A grammatical sketch of Upper Necaxa Totonac

by

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Abbreviations and symbols

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

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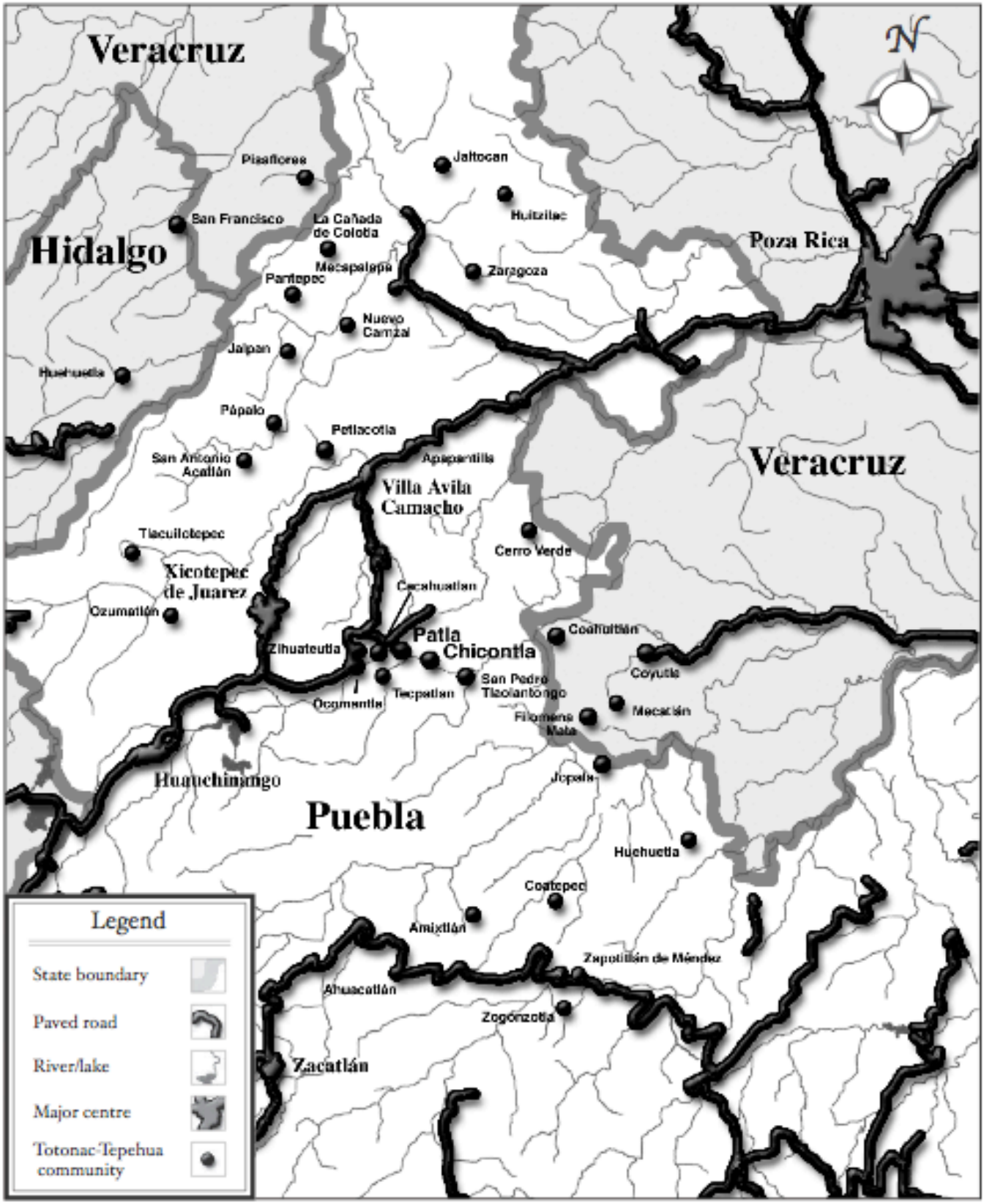
[1] According to some consultants, UNT is (or was) also spoken in San Pedro Tlaloantongo, the community immediately downriver from Chicontla. However, local accounts differ as to the degree of dialect difference between these communities, and many speakers claim that the speech of San Pedro has more 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 (ɾ)	
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 /ɬ/ 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'ą́tą* 'small' > *ts'ą́tą* '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/ (*iʃ-* 'his' + *sasán* 'skunk' > *isasán* 'his skunk'; *iʃ-* + *s'ą́tą* 'child' > *is'ą́tą* 'his child'; *iʃ-* + *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, i̱ iː, i̱ː		u, u̱ uː, u̱ː
mid	e, e̱ eː, e̱ː		o, o̱, oː, o̱ː
low		a, a̱ aː, a̱ː	

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 *liːˑ-* 'INSTRUMENTAL' + *ʔamaːnán* 'play' > *leːʔamaːnán* 'play with something'. Accented long modal vowels in word-final position undergo devoicing of their second mora (*tʃuːyaː* 'be crazy' > [tʃuːˈyaḁ]); 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 — *tʃaːán* 'ant' vs. *tʃaáːn* 'ripe' — where the stress on the long vowel in the word *tʃaáːn* causes a rising tone on the end of the syllable, as compared to the flat tone on *tʃaːán*.

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'
lanʔʃ 'a blow striking with great force'
lanʔɬ 'something being kicked with great force'

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

As in these examples, the alternation *s* ~ *ʃ* ~ *ɬ* (and occasionally *ts* ~ *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 *ɬ* ~ *ʃ* or *s* ~ *ʃ* alternation is attested:

(2) a. *ɬpipí* (vi) ‘vibrate, shake very slightly’
ʃpipí (vi) ‘tremble, shake’

b. *asása* (adj) ‘bare, naked (diminutive)’
aʃáʃa (adj) ‘bare, naked’

c. *mą̲ʔsú:* (vt) ‘peel off a fine skin’
mą̲ʔʃú: (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 simply 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:lą̲ʔatí ʃalaktampiɬín tʃiʃkuwín

xa:	ik–ka:–lą̲ʔatí	**ʃa–lak–tampiɬ–nin**	tʃiʃkų̲–win
NEG	1SG.SUBJ–PL.OBJ–like	DTV–APL–miser–PL	man–PL

‘I don’t like cheap people’

b. iʃtaputsá tsamá: sę́ʔnų̲ ʃastalánʔa tu: xa: ʔą̲:taʃkúta (Pt.)

iʃ–ta–putsá	tsamá:	sę́ʔnų̲	**ʃa–stalánʔa**
PST–3PL.SUBJ–look.for:IMPF	that	banana	DTV–white

tu:	xa:	ʔa̱:–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 *ʃa-* (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:laʔó̱:ɬ sé̱ʔnu̱ (Pt.)

lak–mas–to:la–ʔó–ɬ	sé̱ʔnu̱
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(V̱)/ where V represents a harmonic copy of the last vowel in the stem, as in:

(6)	*tʃik* ‘house’	>	*tʃíkni̱* ‘houses’
	maɬát ‘mushroom’	>	*maɬátna̱* ‘mushrooms’
	pi:ʃká:ɬ ‘civic official’	>	*pi:ʃká:ɬna̱* ‘civic officials’
	aka̱kulúɬ ‘scorpion’	>	*aka̱kulúɬnu̱* ‘scorpions’
	stáya̱ ‘squirrel’	>	*stayán* ‘squirrels’
	slulúku ‘lizard’	>	*slulukún* ‘lizards’
	púksni̱ ‘Spanish cedar’	>	*puksnín* ‘Spanish cedars’

As shown in (6), consonant-final stems take the [-nV̱] 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. *tʃiʃkú̱* ‘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)	*kimakán* 'my hand'	>	*kimakanín* 'my hands'
	kilákn̨i 'my lower leg'	>	*kilaknín* 'my lower legs'
	kutʃu:nún 'doctor'	>	*kutʃu:nunín* 'doctors'
	puʃnún 'picker'	>	*puʃnunín* 'pickers'
	ma:ʔeɬtawq̨ʔe:nɨ́ 'teacher'	>	*ma:ʔeɬtawq̨ʔe:ninín* 'teachers'
	lu:ntún 'lame person'	>	*lu:ntunín* 'lame people'

A few nouns referring to humans also take the distributive/adjective plural prefix *lak-*/*lq̨ʔ-*, as in *lq̨ʔo:lu:nín* 'old men' or *lq̨ʔawatʃán* 'boys'.

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

(8) a. tala:kiɬni:te:ɬá natq̨ʔónu̱ (Ch.)
ta–la:–kiɬni:–te:ɬá **na**–tq̨́ʔo–nu̱
3PL.SUBJ–RCP–scold–AMB COL–old.woman–PL
'the old women go along arguing with each other'

b. pǫ́ʔtu̱ tamíɬ ʃnatq̨ʔónu̱ (Ch.)
pǫ́ʔtu̱ ta–míɬ iʃ–**na**–tq̨́ʔo–nu̱
all 3PL.SUBJ–come 3PO–COL–old.woman–PL
'all of his wives came'

c. *pǫ́ʔtu̱ tamíɬ ʃtq̨ʔónu̱
*'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	iʃkúʃi	iʃkuʃikán

Table 3: Possessive paradigm (√*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, *iʃ-* is usually realized as [ʃ-].

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

(9) a. iʃtʃík ʔawátʃa
iʃ–tʃik ʔawátʃa
3PO–house boy
'the boy's house'

b. iʃtʃikán lakstín
iʃ–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. kimpǫ̨ʔtukán
kin–pǫ̨ʔtu–kan
1PO–all–PL.PO
'all of us'

b. iʃʔeɬatoxonkan
iʃ–ʔeɬa–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) *iʃnáp* 'aunt'
iʃna:ná 'grandmother'
iʃtʃe:ʔé:n 'leg'
iʃʔóʃ'a 'skin, leather'
iʃpa:ʃtapún 'kidney'(lit. 'belly-bean')
iʃʔǫ̨ʔsnį̨ 'tip, protruding portion'
iʃtampín 'lower part, underside'
iʃli:má:n 'oneself'
iʃtapáɬ '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) *tʃiʃkų́* 'man' > *iʃtʃiʃkų́* 'her husband'
puská:t 'woman' > *iʃpuská:t* 'his wife'
ʔawátʃa 'boy' > *iʃʔawátʃa* 'his son'
ʔe:stín 'north (uphill)' > *iʃʔe:stín* 'its dorsal fin, ridge (of hill)'
táɬtsi 'toasted squash seed' > *iʃtáɬtsi* '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 *ʔeːstín* '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. *táɬcį́* 'toasted squash seed' takes on a generic sense when possessed: saying 'seed' is impossible without the expression of a possessor, either specific — *iʃ-*, 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', *iʃlá* 'his/hers/its', *kilakán* 'ours', *milakán* 'yours', *iʃlakán* '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 uːtsá	ʃlakán uːtunún

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, *uːtsá* is textually more frequent and has a demonstrative reading. It also appears as an abstract pronoun in constructions such as (13):

(13) maːʃ tsax lakasku:wakaní:, uːtsá liːkaɬwán
maːʃ tsax lakasku:wa–kan–ní: **uːtsá** liː–kaɬwán
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. kan̯a:tʃá ikta:wá wamá: kinkumpaléx sandía
ik–an̯–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: wanini?oni̯:tsá sandía
wamá: wa–nin–ni–ʔo–ni̯:=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:ɬ* '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, giveness, 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	ti:	ANIMATE	ti:
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:wáɬ* 'someone, anyone', *katu:wáɬ* 'something, anything', and *katʃi:wáɬ* 'some way, any way':

(15) a. xa: kaɬáwa̱ tsamá:, kati:wáɬ nala̱ʔtsiná:n
xa: ka–ɬáwa̱ tsamá: **kati:wáɬ** na–la̱ʔtsin–a:–n
NEG OPT–make:2SG.SUBJ:PFV that someone FUT–see–IMPF–2OBJ
'don't do that, someone will see you'

b. katu:wáɬ li:la̱ʔatʃu:ya:kán ma̱ʔa:stsá
katu:wáɬ li:–la̱ʔatʃu:ya:–kan ma̱ʔa:s=tsá
something INST–hallucinate–IDF long.ago=now
'they$_{IDF}$ would hallucinate anything back then'

c. ma:ntsá katʃi:wáɬ kiwanimá:ɬ
ma:n=tsá **katʃi:wáɬ** kin–wan–ni–ma:ɬ
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, *-ni̱* (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 *kíni̱* '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 partonymic 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 partonymic expressions such as *tampín* 'bottom, underside' and *tampá:n* '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, partonymic expressions are also used to describe relative spatial location of one object with respect to another, as in (16):

(16) a. líbɾu ʃa̱kpún *mesa* wi:ɬ
líbɾu **iʃ–a̱kpún** mesa wi:ɬ
book 3PO–crown table sit
'the book is on the table'

BODYPART	COMBINING FORM	PARTONYMIC EXTENSIONS
ą̱ʔán ‘ear’	*ą̱ʔá-*	branch (tree), handle (cup)
ą̱kpún ‘crown of head’	*ą̱kpú-*	top of object, crown of hill
tʃaːn ‘shin’	*tʃaː-*	trunk of tree, shaft of object
tʃeːʔéːn ‘leg’	*tʃeːʔeː-*	—
ʔéɬnį̱ ‘mouth (interior)’	*ʔéɬ-*	opening, irregular upper surface, surface (liquid)
ʔeːn ‘back’	*ʔeː-*	back of animal, roof of house
kíɬnį̱ ‘mouth (exterior)’	*kíɬ-*	rim (cup), mouth (bottle), edge
kínį̱ ‘nose’	*kinka-, ʔenʔa-*	point, peak
kuʃáːn ‘chest’	*kuʃaː-*	—
lakán ‘face’	*laka-, lą̱ʔa-*	planar surface
láknį̱ ‘leg’	*lak-*	lower portion of field (Ch.)
makán ‘hand, finger’	*maka-, mą̱ʔa-*	paw, talons, handle (bucket)
máknį̱ ‘body’	*mak-, mą̱ʔ-*	bulky part of object, area behind or around object
paːn ‘abdomen’	*paː-*	wide midriff of object
pę̱ʔén ‘arm’	*pę̱ʔe-*	wing, foreleg, sleeve
piːn ‘breast, chest’	*piː-*	front side of leaf
puːn ‘vagina’	*puː-*	interior, container
tánį̱ ‘buttocks, anus’	*tan-, taː-*	hindquarters, stem (corncob)
tampáːn ‘base’	*tampaː-*	—
tampín ‘bottom’	*tampi-*	—
taːpáːn ‘side’	*taːpaː-*	larger vertical face of object
tuːxán ‘foot, paw’	*tuː-, tantuː-*	foot (furniture)
tsǫ̱ʔósnį̱ ‘knee’	*tsǫ̱ʔos-*	—

Table 1: Common UNT bodyparts and partonymic extensions

b. líbɾu ʃtampún *mesa* wiːɬ
líbɾu **iʃ–tampún** mesa wiːɬ
book 3PO–interior.bottom table sit
‘the book is right under the table’

c. nakwiːlíː ʃpę̱ʔʃtún *mesa*
na–ik–wiːlíː **iʃ–pę̱ʔʃtún** mesa
FUT–1SG.SUBJ–put 3PO–shoulder table
‘I’m going to put it next to the table/

d. tamą̱ʔawáslį̱ ʃtampín *mesa* mintʃá
tamą̱ʔawás–lį̱ **iʃ–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 partonymics 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 kinʔą̲:ʃ ʔe: nakmoxó: ʃatʃítʃi nakʃka:n
na–ik–tʃuku=tsá kin–ʔą̲:ʃ ʔe: na–ik–moxó:–Ø
FUT–1SG.SUBJ–cut=now 1PO–gourd and FUT–1SG.SUBJ–immerse–IMPF

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 kinʔą̲:ʃ ʔe: nakpu:moxó: ʃatʃítʃi ʃka:n
na–ik–tʃuku=tsá kin–ʔą̲:ʃ ʔe: na–ik–**pu:**–moxó:–Ø
FUT–ISG.SUBJ–cut=now 1PO–gourd and FUT–1SG.SUBJ–inside–immerse–IMPF

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 a *pu:-* 'vagina' (meaning more generically 'inside') as in (17b), although incorporation of the bodypart does not always transitivize 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. iktawaką̲ɬ tsamá: ʃaʔą̲ɬą̲ nakį̲wį̲
ik–ta–waką̲ɬ tsamá: ʃa–ʔą̲ɬą̲ **nak**=kį̲wį̲
1SG.SUBJ–INCH–be.high that DTV–big LOC=tree
'I climbed up into that tall tree'

b. iktawaką̲ɬ tsamá: **na**ʃaʔą̲ɬą̲ kį̲wį̲
c. iktawaką̲ɬ **nak**tsamá: ʃaʔą̲ɬą̲ kį̲wį̲

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. iktawakɑ̨ɬnaʃpe̱ʔén kɨ̨wi̱
ik–ta–wakɑ̨ɬ **nak**=iʃ–pe̱ʔén **nak**=kɨ̨wi̱
1SG.SUBJ–INCH–be.high LOC=3PO–arm LOC=tree
'I climbed up onto the branch of the tree'

b. iktawakɑ̨ɬ**na**ʃpe̱ʔén kɨ̨wi̱

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: ʃastɑ̨ʔa kapéx
na–ik–ma:–makʃtim–í: tsamá: **ʃa**–stɑ̨ʔa 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 laksákli̱ tu: ʃastɑ̨ʔa
mat lak–sak–li̱ tu: **ʃa**–stɑ̨ʔa
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: iʃpe̱ʔni̱ kɨ̨wi̱ nali:ɬawáyɑ̨ milɑ̨ʔastapún
ʃa–ʃká:n tsamá: iʃ–pe̱ʔni̱ kɨ̨wi̱ na–li:–ɬawá–yɑ̨ min–lɑ̨ʔastapún
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: iʃpe̱ʔni̱ kɨ̨wi̱* '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. *liː-* 'GENERIC' (GNC)

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

(23) a. liːmexiːkánu̱ talą̱ʔʃtapalíːɬ aːʔempaːtín *partido*
liː–mexiːká–nu̱ ta–lą̱ʔʃtapalíː–ɬ aː–ʔempaː–tín partido
INST–Mexican–PL 3PL.SUBJ–exchange–PFV ADD–CLS–one party
'Mexicans changed to another party'

b. nakaːmą̱ʔníː tsamáː liːtsinkwáxna̱ kimą̱ʔwaʔóɬ kinkáʃli
na–ik–kaː–mą̱ʔníː tsamáː **liː**–tsinkwá–xna̱ kin–mą̱ʔ–wa–ʔó–ɬ
FUT–1SG.SUBJ–PL.OBJ–kill that GNC–eyra–PL 1OBJ–AJENO–eat–all–PFV

kin–káʃli
1PO–hen

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

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

(24) a. ʃiɬtín ʃaɬkaːyáwa ʃiːmaːwą̱ laː liːlúːwa
iʃ–iɬtín ʃa–ɬkaːyáwa ʃiːmaːwą̱ laː **liː**–lúːwa
3PO–faeces DTV–green fly do GNC–worm
'the faeces of the greenbottle fly becomes worms'

b. naklaːtamáː ʃaliːstánku
na–ik–laːtamáː ʃa–**liː**–stánku
FUT–1SG.SUBJ–act DTV–GNC–younger.sibling
'I'm going to serve as *stanku* (civic official)'

c. nakina̱niní kilą̱ʔʃǫ́ʔǫ liːskunaːtaːtą̱
na–kin–a̱n–nin–ní kin–lą̱ʔʃǫ́ʔǫ **liː**–skunaːtaːtą̱
FUT–1OBJ–go–DT–BEN 1PO–substitute GNC–godfather
'my substitute is going to stand in for me as godfather'

d. leːʔeɬatáːti piːlíką̱
leː–ʔeɬa–táːti piːlí–ką̱
GNC–CLS–four roll.over–IDF
'he was rolled by four (people)'

e. *ʔeɬatáːti piːlíką̱
*'he was rolled by four (people)' ('they rolled four people')

f. *naklaːtamáː 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 *liː-* 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 *liː-* (d, f).

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

(25) a. lą̲ʔáː ʃliːtsínka
lą̲ʔáː iʃ–**liː**–tsínka
much 3PO–GNC–heavy
'it is very heavy' (lit. 'its weight is much')

b. xaː leː lakatʃaːnkán ʃliːmą̲ʔát (Ch.)
xaː leː laka–tʃaːn–kán iʃ–**liː**–mą̲ʔát
NEG able face–arrive.there–IDF 3PO–GNC–far
'one can't see far'

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

2.1.8. *kaː-* 'place of' (PLC)

The prefix *kaː-* 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) *kį́wį̲* 'tree' > *kaːkɨwín* 'bush, forest'
ʔę̲ɬúː 'limestone' > *kaːʔę̲ɬúːn* 'place of limestone'
tʃik 'house' > *kaːlaktʃíknį̲* 'town'
kukát 'oak' > *kaːkukátnq̲* 'El Encinal' (village)

As in the last example, *kaː-* is frequently used in the derivation of place names. In a few cases, *kaː-* is prefixed to nouns to form adverbs meaning 'by means of' as in *kaːtuxán* 'on foot (*tuxán*)', *kaːmakán* 'by hand (*makán*)', or *kaːmatʃíːt* 'with a machete (*matʃíːt*)':

(27) mą̲ʔtʃuyáːɬ, kintantuːyaːwáːɬ ką̲matʃį́t
mą̲ʔtʃuyáː–ɬ kin–tantuː–yaːwáː–ɬ **kaː**–matʃį́t
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 *kaː-* to non-nominal bases:

(28) *katsán* (vi) 'feel pain' > *kaːkatsán* 'rough (terrain)'
kq̲́kswa (adj) 'quiet, still' > *kaːkq̲kswa* 'quiet (place)'
púkswa (adj) 'dark' > *kaːpúkswa* 'dark (place)'
sʼewį́wį̲ (adj) 'cool' (liquids) > *kaːsʼewį́wį̲* 'cool (place, climate)'
lą̲ʔalíː (adv)'tomorrow' > *kaːlą̲ʔalíː* 'day after day'

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

(29) a. tsisáx xaː leː katitáʃtu, kaːpúkswa xaː tuː ʃʔaːnáːn tuː liːmaːsʼokán
tsisáx xaː leː ka–ti–táʃtu **kaː**–puks–wa xaː tuː
late NEG do OPT–UNR–out:2SG.SUBJ:PFV PLC–dark–SEM NEG NREL

iʃ–ʔaːnáːn tuː liː–maː–sʼo–kán
PST–exist NREL INST–CS–illuminate–IDF

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

b. kaːlanʔatunká
kaː–lanʔ–a=tunká
PLC–be.shady–IMPF=very
'it's very shady'

It (29a), the adverb *kaːpúkswa* 'dark (place)' appears as an adverbial expression of place, while in (b) the word *kaːlánʔa* '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 tamaːʃtumą̲ːnáːɬ naiʃtuxán ą̲ʔtín ʔą́ɬą̲ tʃiwíʃ
mat ta–maː–ʃtu–mą̲ː–náːɬ nak=iʃ–tuxán ą̲ʔ–tín **ʔą́ɬą̲** 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. ɬtun lą̲ʔmakamín ʔeː ʃastą́ʔa suwáːɬ
ɬtun lą̲ʔ–maka–mín ʔeː ʃa–**stą́ʔa** suwáːɬ
IDPH ALTV–hand–come and DTV–unripe black.sapote
'wham! he throws it to him and (it is) an unripe black sapote'

c. mat mą̲ʔatsá ʃtaɬą̲ːwaːnį́ː ʃtaputsamą̲ːnáːɬ ʃatséya tiyą́
mat mą̲ʔa=tsá iʃ–ta–ɬą̲ːwaːn–nį́ː iʃ–ta–putsa–mą̲ː–náːɬ
QTV far=now PST–3PL.SUBJ–wander–PF PST–3PL.SUBJ–search–PRG–PL.ST

ʃa–**tséya** tiyą́
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:lą̲ʔtsíɬ tsamá: tsumaxán lą̲ʔo:ntí:n
ik–ka:–lą̲ʔtsín–ɬ tsamá: tsumaxán lą̲ʔ–**ʔo:ntí:**–n
1SG.SUBJ–PL.OBJ–see–PFV this girl:PL APL–get.fat–DVB
'I saw the fat girls'

b. iklą̲ʔtsíɬ lą̲ʔatín tʃitʃí ʃaʔą̲́ɬą̲
ik–lą̲ʔtsín–ɬ lą̲ʔa–tín tʃitʃí ʃa–**ʔą̲́ɬą̲**
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 tsamá: ʔawátʃa
a:–**laka–ʃkilíki** tsamá: ʔawátʃa
ADD–face–dirty that boy
'the boy has a dirty face'

b. tʃa:sukúku tsamá: ʔentín kį́wį̲
tʃa:–sukúku tsamá: ʔen–tín kį́wį̲
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 tʃiʃkų́
lú:kux tʃiʃkų́
brave man
'the man is brave'

b. lú:kux ʃwanį́:
lú:ku: iʃ–**wan**–nį́: tʃiʃkų́
brave PST–be–PF man
'the man was brave'

c. lú:kux nawán tʃiʃkų́
lú:kux na–**wan** tʃiʃkų́
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:ɬtanʔalán tamą̲:náːɬ
lak–pa:–**ɬtanʔalá**–n ta–ą̲n–mą̲:–náːɬ
APL–belly–uncovered–PL 3PL.SUBJ–go–PRG–PL.ST
'they are coming with their shirts open'

b. kimą̲ʔas'awimáːɬ tsinkatunká ikle:máːɬ
kin–mą̲ʔa–s'awi–máːɬ **tsinka**=tunká ik–le:n–máːɬ
1OBJ–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:lɛ̲́ʔʃwa stą̲klį̲ iʃpɛ̲ʔén kɨ̲́wį̲
ka:ná: **wi:lɛ̲́ʔʃ–wa** stą̲k–lį̲ iʃ–pɛ̲ʔén kɨ̲́wį̲
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:tʃulá:* 'more' as in (35):

(35) a. kit a:tʃulá: mą̲ʔát naiką̲́n ʔe: wamáː tʃiʃkʉ̲́
kit **a:tʃulá:** **mą̲ʔát** na–ik–ą̲́n ʔe: wamáː tʃiʃkʉ̲́
I more far FUT–1SG.SUBJ–go and this man
'I'm going farther than this man'

b. a:tʃulá: ʃatséx wamáː kawa:yúx
a:tʃulá: **ʃa–tséx** wamáː 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 lúʃʉ̲ ikɬawáɬ ka:makán
ʃa–tséx lúʃʉ̲ ik–ɬawá–ɬ ka:makán
DTV–good cloth 1SG.SUBJ–make–PFV by.hand
'I made the finest cloth by hand'

b. iklakma:ʃtumáːɬ tu: ʃatséx
ik–lak–ma:–ʃtu–máːɬ tu: **ʃa–tséx**
1SG.SUBJ–DTB–CS–out–PRG NREL DTV–good
'I'm picking out the best'

c. ʃatséx kʉ̲́tʃʉ̲ ʃta:ma:wa:níː ʃlakpa:yáːɬ mú:ʃnį̲ lame:táx (Ch.)
ʃa–tséx kʉ̲́tʃʉ̲ iʃ–ta:ma:wa:–ní̲ː iʃ–lakpa:–yáːɬ mú:ʃnį̲ lame:táx
DTV–good liquor PST–buy–PF 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-/lą̲ʔ-* 'ADJECTIVAL PLURAL' (APL)

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

(37) a. tamín tsamá: lą̲ʔą́ɬą̲ tʃitʃín
ta–mín tsamá: **lą̲ʔ–ʔą́ɬą̲** tʃitʃí–n
3PL.SUBJ–come that APL–big dog–PL
'some big dogs came'

b. xa: ika:lą̲ʔatí ʃalaktampiɬín tʃiʃkuwín
xa: ik–ka:–lą̲ʔatí ʃa–**lak–tampiɬ–nin** tʃiʃkų̲–win
NEG 1SG.SUBJ–PL.OBJ–like DTV–APL–miser–PL man–PL
'I don't like cheap people'

c. naʃtuxankán mat ɬú:wą̲ iʃka:tantu:tʃukuní̲: tʃiwíʃ ʃalaklaxaxán
nak=iʃ–tuxan–kán mat ɬú:wą̲ iʃ–ka:–tantu:–tʃuku–ní̲:
LOC=3PO–foot–PL.PO QTV many PST–PL.OBJ–foot–cut–PF

tʃiwíʃ ʃa–**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 *lą̲ʔ-* 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:lą̲ʔtsíɬ lú:ku: tʃiʃkuwín
ik–ka:–lą̲ʔtsín–ɬ **lú:ku:** tʃiʃkų̲–wín
1SG.SUBJ–PL.OBJ–see–PFV brave man–PL
'I see the brave men'

b. ika:lą̲ʔtsíɬ laklú:ku: tʃiʃkuwín
ik–ka:–lą̲ʔtsín–ɬ **lak–lú:ku:** tʃiʃkų̲–wín
1SG.SUBJ–PL.OBJ–see–PFV APL–brave man–PL
'I see the brave men'

c. ika:lą̲ʔtsíɬ laklú:ku: tʃiʃkų́
ik–ka:–lą̲ʔtsín–ɬ **lak–lú:ku:** tʃiʃkų́
1SG.SUBJ–PL.OBJ–see–PFV APL–brave man
'I see the brave men'

d. ika:lą̱ʔtsíɬ lú:ku: tʃiʃkų́
ik–ka:–lą̱ʔtsín–ɬ **lú:ku:** tʃiʃkų́
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:ɬ, xa: a:tsínka
xa: ik–katsí: tu: ik–le:n–má:ɬ 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:nipáɬ a:lą̱ʔatín wampaláx
makti:–ni–pá:ɬ **a:**–lą̱ʔa–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)
ą̱ʔslapúx 'having the head covered'	>	*ą̱ʔslapúxwa* 'covered (head)'
tʃaláx 'brittlely'	>	*tʃaláxwa* 'brittle, fragile'
ką́ks 'quietly, still, immobilely'	>	*ką́kswa* 'quiet, still, immobile'
kupúks 'bent over'	>	*kupúkswa* 'bent over'
lą̱ʔatsé̱ʔ 'hidden'	>	*lą̱ʔatsé̱ʔwa* 'hidden'
líks 'whinily'	>	*líkswa* 'whiny, spoiled (of children)'
pám 'very fat, very pudgy'	>	*pámwa* 'very fat, very pudgy'
ɬít 'too heavy to move'	>	*ɬítwa* '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:lɛ̨́ʔʃ stą́klį iʃpɛ̨ʔén kɪ́wį
ka:ná: **wi:lɛ̨́ʔʃ** stą́k–lį iʃ–pɛ̨ʔén kɪ́wį
truly twisted grow–PFV PST–arm tree
'the tree's branch grew very twisted'

b. ka:ná: wi:lɛ̨́ʔʃwa stą́klį iʃpɛ̨ʔén kɪ́wį
ka:ná: **wi:lɛ̨́ʔʃ–wa** stą́k–lį iʃ–pɛ̨ʔén kɪ́wį
truly twisted–SEM grow–PFV PST–arm tree
'the tree's branch grew very twisted'

c. ą̨ʔapi:wi:lɛ̨́ʔʃwa wakáʃ
ą̨ʔapi:–**wi:lɛ̨́ʔʃ–wa** wakáʃ
horn–twisted–SEM cow
'a corn with twisted horns'

d. *ą̨ʔapi:wi:lɛ̨́ʔʃ wakáʃ
ą̨ʔapi:–**wi:lɛ̨́ʔʃ** wakáʃ
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'
ɬmukukú 'yellow' > *ɬmukukúwa* 'yellowish'
snapą̨pą́wa 'white' > *snapą̨pą́wa* '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:ʃ 'orange' > *la:ʃá:ʃwa* 'orange'
ɬkakán 'ash' > *ɬkakánwa* '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)’
kanɬít ‘with teeth showing’
la:tą̲ʔa ‘looking greasy, shiny with grease’
luxtʃúx ‘rearing up and jumping (of crickets and frogs)’
ɬa:mánʔ ‘rounded, full’
ɬ’at ‘close together, tight’
ɬ’ę̲ʔę̲ ‘having the smell of burnt hair, fingernails, horn, meat, or beans’
snu:n ‘on the verge of death’
stiɬ ‘spreadout (small objects), distributed evenly’
wiɬ’ę̲ʔ ‘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. *ɬ’at* ‘close together’, *ɬ’átwa* ‘close together’)

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

(45) a. mą̲ʔá:ya: ɬawakanį́: pu:sikwalán
mą̲ʔá:ya: ɬawa–kan–nį́: 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 *ʃa-* 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, *xaʃáx* ‘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:**xiks**wi:ɬtunká kistánkų̲
ik–ma:–**xiks**–wan–ni:–ɬ–tunká kin–stánkų̲
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 yuxmáːɬ ʃkaːn
tsanʔtsanʔ yux–máːɬ ʃkaːn
IDPH go.down–PRG water
'the water is dripping'

b. xiɬixiɬi tantuːwán akʃní ɬa̲ːwáːn (Pt.)
xiɬixiɬi tantuː–wán akʃní ɬa̲ːwáːn
IDPH foot–say when wander
'his feet make noise as he walks along on loose pebbles'

c. slaːtaslaːta kiɬwán lúːwa
slaːtaslaːta kiɬ–wán lúːwa
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 *xiɬixiɬi* in (b), the sound of someone walking on loose pebbles. The ideophone in (c), *slaːtaslaːta* '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'
ɬanaɬana 'someone running around in a panic because they are late'
pa̲nɬupa̲nɬu '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'
po̲ʔpo̲ʔ 'someone making tortillas'
kalanɬkalanɬ 'someone biting through hard food'

laksliwilaksliwi ‘a four-legged animal limping along on three legs’
pa̱nɬupa̱nɬu ‘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. teɬ iktawí:ɬ ka:s’ewí̱wi̱ antsá
teɬ ik–ta–wí:ɬ ka:–s’ewí̱wi̱ antsá
IDPH 1SG.SUBJ–INCH–sit PLC–cool here
‘I plop myself down here where it’s cool’

b. mat a:tʃula̱tsá teɬteɬ litati:tá tsamá: misín
mat a:tʃula̱=tsá **teɬteɬ** 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 a̱ní:
kunikunikuni a̱n–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) *tʃululu* ‘water trickling’
lununu ‘someone strutting around showing off’
mililí ‘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 tamą̲ːnáːɬ tʃaːán
swatatata ta–ą̲n–mą̲ː–náːɬ tʃaːán
IDPH 3PL.SUBJ–go–PRG–PL.ST ant
'the ants march in a line'

b. tsannannanna kiną̲ʔą̲wán
tsannannanna kin–ą̲ʔą̲–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'
ponʔʃponʔʃ 'large objects dropping into water'
ponʔʃuʃu '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	*ą̲ʔtin*	11	*ą̲ʔkauxtín*
2	*ą̲ʔtuː*	20	*ą̲ʔpuʃám*
3	*ą̲ʔtuːtún*	30	*puʃamakáux*
4	*ą̲ʔtáːtį̲*	40	*tuːpuʃám*
5	*ą̲ʔkitsís*	50	*tuːpuʃamakáux, itát siéntu*
6	*ą̲ʔtʃaʃán*	60	*tuːtunpuʃám*
7	*ą̲ʔtoxón*	70	*tuːtunpuʃamakáux*
8	*ą̲ʔtsayán* (Ch.), *ą̲ʔtseyén* (Pt.)	80	*taːtipuʃám*
9	*ą̲ʔnaxáːtsa*	90	*taːtipuʃamakáux*
10	*ą̲ʔkáux*	100	*ą̲ʔtín siéntu*

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 *ą̲ʔkáux mą̲ʔkáux* 'ten times ten', rather than *kitsispuʃám* '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, *ą̲ʔ-*. So far, twenty-nine numeral classifiers have been recorded:

qʲʔ- [generic]	*piːʃ-* ‘bouquet, bunch (plants)’
qʲk- ‘hide, skin, large heavy cloth’	*puː-* ‘clothing, net, sling’
kiɬ- ‘bunch (bananas)	*puːlak-* ‘plant’
kiɬqʲk- ‘ladder’	*tsan-* ‘roll (plants, sticks)’
kiɬmak- ‘full bunch (bananas)	*ʃlęʲʔ-* ‘times ago’
lqʲʔa- (1), *tan-* (2+) ‘animal’	*tapaː-* ‘armload (both arms)’
lqʲʔapuː- ‘face of object’	*tʃaː-* (1–3), *ʔeɬa-* (3+) ‘person’
laka- ‘planar surface, area’	*tʃaː-* ‘chili’
mqʲʔ- ‘time, event’	*tʃastu-* ‘corner
mqʲʔʃpaː- ‘armload (one arm)’	*ʔeː-* ‘bulky object, avocado’
mak- ‘tortilla, bar of soap, bun, cheese’	*ʔeːsti-* ‘clove (garlic)’
muːs- ‘bunch (bananas, grapes)’	*ʔeɬ-* ‘chunk, flower, mushroom, date (day)’
paː- ‘bottle, gourd with neck, basket’	*ʔempaː-* ‘kind’
pęʲʔ- ‘leaf, cactus pad, paper, door’	*ʔen-* ‘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 *lqʲʔatín*, while two are more use the prefix *tan-*. For people, *tʃaː-* is used for one or two, *ʔeɬa-* is used for four or more; three people can be counted either *tʃaːtuːtún* or *ʔeɬatuːtún*.

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

(57) a. kiɬmaktín másnį̨ sę́ʔnų̨ (Pt.)
kiɬmak–tín más–nį̨ sę́ʔnų̨
CLS–one rot–DVB banana
‘a bunch of bananas’

b. kakimáʃkį̨ paːkitsís lameːtáx (Ch.)
ka–kin–máʃkį̨ **paː–kitsís** lameːtáx
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) uːtsá ɬawáɬ tʃaːtín
uːtsá ɬawá–ɬ **tʃaː–tín**
that make–PFV CLS–one
‘some person (other than me) did that’

Like adjectives, classifier expressions can also function as adverbs:

(59) a. aːmqʲʔtín naktąspitapaːláː
aː–mqʲʔ–tín na–ik–tąspita–paːláː
ADD–CLS–one FUT–1SG.SUBJ–return–RPT
‘I’ll come back again’

b. ą̃ʔtu: nakɬó: (Pt.)
ą̃ʔ–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 *ą̃ʔ-* 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	Ø	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), *tʃą̃n* 'plant' (Class 2b) and *lą̃ʔtsín* 'see' (Class 3), we have the following second-singular forms:

	IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
Class 1	taʃtúyą	táʃtu	taʃtuní:tą	taʃtupą́:
Class 2a	túksą	túkstį	tuksní:tą	tukspą́:
Class 2b	tʃą́ną	tʃą́ntį	tʃaní:tą	tʃąmpą́:
Class 3	lą́ʔtsíną	lą́ʔtsį	ląʔtsiní:tą	ląʔtsimpą́:

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 *ą́n* 'go' and *min* 'come', whose second-person forms are shown in Table 11:

	IMPERFECTIVE	PERFECTIVE	PERFECT	PROGRESSIVE
SG	píną	pit	piní:tą	pimpą́:
PL	pina:tít	pintít	pini:ta:ntít	pimpą:na:ntít
SG	táną	tąt	taní:tą	tampą́:
PL	tana:tít	tatít	taní:ta:ntít	tampą:na:ntít

Table 11: Second-person forms for *ą́n* 'come' and *min* 'go'

Other common verbs with irregular second-person forms are *tʃa:n* 'arrive there' (IMPF:SG *tʃipína*, PL *tʃipina:tít*), *tʃin* 'arrive here' (IMPF:SG *tʃitáną*, PL *tʃitana:tít*), *ʔeʃmą́t-* 'hear, understand' (IMPF:SG *ʔeʃpą́tą*, PL, *ʔeʃpąta: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 essential an extra-long /au/ diphthong with a de-voiced final portion. This ending is realized in informal speech in Patla as simply [a:ʍ].

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:nu̲–nín **ka:**–ma:–wa–í: skuxni̲–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:nu̲–nín **ta**–ma:–wa–í: skuxni̲–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:nu̲–nín **ka:–ta**–ma:–wa–í: skuxni̲–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 verbs forms which are three-way ambiguous, given in (64):

(63) (a) ika:túksnį̃
ik–ka:–tuks–nį̃
1P.SUBJ–PL.OBJ–hit–2OBJ:PFV
'I hit you guys' or 'we$_{EXC}$ hit you' or 'we$_{EXC}$ hit you guys'

(b) kila:túkswį̃
kin–la:–tuks–wį̃
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	kintukskán	tukskáną̃	tukskán
PL	—	—	ka:tukskán

Table 13: Indefinite actor paradigm (imperfective aspect √*tuks* 'hit')

Indefinite actor forms are open to two interpretations—action by an indefinite or generic actor or actors (≈ 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
tukskán	túkską̃	tukskaní̃:	tuksmá:ką̃

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:ką̃* '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:mą̃ʔtą̃ʔą̃ɬni:pą́:ką̃
kit ik–le:n–kutún pero ʔe: wiʃ ma:–mą̃ʔtą̃ʔą̃ɬ–ni:–**pą́:**–ką̃
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 *-pą:* (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:mą:ná:ɬ
ta–musu:–**mą:**–**ná:ɬ**
3PL.SUBJ–kiss–PRG–PL.ST
'they are kissing her/them'

b. kinka:musu:má:ką
ka:–musu:–**má:**–ką
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	iktaʃtú	ʃaktaʃtú	naiktaʃtú
2SG	taʃtúyą	iʃtaʃtúyą	nataʃtúyą
3SG	taʃtú	iʃtaʃtú	nataʃtú
1PL.EXC	iktaʃtuyá:uw	ʃaktaʃtuyá:uw	naiktaʃtuyá:uw
1PL.INC	taʃtuyá:uw	iʃtaʃtuyá:uw	nataʃtuyá:uw
2PL	taʃtuyą:tít	iʃtaʃtuyą:tít	nataʃtuyą:tít
3PL	tataʃtú	iʃtataʃtú	natataʃtú

Table 15: Tense paradigms (√*taʃtú* 'leave')

As shown in Table 15, the present tense is non-marked, while the past takes the prefix *iʃ-* 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 *ʃak-*, 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 Ø, 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 (*taɬtuyá: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 √*taʃtú* ‘leave’	Class 2a √*paʃ-* ‘bathe’	Class 2b √*tʃaɲ* ‘plant’	Class 3 √*laʔtsín* ‘see’
1SG	iktaʃtú	ikpáʃa	iktʃáɲ	iklaʔtsín
2SG	taʃtúyaɲ	páʃa	tʃáɲaɲ	laʔtsínaɲ
3SG	taʃtú	páʃa	tʃáɲ	laʔtsín
1PL.EXC	iktaʃtuyá:uw	ikpaʃá:uw	iktʃaɲná:uw	iklaʔtsiná:uw
1PL.INC	taʃtuyá:uw	paʃá:uw	tʃaɲná:uw	laʔtsiná:uw
2PL	taʃtuyaɲ:tít	paʃaɲ:tít	tʃaɲaɲ:tít	laʔtsinaɲ:tít
3PL	tataʃtú	tapáʃa	tatʃáɲ	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:yaɲ	—	musú:yaɲ
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:yaɲ:tít
3PL	kintamusú:	tamusu:yá:n	tamusú:ɬ
	plural objects		
1SG	—	ika:musú:n	ika:musú:
2SG	kila:musu:yá:uw	—	ka:musú:yaɲ
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:yaɲ:tít
3PL	kinka:tamusu:yá:n	ka:tamusu:yá:n	tamusu:yá:n

Table 18: Imperfective transitive forms (√*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:, ʃkutánl̨i̱
xa: ma:–púpu–u: ʃkután–**l̨i̱**
NEG CS–boil:2SG.SUBJ:PFV–CS boil–PFV
'don't boil it, it goes sour!'

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

(67) kaks tawí:la, ɬtata:ɬtsá
kaks ta–wí:la ɬtata:–**ɬ**=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 *-l̨i̱*. 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 √*taʃtú* 'leave'	Class 2a √*paʃ-* 'bathe'	Class 2b √*tʃa̱n* 'plant'	Class 3 √*la̱ʔtsín* 'see'
1SG	iktaʃtúɬ	ikpáʃl̨i̱	iktʃá̱nl̨i̱	iklá̱ʔtsíɬ
2SG	táʃtu	páʃt̨i̱	tʃá̱nt̨i̱	lá̱ʔtsi̱
3SG	taʃtúɬ	páʃl̨i̱	tʃá̱nl̨i̱	la̱ʔtsíɬ
1PL.EXC	iktaʃtúw	ikpáʃwi̱	iktʃá̱nwi̱	iklá̱ʔtsíuw
1PL.INC	taʃtúw	paʃwi̱	tʃa̱nwi̱	la̱ʔtsíuw
2PL	taʃtutít	paʃtít	tʃa̱ntít	la̱ʔtsintít
3PL	tataʃtúɬ	tapáʃl̨i̱	tatʃá̱nl̨i̱	tala̱ʔtsíɬ

Table 19: Perfective aspectual paradigms

Of particular note here is the variability of the second-singular subject marker, realized either as *-t̨i̱* (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	kimúsu̯	—	músu̯
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:músu̯
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, [-li̯], 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:li̯] > [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	—	iktúksn̰ḭ	iktúksl̰ḭ
2SG	kintúkst̰ḭ	—	túkst̰ḭ
3SG	kintúksl̰ḭ	túksn̰ḭ	túksl̰ḭ
1PL.EXC	—	ika:túksn̰ḭ	iktúkswḭ
1PL.INC	—	—	túkswḭ
2PL	kila:túkswḭ	—	tukstít
3PL	kintatúksl̰ḭ	tatúksn̰ḭ	tatúksl̰ḭ
	plural objects		
1SG	—	ika:túksn̰ḭ	ika:túksl̰ḭ
2SG	kila:túkswḭ	—	ka:túkst̰ḭ
3SG	kinka:túksn̰ḭ	ka:túksn̰ḭ	ka:túksl̰ḭ
1PL.EXC	—	ika:túksn̰ḭ	ika:túkswḭ
1PL.INC	—	—	ka:túkswḭ
2PL	kila:túkswḭ	—	ka:tukstít
3PL	kinka:tatúksn̰ḭ	ka:tatúksn̰ḭ	tatúksl̰ḭ

Table 21: Class 2 perfective transitive forms (√*tuks* ‘hit something’)

This paradigm contains the full form of the perfective suffix, [-l̰ḭ], 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 **tuksɬ*). 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 [wl] cluster ([-w] + [-l̰ḭ] > [-wḭ]) and the second-person object forms from the reduction of [nl] ([-n] + [-l̰ḭ] > [-n̰ḭ]). 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] + [-l̰ḭ] > [-t̰ḭ]), 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, *iklą̰ʔtsín* ‘I see him/her/it’ or ‘I saw you’; *lą̰ʔtsín* ‘s/he sees him/her/it’ or ‘s/he sees you’; *ta-lą̰ʔtsín* ‘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	—	iklą̱ʔtsín	iklą̱ʔtsíɬ
2SG	kilą́ʔtsi̱	—	lą́ʔtsi̱
3SG	kilą̱ʔtsíɬ	lą̱ʔtsín	lą̱ʔtsíɬ
1PL.EXC	—	ika:lą̱ʔtsín	iklą̱ʔtsíuw
1PL.INC	—	—	lą̱ʔtsíuw
2PL	kila:lą̱ʔtsíuw	—	lą̱ʔtsintít
3PL	kintalą̱ʔtsíɬ	talą̱ʔtsín	talą̱ʔtsíɬ
	plural objects		
1SG	—	ika:lą̱ʔtsín	ika:lą̱ʔtsíɬ
2SG	kila:lą̱ʔtsíuw	—	ka:lą́ʔtsi̱
3SG	kinka:lą̱ʔtsín	ka:lą̱ʔtsín	ka:lą̱ʔtsíɬ
1PL.EXC	—	ika:lą̱ʔtsín	ika:lą̱ʔtsíuw
1PL.INC	—	—	ka:lą̱ʔtsíuw
2PL	kila:lą̱ʔtsíuw	—	ka:lą̱ʔtsintít
3PL	kinka:talą̱ʔtsín	ka:talą̱ʔtsín	talą̱ʔtsíɬ

Table 22: Class 3 perfective transitive forms (√*lą̱ʔtsín* ‘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 *-ni̱:tan* (with allomorphs *-ni̱:tą̱* and *-ni̱:*) and does not

	Class 1 √*taʃtú* ‘leave’	Class 2a √*paʃ-* ‘bathe’	Class 2b √*tʃą̱n* ‘plant’	Class 3 √*lą̱ʔtsín* ‘see’
1SG	iktaʃtuni̱:	ikpaʃni̱:	iktʃą̱ni̱:	iklą̱ʔtsini̱:
2SG	taʃtuni̱:tą̱	paʃni̱:tą̱	tʃą̱ni̱:tą̱	lą̱ʔtsini̱:tą̱
3SG	taʃtuni̱:	paʃni̱:	tʃą̱ni̱:	lą̱ʔtsini̱:
1PL.EXC	iktaʃtuni̱:tá:uw	ikpaʃni̱:tá:uw	iktʃą̱ni̱:tá:uw	iklą̱ʔtsini̱:tá:uw
1PL.INC	taʃtuni̱:tá:uw	paʃni̱:tá:uw	tʃani̱:tá:uw	lą̱ʔtsini̱:tá:uw
2PL	taʃtuni̱:ta:ntít	paʃni̱:ta:ntít	tʃą̱ni̱:ta:ntít	lą̱ʔtsini̱:ta:ntít
3PL	tataʃtuni̱:	tapaʃni̱:	tatʃą̱ni̱:	talą̱ʔtsini̱:

Table 23: Perfect aspectual paradigms

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

Table 24: Perfect transitive forms (√*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 *-nį̲: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 √*taʃtú* 'leave'	Class 2a √*paʃ-* 'bathe'	Class 2b √*tʃą̲n* 'plant'	Class 3 √*lą̲ʔtsín* 'see'
1SG	iktaʃtumá:ɬ	ikpaʃmá:ɬ	iktʃą̲má:ɬ	iklą̲ʔtsimá:ɬ
2SG	taʃtupą́:	paʃpą́:	tʃą̲mpą́:	lą̲ʔtsimpą́:
3SG	taʃtumá:ɬ	paʃmá:ɬ	tʃą̲má:ɬ	lą̲ʔtsimá:ɬ
1PL.EXC	iktaʃtumą̲:ná:uw	ikpaʃmą̲:ná:uw	iktʃą̲mą̲:ná:uw	iklą̲ʔtsimą̲:ná:uw
1PL.INC	taʃtumą̲:ná:uw	paʃmą̲:ná:uw	tʃą̲mą̲:ná:uw	lą̲ʔtsimą̲:ná:uw
2PL	taʃtupą̲:na:ntít	paʃpą̲:na:ntít	tʃą̲mpą̲:na:ntít	lą̲ʔtsimpą̲:na:ntít
3PL	tataʃtumą̲:ná:ɬ	tapaʃmą̲:ná:ɬ	tatʃą̲mą̲:ná:ɬ	talą̲ʔtsimą̲:ná:ɬ

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 *maːɬ* '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 *-pą̲ː*, also seen in the inflection of the verb *maːɬ* itself. Plural subjects of any person require an additional morpheme, *-naːn*, most frequently realized as *-naːɬ*, 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 /ɬ/ of *maːɬ* persists in the plural form *mą̲ːnáːɬ*. This is evidence that the original form of the stative base *maːɬ* (and other posture verbs) may have included the perfective morpheme *-ɬ*, a hypothesis supported by the form of the indefinite-actor suffix used with progressives (*-ką̲*, see Table 14 above). Plural-subject forms also show laryngealization of the first vowel in the base form of the morpheme (i.e. *musuːmáːɬ* 'he is kissing her' vs. *tamusuːmą̲ːnáːɬ* '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	—	ikmusuːmáːn	ikmusuːmáːɬ
2SG	kimusuːpą̲ː	—	musuːpą̲ː
3SG	kimusuː máːɬ	musuːmáːn	musuːmáːɬ
1PL.EXC	—	ikaːmusuːmáːn	ikmusuːmą̲ːnáːuw
1PL.INC	—	—	musuːmą̲ːnáːuw
2PL	kilaːmusuːmą̲ːnáːuw	—	musuːpą̲ːnaːntít
3PL	kintamusuːmą̲ːnáːɬ	tamusuːmą̲ːnáːn	tamusuːmą̲ːnáːɬ
	plural objects		
1SG	—	ikaːmusuːmáːn	ikaːmusuːmáːɬ
2SG	kilaːmusuːmą̲ːnáːuw	—	kaːmusuːpą̲ː
3SG	kinkaːmusuːmą̲ːnáːn	kaːmusuːmáːn	kaːmusuːmáːɬ
1PL.EXC	—	ikaːmusuːmáːn	ikaːmusuːmą̲ːnáːuw
1PL.INC	—	—	kaːmusuːmą̲ːnáːuw
2PL	kilaːmusuːmą̲ːnáːuw	—	kaːmusuːpą̲ːnaːntít
3PL	kinkaːtamusuːmą̲ːnáːn	kaːtamusuːmą̲ːnáːn	tamusuːmą̲ːnáːɬ

Table 26: Progressive transitive forms (√*musúː* '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 *wiːɬ* 'sit', *yaːɬ* 'stand', *maːɬ* 'lie', and *wakɑ̨́ɬ* '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. ikɑ̨ʔanúː ɑ̨ʔasliwít
ik–ɑ̨ʔa–núː ɑ̨ʔasliwít
1SG.SUBJ–ear–in earring
'I'm wearing earrings'

b. iʃʔeɬnúː *cable*
iʃ–ʔeɬ–núː cable
PST–mouth–in cable
'the cable was unplugged'

c. kimpɛ̨ʔʃtutawákɑ̨
kim–pɛ̨ʔʃtu–wákɑ̨
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: ʔeɬnúː kamɑ̨ʔʃtɛ́ʔtɪ̨
xa: **ʔeɬ–núː** ka–mɑ̨ʔʃtɛ́ʔ–tɪ̨
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 *maː-* 'CAUSATIVE', as shown in (70):

(70) a. xa: ɑ̨kʃtú tsamáː tʃiwíʃ
xa: **ɑ̨k–ʃtú** tsamáː tʃiwíʃ
NEG head–out this stone
'the rock isn't sticking out of the ground'

b. natą̲kʃtú iʃtanʔe:ʃé̲ʔ wamá: kí̲wi̲
na–**ta–ą̲k–ʃtú** iʃ–tanʔe:ʃé̲ʔ wamá: kí̲wi̲
FUT–INCH–head–out 3PO–roots this tree
'the roots of this tree will come unburied'

c. namą̲:kʃtukán ʃtanʔeʃé̲ʔ kí̲wi̲
na–**ma:–ą̲k–ʃtu**–kán iʃ–tanʔeʃé̲ʔ kí̲wi̲
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. *tą̲kʃtúɬ* 'it came unburied', *tą̲kʃtuní̲:* 'it has come unburied', *tą̲kʃtumá:ɬ* '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:ɬ* 'sit', *ya:ɬ* 'stand', *ma:ɬ* 'lie', and *wakɑ̲́ɬ* 'be high', differ from ordinary stative in a number of respects. One of these is their person-paradigms, shown in Table 27.

	wí:ɬ 'sit'	*yá:ɬ* 'stand'	*má:ɬ* 'lie'	*wakɑ̲́ɬ* 'be high'
1SG	ikwí:ɬ	ikyá:ɬ	ikmá:ɬ	ikwakɑ̲́ɬ
2SG	wí:lą̲	yą̲	pą̲:	wɑ̲́ką̲
2SG	wi:ɬ	ya:ɬ	ma:ɬ	wakɑ̲́ɬ
1PL.EXC	ikwi:la:ná:uw	ikya:ná:uw	ikmą̲:ná:uw	ikwaką̲ná:uw
1PL.INC	wi:la:ná:uw	ya:ná:uw	mą̲:ná:uw	waką̲ná:uw
2PL	wi:la:na:ntít	ya:na:ntít	pą̲:na:ntít	waką̲na:ntít
3PL	tawi:laná:ɬ	taya:ná:ɬ	tamą̲:ná:ɬ	tawaką̲ná:ɬ

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:wakɑ̲́ɬ spu:n naktʃík
ʔe:–wakɑ̲́ɬ spu:n nak=tʃík
back–be.high bird LOC=house
'the bird is up on the house'

b. taʔe:wakɑ̲́ɬ spu:n naktʃík
ta–ʔe:–wakɑ̲́ɬ spu:n nak=tʃík
INCH–back–be.high bird LOC=house
'the bird alights on the house'

c. taʔeːwakąnáɬ spuːn naktʃík
ta–ʔeː–wakąː–naːɬ spuːn nak=tʃík
3PL.SUBJ–back–be.high–ST.PL bird LOC=house
‘the birds are up on the house’

d. tataʔeːwakąnáɬ spuːn naktʃík
ta–ta–ʔeː–wakąː–naːɬ spuːn nak=tʃík
3PL.SUBJ–INCH–back–be.high–PL.ST bird LOC=house
‘the birds alight on the house’

e. taʔeːtawakáɬ spuːn naktʃík
ta–ʔeː–tawaka–níː spuːn 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 *wakąɬ* ‘be high’ and its inchoative form *tawakąɬ* ‘get up high’ make use of the stative plural marker *-naːn*. 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
wiːɬ ‘be sitting’	*wiːlá* ‘sit down’
yaːɬ ‘be standing’	*taːyá* ‘stand up’
maːɬ ‘be lying down’	*tamáː* ‘lie down’
wakąɬ ‘be high’	*tawaká* ‘get up high’

Table 28: Active counterparts to stative posture verbs

Two of the stative verbs, *wiːɬ* ‘be sitting’ and *yaːɬ* ‘be standing’, also have special transitive forms, *wiːlíː* ‘put something’ and *yaːwáː* ‘stand something up’, respectively; the other two verbs have transitive forms with the causative prefix *maː-* (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. ląʔáː maːɬ maɬát xaː ikaːwanín
ląʔáː **maːɬ** maɬát xaː ik–kaː–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. tawakąnáːɬ taɬmáːn tiː kaːputsamáːkąː
ta–wakąː–náːɬ taɬmáːn tiː kaː–putsa–máː–kąː
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. yáːɬ matʃíːta istsastún naktʃík
yaːɬ matʃíːta iʃ–tsastún nak=tʃík
stand machete 3PO–corner LOC=house
'the machete is standing in the corner of the house'

d. ikmakaxikwán xaːsáː wiːɬ tuː wiːɬ
ik–maka–xikwán xaːsáː **wiːɬ** tuː **wiːɬ**
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 *wiːɬ*, which is also used in possessive expressions such as *wiːɬ kinkawaːyúx* '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) *wa* 'eat' + *wiːɬ* > *wawíːɬ* 'be sitting eating something'
mą̲ʔtą̲ʔą̲ɬnán 'guard' + *wiːɬ* > *mą̲ʔtą̲ʔą̲ɬnawíːɬ* 'be sitting guarding'
kaɬwán 'cry' + *yaːɬ* > *kaɬawayáːɬ* 'be standing crying'
lą̲ʔʃtǫ̲ʔó 'nail' + *wakáɬ* > *lą̲ʔʃtǫ̲ʔowakáɬ* 'have nailed up'
lą̲ʔasʼó 'be lit up (face)' + *wiːɬ* > *lą̲ʔasʼowíːɬ* 'have one's face lit up'
ɬawá 'do, make' + *wiːɬ* 'sit' > *ɬawawíːɬ* 'be seated doing something'
mą̲ʔawiːlú 'whistle' + *yaːɬ* 'stand' > *mą̲ʔawiːluyáːɬ* 'be standing whistling'
kinkamín 'point here' + *maːɬ* 'lie' > *kinkamimáːɬ* 'lie pointing at speaker'
kiɬwán 'talk' + *wakáɬ* 'be high' > *kiɬwawakáɬ* '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 (*wiːɬ* 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:ʃwiːlaːnáːɬ tʃiwíʃ, xa: katitą̲puːspį́tlį̲
ta–kaːʃ–wiːlaː–náːɬ tʃiwíʃ xa: ka–ti–ta–ą̲puːspį́t–lį̲
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:ʃtawiːlaːnáːɬ tʃiwíʃ, xa: katitamą̲ʔawáslį̲
ta–kaːʃ–ta–wiːlaː–náːɬ tʃiwíʃ xa: ka–ti–ta–mą̲ʔawás–lį̲
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:ʃwiːlá: tʃiwíʃ, xa: katitamą̲ʔawáslį̲
ta–kaːʃ–wiːlá tʃiwíʃ xa: ka–ti–ta–mą̲ʔawás–lį̲
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 *maːɬ* 'lie' have been reanalyzed as progressive aspectual inflection. The inchoative (*tamáːɬ*) and active (*tamáː*) forms of *maːɬ* 'lie', however, do appear in aspectual compounds such as that shown in (75):

(75) kiwaníkᵱ tsax kaikatsi:tamá:ɬ
kin–wan–ní–kᵱ 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:lí:* 'put' (diachronically a transitivized form of *wi:ɬ*). Compounds built on *wi:lí:* 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. pǫ́ʔtu naka:ʃtᵱʔwi:li:ʔó kilakstín ʔe: xa: mᵱʔtín katika:lᵱʔmíɬ
pǫ́ʔtu na–ik–ka:–ʃtᵱʔ–**wi:li:**–ʔó kin–lakstín ʔe:
all FUT–1SG.SUBJ–PL.OBJ–leave–put–all 1PO–children and

xa: mᵱʔ–tín ka–ti–ik–ka:–lᵱʔ–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. lᵱʔstónʔ katápᵱ:
lᵱʔstónʔ **ka**–tá–pᵱ:
stretched.out OPT–INCH–lie:2SUBJ:PFV
'lie down!'

b. kalaʔstónʔ tápa:
ka–laʔstónʔ **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', *tʃu:* 'DESPECTATIVE', or *tʃi:* '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. kalaktʃíntą ʃumpé:pį kamáʔni:
ka–lak–tʃíntą ʃumpé:pį **ka**–máʔni:
OPT–foot–step.on:2SG.SUBJ:PFV cockroach OPT–kill:2SUBJ:PFV
'step on the cockroach and kill it!'

b. kama:wáką naktʃiwíʃ ʔę nakwi:li:ní
ka–ma:–wáką nak=tʃiwíʃ 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. ʃatséx kawé: *pero* kalakapala:tít
ʃa–tséx **ka**–ą–ę:–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: kalaʔtʃénʔę: mi*refresco* naaʔpaʃmín
xa: **ka**–laʔtʃénʔę: 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: kaʃáma: tu:k tʃaʔli:má:ɬ natalakʃapá:
xa: **ka**–ʃáma: tu: ik–tʃaʔli:–má:ɬ na–ta–lakʃapá:
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: kamaʔtʃéʔtį
xa: ʔeɬ–nú: **ka**–maʔtʃéʔ–tį
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:ʃkútwi̯ naktoo̯ʔo̯ʔé̯:
pus **ka**–la:–ʃkút–wi̯ na–ik–to̯ʔo̯ʔé̯:
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:ma̯ʔní:w, *porque* xa: kit ikwamá:ɬ mi*sandía*
xa: **ka**–la:–ma̯ʔní:–w porque xa: kit ik–wan–má:ɬ 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 (*kakiʃkúti̯* '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. ka̯mpa:lá:uw katapa:nú:w wa:tsá
ka–a̯n–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. katama̯ʔaya:wá:ɬ tsamá: tʃiwíʃ
ka–ta–ma̯ʔa–ya:wá:–ɬ tsamá: tʃiwíʃ
OPT–3PL.SUBJ–hand–stand–PFV that rock
'let them lift that rock!'

c. katama:pa:nú:ɬ tsamá: tʃiwíʃ
ka–ta–ma:pa:nú:–ɬ 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 kaskúxti̯ wa:tsá, kapa̯ʔɬti̯ wamá: tʃiwíʃ
tsax ik–lakaskín **ka**–skúx–ti̯ wa:tsá **ka**–pa̯ʔɬ–ti̯
only 1SG.SUBJ–want OPT–work–2SG.SUBJ:PFV here OPT–break–2SG.SUBJ:PFV

wamá: tʃiwíʃ
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:lą̲ʔspútli̲
ka:–ɬawa–ní–ɬ mísa **ka**–ta–li:–lą̲ʔ–spút–li̲
PL.OBJ–do–BEN–PFV mass OPT–3PL.SUBJ–INST–die–PFV
'he performed a mass on them so that they would die'

b kamą̲ʔʃtę́ʔa ká:ɬtu kas'ontʃitʃínli̲
ka–mą̲ʔʃtę́ʔ–a ká:ɬtu **ka**–s'on–tʃitʃín–li̲
OPT–leave–IMPF broth OPT–luke–get.warm–PFV
'leave the soup so that it cools off!'

c. kiwaníką̲ tsax kaikatsi:tamá:ɬ
kin–wan–ní–ką̲ 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: mą̲ʔtín ika:lą̲ʔtsín paɬ timín la:tanú: naiʃ*cuarto*kán
pus xa: mą̲ʔ–tín ik–ka:–lą̲ʔtsín paɬ **ti**–mín la:–ta–nú:
INTJ NEG CLS–one 1SG.SUBJ–PL.OBJ–see if UNR–come do–INCH–in

nak=iʃ–cuarto–kán
FUT–3PO–room–PL.PO

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

b. xa: tiwáɬ tsamá: tsumaxát
xa: **ti**–wá–ɬ tsamá: tsumaxát
NEG UNR–eat–PFV that girl
'it didn't eat the girl'

c. púːlą̲ natiwayáːuw wamáː ʃatáɬtsį̲ moʔóːt
púːlą̲ na–**ti**–wa–yáː–w wamáː ʃa–táɬtsį̲ moʔóːt
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 *xaː* to negate future events, although in these cases the preferred aspect is the perfective, as in (85):

(85) a. xaːtsá iktimą̲ʔʃtę̲ʔnį̲, tʃuːwá nakwayáːn
xaː=tsá ik–**ti**–mą̲ʔʃtę̲ʔ–nį̲ tʃuːwá
NEG=now 1SG.SUBJ–UNR–leave–2SG.SUBJ:PFV now

na–ik–wa–yáː–n
FUT–1SG.SUBJ–eat–IMPF–2OBJ

'I'm not going to let you go, now I'm going to eat you'

b. xę̲ː, xa: kintilέːɬ
xę̲ː xa: kin–**ti**–lέːn–ɬ
no NEG 1OBJ–UNR–take–PFV
'no, he won't take me'

Note, however, that in (84b) above the same combination of *xaː*, *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. ʔeː xa: tilaːmą̲ʔniːyáːuw *porque* naktǫ̲ʔǫ̲ʔeːpaːlάː
ʔeː xa: **ti**–laː–mą̲ʔniː–yáː–w porque na–ik–tǫ̲ʔǫ̲ʔeː–paːlάː
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: titapáːyą̲ waːtsá *porque* ką̲náw nakxíku
xa: **ti**–ta–páː–yą̲ waːtsá porque
NEG UNR–INCH–lie–IMPF:2SG.SUBJ here because

ik–ą̲n–áː–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. kalą́ʔtsį̨ xaːk tiwanín?
ka–lą́ʔtsį̨ xaː ik–**ti**–wan–ní–n
OPT–see:2SG.SUBJ:PFV NEG 1SG.SUBJ–UNR–say–BEN–2OBJ
'look! didn't I tell you?'

b. xaː katiwáɬ?
xaː **ka**–ti–wá–ɬ
NEG OPT–UNR–eat–PFV
'didn't he eat?'

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

(88) paɬ xaː kintiʃoʔóyą̨ xaːk téɬ iktiskúxa
paɬ xaː kin–ti–ʃoʔó–yą̨ xaː ik–**ti**–ą̨n–ɬ
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 *xaː* as well as *ti-*.

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

(89) a. kawéː *porque* páɬ xaː katilakapalá:uw kimpǫ̨ʔtukán nalą̨ʔsputáuw waːtsá
ka–ą̨n–ę́ː–w porque páɬ **xaː** **ka–ti**–lakapalá:–w
OPT–go–OBG–1PL.SUBJ because if NEG OPT–UNR–hurry–1PL.SUBJ

kim–pǫ̨ʔtu–kán na–lą̨ʔsput–áː–w waːtsá
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. xaː katilaːmą̨ʔʃtę́ʔwį̨ nakliːwiːliːnipaːlaːyáːn aːą̨ʔtín kimakán
xaː **ka–ti**–laː–mą̨ʔʃtę́ʔ–wį̨
NEG OPT–UNR–RCP–leave–1PL.SUBJ:PFV

na–ik–liː–wiːliː–ni–paːlaː–yáː–n aː–ą̨ʔ–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. xaːtsá katispútlį̨ kaːkiɬtamakúx
xaː=tsá **ka–ti**–spút–lį̨ kaː–kiɬtamakúx
NEG=now OPT–UNR–finish–PFV PLC–day
'now the world won't end'

b. xaː katimaːą̱ʔaːníːɬ tsamáː animáːɬ tuː nakiːtʃipá tsamáː muŋéku
xaː **ka–ti**–maː–ą̱ʔaːn–níː–ɬ tsamáː animáːɬ tuː na–kiː–tʃipá
NEG OPT–UNR–CS–fall–CS–PFV that animal NREL FUT–RT–grab

tsamáː muŋéku
that doll

'the animal that is going to come by to grab that doll won't knock it over'

c. xaː katikatsíːɬ tʃiː natsaːlayáːuw
xaː **ka–ti**–katsíː–ɬ tʃiː na–tsaːla–yáː–w
NEG OPT–UNR–know–PFV how FUT–flee–IMPF–1PL.SUBJ
'he won't know that we fled'

d. pero s'ą̱tą̱kús wiʃ xaː leː katilaːléːuw
pero s'ą̱tą̱=kús wiʃ **xaː** leː **ka–ti**–laː–léːn–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. tuː xaː liːtáʃtu, waní, iʃtáʃtu
tuː xaː liː–táʃtu wan–ní **iʃ–táʃtu**
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. iʃlíːtą̱ milakasmų́ː
iʃ–líːtą̱ min–lakasmų́ː
PST–bring:2SG.SUBJ:PFV 2PO–sweetheart
'you should have brought your girlfriend'

c. ʃliːpuːlakɬkuːyúːɬ tiː wánlį̱
iʃ–liː–puːlak–ɬkuːyúː–**ɬ** tiː wán–lį̱
PST–INST–interior–burn–PFV HREL say–PFV
'the one who spoke would have burned his insides with it (a hot poker)'

d. xaːʃ kátsiː
xaː **iʃ–kátsiː**
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 *mą̲ʔa-* 'STIMULUS' and the circumfix *ma:- -ni:* 'CAUSATIVE'.

***mą̲ʔa-* 'STIMULUS' (STM)**

The prefix *mą̲ʔa-* '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:ʃtúnį̲ mą̲ʔaxikwánlį̲ tsamá: ʔawátʃa
tsamá: mu:ʃtú–nį̲ **mą̲ʔa**–xikwán–lį̲ tsamá: ʔawátʃa
that drown–DVB STM–be.afraid–PFV that boy
'the drowned person frightened the boy'

b. tʃitʃiní̲ mą̲ʔapą́ʔɬa ʃanát
tʃitʃin–ní̲ **mą̲ʔa**–pą́ʔɬ–a ʃanát
heat–AGT STM–flower–IMPF flower
'the sun makes the flowers bloom'

c. kimą̲ʔali:pu:waní̲: tsamá: tsumaxát
kin–**mą̲ʔa**–li:pu:wan–ní̲: tsamá: tsumaxát
1OBJ–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 *mą̲ʔa-* forms include:

(93)	*xikwán* ‘be afraid’	>	*mą̲ʔaxikwán* ‘scare someone’
	kų̲́n ‘swell’	>	*mą̲ʔakų̲́n* ‘make something swell’
	tsukú ‘start’	>	*mą̲ʔatsukú* ‘get someone started’
	ʔatʃíː ‘be drunk’	>	*mą̲ʔaʔatʃíː* ‘make someone drunk’
	ʔoxonún ‘cough’	>	*mą̲ʔaʔoxonún* ‘make someone cough’
	liːtsíːn ‘smile, laugh’	>	*mą̲ʔaliːtsíːn* ‘make someone laugh’
	ɬtatá ːʻ sleep’	>	*mą̲ʔaɬtatá ːʻ* put someone to sleep’
	pikʃnín ‘have an itch’	>	*mą̲ʔapikʃnín* ‘make someone itch’
	stą̲́k- ‘grow’	>	*mą̲ʔastą̲́k-* ‘raise or grow something’
	tasá ‘yell’	>	*mą̲ʔatasá* ‘make someone yell’

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

maː- -niː ‘CAUSATIVE’ (CS)

An extremely productive morpheme is the causative circumfix, *maː- -niː*, 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. kimaːɬkaːkníːya̲
kin–**maː**–ɬkaːk–**níː**–ya̲
1OBJ–CS–be.hot–CS–IMPF:2SG.SUBJ
‘you are making me hot’

b. maːtuxníːɬ iʃkawaːyúx
maː–tux–**níː**–ɬ iʃ–kawaːyúx
CS–run–CS–PFV 3PO–horse
‘he made his horse run’

c. yuːnuː makawán a̲ʔtín stilímpų̲ akʃní maːɬiːniːkán
yuːnuː maka–wán a̲ʔ–tín stilímpų̲ akʃní **maː**–ɬiː–**niː**–kán
IDPH hand–say CLS–one top when CS–dance–CS–IDF
‘the top whirs when they make it spin’

d. kamaːsʼolúːniː liːkwá xaː nasʼoluːtamáː naktámą̲
ka–**maː**–sʼolúː–**niː** liːkwá xaː na–sʼoluː–tamáː nak=támą̲
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, *-niː*, 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:miʃí: kapéx lą̱ʔá: ʃli:tʃítʃi
na–ik–**ma:**–miʃ–**í:** kapéx lą̱ʔá: iʃ–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:ʃnę̱ʔé:ɬ tʃitʃiní̱ ʃanát, nastą̱ʔampa:lá: takɬtsaxpa:lá:
ma:–ʃnę̱ʔ–**é:**–ɬ tʃitʃin–ní̱ ʃanát na–stą̱ʔan–pa:lá: ta–ą̱kɬtsax–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. iʃka:mą̱:ʔpaʃi:kutún tsamá: paléx ʃalán *Monte de Chila*
iʃ–ka:–**ma:**–ą̱ʔ–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:ɬ pu:ɬún lakama:waką́ɬ
ma:–ʔos–**u:**–má:ɬ pu:ɬún laka–ma:–waką́ɬ
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:ʔeɬsmani:kán kinkútʃų̱
na–kin–**ma:**–ʔeɬ–smani:–**i:**–kán kin–kútʃų̱
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:ɬtatí:ɬkis'ą́tą̱*pero*xa:ɬtata:kutún
ma:–ɬtata:–**í:**–ɬ kin–s'ą́tą̱ pero xa: ɬtata:–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 tot he causative suffix, becoming /i/. The example in (96c) is also interesting in that it shows one of a handful of stems, *ɬtatá:* 'sleep', that has a form in both *mą̱ʔa-* and *ma:- -ni:*. The semantic difference between the two types of

causatives is relatively straightforward, *mą̲ʔaɬtatí:* ‘put someone to sleep, make someone sleepy’ expressing the stimulus for the action, and *ma:ɬtatá:* ‘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, *-ni:*, as in (97):

(97) a. kit iklą̲ʔmaká:ɬ séra ikma:ʃka:ní:ɬ
kit ik–lą̲ʔ–maká:–ɬ séra ik–**ma:**–ʃka:–**ní:**–ɬ
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:lą̲ʔʃ’aní: kí̲wi̲ kintasákwą̲
ik–**ma:**–lą̲ʔʃ’a–**ní:** kí̲wi̲ kin–tasákwą̲
1SG.SUBJ–CS–split–CS tree 1PO–peon
‘I made my peon split firewood’

c. ikma:ą̲ʔs’awiní:ɬ kin*amígo* iʃlakasmú̲
ik–**ma:**–ą̲ʔs’awi–**ní:**–ɬ kin–amígo iʃ–lakasmú̲
1SG.SUBJ–CS–trick–CS–PFV 1PO–friend 3PO–sweetheart
‘I made my friend$_i$’s girlfriend trick him$_i$’

d. ka:ma:lą̲ʔaponʔní: mintʃitʃí kuyúx
ka:–**ma:**–lą̲ʔaponʔ–**ní:** min–tʃitʃí kuyúx
PL.OBJ–CS–dig.out–CS 2PO–dog armadillo
‘he’s making your dogs dig out the armadillo’

e. ikma:lą̲ʔpu:sní:ɬ iʃpę̲ʔén kinkulá:ntu
ik–**ma:**–lą̲ʔpu:s–**ní:**–ɬ iʃ–pę̲ʔén 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:ní̲: *campana* ya:ɬ
mat tʃi: amá: **ma:**–tʃipa–**i:**–ní̲: campana ya:ɬ
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. uːtsá mat kaːmaːliːminíːɬ kɨ̲wi̲
uːtsá mat **kaː**–maː–liːmin–níː–ɬ kɨ̲wi̲
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. kaːmaːsluːmaːniːkán *bandera* lakstín nakskwéla
kaː–maː–sluːmaː–niː–kán bandera lakstín nak=skwéla
PL.OBJ–CS–glue–CS–IDF flag children LOC=school
'they make the children glue together flags in school'

c. *kaːmaːsluːmaːniːkán *bandera* ʔawátʃa nakskwéla
kaː–maː–sluːmaː–niː–kán bandera ʔawátʃa nak=skwéla
PL.OBJ–CS–glue–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, *kaː-*. 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. kinkaːmaːpuːsuːnuːníːn ponʔóːs
kin–kaː–maː–puː–suːnuː–níː–**n** ponʔóːs
1OBJ–PL.OBJ–CS–inside–inflate–CS–2OBJ balloon
'they made us inflate the balloon'

b. kit ikleːnkutún, *pero* ʔeː wiʃ maːmɑ̲ʔtɑ̲ʔɑ̲ɬniːpɑ́ːkɑ̲
kit ik–leːn–kutún pero ʔeː wiʃ maː–mɑ̲ʔtɑ̲ʔɑ̲ɬ–niː–**pɑ́ː**–kɑ̲
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 maːsuyuːníɬ tiː maːwíː
mat **maː**–suyu–**uː–ní**–ɬ tiː maː–wa–íː
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 uːtsá ikaːliːmaːliːminíːɬ kɨ̲wi̲
pus ta–wá–ɬ uːtsá ik–kaː–**liː–maː**–liːmin–**níː**–ɬ kɨ̲wi̲
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 taliːmaːpanʔeːníɬ, tamakáːn *cohete*
tsex ta–**liː**–**maː**–panʔ–**iː**–**ní**–ɬ ta–makáːn 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 *maːsuyúː* 'make visible, show something' — and the applicative suffix, *-ní*. Sentence (b) shows the application of the instrumental prefix, *liː-*, to the causative of the transitive verb *liːmín* '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 *liː-* to the causative of the intransitive verb *panʔ-* 'explode, burst', also results in a verb, *liːmaːpanʔeːní* '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. tʃuːwá, tsamáː kúʃi̱ namaːɬuwiːyáːuw
tʃuːwá tsamáː kúʃi̱ na–**maː**–ɬuwa–**iː**–yáː–w
now that corn FUT–CS–much–CS–IMPF–1PL.SUBJ
'now we are going to propagate that corn'

b. akɬkunukuːʃanát liːmaːkaːniːkán
akɬkunukuː–ʃanát liː–**maː**–kaːni–**iː**–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, *maː-*:

(103) a. namą̱ːʃtǫ̱ʔokán ʃtanʔeːʃɛ̱́ʔ kɨ̱́wi̱
na–**maː**–ą̱k–ʃtu–kán iʃ–tanʔeːʃɛ̱́ʔ kɨ̱́wi̱
FUT–CS–head–out–IDF 3PO–root tree
'they are going to pull up all the roots of the tree'

b. nakmą̱ːʔtʃóː tsamáː ɬaːmánʔ (Pt.)
na–ik–**maː**–ą̱ʔ–tʃóː tsamáː ɬaːmánʔ
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 *-niː/-iː* acts on its own as a transitivizer:

(104) a. nakpiːʃkaːyuxúː tsamáː puɾéku
na–ik–piːʃ–kaː–yux–**úː** tsamáː puɾéku
FUT–1SG.SUBJ–neck–go.down–TRNS that sheep
'I'm going to cut the head off that sheep'

b. tʃu:nǫ̨ʃ kiɬlá:ɬ *bolsa*, ʃakli:ɬku:yu:kutumá:ɬ takiɬʃlitmá:ɬ
tʃu:nǫ̨ʃ kiɬ–lá:–ɬ bolsa ʃak–li:–ɬku:–**yu:**–kutun–má:ɬ
shrivel mouth–do–PFV bag PST:1SG.SUBJ–INST–burn–TRNS–DSD–PRG

ta–kiɬ–ʃlit–má:ɬ
INCH–mouth–fray–PRG

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

c. lą̨ʔtapaɬí:ką̨ wamá: tʃiʃkų́, u:tsá li:ní:ɬ
lą̨ʔtapaɬ–**í:**–ką̨ wamá: tʃiʃkų́ u:tsá li:–ní:–ɬ
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 *ɬku:* '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:ɬ* 'sit' and *ya:ɬ* '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 ikmą̨:ʔpaʃi:níɬ
ik–ka:ta–**ní:**–w akʃní ik–ma:–ą̨ʔ–paʃ–i:–ní–ɬ
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:ʔeɬʃǫ̨ʔokán tʃiʃkuwín ti: ta*apoyar*lí: iʃ*candidato*
ka:–ʔeɬ–ʃǫ̨ʔo–kán tʃiʃkų̨–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) nakiną̨ʔʃtę̨ʔlí:yą̨
na–kin–ą̨ʔ–ʃtę̨ʔ–**lí:**–yą̨
FUT–1OBJ–head–leave–VBL–IMPF:2SG.SUBJ
'you are going to abandon me'

In this case, *-li:* is affixed to the transitive stem, *ʃtę̨ʔ-* '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 *lą̨ʔ-* '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:ɬi:kán
tsuku–kan–a:–tʃá s'oli:–**ni**–kán ʔe: tsuku–kán tampi:–ɬi:–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 paɬ kiʃǫʔoníyą tʃi: kli:wán ikmaʃki:yá:n
tsex paɬ kin–ʃǫʔo–**ní**–yą 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. kintuksníką kinʔawátʃa
kin–tuks–**ní**–ką kin–ʔawátʃa
1OBJ–hit–BEN–IDF 1OBJ–boy
'they hit my son'

d. tama:wa:níką iʃlúʃu tsamá: ʔawátʃa
tama:wa:–**ní**–ką iʃ–lúʃų tsamá: ʔawátʃa
buy–BEN–IDF 3PO–clothes that boy
'they bought the boy his clothes'

e. wiʃ xa: tu: xikwaníyą?
wiʃ xa: tu: xikwan–**ní**–yą
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:waníɬ wayaya ąɬ
tʃu:n ma:n=tsá tʃu:ntsá kin–te:–wan–**ní**–ɬ wayaya ąn–ɬ
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. kiskįníɬ mánku
kin–skįn–**ní**–ɬ mánku
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.

liː- 'INSTRUMENTAL'

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

(110) a. matʃíːta ʃliːtaɬ'oːnumáːɬ
matʃíːta iʃ–**liː**–taɬ'oː–nun–máːɬ
machete PST–INST–stoke–DT–PRG
'he was using the machete for stoking (the fire)'

b. nakiːmaːxoːnikán wamáː ʔaɬwáʔ nakʃkáːn naliːmaːkuːtuːkáną
na–kiː–maː–xoː–ni–kán wamáː ʔaɬwáʔ nak=ʃkáːn
FUT–RT–CS–down.in–BEN–IDF this egg LOC=water

na–**liː**–maː–kuːtuː–kán–ą
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 wamáː, tsex liːʔaskán talakán liːʔaskán (Ch.)
tsex wa–kán wamáː tsex **liː**–ʔas–kán talakán **liː**–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 *liː-* to express a motive for an event is shown in (111):

(111) a. ląʔtapaɬíːką wamáː tʃiʃkų́, uːtsá liːníːɬ
ląʔtapaɬ–íː–ką wamáː tʃiʃkų́ uːtsá **liː**–níː–ɬ
witch–TRNS–IDF this man that INST–die
'they bewitched this man, that's why he died'

b. pus uːtsá ikaːliːmąʔniːkutún, wan tsamáː ʔawátʃa
pus uːtsá ik–kaː–**liː**–mąʔniː–kutún wan tsamáː 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 *liː-* is open to either the instrument or the motive interpretation, depending on context and the referent of the object noun phrase:

(112) a. liːwiːliːníɬ iʃmakán
liː–wiːliːní–ɬ iʃ–makán
INST–hit–PFV 3PO–hand
'he hit it with his hand'

b. xaː ʔeʃmą́ta ʔawátʃa, uːtsá liːwiːliːníką
xaː ʔeʃmą́t–a ʔawátʃa uːtsá **liː**–wiːliːní–ką
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 *liː-* prefix is added to the verb *wiːliːní* '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, *liː-* has a few other functions when combined with verbs of different types. When combined with verbs of telic motion, for instance, *liː-* adds an object indicating what has been brought or taken as a result of the movement:

(113) a. wamáː tuː taleːmą̱ːnáːɬ kuwésa tsax wakán
wamáː tuː ta–**liː**–ą̱n–mą̱ː–náːɬ 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. tuː tsa liːtampą́ː liːxikwaní
tuː tsa **liː**–tan–pą́ː liː–xikwan–ní
NREL there INST–come:2SUBJ–PRG:2SUBJ INST–be.afraid–BEN
'what you are bringing here is dangerous'

c. akʃnį́ tʃaːɬ tiː iː *sandía*, mat liːtʃáːɬ iʃliːkán
akʃnį́ tʃaːn–ɬ tiː iː sandía mat
when arrive.there–PFV HREL cultivate watermelon QTV

liː–tʃáːn–ɬ iʃ–liːkán
INST–arrive.there–PFV 3PO–iron

'when the watermelon-farmer got there, she'd brought her shotgun'

d. tsex taliːtʃíɬ kį́wį̱
tsex ta–**liː**–tʃín–ɬ kį́wį̱
good 3PL.SUBJ–INST–arrive.here–PFV tree
'they did bring the firewood'

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

(114) a. xaː talakakatsíːɬ tuː tsex iʃliːtʃiwinán tsamáː kąpsnáp
xaː ta–laka–katsíː–ɬ tuː tsex iʃ–**liː**–tʃiwinán tsamáː kąpsnáp
NEG 3PL.SUBJ–face–know–PFV NREL good PST–INST–speak that paper
'they didn't understand what the paper said'

b. tsex paɬ kiʃǫʔoníyą̱ tʃiː kliːwán ikmaʃkiːyáːn
tsex paɬ kin–ʃǫʔo–ní–yą̱ tʃiː ik–**liː**–wán
good if 1OBJ–pay–BEN–IMPF:2SG.SUBJ how 1SG.SUBJ–INST–say

ik–maʃkiː–yáː–n
1SG.SUBJ–give–IMPF–2OBJ

'good, if you pay me what I ask, I'll give it to you'

c. tʃaːtín puskáːt liːʔawaxnít kiliːwán
tʃaː–tín puskáːt liːʔawaxnít kin–**liː**–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 *liː-* follows the pattern shown in (110) and (111) above.

taː- 'COMITATIVE' (CMT)

Another highly productive, although textually less frequent, applicative morpheme is the comitative *taː-*. When prefixed to a verb stem, *taː-* 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:píną
tu: ik–lakaskín na–kin–**taː**–píną
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'awiní, mat wan tsamá: tʃiʃkú
kit tsex na–ik–**taː**–ʔama:nán s'awiní 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:–**taː**–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–**taː**–ta–wi:la–kutún tsamá: soldado
NEG 3PL.SUBJ–like NEG 3PL.SUBJ–CMT–INCH–sit–DSD that soldier
'they don't like the solider, they don't want to marry him'

b. iʃka:ta:skúxa li:*reyes*
iʃ–ka:–**taː**–skúx–a li:–reyes
PST–PL.OBJ–CMT–work–IMPF INST–king
'he worked for kings'

c. kana:tʃá ikta:wá wamá: kinkumpaléx *sandía*
ik–an–a:–tʃá ik–**taː**–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 *taːtawiːlá* 'marry someone', which literally means to sit with someone. The sentence in (b) contains the verb *taːskúx-* 'work for someone' (literally, 'work with someone'), while (c) exemplifies the verb *taːwá* '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. iʃtaːpuskáːn kaːwaní
iʃ–**taː**–puskáːn kaː–wan–ní
3PO–CMT–woman:PL PL.OBJ–say
'she said it to the other women'

b. pus mat tʃuː tʃuːntsá kaːwiliːní ʃtaːlakstín
pus mat tʃuː tʃuːntsá kaː–wiːliːní iʃ–**taː**–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 *taː-* and the possessive prefix gives a reading of 'his/her cohort' or 'those who are the same as him/her'.

lą̃ʔ- 'ALLATIVE' (ALTV)

The prefix *lą̃ʔ-* can be afffixed to verbs denoting telic or directed motion to add a goal or destination, as in (118):

(118) a. natʃipá naiʃmakanín akʃní nalą̃ʔtʃáːn muŋéku tsamáː animáːɬ
na–tʃipá nak=iʃ–makan–nín akʃní na–**lą̃ʔ**–tʃáːn muŋéku
FUT–grab LOC=3PO–hand–PL when FUT–ALTV–arrive.there doll

tsamáː animáːɬ
that animal

'the doll$_i$ will grab the animal$_j$'s hands when it$_j$ gets to it$_i$'

b. ʔeː tʃuːntsá talą̃ʔą́ɬ xaː iʃtamaːkiːnį́ː iʃluːwakán
tʃuːntsá ta–**lą̃ʔ**–ą́n–ɬ xaː iʃ–ta–maːkiː–nį́ː iʃ–luːwa–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. ɬtun lą̃ʔmakamín ʔeː ʃastą́ʔa suwáːɬ
ɬtun **lą̃ʔ**–maka–mín ʔeː ʃa–stą́ʔa suwáːɬ
IDPH ALTV–hand–come and DTV–unripe sapote
'wham he threw it to him, and (it was) an unripe sapote'

d. mat tsax lą̃ʔtoxoːmaːtʃá ʃkaːn tʃiː mat kiːlaːmáːɬ
mat tsax **lą̃ʔ**–toxoː–maː–tʃá ʃkaːn tʃiː mat kiː–laː–máːɬ
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. níːʃ akʃní wą̃máː iʃlą̃ʔtʃáːn *veinticinco de diciembre* iʃliːtunkuːwitsá
akʃní wą̃máː iʃ–**lą̃ʔ**–tʃáːn veinticinco de diciembre iʃ–liːtunkuːwi=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), *lą̃ʔ-* can also be combined with the verb *tʃaːn* '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) *lakamusú:* 'kiss someone' > *lakamusu:nún* 'go kissing'
tʃaʃ- 'carry something in arms' > *tʃaʃnán* 'carry, carry saint in procession'
sipí: 'grind something' > *sipi:nín* '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:nạ̲ ạ̲ʔs'awinín
ʃli:ká:nạ̲ ạ̲ʔ–s'awi–**nín**
true head–defeat–DT
'it's true, he does trick (people)'

b. tá:tʃa, wanį́: wiʃ ʔaɬa:wanampą́:
tá:tʃa wan–nį́: wiʃ ʔaɬa:–wan–**nan**–pą́:
INTJ be–PF you steal–eat–DT–PRG:2SUBJ
'aha! it was you stealing and eating!'

c. iʃmạ̲ʔtạ̲ʔạ̲ɬnán naktʃík
iʃ–mạ̲ʔtạ̲ʔạ̲ɬ–**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. *mạ̲ʔanán* 'plant by scattering', from *mạ̲ʔán* '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. iʃtạ̲ą́n tsamá: iʃtalakasmu̲nún
iʃ–ta–ą́n tsamá: iʃ–ta–lakasmu̲–**nún**
PST–3PL.SUBJ–go that PST–3PL.SUBJ–sweetheart–DT
'they went off to be with their boyfriends'

b. xikslí:wa̱ skuxkán akʃní tʃitʃinín
xikslí:wa̱ 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. naka̱nán ta:skuxá:n
na–ik–a̱n–**nán** ta:–skux–á:–n
FUT–1SG.SUBJ–go–DT CMT–work–IMPF–2OBJ
'I will go to work for you'

b. ika̱ʔspútli̱ iktaa̱kʃtununʔółɬ
ik–a̱ʔspút–li̱ ik–taa̱kʃtu–**nun**–ʔó–ɬ
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 *tʃa̱na:nán* 'plant, sow' (from *tʃa̱n* '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. ʃtaputsama̱:ná:ɬ ʃatséya tiya̱ antsá xa: tsex natatʃa̱na:nán
iʃ–ta–putsa–ma̱:–ná:ɬ ʃa–tséya tiya̱ antsá xa:
PST–3PL.SUBJ–look.for–PRG–PL.ST DTV–good land there where

tsex na–ta–tʃa̱na: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: tʃiʃkú̱ ma:taxí:ɬ ʔǫ̱ʃkitsís tsamá: puská:t
tsamá: tʃiʃkú̱ ma:taxí:–ɬ ʔǫ̱ʃ–kitsís tsamá: puská:t
that man charge–PFV CLS–five that woman
'that man charged the woman five pesos'

b. kima:taxi:ma:ɬtsá iʃtumí:n tu:k lakle:ní̱:
kin–ma:taxi:–ma:ɬ=tsá iʃ–tumí:n tu: ik–lakle:n–ní̱:
1OBJ–charge–PRG=now 3PO–money NREL 1SG.SUBJ–owe–PF
'he is charging me the money I owed him'

c. tsamá: tʃiʃkú̱ ma:taxi:nín ʔǫ̱ʃkitsís
tsamá: tʃiʃkú̱ ma:taxi:–**nín** ʔǫ̱ʃ–kitsís
that man charge–DT CLS–five
'that man charges five pesos'

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

(125) maːntsá xaː staːnankán laːwíːɬ ʔǫ́ta xaːtsá a̲nskúxa naiʃlá
maːn=tsá xaː staː–**nan**–kán laː–wíːɬ ʔǫ́t–a xaː=tsá
only=now where sell–DT–IDF do–stand drink–IMPF NEG=now

a̲n–skúx–a na=iʃ–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)

***laː-* 'RECIPROCAL' (RCP)**

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

(126) a. laːtúkswi̲
laː–túks–wi̲
RCP–hit–1PL.SUBJ:PFV
'we$_{INC}$ hit each other'

b. ik–laːtúkswi̲
ik–**laː**–túks–wi̲
1SG.SUBJ–RCP–hit–1PL.SUBJ:PFV
'we$_{EXC}$ hit each other'

c. laːtukstít
laː–tuks–tít
RCP–hit–2PL.SUBJ
'you guys hit each other'

d. ta–**laː**–túks–li̲
3PL.SUBJ–RCP–hit–PFV
'they hit each other'

e. **laː**–túks–ka̲
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. iʃpe̲ʔʃtǫ́ʔa kintʃík mintʃík
iʃ–pe̲ʔ–ʃtǫ́ʔ–a kin–tʃík min–tʃík
PST–arm–joined–IMPF 1PO–house 2PO–house
'my house was right next to your house'

b. la:tapɛ̨ʔʃtǫ́ʔa kintʃiknikán
la:–ta–pɛ̨ʔ–ʃtǫ́ʔ–a kin–tʃik–nį̨–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:pɛ̨ʔʃtǫʔwi:li:kanį́: *papaya*
na–sta:–kán **la:**–ma:–pɛ̨ʔ–ʃtǫʔ–wi:li:–kan–nį́: 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 *pɛ̨ʔʃtǫ́ʔ-* '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:pɛ̨ʔʃtǫʔ-* 'put beside' in its resultative form compounded with the verb *wi:lí:* '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:túkswį̨
kin–**la:**–tuks–wį̨
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–wį̨ na–k–tǫʔǫ́:
pus ka–la:–ʃkút–wį̨ na–ik–tǫʔǫ́:
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., *kakiʃkútį̨* '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:wą̨ la:waninį̨:táuw nala:maʃki:ya:uw?
tʃi: lí:wą̨ la:–wa–ni–nį̨:tá–w na–**la:**–maʃki:–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 *mą̨ʔtą̨ʔą́ɬ-* 'guard, watch over':

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

kin–ka:–**mą̨ʔtą̨ʔɬ**–má:–n
1OBJ–PL.OBJ–guard–PRG–2OBJ

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

b. mą̨ʔʃtę̨ʔa tamą̨ʔtą̨ʔą́ɬi̱ tsamá: *sandía*
mą̨ʔʃtę̨ʔ–a **ta–mą̨ʔtą̨ʔą́ɬ**–li̱ 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 *mą̨ʔtą̨ʔą́ɬ-* '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:kli̱ Reyes
Longino **laka–swí:k**–li̱ Reyes
Longino face–scrape–PFV Reyes
'Longino shaved Reyes'

b. iktalakaswi:klitsá
ik–**ta–laka–swi:k**–li̱=tsá
1SG.SUBJ–INCH–face–scrape–PFV=now
'I've shaved myself'

c. kutʃu:nu̱ nakutʃu:yá:n
kutʃu:–nu̱ na–**kutʃu:**–yá:–n
cure–AGT FUT–cure–IMPF–2OBJ
'the medicine man will cure you'

d. ʃkiɬtsukút ʃtakuwi:nį́ Patla ʃamexikánu, ʔe: wanikutun pą̱ɬma̱ tu: li:takutʃukán
iʃ–kiɬ–tsukú–ut iʃ–takuwi:nį́ Patla ʃa–mexikánu
3PO–mouth–begin–NM 3PO–name Patla DTV–Nahuatl

ʔe: wan–ni–kutun pą̱ɬma̱ 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. tsukúɬ mat pą̱ʔɬa tsamá: tʃiwíʃ
tsukú–ɬ mat **pą̱ʔɬ**–a tsamá: tʃiwíʃ
begin–PFV QTV break–IMPF that rock
'he began to smash the rock'

f. paɬ natapą́ʔɬa minkiɬtʃúxpi̱, pus, naka:ʃlawapa:la:yá:uw
paɬ na–**ta–pą̱ʔɬ**–a min–kiɬtʃúxpi̱ pus na–ka:ʃlawa–pa: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 itself) 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:míɬ napi:likán
iʃ–puská:t lakla:–ní iʃ–pá:n ʔe: li:mín–ɬ 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:ɬ páʃnį̱ nakpu:ɬún
ta–pi:li–má:ɬ páʃnį̱ nak=pu:ɬún
INCH–roll–PRG pig LOC=mud
'the pig is rolling around in the mud'

c. kistiwimá:ɬ kimpúʃku̱
kin–**stiwi**–má:ɬ kin–púʃku̱
1OBJ–swing–PRG 1PO–older.brother
'my brother is swinging me'

d. pus xa: le: ikyúxa, *porque* iktastiwima:ɬ
pus xa: le: ik–yúx–a porque ik–**ta–stiwi**–ma:ɬ
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. ʃla kinteːtanʔstaːyáːɬ kintsǫ̨ʔosmuːyǫ́ʔl̨i̯
ʃla kin–teː–tanʔstaːyáː–ɬ kin–tsǫ̨ʔos–**muːyǫ́ʔɬ**–l̨i̯
he 1OBJ–PATH–push–PFV 1OBJ–knee–twist–PFV
‘he pushed me and twisted my knee’

b. tamuːyǫ́ʔl̨i̯ istsǫ̨ʔósn̨i̯
ta–muːyǫ́ʔ–l̨i̯ iʃ–tsǫ̨ʔósn̨i̯
INCH–twist–PFV 3PO–knee
‘his knee twisted’

c. iktatsǫ̨ʔosmuːyǫ́ʔl̨i̯
ik–**ta–tsǫ̨ʔos–muːyǫ́ʔ**–l̨i̯
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 (*ʃla*) as the subject; the damaged bodypart is expressed by a bodypart prefix (*tsǫ̨ʔos-*). 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 partonymics in UNT are formed from a prefixal element and an empty suffix *-n(i̯)*. 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 lakpaːlásl̨i̯
lanʔs mat **lakpaː**–lás–l̨i̯
IDPH QTV cheek–slap–PFV
‘whack! he$_i$ hit him$_j$ on the cheek’

b. tanyaːwáːɬ liːʃtǫ̨ʔóːn
tan–yaːwáː–ɬ liːʃtǫ̨ʔóːn
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 partonymic:

(136) a. kʔeːkatsán, kakinʔeːɬíṭi̯
ik–**ʔeː**–katsán ka–kin–**ʔeː**–ɬíṭ–ti̯
1SG.SUBJ–back–hurt OPT–1OBJ–back–press–2SG.SUBJ:PFV
‘my back hurts, press on it for me!’

b. kaɬi̯ti̯ kinʔéːn
ka–ɬi̯t–ti̯ kin–**ʔeːn**
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. tsamáː tʃaːkám tʃaːɬukúː ki̯wi̯ antsá kamaːlá:
tsamáː tʃaːkám **tʃaː**–ɬukúː ki̯wi̯ antsá kamaːlá:
that woodpecker shin–perforate tree there give.birth
'the woodpecker is making a hole in the trunk of the tree, it nests there'

b. naktʃaːɬpíta ki̯wi̯
na–ik–**tʃaː**–ɬpít–a ki̯wi̯
FUT–1SG.SUBJ–shin–carve–IMPF tree
'I'm going to carve the stick'

c. naklakaɬpíta ki*mesa*
na–ik–**laka**–ɬpít–a kin–mesa
FUT–1SG.SUBJ–face–carve 1PO–table
'I am going to carve the top of my table'

d. nakpuːponʔnún xa: na̯a̯n ʃkáːn
na–ik–**puː**–ponʔnún xa: na–a̯n ʃkáːn
FUT–1SG.SUBJ–vagina–dig where FUT–go water
'I will dig a ditch where the water will run'

In (137a), the prefix *tʃaː-* '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-/la̯ʔa-* '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), *puː-* '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. nakpuːkuːtuːʔo̯ wamáː lúʃu̯ nakin*caja*
na–ik–**puː**–kuːtuː–ʔó wamáː lúʃu̯ 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: ą́ʔtsį̱ nakuʃtáɬ
ka–**pú:**–xo: ą́ʔtsį̱ nak=kuʃtáɬ
OPT–vagina–down.in pillow LOC=sack
'put the pillow in the sack!'

c. xa: ą̱kʃtú tsamá: tʃiwíʃ
xa: **ą̱k**–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. kį́wį̱ ą̱kpuyá:ɬ sipéx
kį́wį̱ **ą̱kpu**–yá:ɬ sipéx
tree crown–stand hill
'the tree is standing on top of the hill'

b. wamá: tiɬmáx lakawí:ɬ místu
wamá: tiɬmáx **laka**–wí:ɬ místu
this blanket face–sit cat
'the cat is sitting on the blanket'

b. tʃiʃkų́ ʔe:yá:ɬ tʃik
tʃiʃkų́ **ʔe:**–yá:ɬ tʃik
man back–stand house
'the man is on the roof of the house'

d. líbru taą̱kpuwi:laná:ɬ *mesa*
líbru ta–**ą̱kpu**–wi:la–ná:ɬ 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. mą̱ʔą̱:stsá ʃpu:tʃipakán skí:tį̱ pą̱ʔo:ʃú:t ʔe: ʃtapu:wi:li:kán ʃka:n
mą̱ʔą̱:s=tsá iʃ–**pu:**–tʃipa–kán skí:tį̱ pą̱ʔo:ʃú:t ʔe:
long.ago=now PST–vagina–grab–IDF fish crate and

iʃ–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. kintapuːléːɬ iʃkuʃtaɬkán
kin–ta–**puː**–léːn–ɬ iʃ–kuʃtaɬ–kán
1OBJ–3PL.SUBJ–vagina–take–PFV 3PO–sack–PL.PO
'they carried me in their sack'

c. kimpiːmaːʃtú ɬtúku
kin–**piː**–maː–ʃtú ɬtúku
1OBJ–breast–CS–out spine
'he took the spine out of my chest'

d. tsakát ikta:puːlą̲ʔmakamíɬ tʃiwíʃ kistánku tsamáː tʃiʃkṷ́
tsakát ik–taː–**puːlą̲ʔ**–maka–mín–ɬ tʃiwíʃ kin–stánku
sling 1SG.SUBJ–CMT–interior–hand–come–PFV rock 1PO–younger.sibling

tsamáː tʃiʃkṷ́
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 (*-paːláː* 'REPETITIVE', *-ʔo* 'all, completely') or express manner or direction of motion (*-teːɬá* 'AMBULATIVE', *teː-* 'in passing', *kiː-* 'ROUNDTRIP', *-tʃá* 'DISTAL', *-tʃi* 'PROXIMATE'), those that have modal functions (*-kutun* 'DESIDERATIVE', *-ę̲ː* 'OBLIGATION'), and the prefixes *mą̲ʔ-* 'in the domain of others', *lak-/lą̲ʔ-* 'DISTRIBUTIVE' and *ʔaː-* 'SIMULTANEOUS'.

2.3.7.1. *-paːláː* 'REPETITIVE' (RPT)

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

(141) a. naką̲ʔsʼawipaːlá: naː kit maːskí sʼawiní̲
na–ik–ą̲ʔ–sʼawi–**paːláː** naː kit maːskí sʼawiní̲
FUT–1SG.SUBJ–head–defeat–RPT also I even devil
'I'll trick him even if he is the Devil'

b. tsaːlapaːlaːni̲ːtsá
tsaːla–**paːlaː**–ni̲ː=tsá
flee–RPT–PF=now
'he had fled again'

c. tamaknu:pá:ɬ wamá: nak=ʃą́: tsamá: kį́wį tsamá: tʃiʃkų́
ta–maknu:–**pá:ɬ** wamá: nak=ʃą́: tsamá: kį́wį tsamá: tʃiʃkų́
INCH–put.in–RPT:PFV this LOC=sweat.lodge that tree that man
'the man put wood into the sweatlodge again'

d. tsamá: tʃatʃąʔą́t u:tsá wamá:ɬ tsamá: ʃka:n ʔe: naʃtánį taʃtunima:pá:ɬ
tsamá: tʃatʃąʔą́t u:tsá wa–má:ɬ tsamá: ʃka:n ʔe: nak=iʃ–tánį
that toad that eat–PRG that water and LOC=3PO–buttocks

ta–ʃtu–ni–ma:–**pá:ɬ**
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:ɬ*, 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:kąą́, ąą́ʔs'awima:pa:lá:kąą́
ʔe: tʃu: iʃ–kawa:yúx maʃki:–má:–kąą́ ąą́ʔ–s'awi–ma:–**pa:lá:**–kąą́
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 mąą́ʔni:pa:lá:kąą́ tsamá: tąą́ʔo
antsá mąą́ʔni:–**pa:lá:**–kąą́ tsamá: tąą́ʔo
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. tatsukúɬ taní: ásta xa: taniːʔóɬ
ta–tsukú–ɬ ta–ní: ásta xa: ta–ni:–**ʔó**–ɬ
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. ʔe: kimą̲ʔwaʔoɬtsá tsamá: kis'á̲tą̲
ʔe: kin–mą̲ʔ–wa–**ʔo**–ɬ=tsá tsamá: kin–s'á̲tą̲
and 1OBJ–AJENO–eat–all–PFV=now that 1PO–child
'and it ate all of my children'

c. pus mat xú:ta tʃi: mat li:tapu:nu:ʔóɬ uʃúm
pus mat xú:ta tʃi: mat li:–tapu:nu:–ʔó–ɬ uʃúm
INTJ QTV INTJ how QTV INST–swarm–all–PFV wasp
'well, they say, he was completely swarmed by wasps'

d. kimą̲ʔɬti:ʔoɬtsá kintumí:n tʃu:wá
kin–mą̲ʔɬti:–**ʔo**–ɬ=tsá kin–tumí:n tʃu:wá
1OBJ–take.away–all–PFV–now 1PO–money now
'now he took all my money'

e. bueno, tawayanʔóɬ
bueno ta–wa–yan–**ʔó**–ɬ
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. *-teːɬá* 'AMBULATIVE' (AMB)

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

(144) a. mat iʃxiliteːɬáɬ min
mat iʃ–xili–**teːɬá**–ɬ min
QTV PST–thunder–AMB–PFV come
'they say it came along making a noise like thunder'

b. tsumaxát tʃa:tín ixta:tín mat xla mat leːɬ *dulces* wi:li:teːɬáɬ xa: ka:léɬ xta:tá
tsumaxát tʃa:–tín ix–ta:tín mat xla mat leːn–ɬ *dulces*
girl CLS–one 3PO–sibling QTV ʔe QTV take–PFV sweets

wi:li:–**teːɬá**–ɬ xa: ka:–léːn–ɬ 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. tʃa:ą̲túnu tʃi: naka:ki:teːteːɬakán ti: ka:maklateːɬakán ka:leːmaka:nkán puːtʃiwín
tʃa:–ą̲túnu tʃi: na–ka:–ki:–teː–**teːɬa**–kán ti: ka:–makla–**teːɬa**–kán
CLS–each how FUT–PL.OBJ–RT–take –AMB–IDF HREL PL.OBJ–find–AMB–IDF

ka:–le:n–maka:n–kán pu:tʃiwín
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: ʔanán tsamá: sputʔoɬtsá sputeːɬaʔoɬtsá
xa:=tsá tu: ʔanán tsamá: sput–ʔo–ɬ=tsá sput–**teːɬa**–ʔo–ɬ=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), *-teːɬá* can be combined with the directional prefix *kiː-* 'ROUNDTRIP' and the suffix *-ʔo* 'all, completely', which follows the ambulative in (d). Example (d) is also notable for its figurative use of *-teːɬá*, where the path of movement is through time rather than space.

2.3.7.4. *teː-* 'in passing' (PATH)

The prefix *teː-* 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. ʔeː tʃuːwá antsá wiʃ nateːskúxa antsá tʃiː napíną namintʃík
ʔeː tʃuːwá antsá wiʃ na–**teː**–skúx–a antsá tʃiː
and now there you FUT–PATH–work–IMPF there how

na–pín–ą̨ 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. tʃuːn maːntsá tʃuːntsá kinteːwaníɬ wayaya ą̨ɬ
tʃuːn maːn=tsá tʃuːn=tsá kin–**teː**–wan–ní–ɬ wayaya ą̨n–ɬ
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. tʃuːwá nalą̨ʔtsináːuw akʃní tuː nateːwanikáną̨
tʃuːwá na–lą̨ʔtsin–áː–w akʃní tuː
now FUT–see–IMPF–1PL.SUBJ when NREL

na–**teː**–wan–ni–kán–ą̨
FUT–PATH–SAY–BEN–IDF–IMPF:2SUBJ

'now we'll see what they come by to tell you'

d. nakteːmą̨ʔʃtę́ʔa
na–ik–**teː**–mą̨ʔʃtę́ʔ–a
FUT–1SG.SUBJ–PATH–leave.something–IMPF
'I'll pass by to drop it off'

Historically, it seems likely that *teː-* has its origins in the word *tej* 'road'.

2.3.7.5. *kiː-* 'ROUNDTRIP' (RT)

In its literal use, the morpheme *kiː-* 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:táya̲ lá:su
ka–**kiː**–táya̲ lá:su
OPT–RT–take:2SUBJ:PFV rope
'go get a rope (and bring it back)!'

b. ki:li:paraxaxnanʔón ma:skí wiʃ
ik–**kiː**–li:–paraxaxnan–ʔó–n ma:skí wiʃ
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, *kiː-* 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:waníɬ *profesor* pus kit iktatsǫ́ʔli̲
kiː–wan–ní–ɬ *profesor* pus kit ik–ta–tsǫ́ʔ–li̲
RT–say–BEN–PFV teacher INTJ I 1SG.SUBJ–INCH–write–PFV
'he went to say to the teacher, "I'm enrolling"'

b. ki:skį́nli̲ taskuxút
kiː–skį́n–li̲ ta–skux–út
RT–ask.for–PFV INCH–work–NM
'he went to ask for work'

c. antsá ki:tawi:lapá:ɬ tsamá: iʃtsí: tsamá: ʔawátʃą̲
antsá **kiː**–ta–wi:la–pá:ɬ tsamá: iʃ–tsí: tsamá: ʔawátʃą̲
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:ɬ xa: wi:ɬ ą̲ʔtín tsamá: ʔą́ɬą̲ ní:du
tsamá: kunéxu **kiː**–ta–wí:ɬ xa: wi:ɬ ą̲ʔ–tín tsamá: ʔą́ɬą̲ 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 *kiː-* is textually frequent, although sentences in isolation with *kiː-* 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. xaː tsex tuː kinq̲ʔspulatʃá naʃkáːn
xaː tsex tuː kin–q̲ʔspula–**tʃá** nak=ʃkaːn
NEG good NREL 1OBJ–happen–DST LOC=water
'it isn't good what happened to me down by the water'

b. mat tsax lq̲ʔtoxoːmaːtʃá ʃkaːn tʃiː mat kiːlaːmáːɬ
mat tsax lq̲ʔ–toxoː–maːɬ–**tʃá** ʃkaːn tʃiː mat kiː–laː–máːɬ
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. katapáːnu: nakintéx kq̲naːtʃq̲́
ka–tapáːnu: nak–kin–téx ik–q̲an–aː–**tʃá**
OPT–remove:2SG.SUBJ:PFV LOC=1PO–path 1SG.SUBJ–go–IMPF–DST
'get out of my way! I'm going there'

d. kiskɨ̲nikantʃá q̲ʔtín *regalo*
kin–skɨ̲n–ni–kan–**tʃá** q̲ʔ–tín regalo
1OBJ–ask.for–BEN–IDF–DST CLS–one gift
'they asked me for a gift'

e. tsukukanaːtʃás'oliːnikánʔeːtsukukántampiːɬiːkán
tsuku–kan–aː–**tʃá** s'oliː–ni–kán ʔeː tsuku–kán tampiː–ɬiː–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), *-tʃá* can be used for both distal static locations and for distal goals/destinations. Unlike the other quasi-inflectional affixes, *-tʃá* 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. *ikq̲́n* 'I go'). The suffix also changes the aspectual forms of *-kan* 'indefinite agent', as shown in (d) and (e) (compare (148d) and *kiskɨ̲níkq̲ q̲ʔtín* regalo 'they asked me for a present', (148e) and *tsukukán s'oliːnikán* 'they begin to play for him').

Another unique feature of *-tʃá* is that, like the verb *tʃaːn* 'arrive there' (its probable historical source), it is suppletive in the second person, as shown in (149):

(149) a. iktʃáːn
ik–**tʃáːn**
1SG.SUBJ–arrive.there
'I arrive there'

b. tʃipínq̲
tʃɨ̲pín–q̲
arrive.there:2SUBJ–IMPF:2SG.SUBJ
'you arrive there'

c. iktʃaːnáːuw
ik–**tʃaːn**–áː–w
1SG.SUBJ–arrive.there–IMPF–1PL.SUBJ
'we arrive there'

d. tʃipínq̲
tʃɨ̲pín–aː–ntít
arrive.there:2SUBJ–IMPF–2PL.SUBJ
'you guys arrive there'

e. kileːnaːtʃá
kin-liː–q̲an–aː–**tʃá**
1OBJ–INST–go–IMPF–DST
'he takes me there'

f. kiliːpinaːtʃí
kin–liː–pin–áː–**tʃɨ̲**
1OBJ–INST–go:2SUBJ–IMPF–DST:2SG.SUBJ
'you take me there'

g. ikwi:lana:ntʃáuw
ik-wi:la–na:n–**tʃa**–w
1SG.SUBJ–sit–PL.ST–DST–1PL.SUBJ
'we sit there'

h. wi:lana:ntʃi̱pitít
wi:la–na:n–**tʃi̱pi**–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 *-tʃá* because homophonous with second person forms of verbs suffixed with the next morpheme to be discussed, *-tʃí* 'PROXIMAL'.

2.3.7.7. *-tʃi* 'PROXIMAL' (PRX)

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

(150) a. ki:la:ni̱:tą̱ntʃitsá mą̱ʔtín
ki:–la:–ni̱:tą̱n–**tʃi**=tsá mą̱ʔ–tín
RT–do–PF–PRX=now CLS–one
'he's already come once'

b. mat waní, kis'ą́tą̱, kis'ą́tą̱ katántʃi̱
mat wan–ní kin–s'ą́tą̱ kin–s'ą́tą̱ ka–tán–**tʃi̱**
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:wátʃi̱
ʔe: tʃu:wá kin–ki:–ta:–wá–**tʃi̱**
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 *-tʃá* 'DISTAL' in the second person, verbs with second person singular subjects taking *-tʃi* are homophonous with the same verbs taking *-tʃá*. 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: kuʃtáɬ kúʃi̱
tʃu:wá tu: ik–lakaskín ik–le:n–**kutún** ʔe:–tín tsamá: kuʃtáɬ kúʃi̱
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:ką̱ tsamá: *coyote*
ta:la:–**kutun**–má:–ką̱ tsamá: *coyote*
shoot–DSD–PRG–IDF that coyote
'he is wanting to shoot the coyote'

c. xaːtsá leːnkutúnl̰i maːʃanán
xaː=tsá leːn–**kutún**–l̰i maːʃanán
NEG=now take–DSD–PFV be.ashamed
'he didn't want to take him anymore, he was ashamed'

2.3.7.9. *-e̱ː* 'OBLIGATION' (OBG)

The morpheme *-e̱ː* 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 natamaːe̱ːyáːw tsaláx
mat na–tamaː–**e̱ː**–yáː–w tsaláx
QTV FUT–lie.down–OBG–IMPF–1PL.SUBJ short.time
'we ought to lie down for a while'

b. kla̱ʔatíɬ kliːtamaːwaːé̱ːɬ
ik–la̱ʔatí–ɬ ik–liː–tamaːwaː–**é̱ː**–ɬ
1SG.SUBJ–like–PFV 1SG.SUBJ–INST–buy–OBG–PFV
'I liked it, that's why I had to buy it'

c. tʃuːwá waːtsá natawakae̱ːya̱
tʃuːwá waːtsá na–tawaka–**e̱ː**–ya̱
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 *-e̱ː* appear to be in fixed expressions such as those shown in (153);

(153) a. pus, kalaːʔéːɬ kit nakmakáːn
pus ka–laː–**é̱ː**–ɬ kit na–ik–makáːn
INTJ OPT–do–OBG–PFV I FUT–1SG.SUBJ–send
'well, whatever happens, I'm going to send him'

b. kawé: *porque* páɬ xaː katilakapalaːyáːuw kimpo̱ʔtukán nala̱ʔsputáːuw waːtsá
ka–a̱n–**é̱ː**–w porque páɬ xaː ka–ti–lakapalaː–yáː–w
OPT–go–OBG–1PL.SUBJ because if NEG OPT–UNR–hurry–IMPF–1PL.SUBJ

kim–po̱ʔtu–kán na–la̱ʔsput–áː–w waːtsá
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 *kawe̱ː* 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. *ma̱ʔ-* 'in the domain of others' (AJENO)

The prefix *ma̱ʔ-* 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. mą̲ʔskúxa Juan
mą̲ʔ–skúx–a Juan
AJENO–work–IMPF Juan
'Juan works for someone else'

b. mą̲ʔ ta núːɬ Juan
mą̲ʔ–ta–núː–ɬ Juan
AJENO–INCH–into–PFV Juan
'Juan went into someone else's house'

c. mą̲ʔmaːpupúː ʃkaːn María
mą̲ʔ–maː–pup–úː ʃkaːn María
AJENO–CS–boil–CS water Maria
'Maria boils water in someone else's house'

d. mą̲ʔlą̲ʔatí iʃpuskáːt
mą̲ʔ–lą̲ʔatí iʃ–puskáːt
AJENO–like 3PO–woman
'he desires someone else's wife'

Although *mą̲ʔ-* 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 *mą̲ʔtaːyá* 'help someone' (from *taːyá* 'to stand') and *mą̲ʔwá* 'eat something of someone else's' (from *wá* 'eat something'), shown in (155):

(155) a. nakwayáːn
na–ik–wa–yáː–n
FUT–1SG.SUBJ–eat–IMPF–2OBJ
'I am going to eat you'

b. ʔeː kimą̲ʔwaʔoɬtsá tsamáː kisʼą́t̲ą̲
ʔeː kin–**mą̲ʔ**–wa–ʔo–ɬ=tsá tsamáː kin–sʼą́t̲ą̲
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 *mą̲ʔ-* retain the valency of the original stem.

2.3.7.11. *lak-/lą̲ʔ-* 'DISTRIBUTIVE' (DTB)

The distributive prefix *lak-/lą̲ʔ-* 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. kalą̲ʔslą́ʔtį̲ wamá: kapéx lí:kwa xa: nalakɬkú:
ka–**lą̲ʔ**–slą́ʔ–tį̲ wamá: kapéx lí:kwa xa: na–**lak**–ɬkú:
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. tsukúɬ mat lą̲ʔʃaká iʃmą̲ʔsín tsamá: ta:li:ka:na:tą́ʔo
tsukú–ɬ mat **lą̲ʔ**–ʃaká iʃ–mą̲ʔsín tsamá: ta:li:ka:na:tą́ʔo
begin–PFV QTV DTB–sharpen 3PO–nails that Talikanataho
'Talikanataho began to sharpen her nails

c. wiʃ katsí:yą̲ paɬ naik̲ą́n naklą̲ʔka:nán
wiʃ katsí:–yą̲ paɬ na–ik–ą́n na–ik–**lą̲ʔ**–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 *slą́ʔ-* 'stir something' and *ɬku:* '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) *ʃaká* 'sharpen' takes the prefix because the action is applied in sequence to a series of objects (the fingernails). The verb in (c), *lą̲ʔká:* '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-/lą̲ʔ-* 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:mą̲ʔtaya:yá:n ti: lą̲ʔpą́ʔɬa tsamá: tʃiwíʃ
ka–tasa–ní–w ti: tsex na–kin–ka:–mą̲ʔtaya:–yá:–n
OPT–call–BEN–1PL.SUBJ HREL good FUT–1OBJ–PL.OBJ–help–IMPF–2OBJ

ti: **lą̲ʔ**–pą́ʔɬ–a tsamá: tʃiwíʃ
HREL DTB–break.open–IMPF that rock

'let's call the one who can help us, the one who smashes that rock'

b. púɾotsamá:kɾistiánuʃalán*MontedeChila*na:tatsukúɬtalą̲ʔspúta
púɾo tsamá: kɾistiánu ʃalá nak=Monte.de.Chila na:
poor that person belong.to LOC=Monte.de.Chila also

ta–tsukú–ɬ ta–**lą̲ʔ**–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 *pą̲ʔɬ-* ‘break open’ becomes more intense when combined with *lą̲ʔ-*, making the affixed form of the verb something like ‘smash’. The verb in (b), *lą̲ʔspút-* ‘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 *lákn̲i̲* ‘lower leg’. A definitive answer to this question will have to await an accurate reconstruction of Proto-Totonacan.

2.3.7.12. *ʔaː-* ‘SIMULTANEOUS’ (SMT)

The prefix *ʔaː-* 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:waná̲: xa: na: kinʔa:ʃoʔóya̲, iktia̲nán iklakskuxniyá:n

li:waná̲:	xa:	na:	kin–**ʔa:**–ʃoʔó–ya̲	ik–ti–a̲n–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. ikla̲ʔtsin̲í: kit tsamá: lakstín tsumaxán ti: xa: na: ti: iʃʔa:ka:skín

ik–la̲ʔtsin–n̲í:	kit	tsamá:	lakstín	tsumaxán	ti:	xa:	na:
1SG.SUBJ–see–PF	I	that	children	girl:PL	HREL	NEG	still

ti: iʃ–**ʔa:**–ka:–skín̲
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 *-n̲i̲* (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. *-n̲i̲* ‘DEVERBATIVE’ (DVB)

Verbs in UNT take a deverbative suffix *-n̲i̲* 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 *-n̲i̲*, 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. tsamáː ʃapuːlaʔwaxáxa ʃamásnɨ tʃik
tsamáː ʃa–puːlaʔ–waxáxa **ʃa–más–nɨ** tʃik
that DTV–inside–hollow DTV–rot–DVB house
'it's empty, the broken-down house'

b. ʃalaklaːnɨtsá tuː taːmaːwáːɬ
ʃa–laklaː–nɨ=tsá tuː taːmaːwáː–ɬ
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) *aʔwɨtíː* 'crazy, out of one's senses' > *aʔwɨtíːnɨ* 'crazy, out of one's senses'
xikwán 'be afraid' > *xikwánɨ* 'terrified'
kiɬtʃuːyáː 'joke' > *kiɬtʃuːyáːnɨ* 'joking, crazy-talking'
kukyúx- 'have hair fall out' > *kukyúxnɨ* 'bald'
kún 'swell' > *kúnɨ* 'swollen'
laklá: 'rot, be broken' > *laklá:nɨ* 'rotten, broken'
laːmaʔʃtéʔ- 'separate' > *laːmaʔʃtéʔnɨ* 'separated, broken apart'
laːtapɛʔʃtóʔ- 'be placed side by side' > *laːtapɛʔʃtóʔnɨ* 'side by side'
más- 'rot' > *másnɨ* 'rotten'
páʃ- 'bathe' > *páʃnɨ* 'bathed'
puːɬkúː 'burn inside a container' > *puːɬkúːnɨ* 'burnt inside a container'
pún 'sprouted' > *púnɨ* 'sprouted'
yúx- 'go down' > *yúxnɨ* 'fallen'
liːtsíːn 'smile, laugh' > *liːtsíːnɨ* 'smiling, laughing'

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

(161) *tʃaáːn* 'ripen, cook' > *tʃaáːn* 'ripe, cook'
ʔoːntíː 'get fat' > *ʔoːntíːn* 'fat'
laʔawán 'wake up, come to life' > *laʔawán* 'daring, bold'
niː 'die' > *niːn* 'dead'
puːtíː 'dry up' > *puːtíːn* '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. namą̲ʔankán lónʔn̲i̲ naktéx
na–mą̲ʔan–kán **lónʔ–n̲i̲** nak=téx
FUT–throw.away–IDF cold–DVB LOC=road
'they are going to remove the snow from the road'

b. la:má:ɬ lą̲ʔɬ'ó:n̲i̲ ʃtampín nakpáɬka, natʃitʃinitsá
la:–má:ɬ **lą̲ʔ–ɬ'ó:–n̲i̲** iʃ–tampín nak=páɬka 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) *ku̲n* 'swell' > *kú̲n̲i̲* 'caterpillar'
ʔo̲t- 'drink$_{INTR}$' > *ʔó̲tn̲i̲* 'a drunk'
lą̲ʔspút- 'die, be destroyed' > *lą̲ʔspútn̲i̲* 'dead person'
lónʔ- 'be cold (climate)' > *lónʔn̲i̲* 'cold (climate), ice, snow'
ɬ'o: 'burn' > *lą̲ʔɬ'ó:n̲i̲* 'flames'
tʃu:yá: 'be crazy' > *tʃu:yá:n̲i̲* '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) *ʔatʃí:* 'drink (alcohol)' > *ʔatʃí:n* 'a drunk'
ɬi: 'dance' > *ɬi:n* 'dancer'
ni: 'die' > *ni:n* 'dead person'
la:kiɬní: 'argue' > *la:kiɬní:n* '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 — *ku̲n* 'swell' and *ni:* 'die'. These stems are illustrated in (165):

(165) a. lakú̲n̲i̲ tsamá: iʃtuxán
lak–kú̲n–n̲i̲ tsamá: iʃ–tuxán
APL–swell–DVB that 3PO–foot
'their feet are swollen'

b. a̲ʔawamá:ɬ kú̲n̲i̲ kimṕi̲n
a̲ʔa–wa–má:ɬ **kú̲n–n̲i̲** kin–ṕi̲n
ear–eat–PRG swell–DVB 1PO–chili
'a caterpillar is eating the leaves of my chili plant'

c. ʃaníːn tsi̱yą̱ ą̱kpuksantamáːɬ
ʃa–níː–n tsi̱yą̱ ą̱kpuksan–ta–máːɬ
DTV–die–DVB mouse stink–INCH–lie
'the dead mouse is lying there rotting'

d. ʃantíɬ naɬawaːnán namaːstaːnán nawaní niːn xaːtsá kaskuwáːɬ tiː iskuːwamáːɬ
ʃantíɬ na–ɬawaːnán na–maːstaːnán na–wan–ní **niː–n**
shaman FUT–hold.ceremony FUT–offer.food FUT–say–BEN die–DVB

xaː=tsá ka–skuwáː–ɬ tiː iʃ–skuːwa–máːɬ
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 *ku̱n*, 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. ʔeːtín kuʃtáɬ tsamáː kúʃi̱, ʃatapáʃni̱ kúʃi̱
ʔeː–tín kuʃtáɬ tsamáː kúʃi̱ **ʃa–ta–páʃ–ni̱** kúʃi̱
CLS–one sack that corn DTV–INCH–degrain–DVB corn
'a sack of corn, corn kernels'

b. ʃataʃ'aːntsá kúʃi̱
ʃa–ta–ʃ'aː–n=tsá kúʃi̱
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' > *taʔónʔʃni̱* 'braided'
ą̱ʔpáʃ- 'be baptized' > *tą̱ʔpáʃni̱* 'baptized'
ʔos- 'fly' > *taʔósni̱* 'flying'
kiɬpą̱ʔɬ- 'break something's rim' > *takiɬpą̱ʔɬni̱* 'broken around its rim'
lą̱ʔwé̱ʔ- 'stir something' > *talą̱ʔwé̱ʔni̱* 'stirred'
páɬ- 'sweep something' > *tapáɬni̱* 'swept, cleaned'
tapaːnúː 'be cleared away' > *tapaːnúːni̱* 'having been cleared away'
pą̱́s- 'de-grain (corn)' > *tapą̱́sni̱* 'in grains'
wiːlé̱ʔɬ- 'twist (thick object)' > *tawiːlé̱ʔɬni̱* 'twisted (thick object)'

Note that this list includes *taʔósni̱* '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)	*ą̲ʔáːn* 'fall from vertical'	>	*taą̲ʔáːn* 'knocked over'
	ʔeːtʃíː 'wrap something up'	>	*taʔeːtʃíːn* 'wrapped up'
	iː 'harvest something'	>	*taíːn* 'picked and left to be gathered up'
	ʃúː 'peel something'	>	*taʃúːn* 'peeled, skinned'
	ʃ'áː 'husk (corn)'	>	*taʃ'áːn* '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. tʃuːntsá ʃtakatsiːnkán ʃwanį́ː waːtsą̲́

tʃuːntsá	iʃ–**ta–katsiː–n**–kán		iʃ–wan–nį́ː	waːtsá
thus	3PO–INCH–know–DVB–PL.PO		3PO–be–PF	here

'that's the way their ideas were here'

b. *pero* tʃuwáː ʃtumtsá talakapaːstáknį̲ *porque* tuː ʃlá *antigüa* xaːtsá tʃuːntsá tʃiː tʃuwáː

pero	tʃuwáː	ʃtum=tsá	**ta–lakapaːsták–nį̲**	porque	tuː	
but	now	different=now	INCH–think–DVB	porque	NREL	
iʃ–lá	antigüa	xaː=tsá	tʃuːntsá	tʃiː	tʃuwáː	
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)	*tʃį́t-* 'mill something (sugar cane)'	>	*tatʃį́tnį̲* 'sugar cane syrup'
	nę̲ʔnín 'clear (land)'	>	*tanę́ʔnį̲* 'cleared land'
	snąt- 'embroider something'	>	*tasnątnį̲* 'embroidery' (Pt.)
	ʔeʃmąt- 'hear something'	>	*taʔeʃmątnį̲* 'noise'
	laksák- 'choose something'	>	*talaksáknį̲* 'choice, selection'
	mąʔstóʔ- 'meet, gather'	>	*tamąʔstóʔnį̲* 'meeting, gathering'
	lą̲ʔponʔ- 'dig'	>	*talą̲ʔponʔnį́* 'loosened soil'

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

(171)	*tʃą̲nán* 'plant, cultivate'	>	*tatʃą̲nán* 'orchard'
	tʃiwín 'speak'	>	*tatʃiwín* 'word'
	ʔą̲ʔíː 'believe something'	>	*taʔą̲ʔíːn* 'belief'
	ʔeːtʃíː 'wrap something up'	>	*taʔeːtʃíːn* 'bundle, wrapped lunch' (Ch.)
	ʔeɬ'amáːn 'joke with someone'	>	*taʔeɬ'amáːn* 'a joke'
	katsíː 'know something'	>	*takatsíːn* 'conduct'
	paːtíː 'suffer'	>	*tapaːtíːn* 'suffering'
	paːʃwá 'be happy'	>	*tapaːʃwán* 'happiness'
	piːʃlíː 'sing'	>	*tapiːʃlíːn* 'song'

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

(172) a. leːmáːɬ ʃataʔeːtʃíːn iʃkuwiːwą́ (Pt.)
leːn–máːɬ **ʃa–ta–ʔeː–tʃíː–n** iʃ–kuwiːwą́
take–PRG DTV–INCH–back–tie–DVB 3PO–lunch
'he's taking his wrapped-up lunch'

b. leːmáːɬ ʃataʔeːtʃíːn (Ch.)
leːn–máːɬ **ʃa–ta–ʔeː–tʃíː–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) *ą̱ʔpiːʃtʃíː* 'strangle something' > *ą̱ʔpíːʃtʃį̱* 'snare'
ą̱knáː 'admire something' > *ą́knį̱* 'respect'
kutʃúː 'cure someone' > *kútʃų̱* 'liquor'
mą̱ʔawiːlú 'whistle' > *mą̱ʔawíːlų̱* 'clay whistle'
maːpaːtʃíː 'tie around middle' > *maːpáːtʃį̱* 'wall of traditional house'
lakaʃų̱kú 'stick finger in eye' > *lakaʃų́kų̱* 'person without eyes'
laːtastúk- 'be joined together' > *laːtastúką̱* 'joint, articulation'
tapiːʃnúː 'put through something' > *tapíːʃnų̱* '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) *makwán* 'be sufficient, serve purpose' > *mákwą̱* 'remedy'
ą̱ʔpún 'bud (tree)' > *ą́ʔpų̱* 'a bud (tree)'
liːnę̱ʔnín'fell trees to clear land' > *liːnéʔnį̱* 'land with trees to be felled'
taːliːtsíːn 'laugh with someone' > *taːlíːtsį̱ː* 'a group laugh, laughter'
mą̱ʔskití 'cook for another person' > *mą̱ʔskítį̱* 'a cook'
skąt- 'learn something' > *skąta* 'one who learns'

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

(175) *latamáː* 'live, practice a custom' > *latamą́* 'life'
skąwí 'weave something' > *skąwį́* '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:ʃtumą̲:ná:ɬ naiʃtuxán ą̲ʔtín ʔą́ɬą̲ tʃiwíʃ

mat	ta–ma:–ʃtu–mą̲:–ná:ɬ	nak=iʃ–tuxán	ą̲ʔ–tín	**ʔą́ɬą̲**	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:ɬúkų̲ tsamá: kį́wį̲

ʃa–tʃa:–	**ɬúkų̲**	tsamá:	kį́wį̲
DTV–shin–perforate:NM		that	tree

'that tree is hollow'

c. wą̲:ʔ ʃatį́pį̲ ʃka:n mimá:ɬ, li:ɬtipínlį̲ tą̲:są̲ʔín tʔi: la:má:ɬ

wą̲:ʔ	**ʃa–tį́pį̲**	ʃka:n	min–má:ɬ	li:–	**ɬtipín**–lį̲	tą̲:są̲ʔín
totally	DTV–be.dirty:NM	water	come–PRG	INST–	be.dirty–PFV	downpour

tʃi:	la:–má:ɬ
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)	*tʃa:ɬukú:* 'perforate (trunk)'	>	*tʃa:ɬúkų̲* 'hollow (tree)'
	tʃitʃín 'heat up'	>	*tʃítʃį̲* 'hot'
	ʔą̲ɬán 'increase in size'	>	*ʔą́ɬą̲* 'big'
	ʔewį̲wín 'cool off'	>	*ʔewį́wį̲* 'cold'
	ɬtį̲pín 'dirty (liquid)'	>	*ɬtį́pį̲* 'dirty (of liquids)'
	ɬu:wán 'increase'	>	*ɬú:wą̲* 'much, many, a lot'
	si̲pín'be finely ground'	>	*sípį̲* 'very finely ground'
	tsinkán 'be heavy'	>	*tsínką̲* 'heavy'

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

(178)	*pa:wá* 'pecked at mid-section'	>	*tapá:wą̲* 'pecked at (corn)'
	pít- 'press something'	>	*tapítą̲* 'pressed'
	pu:si̲tku:tú: 'hollow something out'	>	*tapu:si̲tkú:tų̲* 'hollowed out'
	sipí: 'grind something'	>	*tasípį̲* 'finely ground'
	siwí 'twist together'	>	*tasíwį̲* 'twisted together, braided'
	swą̲ʔá 'grind something in *metate*'	>	*taswą́ʔą̲* 'ground'
	s'oʔá: 'hug something'	>	*tas'óʔą̲* 'hugged'
	ta:ma:ʃtú 'castrate something'	>	*tata:má:ʃtų̲* 'castrated'
	tsi̲lí 'fry something'	>	*tatsílį̲* 'fried'
	wa 'eat something'	>	*táwą̲* 'eaten by insects, moth-eaten'
	ʃmú̲:t- 'bend something'	>	*taʃmú̲:tą̲* 'flexible'
	ʃtǫ̲ʔó 'jab something'	>	*taʃtǫ́ʔǫ̲* 'nailed'
	ʃ'etí 'crush to remove seeds'	>	*taʃ'étį̲* '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)	*qʔałumán* 'have a cold'	>	*qʔałumát* 'cold'
	kiɬtsukú 'be founded'	>	*kiɬtsukút* 'origin'
	sput- 'end, run out'	>	*sputút* 'end (time)'
	qksa:sá: 'get grey hair on head'	>	*qksa:sá:t* 'grey hair on head'
	ʔeɬpupú 'foam up (bottle, pot)'	>	*ʔeɬpupút* 'foam on bottle or pot'
	tʃox- '(to)spit'	>	*tʃoxót* 'saliva'
	lonʔ- 'be cold'	>	*lonʔót* 'malaria'
	mqʔlíp- 'flash (lightening)'	>	*mqʔlipít* '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 (*mqʔlíp-* > *mqʔlipít*), 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 *qʔałumán* 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 *-nį* 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)	*ka:ʃlawá* 'fix up, decorate something'	>	*li:ka:ʃlawán* 'decoration'
	lqʔanęʔé: 'fan someone's face'	>	*li:lqʔanęʔé:n* 'fan'
	ʃaká 'file something'	>	*li:ʃakán* 'file'
	męʔeɬá 'be afraid'	>	*li:męʔeɬán* 'scarecrow'
	tʃqn 'plant something'	>	*li:tʃqnį* 'planting stick'
	lqʔas'qʔ- 'stir (sugar cane syrup)'	>	*li:lqʔas'qʔnį* 'instrument used to stir'
	tsoʔ- 'paint, write'	>	*li:tsoʔnu* 'paint, ink, dye'
	slqʔ- 'play (stringed instrument)'	>	*li:slqʔnq* '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:ʃlawá* 'fix up' > *li:ka:ʃlawán* 'decoration') while consonant-final stems take [-nį] (*tʃqn* 'plant' > *li:tʃqnį* '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)	*ʔamá:n* 'play something (game)'	>	*le:ʔamá:n* 'toy'
	ʃq:qn 'take a steambath'	>	*li:ʃq:qn* 'exfoliator, scrubber for bathing'
	s'olí 'make something whistle'	>	*li:s'olį* 'wind instrument'
	nęʔę 'fan someone'	>	*li:nęʔę* '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 *puː-* 'vagina' and is used to form nouns that express an instrument inside of which the process described by the verb takes place:

(182)	*tʃapáː* 'grind'	>	*puːtʃapáːn* 'mill'
	kutʃúː 'heal someone'	>	*puːkutʃúːn* 'medical clinc'
	laʔtʃíː 'tie something up'	>	*puːlaʔtʃíːn* 'jail'
	maːɬkúː 'set something on fire'	>	*puːmaːɬkúːn* 'brazier'
	tʃan 'plant something'	>	*puːtʃanį* 'time for planting corn (June)'
	típ- 'shoot something with bow'	>	*puːtípnį* 'bow (weapon)'
	takút- 'cross river'	>	*puːtakútnį* 'boat' (Ch.)
	takút- 'cross river'	>	*puːtakútnų* 'boat' (Pt.)
	páx- 'thresh beans'	>	*puːpáxna* 'rack for threshing beans'

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

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

(183)	*ʔamáːn* 'play something (game)'	>	*puːʔaːmáːn* 'carnival rides'
	wayán 'eat$_{\text{INTR}}$'	>	*puːwáya* 'dishes'

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

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

(184)	*tʃiː* 'tie'	>	*liːtʃiːkán* 'traditional woman's belt'
	tʃiwinán 'speak'	>	*liːtʃiwinankán* 'story, legend, tale'
	laʔʃtoʔó 'fasten together'	>	*liːlaʔʃtoʔokán* 'nail'
	tsoʔnún 'write$_{\text{INTR}}$'	>	*puːtsoʔnunkán* 'something to write in/on'
	laktsikíː 'strain something'	>	*puːlaktsikiːkán* '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., *puːtsoʔnunkán* '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. *-nV́* 'AGENTIVE NOMINALIZER' (AGT)

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

(185)	*aʔsuyú* 'lasso something'	>	*aʔsuyunú* 'one who lassoes'
	tʃukú 'cut something'	>	*tʃukunú* 'one who cuts'
	tampuːɬnún '(to)drum'	>	*tampuːɬnú* 'drummer'
	aʔsaní 'lie to someone about someone'	>	*aʔsaninį́* 'liar'
	maʔníː 'kill something'	>	*maʔniːnį́* 'murderer'

xilí '(to)thunder'	>	*xilin̰ʸ́* 'thunder'
ʔaɬáːn 'steal something'	>	*ʔaɬaːn̰á́* 'thief'
maːʃanán 'be shy, be ashamed'	>	*maːʃan̰á́* 'shy person'
lamáː 'burn'	>	*lamaːn̰á́* 'flame'
ɬkaːknán 'be hot (climate)'	>	*ɬkaːkn̰á́* '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. *tampuːɬnún* > *tampuːɬn̰ú́*, *maːʃanán* > *maːʃan̰á́*).[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 tʃuːwá mat taʃtutsá tsamáː tą́ʔo (Ch.)

tsisáx	tʃuːwá	mat	ta–ʃtu=tsá	tsamáː	tą́ʔo
early.morning	now	QTV	INCH–out=now	that	old.woman

'now early in the morning the old woman came by'

b. leːɬ tsamáː puskáːt tsamáː múʃn̰ʸ

leːn–ɬ	tsamáː	puskáːt	tsamáː	múʃn̰ʸ
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 *túkslin̰ʸ 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. tsamáː isʾą́tą animáːɬ xaː tuː skątkutún

tsamáː	**iʃ–sʾą́tą**	**animáːɬ**	xaː	tuː	skąt–kutún
that	3PO–child	animal	NEG	NREL	learn–DSD

'the animal's child doesn't want to learn anything'

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[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/ → /ḭʸ/. This analysis would work for most cases in UNT as well.

b. pus tsamá: tą̨ʔo, mat mą̨ʔala:má:ɬ *sandía* (Ch.)
pus **tsamá:** **tą̨ʔo** mat mą̨ʔa–la:–má:ɬ sandía
INTJ that old.woman QTV STM–do–PRG watermelon
'well, that old woman, she is growing watermelon'

c. tu: tsamá: ka:li:tampą́: tawanán
tu: **tsamá:** **ka:–li:tan–pą́:** 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 naką̨́n ikąnkutún iktą̨ʔtʃǫ̨ʔó
ʔe: **kit** ka–la:–ma:–yux–ú:–w na: ik–ą́n
and I OPT–RCP–CS–go.down–CS–1PL.SUBJ also 1SG.SUBJ–go

ik–ą̨n–kutún ik–tą̨ʔtʃǫ̨ʔó
1SG.SUBJ–go–DSD 1SG.SUBJ–have.fun

'and get me down, too, I'm going, I want to go have fun'

b. wiʃ xa: tu: xikwaníyą̨?
wiʃ xa: tu: xikwan–ní–yą̨
you NEG NREL be.afraid–BEN–IMPF:2SG.SUBJ
'aren't you afraid of anything?'

c. kit nu:n ti: kintama:wa:ní kilúʃu
kit nu:n ti: kin–tama:wa:–ní kin–lúʃu
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:ʔeɬtawą̨ʔae:nį́
kit ma:–ʔeɬ–tawą̨ʔa–e:–nį́
I CS–mouth–practice–CS–AGT
'I am a teacher'

b. kit ma:ʔeɬtawą̃ʔae:nį́ ʃakwanį́:
kit ma:–ʔeɬ–tawą̃ʔa–e:–nį́ **ʃak–wan–nį́:**
I CS–mouth–practice–CS–AGT PST:1SG.SUBJ–be–PF
'I was a teacher'

c. kit ma:ʔeɬtawą̃ʔae:nį́ nakwán
kit ma:–ʔeɬ–tawą̃ʔa–e:–nį́ **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 tʃiʃkų́
lú:kux tʃiʃkų́
brave man
'the man is brave'

b. lú:kux ʃwanį́: tʃiʃkų́
lú:kux **iʃ–wan–nį́:** tʃiʃkų́
brave PST–be–PF man
'the man was brave'

c. lú:kux nawán tʃiʃkų́
lú:kux **na–wán** tʃiʃkų́
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 ʃakwanį́:
kit lú:kux ʃak–wan–nį́:
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, wanɨ̰́: wiʃ ʔaɬa:wanampą́:
tá:tʃa **wan–nɨ̰́:** wiʃ ʔaɬa:n–wa–nan–pą́:
aha be–PF you steal–eat–DT–PRG:2SUBJ
'aha! so it's you whose stealing and eating'

b. *pero* xa: tsex katiwánlɨ̰
pero xa: tsex **ka–ti–wán–lɨ̰**
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: wáɬ tsamá: tʃáux, xa: waɬ
xa: wáɬ tsamá: tʃáux, **xa:** wa–ɬ
NEG eat–PFV that tortilla NEG eat–PFV
'he didn't eat the tortillas, he didn't eat them'

b. pus, xa:k manǫ́ʔɬa tu: ya: animá:ɬ wamá:ɬ tsamá: *sandía*
pus **xa:** ik–manǫ́ʔɬ–a tu: ya: animá:ɬ wa–má:ɬ 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: iʃląʔtsinkutún tsamá: paléx
xa:=tsá **ti:** iʃ–ląʔtsin–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:píną
xa: **tu:** min–tumí:n tu: tsex na–li:píną
NEG NREL 2PO–money NREL good FUT–bring:2SG.SUBJ:IMPF
'you have no money to bring'

c. ʔe: xa: ti: ti: iʃmąʔtayá:
ʔe: **xa:** **ti:** ti: iʃ–mąʔtayá:
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 *leː*:

(196) xa: leː katimaːʔeɬtawa̱ʔéːɬ (Ch.)
xaː leː ka–ti–maː–ʔeɬ–tawa̱ʔa–éː–ɬ
NEG able OPT–UNR–CS–mouth–practice–CS–PFV
'he was not able to teach him'

The particle *leː* is pronounced *laː* in Patla, reflecting its probable etymology in the verb *laː* 'do'. Synchronically, however, *leː* 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. tiː wan?
tiː wan
who be
'who is it?

b. tuː ɬawawíːla̱ waːtsá?
tuː ɬawa–wíːla̱ waːtsá
what make–sit:2SG.SUBJ here
'what are you sitting here doing?'

c. tʃiː naɬawayáːuw
tʃiː na–ɬawa–yáː–w
how FUT–make–1PL.SUBJ
'what are we going to do?'

d. xaː laktantít?
xaː lak–tan–tít
where foot–come:2SUBJ–2PL.SUBJ
'where did you come (through)?

e. xákʃni wántia̱?
xákʃni wán–tia̱
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 *xaː* and the negative morpheme. Potential ambiguity is avoided in practice by using the particle *tʃuː* in most questions about location:

(198) xa: tʃu: pína̱?
xaː **tʃuː** pína̱
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 yaːɬ naktéx?
tiː **yaː** kristiánu yaːɬ nak=téx?
who PRT person stand LOC=road
'who is standing in the road?' (lit. 'which person … ?)

b. tu: ya: maːpáːtʃa̱?
tuː **yaː** maːpáːtʃa̱
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. ʔeːtsinkatunká mintakúka̱
ʔeː–tsinka=tunká min–takúka̱
back–heavy=very 2PO–load
'your load is very heavy'

b. ʔeːtsinkatunká mintakúka̱↗
ʔeː–tsinka=tunká min–takúka̱
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. tsamáː puskáːt la̱ʔatʃuːyáːɬ tsíːsa̱ nakaːtakúʃtu̱ ʔeː xikwánli̱
tsamáː puskáːt la̱ʔatʃuːyáː–ɬ tsíːsa̱ nak=kaːtakúʃtu̱ **ʔeː** xikwán–li̱
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. ʔanán tu: ʃlą̃ʔʃtu katsí: maklá tu: mą̨ʔaɬa:nkán ʔo: tu: mą̨ʔatsanʔá
ʔanán tu: iʃ–lą̃ʔʃtu katsí: maklá tu: mą̨ʔ–ʔaɬa:n–kán
exist NREL 3PO–function know find NREL AJENO–steal–IDF

ʔo: tu: mą̨ʔatsa: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 iʃtawi:laná:ɬ tsamá: tʃa:tú: tsamá: ʔawátʃa ʔe: tsumaxát
antsá iʃ–ta–wi:la–ná:ɬ 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 *paɬ* 'if', making the equivalent of the English *either … or*:

(202) ʔo: paɬ tala:li:ma:kiɬwakáɬ ʔo: paɬ tala:li:lakaɬtukúɬ
ʔo: **paɬ** ta–la:–li:–ma:–kiɬ–waką̃ɬ **ʔo:** **paɬ** ta–la:–li:–laka–ɬtukú–ɬ
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: iʃmakan na: iʃtuxanín
na–tʃipá **na:** iʃ–makan **na:** iʃ–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. kmą̲ʔní:ɬ kit misín ti: iʃmín ka:wá lakstín
ik–mą̲ʔní:–ɬ 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”’

b. kalą̲ʔą̲́uw tsamá: tą̲́ʔo ti: ʃtą̲ʔanán
ka–lą̲ʔ–ą̲́n–w tsamá: tą̲́ʔo **ti:** iʃ–tą̲ʔanán
OPT–ALTV–go–1PL.SUBJ that old.woman HREL PST–make.tortilla
‘let’s go to that old woman who makes tortillas’

c. ʔeɬatu:tún ʃtawi:laná:ɬ ti: xa: iʃtaą̲ʔpaʃnį́:
ʔeɬa–tu:tún iʃ–ta–wi:la–ná:ɬ **ti:** xa: iʃ–ta–ą̲ʔ–paʃ–nį́:
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:yą̲ ti: ya: tsumaxát nali:pína̲ nata:tamą̲ʔaʃtǫ́ʔa
pus tsex tʃu:wá wiʃ katsí:–yą̲ **ti:** **ya:** tsumaxát
INTJ good now you know–IMPF:2SG.SUBJ HREL PRT girl

na–li:pína̲ na–ta:–ta–mą̲ʔa–ʃtǫ́ʔ–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:wą̲ tu: mat iʃmín ka:wá kɾistiánu
mat min lú:wą̲ **tu:** mat iʃ–mín ka:–wá kɾistiánu
QTV come snake NREL QTV PST–come PL.OBJ–eat person
‘they say that a snake would come and eat people’

b. wapá:ɬ tsamá:, ʃapitsunáx tsamá: kúʃį̲ tu: ʃle:má:ɬ
wa–pá:ɬ tsamá: ʃa–pitsunáx tsamá: kúʃį̲ **tu:** iʃ–le:n–má:ɬ
eat–RPT that DTV–piece that corn NREL PST–take–PRG
‘he eats another piece of that corn that it was carrying’

c. ʔe: nalą̲ʔtsína̲ páɬ xa: nakli:mín tsamá: kį́wį̲ tu: nakli:ɬawayá:uw tsamá: tʃík
ʔe: na–lą̲ʔtsín–ą̲ páɬ xa: na–ik–li:mín tsamá: kį́wį̲
and FUT–see–IMPF:2SG.SUBJ if NEG FUT–1SG.SUBJ–bring that tree

tu: na–ik–li:–ɬawa–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, *liː,* shown here in (205c) adding an instrumental object (a material) to the otherwise mono-transitive verb *ɬawá* 'make something'. The material, *kw̲iw̲i̲* 'wood', is realized as the governor of the embedded clause and is co-referential with the relative pronoun *tuː.* 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. katasaníuwtsamáː tiː nakinkaːmą̲ʔtaːyayáːn
ka–tasa–ní–w tsamáː **tiː** **na–kin–kaː–mą̲ʔtaːya–yáː–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 iʃtawiːlanáːɬ a̲ʔtín nak*pueblo* tiː ʃtaliːskuxmą̲ːnáːɬ tsamáː *sandía*
mat iʃ–ta–wiːla–náːɬ a̲ʔ–tín nak=pueblo
QTV PST–INCH–sit–ST.PL CLS–one LOC=village

tiː **iʃ–ta–liː–skux–mą̲ː–náːɬ** **tsamáː** **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, *tiː maːwíː*, literally 'the one who feeds him':

(207) ʔeː naliːpína̲ tsamáː tiː kimaːwíː
ʔeː na–liːpína̲ tsamáː **tiː** **kin–maː–wa–íː**
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, *tiː kimaːwíː* 'my wife', *tiː maːwiːyáːn* 'your wife', *tiː maːwíː* 'his wife', and so on; by the same token, a woman would refer to her husband as *tiː ikmaːwíː* 'the one that I feed'.

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

(208) a. iʃmín tuː iʃwamáːɬ
iʃ–mín **tuː** iʃ–wa–máːɬ
PST–come NREL PST–eat–PRG
'the thing that was eating it came'

b. wa: wi:latʃá tu: putsapa̱:
wa: wi:la–tʃá **tu:** putsa–pa̱:
there sit–DST NREL look.for–PRG:2SUBJ
'over there is what you are looking for'

c. xa: a̱ʔaʔeʃpa̱pa̱: tu:tsá kiɬwamá:ɬ?
xa: a̱ʔa–ʔeʃpa̱–pa̱: tu:=tsá kiɬ–wa–má:ɬ
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: uʃúm, xa:tsá katsí: tʃi: tsex natama̱ʔta:yá
ta–sta:lá: tsamá: uʃúm xa:=tsá katsí: **tʃi:** tsex na–ta–ma̱ʔta: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. tapa̱ʔsí: xa: wanikán Jopala, u:tsá iʃ*municipio*
tapa̱ʔsí: **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 iʃɬu: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–ɬu: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 *paɬ* 'if', which is also used for many types of conditional clause (see 3.2.2.3 below):

(210) a. wiʃ katsí:ya̱ paɬ tsex nata:taʃtúya̱
wiʃ katsí:–ya̱ **paɬ** tsex na–ta:–ta–ʃtú–ya̱
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:ma̱ʔta̱ʔa̱ɬa ʔe: xa: iʃka:tasuyuní paɬ iʃka:ma̱ʔta̱ʔa̱ɬa
iʃ–ka:–ma̱ʔta̱ʔa̱ɬ–a ʔe: xa: iʃ–ka:–tasuyu–ní
PST–PL.OBJ–guard–IMPF and NEG PST–PL.OBJ–be.visible–BEN

paɬ iʃ–ka:–mą̱ʔtą̱ʔą̱ɬ–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: paɬ iʃwí:ɬ tsamá: kúʃį̱
pus xu:, waxtsananú xa: ti: iʃ–katsí: **paɬ** iʃ–wí:ɬ tsamá: kúʃį̱
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, *akʃní* 'when' and *li:waną́:* (Pt.)/*li:wán* (Ch.) 'while':

(211) a. ikte:ą̱ktʃintama:pí:ɬ akʃní te:taʃtúɬ tsamá: tumí:n
ik–te:–ą̱k–tʃinta–ma:–pí:–ɬ **akʃní** te:–ta–ʃtú–ɬ
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:waną́: naxáʃą̱ nakɬawá tu: nawáyą̱ (Pt.)
li:waną́: na–xáʃ–ą̱ na–ik–ɬawá
while FUT–rest–IMPF:2SG.SUBJ FUT–1SG.SUBJ–make

tu: na–wá–yą̱
NREL FUT–eat–IMPF:2SG.SUBJ

'while you rest, I'll make your food'

c. li:wán nakpáʃa, li:wán naɬáwą̱ líwą̱ (Ch.)
li:wán na–ik–páʃ–a **li:wán** ka–ɬáwą̱ lí:wą̱
while FUT–1SG.SUBJ–bathe–IMPF while OPT–make:2SG.SUBJ:PFV food
'while I bathe, you make the food'

Of these, only *akʃní* is at all frequent in texts or elicitations, whereas *li:waną́:/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) pǫ́ʔtu tu: iʃtalą̰ʔpu:wán iʃtawá antsá xa: iʃtaki:tʃá:n
pǫ́ʔtu tu: iʃ–ta–lą̰ʔpu: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 paɬ kiʃǫ̰ʔoníyą̰ tʃi: kli:wán ikmaʃki:yá:n, mat wan
tsex paɬ kin–ʃǫ̰ʔo–ní–yą̰ **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 mą̰ʔní:ɬ lú:wą̰
mat paʃki:–kán **tʃu:nú:** mat mą̰ʔní:–ɬ lú:wą̰
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: katią́ɬ tʃi: wa: wánką naɬu:waskuxkán tʃu:wá
xa: ka–ti–ą́n–ɬ **tʃi:** wa: wán–ką na–ɬu: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:kanį́: namintsá tsamá: lú:wą̰ tu: nakiwá
u:tsá kin–**li:**–wi:li:–kan–nį́: na–min=tsá tsamá: lú:wą̰
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: ɬawamá:ɬ
na–**li:**–tʃi:–yá:–w **porque** xa: tsex tu: ɬawa–má:ɬ
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) kalą̲ʔlǫ́ʔǫ̲ tantú:n ki:nú tsex napu:ɬú:ya̲
ka–la̲ʔlǫ́ʔǫ̲ tantú:n **ki:nú** tsex na–pu:ɬú:–ya̲
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.)/*li: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 nakleˌʔtʃeˌʃlá: (Ch.)
ka–ma:–ʔe:nu:–yá:wa: **lí:wa** na–ik–li:–aˌʔɬtʃeˌʃlá:
OPT–CS–aside–stand CNJ FUT–1SG.SUBJ–INST–trip
'put it away (standing up) because I might trip over it'

c. kama:laˌʔatseˌʔtiˌ mis'áˌtaˌ, mimá:ɬ tsamá: puská:t, lí:kwa xá:ʃku nalakaskuwá
ka–ma:–laˌʔa–tseˌʔ–tiˌ min–s'áˌtaˌ min–má:ɬ 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 *paɬ* 'if' and *paɬá:* 'if not' (likely a contraction of *paɬ* plus the negative particle *xa:*), as in (220):

(220) a. paɬ tʃu:ntsá nama:tseyí:yaˌ kinanimá:ɬ ʔe: nali:pínaˌ ti: kima:wí:
paɬ tʃu:ntsá na–ma:–tsex–yí:–yaˌ kin–animá:ɬ ʔe:
if INTJ FUT–CS–good–CS–IMPF:2SG.SUBJ 1PO–animal and

na–li:–pínaˌ 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. paɬá: tapa:nú:yaˌ naktantʃintayá:n
paɬá: tapa:nú:–yaˌ 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 *paɬá:,* there are two other complementizers that express negative conditions:

(221) a. nala:ʔeɬti:yá:uw su: kit naklakalasá:n
na–la:–ʔeɬti:–yá:–w **su:** kit na–ik–laka–lasá:–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. ʔoː pentú natali:ma:makawani:yáːn skuxnín
ʔoː **pentú** na–ta–liː–maː–makawan–niː–yáː–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 *paɬáː* (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 xaː kaːkiːmanǫ́ʔlį̨ tuː tsex iʃtaɬawaɬą̨ːwán
ásta **xaː** kaː–kiː–manǫ́ʔɬ–lį̨ tuː tsex
until where PL.OBJ–RT–find.out–PFV NREL good

iʃ–ta–ɬawa–ɬą̨ːwáːn
PST–3PL.SUBJ–make–wander

'until he knew what they were going around doing'

b. ásta akʃní ʃtaʃtú tʃitʃiną́ ásta akʃní ʃtą̨knúː namą̨ʔʃtę̨ʔkáną̨
ásta **akʃní** iʃ–ta–ʃtú tʃitʃi–ną́ **ásta** **akʃní** iʃ–tą̨knúː
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, *xaː* 'where' (used metaphorically in (222a)) and *akʃní* '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 *tiː* 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 ʃka:wamá:ɬ lakstín
tsamá: misín mat iʃ–ka:–wa–má:ɬ lakstín
that nagual QTV PST–PL.OBJ–eat–PRG children
‘the *nagual*, they say it was eating children’

(2) mat ʔeɬatʃaʃantsá waɬ
mat ʔeɬa–tʃaʃan=tsá wa–ɬ
QTV CLS–six=now eat–PFV
‘they say it ate six’

(3) ʔe: pus wamá: wan tsamá: tʃiʃkṵ
ʔe: pus wamá: wan tsamá: tʃiʃkṵ
and INTJ this say that man
‘and then this man says’

(4) ʔe: kimą̱ʔwaʔoɬtsá tsamá: kis’ą́tą̱
ʔe: kin–mą̱ʔ–wa–ʔo–ɬ=tsá tsamá: kin–s’ą́tą̱
and 1OBJ–AJENO–eat–all–PFV=now that 1PO–child
‘“‘And it ate all of my children.”’

(5) tsex tʃu:wá naką̱ntama:ní naʃtéx, xa: lakmín, mat wan
tsex tʃu:wá na–ik–ą̱n–ta–ma:ɬ–ní na–iʃ–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 ą̱ɬ tamá:
pus mat ą̱n–ɬ tamá:
INTJ QTV go–PFV lie.down
‘so he went to lie down’

(7) ali:stá:n mat taʃtútʃi tʃu:wá tsamá: misín
ali:stá:n mat ta–ʃtú–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:ɬ tsamá: tʃiʃkṵ
mat wan mat ma:ɬ tsamá: tʃiʃkṵ
QTV say QTV lie that man
‘well, he says … they say the man’s lying down’

(9) pus mat lakamusú:, lakamusú: paɬ, paɬ ni:nį́: ʔo: tʃi: tʃu:
pus mat laka–musú: laka–musú: paɬ paɬ ni:–nį́: 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:, lę̰ʔ mat ta:lá: misín lakamusú:
mat wamá: lę̰ʔ 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:wą̰ mat kąks ma:ní4, mat xa:tsá xaʃa:nán
li:wą̰ mat kąks ma:4–ní–4 mat xa:=tsá xaʃa: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 tantę̰ʔá kuká4
ali:stá:n mat tantę̰ʔá kuká–4
then QTV upside.down carry–PFV
'then it carried him off hanging head down'

(13) ʃatséx waxnanú nakte:wá
ʃa–tséx waxnanú na–ik–te:–wá
DTV–good there FUT–PATH–eat
'"I'd better go eat him over there"'

(14) naklé:n ą̰ktsunáx, wa:tsá xa:k tiwá4
na–ik–lé:n ą̰k–tsunáx wa:tsá xa: ik–ti–wá–4
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:wá4 namín, mat wan misín
tʃu:nú: kati:wá4 na–min mat wan misín
because anyone FUT–come QTV say nagual
'"Because anyone could come," says the *nagual*'

(16) le:má:4
le:n–má:4
take–PRG
'it's carrying him'

(17) mat ali:sta:n tʃu:wá tsukú4 tanʃa:má:
mat ali:stá:n tʃu:wá tsukú–4 tan–ʃa:má:
QTV then now begin–PFV buttocks–touch
'so then he (the man) began to feel its buttocks'

(18) tsamá: ... tʃi: kukaníyą̰
tsamá: tʃi: kuka–ní–yą̰
that how carry–BEN–IMPF:2SG.SUBJ
'umm … "What are you up to?"'

(19) tanʃa:ma:te:4á
tan–ʃa:ma:–te:4á
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 him'[3]

(21) ʔe: mat tanʃa:ma:te:ɬá
ʔe: mat tan–ʃa:ma:–te:ɬá
and QTV buttocks–touch–AMB
'and he goes along feeling its buttocks'

(22) mat a̲ʔʃta:ma:ʃtúka̲ tsamá: kɨ́wi̲ mat iʃya:wa:nɨ́: tʃu:wá
mat a̲ʔʃta:–ma:–ʃtú–ka̲ tsamá: kɨ́wi̲ mat iʃ–ya:wa:–nɨ́: 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:ɬ tsamá: kɨ́wi̲ tsamá: misín
tʃu:wá tan–tamaknú:–ɬ tsamá: kɨ́wi̲ tsamá: misín
now buttocks–put.in–PFV that tree that nagual
'now he puts the stick up the *nagual's* anus'

(24) ʔe: mat ma̲ʔawán
ʔe: mat ma̲ʔa–wán
and QTV STM–say
'and he makes it scream'

(25) ali:stá:n tʃu:wá tankukama̲ʔánka̲ tsamá: tʃiʃkṵ́
ali:stá:n tʃu:wá tan–kuka–ma̲ʔán–ka̲ tsamá: tʃiʃkṵ́
then now buttocks–carry–throw.away–IDF that man
'then it threw the man off head over heels'

(26) mat a:tʃula̲tsá teɬteɬ litati:tá tsamá: misín
mat a:tʃula̲=tsá teɬteɬ 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:ʔóɬ kɨ́wi̲
tan–maknu:–ʔó–ɬ kɨ́wi̲
buttocks–put.in–all–PFV tree
'it put the stick all the way into its anus'

(28) li:ma̲ʔní:ɬ
li:–ma̲ʔní:–ɬ
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) aliːstáːn mat miɬtsá kaːwaní tsamáː
aliːstáːn mat min–ɬ=tsá kaː–wan–ní tsamáː
then QTV come–PFV=now PL.OBJ–say–BEN that
‘then he came and said to them’

(30) kmą̲ʔníːɬ kit misín tiː iʃmín kaːwá lakstín
ik–mą̲ʔníː–ɬ kit misín tiː iʃ–min kaː–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) ikmą̲ʔníːɬ, mat wan
ik–mą̲ʔníː–ɬ mat wan
1SG.SUBJ–kill–PFV QTV say
‘“I killed it,” he said’

(32) mat, watʃí wamáː wakáʃ ʃleːʔą̲ɬa tsamáː misín
mat watʃí wamáː wakáʃ iʃ–liː–ʔą̲ɬą̲ tsamáː misín
QTV like this cow 3PO–GNC–big that nagual
‘“That *nagual* was as big as a cow.”’

(33) bueno, tuː liːmą́ʔniː?
bueno tuː liː–mą́ʔniː
well NREL INST–kill:2SG.SUBJ:PFV
‘“Well, what did you kill it with?”’

(34) xaː tuː, tsax kį̲wį̲ ktanmaːnúːɬ
xaː tuː tsax kį̲wį̲ ik–tan–maː–núː–ɬ
NEG NREL only tree 1SG.SUBJ–buttocks–CS–go.in–PFV
‘“Nothing, I just put a stick up its anus.”’

(35) ʔeː lą̲ʔníːɬ, mat wan
ʔeː lą̲ʔníː–ɬ mat wan
and die.for.reason–PFV QTV say
‘“And that’s why it died,” he says’

(36) xaː tiː isʼawí
xaː tiː iʃ–sʼawí
NEG HREL PST–defeat
‘“No one defeated it.”’

(37) kliːsʼawíɬ tʃuːn puːlą̲ʔpuʃwiːlíːɬ tsamáː kį̲wį̲, mat wan
ik–liː–sʼawí–ɬ tʃuːn puːlą̲ʔ–puʃ–wiːlíː–ɬ tsamáː kį̲wį̲ 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) taą̲ɬ talą̲ʔtsín mat ʃaníːn tsamáː misín
ta–ą̲n–ɬ ta–lą̲ʔtsín mat ʃa–níː–n tsamáː 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) tsukúką̣ ʃu:kán tsamá: misín
tsukú–ką̣ ʃu:–kán tsamá: misín
begin–IDF skin–IDF that nagual
'they$_{IDF}$ began to skin the *nagual*'

(41) mat tawáɬ tsamá: misín
mat ta–wá–ɬ tsamá: misín
QTV 3PL.SUBJ–eat–PFV that nagual
'they ate the *nagual*'

(43) ali:stá:n tʃu:wá namimpa:lá: iʃkumpaɲéɾu?
ali:stá:n tʃu:wá na–min–pa:lá: iʃ–kumpaɲéɾu
then now FUT–come–RPT 3PO–companion
'then, "Is another one going to come?"'

(44) xa:tsá katimíɬ paɬ namimpa:lá:, tʃu:ntsá naɬawapa:la:yá:uw, mat tala:waní
xa:=tsá ka–ti–mín–ɬ paɬ na–min–pa:lá: tʃu:ntsá
NEG=now OPT–UNR–come–PFV if FUT–come–RPT thus

na–ɬawa–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 tawaʔóɬ tsamá: misín
ali:stá:n ta–wa–ʔo–ɬ tsamá: misín
then 3PL.SUBJ–eat–all–PFV that nagual
'so they ate up the *nagual*'

(46) ali:stá:n tʃu:wá tawaɬtsá wamá:, tʃi: tu:má: tu:tumá:
ali:stá:n tʃu:wá ta–wa–ɬ=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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