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Contents

0. Introduction.

0.1. Current status of Tol. Tol (also known as Jicaque) is spoken by 250-300 speakers in the Departments of Francisco Morazán and Yoro in north central Honduras. The great majority of these, about 250 speakers, live on an official reservation at Montaña de la Flor in the northern part of the Department of Francisco Morazán (Dennis 1990: 7); there were also a few vestigial speakers in the Yoro Valley as recently as 1974, but the language is no longer a viable medium of daily communication in that area (see the accompanying map). There is a close, dialectal relationship between these two groups of speakers. Among themselves, the speakers of Tol are known as Tolpán, but they are referred to as Jicaques or Turrupanes by most of the Spanish-speakers of the region.

0.2. Genetic classification. The Tol language has long been considered a member of the far-flung Hokan phylum of languages and seems to be most closely related to Subtiaba, an extinct language of Nicaragua, and to Tequistlateco (or Chontal) of the state of Oaxaca, Mexico (Greenberg and Swadesh 1953; Oltrogge 1975). A closely related language, Western Jicaque, was formerly spoken around El Palmar near Chamelecón in west central Honduras but apparently has been extinct for a number of decades. Campbell and Oltrogge (1980) discuss the historical relationship between these two languages and reconstruct the Proto-Tol sound-system and parts of the Proto-Tol lexicon.

0.3. Early distribution of Tol speakers. At the time of the first Spanish contact, speakers of Tol were distributed much more widely than at present, occupying much of the territory along the Caribbean coast between the Ulúa River to the west and the area around present-day

Trujillo to the east, and as far inland as the Sulaco River (see the accompanying map) (Newson 1986: 35-8). By the early nineteenth century most if not all Tol-speakers had moved away from the coastal areas to avoid the Spanish. The group now at Montaña de la Flor is made up of descendants of a small group of refugees who fled the Yoro Valley in 1865 to avoid being conscripted into forced labor by the local governor (Campbell and Oltrogge 1980: 206; for more information on Tol history and culture, see also von Hagen 1943, Chapman 1978).

0.4. History of Tol studies. The earliest known information about the Tol language was gathered in 1788 and published in Fernández (1892: 93-103). Somewhat later, additional data was collected by Benigno Sosa and published in Membreño (1897: 221-2) along with data from Western Jicaque gathered by Antonio S. Madariaga in 1890. Other short vocabulary-lists of Tol were gathered in the 19th century by F. Guardia and J. F. Ferraz, Carlos Torres, Ephraim Squier, and Karl Sapper; all of these lists were published in Lehmann (1920: 631-35, 654-66). Early in this century, work was done on Tol language and culture by Edward Conzemius, who published a short grammatical discussion and word-list in 1922 (Campbell and Oltrogge 1980: 205-6). In more recent years Tol has been extensively studied by Summer Institute of Linguistics researchers Glen and Emily Ager, David and Judith Oltrogge, Ronald and Margaret Dennis, and Ilah Fleming.

0.5. Grammatical overview. Tol is quite complex in terms of both phonology and inflectional morphology. Within the corpus of available data on the language, however, there seems to be very little in the way of productive derivational morphology. There is a three-way contrast among

stop consonants: plain, aspirated, and glottalized, which is partially neutralized in syllable-final position. There is also a pervasive system of vowel harmony governed by vowel height. Morphological processes include vocalic ablaut, prefixation, infixation, and suffixation, as well as shift of stress, and these are associated with an extensive set of morphophonemic variations, especially within the verbs. Tol tense and aspect systems seem to be quite rudimentary: only present, past, and future have been definitively recognized by most researchers. Basic sentence word-order is Subject-Object-Verb, but when a pronominal subject is involved the usual order is Object-Verb-Subject. Many nouns have variant forms as subject and as object. There is a separate category of adjectives, which follow their associated nouns. There is also a large set of postnominal particles which specify case-relationships and express locational notions.

0.6. The present sketch. Because my own work directly with Tol has been limited to a few short sessions gathering lexical data from vestigial speakers in the Yoro Valley in 1974, in order to prepare the following grammatical sketch I have had to rely primarily on information and analyses developed by other researchers, principally what is contained in Fleming and Dennis (1977), Dennis and Dennis (1983), and Dennis (1990). In some cases my analyses differ somewhat from the ones presented in these studies, and I have tried to indicate these discrepancies in what follows. The reader should bear in mind that in many ways this sketch is both preliminary and tentative; a number of problems have yet to be resolved definitively, and I am sure that there is much additional information about the language that has not yet been made available by its principal researchers, information that should both prove the analyses

given here and aid in resolving the remaining mysteries. I wish to thank Ron Dennis for having generously provided me with copies of much of his published work on Tol and for answering my questions whenever he has been able to do so.

In this sketch, the following conventions have been employed:

(1) basic or underlying forms are marked with a preceding asterisk (*); e.g. **sókʰte* 'untie'; **la-hi-t'ú* 'I sprinkle, spatter';

(2) surface phonetic sequences are indicated with square brackets ([ ]); e.g. [ŋkukúsʰ] 'my daughter';

(3) obligatory phonological changes are denoted with a solid arrow (→); e.g. **hi-manúnu-a* → *myáʔna* 'she gives birth';

(4) variable or optional phonological changes are denoted with a broken arrow (⇢); e.g. *ʔístaway* ⇢ *ʔístoway* 'for a moment'.

The following abbreviations have also been employed: ACC accusative; ADJ adjective; AUX auxiliary; BEN benefactive; COP copula; FUT future; IMPERF imperfect; INTENS intensive; ITER iterative; NEG negative; OBJ object; P plural; PERF perfective; PL plural; PRES present; PRO pronominal; PURP purposive; QUES question; S singular; SUBJ subject; 1 1st person; 2 2nd person; 3 3rd person.

1. Phonology.

The following discussion of Tol phonology is based almost entirely on Fleming and Dennis (1977), to which the reader is referred for additional information.

1.1. Phonemes.

There are 22 consonant and 6 vowel phonemes in Tol, which are specified in the articulatory charts below. There is also one suprasegmental phoneme of stress.

1.1.1. Consonant phonemes.

1.1.1.1. Inventory. The consonant phonemes of Tol are presented in the following chart:

	Bilabial	*Alveolar*	*Alveopalatal*	*Velar*	*Laryngeal*
Stops, plain	p	t	c	k	ʔ
aspirated	pʰ	tʰ	cʰ	kʰ	
glottalized	p'	t'	c'	k'	
Fricatives	β	s			h
Nasals	m	n		ŋ	
Liquid		l			
Semivowels	w	~~y~~	y		

(*c*, *cʰ*, and *c'* are alveolar or alveopalatal affricates but are grouped with the stops in this table on the basis of structural considerations.)

There is a close morphophonemic (if not allophonic) relationship between *β* and *w*, and they are virtually in complementary distribution, with *β* occurring primarily adjacent to front vowels and *w* before back vowels. Campbell (Campbell and Oltrogge 1980: 211) claims that there is not enough basis for setting up a separate phoneme *β* distinct from *w*, basing his claim on considerations of phonological aberrancy and pattern-incongruity — *β* is the only voiced fricative — as well as on the pervasive alternations between the two segments and the near complementarity mentioned above. Campbell attempts to dismiss certain apparently minimal pairs on the basis of the fact that one member of each pair is an inalienably possessed form whose possessive infix determines which of the two segments occurs. Nevertheless, there do exist a few locally minimal pairs which cannot be dismissed on this basis and which seem to disallow the assigning of the two phones to the same phoneme; e.g. *βiŋ* 'frog' : *win*

'you walk'; *βitβítʰ* 'drizzlingly' : *wic'íl* 'bee (sp.)'; *βalán* 'trap': *wa* 'house'; *βoyúm* 'her husband': *wolás* 'fruit'.

1.1.1.2. Allophonic variation.

Plain stops are voiced following nasals; e.g. *t'ánka* → [t'ánga] 'it breaks'; *ncíβe* → [n̪j̆íβe] 'my brain'.

pʰ is realized as a voiceless bilabial fricative, [ɸ], before a syllable-initial *w* or *β* ; e.g. *hipʰ βya* → [hiɸ βya] 'your house'. *pʰ* may have nasalized aspiration before a syllabic nasal; e.g. *napʰ m-βis* --→ [napᴹ m̥-βis] 'my tooth'.

A glottalized stop has three possible phonetic realizations when initial in a stressed syllable. It may be realized as (1) a glottalized stop followed by a laryngealized vowel; as (2) a plain stop followed by a lengthened, laryngealized vowel; or as (3) a plain stop followed by a short, unstressed laryngealized vowel plus a glottal stop followed by a stressed, laryngealized vowel. For example, *nc'il* 'my hair' may be realized as [n̪c'ɬ], [n̪cɬ:l], or [n̪cɬʔi̯íl].

When utterance-final or before a non-stop consonant, a glottalized stop may have any of three types of release: a voiceless release, a delayed release, or a voiced vowel release. The vowel release is typically a short front vowel of the same height as the vowel of the last syllable. For example, *ncoc'* my breast' may be realized as [n̪coc'], [n̪coc':], or [n̪coc'ᵉ].

The affricates, *c*, *cʰ*, and *c'*, are freely variant as both alveolars and alveopalatals, the latter being the more common type when adjacent to a front vowel or semivowel; e.g. *cacʰ* --→ [čačʰ] or [cacʰ] 'weasel'; *cʰin* → [čʰin] 'beans'.

s is followed by aspiration when utterance-final; e.g. [ŋkukúsʰ] 'my daughter'. It is optionally realized as [š] when immediately adjacent to a front vowel or semivowel (*e*, *i*, or *y*). [s] and [z] are freely variant allophones of *s* following nasals.

l is realized as [dl] when syllable-final, and optionally as [tɬ] when utterance-final. Intervocalically, the allophones [l] and [r] are in free variation.

y may optionally be realized as non-syllabic [e̯] when it is the second member of a cluster before *a* in an open syllable; e.g. *lyáha* --→ [le̯áha] 's/he eats'.

1.1.2. Vowel phonemes.

1.1.2.1. Inventory. The vowel phonemes of Tol are presented in the following chart:

	Front	*Back*	
		Unrounded	*Rounded*
High	i	ɨ	u
Mid	e		o
Low		a	

There is also the suprasegmental phoneme of stress: ⟨ ˈ ⟩.

1.1.2.2. Allophonic variation.

Vowels are laryngealized in the immediate vicinity of a glottalized stop, whether in the same or an adjacent syllable. Vowels in the same syllable are somewhat more strongly laryngealized.

u has the optional allophone [ʊ] in syllables ending with an alveolar fricative or affricate (*s, cʰ, c'*) or in unstressed open syllables.

e is realized as [ɛ] in closed syllables not ending in *n* or *y*, and sometimes in open syllables, where it is freely variant with [e]. It is realized as [e] elsewhere.

a is optionally realized as [ʌ] in unstressed syllables and as [æ] after a

Cy cluster, especially when *C* is an alveolar; e.g. *lyáha* --> [lɐ̯ǽhʌ] 's/he eats'. Variably, *a* becomes [o] before *w*; e.g. *ʔístaway* --> [ʔístoway] 'for a moment'.

1.1.3. Practical orthography. The Spanish-based practical orthography for Tol which has been developed by Summer Institute of Linguistics researchers and is employed in Dennis and Dennis (1983) is as follows:

Phoneme	*Orthographic equivalent*	*Phoneme*	*Orthographic equivalent*
p	p	m	m
pʰ	pj	n	n
p'	p'	ŋ	n
t	t	s	s
tʰ	tj	h	j
t'	t'	β	v
c	ts	y	y
cʰ	tsj	ɨ	ü
c'	ts'	w	w
k	qu before i, e	i	i
	c elsewhere	e	e
kʰ	qju before i, e	ɨ	ü
	cj elsewhere	u	u
k'	q'u before i, e	o	o
	c' elsewhere	a	a
ʔ	'		

Additionally, stress is marked with an acute accent ⟨ ́ ⟩ over the vowel of the stressed syllable, but only when the stress is non-canonical, i.e. when it falls on the antepenult, on the penultimate syllable in a consonant-final word, or on a word-final vowel. (Cf. §1.2.4.)

1.2. Sequence-structure conditions.

1.2.1. Syllable-structure. Tol syllables are typically of the form *C(S)V(C)* (where *S* is a semivowel). Any consonant except *ŋ* may appear in syllable-initial position. There are no vowel-initial syllables. *h* is infrequent syllable-finally.

A second phonetic syllable-type consists of a single syllabic nasal, occurring only in word-initial position, where it is invariably the phonetic reflex of a phonemic sequence of the type *NV-* (either the 1st-person possessive prefix *na-* or the future prefix *mV-*). Such syllabic nasals do not occur before laryngeals (*h, ʔ*).

1.2.2. Consonant-clusters. In underlying forms, initial consonant-clusters are limited to those consisting of a true consonant followed by a semivowel. In surface forms, however, there are some other possibilities. One of these occurs with past-tense verb-forms involving verb-stems beginning with *l*, for example, *tʰe-lehéŋ* 'they were standing'. In rapid speech this is optionally pronounced as [tʰlehéŋ], thus producing a cluster of the type *Cl*. More complex clusters of this type are also possible, e.g. *tʰe-lyawúŋ* --> [tʰlyawúŋ] 'they walked'.

Word-medial consonant-clusters of two (and potentially three) members may occur; for example, *syokʰtékʰ* 'we untie (it)', *li-silsíl* 'you shake (it)', *ʔumʔúm* 'soft'. Geminate medial clusters are not permitted, however, and in those cases where such clusters would be produced by normal morphophonemic vowel-loss in verbs, the first of two like consonants is realized as *ʔ*; e.g. **hi-manúnu-a* → *myáʔna* 'she gives birth'; **hi-hɨtátɨ-k* → *hyɨʔtákʰ* 'we make baskets' (cf. §2.1.1.1.1.1).

There are no word-final consonant-clusters.

1.2.3. Vowel-harmony. Vowel-harmony is a pervasive aspect of Tol phonology which is evident in the underlying forms of monomorphemic lexical stems and in connection with certain morphological processes associated with the conjugation of verbs, the inflection of pronouns, and the formation of possessed nouns. In essence, except for compounds, high vowels and mid vowels do not occur in the same word. Within lexical stems the vowel *a* is neutral with regard to vowel-harmony and may occur with either high vowels or mid vowels; e.g. **sína* 'sow, plant'; **páke* 'write'. However, *a* patterns as a non-high vowel in vowel harmony between affixes and stems; e.g. *l-e-t'a* 'I choose'; *l-o-t'a* 'you-all choose'. Certain inflectional morphemes have both high-vowel and mid-vowel allomorphs in order to insure at least local harmony in the larger constructions of which they are a part. In verbal constructions, later phonological or morphophonemic processes may produce surface-words which violate this principle of vowel-harmony.

A special case of vowel-harmony exists within lexical stems containing sequences of the type *VhV* or *V?V*, in that both vowels are invariably identical.

1.2.4. Canonical stress. As noted earlier, stress is phonemic in Tol. Nevertheless, normally words ending in a consonant are stressed on the final syllable, and words ending in a vowel are stressed on the penultimate syllable. There are numerous exceptions to this, however, and, accordingly, stress is marked on all words of more than one syllable in what follows.

1.2.5. Other sequence-structure conditions. Plain and aspirated stops contrast only in syllable-initial position. Syllable-finally the distinction is neutralized, with only plain or unreleased stops occurring before stops, and only aspirated stops occurring elsewhere. The former condition holds even

across word-boundaries; e.g. *nop^{h} p^{h}e* → [nop˺p^{h}é] 'corn white'.

? does not occur word-finally, but does occur syllable-finally elsewhere.

β does not occur before high back vowels or semivowels (*ɨ, u, ɣ, w*), or after back vowels (*a, o, ɨ, u*).

h is rare in syllable-final position (cf. §1.3, phonological rule 2(d)).

w does not occur syllable-initially before *y*, nor syllable-finally after a front vowel.

1.3. Phonological rules.

1.3.1. Unrestricted rules. The following phonological rules (internal sandhi) operate word-internally between morphemes in Tol.

1. *β* becomes *w* following a rounded vowel (*u, o*) or before the central semivowel *ɣ*; e.g. **ho-βelé* → **ho-welé* → *welé* 'you-all speak'.

2. *h* is often lost in various environments, including:

(a) word-initially as a concomitant of the infixal spreading of a following vowel beyond a stem-initial consonant; e.g. **hi-púlu* → **pyúl* 'I fetch water' (cf. rule 4 below).

(b) between vowels in an unstressed syllable, with concomitant loss of the first of the associated vowels; e.g. **hi-láha* → **l-yáha* → *l-y-á* 'I eat'; **la-hi-t'u* → *li-t'u* 'I spatter, sprinkle (it)'. In some instances *h* is optionally lost between vocalic segments in a stressed syllable; e.g. **t^{h}i-hók^{h}o* → *t^{h}e-hyó?o* --→ *t^{h}yó?o* 'he cuts (it)'.

(c) following a consonant; e.g. **k^{h}is-hi-βóho* → **k^{h}is-i-βóho* → *k^{h}es-é-βóho* 'we vomit'.

3. *w* becomes *β* before *y*; e.g. *wa* 'house' : **hi-wa* → **wya* → *βya* 'your house'.

4. There is a tendency for high vowels to produce residual semi-

vowels after a following consonant; *i* participates in this process only before back vowels, and *u* only before *a* ; e.g. **tʰi-núku-kʰ → tʰi-nyúku-kʰ* 'we see'; **nu-káp^h → *nu-kwáp^h → nu-kóp^h* (cf. rule 5 below) 'for you-all'. In most cases the underlying morpheme containing the high vowel is lost, leaving the semivowel as an infixal reflex and allomorph of the morpheme; e.g. **hi-cʸɨmɨ → *hi-cyʸɨmɨ → cyʸɨm* 'I suck (it)' (cf. rule 2(a) above); **tʰi-sɨ́pɨ → *tʰi-syɨ́p → syɨ́p* 'I hit (it)' (cf. §2.1.1.1.1.2.). This process can even take place stem-internally under certain conditions; e.g. **has-hi-kipáp-a → s-i-kipyáp-a* 'he dresses himself'; **la-hi-cʰinán-a → l-i-cʰinyán-a* 'he spreads (it) out'.

5. The sequence *wa* becomes *o*; e.g. **hu-cʰaká → *cʰwaká → cʰoká* 'you-all prick'.

1.3.2. Morphemically restricted rules. A number of phonological changes take place only in association with certain morphemes. Some of these are the following:

1. In 3rd-person-singular verb-forms, an unstressed suffix-vowel assimilates to a previous vowel if only *h* or *ʔ* intervenes; e.g. **hi-nɨ́h-a → n-y-ɨ́h-ɨ* 's/he throws (it)'.

2. In certain verb-stems, *Cʰ* becomes *ʔ* when intervocalic; e.g. **hi-hokʰó-kʰ → h-y-oʔó-kʰ* 'we cut (it)'.

3. In certain verb-stems, a consonant becomes *ʔ* before a consonant; e.g. **hi-mánun-a → *m-y-ánn-a → m-y-áʔn-a* 'she gives birth'.

4. A non-low prefix-vowel assimilates in height to the first stem-vowel (in accordance with principles of vowel harmony).

These and other changes are further discussed and exemplified as part of the discussion of related morphological processes in what follows.

2. Morphology.

2.0. Introduction.

2.0.1. Morphological processes. There is a broad range of morphological processes employed in Tol, including prefixation, suffixation, infixation, vowel apocope, vocalic ablaut, and shift of stress.

2.0.2. Word-classes. Tol words fall into five principal categories: verbs, nouns, adjectives, adverbs, and postpositions. Each of these is discussed in a separate section below. There are also assorted particles with various functions, a number of which are discussed in §3 below.

2.0.3. Grammatically conditioned alternation.

2.0.3.1. Vocalic ablaut. In Tol there is a pervasive set of ablaut-phenomena associated with certain verbal prefixes, namely the non-future morpheme {hi-}: *hi-/hu-/ha-* and, in a slightly modified form, the past-tense morpheme {tʰi-}: *tʰi-/tʰV-*. In association with singular verb-forms and 1st-person-plural forms, the allomorph of each of these morphemes exhibits the vowel *i* (before a high vowel in the stem) or *e* (before a non-high vowel); however, with 2nd- and 3rd-person-plural forms, the allomorphs of {hi-} contain the vowels *u* or *o*, and *a*, respectively; with these same forms the vowel of {tʰi-} assimilates to the first vowel of the stem. For most verb-stems, the ablaut-alternations in the morpheme {hi-} are observable only in the infixes which remain as reflexes of the earlier or underlying prefix. (See §2.1.1.1.1.1 for a fuller discussion of these changes and for examples.)

2.0.3.2. Other grammatically conditioned alternation. An object-marking morpheme that appears as a suffix on most nouns in certain circumstances has three allomorphic realizations — *-kʰ, -s,* and *-m/-n* — depending on the noun-stem involved. (These phenomena are discussed further in §2.2.1.2.)

2.1. Verb-morphology.

2.1.1. Verb inflection. In addition to the lexical stem, verb-forms in Tol are marked only for subject and tense. Nevertheless, verb-morphology in Tol is rather complex, involving prefixes, suffixes, infixes, ablaut, and vowel-harmony in various situations. Verbal subjects are marked for person: 1st, 2nd, and 3rd; and for number: singular and plural. Tol verb-stems can be divided into two major conjugational classes, which, following Dennis (1990), will be referred to here as Class 1 and Class 2. While Dennis claims that the basis for this categorization is arbitrary, there are nevertheless a preponderant number of transitive stems among the Class 1 verbs and a similar preponderance of intransitive stems among those of Class 2, suggesting that, at least historically, there was a grammatical basis for the differing conjugational treatment. There are also numerous irregular verb-stems, which will be discussed in §2.1.1.3 below.

2.1.1.1. Morphology of Class 1 verbs. The extremely complex behavior of Class 1 verbs is probably best understood through a somewhat abstract approach by which the great diversity of conjugational types can be systematically explained. Such an explanation may also bear some relation to a supposed underlying competence on the part of present-day speakers of Tol. Accordingly, I here set up a hypothetical underlying canonical verb paradigm and then propose a set of morphophonemic and phonological rules which derive the observed synchronic forms primarily on the basis of phonological factors within the verbal constructions.

2.1.1.1.1. Non-future tenses. Non-future forms of Class 1 verbs are marked for person and number with the following set of suffixes and stress-changes:

1st-person singular: No change.

2nd-person singular: Add *-n*.

3rd-person singular: Change final stem-vowel to *-a* if unstressed (otherwise no change); then shift stress to first stem-syllable.

1st-person plural: Shift stress to final stem-syllable; add *-k*^{h} (or *-m*).

2nd-person plural: Shift stress to final stem-syllable.

3rd-person plural: Add *-p*^{h}.

(See below for examples. Note that in the 1st-person-plural forms of both verb-classes the person-suffix may optionally be realized as *-m* instead of *-k*^{h}, but *-k*^{h} is the more common of the two.)

2.1.1.1.1. Present tense. Present-tense forms of Class 1 verbs are formed by prefixing the morpheme {hi-} to the personal non-future stem. This prefix has three grammatically conditioned allomorphs: *hu-* with 2nd-person-plural forms; *ha-* with 3rd-person-plural forms; and *hi-* elsewhere. Thus the underlying present-tense paradigm of the regular verb **núku* 'see' is as follows:

	Singular	*Plural*
1st	*hi-núku	*hi-nukú-k^{h}
2nd	*hi-núku-n	*hu-nukú
3rd	*hi-núk-a	*ha-núku-p^{h}

The following ordered set of phonological rules (some of them grammatically conditioned) is now applied to the members of this paradigm in order to derive the observed forms:

1(a). Before a back stem-vowel, *hi-* is realized as the infix *-y-* after the first consonant of the stem.

(b). Elsewhere before two or more syllables *hi-* is deleted.

2(a). Before the stem-vowel *a*, *hu-* is realized as the infix *-w-* after the

first consonant of the stem; the sequence *wa* then monophthongizes to *o*.

(b). Elsewhere *hu-* is deleted.

3(a). A word-final consonant is deleted following an unstressed vowel.

(b). Except in the 3rd-person singular, a word-final unstressed vowel is deleted.

4. Final unstressed *a* becomes *e* following a front vowel in the previous syllable.

5. Following a laryngeal (*ʔ* or *h*), a final unstressed vowel assimilates completely to a stressed vowel in the previous syllable.

6. An unstressed vowel is lost in a stem-medial syllable, and the first member of the resulting consonant-cluster is changed to *ʔ*.

7. A final consonant is deleted following a consonant (in accordance with the sequence-structure condition prohibiting final clusters).

8. A non-low prefix-vowel assimilates in height to the first stem-vowel.

9. A final plain stop is aspirated.

10. A final *h* is deleted.

The derived present-tense paradigm of **núku* 'see' is then as follows:

	Singular	*Plural*
1st	n-y-úkʰ	n-y-ukú-kʰ
2nd	n-y-úkʰ	nukú
3rd	n-y-úk-a	ha-núkʰ

Verb-stems with a front vowel in the first syllable are not subject to the application of rule 1, and thus somewhat different forms will result in the 1st- and 2nd-person singular; e.g. **hi-sína* → *hi-sín* 'I/you sow'. Rule 4 also operates with such forms; thus e.g. **hi-sín-a* → **sín-e* 's/he sows'.

With monosyllabic stems of this type, the 3rd-person-singular form also retains the tense-prefix due to the inoperation of rule 1(b); e.g. **hi-βé* → *he-βé* 's/he swallows'.

Verb-stems with final stress preclude both the addition of the 3rd-person-singular suffix *-a* and the application of rule 3, producing another set of types. Following is the present-tense paradigm of **ʔonsó* 'place, put':

	Singular	*Plural*
1st	ʔ-y-onsó	ʔ-y-onsó-kʰ
2nd	ʔ-y-onsó-n	ʔonsó
3rd	ʔ-y-ónso	ha-ʔonsó-pʰ

Verb-stems of the form **CVhV* undergo a different set of changes due to the operation of the rule *h* → *Ø/V__V* (rule 2(b), §1.3.1) in the 2nd-person singular and the loss of final *h* (rule 10 above) in two other forms. For example, here is the present-tense paradigm of the verb **láha* 'eat':

	Singular	*Plural*
1st	l-y-á	l-y-ahá-kʰ
2nd	l-y-á-n	lohá
3rd	l-y-áh-a	ha-lá

In most disyllabic stems of the form **CVCʰV*, *Cʰ* becomes *ʔ* in those surface-forms in which it falls between vowels, namely the 3rd-person singular and the 1st- and 2nd-person plural. For example, **hi-hókʰo-kʰ* → *h-y-oʔó-kʰ* 'we are cutting (it)'. Exceptions to this are the stems **púcʰa* 'spit' and **pókʰe* 'pull up'.

In disyllabic stems of the form **C_1VC$_2$C$_3$V*, *C_3* is lost in the 1st- and 2nd-person singular and the 3rd-person plural through the regular operation of rule 7. For example, **hu-ʔápʰta-´* → *ʔopʰtá* 'you-all break (it)',

but **ha-ʔápʰta-pʰ* → *ha-ʔápʰ* 'they break (it)'.

In trisyllabic verb-stems of the form *CVCVCV*, rule 6 operates to delete the stem-medial vowel in those forms in which it is destressed (the 3rd-person singular and the 1st- and 2nd-person plural), with concomitant modification of resulting CC clusters through the change *C* → *ʔ*/__ *C*; e.g. **hi-t'olóno-a* → **t'-y-óln-a* → *t'-y-óʔn-a* 's/he closes (it)'; **hi-hɨtɨtɨ́-kʰ* → **h-y-ɨttɨ́-kʰ* → *h-y-ɨʔtɨ́-kʰ* 'we send (it)'; **hu-manunú* → **m-w-annú* → *moʔnú* 'you-all give birth'. The other members of the paradigm are realized normally. (On the basis of very limited data, it appears that these changes *do not* take place with trisyllabic verb-stems of the form *CVCVCV́*; e.g. **hi-ʔumalú* → *ʔ-y-umalú* 'it shrinks', not *ʔ-y-uʔlú*.)

2.1.1.1.1.2. Past/perfect tense. The past tense of Class 1 verbs is formed by prefixing the morpheme {tʰi-} to the non-future personal stems; {tʰi-} has the allomorphs *tʰV-* in 2nd- and 3rd-person-plural forms and *tʰV-* elsewhere. In the 2nd- and 3rd-person-plural forms, the prefix-vowel assimilates completely to the first vowel of the stem; e.g. **tʰV-nukú* → *tʰu-nukú* 'you-all saw (it)'. In the other persons a residual *-y-* infix appears following the first stem-consonant before back vowels (cf. §1.3, rule 4) and normal vowel-harmony operates within the prefix; e.g. **tʰi-βúsa* → *tʰi-β-y-ús* 'I twisted (rope)'; **tʰi-pʰoyé-kʰ* → *tʰe-pʰ-y-oyé-kʰ* 'we disemboweled (it)'. Additionally, if the first stem-consonant is a plain stop, the consonant of the prefix assimilates to this condition; e.g. **tʰi-póne* → *te-p-y-ón* 'I believed'.

When the verb-stem begins with an alveolar or alveopalatal stop, affricate, or fricative (*t, tʰ, t', c, cʰ, c'*, or *s*), the past-tense morpheme is deleted, leaving a residual infixal allomorph in those forms in which it normally develops; e.g. **tʰi-t'aná-n* → *t'-y-aná-n* 'you shucked corn'.

Following are the complete past-tense paradigms of the verbs **núku* 'see', **páke* 'write', and **síp*ɨ 'hit':

**núku* 'see':

	Singular	*Plural*
1st	tʰi-n-y-úkʰ	tʰi-n-y-ukú-kʰ
2nd	tʰi-n-y-úkʰ	tʰu-nukú
3rd	tʰi-n-y-úk-a	tʰu-núkʰ

**páke* 'write':

	Singular	*Plural*
1st	te-p-y-ákʰ	te-p-y-aké-kʰ
2nd	te-p-y-ákʰ	ta-paké
3rd	te-p-y-ák-a	ta-pákʰ

**síp*ɨ 'hit':

	Singular	*Plural*
1st	s-y-ípʰ	s-y-ɨpɨ-kʰ
2nd	s-y-ípʰ	sɨpɨ́
3rd	s-y-íp-a	sɨpʰ

The development of the *-y-* infix here in just those forms in which it develops in the present tense suggests that perhaps the *hi-* allomorph of the present-tense morpheme is present underlyingly in these past-tense forms also; in fact, Dennis (1990) posits this, a conclusion which is further supported by the presence of analogous present-tense infixes in the past-tense forms of Class 2 verbs (cf. §2.1.1.2.1.2). The absence of any sign of the present-tense prefix in the 2nd- and 3rd-person plural may be due to its complete absorption by the past-tense prefix; e.g. **tʰV-hu-payú* → **tʰV-payú* → *ta-payú* 'you-all picked (them) up'. Given such an analysis, the coöccurrence of both present- and "past"-tense morphemes in the same verbal construction would seem to imply that {tʰi-} might be better interpreted as a perfective aspectual morpheme. There is some additional evidence, mostly of a semantic nature, that {tʰi-} is actually a *perfective* prefix rather than past; e.g. cf.

n-cʰícʰa *tʰi-ʔyɬ́m* *na,* *ka* *(n-ʔ)sin* *napʰ*
1.S-field PERF?-burn.1.S when FUT plant.1.S 1.S-SUBJ
'When I *have burned* my field, I will plant.'

pis *tʰi-ʔyɬ́ma,* *po* *ʔɬkʰ* *s-y-áʔma*
meat PERF?-roast INTENS good t-PRES-aste.3.S
'Meat that *has been roasted* tastes very good.'

(The latter sentence may contain a relative clause with a verb used impersonally [cf. §3.9].)

2.1.1.1.2. Future tense. The future-tense personal stems of Class 1 verbs, which are somewhat different than the corresponding non-future stems, are formed with the following set of suffixes. In all persons except the 1st-singular, stress is also shifted to the stem-final vowel:

	Singular	*Plural*
1st	Ø	-kʰ (or -m)
2nd	-n	stress-shift only
3rd	-s	-kʰ (or -m)

To the resultant stems is added the future prefix *m(V)-*, which is realized as Ø before *m* or *n*; as *m* plus a vowel homorganic with the first stem-vowel before *h* or *ʔ*; and as a syllabic *n-* before any other consonant. The same set of phonological rules described above for present-tense forms (§2.1.1.1.1.1) also applies in the future tense.

Following are the complete future paradigms of the verbs **núku* 'see', **ʔúli* 'break', and **páchi* 'wash':

**núku* 'see':

	Singular	*Plural*
1st	(ka) núkʰ	(ka) nukú-kʰ
2nd	(ka) nukú-n	(ka) nukú
3rd	(ka) nukú-s	(ka) nukú-kʰ

**páchi* 'wash':

	Singular	*Plural*
1st	(ka) n-páchʰ	(ka) n-paʔí-kʰ
2nd	(ka) n-paʔí-n	(ka) n-paʔí
3rd	(ka) n-paʔí-s	(ka) n-paʔí-kʰ

**ʔulíni* 'break corn':

	Singular	*Plural*
1st	(ka) mu-ʔulín	(ka) mu-ʔuʔní-kʰ
2nd	(ka) mu-ʔuʔní-n	(ka) mu-ʔuʔní
3rd	(ka) mu-ʔuʔní-s	(ka) mu-ʔuʔní-kʰ

Additionally, as indicated parenthetically in the charts above, an optional future emphatic (?) particle, *ka*, may be added before or after the future verb-complex, preposed occurrence being somewhat more common. (That the particle *ka* is not an integral part of the verbal complex is further evidenced by the fact that words may intervene between it and the future-tense construction proper; e.g.

pɬɬ́l *kaβayú* *ka* *kasá* *la-n-cʰiʔná-s*
blanket horse FUT over ITER-FUT-spread-3.S.
'He is going to spread the blanket over the horse'.

na-tʰám *ka* *ŋ-kapʰ* *m-p'aʔsá-s* *n-cʰicʰ* *la* *ʔel*
1.S-brother FUT 1.S-BEN FUT-help-3.S 1.S-field PURP clean
'My brother will help me clean my field.')

2.1.1.1.3. Verbs with the iterative prefix la-. Class 1 verbs can also be further subdivided on the basis of their morphophonological behavior into

those stems which include the preposed prefix (or particle) *la-* and those which do not. The exact semantic or syntactic nature of the prefix *la-* is not yet well understood. The prefix, which occurs obligatorily with certain verbs and optionally with others, appears in most cases to have an aspectual function with an iterative or sometimes a distributive meaning. It seems to be related to the particle *la* 'time, instance', which occurs in such constructions as *la kon-t'e* 'three times' and *la nol* 'how many times?'. In a few cases in which verb-roots occur both with and without *la-*, the differential semantic effect of the prefix is evident; e.g. cf. **núku* 'see, look': **la-núku* 'wait' (i.e. 'look again and again'?); **βelé* 'speak, talk': **la-βelelé* 'argue' (here the additional syllable *le* is probably a reduplication, also with iterative semantic effect); however, with other pairs, such as **pála* 'happen, become': **la-pála* 'look for', the semantic interpretation is not as obvious. Certain other verb-roots occur both with and without the prefix with no apparent difference in meaning; e.g. **wúku* or **la-wúku* 'mix'; **ʔɨmɨ* or **la-ʔɨmɨ* 'burn something'. In these pairs, the stems with *la-* may involve somewhat more explicit or emphatic iterativity.

Morphologically, *la-* seems to be part of the larger verbal word since it participates in regular morphophonemic processes involving other verbal prefixes; thus it is treated as a prefix in this discussion. (Dennis and Dennis [1983] and Dennis [1990], however, treat *la* as a particle separate from the verbal word.) In present-tense constructions, *la-* fuses with the present-tense morpheme *hi-/hu-/ha-* through normal operation of phonological rule 2(b) (§1.3) : **la-hi-* → *li-*; **la-hu-* → *lu-*; **la-ha-* → *la-*. Consequently, with such iterative/distributive verbs, *hi-* and *hu-* are never realized as stem-internal infix and ablaut, respectively, nor does *ha-* ever occur as a separate, recognizable syllable. Normal processes of vowel-harmony also

operate with these reduced prefixal complexes; e.g. **la-hi-cʰéke* → *le-cʰékʰ* 'I plow'; **la-hu-ʔelé* → *lo-ʔelé* 'you-all clear brush'. In other tenses *la* retains its basic form; e.g. *la-tʰu-húy* 'they whistled'; (*ka*) *la-n-pál* 'I will look for (it)'.

In addition to the differences just mentioned, for most verbs involving *la-*, the 3rd-person-singular present-tense form is realized differently than for verbs without *la-*. For disyllabic stems, the stress is shifted to the final syllable, and the final stem-vowel retains its identity; e.g. **la-hi-pála* → *l-e-palá* 's/he seeks (it)'; **la-hi-ʔɨmɨ* → *l-i-ʔɨmí* 's/he burns (it)'. In 3rd-person-singular forms of *CVCV́CV* stems, the stress remains on the stem-medial syllable rather than being shifted to the stem-initial syllable, and as a result the vowel-loss and cluster-modification described above for non-*la-* stems (§2.1.1.1.1.1, rule 6) do not take place; e.g. **la-hi-palán-a* → *l-e-palán-a* 's/he fights' (not *l-e-páʔn-a*). However, these changes also do not take place in 1st- and 2nd-person-plural forms, even though there is no difference in stress associated with them; e.g. **la-hu-palaná* → *l-o-palaná* 'you-all fight' (not *l-o-paʔná*). Such phenomena might be explainable on the basis of analogy with the 3rd-person-singular forms; or there may be a more complex reason involving prosodic factors that are not yet explainable. In other tenses, verbs with *la-* behave just as do verbs without *la-*; e.g. **la-tʰi-palán-a* → *la-te-p-y-áʔn-a* 's/he fought'; **la-mV-palaná-kʰ* → *la-n-paʔná-kʰ* 'we will fight'.

There is some evidence that the prefix *la-* also occurs with Class 2 verbs, but the data is incomplete in this area; e.g. *lu pʰyɨnís napʰ* 'I'm stretching'. Here *la-* has apparently fused with the underlying prefix, *hɨ-* (or *hu-* ?) that gives rise to the Class 2 present-tense infix *-y-* (cf. §2.1.1.2.2).

2.1.1.2. Morphology of Class 2 verbs. A second set of verb-stems, most of them grammatically intransitive, is conjugated substantially differently from the Class 1 verbs.

2.1.1.2.1. Non-future tenses. In the present and past tenses, Class 2 verbs are marked for person and number with the following set of suffixes:

	Singular	*Plural*
1st	-s	-ké-kʰ (or -ké-m)
2nd	-m	-ké
3rd	Ø	-ŋ

In addition, stress is shifted to the final stem-syllable in 1st-person and 3rd-person forms.

2.1.1.2.1.1. Present tense. Present-tense forms of Class 2 verbs are formed by infixing the morpheme *-y̶-* after the first consonant of the personal stem. This infix has two grammatically conditioned allomorphs: *-y-* in 1st- and 3rd-person-plural forms; and *-y̶-* elsewhere. (As with Class 1 verbs, this infix may have arisen historically from a prefix, but there is no direct surface evidence of this; however, cf. §2.1.1.1.3, in which the aspectual particle *lu* ← **la-hɨ-* [ʔ] is discussed.)

The same set of rules associated with Class 1 verb-stems applies to Class 2 forms, and the following additional rules of vowel-loss and vowel-combination also operate to reduce certain vowel-sequences in these Class 2 forms:

(1) *ɨ* is lost before a non-low back vowel (*ɨ, u, o*); e.g. **t-y̶-oló-s* → *tolós* 'I jump'.

(2) *y* is lost before a front vowel (*i, e*); e.g. **s-y-isi-kekʰ* → *sisi-kékʰ* 'we are getting warm'.

(3) *y̶a* → *o*; e.g. **ʔ-y̶-ásʔɨ* → *ʔósʔɨ* 's/he bathes'.

(4) *yo* → *e* in an unstressed syllable preceding a stressed syllable (ʔ)(i.e. in 3rd-person plural forms only); e.g. **p-y-ohó-ŋ* → *pehó-ŋ* 'they stumble'.

The derived present-tense paradigm of **ʔasʔɨ* 'bathe' is then as follows:

	Singular	*Plural*
1st	ʔosʔɨ-s	ʔ-y-asʔɨ-kékʰ
2nd	ʔosʔɨ-m	ʔosʔɨ-ké
3rd	ʔósʔɨ	ʔ-y-asʔɨ-ŋ

2.1.1.2.1.2. Past/perfect tense. As with Class 1 verbs, the verbs of Class 2 are marked for past tense with a prefix of the form *tʰV-*. However, here the prefix is added to what is in almost all cases the present-tense form of the verb. The only exceptions are those forms in which *y̶a* → *o* in the present, which evince no sign of the *-y̶-* infix in the past tense. As with Class 1 verbs, *tʰV-* is not realized before an alveolar or alveopalatal fricative or affricate; however, unlike Class 1 verbs, *tʰV-* is realized as syllabic *n-* before alveolar stops. In all other cases, the prefix-vowel assimilates to the first vowel or semivowel of the stem in accordance with the rules presented in §2.1.1.1.1.2 above. Additionally, the prefix-vowel becomes *ɨ* before the infix *-y̶-*. Following is the complete past-tense paradigm of **ʔasʔɨ* 'bathe':

	Singular	*Plural*
1st	tʰa-ʔasʔɨ-s	tʰe-ʔ-y-asʔɨ-kékʰ
2nd	tʰa-ʔasʔɨ-m	tʰa-ʔasʔɨ-ké
3rd	tʰa-ʔásʔɨ	tʰe-ʔ-y-asʔɨ-ŋ

2.1.1.2.2. Future tense. The personal endings for future-tense forms of Class 2 verbs are identical with those used for non-future forms, except in the 3rd-person singular, where the suffix *-m* appears. With regard to future-tense marking, Class 2 verbs behave exactly as do Class 1 verbs, employing the prefix *m(V)-* and the optional emphatic particle *ka*. For example, following is the complete future-tense paradigm of **ʔasʔɨ* 'bathe':

	Singular	*Plural*
1st	(ka) ma-ʔasʔɨ-s	(ka) ma-ʔasʔɨ-kékʰ
2nd	(ka) ma-ʔasʔɨ-m	(ka) ma-ʔasʔɨ-ké
3rd	(ka) ma-ʔasʔɨ-m	(ka) ma-ʔasʔɨ-ŋ

2.1.1.3. Imperfect tense. The imperfect-suffix *-cʰa* can apparently be added to any present-tense verb-form (?); e.g. *hák-cʰa* 's/he came'; *hós-cʰa* 's/he wanted'.

2.1.1.4. Irregular verbs. As with most languages, a number of important and commonly used Tol verbs are conjugated irregularly. Space-limitations prohibit a complete discussion of these, but two of the most common, those meaning 'go' and 'come', are presented below:

'go'

Present	*Singular*	*Plural*	*Past*	*Singular*	*Plural*
1st	hum	léke	*1st*	tʰum	tléke
2nd	hay	lówa	*2nd*	tʰay	tlówa
3rd	háma	hil	*3rd*	tʰemémy	tʰil

Future	*Singular*	*Plural*
1st	ka mis	ka nláka
2nd	ka mim	ka nlawú
3rd	ka mim	ka mal

'come'

Present	*Singular*	*Plural*	*Past*	*Singular*	*Plural*
1st	kuwís	kiláka	*1st*	tʰakuwís	tʰikiláka
2nd	kuy	kulá	*2nd*	tʰakuy	tʰukúl
3rd	hak'	hikil	*3rd*	tʰak'	tʰikíl

Future	*Singular*	*Plural*
1st	ka nkuwís	ka nkuláka
2nd	ka nkuwím	ka nkulá
3rd	ka nkuwím	ka nkul

2.1.1.5. Imperative mood. Verbs are conjugated in the imperative mood in both singular and plural. The singular imperative is identical in form with the 3rd-person-singular past-tense form, but is distinguished from the latter through the use of the pronoun *hipʰ* 'you'; e.g. *tʰapʰáka hipʰ* 'listen (you)!' The plural imperative is identical with the 2nd-person-plural form of the past tense and is followed by the pronoun *nun* 'you-all'; e.g. *tʰapʰaʔké nun* 'hear ye!'

There is also an imperative copula, *t'as*; cf. §2.3.1.

2.1.2. Infinitives. Certain uninflected verb-forms which seem to function as infinitives occur in purposive phrases with the particle *la* 'in order to'; e.g. *la nukʰ* (**núkʰu*) 'in order to see'; *la pacʰ* 'in order to wash (it)' (**pácʰi*). As in these examples, the infinitive typically consists of the underlying stem minus its final vowel; however, in some cases the infinitive differs somewhat more markedly from the underlying stem; e.g. *la capáp* 'in order to tie (it)': **cupápa*; *la las* 'for eating': **láha*.

2.1.3. Modal auxiliaries. The Spanish infinitives *querer* 'want' and *poder* 'be able to' have been borrowed into Tol as invariant verbal auxiliaries, *kelél* Desiderative and *polél* Capacitative, respectively, which usually occur immediately before the main verb with which they are associated; e.g. *kʰul kelél lya* 'I want to eat fish'; occasionally, however, other words may intervene between the auxiliary and the main verb; e.g. *ma kelél wa móʔo hák-cʰa* (= NEG 'want house LOC come'-IMPERF) 'S/he didn't want to come into the house.' When these auxiliaries are employed, person, number, and tense continue to be marked on the main verb.

2.1.4. Verb derivation. On the basis of available data, there appears to be very little in the way of productive derivational morphology in Tol. Nevertheless, a few morphological relationships can be discerned among certain word-pairs that suggest that such processes may have operated in the past or may be partially productive in the language at present. For example, the suffix *-ka* is used to create intransitive verb-stems from nouns; e.g. cf. *mus* 'smoke': **mús-ka* 'make smoke; smoke'; *mol* 'cloud': **mól-ka* 'boil'. Another process which derives verbs from nouns involves the suffixation of a vowel identical to the final vowel of the noun-stem plus shift of stress to this suffix-vowel; e.g. cf. *cincíl* 'nest': **cincil-í* 'make a nest'; *hul* 'hole': **hul-ú* 'make a hole (in something)'; *mul* 'ball (for slingshot)': **mul-ú* 'make balls'; *pehéy* 'egg': **pehey-é* 'lay eggs'; and possibly *ham* 'thorn; axe': *ham-á* 'take care of; send someone' (?). (It seems possible that these suffixed vowels are actually historical or underlying stem-vowels which were not lost due to the stem-final stress in the verb-stems. Historically then, the process would be merely one of stress-shift.)

There are a number of other non-recurrent relationships discernible between certain noun-verb pairs; e.g. cf.

-kol 'stomach': **kol-koló* 'crawl';

wa 'house': **wá-yi* 'get married'

cʰohó-ka 'shade': *cʰohó-se* '(be?) cold'.

There are also a few instances of verb-stems derived from adjectives; e.g. *pʰa* 'empty, dry (adj.)' : **pʰá-ha* 'dry out (e.g. a river)'; *c'í-c'e* 'dry (adj.)' : **c'í-ke* 'become dry (e.g. a plant)'; *ʔɨs-ís* 'good': **ʔís-ɨ* 'cause to learn or understand'. Other derivational relationships between adjective-verb pairs are discussed in §2.3.3 below.

Reduplication is fairly common among verb-stems and generally seems to be associated with inherently iterative activities; e.g. **kol-koló* 'crawl'; **ten-tené* 'roll'; **cɨn-cɨní* 'jump (of a child)'; **la-sol-sólo* 'shake (something)'; **t'o-t'ó* 'knock at the door'; **wo-wó* 'beat, brush off (dust)'; etc. In at least one case, the unreduplicated form of the stem also occurs as a verb: **t'ínV* 'grow': **t'ɨn-t'ɨnV!* 'swell'.

A few verbs are accompanied by preposed directional adverbs; e.g.

**palá yákV* 'fall down': *palá* 'down'

**palá ʔulíni* 'harvest corn' (lit. 'down break')

**peʔá t'u* 'gargle': *peʔá* 'outward'

**βya tʰíʔli* 'lift, raise': *βya* 'up', *tʰíʔli* 'grasp, hold'

**naʔáh la-ʔótʰe* 'stretch': *naʔáh* '(to) there'; *la-ʔótʰe* also occurs in the complex stem **po la-ʔótʰe* 'touch'.

2.2. Noun morphology.

2.2.1. Noun inflection. Nouns may be inflected for possession, plurality, and objective case. Each of these types of inflection is discussed in a separate section below.

2.2.1.1. Possession.

2.2.1.1.1. Possessive pronominal prefixes. Pronominal possession is indicated by either a prefix or an infix (when a singular possessor is involved) or by a preposed clitic (when a plural possessor is involved). A possessed noun may occur alone or may be preceded by a noun or pronoun possessor; e.g. *míste pʰoc'* 'the cat's ear'; *hupʰ pʰoc'* or *pʰoc'* 'its ear'. The basic forms of the possessive morphemes are as follows:

	Singular	*Plural*
1st	na-	kʰis
2nd	hi-	his
3rd	hu-	his

The basic singular forms are in fact the singular personal roots which are also used as the basis of many of the personal pronominals (cf. §2.2.3.1). The 2nd/3rd-person-plural form *his* also appears as the underlying form of the 3rd-person-plural benefactive/comitative pronominal prefix (cf. §2.2.3.5).

There is considerable variation among the singular forms. The 1st-person-singular form *na-* may be realized as an *nV-* prefix or as a syllabic nasal. The *nV-* form always occurs before *h* and *ʔ*; however, either variant may occur before other consonants. When the initial consonant of the associated noun is *β, m, n, w* or *y,* the *nV-* form is somewhat more usual. In most instances of the *nV-* prefix, the vowel assimilates to the first vowel of the associated noun; e.g. *na-más* 'my hand'; *na-ʔás* 'my blood'; *na-wála* 'my face'; *ne-mén* 'my neck'; *no-holól* 'my throat'; *nu-ʔulup'áh* 'my upper neck'; *nɨ-ʔɨsám* 'my sister-in-law (woman's)'; *ni-míkʰ* 'my nose'. Such vowel-harmony is not totally strict, however, and variant forms are often

produced; e.g. *ne-míkʰ* 'my nose'; *na-míste* 'my cat'. In the case of nouns in initial *y*, the prefix-vowel assimilates to the high, front quality of this semi-vowel, rather than to the following stem-vowel, yielding the allomorph *ni-*; e.g. *ni-yóla* 'my kidney'. Before other consonants, the prefix is normally reduced to a syllabic nasal: *n̩-* before *kʰ* and *k'*, e.g. *n̩-kʰéle* 'my bone'; *m̩-* before *w*, e.g. *m̩-wa* 'my house'; a nasal homorganic with the following consonant in all other cases; e.g. *ŋ-kom* 'my liver'; *n̩-cípe* 'my sibling'; *m̩-pʼɨy* 'my skin'. As suggested earlier, however, there is considerable free variation among such forms; thus, for example, 'my rock' may be realized as *m̩-pé, ne-pé,* or *na-pé.* The syllabic nasal form is more usual when preceded by the pronoun *napʰ*.

The 2nd-person-singular possessive morpheme *hi-* is realized as a prefix only before *y* or when the first vowel of the associated noun-stem is a front vowel, *i* or *e*; in the latter case, the prefix-vowel assimilates to the stem-vowel; e.g. *hi-c'íl* 'your hair'; *he-pʰél* 'your arm'. In all other cases, this morpheme is realized as the infix *-y-*, which appears immediately following the initial consonant of the noun-stem; e.g. **hi-ʔas → ʔ-y-as* 'your blood'; **hi-kʰul → kʰ-y-ul* 'your fish'; **hi-kokóy → k-y-okóy* 'your grandfather'; **hi-pʰɨs → pʰ-y-ɨs* 'your shoulder'.

Similarly, the 3rd-person-singular possessive morpheme *hu-* is realized as a prefix only before *w* or when the first vowel of the associated noun-stem is high and back, either *u* or *ɨ*; here also, the prefix-vowel assimilates to the stem-vowel; e.g. *hu-c'úl* 'its tripe'; *hɨ-c'ɨ́kʰ* 'his beard'. When the first stem-vowel is front, the morpheme is realized as an infixed semi-vowel immediately following the initial stem-consonant; this semi-vowel varies in quality according to the initial stem-consonant: *w* following a labial consonant, e.g. **hu-pʰel → pʰ-w-el* 'his/her arm'; **hu-men → m-w-*

en 'his/her neck'; and *ɬ* following a non-labial consonant; e.g. **hu-c'il → c'-ɬ-il* 'his/her hair'. In the case of nouns whose first stem-vowel is *a*, monophthongization of an earlier or intermediate *wa* sequence (where *w* is the infixal allomorph) takes place, yielding an ablaut-like result in the 3rd-person-singular possessed form; e.g. **hu-ʔas → *ʔ-w-as → ʔos* 'his/her blood'. Noun-stems beginning with a sibilant (*s, c, cʰ, or c'*) followed by *e* are not marked for 3rd-person-singular possession; e.g. *setél* 'seed, his/her seed'; in such cases a noun or pronoun possessor must be used to avoid ambiguity.

There are a few vowel-initial (or *hV*-initial) noun-stems, most of them kinship-terms, with which the behavior of possessive prefixes is somewhat variant. For example, the possessive paradigm of **-apéy* 'man's brother-in-law' is as follows:

	Singular	*Plural*
1st	n-apéy	kʰis k-apéy
2nd	*hi-apéy → hepéy	*nu-hu-apéy → nuhopéy
3rd	*hu-apéy → hopéy	*his-apéy → sy-apéy

Processes of vowel-coalescence are observable in the 2nd-person and 3rd-person-singular forms: **i + a → e* and **u + a → o*. The metathesis in the 3rd-person-plural form is apparently the result of the same process that produces infixes in non-future-tense verb-forms (cf. §1.3.1, rule 4).

2.2.1.1.2. Inalienably possessed nouns. Certain nouns are inalienably possessed and are always marked with a possessive morpheme. These include primarily the names of body-parts and kinship-terms, but there are a few other nouns of this type; e.g. *-la* 'name'.

2.2.1.1.3. Genitive constructions. There is no overt marker of the genitive

case-relationship in Tol. Genitively associated nouns are merely apposed, with the genitive noun in first position; e.g. *c'olól wolás* 'oak fruit' = 'acorn'; *hɨmíy c'ɨɬíkʰ* 'tree (sp.) oil'. (While these are, strictly speaking, *syntactic*, not morphological, facts, it does not seem inappropriate to include them here as part of the larger discussion of possession.)

2.2.1.2. Objective case-marking. In many (but not all) instances in which a noun serves as the grammatical object of a sentence, the noun will appear with an added object-suffix and sometimes in a phonologically extended form. For example, *sitʰ* : *sitʰí-m* 'avocado'-OBJ; *yukúc'* : *yukuc'ú-s* 'armadillo'-OBJ. This process generally does not take place with inalienably possessed nouns (body-part and kinship terms, etc.) and with a few others. With most nouns the phonological extension consists of only a single vowel following the non-objective stem, as in the examples above. Such vowel extensions are usually, but not always, identical to the final stem-vowel; those vowel extensions which vary from this principle are apparently the resurfacing of underlying or historical vowels which have been lost from the non-objective forms of the nouns through normal (historical) phonological processes. In a very few cases a stem-final vowel changes in the objective form; e.g. *míste* : *mistú-s* 'cat'-OBJ. In certain other stems an additional *s* also resurfaces; e.g. *wáka* : *wakasá-s* 'cow'-OBJ. In the objective forms of certain other noun-stems in initial *ʔ*, this *ʔ* is replaced by a reduplication of the following stem-consonant; e.g. *ʔɨpʰɨ́* : *pʰɨpʰɨ́-s* 'ashes'-OBJ; *ʔamá* : *mamá-s* 'dirt'-OBJ.

There are three lexically determined forms of the objective suffix — *-kʰ*, *-s*, and *-m/-n* — depending on the particular noun involved. In the case of the suffix *-m/-n*, the *-m* allomorph occurs following an alveolar stop or affricate, and *-n* occurs elsewhere. With only one exception (*pe* :

pe-n 'stone'-OBJ), vowel-final and two-syllable consonant-final noun-stems appear with the *-s* suffix; e.g. *cʰiyó-s* 'dog'-OBJ; *kʰelé-s* 'bone'-OBJ. (For further information and examples, see Dennis and Fleming 1975 [both versions].)

2.2.1.3. Plurality. Only animate nouns may be marked for plurality in Tol. There are two optional plural suffixes: *-tʰákʰ*, which may be used with any animate noun, e.g. *cʰikʰ-tʰákʰ* 'children'; and *-pán*, which may be used only with nouns referring to humans and spirits, e.g. *hepey-pán* 'your brothers-in-law'. With some nouns an extended form of the first suffix, *wi-tʰákʰ*, appears as a free form following the noun; e.g. *ʔanimál wi-tʰákʰ* 'animals'. There is also a plural prefix, *ne-*, which apparently occurs only in the constructions *ne-képʰ* 'women' and *ne-yóm* 'men'.

2.2.2. Noun derivation. As with verbs, there are apparently few or no widely productive derivational processes for the formation of noun-stems. Nevertheless, a number of derivational relationships can be recognized among certain sets of words, though in many cases it is not clear whether these are vestiges of earlier productive morphological processes or perhaps the results of unique instances of compounding.

A number of derived nouns involve at least one noun component; e.g. *c'ák'* 'day' : *lo-c'ákʰ* 'sun'; *yo* 'tree' : *yo-kín* 'beam, bridge'; *-pi* 'buttocks' : *pi-yáʔa* 'excrement'; *pʰí-pʰe* 'pipe' : *pʰi-yá* 'tobacco'. In at least one case a postposition serves as the base for a derived noun: *kasá* 'upon' : *kasá-pʰa* 'upper part, surface'.

Reduplication is fairly common in noun-stems; in some cases the reduplication is complete, while in others it appears that **CV-CV → CV-C* or **CVCV-CVCV → CVCV-CVC*. There seems to be a semantic basis for this reduplication in most cases; many reduplicated nouns refer to things that move repetitively, such as birds and insects, or that commonly proliferate, such as rabbits and trees. Some examples are:

tin-tín 'cricket'	*lem-lém* 'butterfly'	*syuy-syúy* 'rash'
c'in-c'ín 'oriole'	*-p'oy-p'óy* 'lung'	*c'a-c'á* 'gnat sp.'
su-s 'sand'	*c'o-c'* 'milk'	*cʰu-cʰ* 'woods'
koto-kótʰ 'rabbit'	*c'ulu-c'úl* 'bat'	*βec'e-βéc* 'weevil'

Certain types of compound nouns are found among the available data, most of them involving a noun and an adjective; e.g. *pwi-lú* = 'his-rump-yellow' : 'wasp sp.'; *cʰu-yúpʰ* = 'green-they' : 'children'.

2.2.3. Pronouns.

2.2.3.1. Personal pronouns. There are six sets of personal pronouns in Tol, each of which will be discussed in a separate section. Because of their syntactic behavior, it is fairly clear that the subject pronominals are free forms; however, most of the remaining sets of object pronominals are so intimately associated with verb-stems that it seems best to consider them bound prefixes or proclitics. (This analysis differs from that of some earlier researchers [e.g. Dennis and Dennis 1983], who present the object pronominals as separate particles, morphologically independent of the verbal word.)

2.2.3.1.1. Personal pronominal roots. Although there are variant/suppletive forms in certain instances, each of the sets is based to some extent on the following set of pronominal roots:

	Singular	*Plural*
1st	na- ~ n-	ku-/kʰis
2nd	hi- ~ h-	nu-
3rd	hu-	yu-/his

2.2.3.1.2. Subject pronouns. Subject pronouns are formed by adding the suffix *-pʰ* to the pronominal root, except in the 2nd-person plural, where the suffix is *-n*. The subject pronouns are as follows:

	Singular	*Plural*
1st	na-pʰ	ku-pʰ
2nd	hi-pʰ	nu-n
3rd	hu-pʰ	yu-pʰ

Subject pronouns are optional, but nevertheless seem to be used in most cases in which a noun subject is not present. In some cases, a subject pronoun is used *in addition to* a noun subject; e.g. *mu píste wína hupʰ* (= 'owl night goes it') 'The owl flies at night' (cf. also §3.1.2). Similarly, a subject pronoun may be used in addition to a pronominal with another case-function as an emphatic; e.g. *ne-kʰéska napʰ* (= 'to-me it-breathes I') 'I am breathing'. This set of pronouns is also used for pronominal *objects* with certain verbs, e.g. *nɬhɬ* 'shoot (with a rifle)': *hupʰ nɬhɬ napʰ* 'he shoots me'; as in this case, the semantic basis for this may be the fact that an affected object is involved.

The emphatic/restrictive suffix *-sá* may be used with subject pronouns; e.g. *na-sá-pʰ* 'just I'; *hi-sá-pʰ* 'just you'; etc. In the 2nd-person plural, the normal subject-suffix appears in the emphatic form: *nu-sá-pʰ*.

2.2.3.1.3. Accusative/direct-object pronominals. The accusative/direct-object pronominals, which may also be used reflexively, are formed by adding the suffix *-in-* to the pronominal root in singular forms and *-s-in-* in plural forms. In the 3rd-person plural the pronominal root is realized as the zero-morpheme; this is probably a result of the loss of the unstressed syllable *hi-* through normal phonological processes (cf. §1.3.1, rule 2(a)).

The accusative/direct-object pronominals are as follows:

	Singular	*Plural*
1st	n-in-	ku-s-in-
2nd	h-in-	nu-s-in-
3rd	has-/si-	(*hi-)s-in-

Here and in two other pronominal sets, an irregular, suppletive form, *si-* (*se-* before a non-high vowel), is used in the 3rd-person singular when associated with present-tense verbs. In two of these sets this is apparently a morphological complex resulting from the combination of the pronominal with the present-tense prefix *hi-* : **has-hi-* ~ **hus-hi-* → *si-*. This is further substantiated by the fact that when such 3rd-person-singular pronominals are present, the usual *-y-* infix associated with present-tense verb-forms does not appear, the motivating *hi-* prefix having been "co-opted" by the pronominal; e.g. *se-c'om* 'I peel it' (but *sin-c'yom* 'I peel them'). However, the *hi-* prefix *does appear* in those forms in which the infix *-y-* does not develop; e.g. *si-hipís* 'I lick it'; in such cases the form of the pronominal seems best explainable on the basis of analogy. In addition, when *si-* is associated with the 3rd-person-singular forms of certain verbs, the stress is shifted to the stem-final vowel, which retains its identity instead of being replaced by the 3rd-person-singular morpheme *a* (cf. §2.1.1.1.1); e.g. *se-hamá* 'he sends him', but *nin-hyáma* 'he sends me'. Apparently, the same prosodic factors that motivate identical conjugational differences in verbs with the iterative/distributive prefix *la-* (cf. §2.1.1.1.3) are also operative here.

2.2.3.1.4. Dative/indirect-object pronominals. The dative/indirect-object pronominals (or "causative" pronouns [Dennis and Dennis 1983]) are as follows:

	Singular	*Plural*
1st	n-	kʰis-
2nd	hi-	nu-
3rd	Ø	his-

The dative pronominals participate in constructions with many of the impersonal or "causative" verbs described in §4.1 below.

As with the 3rd-person-singular pronominals of other sets, the dative pronominals (except for the 3rd-person singular and 2nd-person plural) interact with the present-tense prefix to form reduced morphological sequences as follows:

	Singular	*Plural*
1st	*n-hi- → ni-	*kʰis-hi- → kʰis-í-
2nd	*hi-hi- → ʔi-	nu-
3rd	Ø	*his-hi- → si-

The behavior of certain 3rd-person-singular verb-forms associated with these reduced pronominals is also like that described in §2.2.3.1.3 above; e.g. *ne-pʰasá* 'I'm tired' (lit. 'something makes me tired'), but *nu-pʰyása* 'you-all are tired'.

2.2.3.1.5. Benefactive/comitative pronouns. The benefactive/comitative pronouns are formed by adding the suffix *-káp*ʰ to the pronominal root, with associated infixing in 2nd-person forms, in which a high vowel precedes the suffix. In this set the suppletive 3rd-person-singular form is *kus*. The benefactive/comitative pronouns are as follows:

	Singular	*Plural*
1st	ŋ-kápʰ	kʰis-kápʰ
2nd	(*hi-)k-y-ápʰ	nu-k-w-ápʰ
3rd	kus/si-	his-kápʰ

Because of the stress associated with most of these forms, they appear to be independent words, not prefixal or cliticized sequences. (Analogy may be the best explanation for the appearance of the form *si* in this set also, since here *si-* cannot be explained as the reduction of a sequence of the type **hVs-hi-* as it was with other sets.)

2.2.3.1.6. Relational/"stative" pronominals. The relational or "stative" pronominals are formed by adding the suffix *-us-* to the pronominal root, with concomitant vowel-loss in those forms in which *VV* sequences would otherwise result. The relational pronominals are as follows:

	Singular	*Plural*
1st	n-us-	ku-(u)s-
2nd	hi-(u)s-	nu-h-ús-
3rd	hus-/si-	yu-(u)s-

Relational pronominals occur with certain relational verbs such as **núku* 'see'; e.g. *hupʰ nus-nyúka* 'he sees me'.

2.2.3.1.7. "Non-human" pronominals. A defective set of 3rd-person accusative pronominals — *hay-* singular, *sey-* plural — occurs with certain verbs that never involve human objects and thus never take 1st- or 2nd-person pronominals; e.g. *napʰ sey-hyókʰ* 'I cut them (trees) down'. These forms seem to be related phonologically to the 3rd-person accusative pronominals listed above, *has-* and *sin-*.

2.2.3.1.8. Possessive pronouns. The possessive pronouns are formed regularly by the addition of the suffix *-c'aʔá* to the pronominal root; e.g. *na-c'aʔá* 'mine'; *yu-c'aʔá* 'theirs'; etc.

2.2.3.1.9. Obligatory personal pronominals. With certain inherently transitive verb-stems, object pronominals are required even when an overt noun object is present; e.g. *cʰikʰ se-kʰól napʰ* (lit. 'child PRO I-uncover I') 'I

uncover the child'; *ʔáwa se-wat'áth* (lit. 'fire PRO I-put-out') 'I put out the fire'. Such verb-stems constitute a syntactic class distinct from the class of transitive verb-stems that can occur without overt objects.

2.2.3.2. Indefinite pronouns.

leŋ 'no one'

nepenowá 'someone, some (human)'

phaní 'something, some (non-human)'

2.2.3.3. Demonstrative pronouns. There appear to be only two demonstrative pronouns in Tol, *nempe* and *nenem* 'this, that, these, those', which seem to be in free variation. In Tol there is apparently no distinction made between proximal and distal meanings. Whatever semantic or pragmatic differences that may exist between the two words are not discernible from the available data.

There is also an indefinite demonstrative pronoun, *niná* 'this, these, that, those' (?), which occurs in questions; e.g. *chan niná* 'what's this?'

2.3. Adjectives. All adjectives follow the nouns they modify.

2.3.1. Qualitative adjectives. Qualitative adjectives are invariant; e.g. *yom malála* 'man bad'; *yokín nepnéph* 'bridge weak'; *namás niʔnyámpa* (= 'my-hand right') 'my right hand'. Dennis and Dennis (1983) treat adjectival stems as adjectives when used attributively but as stative verbs when used predicatively. I have found no sufficient reason for the latter approach and have not adopted it here.

Adjectival complements are expressed using the copular forms *way* (present), and *n-sem* (future); e.g.

wáka	*hóskha*	*way*		*ʔamá*	*k'a*	*ka*	*n-sem*
cow	reddish	COP		land	hard	FUT	FUT-COP
'The cow is reddish.'				'The soil will be hard.'			

There is probably also a past-tense copula, but it does not appear to be among the available data (*ʔthe-way* ?).

There is also a negative copula, *kustháy*; e.g. *koʔmíy kustháy* 'It is not old'; and also an imperative copula, *t'as*; e.g. *lyáhasa t'as* 'Be quiet!'

2.3.2. Numerals. The adjectival numerals from 1 to 4 are as follows:

phaní 'one'	*kón-t'e* 'three'
má-t'e 'two'	*yuluphána* 'four'

Above 'four', Spanish numerals are used. The adoption of Spanish words for the higher numerals seems to have been relatively recent, as both Conzemius (1922) and von Hagen (1943: 94) give native Tol words for numerals above four. Von Hagen lists the following additional forms (in his own, non-phonemic transcription):

⟨komasopani⟩ 'five'	⟨tsenam pani⟩ 'twenty'
⟨kuspi⟩ 'six'	⟨tsenam mata⟩ 'forty'
⟨kus panikuö⟩ 'seven'	⟨tsenam contis⟩ 'sixty'
⟨kamayarö⟩ 'eight'	⟨tsenam yurupa⟩ 'eighty'
⟨komaspö⟩ 'ten'	⟨tsenam komas⟩ 'hundred'

phaní 'one' can also be used as an indefinite article: *yo phaní* 'some trees'. The stems for 'two' and 'three' also may be combined with the suffix *-nás* to form demonstrative pronouns: *ma-nás* 'the two of them'; **kon-nas* → *ko-nás* 'the three of them'. Whether or not this is also possible with higher numerals cannot be determined from the available data. In some instances the suffix *-ya* is added to numerals when used adjectivally:

p'is	*má-t'e-ya*	*y-us*	*thi-nyúk*
deer	two-?-ADJ	3.P-ACC	PAST-see.1.S

'I saw the two deer'.

I have found only one ordinal numeral within the available data: *mwalá* 'first'.

2.3.3. Adjective derivation. Reduplication is a very common morphological process among qualitative adjectives. In most cases the reduplication is complete; e.g. *ʔum-ʔúm* 'soft'; *ʔú-ʔu* 'unripe, immature'; *wɨna-wɨ́na* 'shaky, wobbly'; *tɬ-tɬ́* 'soft, tender'; *cʰey-cʰéy* 'dry, toasted'; *t'ɨn-t'ɨ́n* 'fat'; *p'om-p'óm* 'thick'; *tan-tán* 'tight'; etc. However, in some cases the reduplication is only partial; e.g. *ʔɨs-ɨ́s* 'good'; *luʔ-lúy* 'soft'; *cʰa-cʰ* 'thin' (probably from earlier **cʰá-cʰa ʔ*).

Very few additional conclusions about derivation of adjectives can be drawn on the basis of the available data. Nevertheless, there are a few pairs that indicate a derivational relationship between certain adjectives and verb-stems; cf. *t'ɨ́nV* 'grow' : *t'ɨn-t'ɨ́n* 'fat'; *ʔíc'V* 'wet (v.)' : *ʔic'-íc'* 'wet (adj.)'; *tan-taná* 'stop (v.i.)' : *tan-tán* 'tight, stuck' In such pairs, however, the direction of derivation does not seem to be incontrovertibly determinable.

2.3.4. Intensification of adjectives. Various intensificational particles, all translatable as 'very', may be used before adjectives: *cʰay, pahál, pasál, po, po ʔin*; e.g. *pahál he* 'very red'. *pahál* may also be used adverbially (cf. §2.4).

2.4. **Adverbs.** Temporal adverbs normally occur first in the sentence; e.g. *t'aŋ nopʰ tʰelyahákʰ* (lit. 'yesterday corn we-ate') 'yesterday we ate corn'; manner and locative adverbs, however, typically immediately precede the verbs that they modify; e.g. *ʔáwa pahál myúska* (lit. 'fire much smokes') 'The fire is smoking a lot'; *cʰiyó pʰeʔá pɨ́ʔɨ hupʰ* (lit. 'dog outside lies he') 'The dog is outside'. There are exceptions to both of these principles, however.

2.5. **Postpositions.** Various case-relationships are expressed through the use of a wide assortment of postpositions. Among these are the following:

ʔalá 'under, beneath'; e.g. *yokín ʔalá* 'under the bridge'

hay 'in, on'; e.g. *yo hay* 'in the tree'

kasá 'on, upon (a horizontal surface)'; e.g. *mésa kasá* 'on the table'

kʰɨpʰaʔá 'behind'; e.g. *wa kʰɨpʰaʔá* 'behind the house'

lal 'with (comitative)'; e.g. *mpapáy lal* 'with my father'

móʔo 'in, into (an enclosed space)'; e.g. *hok' móʔo* 'in/into the mountains'

mpes 'for, as; with (instrumental); because of'; e.g. *cʰikís mpes* 'for children'; *mɨcʰícʰ mpes* 'with his machete'; *mol mpes* 'because of clouds'

napé (or *mpe*) 'from'; e.g. *hok' napé* 'from the mountain'

nt'a 'to; by, near'; e.g. *ʔiyó kampánya nt'a* 'to the tall pine-tree'; *ʔɨsí pɨné nt'a* 'near the river'

pʰyápʰa 'behind'; e.g. *popáy pʰyápʰa* 'behind his father'

póʔo 'to; in (a time-period)'; e.g. *enélo póʔo* 'in January'.

There is some evidence that postpositions may be chained; cf. *yo hay nt'a* 'in the trees'.

Normally, postpositional phrases of the locational type appear either immediately before or immediately after the main verb in a Tol sentence; e.g.

kepʰ	*mésa*	*kasá*	*kʰ-y-ókʰ-a*	
woman	table	on	g-PRES-rind-3.S	

'The woman is grinding on top of the table.'

Non-locative postpositional phrases, on the other hand, normally follow the verb; however, in situations where no overt subject is present, they may precede the verb; e.g.

m-papáy *ʔiyó* *tʰe-hyókʰ-a* *ham* *mpes*
my-father tree PAST-cut-3.S axe with
'My father cut down the tree with an axe.'

halékʰ *mpes* *p'ɨs* *tʰi-nyɨ́hɨ*
bow with deer PAST-3.S.shoot (at)
'He shot (at) the deer with a bow.'

Sequential priorities among postpositional phrases are suggested by the following sentence:

ne-yóm *mát'e-ya* *tʰi-kíl* *na-wá* *nt'a* *leméliyu* *mpes*
PL-man two-ADJ PAST-come.3.S my-house to medicine for
'Two men came to my house for medicine.'

3. Syntax.

3.1. The sentence.

3.1.1. Sentence components. The most common basic sentence-types in Tol consist of the following sets of components (given here in approximate order of complexity):

1. A finite intransitive verb; e.g. *híβe* 'It's raining.'

2. A subject noun-phrase plus an appositive noun or adjective; e.g. *t'ol c'olól* 'The post is (of) oak'; *pe pɨné* 'The rock is big.'

3. A subject noun-phrase plus a finite intransitive verb; e.g. *yuc' háma* 'The lizard (sp.) goes.'

4. A subject noun-phrase plus an adjective plus a copular verb; e.g. *polomáy ʔumúl way* 'The machete is short.'

5. A subject noun-phrase plus an object noun-phrase plus a finite transitive verb; e.g. *cʰikʰ tóʔo c'yɨ́ʔɨcʰa* 'The child pinched his/her sister.'

3.1.2. Word-order. In transitive sentences, when a noun subject is present the normal sentence word-order in Tol is Subject-Object-Verb; e.g. *βec'eβéc' nopʰ halá* (= 'weevil(s) corn eat') 'Weevils eat corn'. However, with a pronominal subject the word-order is optionally and quite commonly Object-Verb-Subject; e.g. *wɨt' t'yɨ napʰ* (= 'wood cut I') 'I cut/am cutting wood'. Noun subjects may also occur at the end of sentences, though the precise pragmatic effect of this is not yet clear; e.g. *neʔáh pwéla cʰikí-s* (= 'there plays child') 'The child is playing there.' (For some still unexplained reason, the subject noun in this sentence appears to be in the *objective* form.)

In sentences with noun subjects, often a pronoun copy of the subject noun appears following the verb; e.g. *lakasáy malála way yupʰ* (= 'ants bad are they') 'Ants are bad'. This practice serves to indicate number for subject nouns that are not already so marked, and this may be part of its underlying rationale. Similarly, clarificational tags may be added at the end of sentences; e.g.

hu-n *c'ilín* *kámpa* *way* *cʰikí-s*
3.S-eye lash(es) long COP child-OBJ
'The child's eyelashes are long.'

3.1.3. Topic/focus and subject/object emphasis. There is little discernible about topic/focus and subject/object emphasis from the available data. The emphatic/restrictive suffix *-sá-* has already been discussed (§2.2.3.1.2). The sentence given in §3.1.2. above, *neʔáh pwéla cʰikí-s* (= 'there plays child') 'The child is playing there', may involve a pragmatic shift of word-order. However, little else can even be surmised at present.

3.1.4. Negation. The negative particle *ma* always appears immediately

before the verbal complex, which may consist solely of a conjugated verb or may involve a modal auxiliary or other immediately associated elements; e.g.

kapʰé ma mɨʔɨs na-pʰ ma polél tʰ-y-am
coffee NEG drink.1.S I-SUBJ NEG AUX: can c-PRES-arry.1.S
'I don't drink coffee.' 'I can't carry anything.'

ma kelél wa móʔo hák-cʰa
NEG AUX: want house into 3.S.PRES.come-IMPERF
'S/he didn't want to come into the house.'

3.2. Coordination. Sentence coordination may be effected through the use of the coordinating conjunction *ne* 'and' or by simple apposition; e.g.

cʰikʰ c'-ɣ-ísa ne βekʰ péʔe
child PRES-be.poor.3.S and hunger have.3.S
'The child is poor and he is hungry.'

cʰeβ tʰi-nyíhɨ po β-y-áha
scorpion PAST-sting INTENS PRES-hurt
'A scorpion stung (me) and it hurts a lot.'

I have not found a corresponding disjunctive particle in the available data.

3.3. Subordination.

3.3.1. Finite subordinate clauses. Subordinating conjunctions and adverbs usually appear at the end of the subordinate clause; e.g. *hupʰ hya na* (lit. 'he sleeps when') 'when he sleeps'. There are exceptions, however: *yas tʰehyáwka* 'when it became morning'.

The particle *mpes*, which functions as a preposition ('because of, for'), can also be used either as a subordinating conjunction meaning 'because' or

as an adverb meaning 'so, thus', depending on whether it occurs at the beginning or the end of its associated clause; note that in the examples below, the only difference between sentences in which it is used as an adverb and those in which it functions as a conjunction is the fact that there is a pause before *mpes* in the latter case but no pause in the former;

e.g. *wɨt kʰuwá mpes te-kétʰ na-pʰ*
firewood there.wasn't because PAST-1.S.bring I-SUBJ
'Because there wasn't any firewood, I brought some.'

ʔamá k'a way ma híβe mpes
land dry COP NEG PRES.rain.3 because
'The land is dry because it doesn't rain.'

pʰɨ ma kelél tʰ-il, mpes na-sá-pʰ tʰ-um
all NEG want PAST-go.3.P. so I-EMPH-SUBJ PAST-go.1.S.
'No one wanted to go, so I went alone.'

píste ma tʰe-hyá na-pʰ, mpes ha ni-βe yakʰáh
last night NEG PAST-sleep.1.S I-SUBJ so I'm tired today
'I didn't sleep last night, so I'm tired today.'

3.3.2. Purposive. Non-finite purposive phrases consist of the purposive particle *la* followed by a verbal infinitive; e.g. *máŋgo ʔísɨs way la las* 'Mangoes are good to eat' (cf. §2.1.2).

3.4. Relativization. There is very little evidence of relativization in Tol. I have been unable to find anything that functions like a relative pronoun in the available data. Nevertheless, a few sentences suggest that relativization may be possible in certain circumstances when a copular sentence is involved; e.g.

pʰáha he way kol c-y-úʔpa hu-pʰ
belt red COP his.stomach t-PRES-ie.3.S he-SUBJ
'He ties a belt that is red (?) onto his stomach.'

híβe mpes nopʰ ʔɨsís way t'-y-ína
PRES.rain.3 because corn good COP gr-PRES-ow.3.S
'Because it rains, corn that is good (?) grows.'

These relative clauses, if that is what they are, are identical with copular sentences, but their association in a sequence that contains a verb in addition to the copula suggests the relative-clause interpretation. I have not yet found any sentence in which a non-copular verb seems to be part of a relative clause.

3.5. Complementation. Embedded sentential complements precede the higher verb; e.g.

kláse nt'a líβro móʔo βéle si ʔɨsí
class in books in PRES.speak.3.S 3.S.ACC PRES.better.3.S
'In class he learns to read books.'

leβél l-e-hay n-oʔ te-péʔe
debt ITER-PRES-make.1.S 1.S(?)-? PAST-die.3.S
'I forgot that I owe (him something).'

3.6. Causativization. In addition to the "causative verbs" discussed in §4.1 below, there is also some evidence for non-morphological causative sequences involving the irregular factitive verb *la-hay* 'do, make'; e.g.

hu-pʰ n-in tʰi-ʔyɨ́sa la-tʰí-hi
3.S-SUBJ 1.S-ACC PAST-better (v.).3.S ITER-PAST-make.3.S
'He taught me.' (lit. 'He made it better me.')

tʰi-ʔyɨ́ʔsa la-tʰí-hi
PAST-3.S.get.well ITER-PAST-3.S.make
'It healed him.' (lit. 'It made him get well.')

3.7. Comparison. Information on comparative constructions is rather spotty in the available data. The following examples involve the comparative phrase *hin hústa*, lit. 'thus is.like':

pɨʔá cʰiyó hin hústa
puma dog thus is.like
'The puma is like a dog.'

In some cases the additional particle *wa* 'also' appears; e.g.

sipípʰ c'ilíl hin wa husta
dove.sp. bird.sp. thus also is.like
'The dove is similar to the *c'ilíl*.'

The Spanish intensive adverb *más* 'more' has been borrowed into Tol, where it occurs in comparative constructions; e.g. *mas ʔin kámpa* (lit. 'more little long') 'a little longer'.

3.8. Interrogation. The interrogative particles and phrases are as follows:

pʰakʰ 'who?'
kaʔáh 'where?'
cʰan 'what? which?'
cʰan mpes 'for what? why?'
ʔóna 'when?'
ʔonín ne 'why?'
ʔoyn 'how? (what?)'

nol 'how many?'

These normally appear at the beginning of an interrogative sentence, with the subject following the verb; e.g.

kaʔáh	*tʰe-méy*	*wakasás*	*ʔoyn*	*cʰi*	*hu-pʰ*
where?	PAST-go.3.S	cow	how?	PAST.say.3.S	3.S-SUBJ
'Where did the cow go?'			'What did s/he say?'		

Apparently, yes-no questions are formed by placing the interrogative particle *nku* 'if, whether' after the topic of the sentence; e.g.

βe	*nku*	*t-y-atʰ*	*hi-pʰ*
tamale	QUES	h-PRES-ave.2.S	2.S-SUBJ
'Do you have tamales?'			

There is, however, a paucity of data in this area, which makes further elucidation impossible here.

3.9. Passivization. No evidence of passive constructions has been found in the available data. However, the 3rd-person-singular form of a verb can be used impersonally with a sort of "agentless passive" meaning; e.g.

pɬíl	*syása*	*ʔ-y-umalú*	*péʔe*	*na*
cloth	new	shr-PRES-ink.3.S	wash.3.S	when
'New cloth shrinks when it is washed.'				

4. Semantics. While limitations in both data and space prevent any extensive discussion of semantic phenomena here, a few interesting facts do present themselves within the available data. Additional semantic information about Tol can be found in Oltrogge 1976 and Oltrogge and Neuenswander 1976.

4.1. Causative verbs. A small but important subset of defective verb-stems, called "causative verbs" by Dennis and Dennis (1983), are conjugated only in the 3rd-person singular and are used to refer to involuntary, impersonal processes that can affect animate grammatical objects; e.g. *ne-pʰasá* 'I am tired' (i.e. 'Something makes me tired'); *nu-kʰéska* 'you-all breathe' (i.e. 'Something makes you breathe'). As in these examples, the affected objects of such verbs are usually expressed as indirect/dative objects when in pronominal form; however, with a few verbs the accusative pronouns are used; e.g. *nin-ʔyísa* 'I learn' (i.e. 'Something improves me'). Emphatic pronouns (cf. §2.2.3.1.2) are also commonly used with such verbs; e.g. *t'yúnka hupʰ* 'He has hiccups' (i.e. 'Something gives him the hiccups'). Verbs of this type in the available corpus are the following:

Dative stems:

kʰéska 'cause to breathe'
tantaná 'cause to stop walking'
tɬí 'cause to fall'
t'únka 'cause hiccups'
pʰasá 'cause to be tired'
cɬɬmí 'wake, cause to awaken'
ʔálc'a 'cause to belch, burp'
βe 'cause to need'
βóho 'cause to vomit'
máyka 'hurt, cause to hurt'

Accusative stems:

kɬkɬyɬ! 'cause to shiver from the cold'
túla 'tire, cause to become tired'
ʔɬsɬ! 'cause to learn or understand, improve'

4.2. Wanting. As was discussed in §2.1.3, the verbal auxiliary *kelél* is used to encode the desiderative mood in association with another verb.

However, when the object of wanting is not expressed as a verbal construction but as a noun object, then a different means is employed, namely, the inalienably possessed noun *-has* 'heart', which for this special function behaves semantically (though not morphologically) like a verb. In such cases, the pronominal possessive morphemes are equivalent to subject-markers; e.g. **hu-has → *h-w-as → hos* (lit. 'his-heart') 'he wants'. There is a rather broad range of semantic interpretations associated with such usage, including 'want', 'need', and 'like' in various situations. For example, *híla na-hás la lul* (lit. 'thread my-heart for sew') 'I need thread in order to sew'; *kepʰ pɬíl syása hos hupʰ* (lit. 'woman cloth new her-heart' 'she') 'The woman wants new cloth.' Despite the absence of normal verb-morphology in most cases, the imperfect suffix *-cʰa can* occur with these constructions; e.g.

lemeliyú	*hos-cʰa*	*hupʰ*	*mpes*	*tʰ-ak'*
medicine	his.heart-IMPERF	he	because	PAST-come.3.S.

'He came because he wanted medicine.'

Negation is effected as with normal verbs; e.g. *ʔɬpí t'iktíkʰ ma na-hás* (lit. 'rope weak' NEG 'my-heart') 'I don't want a weak rope.'

4.3. Metaphor. There are a few interesting metaphorical constructions in the available data; e.g.:

ne-mén c'-y-úskʰa lit. 'my-throat (something) stings' = 'I cough';

hi-míkʰ sína lit. 'your-nose (something) sows' = 'your nose is running';

ŋ-kápʰ t'-y-áha lit. 'for-me it.became.night' = 'I fainted'.

5. Sample text. The following short text was collected by Margaret Dennis at Montaña de la Flor in 1982. For comparative purposes it is given here in both orthographic and phonemic transcription; it is followed by an English translation.

Müts'üy

1. Müts'üy püste lyawün yupj. 2. Jun ta'á wine. 3. 'Amá jul pü'ü. 4. Tsjicj way jupj müts'is. 5. Newa malala li ji. 6. Jonopj lyaja jupj lovin. 7. Püste wine mpes 'ücj jonopj lyaja. 8. Malala nin napj lal. 9. Nin mpes mas 'ücj 'yünan. 10. Mas 'amá jul tsjacjam müts'üy mpes.

Mɬc'ɬy

1. mɬc'ɬy píste lyawíŋ yupʰ. 2. hun taʔá wíne. 3. ʔamá hul píʔɬ. 4. cʰikʰ way hupʰ mɬc'ís. 5. néwa malála li hi. 6. honópʰ lyáha hupʰ loβín. 7. píste wíne mpes ʔɬkʰ honópʰ lyáha. 8. malála nin napʰ lal. 9. nin mpes mas ʔɬkʰ ʔyɬnán. 10. mas ʔamá hul cʰakʰám mɬc'ɬy mpes.

Mice

1. Mice roam around at night. 2. He roams everywhere. 3. He lives in a hole in the ground. 4. The mouse is small. 5. And he also does bad things. 6. He always eats corn. 7. Because he walks around at night, he is able to eat the corn. 8. This is bad as far as I am concerned. 9. Therefore it is best that I kill them. 10. Let's go poke around in holes in the ground for mice.

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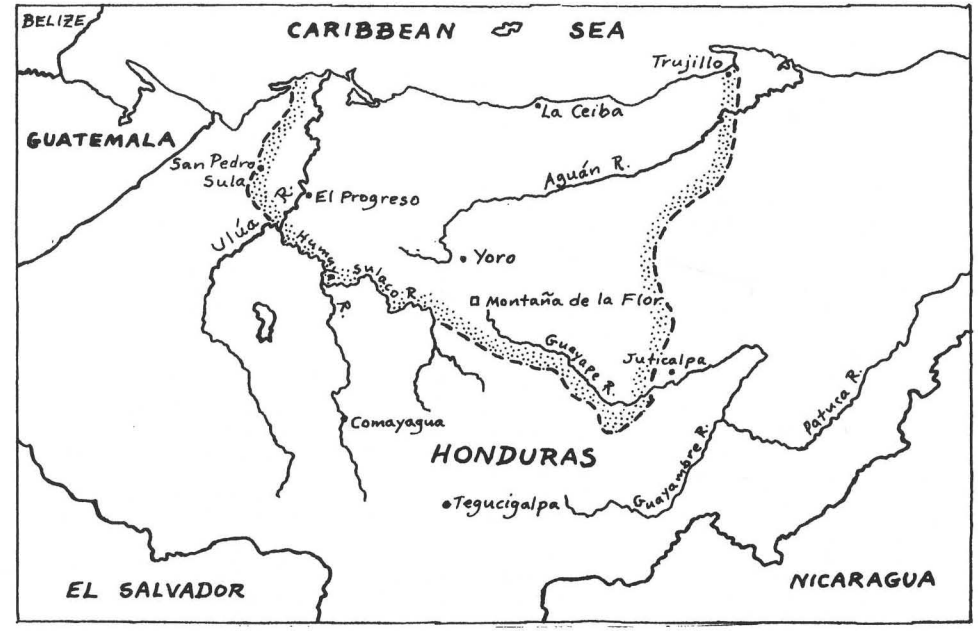

Probable former extent of Tol territory.