals.

Purpose seems not to be frequently expressed in subordinate clauses (or at least in clauses with obvious traits of subordination), although UNT does have purpose complementizers. The most straightforward of these is *ki:nú* ‘so that’, shown in (218):

- (218) kaʎaʎlólóló tantú:n ki:nú tsex napu:ʃú:ya
 ka-ʎaʎlólóló tantú:n **ki:nú** tsex na-pu:ʃú:-ya
 OPT-loosen post so.that good FUT-pull.out-IMPF:2SG.SUBJ
 ‘loosen the post so that you can pull it out’

A more common way of formulating the expression in (218) would simply be to juxtapose the two clauses without a complementizer or any other explicit indication of the relationship between the two clauses.

UNT has two other elements that appear to form subordinate clauses of purpose as well, *xá:ʃku* and *lí:wa* (Ch.)/*lí:kwá* (Pt.). These conjunctions combine the notions of purpose and conditionality, as shown in (219):

- (219) a. ʃánka kamá:ki: ki:ní:t xá:ʃku: namá:sa (Pt.)
 ʃánka ka-má:ki: ki:ní:t **xá:ʃku:** na-má:sa
 well OPT-put.away:2SG.SUBJ:PFV meat CNJ FUT-rot-IMPF
 ‘store the meat well so that it won’t rot’

- b. kama:ʔe:nuyá:wa:, lí:wa nakle:ʔtʃeʃlá: (Ch.)
 ka-ma:-ʔe:nu:-yá:wa: **lí:wa** na-ik-li:-aʔtʃeʃlá:
 OPT-CS-aside-stand CNJ FUT-1SG.SUBJ-INST-trip
 ‘put it away (standing up) because I might trip over it’
- c. kama:láʔatséʔtʃi mis’áʔa, mimá:ʔ tsamá: puská:t, lí:kwa xá:ʃku nalakaskuwá
 ka-ma:-láʔa-tséʔ-tʃi min-s’áʔa min-má:ʔ tsamá: puská:t
 OPT-CS-face-hidden-2SG.SUBJ:PFV 2Po-baby come-PRG that woman
- lí:kwa** **xá:ʃku** na-laka-skuwá (Pt.)
 CNJ CNJ FUT-face-curse

‘hide your baby’s face, that woman is coming, let her not give him the evil eye!’

The conjunction in (219a), *xá:ʃku*, indicates that if the action in the matrix clause is not performed, the event in the subordinate clause will take place. The conjunction *lí:wa/li:kwá* in (219b) has a similar meaning, although it seems to treat the subordinate clause to the matrix clause more as a motive (i.e. “I don’t want to trip over it”) than a purpose (“so it will not rot”). These two conjunctions can also be combined, as shown in (219c), although here — as in some other cases — it is not clear that we are dealing with syntactic subordination so much as the use of adverbial particles, and a great deal more work needs to be done before these elements are thoroughly understood.

Conditional clauses are most commonly introduced with the complementizers *paʔ* ‘if’ and *paʔá:* ‘if not’ (likely a contraction of *paʔ* plus the negative particle *xa:*), as in (220):

- (220) a. paʔ tʃu:ntsá nama:tseyí:yá kinanimá:ʔ ʔe: nali:píná ti: kima:wí:
paʔ tʃu:ntsá na-ma:-tsex-yí:-yá kin-animá:ʔ ʔe:
 if INTJ FUT-CS-good-CS-IMPF:2SG.SUBJ 1PO-animal and
- na-li:-píná ti: kin-ma:-wa-í:
 FUT-take:IMPF:2SG.SUBJ HREL 1OBJ-CS-eat-CS

‘if you cure my horse then you will take my wife’

- b. paʔá: tapa:nú:yá naktantʃintayá:n
paʔá: tapa:nú:-yá na-ik-tan-tʃinta-yá:-n
 if.not move.aside-IMPF:2S.SUBJ FUT-1SG.SUBJ-buttocks-kick-IMPF-2OBJ
 ‘if you don’t get out of the way I’ll kick you in the butt’

Although the examples here show conditional clauses in the indicative mood, many of the non-indicative moods described in Section 2.3.4 are also commonly used in conditional expressions, reflecting the speaker’s perceptions of the likelihood of the condition or its factuality/counter-factuality. Space limitations prevent a fuller discussion of these issues.

In addition to *paʔá:*, there are two other complementizers that express negative conditions:

- (221) a. nala:ʔeʔti:yá:uw su: kit naklakalásá:n
 na-la:-ʔeʔti:-yá:-w **su:** kit na-ik-laka-lásá:-n
 FUT-RCP-answer-IMPF-1PL.SUBJ if.not I FUT-1SG.SUBJ-face-slap-2OBJ
 ‘you’ll answer me or I will hit you in the face!’

- b. ?o: pentú natali:ma:makawani:yá:n skuxnín
 ?o: **pentú** na-ta-li:-ma:-makawan-ni:-yá:-n skux-nín
 or if.not FUT-3PL.SUBJ-INST-CS-contribute.drink-CS-IMPF-2OBJ official-PL
 ‘or if not the officials would make you buy liquor for everyone for [doing] it’

Neither of these is frequent and it is not clear if they are exactly equivalent to *pałá:* (or to each other). The element in (221b), *pentú* appears, at least phonologically, to be a non-native lexical item, though its source is as yet undetermined.

Like many other Mesoamerican languages, UNT has borrowed some complementizers from Spanish. The most pervasive of these are *porque* ‘because’ (illustrated in (217) above) and *ásta* ‘until’. The latter of these is extremely frequent in texts, although as a complementizer it seems only to be used in a temporal sense, as shown in (222):

- (222) a. ásta xa: ka:ki:manó?lĭ tu: tsex iſtaławałá:wán
ásta xa: ka:-ki:-manó?ł-lĭ tu: tsex
 until where PL.OBJ-RT-find.out-PFV NREL good

iſ-ta-ława-łá:wá:n
 PST-3PL.SUBJ-make-wander

‘until he knew what they were going around doing’

- b. ásta akfńi ſtaſtú tſitſinĭ ásta akfńi ſtaġnú: nama?ſte?kána
ásta akfńi iſ-ta-ſtú tſitſi-nĭ **ásta akfńi** iſ-taġnú:
 until when PST-INCH-out heat-AGT until when PST-go.into
 ‘from when the sun rose until the sun set’

In both of these cases, *ásta* is used to mark the temporal limit of some event or process and is combined with one of the other complementizers, *xa:* ‘where’ (used metaphorically in (222a)) and *akfńi* ‘when’. In its other uses, *ásta* appears to function as an adverb (meaning roughly ‘even’) rather than as a complementizer. The dual functionality of *ásta* and many of the other complementizers described above suggests that the formation of subordinate adverbial clauses may once have played only a minor role in grammar of UNT and the emergence of syntactic complementizers may have been a relatively recent development in the language — perhaps even one facilitated (or driven) by contact with Spanish.

4. Sample text: “The story of a *nagual*”

The following story was told to the author by the late Manuel Romero Morales, then in his mid-seventies, in Chicontla in the fall of 1998. The story concerns a *nagual*, a human sorcerer with the power to transform into the shape of an animal. The word *nagual* itself is from Nahuatl and the Totonac word for it used in this story is *misín* ‘jaguar’, the animal shape most commonly chosen by sorcerers in Upper Necaxan culture. Although the *nagual* is considered to be both sentient and human, I have consistently chosen the non-human English “it” as a pronoun to refer to him in my translation to help with the reference-tracking; this creates a slight tension in places such as line 30 in which the human relative pronoun *ti:* is used for the monster. The story was recorded on a hand-held audio-cassette recorder and transcribed with the help of the late Luciano Romero Aguilar and Porfirio Sampayo Macín.

The story of a *nagual*

- (1) tsamá: misín mat fka:wamá:ł lakstín
 tsamá: misín mat ił-ka:-wa-má:ł lakstín
 that nagual QTV PST-PL.OBJ-eat-PRG children
 ‘the *nagual*, they say it was eating children’
- (2) mat ʔełatfajantsá wał
 mat ʔeła-tfajan=tsá wa-ł
 QTV CLS-six=now eat-PFV
 ‘they say it ate six’
- (3) ʔe: pus wamá: wan tsamá: tʃiłkú
 ʔe: pus wamá: wan tsamá: tʃiłkú
 and INTJ this say that man
 ‘and then this man says’
- (4) ʔe: kimāʔwaʔołtsá tsamá: kis’áta
 ʔe: kin-māʔ-wa-ʔo-ł=tsá tsamá: kin-s’áta
 and 1OBJ-AJENO-eat-all-PFV=now that 1PO-child
 ‘‘‘And it ate all of my children.’’’
- (5) tsex tʃu:wá nakantama:ní naftéx, xa: lakmín, mat wan
 tsex tʃu:wá na-ik-ān-ta-ma:ł-ní na-ił-téx xa: lak-mín
 good now FUT-1SG.SUBJ-go-INCH-lie-BEN LOC=3PO-path where leg-come
 mat wan
 QTV say
 ‘‘‘Well, now I’m going to lie down in its path, where it walks,’’ he says’
- (6) pus mat āł tamá:
 pus mat ān-ł tamá:
 INTJ QTV go-PFV lie.down
 ‘so he went to lie down’
- (7) ali:stá:n mat taftútʃi tʃu:wá tsamá: misín
 ali:stá:n mat ta-ftú-tʃi tʃu:wá tsamá: misín
 then QTV INCH-out-PRX now that nagual
 ‘so then, they say, now the *nagual* came out here’
- (8) mat wan, mat ma:ł tsamá: tʃiłkú
 mat wan mat ma:ł tsamá: tʃiłkú
 QTV say QTV lie that man
 ‘well, he says ... they say the man’s lying down’
- (9) pus mat lakamusú:, lakamusú: pał, pał ni:nú: ʔo: tʃi: tʃu:
 pus mat laka-musú: laka-musú: pał pał ni:-nú: ʔo: tʃi: tʃu:
 INTJ QTV face-kiss face-kiss if if die-PF or how PRT
 ‘so it licks his face, it licks his face (to see) if he had died or what’

- (10) mat wamá:, lɛʔ mat ta:lá: misín lakamusú:
 mat wamá: lɛʔ mat ta:-lá: misín laka-musú:
 QTV this much QTV CMT-do nagual face-kiss
 ‘they say it, it really gets close to him, the *nagual* kisses his face’
- (11) li:wá mat kaks ma:níʔ, mat xa:tsá xaJa:nán
 li:wá mat kaks ma:ʔ-ní-ʔ mat xa:=tsá xaJa:nán
 deliberately QTV quietly lie-BEN-PFV QTV NEG=now breathe
 ‘he deliberately lay still, he doesn’t even breathe’
- (12) ali:stá:n mat tanteʔá kukáʔ
 ali:stá:n mat tanteʔá kuká-ʔ
 then QTV upside.down carry-PFV
 ‘then it carried him off hanging head down’
- (13) Jatséx waxnanú nakte:wá
 Ja-tséx waxnanú na-ik-te:-wá
 DTV-good there FUT-PATH-eat
 ‘‘I’d better go eat him over there’’
- (14) naklé:n aʔtsunáx, wa:tsá xa:k tiwáʔ
 na-ik-lé:n aʔ-tsunáx wa:tsá xa: ik-ti-wá-ʔ
 FUT-1SG.SUBJ-carry head-small here NEG 1SG.SUBJ-UNR-eat-PFV
 ‘‘I’m going to carry him a bit, I won’t eat him here’’
- (15) tʃu:nú: kati:wáʔ namín, mat wan misín
 tʃu:nú: kati:wáʔ na-min mat wan misín
 because anyone FUT-come QTV say nagual
 ‘‘Because anyone could come,’’ says the *nagual*
- (16) le:má:ʔ
 le:n-má:ʔ
 take-PRG
 ‘it’s carrying him’
- (17) mat ali:stá:n tʃu:wá tsukúʔ tanJa:má:
 mat ali:stá:n tʃu:wá tsukú-ʔ tan-Ja:má:
 QTV then now begin-PFV buttocks-touch
 ‘so then he (the man) began to feel its buttocks’
- (18) tsamá: ... tʃi: kukaníya
 tsamá: tʃi: kuka-ní-ya
 that how carry-BEN-IMPf:2SG.SUBJ
 ‘umm ... ‘‘What are you up to?’’
- (19) tanJa:ma:te:ʔá
 tan-Ja:ma:-te:ʔá
 buttocks-touch-AMB
 ‘he goes along feeling its buttocks’

- (20) xa: kaʃá:ma: mintéx, xa: kaʃá:ma: mintéx, mat waní
 xa: ka-ʃá:ma: min-téx xa: ka-ʃá:ma: min-téx
 NEG OPT-touch:2SUBJ:PFV 2PO-PATH NEG OPT-touch:2SUBJ:PFV 2PO-path

mat wan-ní
 QTV say-BEN

“Don’t touch your path! Don’t touch your path!” it says to him³

- (21) ʔe: mat tanʃa:ma:te:ʃá
 ʔe: mat tan-ʃa:ma:-te:ʃá
 and QTV buttocks-touch-AMB
 ‘and he goes along feeling its buttocks’
- (22) mat aʔʃta:ma:ʃtúkə tsamá: kíwǐ mat ifya:wa:ní: tʃu:wá
 mat aʔʃta:-ma:-ʃtú-kə tsamá: kíwǐ mat if-ya:wa:-ní: tʃu:wá
 QTV armpit-CS-out-IDF that tree QTV PST-stand-PF now
 ‘he pulled a stick out from under his arm’
- (23) tʃu:wá, tantamaknú:ʃ tsamá: kíwǐ tsamá: misín
 tʃu:wá tan-tamaknú:-ʃ tsamá: kíwǐ tsamá: misín
 now buttocks-put.in-PFV that tree that nagual
 ‘now he puts the stick up the *nagual*’s anus’
- (24) ʔe: mat maʔawán
 ʔe: mat maʔa-wán
 and QTV STM-say
 ‘and he makes it scream’
- (25) ali:stá:n tʃu:wá tankukamaʔánkə tsamá: tʃiʃkú
 ali:stá:n tʃu:wá tan-kuka-maʔán-kə tsamá: tʃiʃkú
 then now buttocks-carry-throw.away-IDF that man
 ‘then it threw the man off head over heels’
- (26) mat a:tʃulətsá teʃteʃ litati:tá tsamá: misín
 mat a:tʃulə=tsá teʃteʃ litati:tá tsamá: misín
 QTV more=now IDPH bounce.on.buttocks that nagual
 ‘the nagual went bouncing along on its buttocks over and over’
- (27) tamaknu:ʔóʃ kíwǐ
 tan-maknu:-ʔó-ʃ kíwǐ
 buttocks-put.in-all-PFV tree
 ‘it put the stick all the way into its anus’
- (28) li:maʔní:ʃ
 li:-maʔní:-ʃ
 INST-kill-PFV
 ‘he killed it that way’

³ The reference here is to the fact that the *nagual* is planning on eating the man, making the *nagual*’s anus the path the man will take when he finally is defecated out.

- (29) ali:stá:n mat miłtsá ka:waní tsamá:
 ali:stá:n mat min-ł=tsá ka:-wan-ní tsamá:
 then QTV come-PFV=now PL.OBJ-say-BEN that
 ‘then he came and said to them’
- (30) kmaʔní:ł kit misín ti: iʃmín ka:wá lakstín
 ik-maʔní:-ł kit misín ti: iʃ-min ka:-wá lakstín
 1SG.SUBJ-kill-PFV I nagual HREL PST-come PL.OBJ-eat children
 “‘I killed the *nagual* that was coming to eat the children””
- (31) ikmaʔní:ł, mat wan
 ik-maʔní:-ł mat wan
 1SG.SUBJ-kill-PFV QTV say
 “‘I killed it,” he said’
- (32) mat, watʃí wamá: wakáʃ ʃle:ʔáła tsamá: misín
 mat watʃí wamá: wakáʃ iʃ-li:-ʔáła tsamá: misín
 QTV like this cow 3PO-GNC-big that nagual
 “‘That *nagual* was as big as a cow.””
- (33) bueno, tu: li:máʔni:?
 bueno tu: li:-máʔni:
 well NREL INST-kill:2SG.SUBJ:PFV
 “‘Well, what did you kill it with?’”
- (34) xa: tu:, tsax kíwı ktanma:nú:ł
 xa: tu: tsax kíwı ik-tan-ma:-nú:-ł
 NEG NREL only tree 1SG.SUBJ-buttocks-CS-go.in-PFV
 “‘Nothing, I just put a stick up its anus.””
- (35) ʔe: laʔní:ł, mat wan
 ʔe: laʔní:-ł mat wan
 and die.for.reason-PFV QTV say
 “‘And that’s why it died,” he says’
- (36) xa: ti: is’awí
 xa: ti: iʃ-s’awí
 NEG HREL PST-defeat
 “‘No one defeated it.””
- (37) kli:s’awíł tʃu:n pu:laʔpuʃwi:lí:ł tsamá: kíwı, mat wan
 ik-li:-s’awí-ł tʃu:n pu:laʔ-puʃ-wi:lí:-ł tsamá: kíwı mat wan
 1SG.SUBJ-INST-defeat-PFV PRT interior-tear-put-PFV that tree QTV say
 “‘I defeated it because the stick ripped up its insides,” he says’
- (38) taqł talqʔtsín mat ʃaní:n tsamá: misín
 ta-an-ł ta-laʔtsín mat ʃa-ní:-n tsamá: misín
 3PL.SUBJ-go-PFV 3PL.SUBJ-see QTV DTV-dead-DVB that nagual
 ‘they went to see that the *nagual* is dead’

- (39) pus tʃu:wá nawayá:uw, mat tala:waní
 pus tʃu:wá na-wa-yá:-w mat ta-la:-wan-ní
 INTJ now FUT-eat-IMPF-1PL.SUBJ QTV 3PL.SUBJ-RCP-say-BEN
 “Well, now we’re going to eat it,” they say to each other’
- (40) tsukúka ʃu:kán tsamá: misín
 tsukú-ka ʃu:-kán tsamá: misín
 begin-IDF skin-IDF that nagual
 ‘they_{IDF} began to skin the *nagual*’
- (41) mat tawáʃ tsamá: misín
 mat ta-wá-ʃ tsamá: misín
 QTV 3PL.SUBJ-eat-PFV that nagual
 ‘they ate the *nagual*’
- (43) ali:stá:n tʃu:wá namimpa:lá: iʃkumpaɲéru?
 ali:stá:n tʃu:wá na-min-pa:lá: iʃ-kumpaɲéru
 then now FUT-come-RPT 3PO-companion
 ‘then, “Is another one going to come?”’
- (44) xa:tsá katimíʃ paʃ namimpa:lá:, tʃu:ntsá naʃawapa:la:yá:uw, mat tala:waní
 xa:=tsá ka-ti-mín-ʃ paʃ na-min-pa:lá: tʃu:ntsá
 NEG=now OPT-UNR-come-PFV if FUT-come-RPT thus
 na-ʃawa-pa:la:-yá:-w mat ta-la:-wan-ní
 FUT-do-RPT-IMPF-1PL.SUBJ QTV 3PL.SUBJ-RCP-say-BEN
 “Now it won’t come, if it comes we’ll do the same to it,” they say to each other’
- (45) ali:stá:n tawaʔóʃ tsamá: misín
 ali:stá:n ta-wa-ʔo-ʃ tsamá: misín
 then 3PL.SUBJ-eat-all-PFV that nagual
 ‘so they ate up the *nagual*’
- (46) ali:stá:n tʃu:wá tawaʃtsá wamá:, tʃi: tu:má: tu:tumá:
 ali:stá:n tʃu:wá ta-wa-ʃ=tsá wamá: tʃi: tu:má: tu:tumá:
 then now 3PL.SUBJ-eat=now this how two.days three.days
 ‘so then they ate it up in two or three days’

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