Person Marking in Petalcingo Tzeltal

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______________________________

John B. Haviland
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# Table of Contents

**Introduction** ................................................................. 1  
About Tzeltal ................................................................. 1  
Petalcingo, Municipio Tila, Chiapas ........................................... 3  
The Linguistic Situation .......................................................... 5  
About This Thesis ............................................................. 6  

**Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal** ......................................................... 9  
Phonetics and Phonology ......................................................... 9  
  Phonetic Inventory ............................................................. 9  
    Consonants ........................................................................ 9  
    Vowels ............................................................................ 11  
  Phonological Processes .......................................................... 12  
    Assimilation ..................................................................... 12  
    Epenthesis ........................................................................ 13  
    Lenition ........................................................................... 13  
  Reduplication ........................................................................ 15  
  Syllabification and Stress ......................................................... 15  
Morphology .............................................................................. 15  
  Morphophonemics ............................................................... 16  
  Morphological Strategies .......................................................... 16  
  Root Classes ......................................................................... 17  
    Are There Adjectives in Tzeltal? ............................................. 17  
    Polyvalence ...................................................................... 18  
Nouns and Nominal Morphology .................................................. 19  
  Number ............................................................................. 19  
  Gender ........................................................................... 20  
  Pronouns ........................................................................... 20  
  Inherent Possession and Getting Around It ................................. 21  
Verbs ...................................................................................... 21  
  Causatives ........................................................................ 21  
  Transitivizers ...................................................................... 22  
  Verbalizers ........................................................................ 22  
  Nominalizations ................................................................. 23  
Positionals .............................................................................. 25  
  Compounding ..................................................................... 27  
Minor and Functional Classes .................................................. 27  
  Adverbs ............................................................................ 28  
  Relational Nouns ............................................................... 28  
  Prepositions ........................................................................ 29  
Syntax and Clause Structure ................................................... 30  
  Word Order, Pro-Drop and Head/Dependent-Marking .................. 31  
Grammatical Relations, Ergativity, and Possessor Marking ................. 33  
  Syntactic Ergativity ............................................................ 38  
Noun Phrases ........................................................................... 39  
  Determiners ...................................................................... 39  
  Quantifiers ....................................................................... 40
List of Tables

Table 1: Consonants ............................................................................................................................9
Table 2: Vowel System ........................................................................................................................11
Table 3: Phonological Shape of Lexical Types ..................................................................................16
Table 4: Roots Classes ........................................................................................................................17
Table 5: Identical Stems as Positionals versus Transitive Verbs .....................................................18
Table 6: Pronominal Paradigm ...........................................................................................................20
Table 7: Adverbs .................................................................................................................................28
Table 8: Relational Nouns ..................................................................................................................28
Table 9: Occurrence and Order of Arguments in PMP-FS2 ..............................................................32
Table 10: Set A markers .....................................................................................................................35
Table 11: Set B markers .....................................................................................................................35
Table 12: Numeral Classifiers .........................................................................................................40
Table 13: Numbers .............................................................................................................................41
Table 14: -il versus -al modifiers .......................................................................................................42
Table 15: Aspectual Morphemes and their Distribution ..................................................................47
Table 16: Auxiliary Verbs ..................................................................................................................53
Table 17: Directional Verbs ..............................................................................................................54
Table 18: Perfect and Resultative Markers ......................................................................................58
Table 19: Distribution of -bil Perfects ..............................................................................................60
Table 20: Evidential Adverbs ............................................................................................................64
Table 21: Wh-words ...........................................................................................................................65
Table 22: Clitics .................................................................................................................................73
Table 23: Basic Aspect Marking .......................................................................................................103
Table 24: Personal Pronouns in Koyra Chiini ...............................................................................123
Table 25: The ng Forms of Personal Pronouns in Tagalog ..............................................................129
Table 26: Ergative/Genitive Marking in Ladakhi ............................................................................130
List of Figures

Figure 1: Mayan Family Tree........................................................................................................2
Figure 2: Geographic Distribution of Tzotzil, Tzeltal and Chol...................................................2
Figure 3: Tzeltal Dialect Map.....................................................................................................3
Figure 4: Communities and Languages around Petalcingo.......................................................5
Figure 5: Grammatical Relations in English versus Tzeltal......................................................34
Figure 6: Accusative and Ergative Case Marking / Agreement...............................................34
Typographic Conventions and Abbreviations

The majority of Tzeltal data in this work is transcribed using practical orthography, which is implicitly described in “Phonemic Inventory,” below. However, there are times when an IPA transcription (of varying broadness) is used: then the text is enclosed in brackets and is transcribed using [ðíʃ fɔnt].

What follows is a list of abbreviations used in interlinear glosses. Dashes (-) indicate morpheme boundaries. Colons separate the paradigm specification from the specific instance indicator, for example “A:1” means Set A (ergative/possessive) cross-reference, first person. Different meanings of a portmanteau morpheme are separated by a dot, for example “ICMP.A:2” means “Incompletive, Set A first person.”

1 First person
2 Second person
3 Third Person
A Set A (ergative / possessive)
AGNT Agentive
ABS Absolutive
APPL Applicative
APASS Antipassive (voice)
B Set B (absolutive)
CAUS Causative
CL Clitic
COMP Complementizer
DEM Demonstrative
DET Determiner
DIM Diminutive
DIR Directional
DEM Demonstrative
DIST Distal
EMPH Emphatic
ERG Ergative
EVID Evidential
EXCL Exclusive
FOC Focus
F/T Focus and/or Topic
G Gender
ICMP Incompletive aspect

IMP Imperative
INT Intensifier
INCL Inclusive
IRR Irrealis
MID Middle (voice)
MOD Modifier (adjective)
NEG Negation
NC Numeral classifier
N Nominalization
PART Participle
PASS Passive (voice)
PCHG Possession changing
PERF Perfect
PL Plural
PFV Perfective aspect
POSS Possessor marking
PRED Predicational
PREP Preposition
PROG Progressive aspect
PT Particle
Q Question marker
REFL Reflexive
PROX Proximal
REDUP Reduplication
TRANS Transitivizer
TOP Topic
V Denominalization (Verbalization)

1 The abbreviations used in examples from other works are the original authors’. Their abbreviations are not included in this table.
Abstract
This thesis is a heterogeneous study of the Petalcingo variant of the Tzeltal, a Mayan language. The first chapter presents a grammatical sketch of the language based on nine months of fieldwork in Petalcingo. The chapters that follow analyze some of the grammatical features of this language in more detail. The common thread uniting the diverse topics is the person marking in verbal and nominal paradigms. A nominal account of Tzeltal participles is offered, contra previous analyses which claimed that these participles are infinitive. The proposal offered herein seeks to explicate the distribution of the preposition in combination with these participles, as well as optional appearance of ergative markers that cross-reference the patient argument in a maximally non-disjunctive way. In the latter part of this thesis, a clitic theory of Set A (ergative/possessive) is advanced, and some options for explaining the identity of ergative and possessive markings are examined.
This thesis is dedicated to all the persevering boys and girls, men and women who despite being born in abject poverty to families with no scholarly tradition nonetheless valued learning enough to put themselves through school — you are an inspiration.
Introduction

The tirade above was launched (mostly in jest) by angry Francisca, the mother of my host family in Petalcingo, when after a frantic search all over the house for my little desk lamp it turned out that I had hidden it myself in my backpack earlier that day. The quote, which alternatively references me in the second and third person, is replete with references to him and his, and you and yours, which, rather than being realized as pronouns (as in English) are marked by agreement morphemes on the verb and the possessed noun. The morphology and syntax of these agreement morphemes is the topic of the present thesis. Since overt pronouns are quite rare in Tzeltal discourse, the agreement markers usually are the only way of indicating who is doing what to whom, and what is possessed by whom. The fact that the same markers are used to indicate the subject of a transitive verb as well as the possessor of a thing, while not entirely uncommon in the world’s languages, is one of the interesting properties exhibited by Tzeltal. However, prior to embarking on the analysis of Tzeltal grammar in general, and agreement (person) markers in particular, an overview of both Tzeltal and the town of Petalcingo is in order.

About Tzeltal

Tzeltal is a Mayan language with between 265,000\(^3\) and 278,000\(^4\) speakers located mainly in the highlands of Chiapas, Mexico. It is a part of the Tzeltalan branch of the Mayan family:

---

\( ^2 \) Me supposedly having a wife in the next town over has been a running joke in the house.

\( ^3 \) Data from Summer Institute of Linguistics Ethnologue.

http://www.ethnologue.com/show_country.asp?name=Mexico

\( ^4 \) Haviland 2004, who sites Mexican 2000 census, INEGI.
Together Chol, Tzotzil, and Tzeltal comprise the three most widely spoken Mayan languages of Chiapas. Geographically, these have roughly the following distribution:

**Figure 1: Mayan Family Tree (adopted from Craig 1977, who credits Kaufman)**

**Figure 2: Geographic Distribution of Tzotzil, Tzeltal and Chol (adopted from Haviland 2004)**
Kaufman 1971 tentatively identifies 5 dialects of Tzeltal, while Campbell 1987 proposes six, though both Campbell 1987 and Kaufman 1972 find many different variations, which could potentially be grouped into an arbitrary number of dialects. The Tzeltal dialect map proposed in Campbell 1987 is reproduced here as Figure 3, below.

Figure 3: Tzeltal Dialect Map (adopted from Campbell 1987)

This thesis is primarily based on about nine months of fieldwork conducted in the town of Petalcingo, municipio Tila over four separate visits between June 2003 and January 2005.

Petalcingo, Municipio Tila, Chiapas

Petalcingo is a small town (population of about 7,000) nestled in the highland mountains of Chiapas, Mexico. The climate is rather mild, except for a few months in the winter when it gets quite cold (though never freezing). In the summer, owing to the elevation, the heat never gets unbearable, except for a few hours in the afternoon.

The majority of the population of Petalcingo engages in subsistence and commercial farming. The main cash crops are corn, beans, and especially coffee, of which Petalcingo is a
major producer. Diet is supplemented by bananas and various other greenery which grows (and is cultivated) in the corn fields and coffee plantations, as well as chicken and eggs, which the majority of families raise. Many families also keep pigs; however, pork is reserved for special occasions, and the slaughter of a pig is something of a minor festivity in the immediate neighborhood.

While the previous generations worked almost exclusively on their own land, younger people increasingly migrate away from Petalcingo to seek work elsewhere, primarily in Yajalon and Villa Hermosa, the capital of the nearby state of Tabasco.

Roughly half of Petalcingo’s population is Catholic, though very few attend church weekly. The other half is split between Protestants, Episcopalians, and members of the ‘Profesia.’ Petalcingo’s patron saint is Saint Francis, whose holiday (which is celebrated for four days between the 1st and 4th of October) is the largest festival in Petalcingo.

Economically speaking, Petalcingo seems to be located squarely in the middle of the Chiapan scale. There are several multi-story houses, and while the older houses utilize mud-reinforced bamboo construction, virtually all new houses are built with cinderblocks and cement. Unlike some smaller rural Chiapan communities, Petalcingo has running water, as well as many paved roads, and reasonably reliable electrical power (blackouts happen only once every few weeks). The majority of families have radios, quite a few have televisions, and recently even a local Petalcingo radio station has begun broadcasting. Yet Petalcingo does not quite class with the nearby larger towns. While both Tila and Yajalon feature several Internet cafes and a large number of restaurants, Petalcingo has neither, though there are several public telephones located in grocery stores.

Politically, the township is governed by the assembly of land-owning heads of families, a little more than 300 in number. Some years ago Petalcingo was the site of much politically-related violence, including murders. The hostilities were mainly between supporters of the leftist Zapatistas and those of the right-leaning PRI, the traditional power in national Mexican politics. More recently, however, the political climate has calmed down, and though deep political divisions persist (many residents say that the village is divided in two), political violence is relatively uncommon.
The Linguistic Situation

Petalcingo represents the northern-most point in the Tzeltal-speaking zone (see Figure 3). It is surrounded on three sides by Chol-speaking communities, as can be seen from the map below:

![Figure 4: Communities and Languages around Petalcingo](image)

Probably as a result of the contact with Chol, Petalcingo Tzeltal exhibits some unique (for Tzeltal) features. The most noticeable of these is the distribution of the two realizations of the first-person ergative morpheme, /k/ and /j/. The distribution is identical to that in Chol, which differs from all other dialects of Tzeltal. Though there is some evidence (to be discussed below) that /k/ is the more historically conservative reflex of this morpheme, it is likely that contact with Chol had a role in Petalcingo Tzeltal’s preservation of the more conservative form.

At present, however, there is no evidence of intensive contact with Chol speakers: when Petalcingo residents travel to sell or purchase supplies, the preferred trade center is Tzeltal-speaking Yajalon, rather than Chol-speaking Tila, though the two are roughly equidistant from Petalcingo, and Tila is the local administrative center. It is possible that the trade with Tzeltal-speaking people is a relatively recent phenomenon, and is a result of contemporary improvements in transportation infrastructure. Whatever its nature, it appears that there are certain “normalization” pressures on the Petalcingo Tzeltal speakers. Perhaps as a result, some younger speakers have a more classic Tzeltal distribution of the 1st-person ergative prefix.

The majority of the population of Petalcingo is bilingual in Tzeltal and Spanish. While monolingualism is more common in the older generation, virtually all the residents under the age of 30 are bilingual. A few members of the community also speak Chol, but for most people in Petalcingo knowledge of Chol is limited to a few words. Spanish is the language of education, commerce, and government, as well as much of the liturgy. All of the broadcast programming available in Petalcingo (including Petalcingo’s own radio station) is exclusively in Spanish. Most children attend local schools at least until the middle grades of ‘segundaria’ or middle school. The education is conducted almost exclusively in Spanish: while there is

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5 The Yajalon dialect of Tzeltal features regular (for Tzeltal) distribution of /k/ and /j/ 1st-person ergative morphemes.
one bilingual school in Petalcingo, most of the teachers even at this school do not speak Tzeltal, and the goal is usually to move the pupils into Spanish-only education.

Many families where young children are present now speak Spanish in their homes. While the parents in these families grew up in monolingual Tzeltal homes, they feel that their children will benefit from a better command of Spanish in school or when searching for work, and that the kids “will learn to speak Tzeltal anyway.” At the same time, some older members of the community express frustration at what they see as the young people’s lack of desire to speak Tzeltal.

About This Thesis

Nine months of fieldwork on an under-researched language is not nearly enough time to accomplish much of anything, or at least this was the situation in my case. Perhaps if one knows in advance what one would like to research, an in-depth investigation of a single phenomenon is possible in such a limited timeframe. Unfortunately, most of my trips to Petalcingo were not made with a particular investigative topic in mind, but rather with the idea to learn as much about the language as possible. Therefore the inadequacies of my research will become patently obvious to an astute reader, and I beg the reader’s indulgence in advance. I try to note, wherever possible, both the cases in which I do not feel at ease in making a judgment, and areas in which my understanding of Tzeltal grammar is not deep enough.

These faults of the present work notwithstanding, the stance adopted in this thesis is formal in a sense that absent compelling reasons to the contrary, the most attractive analysis treats like forms as instantiations of one and the same entity. Thus it is assumed wherever plausible that identical forms are not syntactico-semantically disjunctive homophones. The philosophical underpinnings of such a move derive from the assumption that we (or I in particular) do not yet know all there is to know about the world’s languages; that is, without a formal (in the preceding sense) analysis, we may fall into the trap of force-fitting unexpected or heretofore unseen linguistic phenomena into the mold of already well-studied languages. There are many historical examples of this kind of analysis, that is, one that overlooks interesting linguistic facts; however, one seems particularly relevant here: in the first half of the previous century many ergative languages were analyzed as lacking active voice and instead only featuring some kind of passive. While this analysis captured an important intuition, and one that has proven to be a factor in the diachronic analysis of ergative languages, it obscured the basic facts of the languages under scrutiny. It may be the case that the “form first” principle may occasionally be compromised in order to save a particular analysis in this thesis, but I hope the benefits of such an analysis are seen to outweigh the possible injustice perpetrated on the language itself. In other instances in which an identical form is given divergent treatment, the culprit will probably be the author’s imperfect knowledge of Petalcingo Tzeltal grammar.

I’ve tried to use textual examples as much as possible, rather than elicited ones. The pitfalls of elicited examples are well known, and besides being more lively, the textual examples may offer glimpses of phenomena that this investigator may have mis-analyzed, or had not thought to pursue. However, since the dialect under investigation is understudied the textual corpus at my disposal is not particularly large. As a result, many of the examples in this thesis still come from elicitation sessions. With a view towards possible analyses different from mine, the theoretical claims advanced in this thesis are generally not pressed in the examples.
This means that if a null agreement is proposed (for example, with all intransitive auxiliaries, in Chapter 2), the null agreement morpheme only appears in the proposed morpheme divisions where directly relevant, that is, not outside of the context in which this theoretical claim is advanced. This practice should not be taken as a sign that the claim is abandoned, but rather as an acknowledgement of the possibility that a better analysis could be proposed.

Disclaimers and manifestos aside, this thesis is organized as follows: the first half (contained in Chapter 1) is a very partial grammatical sketch of the Petalcingo variant of Tzeltal. The rest of the present thesis presents an analysis of some interesting phenomena in this language. Chapter 2 analyzes participle constructions. It is argued that the -el participles in Tzeltal are nominal forms, which explains several of their curious grammatical properties. This analysis is then extended to the -bel participles. Although these seem to be in similar distribution to the -el participles, their nominal properties are much more open to question.

In the latter half of the chapter, a nominal analysis of all transitive verbs is considered. While this analysis is found to present some advantages, it is judged to be premature based on a number of formal criteria. Chapter 3 considers the striking phenomenon of identical ergative and possessive marking. In keeping with the formal orientation of this thesis, the nature of these markers is examined first: they are argued to be clitics, rather than affixes, as has previously been thought. The latter half of the chapter examines the phenomenon of identical ergative and possessive marking in a broader context of world’s languages, from functional, typological, diachronic, and syntactic perspectives. Following the conclusion, several Petalcingo Tzeltal texts are included for reference.
Chapter 1
A Grammatical Sketch of Petalcingo Tzeltal

This chapter is an attempt to provide a grammatical overview of Petalcingo Tzeltal. While necessarily quite partial, the background provided in this chapter will be important for understanding the points I will argue in the chapters that follow. Also, as Petalcingo Tzeltal has not received much attention from linguists to date, my hope is that the present chapter may be useful in its own right.

Phonetics and Phonology
The phonology of Petalcingo Tzeltal is fairly straightforward. Although some phonological rules serve to obscure morpheme and word boundaries, for the most part the surface form reflects the underlying phonological structure relatively transparently. On the other hand, the absence of complex phonological rules and lack of features such as vowel harmony sometimes makes it difficult to identify word boundaries independent of speaker judgments.

Phonemic Inventory
The phonemic inventory of Petalcingo Tzeltal is unremarkable: the vowel system is one of the most common 5-vowel types, while the main distinguishing feature of the consonant system is a presence of ejectives, which is typical for many Mayan languages.

Consonants
Petalcingo Tzeltal features the following phonemic consonants:

<table>
<thead>
<tr>
<th></th>
<th>Bilabial</th>
<th>Alveolar</th>
<th>Post-Alveolar</th>
<th>Velar</th>
<th>Glottal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stops</td>
<td>/p/</td>
<td>/b/</td>
<td>/t/</td>
<td>/k/</td>
<td>/ʔ/</td>
</tr>
<tr>
<td>Ejective Stops</td>
<td>/p^/</td>
<td>/b^/</td>
<td></td>
<td>/k^/</td>
<td></td>
</tr>
<tr>
<td>Nasals</td>
<td>/m/</td>
<td>/n/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rhotics</td>
<td>/r/</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affricates</td>
<td>/ts/</td>
<td>/ch/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ejective Affricates</td>
<td>/ts^/</td>
<td>/ch^/</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fricatives</td>
<td>/s/</td>
<td>/x/</td>
<td>/h/</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approximants</td>
<td>/l/</td>
<td>/y/</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Consonants

Several of the phones listed above necessitate further explanation. Some authors posit that there are no voiced stops in Tzeltal and other related Mayan languages, and that the putative
voiced bilabial stop is rather an implosive (Dayley 1981 cites Kaufman 1971, but that work seems to assume a voiced plosive as the underlying phoneme). Kaufman 1972 posits an implosive for the proto-language, while listing a voiced stop as part of the phonemic system of Petalcingo Tzeltal. The devoicing rule application (see “Lenition” on page 13, below) to this phone suggests that whatever its phonetic properties, for this dialect the voice stop analysis may be preferable. In either case, very little in the present work hinges on one analysis or the other.

The /j/ versus /h/ distinction has a phonemic status in Petalcingo Tzeltal, unlike that in some other dialects. In Bachajon Tzeltal (Slocum, Gerdel, and Cruz Aguilar 1999) both fricatives have full phonemic status, while in general in Tzeltal these phones are considered to be allophones of the same phoneme (Sánchez Gómez et al 2003, and Polian 2003b). In Petalcingo Tzeltal these seem to have a phonemic status, but one that does not bear a high functional load: there are a few minimal pairs, such as in (1), where the back fricative is the distinguishing feature; however, most of the time, the distribution of these phones is complementary. In some phonological environments, it seems that an underlying /h/ is realized as [j].

(1)  
y-ajan  y-ahan  
POSS:3-corn cob  POSS:3-under  
‘his/her corn cob’  ‘under it’

Kaufman 1972, on the basis of the phonemic back fricative distinction, voiced bilabial plosive, and other phonetic features groups Petalcingo Tzeltal with Bachajon as one of the seven phonemic systems he recognizes in current Tzeltal. It seems, however, that the functional load of /h/ vs. /j/ appears to be smaller in Petalcingo then in Bachajon, though it bears mentioning that in my limited contact with Bachajon speakers the phonology of /h/ vs. /j/ sounded similar to that in Petalcingo Tzeltal. In general, the /h/ vs. /j/ distinction posed significant challenges for me. Though all speakers had the /yajan/ /yahan/ distinction, the frontedness of articulation seemed to vary between speakers. Moreover, when overlaid on top of the vowel aspiration (discussed in the next section), the phonology of /h/ vs. /j/ appeared particularly intractable. For example, the morpheme used to derive the middle voice verbs in Tzeltal is an infix consisting of these two back fricatives: when added to a non-aspirated vowel root the infix seemed more like /h/, while in an aspirated root it was pronounced more like the /j/ in chij or yajan. As a result, there are inconsistencies in my transcription of these phones: I have standardized the transcription of some lexemes (like laj, for example) where I am sure that whatever the nature of the underlying fricative, the morpheme remains the same, however, with other morphemes and lexemes the transcription may alternate between /h/ and /j/, depending on the speaker, and how I heard the phone.

Two of the phones listed above have a rather marginal status: the rhotic /r/ and the bilabial approximant /w/. The rhotic appears in very few roots, and as the “native” pronunciations of some loan words indicate, its distribution may be severely restricted. For example, it seems that it cannot appear word-finally. The following example shows a loanword, and its standard pronunciation in Petalcingo:

(2)  
poder  →  [porel]

The 1st-person ergative exclusive morpheme sometimes features a /r/ phone and sometimes not, even with the same speaker.
The bilabial approximant, /w/, when occurring in roots, is heavily velarized in Petalcingo
Tzeltal, to the point of acting like a velar for the purposes of certain phonological rules (see
“Assimilation,” on page 12, below):

(3) jaʔin winiki → [xaʔiŋwɪˈiki]

Though the velarization is stronger when followed by a high, front vowel, all roots exhibit it
to a certain degree. The phone /w/, when in roots, always occurs as the initial consonant of
the root, never the final. In inflectional morphology (such as the pre-vocalic 2nd-person
ergative marker -aw) the /w/ is never velarized.

Though phonetically an glide, there is evidence that /w/ should be considered a consonant
in Tzeltal. First, it acts like a consonant for the purposes of devoicing rules. Secondly,
counting /w/ among consonants would allow us to consider roots such as wah (“tortilla”)
to have the canonical CVC shape, rather than the unusual VVC shape. Finally, it is never
syllabified into a nucleus.

In addition to the consonantal phonemes listed above, which are judged to be “native,”
many Spanish phonemes (such as /d/, /g/, /f/) also seem to have phonemic status in some
speakers’ idiolects.

Vowels

Tzeltal features a typologically quite common five vowel system, shown below:

\[
\begin{align*}
/i/ & \quad /u/ \\
/e/ & \quad /o/ \\
/a/ &
\end{align*}
\]

Table 2: Vowel System

Some authors argue that Tzeltal maintains a phonemic distinction between short and long
vowels. For Petalcingo Tzeltal, this is one way of looking at some phonemic contrasts
present in the language: some words are distinguished solely by voiceless aspiration
following the vowel of the CVC root. This difference could be analyzed as a vowel length
distinction (which allows the analyst to preserve the abstract “purity” and simplicity of CVC
roots), or as a separate phone (a voiceless glottal fricative), which allows the analyst to
preserve the simplicity of the vowel system. Attinasi 1973, argues for vowel length
distinction in Chol, and relates it (for Mayan languages in general) to the aspiration, or
occurrence of /h/. Here, I will transcribe the aspirated roots with a separate [h] segment;
however, little in this work depends on this analysis. Some relevant examples:

(4) a. tuhl vs tul
    ‘one (person)’ ‘to cut’

b. yahl vs yal
    ‘to fall’ ‘his child’
c. mahts\(\hat{\text{v}}\) vs mats\(\hat{\text{v}}\)
‘to drain’ ‘posol’

The aspiration of the vowels seems to differ from speaker to speaker.

**Phonological Processes**

What follows is a rough-and-ready description of some of the phonological rules I’ve been able to identify in this interesting dialect. In general, in Petalcingo Tzeltal, epenthesis and (vowel) deletion seem to be the only rules limited to the domain of the phonological word. The other phonological rules (such as degemination, assimilation, etc.) seem to frequently operate independently of word boundaries.

**Assimilation**

There are several different types of assimilation in Petalcingo Tzeltal, and each one will be described in turn below.

(i) The alveolar nasal assimilates to the following plosive’s or nasal’s place of articulation. This phonological rule seems to work across word boundaries:

\[(5)\]
\[
a. \text{yan parte} \rightarrow [\text{jamparte}]
b. \text{jun baso} \rightarrow [\text{xumbaso}]
c. \text{onkonak} \rightarrow [\text{onkonak}]
\]

The bilabial nasal does not assimilate:

\[(6)\]
\[
\text{cham + tes} \rightarrow [\text{tʃamtes}]
\]

(ii) Alveolar and post-alveolar fricatives, affricates, and stops assimilate in place of articulation to the following (post)alveolar fricatives, affricates, and stops:

\[(7)\]
\[
a. \text{och spasik} \rightarrow [\text{otspasik}]^7 
b. \text{s + chij} \rightarrow [\text{ʃtʃix}]
c. \text{chololet + xanix} \rightarrow [\text{tʃololetʃaniʃ}]
\]

Example (7c) requires slight elaboration: normally the /t/ in Tzeltal is dental or alveolar, but in this case the word-final /t/ of *chololet* assimilates to the post-alveolar place of articulation of the following phone, [ʃ].

(iii) The glottal fricative assimilates in place of articulation to the following vowel:

\[(8)\]
\[
a. \text{kta(h)ix} \rightarrow [\text{ktavij}]
\]

This phonological rule demonstrates an allophonic status of the two back fricatives /h/ and /j/ in some environments.

---

^6 Posol is a traditional comestible which is often consumed while working in the fields. It is corn gruel made by mixing ground cooked corn with water.

^7 In this example and below, various phones are eliminated by the regular process of degemination, as described in “Lenition,” below.
(iv) There is a voicing assimilation in the same environment as described above:

\[
\begin{align*}
\text{(9)} & \quad \text{a. } \text{kta(h)}\text{i}x & \rightarrow & \text{[kta} \gamma \text{i]}\\
\end{align*}
\]

**Epenthesis**

The most common epenthesis is that of a glide to break up two vowels:

\[
\begin{align*}
\text{(10)} & \quad \text{a. } \text{s-}\text{majli} + \text{-on} & \rightarrow & \text{smajliyon} \\
& \quad \text{b. } \text{s-lo7lo} + \text{-on} & \rightarrow & \text{slo7loyon} \\
& \quad \text{c. } \text{mil} + \text{a } +\text{ik} & \rightarrow & \text{milayik} \text{ [HBC:0418]} \\
\end{align*}
\]

Sometimes it appears that a glottal fricative is epenthesized:

\[
\begin{align*}
\text{(11)} & \quad \text{a. } \text{ermanno} + \text{etik} & \rightarrow & \text{ermanojetic} \text{ [HBC:22:03]} \\
& \quad \text{b. } \text{s-ta(h)} + \text{ik} & \rightarrow & \text{stajik} \\
\end{align*}
\]

However, I would argue in this case that V-final roots in Tzeltal actually end with a glottal fricative, and loanwords (11a) are normalized to the same pattern. The glottal fricative is either deleted or weakened word-finally, but then shows up when a V-initial suffix follows. Vowel epenthesis is not attested.

**Lenition**

(i) All consonants are degeminated. This rule operates after the assimilation rules, as can be see in (7), and below:

\[
\begin{align*}
\text{(12)} & \quad \text{ton} + \text{mut} & \rightarrow & \text{tomut} \\
& \quad \text{‘rock’} + \text{‘chicken’} & \rightarrow & \text{‘egg’} \\
\end{align*}
\]

(ii) There are two kinds of vowel deletion in Petalcingo Tzeltal. The first is a strategy for resolving vowel hiatus, which is not well-tolerated in Petalcingo Tzeltal:

\[
\begin{align*}
\text{(13)} & \quad \text{a7i} + \text{be} + \text{on} & \rightarrow & \text{a7ibon} \\
& \quad \text{‘listen to me’} & \rightarrow & \text{‘listen to me’} \\
\end{align*}
\]

As mentioned above, Petalcingo Tzeltal also uses epenthesis to break up vowel clusters. The exact conditions governing the application of epenthesis versus deletion for vowel hiatus resolution are not clear to me. The be + absolutive suffix is the only situation I know of in which a vowel deletes in a vowel hiatus, so one possible generalization is that there is a morpho-phonological rule that acts specifically on the -be suffix. \(^8\) Whatever the generalization, the deletion rule seems to be sensitive to possible undesirable homophony: in the combination -be + -el, the ee vowel cluster is not subject to vowel deletion, and instead a glide is epenthesized. The vowel deletion, I hypothesize, is probably blocked by the existence of a participle-forming suffix -bel.

\(^8\) Another example could be the transitive imperative formation, described in “Imperative,” below, though there the issues are not particularly clear-cut.
Syncope is another phonological operation that deletes vowels in Petalcingo Tzeltal:

(14) sbhehalal → sbhlal

The conditions under which syncope occur are not very clear to me.

(iii) The voiced consonants /b/, /l/, and /m/ devoice word-finally, or at a morpheme boundary when not followed by a vowel. For /l/ and /m/, part of the conditioning environment is the quality/aspiration of the vowel preceding (see “Vowels” on page 11, above). The phones /l/ and /m/ are devoiced word-finally only when a long vowel/aspiration/glottal fricative precedes:

(15) a. [jahl] vs [jahlij]  
(he/she/it) fell’  ‘(he/she/it)she already fell’

b. sk^ab → [sk’ap]  
‘his hand’  ‘his hand’

c. [swap] vs [swabal]  
‘his bed’  ‘his bed’

d. [sjam] vs [jahm] ̥  
‘he closed it’  ‘it closed’

It is also possible that /n/ devoices word-finally in casual speech as well. In my data I have one example of this:

(16) jujun winik → [xuxuŋ̥winik] or [huhuŋ̥winik]  
‘every man...’

The following example illustrates an interesting difference between clitics -ix (already), -e, and -wan (evidential), which seems to speak to the consonantal status of the /w/ phone:

(17) a. yahl + ix → [jahlij]  

b. yahl + e → [jahle]  

c. yahl + wan → [jahľwan]

It appears that in some words the word-final devoicing is blocked, though the reasons for this are not clear at this point:

(18) tuhl → [tuhl]  
‘one (person)’

(iv) The ejective velar stop /k^/ reduces to a glottal stop in the environment V_V or word-finally:

(19) a. tak^in → [taʔin]  
‘metal’

b. lok^ → [loʔ]  
‘exiting’
Reduplication

Reduplication in Petalcingo Tzeltal generally reduplicates the entire (usually CVC) root, such as:

(20)  
   a. lum-lum  
        ground-REDUP  
        ‘dirty’  
   b. tson-tson  
        hair-REDUP  
        ‘hairy’

However, there are also cases where a C<sub>1</sub>VC<sub>2</sub> root is reduplicated C<sub>1</sub>VC<sub>1</sub>VC<sub>2</sub> (more common), or even C<sub>1</sub>VC<sub>2</sub>VC<sub>2</sub> and C<sub>1</sub>VC<sub>2</sub>V:

(21)  
   a. s-lo7-lo-y-on  
       ERG:3-lie-REDUP-EPN-ABS:1  
       ‘(he/she) deceives me’  
   b. nuts-uts-in-a  
       chase-REDUP-?-IMP  
       ‘Get it out of here!’ [HBC:1457]

Some of the cases of partial reduplication can be explained by phonological rules prohibiting certain consonant clusters (such as, [tl] in the case (21a), above). This does not, however, account for why the final consonant is not reduplicated in the same example.

Syllabification and Stress

The syllables in Petalcingo Tzeltal generally have obligatory onsets. Branching onsets are common, but branching codas seem to be disallowed, except if we assume that the “vowel-lengthening” /h/ is a segment. Without this assumption the syllable structure looks like this:

(22)  
      (C)CV(C)

If we do assume that the pre-consonantal /h/ is in fact a segment, we need to revise our syllabic structure to include branching codas, since we get examples such as:

(23)  
      jtehk.lum

Stress is one of the phenomena in Petalcingo Tzeltal that is still quite obscure to me. While Haviland (p.c.) suggests that stress in Mayan languages like Tzotzil and Tzeltal falls on the root, Kaufman 1971 and p.c. argues that word-stress in Tzeltal is word-initial. In my experience, clause-level (prosodic stress) in Petalcingo Tzeltal serves to at least partially obscure word-level stress. As a result I do not have much to say about stress in this language.

Morphology

Tzeltal morphology tends to be fairly agglutinating. On the classical index of synthesis (tracing back to Sapir 1921), Tzeltal ranks probably somewhere between the middle and the synthetic end of the scale: including elitics, five (or more) morphemes per word are not uncommon. Polysynthesis (more than one root per word, i.e. incorporation) is unattested. The index of fusion of this language is fairly low: while epenthesis and syncope do serve to
obscure morpheme boundaries, fusion of morphemes of different categories (portmanteau morphemes) are only attested in a few cases (such as in “Ossified Portmanteau Morphemes” on page 50, below).

**Morphophonemics**

Many Mayanists point out that the canonical shape of Mayan roots is CVC. This is certainly true for Petalcingo Tzeltal: the vast majority of roots are CVC, though some apparently non-compositional CVCVC roots are also found. The table below illustrates the morphological shape of Petalcingo Tzeltal roots, affixes (prefixes and suffixes), and clitics:

<table>
<thead>
<tr>
<th>Lexical Class</th>
<th>Shapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>roots</td>
<td>CVC, CVCVC</td>
</tr>
<tr>
<td>suffixes</td>
<td>-CV, -VC, -CVC, -VC</td>
</tr>
<tr>
<td>prefixes</td>
<td>C-</td>
</tr>
<tr>
<td>enclitics</td>
<td>-V, -VC, -C</td>
</tr>
<tr>
<td>proclitics</td>
<td>C-, V-</td>
</tr>
</tbody>
</table>

*Table 3: Phonological Shape of Lexical Types*

There is also a significant class of VC roots that, at least on the surface, appear with a root-initial vowel. When not prefixed, these usually appear with a word-initial glottal stop. Aissen 1987 argues that the VC roots have an underlying glottal stop (meaning that they are CVC in the lexicon), and the glottal stop is deleted following an ergative prefix.

**Morphological Strategies**

The main morphological strategy employed by Petalcingo Tzeltal is suffixation. Most derivation (other than compounding) and inflection is expressed by means of suffixes, as there are very few prefixes in Petalcingo Tzeltal. Reduplication plays a marginal role in this language. Some examples are given below:

(24) a. *lot + REDUP* → lolo
   ‘lie’
   ‘deceive’

b. *k’in + REDUP + PLUR* → k’inik’intik
   ‘celebration’
   ‘many celebrations (all over)’

c. *sak + REDUP* → saksak
   ‘white’
   ‘kind of white; almost white’

Infixation (or ablaut, depending on your view of the long vowel issue: see “Vowels,” above) occurs as a derivational strategy for deriving verb stems from positional roots, or for inflecting a transitive verb as a middle (middles are discussed in “Antipassives, Passives, and Middles,” on page 55, below). Generally, in Tzeltal literature the middle-deriving infix is glossed as /j/, however, with unaspirated vowels it sounds more like /h/ (see “Consonants” on page 9 above). Some examples:

(25) a. *nak-* → nahk
   ‘seated’
   ‘to sit down’

b. *tehk-* → tejk
   ‘standing’
   ‘to stand up’
Root Classes

Based on morphological and distributional evidence I distinguish three major open root classes in Petalcingo Tzeltal: nouns, verbs, and positional roots. While many criteria might be applicable, the ones listed below seem the most robust:

(i) Nominal and verbal roots directly form stems that can be main predicates in a clause. Consequently, we may see a bare noun or a verb directly taking absolutive morphology, which a positional root (with no overt derivation) may not do.

(ii) Only nouns may directly form stems that can function as an argument to a (main) clause. Positional (and verbal) roots require derivational processes to form such stems.

(iii) Only nouns take the nominal plural suffix -etik.

These criteria yield the following typology of root classes:

<table>
<thead>
<tr>
<th></th>
<th>Nominal</th>
<th>Verbal</th>
<th>Positional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct predicate stem</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>Direct argument stem</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>Nominal plural morphology</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
</tbody>
</table>

Table 4: Roots Classes

The more “obvious” criteria for identifying word classes, such as using inflectional markers, are of little immediate help in the identification of word classes, as most types of stems are able to take absolutive cross-reference markers, just like verbs. Ergative markers, which appear on transitive verbs, are homophonous with possessive cross-reference markers, which appear on nouns and noun phrases.

Are There Adjectives in Tzeltal?

In carving up the root pie, I depart from Polian 2003b, who distinguishes a fourth major lexical class: adjectives. Modifiers of noun phrases in Petalcingo Tzeltal are characterized by the -Vi suffix. For example:

(26) sak-il winik
white-MOD man
‘white man’

However, by all the criteria above, roots that form modifier stems fall into the noun class:

(27) a. sak te winik-e
white DET man-CL.
‘the man is white’

b. tsak-a me sak-e
grab-IMP DET white-CL.
‘Grab the white one!’

c. ka tsak me sak-etik
ICMP.ERG:2 grab DET white-PL
‘You take the white ones’

Polian 2003b identifies another criterion for nounhood: the ability to be modified by a relative clause. By this criterion too, the stems that form modifiers are nouns:
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

Finally, though this is uncommon (due to pragmatic awkwardness), many canonical nouns also form modifier stems with the \[-Vl\] suffix:

\[(29)\]  
\[\text{chenek}^-\text{i}l \text{ waj}\]  
\[\text{bean-MOD tortilla}\]  
\[\text{‘bean tortilla’}\]

One could of course argue that the nominal roots that do appear as modifiers with \[-Vl\] suffix are polyvalent, but this would be adding needless complexity. Thus I conclude that Tzeltal adjectives are in fact nouns.

**Polyvalence**

Many Mayanists (Haviland 1992, Lois and Vapnarsky 2003, Polian 2003b, Coon 2004) have argued for polyvalence, or root underspecification as a widespread phenomenon in Mayan languages. This seems to contradict the assertion in Dixon 1992 that “each semantic type has a basic or ‘norm’ connection with a single part of speech.” There is one class of Tzeltal roots that does form two types of stems, however, the polyvalence here is not clear-cut. All positional roots regularly derive predicative stems with the \[-Vl\] suffix (where \(V\) is the stem vowel). Positional roots also derive verbal stems via various verbalizing affixes; however, a large number of positional roots also derive transitive stems directly, with no affixation. As can be seen from the following table the semantics of the verbs are not readily predictable from the predicative stems formed by the positionals:

<table>
<thead>
<tr>
<th>Stem</th>
<th>Positional Gloss</th>
<th>Transitive Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>nuj</td>
<td>face down</td>
<td>to cover</td>
</tr>
<tr>
<td>pak</td>
<td>lying face down with arms out</td>
<td>to fold</td>
</tr>
<tr>
<td>lich</td>
<td>lying face down with arms out, flattened</td>
<td>to press (something) out</td>
</tr>
<tr>
<td>ch`ik</td>
<td>inserted (flat or thin object)</td>
<td>to insert (a flat or thin object)</td>
</tr>
<tr>
<td>jok</td>
<td>hanging</td>
<td>to hook</td>
</tr>
</tbody>
</table>

**Table 5: Identical Stems as Positionals versus Transitive Verbs**

In light of the lack of correspondence of meaning, as well as the fact that affixation is involved in deriving the predicational positional stems in the first place, it is not clear that the term “polyvalence” is appropriate here after all.

Polian identifies a further class of roots which appears polyvalent: these form both verbal stems denoting some action, and a related abstract noun, such as \(k^\text{op}\) (to speak/word), and \(ajk^\text{ot}\) (to dance/a dance). These roots, according to Polian, also may derive other transitive and intransitive verb stems. In Petalcingo Tzeltal this latter process seems to be more common, and little evidence of the kind of polyvalence Polian describes for Oxchuk is in evidence.
**Nouns and Nominal Morphology**

Nouns, as was stated above, can be both predicates and arguments, that is, no copula is needed for an identity-type clause:

(30)  
winik-on  
man-ABS:1  
‘I am a man’

Unlike VPs (verb phrases), nouns may not take aspectual markers, but can appear with a tense marker, to be described below in “Tense and Aspect.”

Nouns in Tzeltal are inflected for number (singular vs. plural), and sometimes take a “gender” prefix. These are the subjects of the next two subsections. Tzeltal does not exhibit morphological case on nouns.

**Number**

The nominal plural marker is the morpheme -etik:

(31)  
a. x-7ajaw-etik  
trensipal  
G-lord of the earth-PL principle  
‘the principal lords of the earth’ [HBC:0031]

b. pues ja7 y-7a7tel te kerem-etik  
well F/C POSS:3-work DET boy-PL  
‘well, the boys’ work’ [HBC:0136]

The unmarked nominal number category is singular, and as in many Mayan languages (and unlike English), in Tzeltal, the use of the plural marker on noun (or plural verb agreement) is optional—lack of plural marking does not mean that the referent cannot be understood as plural:

(32)  
spisil 7a cha7-muh-Ø bahel me j-7onkonak-etik  
all PT again-climb-ABS:3 DIR:away DET G-frog-PLUR  
‘Todos subieron otra vez; All (the frogs) climbed away again’ [PMP-FS2:151]

(33)  
a. laj s-leh-ik te ventana-je  
PFV ERG:3-search-PL DET window-CL  
‘They searched the window’

b. ots s-k^ehlu-Ø ta fwera  
enter watch PREP outside  
‘began to look outside’

c. i mayuk binti laj y-il-Ø  
and NEG.EXIST what PFV ERG:3-see-ABS:3  
‘and there was not anything that they saw’ [AGP-FS:019-021]

(34)  
este pisil 7a lok^-ik ta ahn-el me xux-e7  
this all PT exit-PL PREP escape-PART DET wasp-CL  
‘All the wasps came out’ [PMP-FS2:081]
The example in (32) shows a verb with no plural agreement with a plural nominal argument; if plural verbal agreement was obligatory, we would expect to see it here. Example (33) is a stretch of connected discourse from Appendix A. The first clause (33a) shows that the subject is plural (a boy and his dog), however, in the third clause (33c), the plural agreement is not present. The third example (34) shows a plural subject (with plural verb concord) but without the plural marking on the noun phrase.

**Gender**

There are two noun prefixes, *x-* and *j-* that appear on some nouns, but always in complementary distribution; that is, a noun may take only one of these prefixes. These prefixes are always available with person’s names, *x-* for women’s names and *j-* for men’s names:

(35) a. me *x*-Martaj-e ch^a way nax *x*-k^ot
    DET *x*-Marta-CL two sleep only ICMP-arrive
    ‘la Martha solo dos noches estuvo; Marta only stayed two nights’ [N:0965]

    b. ta s-pat s-nah te *j*-Laloj-e
    PREP A:3-back A:3-house DET *j*-Lalo-CL
    ‘At the back of Lalo’s house’ [PMO-Dir:0027]

These prefixes are also available with some (but not all) animal names, and a particular animal name goes with a particular prefix. There are also pairs of morphologically similar animals (such as frog and toad) where one member of the pair selects one prefix, and the other member selects the other prefix:

(36) a. *j*-onkonak vs. *x*-chuch^ a
    j-frog x-toad

Haviland (p.c.) suggests that these prefixes are remnants of the gender system in Mayan, and the distribution of the prefixes supports this hypothesis. The gender prefixes are always optional, though the gender of the noun, in the case of animals, is invariant. Some nouns never take a gender prefix.

**Pronouns**

As Tzeltal is a pro-drop language, personal pronouns are only used when stressed, or in short, presupposing questions/assertions such as “and you?” The full pronominal paradigm is as follows:

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>jo7on</td>
<td></td>
</tr>
<tr>
<td>inclusive</td>
<td></td>
<td>jo7otik</td>
</tr>
<tr>
<td>exclusive</td>
<td></td>
<td>jo7on(r)otik</td>
</tr>
<tr>
<td>2nd</td>
<td>ja7at</td>
<td>ja7/ex</td>
</tr>
<tr>
<td>3rd</td>
<td>ja7</td>
<td>ja7/tik</td>
</tr>
</tbody>
</table>

**Table 6: Pronominal Paradigm**

The pronouns in Tzeltal could be analyzed as the morpheme *ja7* with a Set B marker, and root vowel harmony to account for the *ja7 / jo7* alternation in 1st-person (see “Topic and Focus,” below for more information).
Inherent Possession and Getting Around It

While possessive constructions are discussed in detail in “Possessive Constructions,” below, it must be noted in this section that some nouns (such as body parts) are obligatorily possessed, while others are normally not possessed at all. While I am unable go into great detail with respect to possession here (see Haviland 1981 an analysis of Tzotzil), I would like to note that some form of the -Vl morpheme can be used to change the “inherent” possession status of a noun phrase:

\[ (37) \]
\[ \text{a. } k^\text{\textasciitilde}x \text{ mi me s-te7-el me spamlej} \]
\[ \text{very much DET ERG:3-tree-PCHG DET valley} \]
\[ \text{‘tiene bastante arbol el valle; the valley has many trees’ [N:1506]} \]
\[ \text{b. } s-bchl-al \]
\[ \text{POSS:3-path-PCHG} \]
\[ \text{‘Its path’ (of the house, the village, etc)} \]

Thus, for example, in (37a) a normally unpossessed noun appears possessed (by an unusual type of possessor, an inanimate object, if a valley may be called such). This appears to require the use of a possession-changing suffix on the possessed noun.

A standard way of responding to “thank you” in Tzeltal provides a nice “minimal pair” of sorts:

\[ (38) \]
\[ \text{a. } mayuk \text{ wokol} \]
\[ \text{NEG.EXIST trouble} \]
\[ \text{‘No problem’} \]
\[ \text{b. } mayuk \text{ s-wokol-il} \]
\[ \text{NEG.EXIST POSS:3-trouble-PCHG} \]
\[ \text{‘No problem’} \]

The second of the above examples features a possessed version of the noun, which, apparently, is generally unpossessed. In order to make it a possessible noun, a -Vl suffix is used.

Another interesting example of the “de-possession” use of the -Vl suffix is the word *chu7il*, which is an affectionate term to refer to an older, unmarried woman. *chu7* means “breast” and is normally obligatorily possessed, as are most body parts. *chu7il*, then, would be a disembodied breast of sorts.

Verbs

As described above, verbs, like nouns, directly form predicate stems, but cannot directly form stems that can be used as arguments to a predicate (though see Chapter 3 where I explore an alternative analysis). In the following sections I will review some aspects of Petalcingo Tzeltal verbs.

Causatives

Petalcingo Tzeltal features one morphological causative which is formed via the -es/-tes suffix. The rules governing the distribution of the two allomorphs of this suffix are not clear to me at this point. This causative is quite productive, and most intransitive verbs can freely take this suffix to form regular transitive verbs:
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

(39) a. laj y-ots-es-Ø
   PFV ERG:3-enter-CAUS-ABS:3
   ‘He/she/it put it (in)’

b. laj s-yahl-tes-on
   PFV ERG:3-fall-CAUS-ABS:1
   ‘He/she/it made me fall’

The causative may not appear on transitive verbs. This may be related to the fact that Tzeltal does not have tri-valent verbs, even in applicative constructions.

The semantic range of the causatives is all the way from direct causative (such as “physically compel”) to indirect causation (such as persuasion). Permissive is not one of the possible meanings of this construction, except in a very narrow sense: example (39b) may mean “he let me fall” in a situation where one person lets go of another’s hand and the second person falls, but (39a) may not mean “he gave me permission to enter.” True permissives are expressed via periphrastic constructions using matrix verbs such as “say,” or “give” (for “allow to eat,” for example).

Transitivizers

The suffix -ta is used in Petalcingo Tzeltal to increase the valence of an intransitive verb. The meaning of the resulting transitive verb is at times quite predictable, and idiosyncratic in other instances. Both are exemplified below:

(40) a. ma-x laj s-bejen-ta-bel-Ø te wakax-e
   NEG-ICMP PFV ERG:3-walk-TRANS-bel-ABS:3 DET cow-CL
   ‘No lo termina de caminar la vaca; She/he does not finish walking the cow’ [N:0486]

b. te pox-e laj s-kol-ta-y-on
   DET medicine-CL PFV ERG:3-grow-TRANS-EPN-ABS:3
   ‘The medicine helped me’

Verbalizers

The suffix -in seems to be one of the morphemes that used to derive verbs from non-verbs. Consider the following:

(41) a. yakal-on ta k^ayoj
   PROG-ABS:1 PREP song
   ‘I am singing’

b. k^ayoj-in-ex
   song-V-ABS:2.PL
   ‘You (pl) sang’

(42) a. ay waj
   EXIST tortilla
   ‘There is/are tortilla(s)’

b. ay-in-on ta Petalcingo
   EXIST-V-ABS:1 PREP Petalcingo
   ‘I was born in Petalcingo’
This suffix seems to regularly produce intransitive stems from non-verbal roots. It appears that this suffix can also be used to increase the valence of an intransitive verb:

(43) a. te ma-ba k-o-ch-in-tik-ix me wokolil
    COMP NEG-ba ERG:3-enter-TR-PL-already DET suffering
    ‘de que no nos metemos con los sufrimientos ya;
    that we don’t put ourselves in trouble’ [N:2015]

b. laj s-laj-in-ik ejuk laj s-tup-ik ejuk
    PFV ERG:3-finish-TRANS-PL also PFV ERG:3-extinguish-PL also
    ‘tambien ya lo terminaron; they already stopped those too’ [Fra1:044]

Another suffix, -oj, may also produce verbal stems, but at present I don’t have enough information to fully describe it. Additionally, there are ways of verbalizing positional stems to be discussed in “Positionals,” below.

**Nominalizations**

Slocum 1948 describes a bewildering number of nominalizations for the Oxchuk variant of Tzeltal. Not all of these have been systematically investigated for Petalcingo Tzeltal, thus I will only make reference to those that are known to me to occur. Below (in Chapter 2) I will argue that the participle-forming suffixes -el and perhaps -aw should be analyzed as nominalizers, their function appears to be more syntactic and less derivational (perhaps akin to some English gerunds). Therefore I will not describe the participle-forming suffixes in this section.

**Agentive (j-)**

The j- prefix, perhaps related to the putative gender marker (see “Gender” on page 20, above), is used to derive nouns which describe a person involved with the action of the verb from participle-like forms. Some examples are shown below:

(44) a. j-mil-aw
    AGNT-kill-PART
    ‘killer’

b. j-pas-aw
    AGNT-do-PART
    ‘curer’

These prefixes have been termed “agentive” in the Mayan literature, though this may be a misnomer, as they seem also to appear on nominalizations (participles) that are patient oriented:

(45) a. j-mil-el
    AGNT-kill-PART
    ‘killed person’

b. j-maj-el
    AGNT-hit-PART
    ‘hit person’
Place where X

There are two nominalizations in Tzeltal that derive a noun that refers to a place where the activity denoted by the verb occurs. For transitive verbs two nominalizations are available: -ib patient-oriented (a place where X is done to P) and -ibal agent-oriented (a place where A does X). To wit, the following “minimal pair” may be adduced:

(46)  a. s-we7-ib mut
POSS:3-eat-N chicken
‘place where chickens eat; trough’

b. s-we7-ibal mut
POSS:3-eat-N chicken
‘place where chickens are eaten; fried-chicken restaurant’

Intransitive verbs may take either nominalizer, perhaps depending on the semantics of the verb (thereby making a distinction between unergative and unaccusative verbs), though it is possible that the same verb may appear in both nominalizations. Some examples:

(47)  a. yahl-ib ja7
fall-N water
‘waterfall’

b. way-ibal
sleep-N
‘bed’ [PMP-FS2:0015]

c. nak-aj-ibal
sit-V-N
‘chair’ [PMP-FS2:008]

There also appear a number of secondary uses, where the resulting nominal has nothing to do with a place. These are shown below:

(48)  a. sut-ib me k^op-e
return-N DET word-CL
‘answer to the utterance’ [SP:0247]

b. y-ahch^-ib k-7otan-tik
POSS:3-wet-N POSS:1-heart-PL
‘moistener of our hearts (liquor)’ [HBC:0171]

c. y-al-ib
POSS:3-child-N
‘his/her daugther-in-law’ [SP:0669]

d. ma7y-uk s-laj-ibal
NEG.EXIST-IRR POSS:3-finish-N
‘it does not have an end’ [N:2321]

While it is possible to interpret the examples (48a) and (48b) above as somehow place-related (noting that in (48b) it is certainly not the hearts that are doing the moistening), the (48c) example nominalizes an already nominal stem, and the result is not at all place-related.
It may be tempting to analyze the -ibal suffix as the -ib suffix plus the possession-changing suffix -VI. Semantically this analysis would pose no problems, as the concept of “possession” is a rather fluid one, both in the world’s languages and in Tzeltal. However, formally, the fact that the pre-/-l/ vowel is completely invariant in the -ibal suffix contradicts this analysis.

-ol

Slocum 1948 describes -ol as a nominalizer for certain verbs. This seems to be the case for Petalcingo Tzeltal, though it is difficult to say specifically what kinds of verbs can take this nominalizer, or to characterize (semantically) the kinds of nouns it produces. Some examples are shown below:

(49)  
  a. s-jel-ol  
      POSS:3-change-N  
      ‘his substitute’ [HBC:0681]
  b. toj-ol  
      pay-N  
      ‘pay; money; price’
  c. tsob-ol  
      gather-N  
      ‘many’

Positionals

Positionals constitute a class of roots particular to Mayan languages. They encode spatial configurations and relations, sometimes with a bewildering degree of specificity (see Haviland 1992). In Petalcingo Tzeltal the majority of positional roots do not directly form inflectable stems, though some do, perhaps as a result of polyvalence (as described in “Polyvalence” on page 18, above).

Positional roots form two kinds of primary stems: predicational and verbal. The predicational stems are formed via the -VIl suffix, where V is the root vowel:

(50)  
  a. tey laj jok^-ol s-na xux-7a  
      there EVID hang-PRED POSS:3-house bee-DIST  
      ‘There was a bees’ nest hanging there’ [PMP-FS2:066]
  b. ja7-in winik-in-i nak-al  
      F/T-DEM man-DEM-PROX seat-PRED  
      ‘This man is seated’
  c. luch-ul-ix 7a me ala wits^ kerem-e  
      perch-PRED-already DIST? DET DIM small boy-CL  
      ta y-ajkol-al me te7e  
      PREP POSS:3-top-PCHG DET tree-CL  
      ‘And the small boy was perched already on top of the tree’ [PMP-FS2:141]

For many Petalcingo Tzeltal speakers these predicational positional stems can only be predicates: when used to modify a noun they must be secondary predicates, and thus cannot appear directly before the head nouns after the determiners, where regular modifiers appear. For some, however, these -VIl positional stems can be modifiers as well (like the perfect verb
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

forms, see “Perfect and Resultative Constructions” on page 58, below) but they are defective as such: most modifiers in Petalcingo Tzeltal appear between the possessive marking and the head noun, while the positional modifiers, even for the speakers that accept them, cannot do so.

The second kind of stem the positional roots form are verbal stems. Here there are many options for the Tzeltal speaker, and I am not (yet) in the position to describe them in the detail they deserve; thus what follows is rather incomplete.

There seems to be at least two verbalization affixes that form intransitive stems from positional roots. The most common of these is the -l suffix:

\[(51)\] nak-l-an
sit-V-IMP
‘Sit down!’

John Haviland (p.c.) suggests that this form may be analyzed as nak-al-an (sit-PRED-IMP), with a syncope deleting the vowel. This is attractive since it would avoid postulating another verbalizer (-l). However, the rules of Tzeltal vowel syncope are not entirely clear to me,\(^9\) so I will avoid committing to either analysis, and provisionally continue to gloss -l as a verbalizer.

Also a combination of the -j- infix and the suffix -aj seems to be available:

\[(52)\] najk-aj-on
sit.V-V-ABS:1
‘Me senté; I sat down’

Of the two, the latter (-j + -aj) seems to produce more verb-like forms, based on the fact that these stems are inflected more like regular intransitive verbs (-el in the progressive):

\[(53)\]

\[a.\] yakal-on ta nak-l-ej
PROG-ABS:1 PREP sit-V-PART
‘I am sitting down’

\[b.\] yakal-on ta najk-aj-el
PROG-ABS:1 PREP sit-V-PART
‘I am sitting down’

\[c.\] yakal-on ta way-el
PROG-ABS:1 PREP sleep-PART
‘I am sleeping’

\(^9\) There is more at stake here than syncope rules, however. The nak-al-an (sit-PRED-IMP) analysis implies that imperatives may appear on non-verb forms. It seems that this is not the case, at least with nouns:

\[(1)\]

\[*\] winik-an
man-IMP
‘Be a man!’

This does not necessarily mean that imperatives cannot appear on predicative positionals. It is also possible that -an is not just an imperative marker. For an example see (54).
Example (53c) shows the standard way of forming progressive constructions with intransitive stems: the verb takes the nominalizing participle suffix -el. The -j- + -aj positional verbal stem (53b) inflects similarly, while the -l form takes a distinct -ej suffix (53a).

Transitive stems may be produced in two ways: from the verbalized intransitive stems via a causative suffix -(t)es (described above), or via the -j- infix in combination with the suffix -an:

\[(54) \quad \text{s-najk-an-on} \]
\[
\text{ERG:3-sit.V-V-ABS:1}
\]
\[\text{‘Me sentó; He/she/it seated me (perhaps by force)’}\]

**Compounding**

Petalcingo Tzeltal has productive lexical compounds. For example:

\[(55) \quad \text{tomut (ton + mut)} \]
\[\text{‘egg’ (rock + chicken)}\]
\[(56) \quad \text{tultuxtak^in (tultux + tak^in)} \]
\[\text{‘helicopter’ (dragonfly + metal)}\]

Petalcingo Tzeltal also has what might be called “syntactic” compounds such as jol na (“roof,” literally “head house”), whose constituents are transparent to syntactic processes. Compare:

\[(57) \quad \begin{align*}
\text{a.} \quad & \text{k-tomut (ton + mut)} \\
& \text{POSS:1-egg} \\
& \text{‘his egg’} \\
\text{b.} \quad & \text{s-jol k-na} \\
& \text{POSS:3-head POSS:1-house} \\
& \text{‘my roof’, or ‘the roof of my house’}
\end{align*}\]

In (57a), a “regular” compound is possessed, and the possessive marker appears on the outside of the word/phrase. In (57b), a “semantic” compound, the possessive marker that applies to the entire compound appears only on the head noun of a formally possessive construction, with the possessive marker on jol cross-referencing the head noun na.

**Minor and Functional Classes**

This section describes the minor and the functional word classes of Petalcingo Tzeltal, namely the adverbs, relational nouns, and prepositions.
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

Adverbs

Adverbs are a rather small class in Petalcingo Tzeltal. Some of these are listed in the table below:

<table>
<thead>
<tr>
<th>Lexical Item</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>wen10</td>
<td>intensifier</td>
</tr>
<tr>
<td>cha7 (and other numerals?)</td>
<td>twice (thrice, etc)</td>
</tr>
<tr>
<td>woj</td>
<td>yesterday</td>
</tr>
<tr>
<td>pajel</td>
<td>tomorrow</td>
</tr>
<tr>
<td>namal</td>
<td>far</td>
</tr>
<tr>
<td>k^un</td>
<td>slowly</td>
</tr>
<tr>
<td>ta ora (or ora)</td>
<td>quickly</td>
</tr>
<tr>
<td>tulan</td>
<td>hard</td>
</tr>
<tr>
<td>tibil</td>
<td>late</td>
</tr>
</tbody>
</table>

Table 7: Adverbs

I have included ta ora in the above table because ora seems to be a contraction derived from ta ora. Other expressions that would be expressed by adverbials in English also appear with the preposition ta. One example of such adverbial expression is ta lek, “well.”

Relational Nouns

Relational nouns are a class of lexical items in Mayan languages that tend to express spatial relations which are expressed by prepositions in languages like English; concepts such as “above,” “below,” etc. These relational nouns (RNs) are obligatorily marked for possession, the grammatical possessor being the nominal that corresponds to the complement of a preposition in English:

(58) a. li7 ta aw-ahk^ol-al-i x-7ajaw-etik
     here PREP POSS:3-top-PCHG?-PROX G-lord of earth-PL
     ‘here above you, lords of the earth’ [HBC:0118]

     b. ta y-ut na
     PREP POSS:3-inside house
     ‘inside the house’

A list of some relational nouns is given below:

<table>
<thead>
<tr>
<th>Relational Noun</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>-ut(l)</td>
<td>inside</td>
</tr>
<tr>
<td>-ah(l)an(l)</td>
<td>below</td>
</tr>
<tr>
<td>-ahk^ol(al)</td>
<td>above</td>
</tr>
</tbody>
</table>

Table 8: Relational Nouns

10 Both wen and (ta) ora appear to be loan words from Spanish (“good” and “hour” respectively). However, they seem to be quite integrated into the Petalcingo Tzeltal grammar so I do not see any reason to strike them from my analysis.
Frequently the relational nouns appear with what looks like a possession-changing -VL suffix, though the semantics of its usage are obscure to me. Thus the native speakers consider (59) a paraphrase of (58b):

(59) ta y-ut-il na
PREP POSS:3-inside-PCHG? house
‘inside the house’

The relational nouns can be termed such because they do in fact exhibit many nominal characteristics: they follow a preposition, take Set A markers, and do not co-occur with aspectual markers.

**Prepositions**

Many Mayan languages (Chol is one example) feature only one preposition—historically related to the main preposition in Tzeltal, *ta*. This preposition generally introduces sources, goals, and locations:

(60) a. li7 ta a-sit-i
here PREP POSS:2-eye-PROX
‘Here in (front of) your eyes’ [HBC:0117]

b. x-boh-on ta s-na diyos
ICMP-go-ABS:1 PREP POSS:3-house god
‘I am going to church’

In addition this preposition has as a semantically bleached, purely grammatical function of introducing nominal-like complements to formally intransitive verbs (such as in intransitive progressive constructions):

(61) yakal-on ta beh-el / a7tel / te7
PROG-ABS:1 PREP walk-PART / work / stick
‘I am walking / working / having sex’

Contra the one preposition assumption, Polian 2003b points out that Tzeltal does have another preposition, namely *sok*. In Petalcingo Tzeltal it introduces comitative and instrumental adjuncts:

(62) a. ala wits^ kerem Sok s-ts^i7
DIM small boy with POSS:3-dog
‘a small boy and his dog...’ [PMP-FS2:0002]

b. te ants-e laj s-mil-Ø mut sok kuchiyo-h-e
PREP woman-CL PFV ERG:3-kill-ABS:3 chicken with knife-EPN-CL
‘The woman killed the chicken using a knife’

In this dual function *sok* is reminiscent of the English preposition “with”, or the Russian instrumentative case, which is used (alone) to mark instrument arguments and (following a preposition) comitative arguments.

There is yet another preposition, -u7un, which is sometimes analyzed as a relational noun. Like a relational noun, it obligatorily takes Set A inflection, however, unlike relational nouns, -u7un never follows a preposition. Thus I argue it is more appropriate to analyze it as a preposition that cross-references its complement. That such a preposition would appear in
an overwhelmingly head-marking language should be no surprise, and thus the preposition analysis of \textit{-u7un} would not be typologically unexpected.

Semantically \textit{-u7un} is used to express concepts like “for,” and “by,” and with third-person cross-reference can introduce “because” clauses:

\begin{align*}
\text{(63)} & \quad \text{a. laj} \quad \text{7a} \quad \text{k}^\text{ot} \quad \text{s-nak}^\text{~} \quad \text{s-ba} \\
& \quad \text{PFV} \quad \text{PT} \quad \text{arrive} \quad \text{ERG:3-hide} \quad \text{POSS:3-REFL} \\
& \quad \text{me} \quad \text{y-u7un} \quad \text{xux-ul-tik-e7} \\
& \quad \text{DET?} \quad \text{POSS:3-for} \quad \text{hornet-PCHG?-PL-CL} \\
& \quad \text{‘[the doggie] came and hid himself from/because of the hornets’} \\
& \quad \text{[PMP-FS2:0099]} \\
\text{b. bin} \quad \text{y-u7un?} \\
& \quad \text{what} \quad \text{POSS:3-for} \\
& \quad \text{‘why? what for?’} \\
\end{align*}

\textit{-u7un} is also used to introduce a possessor which for one reason or another cannot be marked via the usual cross-reference on the possessed noun. This situation frequently occurs in an expression of lack of possession, in a construction such as the following:

\begin{align*}
\text{(64)} & \quad \text{mayuk} \quad \text{k-u7un} \quad \text{ts}^\text{~i7} \\
& \quad \text{NEG.EXIST} \quad \text{POSS:1-for} \quad \text{dog} \\
& \quad \text{‘I don’t have a dog’} \\
\end{align*}

Literally (64) means “there is no dog to/for me.”

\textit{-u7un} is also used to introduce “extra” (but still required) arguments in an abilitative construction. While an example is given below, it is discussed in a more detail in “The Participle-Taking \textit{-u7un}” on page 110 in Chapter 2.

\begin{align*}
\text{(65)} & \quad \text{ma} \quad \text{x-u7} \quad \text{k-u7un} \\
& \quad \text{NEG ICMP-able} \quad \text{POSS:1-for} \\
& \quad \text{‘I can’t do it’} \\
\end{align*}

\section*{Syntax and Clause Structure}

Edward Sapir claimed that “it must be obvious to anyone who has thought about the question at all or who has felt something of the spirit of a foreign language that there is such a thing as a basic plan, a certain cut, to each language” (Sapir 1921). Baker 1996 loosely translates the germ of this idea into P&P (Principles and Parameters, the Chomskyan-style linguistic theories dating back to Chomsky 1981) through the notion of macro-parameter, such as his polysynthesis parameter. In this section I discuss a few features of the “basic plan” of Petalcingo Tzeltal, which, while not as pervasive as Sapir’s and not as technical as Baker’s, seem to underlie the principles of Tzeltal grammar.

The first of these is the notion is that an absolutive cross-reference can appear on just about any member of the open classes of words in Tzeltal. This means that just about any stem can be a predicate:

\begin{align*}
\text{(66)} & \quad \text{a. s-maj-on} \\
& \quad \text{ERG:3-hit-ABS:1} \\
& \quad \text{‘He hits/will hit me’} \\
\end{align*}
b. winik-on
   man-ABS:1
   ‘I am a man’

c. sak-on
   white-ABS:1
   ‘I am white’

d. ay-on
   EXIST-ABS:1
   ‘I exist’

e. nak-al-on
   seated-PRED-ABS:1
   ‘I am seated’

Given the fact that the third-person absolutive marker is Ø, it is not clear that regular arguments of predicates do not in fact bear the absolutive cross reference, such as:

(67)   te winik-Ø-e laj s-mil-Ø te ts^i7-Ø
   DET man-ABS:3-CL PFV ERG:3-kill-ABS:3 DET dog-ABS:3
   ‘The man killed the dog’

This idea receives some support from the fact that secondary predicates in Petalcingo Tzeltal must bear an absolutive marker which cross-references the argument they are predicating (see “Secondary Predicates” on page 68, below).

In Baker 2001, in fact, it is argued that secondary predication is exactly how arguments are licensed in Warlpiri-type languages in a way compatible with the Jelinek’s Pronominal Argument Hypothesis (PAH), first articulated in Jelinek 1984. I do not currently adopt a stand on this issue for Petalcingo Tzeltal.

The second principle we can identify for Tzeltal is the radically different treatment of transitive and intransitive verbs, which manifests itself in inflectional marking (transitive verbs take ergative markers, while intransitives do not), unmarked aspect interpretation (perfective for intransitive, incompletive for transitive), imperative formation, and other aspects of grammar. Furthermore, as a transitive verb is derived from an intransitive one, or as a transitive verb is inflected to reduce its effective valence (through passives, anti-passive, etc), Tzeltal grammar treats the new word in a way appropriate to its effective valence, rather than the original root type. This pattern is very robust across Tzeltal grammar, though interesting deviations will be described below. I explore some possible solutions for this puzzle in Chapter 2.

**Word Order, Pro-Drop and Head/Dependent-Marking**

Like other Mayan languages, Tzeltal is a thoroughly head-marking language, in the terms of Nichols 1986. Nichols observes that some languages seem to mark grammatical relations on the head of the phrase (agreement on verbs, possessor cross-references on the possessed noun, prepositions that agree with their complements, etc), and others mark grammatical relations on the dependents (such as case marking in nouns, both in the verbal phrase, as in nominative/accusative, and in the noun phrase, as with genitive case marking). In Tzeltal, both at the phrasal level (possessive constructions) and at the clausal level (predicates), the arguments are cross-referenced on the head. There is also a preposition that obligatorily...
cross-references its arguments, as well as relational nouns (described above) which do the same—both of these must be classified as instances of head-marking.

Like many other head-marking languages, Tzeltal allows pro-drop in almost all positions. Pro-drop is a term for the phenomenon whereby a noun phrase (especially a pronoun) can be omitted from a (finite) clause without causing the sentence to become ungrammatical. Usually this phenomenon is considered to be conditioned by rich (verb) agreement morphology (such as in Spanish), although some pro-drop languages (such as Chinese) do not feature any agreement. In Tzeltal any argument of any predicate may be freely omitted from the clause, as well as the possessor in a possessive noun phrase, or the complement of a “relational noun”/inflected preposition. Thus an inflected verbal word can stand alone as a complete utterance. This is a matter of some importance to the word-order determination discussed immediately below. The one exception to the free pro-drop is the complement of the preposition ta, which may never be omitted. This seems to lend support to those theories of pro-drop that identify two types of pro-drop, the agreement type and the non-agreement (i.e. Chinese) type. Particularly striking is the “minimal pair” of -u7un (preposition with agreement, as I argue above) which allows pro-drop, and ta (a preposition without agreement), which does not.

The existence of “basic” word order in Tzeltal is a matter of some controversy. Dayley 1981 (following other Mayanists) suggests that no single basic constituent order exists. Robinson 2002, working with the Tenejapa dialect, disagrees, and on the basis of statistical evidence from texts argues for VOS as the basic order. Polian 2003b offers a different account for the Oxchuk variant. He finds that VSO is the unmarked word order, even though VOS is more common. This pattern, he argues, is due to the fact that agent arguments are generally more topical, and the more topical NP (noun phrase) tends to appear to the right. Thus, while VOS is statistically more common, is not the unmarked word order.

The determination of basic word order is made more difficult by the extensive pro-drop in Mayan languages. In a small Petalcingo Tzeltal text with 37 transitive clauses, only eleven (29%) featured two overt arguments:

<table>
<thead>
<tr>
<th>Transitive Clause</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vt P</td>
<td>16</td>
<td>43%</td>
</tr>
<tr>
<td>A Vt P</td>
<td>9</td>
<td>24%</td>
</tr>
<tr>
<td>Vt</td>
<td>7</td>
<td>19%</td>
</tr>
<tr>
<td>Vt P A</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>A Vt</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>Vt A</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Total</td>
<td>37</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intransitive Clause</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vi S</td>
<td>20</td>
<td>45%</td>
</tr>
<tr>
<td>Vi</td>
<td>13</td>
<td>30%</td>
</tr>
<tr>
<td>S Vi</td>
<td>11</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 9: Occurrence and Order of Arguments in PMP-FS2

The rarity of two overt arguments in transitive clauses is in line with what is found by DuBois 1987 for Sacapultec Maya. However, the sample given seems to suggest that VOS is more common than VSO (I would hold that non-verb initial word orders are derived by fronting of a constituent), perhaps owing to the factors that Polian 2003b cites. For the remainder of this study I will assume that if there is a basic word order in Tzeltal it is verb-initial and moreover, that it is probably VOS.
Grammaratical Relations, Ergativity, and Possessor Marking

Tzeltal (like most other Mayan languages) marks grammatical relations by cross-referencing the verbal arguments on the verbal word: person, number, and inclusive/exclusive distinctions (in the 1st-person plural) are marked. This cross-referencing system falls along an ergative/absolutive pattern. Ergativity is usually defined as a phenomenon in a language whereby the only argument of an intransitive clause (the subject) is marked identically to the patient argument of the transitive clause. Dixon 1994 popularized the terms S, A, and O to refer to arguments of transitive and intransitive clauses; especially in discussions of ergativity. In this nomenclature, S stands for the subject, or the only core argument of an intransitive clause, while A (agent) and O (object) stand for the most agent-like and the most patient-like core arguments of an intransitive clause respectively. The case system (that is, what’s left of it), word order, and agreement in English are organized along nominative/accusative lines, where the subject of an intransitive clause (S) is marked identically to the agent of a transitive clause (A), as illustrated below:

(68) a. he punts
   S  verb

b. he hits him
   A  verb  O

As can be seen from the examples above, English features identical marking for A and S arguments (he), with the O argument being in a different case (him). Likewise, the verb agrees with the third-person singular A or S argument (the -(e)s suffix), but not the O argument. Both A and S precede the verb, while O follows.

Tzeltal, on the other hand, features ergative patterns of core grammatical relations, where O (and not A) is marked identically to S. While there is no (overt) case-marking in Tzeltal, the transitive verb agrees with both arguments, with the S agreement being identical to the O agreement:

(69) a. laj s-maj-at
   PFV AGENT:3rd-hit-PATIENT:2nd
   ‘He hit you’

b. bejen-at
   walk-SUBJECT:2nd
   ‘You walked’
The argument marking of English versus Tzeltal can be diagrammed as follows:

![Diagram](image)

**Figure 5: Grammatical Relations in English versus Tzeltal**

In accusative languages the S/A argument marking is called “nominative” while the O argument marking is called “accusative.” In ergative languages the A marking is called “ergative” and the S/O marking is called “absolutive.” This terminology can be diagrammed as follows:

<table>
<thead>
<tr>
<th>Nominative</th>
<th>Accusative</th>
<th>Ergative / Absolutive</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>S</td>
<td>Absolutive</td>
</tr>
<tr>
<td>Nominative</td>
<td></td>
<td>Ergative</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 6: Accusative and Ergative Case Marking / Agreement**

In Tzeltal (and other Mayan languages), the markers that cross-reference the agent argument of a transitive verb (ergative) are identical to the markers that cross-reference the person/number of a possessor on the head noun of a possessive construction:

(70)  

a. k-maj-at  
   ERG:1-hit-ABS:2  
   ’I hit you’

b. k-ts'it  
   POSS:1-dog  
   ’my dog’

Due to their homophony, the ergative and possessive cross-reference markers together are called “Set A” in the Mayan literature, while the absolutive markers form “Set B.” Henceforth, in interlinear glosses, rather than using terms ERG, ABS, and POSS, I will use A (Set A) and B (Set B) instead.
The complete set of Set A markers includes morphemes that attach at the right edge and left edge of the constituent in question. The morphemes that attach at the left edge mark person, while those at the right edge mark the number as well as the inclusive/exclusive distinction for 1st-person plural. The complete paradigm is as follows:

<table>
<thead>
<tr>
<th>Person</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>inclusive</td>
<td>-tik</td>
</tr>
<tr>
<td>exclusive</td>
<td>-(r)yotik</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>k- / j-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>a- / aw-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>s- / y-</td>
</tr>
</tbody>
</table>

**Table 10: Set A markers**

While Set B markers are as follows:

<table>
<thead>
<tr>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>-otik</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1st</th>
</tr>
</thead>
<tbody>
<tr>
<td>-on</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2nd</th>
</tr>
</thead>
<tbody>
<tr>
<td>-at</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3rd</th>
</tr>
</thead>
<tbody>
<tr>
<td>-Ø</td>
</tr>
</tbody>
</table>

**Table 11: Set B markers**

The reason the two tables above are laid out slightly differently is because the slicing up of the agreement pie into (only) Set A and Set B may be called into question on the basis of their formal properties. First of all, Set A markers occur on both edges of the word/phrase with person agreement at the left edge, and number agreement at the right edge, whereas Set B occurs only at the right edge. Secondly, Set A person marking on transitive verbs is obligatory: it cannot be left unexpressed. This is not true for Set A number agreement, or Set B agreement. This approach would yield an opposition between ergative/possessive person marking on one hand and ergative number + absolutive person and number marking on the other. On the basis of the kind of arguments this agreement cross-references, we may want to then subdivide the right-edge morphemes into ergative/possessive and absolutive agreement, yielding a tri-partite system. However, if this is done without further analysis, some formal facts may be overlooked: there is evidence that Set A number agreement and Set B (absolutive) agreement are in competition at the right edge of the word in some circumstances, i.e. the two cannot co-occur:

(71) a. s-maj-otik  
A:3-beat-B:1.INCL  
‘He/they beat us (inclusive)’

b. s-maj-onyotik  
A:3-beat-B:1.EXCL  
‘He/they beat us (exclusive)’

---

11 I am thankful to John Haviland for this suggestion.
The first three examples show plural object and plural subject marking in transitive verbs. As is demonstrated by examples (71d) and (71e), the two cannot be combined in this case. The fact that Set A and Set B plural markers cannot co-occur results in ambiguity with respect to the number of participants as shown in examples (71a), (71b), and (71c).

Moreover, even some combinations of ergative person cross-reference markers and absolutive plural markers result in grammaticality:

\[(72)\]
\[
\begin{align*}
\text{a.} & \quad * \text{s-maj-on-ik} \\
& \quad \text{A:3-beat-B:1-.PL} \\
& \quad \text{‘They beat us’}
\end{align*}
\]

On the other hand, stacking of some Set A and Set B markers at the right edge of the verb is allowed:

\[(73)\]
\[
\begin{align*}
\text{a.} & \quad \text{s-maj-on-ik} \\
& \quad \text{A:3-beat-B:1-.PL} \\
& \quad \text{‘They beat us’}
\end{align*}
\]

Unfortunately I am unable to fully analyze of the interactions of the Set A and Set B markers in the present work. It is worth noting, however, that the ambiguity resulting from the ban on some Set A/Set B stacking ban can be resolved by another plural agreement morpheme, la. This is a marginal mechanism used to explicitly specify the plural patient argument of a transitive verb:

\[(74)\]
\[
\begin{align*}
\text{a.} & \quad \text{laj k-mil-tik-la} \\
& \quad \text{PFV A:1-kill-PL-PL} \\
& \quad \text{‘We killed them’}
\end{align*}
\]
(75) k^ax t^uj-tik-la-bil te bi ay y-u7un-ik-e7

very beautiful-PL-PL-PASS? COMP what EXIST A:3-for-PL-Cl.

‘It was very beautiful what they had’ [N02:0101]

Regularly, the word for beautiful is tujbil, however in (75) it is interrupted by two plural markers: first the third-person absolutive -tik, followed by -la. This strategy does not seem very wide-spread, as it rarely appears in text; therefore, I have nothing further to say about it, other than the fact that for some speakers some variants of this construction are not grammatical.

As shown in Table 11 on page 35, above, the Set B 3rd-person singular agreement is Ø. It is commonly assumed in Mayan linguistics that the 3rd-person absolutive agreement is present in the appropriate circumstances, but its phonological realization is null. In my glosses throughout this thesis I add “-Ø” to the target language text and “-B:3” to the morpheme-by-morpheme gloss to indicate instances in which I believe there to be null absolutive agreement.12

Classically, for Tzeltal (and closely-related Tzotzil) the Set A person-marking morphemes have been divided into a pre-consonantal series and a pre-vocalic series. However, in Petalcingo Tzeltal the distinction cannot be made on this basis: in Table 10, above, for 2nd- and 3rd-person markers the first morpheme is indeed the pre-consonantal one and the second is pre-vocalic. However, for the 1st-person morphemes, k- is the shape of the morpheme in all cases, except when the stem that follows begins with a voiceless or ejective velar stop ([k] or [k^]).13 Therefore, the terms “pre-consonantal” and “pre-vocalic” simply do not apply in the case of 1st-person Set A marker.

With respect to the first-person ergative marker, it seems likely that the distribution of /k-/ and /j-/ is the result of contact with Chol: in Chol the Set A markers have an identical distribution to Petalcingo Tzeltal, and, moreover, no other known dialect of Tzeltal features this distribution of 1st-person ergative morpheme. All known dialects of Tzotzil seem to have pre-C/pre-V distribution of 1st-person Set A markers as well. Normally this would suggest that the more common /k-/ and /j-/ distribution is a shared retention from Proto-Tzeltal-Tzotzil, and that the Petalcingo distribution is an innovation; however, Ara 1571 only notes the stop as the pronominal reference marker in the first person (ergative).14, 15 As the dialect with which Fray Domingo de Ara was working is rather far from Petalcingo (Copanaguastl is about 30km south of Aguacatenango) and the Aguacatenango dialect appears to be rather different from many of the northern dialects of Tzeltal, it seems likely

12 This practice is not followed throughout with respect to the more controversial null agreement I postulate in this and the following chapters, such as predicative positionals, and all intransitive auxiliaries.

13 The /k/ ~ /j/ alternation in the first person ergative marker cannot be a result of a phonological dissimilation rule, as other kk clusters simply delete by the degemination rule described above.

14 “Est autem advertendum q. ista pronomina: q, a, z semper ponitur in principic verbi seu nominis et numquam in fine vg., gtat mi padre; atat, tu padre; ztat, el de aquél.” — “It must however be noticed that these pronouns q, a, z always are placed at the beginning of verbs or nouns and never at the end, for example gtat: my father; atat, your father; ztat, he (the father) of him.” I am indebted to Samuel Cole and Walter Englert for the translation from Latin.

15 I am thankful to Terrence Kaufman for pointing this out to me.
that the Copanaguastl data points in the direction of /k-/ as the form in pre-Tzeltal. But at this point the data seems rather inconclusive.

**Syntactic Ergativity**

As Dixon 1994 (and numerous other authors) point out, there are (at least) two types of ergative languages: those that realize ergative patterns in morphology only, and those that also instantiate ergative patterns in syntax, or in Dixon’s terms those that have S/O pivot. Generally, ergative languages feature S/O patterns in the following grammatical phenomena:

- Word order
- Inter-clause coordination
- Relativization
- Question formation
- Control

Syntactic ergativity is hard to investigate in Petalcingo Tzeltal due to the free pro-drop in all positions, nonetheless, I will try to address each of the criteria listed above.

Whatever the basic word order is in Tzeltal, it seems to be verb-initial. This means word order is not going to disambiguate between S/A and S/O pivot. Thus, for example, the following coordinated construction is ambiguous:

(76)  
\[
\text{te ts'i7 laj s-nau-Ø te mis i lok^-Ø}
\]
\[
\text{DET dog PFV A:3-push-B:3 DET cat and leave-B:3}
\]
\[
\text{‘The dog pushed the cat and left’}
\]

The subject of the conjoined intransitive clause “leave” can be taken to be either the dog or the cat (unlike that of the English gloss). This is presumably owing to the fact that the argument of \( \text{lok}^\wedge \) can be pro-dropped, rather than omitted for reasons of coordination (pivot).

Both arguments of a transitive clause can be relativized or questioned in Tzeltal, as in the following examples:

(77)  
\[
a. \text{ja7 te ach^ix te mach^a7 laj s-mil lok^}
\]
\[
\text{DET young woman DET who PFV A:3-kill-B:3 leave}
\]
\[
\text{‘The woman who killed (something) left’}
\]

\[
b. \text{ja7 te winik te mach^a7 laj k-maj-Ø lok^}
\]
\[
\text{DET man DET who PFV A:3-beat-B:3 leave}
\]
\[
\text{‘The man who I hit left’}
\]

(78)  
\[
\text{mach^a laj s-maj-Ø te winik}
\]
\[
\text{who PFV A:3-hit-B:3 DET man}
\]
\[
\text{‘Whom did the man beat? or Who beat the man?’}
\]

As Baker 1997 reports, “Dyirbal has control(-like) purposive constructions in which there is a special subordinate verb form and a missing argument that is understood as coreferential with an argument of the first clause” (p81). As I argue in Chapter 2, the structures in
Petalcingo Tzeltal that have been termed infinitives and analyzed as control-like, are really nominals, and thus do not help shed light on the phenomenon of syntactic ergativity.\footnote{These structures do show some syntactic ergativity, but as I argue in Chapter 2, this follows from their nominal properties.}

It must be noted, however, that cross-linguistically languages that feature ergative agreement (rather than case-marking) are thought to be more ergative, and thus are more likely to exhibit syntactic ergativity phenomena (c.f. Trask 1979, Bittner and Hale 1996a). Thus it would not be entirely unexpected if syntactic ergativity were found to be present in Mayan languages, which are generally ergative, and are overwhelmingly head-marking.

In fact, in Jacaltec, a Mayan language of Guatemala (Craig 1977), question formation and topicalization (but not relative clause formation) follow ergative patterns. On the other hand, in more closely related Tzotzil there is little evidence to postulate syntactic ergativity; in fact Robinson 1996 specifically provides some evidence against it. Clifton 2001 assumes syntactic accusativity in her analysis of Tenejapa Tzeltal, though few arguments are provided.

**Noun Phrases**

The noun phrase in Petalcingo Tzeltal appears to have the following structure:

\[
(79) \quad \text{(DET)} \left( \begin{array}{c} \text{QUANT} \\ \text{NUM} \\ \text{DEM} \end{array} \right) \text{(POSS)} \text{-NOUN-} \left( \begin{array}{c} \text{PROX} \\ \text{DIST} \end{array} \right)
\]

Most of these parts of the noun phrase (or DP) will be discussed below.

**Determiners**

Tzeltal features two overt determiners: \textit{te} and \textit{me}. These can co-occur with most of the other DP elements shown in the above chart, such as numerals, demonstratives, attributives, etc. Both of these determiners appear to be specific, as evidenced by the fact that they cannot occur in existential predicates, which are generally taken only to accept non-specific subjects. Compare English \textit{there is a chicken} versus \textit{* there is the chicken}. This is sometimes called the “definiteness restriction.” Nouns phrases headed by either \textit{te} or \textit{me} are unable to appear in existential predicates in Tzeltal:

\[
(80) \quad \begin{align*}
\text{a.} & \quad \ast \text{ ay te mut} \\
& \text{EXIST DET chicken} \\
& \text{‘There is the chicken’} \\
\text{b.} & \quad \ast \text{ ay me mut} \\
& \text{EXIST DET chicken} \\
& \text{‘There is the chicken’}
\end{align*}
\]

It seems that of the two, \textit{me} is the definite determiner, while \textit{te} is “merely” specific. This analysis is confirmed in textual occurrences: in my texts, where the same nominal referent occurs with both \textit{te} and \textit{me}, it occurs with \textit{te} first, and with \textit{me} later in the text, and never the other way around. There are also quantified examples that seem to lend support to this idea:
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

(81) a. juju-koht ts^i7 laj s-ti7-Ø te mut each-NC dog PFV A:3-bite-B:3 DET chicken
    ‘Every dog bit a chicken’ (meaning: “Every dog bit a different chicken”)

b. * juju-koht ts^i7 laj s-ti7-Ø me mut each-NC dog PFV A:3-bite-B:3 DET chicken
    ‘Every dog bit a chicken’ (meaning: “Every dog bit a different chicken”)

In an English sentence with a quantified NP, the quantifier inside a subject may scope over the object only if the object is not definite. Thus every dog bit a chicken has two readings: “there is a chicken such that every dog bit it,” or “for every dog, there is a (possibly different) chicken such that the dog bit it.” On the other hand, if the object is definite, it cannot scope over the quantified subject, and every dog bit the chicken cannot mean that every dog bit a different chicken. As (81b) shows, me cannot scope under “every dog,” showing that an NP headed by me is definite.

Polian 2003b argues that enclitic -e is also a definite determiner. In Petalcingo Tzeltal, this enclitic clearly has something to do with definiteness, but this may be epiphenomenal, as the -e enclitic can (but does not necessarily) co-occur with te and me. Although I am not certain of the function of the -e enclitic, it is discussed further in “The -e Clitic,” below.

Quantifiers

There is to my knowledge only one quantifier in Petalcingo Tzeltal: juju + numeral classifier (jujun for generic numeral classifier):

(82) juju-koht mut every-NC chicken
    ‘every chicken’

Whether or not juju- is a “true” English-like quantifier is still an open question. To my knowledge, many non-Indo-European languages lack quantifiers that are English-like in their syntax, and thus it would not be surprising if Tzeltal did not feature a “true” quantifier as well.

Numerals and Numeral Classifiers

Tzeltal, like all Mayan languages, has a system of numeral classifiers, which is organized along shape/function lines. Much of the system is falling into disuse due to the fact that many communicative acts requiring numbers (such as buying and selling) are transacted in Spanish, and in many cases the generic classifier is replacing more specific ones. The most common numeral classifiers are shown in the following table:

<table>
<thead>
<tr>
<th>Classifier</th>
<th>Used for...</th>
</tr>
</thead>
<tbody>
<tr>
<td>tuhl</td>
<td>people</td>
</tr>
<tr>
<td>koht</td>
<td>all animals, cars</td>
</tr>
<tr>
<td>pech^</td>
<td>flat things, tortillas</td>
</tr>
<tr>
<td>ch^ix</td>
<td>long things: bananas, pens, ears of corn, etc.</td>
</tr>
<tr>
<td>pix</td>
<td>round things: oranges, soccer balls, etc.</td>
</tr>
<tr>
<td>-eb</td>
<td>everything (generic numeral classifier)</td>
</tr>
</tbody>
</table>

Table 12: Numeral Classifiers
Tzeltal, unlike English, has a duodecimal number system (base-20). This means that numbers like “twenty” and “four hundred” are linguistic primes, whereas “one hundred” and “one thousand” are not. The numerals are formed by prefixing the numeral to the classifier. The one exception to this rule is the numeral “one” with the generic classifier: here the resulting numeral is jun. Some numerals of Petalcingo Tzeltal are given below:

<table>
<thead>
<tr>
<th>Tzeltal</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>j-</td>
<td>one</td>
</tr>
<tr>
<td>ch-</td>
<td>two</td>
</tr>
<tr>
<td>ox-</td>
<td>three</td>
</tr>
<tr>
<td>chan-</td>
<td>four</td>
</tr>
<tr>
<td>jo7</td>
<td>five</td>
</tr>
<tr>
<td>wak-</td>
<td>six</td>
</tr>
<tr>
<td>juk-</td>
<td>seven</td>
</tr>
<tr>
<td>waxak-</td>
<td>eight</td>
</tr>
<tr>
<td>balun-</td>
<td>nine</td>
</tr>
<tr>
<td>lajun-</td>
<td>ten</td>
</tr>
</tbody>
</table>

Table 13: Numbers

Numeral classifiers permit omission of the noun they classify, in a manner similar to pro-drop. Thus, for example, in (83a), the referent is understood as “person” because of the numeral classifier. Some examples of noun phrases with numerals are given below:

(83)  
a. ay nax ox-tuhl, chan-tuhl  
EXIST only 3-NChuman, 4-NChuman  
‘There were only three, four people’ [N01:0961]
b. j-koh  
onkonak  
1-NCanimal frog  
‘One frog’ [PMP-FS2:0003]

Even the older generation of Tzeltal speakers are not able to easily produce numbers above twenty.

**Possessive Constructions**

Possessors in Tzeltal are cross-referenced on the head of the phrase, the possessed nominal, using morphemes identical to the ergative cross-reference markers on the verb. The following are some examples of the possessive construction:

(84)  
a. s-ts^i7 Pedro  
A:3-dog Pedro  
‘Pedro’s dog’
b. a-bankil  
A:2-older brother  
‘your older brother’
c. s-nich^an  
A:3-child  
‘his child’

It must be noted that the word order in a possessive construction with an overt possessor must be possessum-possessor, and never the other way around. Discontinuous possessive constituents (with the possessor appearing away from the possesum) are either unavailable or very uncommon.
Possessed nominals cannot be pluralized. If the nominal plural marker and the Set A plural marker share the same slot at the right edge of the word/phrase, the ban on plural possessed nominals suggests that Set A number agreement is always present: 17

(85) a. k-ts^i7
   A:1-dog
   ‘my dog/dogs’

   b. * k-ts^i7-etik
      A:1-dog-PL
      ‘my dogs’

   c. k-ts^i7-tik
      A:1-dog-A:1.PL
      our (incl) dog/dogs

   d. k-ts^i7-yotik
      A:1-dog-A:1.PL
      ‘our (incl) dog/dogs’

This has some interesting parallels to the verbal cross-reference paradigm, where some Set A and Set B markers appear to be in competition for the slot at the right edge of the verbal stem.

Attributives

Attributive constructions are discussed in “Are There Adjectives in Tzeltal?” above, where I claim that there is no empirical reason to distinguish an adjective class in Petalcingo Tzeltal. The attributive modifiers are formed from formally nominal roots, with a -VI suffix. The exact mechanism by which the vowel in the -VI suffix is selected is obscure to me, but the vowels that occur in attributive-forming suffix are /i/ and /a/:

<table>
<thead>
<tr>
<th>-al</th>
<th>-il</th>
</tr>
</thead>
<tbody>
<tr>
<td>yax-al</td>
<td>naht-il</td>
</tr>
<tr>
<td>sak-al</td>
<td>k^un-il</td>
</tr>
<tr>
<td>tsaj-al</td>
<td>lek-il</td>
</tr>
<tr>
<td>k^an-al</td>
<td>sak-il</td>
</tr>
<tr>
<td>ijk^-al</td>
<td>‘black’</td>
</tr>
<tr>
<td></td>
<td>‘green’</td>
</tr>
<tr>
<td></td>
<td>‘tall’</td>
</tr>
<tr>
<td></td>
<td>‘slow; smooth’</td>
</tr>
<tr>
<td></td>
<td>‘good’</td>
</tr>
<tr>
<td></td>
<td>‘white’</td>
</tr>
</tbody>
</table>

Table 14: -il versus -al modifiers

The modifiers appear to the right of the possessor cross-reference in most cases, and can be apposed, English-like, to form a noun phrase with multiple modifiers:

(86) k-naht-il sak-il mut
     A:3-tall-MOD white-MOD chicken
     ‘my tall, white chicken’

17 Alternatively, this co-occurrence restriction could be due to the phonological similarities of the markers in question.

18 sak (“white”) can appear with both -il and -al. With some speakers these appear in free variation, though it seems that younger speakers prefer -il.
The positional stems also form what look like attributives, however, I argue that these are in fact secondary predicates. These constructions are discussed in “Positionals” on page 25, above.

**Verb Phrases**

Tzeltal verb phrases may contain aspectual markers, auxiliaries, and directionals, in addition to the verb itself. The general “map” of the Petalcingo Tzeltal verb phrase (excluding any NPs) may be given roughly as follows:

\[
\begin{align*}
\text{ASP} & \quad \text{AUX} \quad \text{ERG} & \quad \text{ADV} & \quad \text{VERB} & \quad \text{APPL}
\end{align*}
\]

\[
\begin{align*}
\quad \left( \begin{array}{c}
\text{PASS} \\
\text{APASS} \\
\text{MID} \\
\text{PERF} \\
\text{ABS} \\
\text{DIR1} \\
\text{DIR2}
\end{array} \right)
\end{align*}
\]

The inflection (person/number cross-reference) may appear on the verb itself, or on the auxiliary, depending on the verb form. The different forms a (main) verb may appear in are discussed in the following sections. The irrealis mood marker \(-uk\) is discussed in “Clause Structure,” below, as it does not appear to be a property of verbal predicates exclusively.

**Verb forms**

The (main) verbs in Tzeltal can appear in one of four forms:

- Regular (inflected form)
- \(-el\) form
- \(-bel\) form
- \(-aw\) form
- Compound form

These are discussed in detail in the sections that follow. Descriptively speaking, when the main verb appears in a form that cannot take person/number inflection (the \(-el\) and \(-aw\) forms), the auxiliary takes these inflectional cross-references.

**The Regular Form**

Normally, transitive verbs take ergative and absolutive cross-reference markers, while intransitive verbs take absolutive markings. As aspect markings are not obligatory in Petalcingo Tzeltal, aspectual information may or may not be overtly expressed in these types of clauses (this is discussed in detail below). Some examples follow:

(88)  a. laj s-maj-on
       PFV A:3-hit-B:1
       ‘He hit me’

       b. bah-at ta k^altik
           go-B:2 PREP field
           ‘You went to the field’
The **-el** form

This form is frequently used with progressive aspect. In this form the verb appears with an -el suffix, and never takes absolutive inflection. As pointed out by Polian 2003a, these forms are nominal in character: for example they may follow a preposition, which verbs in Tzeltal generally cannot do:

(89) yakal-Ø ta yahl-el te alal-e
    PROG-B:3 PREP fall-el DET child-CL
    ‘The child is falling’

The following example shows that regular nouns can appear in the same position:

(90) yakal-on ta machit
    PROG-B:1 PREP machete
    ‘I am (doing) machete; I am working with a machete’

The -el participles formed from transitive verbs do take Set A inflection markers in some circumstances. In this case, however, the Set A inflection markers cross-reference the patient argument, rather than the agent:

(91) yakal-on ta a-mil-el
    PROG-B:1 PREP A:2-kill-el
    ‘I am killing you’

Without an ergative cross-reference, the -el participles formed from transitive verbs seem to have their agent theta-role satisfied. Therefore these -el participles assign the patient theta-role:

(92) yakal-on ta mil-el
    PROG-B:1 PREP kill-el
    ‘I am being killed’

It seems that *yakal-ABS ta TRANSITIVE-el* form cannot take an object nominal, other than the one cross-referenced by the absolutive marker on *yakal* (I am talking about a situation where no ergative cross-reference appears on the dependent form). Although I lack an explicit example showing the ungrammaticality of such a construction, there is one example in my data that strongly suggests that such constructions are not possible:

(93) a. yakal-Ø ta ch^i7-el winik
    PROG-B:3 PREP break-el man
    ‘(They are) breaking a man’

       b. winik yakal-Ø ta ch^i7-el
          man PROG-B:3 PREP break-el
          ‘(They are) breaking a man’

The utterance is decidedly pragmatically awkward, as the verb *ch^i7* is generally not used with humans as objects. A more pragmatically neutral reading would be “the man is breaking something”, and if such a reading was available, I believe it would have been offered by my informants. That is, if *yakal-ABS ta TRANSITIVE-el* form could appear with another nominal, albeit pro-dropped, this nominal could serve as the less pragmatically awkward object of the verb *ch^i7*. Since no such reading was offered, in this instance not in similar cases, I conclude that *yakal-ABS ta TRANSITIVE-el* form cannot take an (additional) object nominal.
While Polian 2003a analyzes these forms as infinitives, I argue in Chapter 2 that the -el forms are best understood as nominalizations. However, I will, remain neutral in my glosses and gloss these as “participles.”

It bears mentioning that some stems form -el-type participles via the suffix -ej:

(94)  
\[ a. \quad \text{i och-Ø ta wowo-t-awan-ej} \]
\[ \quad \text{and enter-B:3 PREP bark-TRANS-APAS-PART} \]
\[ \quad \text{‘empezó a ladrar; he began to bark’ [APG-FS:0094]} \]
\[ b. \quad \text{yakal-on ta nak-l-ej} \]
\[ \quad \text{PROG-B:1 PREP sit-V-PART} \]
\[ \quad \text{‘I am sitting down’} \]

In the examples above the -ej stem appears with a positional stem and an antipassivized transitive stem. Though the conditions governing the -ej/-el alternation are not completely clear to me, it seems likely that the -ej suffix mainly appears with derived stems.

### The -aw form

In contrast with the -el form, the -aw form appears as a nominalization which leaves the patient theta-role satisfied, rendering the nominalization with an agent theta-role to assign.¹⁹ This makes this nominalization “agent-oriented”:

(95)  
\[ \quad \text{yakal-on ta mil-aw} \]
\[ \quad \text{PROG-B:1 PREP kill-PART} \]
\[ \quad \text{‘I am killing’} \]

### The -bel form

This form for the verb is able to take both ergative and absolutive cross-reference markers, and is a participle-like form similar to the -el form:

(96)  
\[ \quad \text{yakal s-mil-bel-on} \]
\[ \quad \text{PROG A:3-kill-PART-B:1} \]
\[ \quad \text{‘He is killing me’} \]

The question of nominality of both the -el and the -bel participles is examined further in Chapter 2.

### The Compound form

This “syntactic compound” form is only used with transitive verbs. In this form, a verb appears with an object, and does not take any person/number cross-reference markers. The compound form formally appears to be a kind of nominalization.

(97)  
\[ a. \quad \text{yakal-on ta we7 waj} \]
\[ \quad \text{PROG-B1 PREP eat tortilla} \]
\[ \quad \text{‘I am eating a tortilla / tortillas’} \]
\[ b. \quad \text{laj k-tikun-at ta tul chenek\^} \]
\[ \quad \text{PFV A:1-send-B:2 PREP cut beans} \]
\[ \quad \text{‘I sent you to harvest beans’} \]

¹⁹ I will again remain neutral in the glosses, glossing the -aw form as participle-forming.
Perhaps an argument could be made that this is a form of noun incorporation. However, in this case we would expect the verb-nominal complex to act like an intransitive verb, and be able to take absolutive markings at the left edge. This does not appear to be possible:

(98)  
* tul chenek^-on  
  cut beans-B:1  
  ‘I harvested beans’

In the Mayan linguistics literature, it is frequently remarked that transitive stems may never appear in the “bare” form, that is, without derivational or inflectional markers. This “compound form” seems to be an exception to this observation, albeit one that does not appear very frequently in discourse.

**Tense and Aspect**

Tense is traditionally defined as a deictic category (for example see Jakobson 1971): it indicates the time of the narrated event relative to some variable whose value can be determined from the context of the speech event, such as “now.” Thus, “past” is a time before “now”, while “present” is a time co-extensive with “now.” Aspect, on the other hand, is a way of referring to the temporal constituency of the situation (Comrie 1976), without a reference to the speech event situation. Tzeltal has very little, if any, grammaticalized tense, and like most Mayan languages instead marks clauses for aspect. This is not uncommon in the world’s languages: Bybee 1985 (cited by Payne 1997) finds that while 74% of the languages in her sample feature overt morphological manifestation of aspect, only 50% feature morphological manifestation of tense.

Unlike many Mayan languages, Petalcingo Tzeltal actually does have some grammaticalized manifestation of tense: it is a generalized reflex of the distal clitic -a, described in more detail in “Deictic Clitics,” below. Thus, it seems, the spatial distal meaning of -a has been generalized to include the temporal meaning as well. Thus, the only way to say something like “I was a man” in Petalcingo Tzeltal is by employing the distal clitic:

(99)  
  winik-on-a  
  man-B:1-DIST  
  ‘I was a man’

The -a tense clitic may show up in verbal clauses as well, though whether the temporal or spatial distance is intended may be ambiguous. However, the fact, that this marker shows up on nouns may speak to its intermediate status, as generally tense is considered a verbal, not nominal, category.20

The more robust way of expressing temporality in Petalcingo Tzeltal is through aspect. Aspect is expressed either via auxiliaries, or via a clitic / affix, for intransitive verbs. The task of separating purely aspectual material from other auxiliaries proves somewhat difficult for Petalcingo Tzeltal. The auxiliary information can be expressed by various grammatical means, and while some of these express aspect only, others seem to express a combination of aspect, tense, and/or modality. This yields one continuum for a typology of aspectual marking in Petalcingo Tzeltal. Another such continuum is obtained by examining the degree

20 Though in some languages what look like tense markers show up on nouns, Alexiadou 2001 argues that they do not refer to “tense” in the same sense.
of grammaticalization, which ranges from maximally grammaticalized (in the historical linguistic sense of the term, i.e. where aspectual distinctions are expressed by a morpheme that does not express non-aspectual distinctions) to minimally grammaticalized, where an aspectual auxiliary may (depending on the pragmatics) refer to spatial and not aspectual information. Finally, some aspectual markers act in the fashion of auxiliaries, i.e. can take inflectional morphemes, while others are largely invariant, and may not take inflection, thereby “forcing” the inflectional morpheme to appear on the verb itself. These three typologies of aspectual markers are not completely independent, and interrelate in various interesting ways.

A sample of some lexemes that appear to carry aspectual information is shown below in Table 15. The second and third columns show default marking in transitive and intransitive clauses. The fourth column lists whether an unmarked form exists (for example, intransitive clauses without an overt aspect marker are understood as perfective). The fifth column details whether this morpheme may take inflection, and the sixth lists whether a main verb exists corresponding to the aspectual marker.

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Intr</th>
<th>Trans</th>
<th>O-form?</th>
<th>Infl</th>
<th>Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>incompletive</td>
<td>x</td>
<td>Ø</td>
<td>yes</td>
<td>no</td>
<td>no</td>
</tr>
<tr>
<td>perfective</td>
<td></td>
<td>Ø</td>
<td>laj 21</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>progressive</td>
<td>yakal</td>
<td>yakal</td>
<td>no</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>inceptive</td>
<td>och</td>
<td>och</td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 15: Aspectual Morphemes and their Distribution

Modern literature on Tzeltal (Polian 2003b) generally recognizes three aspects (not including Perfect, which I discuss below): Incompletive/Imperfective, Completive/Perfective, and Progressive. However given the distributional properties of a marker like och, it seems that if the progressive is recognized as bona fide aspect, then och (inceptive) must be recognized as such on formal grounds: distributionally, och appears in the exact same environments as yakal, as illustrated by the following examples. Both can take -bel and -el participle complements, and the syntax of these complements is identical irrespective of the matrix verb used:

(100) a. yakal-on ta yahl-el
     PROG-B:1 PREP fall-PART
     ‘I am falling’

 b. yakal s-mil-bel-on
    PROG A:3-kill-PART-B:1
    ‘He is killing me’

(101) a. och-on ta way-el
     enter-B:1 PREP fall-PART
     ‘I am falling asleep’

21 There is also a “terminative” laj auxiliary, which I discuss later.
22 Sánchez Gómez et al 2003 mention only the Perfective and Imperfective.
23 The fact that och but not yakal can also serve as a main verb does not, I believe, diminish the force of the argument presented.
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

b. och s-mil-bel-on
   enter A:3-kill-PART-B:1
   ‘He began to kill me’

However, that may be opening Pandora’s box, leading to a plethora of aspectual distinctions, since Petalcingo Tzeltal presents a hypertrophy of other aspectual-like auxiliaries such as terminative laj, inceptive jahch, and many others.

One way of formally distinguishing the commonly-recognized aspects from other auxiliaries which may carry aspectual meaning is the compatibility with another aspectual marking and/or default interpretation. Perfective, Incompletive and Progressive aspects, when morphologically marked, are unable to combine with another one of these aspectual markers. This is not true for aspects like inceptive och. Compare the following:

(102) a. och ta yahl-el
   begin PREP fall-PART
   ‘empezó a caer; he began to fall’

b. x-och ta yahl-el
   ICMP-begin PREP fall-PART
   ‘empieza a caer; he begins to fall’

As the above examples show, the auxiliary construction otherwise unmarked for aspect is interpreted as perfective, rather than incompletive, regardless of the transitivity of the (semantically) main verb. This kind of distinction, however, may be ad hoc since it probably is also possible to offer a semantic explanation for the inability of x- to combine with perfective and progressive aspect markers. I offer a different view of this phenomenon in Chapter 2.

Unmarked Aspect

Petalcingo Tzeltal features zero marking of some aspects, depending on the transitivity of the verb. If any intransitive clause appears without morphological expression of aspect, it is interpreted as perfective, while a transitive one is interpreted as incompletive:

(103) a. laj s-mil-Ø
   PFV A:3-kill-B:3
   ‘He killed it’

b. s-mil-Ø
   A:3-kill-B:3
   ‘He kills it’, ‘He will kill it’

(104) a. boj-on
   go-B:1
   ‘I went’

b. x-boj-on
   ICMP-go-B:1
   ‘I am going’, ‘I will go’, ‘I go’

This is rather unusual in the sense that the transitive and intransitive aspect marking seems completely divergent. We may note in passing that the details of the aspect marking seem to contravene the Transitivity Hypothesis articulated in Hopper and Thompson 1980: in
Petalcingo Tzeltal an unmarked aspect in intransitive clauses (a low transitivity feature) correlates with a high transitivity feature, namely the perfective reading, and the opposite in transitive clauses.

It is worth remarking that the intransitive incompletive aspect marker $x$- does appear in transitive clauses, but it is limited to negative constructions:

\[(105)\]

a. ka-\$k^\text{\textasciitilde}a$n-\$O$
   ICMP.A:2-want-B:3
   ‘Do you want it?’

b. ma-\$x$ a-k^\text{\textasciitilde}an-\$O$
   NEG-ICMP A:3-want-B:3
   ‘You don’t want it?’

The $x$- in transitive incompletive constructions only appears with 2\textsuperscript{nd}-person ergative marker:

\[(106)\]

ma s-k^\text{\textasciitilde}an-\$O$
NEG A:3-want-B:3
‘She does not want it’

This may suggest, contra the glosses in (105) that $x$- actually appears on the verb: this would allow us to account for its non-appearance in (106); the $xs$ consonant cluster would reduce to $ss$C via assimilation, and then degenerate. With other ergative markers, the consonant cluster resulting from $x + ERG + C$ would also be prohibited by Tzeltal phonological structure. If this hypothesis is correct, then perhaps the aspect marking in Petalcingo Tzeltal is not as disjunctive as it might appear at first sight, since we could postulate the presence of $x$- in all transitive constructions. However, this seems not to be the case, since if anything, non-negative transitive clauses seem to feature their own incompletive marker.

A sometimes optional incompletive marker $ya(k)$ is available for Petalcingo Tzeltal transitive clauses, and its distribution is governed by two different considerations. First, it is optionally inserted for emphatic effect in any transitive clause. Secondly, it is may be added as a host for a second-position clitic:

\[(107)\]

a. laj k-ai-\$O$ yak-laj s-mil-\$O$ j-kocht mut
   PFV A:1-hear-B:3 ICMP-EVID A:3-kill-B:3 1-NC:animal chicken
   ‘Escuché que va a matar un pollo; I heard they will kill a chicken’

b. ja7 y-u7un yak-to k-pas-tik bajel
   F/T A:3-for ICMP-still A:3-do-PL away
   ‘Por eso todavía lo vamos hacer; Therefore we will still do it’ [HBC:0375]

There is a third context where the incompletive $ya(k)$ surfaces, and that is in short affirmative answers. Tzeltal has no generic “yes”-like lexeme, and the closest response to a generic “yes” would be $jich$ (”oh yeah, sure,” literally “like this”). A regular short affirmative response is the bare aspect marker, with the aspect being appropriate to the question asked. Thus, “Did you feed the pigs?” — “laj”, but “Will you bring the water”—“yak.”

Likewise the trace of $ya(k)$ seems to surface with incompletive clauses with 2\textsuperscript{nd} and some 3\textsuperscript{rd}-person ergative markers, as discussed immediately below.
Ossified Portmanteau Morphemes

While generally the morphemes that express aspect in Petalcingo Tzeltal are invariant, other than taking inflection markers in circumstances described above, and are easily segmentable from person/number cross-reference morphemes, there is one notable exception to this pattern: the incompletive 2nd-person marker, *ka*. When a transitive clause with incompletive aspect appears with a 2nd-person agent, a different marker must be used:

(108) a. ka na-Ø  
A:2.ICMP know-B:3  
‘You know it’
b. * a-na-Ø  
A:2-know-B:3  
‘You know it’

In the perfective, a regular Set A marker must be used:

(109) a. * laj ka mil-Ø  
A:2.ICMP kill-B:3  
‘You killed it’
b. laj a-mil-Ø  
PFV A:2-kill-B:3  
‘You killed it’

The incompletive 2nd-person marker, *ka* could be analyzed as the combination of the word-final phone in *yak* and the regular 2nd-person ergative marker *a(w)*. This suggests that in “Pre-Petalcingo Tzeltal” *yak* was always used to mark incompletive in transitive clauses. Today, *ya(k)* marks incompletive clauses in the Tenejapa variant of Tzeltal (Clifton 2001) as well as in the Bachajon variant (Slocum, Gerdel, and Cruz Aguilar 1999). This theory receives further support if we note that this combination of the *yak*-final consonant /k/ and a following vowel becomes phonologically quite natural. Were *yak* to precede transitive verbs, as I argue, what would follow the *yak*-final /k/ is one of five phones: /k/, /j/ (for 1st-person ergative cross-reference), /a/ (for 2nd-), and /s/ or /y/ (for 3rd-). This means that there would be five different double-phone clusters at the junction: kk, kj, ka, ks, and ky. The kk consonant cluster would reduce to k by the regular application of a phonological rule, and the kj and ks would reduce (deleting the /k/) because these consonant clusters seem to be disallowed, or at least dispreferred in Petalcingo Tzeltal, which explains why we do not see the remnant of *yak* with 1st-person ergative in incompletive clauses. The ka cluster is rather natural in Petalcingo Tzeltal and thus we see the remnant of *yak* with 2nd-person ergative in incompletive clauses.

This analysis makes an interesting prediction: as the ky cluster is perfectly fine in Petalcingo Tzeltal, we should be able to see the remnant of *yak* in 3rd-person ergative markers with vowel-initial stems. This is exactly what we find, at least in some cases:

(110) a. laj y-a-be-Ø  
PFV A:3-give-APPL-B:3  
‘She/he/it gave it’
b. ky-a-be-Ø
   ICMP.A:3-give-APPL-B:3
   ‘She/he/it gives it’

(111) a. laj y-il-Ø
   PFV A:3-see-B:3
   ‘She/he saw it’

b. ky-il-Ø
   ICMP.A:3-see-B:3
   ‘She/he sees it’

Interestingly, the /k/ does not show up in negative incompletive transitive constructions:

(112) ma-x a-k^an-Ø?
   NEG-ICMP A:3-want-B:3
   ‘You don’t want it?’

This seems to show that incompletive x- and incompletive ya(k) are (or were) in complementary distribution with transitive verbs.

**Imperative**

In line with Petalcingo Tzeltal grammar’s preoccupation with grammatically separating transitive and intransitive verbs, imperatives seem to be formed differently for these two kinds of verbs. For intransitives, the suffix -an is used, with a plural Set B marker, if necessary:

(113) a. we7-an
   eat-IMP
   ‘Eat!’

b. och-an-ik
   enter-IMP-A:PL
   ‘(You pl) enter!’

For transitive verbs, the basic imperative is formed from a verbal stem with an -a suffix, with an optional Set A plural marker. No Set A person marker (on the left edge) is used:

(114) a. mil-a-Ø
   kill-IMP-B:3
   ‘Kill it!’

b. mil-a-y-ik cjk in-i
   kill-IMP-EPN-A:PL also DEM-PROX
   ‘(You pl) kill this one too!’ [HBC:0417]

A Set B marker can be attached to the verb if necessary to indicate the patient argument of a transitive imperative:

(115) mil-on
   kill-B:1
   ‘Kill me!’
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

The construction above could be analyzed as containing the -a imperative suffix, which has been deleted through the process of vowel hiatus resolution. On the other hand, sometimes Tzeltal epenthesis a glide to break up vowel clusters (though the conditions which govern vowel deletion, rather than epenthesis of a consonant to break up vowel clusters are not clear), so perhaps an argument could be made that the imperative marker is either Ø, or competes for the same slot as the absolutive cross-reference.

Negative imperatives of the intransitive verbs are usually formed with the me particle, which, in this case, may be the evidential -me discussed in “Evidentials,” below. Negative intransitive imperatives without this marker are ungrammatical. The fact that me is not functioning as a complementizer is illustrated by the fact that the other complementizer te is ungrammatical in these constructions:

(116) a. ma me yahl-an
    NEG EMPH fall-IMP
    ‘Don’t fall!’

b. * ma yahl-an
   NEG fall-IMP
   ‘Don’t fall!’

c. * ma te yahl-an
   NEG COMP fall-IMP
   ‘Don’t fall!’

Transitive imperatives optionally take the me marker, and interestingly, make use of the incomplete marker generally used only with intransitive verbs (in declarative clauses):

(117) a. ma-x a-mil
       NEG-ICMP A:2-kill
       ‘No lo mates! Don’t kill it’

b. ma me x-a-mil
   NEG EMPH ICMP-A:2-kill
   ‘No lo mates! Don’t kill it’

The placement of me seems to suggest that it is, in fact, the evidential marker, as it appears in the second position, between the negative marker and the aspectual clitic. This is the position in Petalcingo Tzeltal clauses where many evidential clitics appear.

Auxiliaries and Directionals

A rough schematic of a complete Tzeltal verbal complex was given in (87), above, and is reproduced in a shortened version here:

(118) (ASPECT) (AUX) VERB (DIRECTIONAL1) (DIRECTIONAL2)
The diagram suggests that the pre-verbal auxiliary may indicate something other than aspect, and this is true. The verbs that have been found to occupy this position are listed below (more verbs may be available to act as auxiliaries):

<table>
<thead>
<tr>
<th>Auxiliary</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>baht</td>
<td>go</td>
</tr>
<tr>
<td>jahch</td>
<td>lift</td>
</tr>
<tr>
<td>jul</td>
<td>arrive</td>
</tr>
<tr>
<td>k’an</td>
<td>want</td>
</tr>
<tr>
<td>k’ot</td>
<td>arrive</td>
</tr>
<tr>
<td>laj</td>
<td>finish</td>
</tr>
<tr>
<td>lihk</td>
<td>lift (begin)</td>
</tr>
<tr>
<td>lok^</td>
<td>exit</td>
</tr>
<tr>
<td>muh</td>
<td>rise</td>
</tr>
<tr>
<td>och</td>
<td>enter</td>
</tr>
<tr>
<td>suht</td>
<td>return</td>
</tr>
<tr>
<td>tal</td>
<td>come</td>
</tr>
</tbody>
</table>

Table 16: Auxiliary Verbs

Auxiliaries in Mayan languages have been previously analyzed in the literature. See Aissen 1987 for a Tzotzil analysis, or Zavala Maldonado 1993 for a treatment of auxiliaries in Mayan languages. Here I will only touch on some major aspects of Petalcingo Tzeltal auxiliaries, though some analysis will be offered in Chapter 2.

It will be noted that the large majority of auxiliaries are motion verbs. Semantically these verbs may express one of three things: aspect/mood, motion, or motion-cum-purpose as described for Tzotzil in Aissen 1994. Some examples are given below:

(119)  
\[ k-lihk-Ø \ koh-el \ jun \ kubeta \ ja7 \]
\[ :1:lift-B:3 \ descend-PART \ one \ bucket \ water \]
‘Voy a bajar con una cubeta de agua; I will descend with a bucket of water’

The construction above is assimilated to the progressive construction syntax in Chapter 2.

Directionals are formed from motion verbs and appear at the end of a verbal complex. In this position the verbs take the -el suffix, and up to two such verbs may appear following the main verb:

(120)  
\[ yah-laj \ koj-el \ tael \ me \ ala \ ts^i7-e \]
\[ fall-EVID \ DIR:down \ DIR:toward \ DET \ DIM \ dog-CL \]
‘The doggie fell down (toward us)’ [PMP-FS2:0050]

---

24 How the directional-forming -el suffix relates to the homophonous participle-forming suffix is an open question.
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

These seem to express not only the direction of the action, but depict the deictic perspective (as in the case of talel above) from which the motion is presented. It seems that the second directional slot is reserved for the perspectival use of the directional, as only a few verbs may appear there, as detailed in the following table:

<table>
<thead>
<tr>
<th>Slot 1</th>
<th>Gloss</th>
<th>Slot 2</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>lok^el</td>
<td>exit</td>
<td>tal(el)</td>
<td>toward</td>
</tr>
<tr>
<td>muhel</td>
<td>rise</td>
<td>bahel</td>
<td>away</td>
</tr>
<tr>
<td>kohel</td>
<td>descend</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ochel</td>
<td>enter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sutel</td>
<td>exit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17: Directional Verbs

One verb, tal, does appear without the -el suffix, suggesting that perhaps it is farther along a grammaticalization cline than the other directionals. This is supported by the fact that some speakers feel that it forms a single word with the word to its left. An example is given below:

(121) yakal-on-tal ta bej-el
     PROG-B:1-DIR:toward PREP walk-PART
     ‘I am coming on foot (walking)’

The position of the directional can determine whether the auxiliary is interpreted as spatial or aspectual. Consider:

(122) a. och-on ta behel (talel)
      enter-B:1 PREP way-PCHG (DIR:towards.here)
      ‘empezé caminar; I started walking’

b. och-on tal(el) ta beh-el
   enter-B:1 DIR:towards.here PREP walk-PART
   ‘entré caminando; I walked in’

What this shows is that the directional appears at the right edge of the VP, with anything to the right of the directional being interpreted as a VP-adjunct. Spatial auxiliaries like och are interpreted as aspectual if they appear without a complement content verb, and spatial otherwise, though it must be noted that och can perfectly well function as a directional (ochel).

Counterfactual Past Incompletive

One particular auxiliary that deserves special treatment, is k^an (“was/were going to [do X]”), which plainly derives from a transitive root k^an (“to want”). One reason it must be accorded its own section is that Petalcingo Tzeltal distinguishes it morphosyntactically: its complement verb, when intransitive, must take an irrealis mood marker. Given Tzeltal’s propensity for treating transitive and intransitive verbs differently, it is no surprise that transitive complements are treated differently:

(123) a. k^an s-mil-Ø
      want A:3-kill-B:3
      ‘Lo iba a matar; he/she/it was going to kill it’
b. k\^an yahl-uk  
want fall-IRR  
‘Iba a caer; He/she/it was going to fall’

With absolutive marking present, the vowel in -uk deletes:25

(124)  
k\^an yahl-k-on  
want fall-IRR-B:1  
‘Iba yo a caer; I was going to fall’

Another reason why the k\^an auxiliary seems different from others, is that unlike those already discussed, it is neither spatial nor purely aspectual, but rather is a portmanteau marker that combines aspect with modality. Though in (123b) irrealis mood is expressed overtly, in (123a) it receives no overt realization.

**Antipassives, Passives, and Middles**

This section describes antipassives, passives, and middles. These are valence-changing operations that reduce that valence of the verb from two to one (the lack of true three-place predicates in Tzeltal is discussed in “Applicatives,” below).

It is interesting to note that in all these voices, Petalcingo Tzeltal maintains its sensitivity to the transitivity of a predicate, as manifested in unmarked aspect interpretation. Thus passive, middle, and antipassive clauses with no aspect marking are interpreted as imperfective, just like intransitive clauses.

**Antipassive**

Petalcingo Tzeltal, like most ergative languages, features an antipassive construction. Antipassive is a valence changing operation that elides the object of the transitive verb, producing an intransitive predicate. While a regular transitive verb must bear both ergative and absolutive markers, antipassivized verbs may not bear ergative marker, and agree with their sole core argument via an absolutive cross-reference:

(125)  
a. mil-awan-on  
kill-APAS-B:1  
‘yo mató; I killed’

b. pas-awan-at  
do-APAS-B:2  
‘tu hiciste; you did, you made’

c. x-mil-awan-on  
ICMP-kill-APAS-B:1  
‘mato; I kill’

Antipassive in the world’s ergative languages is usually used to promote an agent argument to the “subject” slot for extraction, intra-clause co-reference and other operations that may required an absolutive-marked argument, as well as to omit a reference to a patient, by detransitivizing a verb. An interesting example of the latter function is as follows:

---

25 I am grateful to John Haviland for suggesting this analysis.
In Tzeltal the stem *wowo*ta ("to bark at someone") is transitive, however in the example above, the dog is not barking at anything in particular, therefore the speaker used the antipassive form to describe the action.

### Passive

Passive is an operation that promotes the object of a transitive clause to a subject, and elides (or demotes to an oblique) the (former) subject. Unlike some ergative languages, Petalcingo Tzeltal also has a productive passive construction. Normally, Tzeltal transitive verbs obligatorily take ergative cross-reference markers, however since the subject of a transitive verb is elided or appears as an oblique, no ergative inflection is possible with passivized verbs. The (former) object is cross-referenced, as before, via absolutive agreement markers:

(127) a. mil-ot-Ø
    kill-PASS-B:3
    ‘lo mataron; he was killed’

b. x-mil-ot-at
    ICMP-kill-PASS-B:2
    ‘te van a matar; you will be killed’

The agent, when expressed, is realized as an oblique:

(128) a. x-mil-ot-at y-u7un winik-etik
    ICMP-kill-PASS-B:2 A:3-for man-PL
    te me x-bah-at ta Majasil
    COMP EMPH ICMP-go-B:3 PREP Majasil
    ‘You’ll be killed by (some) men if you go to Majasil’

b. ti7-ot ta ts^i7
    bite-PASS PREP dog
    ‘It was bitten by the dog’

I am not sure whether -u7un and ta are in free variation when expressing demoted agents in a passive, or if there is some subtle semantic difference between the two. Aissen 1987 claims that in Tzotzil ta is less common than -u7un for expressing agents of passivized verbs, and that for expressing non-3rd-person agents ta is ungrammatical.

Unlike some languages (such as German), Tzeltal passive cannot be applied to an intransitive verb to form impersonal passives.

### Middle

Finally, Petalcingo Tzeltal has a middle voice. Polian 2003a reports that in the Oxchuk variant this construction is not very productive. The extent of its productivity in Petalcingo Tzeltal is unknown. The middle voice is formed by infixation of /j/ or /h/ (alternatively, by lengthening of the vowel, see “Vowels” on page 11, above). Some examples:
(129) a. laj k-mak-Ø
   PFV A:1-close-B:3
   ‘Llo cerré; (I) closed it’  ‘Se cerró; It closed’

b. laj k-jam-Ø
   PFV A:1-open-B:3
   ‘Lo abrí; I opened it’  ‘Se abrió; It opened’

c. laj j-k^as-Ø machit-e7 k^ahs-Ø machit-e
   PFV A:3-break-B:3 machete-CL
   ‘Lo rompeó el machete; the machete broke’

When the root vowel is already aspirated (lengthened) the aspiration is replaced by /j/, whereas when the root vowel is not aspirated aspiration, or /h/ is infixed.

That these are true middles can be shown by the fact that unlike passives, no agent can be expressed:

(130) a. * mihl y-u7un winik-etik-e
   kill.MID A:3-by man-PL-CL
   ‘(He) was killed by the men’

b. mil-ot y-u7un winik-etik-e
   kill-PASS A:3-by man-PL-CL
   ‘(He) was killed by the men’

As with the other valence-reduced forms discussed in this section, this construction is interpreted as perfective when unmarked for aspect; incompletive is formed the same as with intransitive verbs:

(131) x-mahk-Ø
   ICMP-close.MID-B:3
   ‘Se sierra; It closes’

Some middle constructions appear without the infix, and are formed simply from transitive stems without ergative marking on the verb. The set of stems that does not undergo infixation varies among speakers: the same roots that take the infix for some speakers do not take it for other speakers.

**Applicatives**

Applicatives are generally considered valence-increasing operations that promote a peripheral argument (an oblique) to a core argument of the verb. Petalcingo Tzeltal has one applicative construction, with the sense of “for (someone)”: it can express benefactive as well as malefactive meaning. In addition many verbs that are tri-valent in English (like “say” or “give”) are expressed though the applicative construction in Tzeltal. Both of these uses are illustrated below:

(132) a. ya-bal a-jam-b-on-ik in-i7
   ICMP.EMPH A:2-open-APPL-B:1-PL DEM-PROX
   ‘Si puedes abrir este; Can you open this for us?’ [HBC:0278]
Applicatives do not make the verb actually tri-valent in Petalcingo Tzeltal. This is seen when a transitive verb with an applicative is passivized, as in the following example:

\[
(133) \quad ti7-b-ot \quad s-ni7 \\
\text{bite-APPL-PASS A:3-nose} \\
\text{‘He got his nose bitten’ [APG-FS:0044]}
\]

In this example, if the applicative (with a transitive verb) formed a trivalent predicate, we would expect that when such a stem is passivized it would form a transitive stem again. The fact that the construction in (133) is, in fact, intransitive, shows that trivalent Tzeltal does not have trivalent verbs.

Therefore in Petalcingo Tzeltal “applicative” should be more properly considered an argument re-arranging application; however, it does allow more arguments to be expressed without the need for oblique constructions.

**Perfect and Resultative Constructions**

Comrie 1976 argues that while perfect constructions have been traditionally analyzed as belonging to an aspect category, frequently these constructions are unlike verb phrases with aspectual marking. The facts of Petalcingo Tzeltal perfect constructions seem to support this assertion, and for this reason the perfect constructions are discussed separately from aspectual marking.

Petalcingo Tzeltal features a variety of perfect and resultative constructions. In keeping with the language’s morphological preoccupation with distinguishing agent-oriented and patient-oriented constructions (see -el vs. -aw in “Verb forms” on page 43, above), for transitive verbs Petalcingo Tzeltal distinguishes agent-oriented versus patient-oriented perfects and resultatives. The perfect morphology can be summarized as follows:

<table>
<thead>
<tr>
<th>Morpheme</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>-oj/-ej</td>
<td>Agent-oriented transitive perfect</td>
</tr>
<tr>
<td>-bil</td>
<td>Patient-oriented transitive perfect</td>
</tr>
<tr>
<td>-em/-en</td>
<td>Intransitive perfect</td>
</tr>
</tbody>
</table>

**Table 18: Perfect and Resultative Markers**

In this section I do not make a distinction between perfect and resultative, and use these terms interchangeably. The details of these constructions are described in what follows.
Agent-Oriented Transitive Perfects

This perfect construction requires an expression of the agent via ergative cross-reference, and, in fact, is ungrammatical without it:

(134) a. s-mil-oj-Ø
    A:3-kill-PERF-B:3
    ‘Lo ha matado; He has killed him/her/it’

b. * mil-oj
    kill-PERF
    ‘(Someone) killed it’

The determination of how the allomorph is selected is somewhat opaque to me. For some informants, the -oj allomorph is generally the default one, the one exception being when it follows a causative -(t)es, though even then, for some of the less frequently causitivized roots these speakers accept the -oj allomorph. For others, both -oj and -ej are equally acceptable in most cases.

This perfect construction, unlike the others described in this section, is not used attributively (as a modifier of a noun): some speakers find it marginal in attributive use, while other reject it outright. It is interesting to note that for those speakers that find attributive use at least marginally acceptable, the noun it would modify would be construed as the patient, rather than agent of the action.

For unmarked aspect purposes, Petalcingo Tzeltal seems to treat this construction as an intransitive. Consider the following:

(135) a. k-jel-oj-Ø
    A:1-change-PERF-B:3
    ‘I have changed it’

b. x-jel-oj-Ø
    ICMP.A:3-change-PERF-B:3
    ‘He will have changed it’

Even though both the agent and the patient can be expressed via the cross-reference markers on the verb, aspect marking with this construction follows the intransitive paradigm: unmarked (for aspect) constructions are interpreted as perfective, while incompletive aspect must be expressed overtly. There are two possible explanations for this: one is that even though both of the arguments are cross-referenced on the verb, the construction is so agent-oriented (like an anti-passive) that it is treated as intransitive. Or perhaps, since perfect expresses a result of some action, and thus is more commonly describes a state of affairs resulting from some action, this is one case in Petalcingo Tzeltal grammar where the expected usage is dictating the unmarked interpretation.

The fact that this perfect marking can co-occur with other, overt, “primary” aspect marking (namely imperfective) seems to suggest that -oj should be treated differently from aspectual markers. This is beside the fact that this perfect construction, like all others, shows up in a completely different place on the verb. Taken together, these facts seem to support Comrie’s analysis of perfect as something different than aspect.
Patient-Oriented Transitive Perfect

This morphological perfect is the patient-oriented counterpart to the agent-oriented construction detailed above. This de-verbal form, unlike a regular verb, can be used either predicatively or attributively:

(136) a. mil-bil laj k-il-Ø te winik-e
   kill-PERF PFV A:1-see-B:3 DET man-CL
   ‘I saw the man, dead’

   b. laj k-chon-Ø k^as-bil machit
   PFV A:1-sell-B:3 break-PERF machete
   ‘I sold the broken machete’

   c. k-mil-bil ts^i7
   A:1-kill-PERF dog
   ‘my killed dog’

However, it is possible that even in (136b) k^asbil (“broken”) is a secondary predicate. We would need to have an example of the putative attributive use with non-3rd-person head noun to be sure.

With this patient-oriented perfect, agent expression is not required, and ergative cross-reference marking is not possible. An agent can be expressed as an oblique, headed by relational noun or a preposition, but only when the perfect is used as a main predicate:

(137) a. te x-Marta pas-bil y-u7un te portera
   DET G-Marta do-PERF A:3-by DET portera
   ‘Marta fue curado por la partera; Marta was cured by the portera’

   b. te mut mil-bil ta ts^i7
   DET chicken kill-PERF PREP dog
   ‘The chicken was killed by the dog’

This distribution covers (is a union of) the distribution of a bare noun stem (which can function as a predicate) and a noun stem with attributive morphology (which can only function as a modifier). This is illustrated in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Bare Noun sak (“white”)</th>
<th>Attributive Noun sakil (“white”)</th>
<th>Perfect milbil (“killed”)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Predicate</strong></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Secondary Predicate</strong></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
</tr>
<tr>
<td><strong>Attributive</strong></td>
<td>no</td>
<td>yes</td>
<td>yes</td>
</tr>
</tbody>
</table>

Table 19: Distribution of -bil Perfections

Presumably just like bare noun stems with adjectival meaning, this type of perfect can also be used as an argument, though I do not have data to support this assertion.
Intransitive Perfects

Intransitive perfects are formed via the -em/-en verbal suffixes. At this point the criteria that determine which of these suffixes are selected are obscure to me. The large majority of intransitive verbs take the -em suffix:

(138) a. yahl-em te alal-e
   fall-PERF child-CL
   ‘The child has fallen’

b. ay cham-en winik ta s-na7
   exist die-PERF man prep A:3-house
   ‘There is a dead man in his house’

Just like the -bil perfect, the -em/-en perfect can function as an attributive or a predicate.

Clause Structure

In this section I describe some aspects of the structure of Petalcingo Tzeltal clauses. Since the word order and VP structure were already described in some detail above, in this section I concentrate on the other aspects of the structure of the clause.

Existential Predication

The basic lexical item used to express existence is ay, “there is.” It is not a loan word (from Spanish hay, “there is”), as the closely-related Tzotzil features an undoubtedly related predicate oy (Haviland 1981, Aissen 1987). It takes absolutive markers to cross-reference the person of the argument of the existential predicate:

(139) a. ay-Ø waj
   exist-B:3 tortilla
   ‘There is/are tortilla(s)’

b. li7 ay-on-ix-i
   here exist-B:1-already-prox
   ‘I am here already’ [HBC:1289]

The word used to express the lack of existence is mayuk. It can be analyzed as ma-ay-uk (NEG-EXIST-IRR), as is demonstrated when a modal clitic -to (“still”) intervenes:

(140) a. mayuk lus
   neg.exist electricity
   ‘There is no electricity’

b. ma-to ay-uk lus
   neg-still exist-IRR electricity
   ‘There is still no electricity’

Mood and Modality

There is one modality marker in Tzeltal: -uk. It occurs with negative existentials, as described in “Existential Predication,” above. This irrealis marker likewise occurs with “was going to...” constructions with intransitive complements, as described in “Counterfactual Past
Chapter 1: A Grammatical Sketch of Petalcingo Tzeltal

Incompletive” on page 54, above. The most common use, however, seems to be with a type of negation such as in the following example:

(141) te ts’i7 laj smil-Ø pero ma7 mis-uk
DET dog PFV A:3-kill-B:3 but NEG cat-IRR
‘The dog did kill it, but it was not a cat (that it killed)’

In (141) the speaker is agreeing with the assertion that the dog killed something, but denying that it was a cat that it killed. Since it is not possible to negate a specific constituent in Tzeltal (see “Negation” on page 64, below), the constituent negated bears an irrealis mood marker.

The clitics -to (“still”) and -ix (“already”) also could be considered modal, in the sense that they encode speaker’s attitude toward the proposition expressed (but not in the sense of expressing propositions over possible worlds). Both prefer to be second-position clitics, though -to prefers a position immediately after NEG and will break up a constituent to do so, while -ix will not do so. Compare:

(142) a. mayuk-ix lus
NEG.EXIST-already electricity
‘Already there no electricity’

b. ma-to ay-uk lus
NEG-still EXIST-IRR electricity
‘There is still no electricity’

Clitic placement is discussed in more detail in “Clitic Placement”, below.

Evidentials

There are (at least) three types of morphological evidentials in Petalcingo Tzeltal: the reportative -laj and the dubitative -wan, and the “emphatic” -me.

The reportative -laj is an enclitic that signals that the information comes from the source other than the speaker. It is used extensively in retelling stories, repeating what someone else had said, etc:

(143) a. “me li7 ay-Ø-ix” xchi-laj
‘EMPH here EXIST-B:3-already’ say-EVID
‘ “It is here already”, he says/said [AMP-FS:0129]

b. baht-Ø laj-ix ta way-el
go-B:3 EVID-already PREP sleep-PART
‘He went to bed’ (retelling a story) [PMP-FS2:0013]

The -laj marker seems to prefer to cliticize to the aspect marker, as is shown below:

(144) laj k-a7i-Ø laj-laj s-mil-Ø j-kojt mut
PFV A:1-hear-B:3 PFV-EVID A:3-kill-B:3 one-NC chicken
‘I’ve heard that he/she/it, killed a/one chicken’

It will be recalled that transitive clauses with unmarked aspect are interpreted as incompletive, with the reflex of the former incompletive marker yak, now ya, functioning as an emphatic marker. The incompletive ya is sometimes inserted as a host for the reportative -laj as in the following example:
(145) te winik-e ya-laj s-mil-Ø te mis-e
   DET man-CL ICMP-EVID A:3-kill-B:3 DET cat-CL
   ‘The man, he/she/it/they say, kills the cat’

I have one textual example of the reportative -laj clitic interrupting a constituent, as follows:

(146) ta yan-laj-ix lugar banti a7 k^ot-7a me y-ok-e
    PREP other-EVID-already place where PT arrive-? DET A:3-foot-CL
    ‘It is in another place that his foot came’

It appears the everything after banti forms a relative clause, with lugar as the head. This means that the matrix clause is lacking a verb, and consequently aspect marking, which helps explain the location of the reportative -laj in (146).

The dubitative -wan enclitic marks information about which the speaker has some doubt, or is uncertain about. It seems to freely attach itself to any constituent, though generally it seems to attach to the focus, or new information, in the clause. Some examples follow:

(147) a. ma-wan ejido-h-uk a?
    NEG-EVID village-EPN-IRR DIST
    ‘creo no era ejido? It wasn’t a village, no?’ [N:0004]

b. lek-wan in machit-e
    good-EVID DEM machete-CL
    ‘I think this one (machete) is good’ [HBC:0299]

c. ma-wan
    NEG-EVID
    ‘I don’t think so’

d. ta Yajalon-wan
    PREP Yajalon-EVID
    ‘I think to Yajalon’ (as a response to “Where did he/she go?”)

The other clitic to be discussed in this section is the “emphatic” -me. I originally considered this morpheme as an emphatic marker, however, in Haviland 2002 the cognate morpheme in Tzotzil is analyzed as a second-position evidential clitic, in paradigmatic opposition to reportative -laj. This analysis seems appropriate for Petalcingo Tzeltal, as the -me marker appears to be less than fully grammatical with -laj:

(148) a. *? laj-laj me s-maj-Ø
    PFV-EVID EMPH A:3-hit-B:3
    ‘(really!) he did hit him, I heard’

b. ? laj me laj s-maj-Ø
    PFV EMPH EVID A:3-hit-B:3
    ‘(really!) he did hit him, I heard’

Haviland glosses the -me as marker of “speaker as principal”, where (in opposition to -laj) the speaker asserts that the speaker him/herself is the source of the information. This analysis seems to be appropriate for Petalcingo Tzeltal, except that it appears that in
Petalcingo in addition, *-me frequently signifies (implies) “I (forcefully) assert (the truth of what I am saying).” A minimal pair might be sited:

\[(149)\]

<table>
<thead>
<tr>
<th>a.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>laj</td>
<td>k-a-be-y-ix</td>
<td>PFV A:1-give-APPL-EPN-already</td>
<td></td>
</tr>
<tr>
<td>‘ya le dí; I already gave it to him/her/it’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>b.</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>laj me k-a-be-y-ix</td>
<td>PFV EMPH A:1-give-APPL-EPN-already</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘ya le dí; I already gave it to him/her/it’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The two locutions cited in (149) are paraphrases. However, while the first one may be a good response to “What happened?” or “What did you do with the water?” the second one is more appropriate as a contrastive response to “You didn’t give it to her/him/them/it!”

Other evidentiality in Petalcingo Tzeltal is expressed by distinct lexical items, the syntax of which has not been investigated. A brief list is shown in the following table:

<table>
<thead>
<tr>
<th>Lexical Item</th>
<th>Literally</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>melel</td>
<td>truth, truthfully</td>
<td>It is the truth what I am saying</td>
</tr>
<tr>
<td>k^ajon</td>
<td>?</td>
<td>It appears this way (inference?)</td>
</tr>
</tbody>
</table>

Table 20: Evidential Adverbs

**Negation**

The negative marker in Tzeltal is *ma*. It appears at the left edge of the clause preceding all the verbs and the auxiliaries:

\[(150)\]

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ma-x aw-il-ik jaex-e7?</td>
<td>NEG-ICMP A:3-see-PL you.PL-CL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Ustedes no lo ven? You(pl) do not see it?’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As discussed below in “Clitic Placement,” the negative marker frequently hosts modal and evidential clitics. Interestingly, however, when a constituent is fronted, it appears to the left of the negative marker:

\[(151)\]

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ja7 laj me ts^i7-e ma7 laj ba kuhch</td>
<td>F/T EVID DET dog-CL NEG PFV ? hold</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EVID? A:3-see-B:3 alse DET A:3-house wasp-CL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘No avanto los ganas de ver la casa de avispo;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(The dog) did not (could not) control his desire to see the wasps’ nest’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This may indicate that the fronted constituents are clause-external topics along the lines of the analysis proposed in Aissen 1987.

Negated constituents are expressed in a clause with the usual negative marker *ma*, however, the negated constituent bears an irrealis marker, as was already discussed.

---

26 It may be plausible to postulate a historical relation between the evidential *-me and the definite article *me described in “Determiners” on page 39, above.
Questions

Traditionally, in other Mayan languages a question marker is used to form yes/no and other non-wh-word questions. Such a marker also exists in Petalcingo Tzeltal, but to my knowledge it is not always used. An example follows:

\[(152)\quad ay-bal \ chenek^{^\sim} \]
\[
{\text{EXIST-Q}} \ beans
\]
\['Are there beans?’

Wh-questions are formed with wh-words, which are summarized in the following table:

<table>
<thead>
<tr>
<th>Wh-word</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>bin(tl)</td>
<td>what</td>
</tr>
<tr>
<td>ban(tl)</td>
<td>where / what / which</td>
</tr>
<tr>
<td>mach^a</td>
<td>who</td>
</tr>
<tr>
<td>jay(eb)</td>
<td>how many</td>
</tr>
</tbody>
</table>

Table 21: Wh-words

The wh-words are obligatorily fronted. Given that there is no evidence of case in Petalcingo Tzeltal, wh-questions out of context may be ambiguous:

\[(153)\quad mach^{^\sim}a \ laj \ s-mil-Ø \]
\[
{\text{who \ PFV \ A:3-kill-B:3}}
\]
\['Who killed him/it/her?’ or ‘Who did he/she/it kill?’

The first two items in the above table may appear with or without the final (- tl) and the criteria governing its appearance are obscure to me. The question word “whose” does not exist in Petalcingo Tzeltal: this question instead is formed with \(mach^{^\sim}a + yu7un\):

\[(154)\quad mach^{^\sim}a \ y-u7un \ in \ machit-i \]
\[
{\text{who \ A:3-for \ DEM \ machete-PROX}}
\]
\['Whose machete is this?’

To form “which”-type questions, the word \(banti\) is used:

\[(155)\quad banti \ mut-il^\sim\]
\[
{\text{what \ chicken-PCHG? \ ‘which chicken?’}}
\]

Wh-words are also used in the formation of the relative clauses (see “Relative Clauses” on page 70, below). Multiple wh-questions (such as “who killed whom”) are impossible in Petalcingo Tzeltal.

Reflexives

The reflexive morpheme in Petalcingo Tzeltal is \(-ba\), and it obligatorily takes a Set A marker. Historically, it may be related to the word \(ba\) (“top, forehead”). Some examples of reflexive constructions are shown below:

\[\]

\[27\] It appears that when forming “which”-type questions, either an -il or a -Vl suffix is required on the questioned nominal. The syntax of the usage of this suffix in “which”-type constructions is obscure to me.
a. laj s-nak^ s-ba
   PFV A:3-hide A:3-REFL
   ‘He hid himself’

b. laj k-nak^ k-ba
   PFV A:1-hide A:1-REFL
   ‘I hid myself’

The -ba anaphor functions as the (transitive) object argument of the verb, as is evidenced by the appearance of the ergative morpheme on the verb, and lack of the overt absolutive agreement in (156b). (Aissen 1997 argues the same for Tzotzil, though she argues that there is a Ø 3rd-person agreement on the verb)

Though Tzeltal does not feature a morphological reflexive, the -ba anaphor seems to behave very much like one: unlike regular patient arguments of the verb, which are free to move, the reflexive must appear immediately after the verb, a highly unusual phenomenon in a free word-order language such as Tzeltal. The apparent exceptions to this rule are reflexive-like constructions that do not involve a verb, to be described below. Some evidence for the claim that the verb and a reflexive anaphor form a tightly integrated unit comes from plural agreement facts. When a plural agent acts on a patient, the verb (optionally) agrees with the agent in number, whereas in plural reflexive constructions, this agreement must appear on the anaphor, and never on the verb (at least for some speakers):28

a. laj k-mil-tik te mut-etik-e
   PFV A:1-kill-PL DET chicken-PL-CL
   ‘We killed the chickens’

b. laj k-nak^ k-baj-tik
   ‘We hid ourselves’

c. * laj k-nak^-tik k-baj-tik
   ‘We hid ourselves’

Example (157a) shows regular plural agreement on the verb. As (157c) demonstrates, the same plural agreement on the verb is ungrammatical when the verb takes a reflexive complement. The plural agreement in reflexive constructions must appear on the reflexive anaphor -ba, and not on the verb itself. This suggests that whatever the syntax of Tzeltal reflexive constructions, the reflexive anaphor must be located very close to the verb, resembling, in some ways a morphological reflexive (which would be typologically expected in a head-marking language like Tzeltal anyway). Furthermore, unlike regular objects of transitive verbs, -ba cannot be fronted away from its post-verbal position. Thus compare a regular (non-reflexive) usage in (158) versus the reflexive in (159), where fronting the “object” is ungrammatical:

a. laj s-mil-Ø te mut-e
   PFV A:3-kill-B:3 DET chicken-CL
   ‘He/she/it killed the chicken or The chicken killed him/her/it’

28 Others find examples like (157c) possible, but dispreferred.
b. te mut-e laj s-mil-Ø
   DET chicken-Cl. PFV A:3-kill-B:3
   ‘He/she/it killed the chicken or The chicken killed him/her/it’

(159) a. laj s-nak^ s-ba
   PFV A:3-hide A:3-REFL
   ‘She/he/it hid himself/herself/itself’

b. * s-ba laj s-nak^  
   PFV A:3-hide A:3-REFL
   ‘She/he/it hid himself/herself/itself’

Even though the -ba particle appears in some aspects to resemble a morphological reflexive, in other respects the Petalcingo Tzeltal reflexive construction is fully transitive: it features ergative marking on the verb, and, like other transitive verbs is interpreted as incompletive in the absence of overt aspectual morphology.

The reflexive anaphor also appears in other, verb-less contexts. These uses are puzzling, in that it appears that they need not / should not be reflexive:

(160) a. sole xiben s-ba me ton-tik-il-i
   only fear A:3-REFL DET rock-PL-PCHG-PROX
   ‘da miedo el pedregal; only that the rock place is scary’ [HBC:0617]

b. k^ax t^ujbil-to s-ba ta pas-el   
   very beautiful-still A:3-REFL PREP do-PART  
   ‘Era muy bonito lo que hacian; It was very beautiful what they did’ [Fra1:0005]

c. kala tukel-tike ma7 obol k-bah-tik 
   ‘nosotros solito, a poco no damos lastima; holy cow, we don’t hurt ourselves alone’ [HBC:0940]

One hypothesis about these verbless reflexives (at least some of them, such as (160b)) is that the lexical items they appear with (such as t^ujbil) may only function as modifiers (similar to nouns with modifier morphology), i.e. they may be used neither a predicates, nor as arguments. The obligatory reflexive provides the overt syntactic noun (semantically empty) which these words may then modify. This idea receives some support from the fact that t^ujbil quite frequently appears without the accompanying reflexive exactly when there is an overt noun it can modify:

(161) t^ujbil achix 
   beautiful girl  
   ‘beautiful girl’

This plainly is not true for the xiben sba construction, as xiben may not function as an attributive:

(162) * xiben winik   
      fear man  
      ‘fearsome man’

Thus a different account must be sought to explain the xiben-type reflexives. It is possible, that reflexive analysis of -ba is not appropriate in these cases.
Secondary Predicates

As I have argued above (in “Are There Adjectives in Tzeltal?” and “Positionals”) nouns used as modifiers but without the attributive suffix, as well as positionals, are actually secondary predicates. What is interesting is that secondary predicates in Petalcingo Tzeltal seem to be required to bear absolutive cross-reference markers:

(163) a. * laj k-il-at jot^-ol
   PFV A:1-see-B:2 crouched-PRED
   ‘I saw you and you were crouched; I saw you crouched’

   b. laj k-il-at jot^-ol-at
   PFV A:1-see-B:2 crouched-PRED-B:2
   ‘I saw you and you were crouched; I saw you crouched’

This seems to differ from Tzotzil, where there is dialectal variation with respect to absolutive agreement on secondary predicates, but in no dialect is such agreement obligatory. Likewise, it seems that in Oxchuk Tzeltal (Fransisco Javier Sánchez Gómez, p.c.) at least in some secondary predicate constructions the absolutive cross-reference is ungrammatical.

Subordinate Clauses

There seem to be at least three complementizers in Petalcingo Tzeltal: te, me, and Ø

(164) a. laj k-il-Ø te laj s-maj-Ø s-ts^i7 te Pedro-j-e
   PFV A:1-see-B:3 COMP PFV A:3-hit-B:3 A:3-dog DET P.-EPN-CL
   ‘I saw that Pedro hit his dog’

   b. laj k-il-Ø me laj s-maj-Ø s-ts^i7 te Pedro-j-e
   PFV A:1-see-B:3 COMP PFV A:3-hit-B:3 A:3-dog DET P.-EPN-CL
   ‘I saw that Pedro hit his dog’

   c. laj k-il-Ø laj s-maj-Ø s-ts^i7 te Pedro-j-e
   PFV A:1-see-B:3 PFV A:3-hit-B:3 A:3-dog DET P.-EPN-CL
   ‘I saw that Pedro hit his dog’

Interestingly enough they seem to correspond to the determiners available, though no systematic work has been done to see if the me complementizer is somehow more definite. One avenue of research would be to see if clauses headed by me might be factive.

Conditional subordinate clauses are formed with the complementizer te followed by me as in:

(165) a. te me x-bah-at ta Majasil x-mil-ot-at
   COMP EMPH? ICMP-GO-B:3 PREP Majasil ICMP-KILL-PASS-B:2
   ‘If you go to Majasil, you will be killed’

29 I appreciate this suggestion by Matt Pearson.
b. tal-Ø laj y-il-Ø me s-ts^i7 come-B:3 EVID A:3-see-B:3 DET A:3-dog
te me mayuk bin laj s-pas-Ø-e COMP EMPH? NEG.EXIST what PFV A:3-do-B:3-CL
‘(He) came to see his dog, (to see) if nothing happened (to it)’

There are different possible ways of analyzing this construction: a) as having something akin to two complementizers, perhaps in different projections, b) as a complementizer followed by essentially a DP, headed by me, or c) with me as some sort of relative of the emphatic evidential me. The second of the hypothesis can be ruled out on the basis of the * COMP DET prohibition discussed immediately below, while the third seems semantically implausible, since me is generally used to attest the truth, rather than conditionality of a proposition. It is possible that a different me needs to be postulated in this case.

Wh-items may be freely extracted from subordinate clauses, whether headed by an overt COMP or no:

(166) mach^a laj a-wil-Ø te laj s-maj-Ø s-ts^i7-e
     who PFV A:2-see-B:3 COMP PFV A:3-hit-B:3 A:3-dog-CL
     ‘Who did you see hit his dog?’

Relative clauses highlight an interesting prohibition against COMP followed by a DET (* COMP DET). Thus, for example, an agent argument of a subordinate clause (itself headed by a complementizer) can normally be headed by a specific (and/or definite) determiner, however, if the agent NP is fronted, ungrammaticality results:

(167) a. te/me Pedro-j-e laj s-maj-Ø te s-ts^i7-e
     DET Pedro-EPN-CL PFV A:3-hit-B:3 DET A:3-dog-CL
     ‘Pedro hit his dog’

b. laj k-il-Ø te/me laj s-maj-Ø te s-ts^i7 te/me Pedro-j-e
     PFV A:3-see-B:3 COMP PFV A:3-hit-B:3 DET A:3-dog DET Pedro-EPN-CL
     ‘I saw Pedro hit his dog’

c. * laj k-il-Ø te/me te/me Pedro-j-e
     PFV A:3-see-B:3 COMP DET Pedro-EPN-CL
     ‘I saw Pedro hit his dog’

This could be considered in instance of “stuttering prohibition.” Stuttering prohibition is the observed tendency of languages to disprefer a sequences of identical segments. In English this could be demonstrated with the following examples:

(168) a. It is obvious that it bothers the clown that the elephant smokes

b. That the elephant smokes bothers the clown

c. * It is obvious that that the elephant smokes bothers the clown

Syntactically there seems to be no reason for (168c) to be ungrammatical, therefore it is assumed that the adjacency of that to that is the reason for ungrammaticality. Another
example of the stuttering prohibition (at the morpheme level) in English is *foolish-ly versus *ugly-ly.

The problem with assuming that *COMP DET is an instance of the stuttering prohibition is that it is not clear why the stuttering prohibition would apply to the *te me sequence, since a) the segments would appear to be sufficiently distinct and b) this sequence appears to be (phonologically) fine elsewhere, such as in (165). Thus, the *COMP DET prohibition remains one of the features of Tzeltal that requires further investigation.

Relative Clauses
Relative clauses in Petalcingo Tzeltal are externally headed, usually head-initial, and are generally formed via wh-words (see Table 21, on page 65, above), with the wh-words introducing the relative clause:

(169) a. me sak-e mach^a yakal-Ø ta we7-el
   DET white-CL who PROG-B:3 PREP eat-PART
   ‘The white one that’s eating’

b. k-al-Ø jo7on chopol bin yak s-pas-ik li7 ta iglesiya-j-e
   A:1-say I bad what EMPH A:3-do-PL here PREP church-EPN-CL
   ‘I say it is bad what they do in the church here’

Deictic Clitics
There are two deictic clitics in Petalcingo Tzeltal, the distal -(7)a and the proximal -i. Of the two, -(7)a is much more common, and although it seems to be a clause-level clitic it frequently cliticizes to the word tey (“there”):

(170) a a, ja7 tey-a
     a a, F/T there-DIST
     ‘aa, there’

That in the clause-final position -a is a distal clitic can be shown by following examples:

(171) laj k-il-Ø-a
     PFV A:1-see-B:3-DIST
     ‘Alli lo vió; There I saw it’

where the word tey (“there”) is not in the clause itself but is understood, owing to the presence of the distal clitic.

The proximal deictic clitic is -i, and it occurs frequently with demonstratives:

(172) ja7-in winik-i
     F/T-DEM man-PROX
     ‘this man’

Both, the distal -a and proximal -i have grammaticalized into (or from?) other meanings. The -a can now be considered a tense marker. As discussed above, nouns generally do not take aspectual markers; thus, the only way to say “I was a man” is as follows:

(173) winik-on-a
     man-B:1-DIST
     ‘I was a man’
The -i can be used for emphatic effect, perhaps somehow “bringing” the referent marked with the proximal closer to the discourse situation:

(174)  
\[
\text{laj k-il-Ø-i}  \\
\text{PFV A:1-see-B:3-PROX}  \\
\text{‘Sí, lo vió; Yes, I saw it’}
\]

The -e Clitic

This clitic poses a vexing problem for the analysis of Petalcingo Tzeltal in this work, as this morpheme is rather ubiquitous in discourse, yet its function is not well understood. It attaches to the right edge of a DP, or a relative clause (which also may be inside the DP) as in this example:

(175)  
\[
\text{ma xu k-u7un te 7a7tel yakalon-e}  \\
\text{NEG able A:1-for DET work PROG-B:1-CL}  \\
\text{‘No puedo hacer el trabajo que estoy haciendo; I cannot do the work I am doing’}
\]

Aissen 1992 points out that only topics in Tzotzil may take the -e enclitic, but does not suggest a gloss for this morpheme. Polian 2003b analyzes this clitic in Oxchuk Tzeltal as a definite determiner in combination with te. Clifton 2001 suggests a functional analysis of the te...-e bracketing whereby in a transitive clause with two postverbal arguments it is the agent that receives the te...-e marking, and in a presence of an argument in pre-verbal position both arguments can take the te...-e marking.

In Petalcingo Tzeltal the -e clitic may appear either with a determiner (te or me) or, less frequently, without. Therefore, it seems that in this variant, it would be necessary to study this lexeme both in combination with and in the absence of an overt determiner.

In out-of-context transitive constructions where either overt argument could be considered the agent or the patient, it seems to help to disambiguate, preferring to appear on the agent. This is most clearly shown in a wh-question formed from a transitive predicate:

(176)  
\[
\begin{align*}
\text{a. mach^a7 laj s-maj-Ø winik}  \\
\text{who PFV A:3-hit-B:3 man}  \\
\text{‘Who hit the man?’}
\end{align*}
\]

\[
\begin{align*}
\text{b. mach^a7 laj s-maj-Ø winik-e}  \\
\text{who PFV A:3-hit-B:3 man-CL}  \\
\text{‘Who hit the man?’ or ‘Who did the man hit?’}
\end{align*}
\]

As we’ve already seen (in “Questions” on page 65, above), wh-questions formed from transitive clauses are ambiguous, because the wh-word does not change form depending on whether it is the subject or the object of the transitive verb. However, in (176a), unlike (176b), the preferred interpretation is with the subject questioned, not object. This it seems is due to awkwardness of interpreting the nominal not marked with -e as the subject (though I believe such an interpretation could probably be forced). This observation seems to correlate with the analysis in Clifton 2001.

As the authors cited here suggest, the -e clitic also seems to have something to do with specificity / definiteness, as the topicalized/focused constituent with ja7 (at least in those elicited examples) must bear this clitic (see examples in (179)). Likewise the nominals bearing
this clitic fail the “definiteness restriction” (see “Determiners” on page 39, above), even without an overt determiner:

\[(177)\]

- a. ay mut
  \[\text{EXIST \ chicken-CL}\]
  ‘There a chicken’
- b. * ay mut-e
  \[\text{EXIST \ chicken-CL}\]
  ‘There is the chicken’

However, an interesting wrinkle on this issue is posed by the fact that there is (another) definite determiner: \textit{me}.

\section*{Topic and Focus}

This section discusses topic and focus marking in Petalcingo Tzeltal. As my own research on this subject is vastly insufficient, I will content myself with reviewing some of the literature available on this subject, and adding my own observations where it seems appropriate.

As was briefly mentioned in “Word Order, Pro-Drop and Head/Dependent-Marking” on page 31, above, Polian 2003b proposes that topics in Tzeltal appear after the predicate. However, to Polian, this is the less marked topic position. He suggests that clause-initial positions are also topic positions, positions where marked topics appear. The focused constituent, on Polian’s analysis is immediately preceding the predicate.

This accords well with the topic and focus proposal articulated in Aissen 1992.\footnote{While this work proposes analyses of three Mayan languages, namely Tzotzil, Jacaltec, and Tz’utujil, I will only address the Tzotzil portion of her argument, as Tzotzil is very closely related to Tzeltal, and is the most closely-related of the three.} She proposes that in Tzotzil there is a clause-external topic position and a clause-internal (pre-IP) focus position.

One of the Tzeltal topic markers Polian 2003b discusses is \textit{ja7}, which he says can also be analyzed as a non-verbal predicate. However, its principal function, according to Polian is as a focus marker. In this Polian postulates that \textit{ja7} is a marker of “outstanding information,”\footnote{información destacada} or emphasis, and as such marks either topic or focus.

The focus function of this marker proposed by Polian accords with some of my elicited contrastive focus constructions:

\[(178)\]

- ma-ja7-uk a me mut-e
  \[\text{NEG-F/T-IRR PT DET \ chicken-CL}\]
  ‘No, it is NOT the chicken’

On the other hand, this correspondence was not very consistent in my elicitations, and perhaps should not be seen as reliable. Additionally an argument against the focus analysis of \textit{ja7} is the fact that it seems to require a [+specific] complement. This fact is pointed out in Polian 2003b (with the focus use of \textit{ja7}), and is supported for Petalcingo Tzeltal by the following (albeit elicited) data:
(179) a. ja7 me johkote laj smil te winike
    b. ja7 te johkote laj smil te winike
    c. ja7 jkohk johkote laj smil te winike
    d. * ja7 johkot laj smil te winike
    e. * ja7 te johkot laj smil te winike
    f. * ja7 johkote laj smil te winike

In the above example ja7 appears ungrammatical with nominals which do not bear the -e marker and a determiner or a numeral. As Matt Pearson pointed out to me, one would not expect a language to require a [+specific] (or a [+definite]) focus, as focus generally serves to introduce new information. For a topic marker, a [+specific] or a [+definite] requirement would not be unexpected since topics are by their nature entities already present in discourse.

Since I am not prepared to take a stand on the nature of the ja7 morpheme, I gloss it as F/T in the present work.

Clitics

Tzeltal is a rather clitic-rich language. Clitics are grammatical morphemes that occupy an intermediate status between affixes (prefixes and suffixes) and words. Like affixes, clitics must attach to a phonological host, a word, and like affixes they sometimes trigger word-internal phonological processes. On the other hand, like words, clitics are positioned syntactically, rather than via lexical processes (at least if we are to accept the independence of lexicon from syntax).

Tzeltal features both Wackernagel (second-position) clitics, and clitics that attach to words and phrases. While many of the Tzeltal clitics require further investigation before any conclusions about their status can be made, A summary of Tzeltal clitics is given in the following table:

<table>
<thead>
<tr>
<th>Clitic</th>
<th>Meaning</th>
<th>Domain</th>
<th>Edge</th>
</tr>
</thead>
<tbody>
<tr>
<td>-laj</td>
<td>EVID:reported</td>
<td>neg/verb/aux</td>
<td>right</td>
</tr>
<tr>
<td>-wan</td>
<td>EVID:belief</td>
<td>neg/verb/aux</td>
<td>right</td>
</tr>
<tr>
<td>-to</td>
<td>modal:still</td>
<td>neg/aux/predicate</td>
<td>right</td>
</tr>
<tr>
<td>-ix</td>
<td>modal:already</td>
<td>neg/aux/predicate</td>
<td>right</td>
</tr>
<tr>
<td>-a</td>
<td>deictic:distal</td>
<td>clause</td>
<td>right</td>
</tr>
<tr>
<td>-i</td>
<td>deictic:proximal</td>
<td>clause/DP</td>
<td>right</td>
</tr>
<tr>
<td>-e</td>
<td>determiner?</td>
<td>DP?</td>
<td>right</td>
</tr>
<tr>
<td>ERG</td>
<td>person</td>
<td>VP</td>
<td>left</td>
</tr>
</tbody>
</table>

Table 22: Clitics

32 As discussed above, the -e clitic seems to mark (among other things) definiteness and/or specificity.

33 The intransitive incompletive marker x- which seems to attach either to the right edge (to negative marker ma) or the left edge (of the verb) may need to be in this table as well.
Since the modal and evidential clitics have already been discussed, I only discuss other (possible) clitics, as well as clitic placement in this section.

### Other Clitics

The two other possible clitics that deserve serious consideration, are -\textit{ba} and -\textit{a}. -\textit{ba} frequently occurs with negation:

\begin{align*}
\text{(180)} & \quad \text{pero ma-}\text{ba} \quad y-u7\text{un-uk} \quad k^\text{\`ax} \quad \text{jelawen} \\
& \quad \text{but} \quad \text{NEG-ba} \quad A:3\text{-for-IRR} \quad \text{very} \quad \text{much} \\
& \quad \text{’Pero que no sea demaciado; But it would not be too much’ [HBC:0018]}
\end{align*}

The fact that \textit{maba} is formed from two different lexical items is clear from the fact that it can be interrupted by another clitic:

\begin{align*}
\text{(181)} & \quad \text{pe7} \quad \text{ja7} \quad \text{me} \quad \text{wits^} \quad \text{kereme} \quad \text{ma7} \quad \text{la} \quad \text{la} \quad \text{la} \quad \text{s-nuj-}\varnothing \\
& \quad \text{but} \quad \text{F/T DET small boy-CL NEG EVID \text{ba} PFV A:3-close-B:3} \\
& \quad \text{‘But the little boy did not close it’ [PMP-FS2:0016]}
\end{align*}

It is possible that it is a contraction or a relative of \textit{bal}, the interrogative particle.

-(7)a performs many functions in Tzeltal discourse: it is a Set A 2\textsuperscript{nd}-person marker, a distal clitic, a marker of agreement (see Haviland 2002 on Tzotzil -\textit{a7a}), perhaps a complementizer (see “Subordinate Clauses” on page 68, above), and also frequently appears on the negative marker:\textsuperscript{34}

\begin{align*}
\text{(182) a.} & \quad \text{pe7} \quad \text{te} \quad \text{jo7otik-e ma-7a} \\
& \quad \text{but} \quad \text{DET we-CL NEG-a} \\
& \quad \text{‘But, we, no (we don’t do it)’ [HBC:0166]} \\
\text{b.} & \quad \text{ma-7a} \quad \text{s-tsay-oj-}\varnothing \quad \text{xik^\text{\`i}} \quad \text{como} \quad \text{s-kuch-oj-}\varnothing \\
& \quad \text{NEG-a} \quad A:3\text{-grab-PERF-B:3 wing-PROX because A:3-carry-PERF-B:3} \\
& \quad \text{‘No lo tiene agarrado su ala, pero lo tiene cargado;} \\
& \quad \text{‘(She) does not have its wings (in her hand), because it (the chicken) is carrying (its wings)’ [HBC:0428]}
\end{align*}

It is not clear how many different functions -(7)a serves and how many of these can be analyzed in a non-disjunctive manner, but when attaching to the negative marker \textit{ma} it seems to act like a clitic. In this work, I have glossed non-distal -(7)a as PT (particle), and it is not unlikely that even some instances of -(7)a which have been glossed as distal markers are in fact something else:\textsuperscript{35}

Finally, I argue in Chapter 3 that the ergative/possessive cross-reference markers are also clitics.

\textsuperscript{34} It is quite probable that -7a and -a are different entities, if the form tells us anything. Clearly more work remains to be done here.

\textsuperscript{35} I base this speculation purely on the fact that they seem to occur with relative frequency in texts.
Clitic Placement

We’ve already seen how -to usually attaches to a position to the left of the position where -ix attaches (also see examples (184) and (185) below):

(183) a. mayukix
ma-ay-uk-ix
NEG-EXIST-IRR-already
‘there is already no ...’

b. ma-to ay-uk
NEG-still EXIST-IRR
‘there is still no ...’

The reportative -laj prefers to attach to an auxiliary, or to the negation marker ma. It seems to appear in a position between the -to and -ix:

(184) a. yakal-to-laj s-mil-bel-Ø
PROG-still-EVID A:3-kill-PART-B:3
‘He is still killing it (reportative)’

b. * yaka-laj-to s-mil-bel-Ø
PROG-EVID-still A:3-kill-PART-B:3
‘He is still killing it (reportative)’

(185) a. yakal-laj-ix s-mil-bel-Ø
PROG-EVID-already A:3-kill-PART-B:3
‘He is already killing it (reportative)’

b. * yakal-ix-laj s-mil-bel-Ø
PROG-already-EVID A:3-kill-PART-B:3
‘He is already killing it (reportative)’

In the examples and (185a) -ix appears on the matrix verb. On the other hand, sometimes, where evidential -laj appears on the auxiliary, the -ix appears on the dependent verb:

(186) a. i laj-laj s-koj-tes-ix ta lum-7a
and PFV-EVID A:3-descend-CAUS-already PREP ground-DIST
me este y-ala ts^i7 me wits^ kerem-e
DET this A:3-DIM dog DET small boy-CL
‘And the little boy put the dog down on the ground’ [PMP-FS2:0058]

Though not enough evidence is available, it appears as if -wan occupies the same position as -laj:

(187) a. laj-to-wan s-mil-Ø
PFV-still-EVID A:3-kill-B:3
‘He still killed him, I think’

b. te winik laj-wan-ix s-mil-Ø te ts^i7-e
DET man PFV-EVID-already A:3-kill-B:3 DET dog-CL
‘El hombre ya mato tal vez el perro; The man already killed the dog, I think’
This would not be surprising since both are evidential clitics, and would accord with the analysis proposed in Haviland 2002. As was discussed above, -me appears to be in complementary distribution with -laj and I assume that it occupies that same position.

Finally, if ba is to be considered a clitic (and it is far from clear that it should be), and even if it is not, it seems to appear to the right of the evidentials, but to the left of the modal -ix:

\[
\begin{align*}
\text{(188)} & \quad \text{ma7 laj ba-y-ix chikan-Ø me onkonak} \\
& \quad \text{NEG EVID ba-EPN-already appear-B3 DET frog} \\
& \quad \text{‘The frog did not appear (was not seen)’}
\end{align*}
\]

This yields the following placement chart:

\[
\begin{align*}
\text{(189)} & \quad \text{NEG > MODAL: -to > -laj > -wan > -ba > MODAL: -ix} \\
& \quad \text{EVID: -me}
\end{align*}
\]

If a NP/DP is fronted to a focus position (as in (187b)), it appears that it is ignored for the purposes of clitic placement.

The clitics that are frequently located at the right edge of the clause rarely co-occur, however, when they do, the order seems to be:

\[
\begin{align*}
\text{(190)} & \quad \text{MODAL > DEICTIC > -e} \\
& \quad \text{-ix > -i > -a}
\end{align*}
\]

This can be shown with the following examples:

\[
\begin{align*}
\text{(191)} & \quad \begin{align*}
\text{a. tey-a jil-ik-ix-a} \\
& \quad \text{there-DIST remain-PL-already-DIST}
\end{align*} \\
& \quad \text{‘They remained there’ [Rio:0064]} \\
\text{b. te sataje te ten-el-a-j-e} \\
& \quad \text{DET saint COMP push-PART-DIST-EPN-CL}
\end{align*}
\]

‘The saint that was buried’ [Rio:0133]

However, this may simply be owing to the fact that where the distal -a appears with the -e clitic, the -a applies to the subordinate clause, which -e marks.

**Conclusion**

In this chapter I provide an overview of the Petalcingo Tzeltal grammar. Owing both to space limitations, and time constraints, the grammatical sketch is necessarily partial, and surely contains significant gaps. Nonetheless, it is my hope that this grammatical sketch, however incomplete, of a heretofore almost completely unstudied dialect of Tzeltal might prove useful to scholars of Mayan in general and of Tzeltal in particular.

Some of the most interesting features of this language/dialect are, coincidentally, the ones that posed the greatest challenge to the author. The present status of the /j/ and /h/ distinction, which may be the result of de-phonemization of /j/, may offer an opportunity for a close scrutiny of phonemic distinction in a language. Also noteworthy are the ubiquitous (7)a morpheme(s), which at least on the surface appear to serve several different functions. This form, at least in some of its uses seems to be absent from other dialects of
Tzeltal, as one of the native speaker linguists from Ocosingo seemed unfamiliar with the Petalcingo usage of this form. The definite determiner *me*, though am unsure about its status in other variants, seems to be absent from the closely-related Tzotzil. Another striking feature of Tzeltal noted in this grammatical sketch is the radical disjunctiveness of the aspectual system, which seems to treat transitive and intransitive verbs as very different entities. This distinction seems to be maintained throughout the language, as the aspectual markings are generally consistent with the verb’s new valence when a verb is transitivized or detransitivized.
A truck from Yajalon to Petalcingo
Petalcingo from a nearby hill
The family who most graciously opened their home to me. From the left: Fransisco, Pascual, Moises, Fransisca, Marta. Missing from the picture is Rosa.
Fransisco in his coffee field
Kitchen and back of the house
In this chapter I consider the properties of -el and -bel participles, which under some previous analyses have been termed infinitives. I propose an alternative, which treats the -el participles as formally nominal forms, and attempt to show how this analysis is preferable to the infinitive analysis.

Since a -VI suffix is quite omni-present in Tzeltal grammar, it is important at the outset to circumscribe the phenomenon I wish to deal with here. The -VI suffixes can be:

- Participle-forming
- Possession-changing
- Predicate-forming (for positional roots)
- Nominalizing

This chapter will only concern the first of the above. The possession-changing suffix seems to feature some sort of disharmonizing vowel (-V₁l), while the suffix that forms predicative roots out of positional stems has a harmonizing vowel (-V₁l). The nominalizer (see “Nominalizations” on page 23 in Chapter 1) is usually -ol. The participle-forming suffix always features a low, front vowel (/e/). There are some nouns (such as 7a7tel “work”) and other words (such as -tuKel, “alone,” and ya7yel, “also”) which also may have been derived using this suffix. The most clearly nominal of these will be addressed below, whereas the non-nominal are few enough that they should not cause (formal) confusion.

Among the -el participles, several environments in which these appear may be identified: as complements of auxiliaries, as directionals, in constructions with certain transitive verbs, as well as adverbials. In this chapter I will mainly be concerned with the first of these, that is the syntax of -el participles as complements of auxiliary verbs, primarily the progressive auxiliary yakal. I will briefly address the adverbial function as well as the environment of transitive matrix verbs towards the end of the chapter, with a view toward directional uses of the -el participles, however, these parts of the Tzeltal grammar will remain mostly outside of the scope of the analysis herein presented.

**Descriptive Facts**

One of the paradigmatic uses of -el participles in Petalcingo Tzeltal discourse is as a complement to the progressive marker yakal:

(1) a. yakal-on ta yahl-el

   PROG-B:1  PREP fall-el

   ‘I am falling’
Chapter 2: Participles

b. yakal-on ta maj-el
   PROG-B:1 PREP hit-el
   ‘I am being beaten; (they) are beating me’

Both transitive and intransitive verbs can take this form. Generally when the -el participle is a complement of yakal, it is preceded by a preposition:36

(2)   * yakal-on maj-el
       PROG-B:1 hit-el
       ‘I am being beaten; (They) are beating me’

The -el participle forms do not take absolutive cross-reference markers:

(3)   a. * yakal(-on) (ta) yahl-el-on
       PROG-B:1 (PREP) fall-el-B:1
       ‘I am falling’

b. * yakal(-on) (ta) maj-el-on
       PROG-B:1 PREP hit-el-B:1
       ‘I am being beaten; (They) are beating me’

The ungrammaticality of absolutive marker is not a matter of morphological conditions, as agentive forms of the same stems freely take the absolutive markers:

(4)    j-maj-el-on
       AGNT-beat-PART-B:1
       ‘I am a punchee (I get punched)’

Transitive roots may (optionally) take a Set A prefix when in the -el form, though textual examples of this are rare:

(5)    yakal-on ta a-maj-el
       PROG-B:1 PREP A:2-hit-el
       ‘I am hitting you’

In this case, the Set A marker cross-references the O argument (object) of the underlying root, rather than the A argument. This is rather unexpected, since usually the Set A markers (ergative) cross-reference the A argument (subject) of a transitive verb.

Without a Set A marker on the participle, no object nominal can be introduced with the transitive -el participle without being cross-referenced on the yakal form.37 Instead the transitive O argument may be introduced via a compound complement:

36 It appears that in these constructions the complement of the preposition can be fronted, in which case the preposition is lost:

(2)   a. yakal-on ta a7tel
       PROG-B:1 PREP work
       ‘I am working’

b. a7tel yakal-on
       work PROG-B:1
       ‘I am working’

I do not have an analysis of this fronted complement construction, though Haviland (p.c.) suggests that perhaps the preposition is always lost when a PP is fronted. Likewise Aissen 1987 states that
Descriptive Facts

(6) yakal-on ta maj tumin
    PROG-B:1 PREP beat cotton
    ‘I am beating cotton’

It is worth pointing out that in the -el participles we see a trace of syntactic ergativity in Tzeltal. Compare the following:

(7) a. yakal-on ta yahl-el
    PROG-B:1 PREP fall-el
    ‘I am falling’

b. yakal-on ta maj-el
    PROG-B:1 PREP hit-el
    ‘I am being beaten; (They) are beating me’

While it is possible for the example in (7b) to bear a Set A cross-reference, it is optional, in the sense that the construction is grammatical without it (not in the sense that the Set A marker can be added without a change in meaning; see example (5), above). In the minimal form the progressive auxiliary bears an absolutive cross-reference. The absolutive cross-reference on the auxiliary marks the S argument of the predicate for the intransitive construction, and the O argument of the transitive construction, thereby instantiating an S = O pattern.

This notion of ergativity in the -el participles was first observed by Haviland 1981, when he described similar constructions in Tzotzil as passive-like; however, in the Tzeltal case “passive” does not seem an appropriate term, since while the A argument in the transitive predicate is clearly demoted, the S argument of an intransitive predicate remains obligatory. A priori we would want a unified theory of -el participles that does not distinguish the -el as when applied to transitive versus intransitive verbs. Such a treatment is not possible within the passive analysis because the subject of the intransitive participle is still obligatorily expressed (on the yakal), and not demoted, meaning no impersonal passive is formed via the -el participle from intransitive stems. This means that intransitive roots with -el suffixes cannot be analyzed as passives. Therefore in a non-disjunctive treatment of the -el participles they cannot be considered passive-forming.

The transitive verbs can also appear as a complement to yakal in another form: with the -bel suffix. The -bel suffix appears only on transitive verbs, and the resulting stem obligatorily

when an object of a preposition is questioned, the preposition is lost. For Petalcingo Tzeltal, however, I do not have examples of the preposition loss phenomenon outside the yakal construction.

It is possible that when a prepositional complement of yakal is fronted it actually forms a relative clause, similar to:

(3) te a7tel yakal-on-e
    DET work PROG-B:1-CL
    ‘the work that I am doing’

This analysis, however, still does not account for the loss of the preposition.

37 I do not have an example of the ungrammaticality of this, however see example (93) in Chapter 1 for discussion.
takes both ergative and absolutive cross-reference markers. In this case, *yakal* does not bear any cross reference markers, and the preposition is absent:

(8) a. *yakal k-nop-tes-bel-at
    PROG A:1-learn-CAUS-bel-B:2
    ‘I am teaching you’

    b. * yakal-at ta k-nop-tes-bel
        PROG-B:2 PREP A:1-learn-CAUS-bel
        ‘I am teaching you’

    c. * yakal ta k-nop-tes-bel-at
        PROG PREP A:1-learn-CAUS-bel-B:2
        ‘I am teaching you’

    d. * yakal-on (ta) nop-tes-bel-at
        PROG-B:1 PREP learn-CAUS-bel-B:2
        ‘I am teaching you’

The next section offers an overview of the existing analyses of these interesting constructions.

**Previous Analyses**

The -el forms derived from verbs occur in other related Mayan languages. In addition to Tzeltal, I will specifically look at Chol and Tzotzil literature, as these are the more closely related languages to the one under consideration.

Heretofore, two approaches have been taken towards the -el participles. Aissen 1987, notes in passing that in Tzotzil these constructions resemble infinitives, though she does not address their categorical status head-on. For Chol, Aulie and Aulie 1978 and Vásquez Alvarez 2002 analyze the nearly identical constructions as infinitives as well. Likewise, for Mam, England 1983 glosses the -l suffix as infinitive-forming. She specifically states that “there is no evidence to suppose that it is a verbal noun in Mam. That is, the infinitive is not, as far as I know, ever possessed” (page 132).

Polian 2003a, working with the Oxchuk variant of Tzeltal argues for an “infinitive” analysis. Polian identifies four types: the “intransitive infinitive” (INTR-el), “passive transitive infinitive” (TRANS-el), “active uninflected transitive infinitive” (ERG-TRANS-el), and “active inflected infinitive” (ERG-TRANS-bel-ABS). The examples corresponding to Polian’s typology are as follows:38

(9) a. yakal-at ta muh-el
    PROG-B:2 PREP climb-PART
    ‘You are climbing’

    b. yakal-at ta mah-el
    PROG-B:2 PREP beat-PART
    ‘(They) are beating you; you are being beaten’

38 In the first part of the present chapter I deal with -el participles mainly in progressive constructions, whereas Polian 2003a deals with both *yakal*-type constructions as well as other matrix verbs. Therefore his examples have been transposed into progressive constructions in this section.
Previous Analyses

c. yakal-on ta s-mah-el  (active uninflected transitive infinitive)
    PROG-B:2 PREP A:3-beat-PART
    ‘I am beating him’

d. yakal k-mah-bel-at  (active inflected infinitive)
    PROG A:3-beat-PART-B:3
    ‘I am beating you’

For the active uninflected transitive infinitive, it seems that only a third-person ergative cross-reference marker can appear on the -et participle in the Oxchuk variant. Polian cites the possibility of expressing an agent with the passive transitive infinitive via the -u7un phrase (though unfortunately no examples of this are included), a mechanism used to express the agent in regular Tzeltal passives (see “Antipassives, Passives, and Middles” on page 55 in Chapter 1). I do not have any examples of this in my Petalcingo Tzeltal data.

Polian notes that in the intransitive infinitive, passive transitive infinitive, and active uninflected transitive infinitive, the “subject” (A/S) is not expressed by any verbal cross-reference mark. Thus Polian raises two possibilities: first, this could be an instance of control (it is not clear how technically he is using this term), whereby the A/S argument is coreferential with another argument in the clause, or, alternatively the agent argument could be interpreted generically or arbitrarily. Thus Polian postulates that the intransitive, passive transitive, and active uninflected infinitives each have an S, O, and A argument respectively filled by PRO.

According to this analysis, the PRO can be controlled by the ergative argument of the transitive matrix verb, or by the absolutive argument of the intransitive matrix verb. Polian argues that the “transitive (uninflected) infinitives” should not be analyzed as “possessed passives (sic)” on the basis of the fact that in Oxchuk Tzeltal, the ergative marker can only cross-reference a third-person argument. Likewise, Polian argues that unlike regular passives, the “transitive (uninflected) infinitives” always have an agent which is either understood to be controlled by another argument in the clause, or is interpreted arbitrarily. The “transitive (uninflected) infinitives” can never express an agent in an oblique phrase.

The PRO analysis implies, if a Chomskyan framework is assumed, that the matrix verb (which projects at least a VP) selects a complement that contains at least a CP (complementizer phrase), in order that PRO may remain ungoverned. With respect to “control by Set B affix,” it is not obvious whether the PP (prepositional phrase) headed by ta should be inside or outside the IP (Infl phrase). There are three structures one could posit:

The structure in (10c) can immediately be ruled out on the grounds that the 
\[ [\text{VP} \ [\text{PP} \ \text{ta nuxel}]] ] \] structure is not endocentric. This leaves (10a) or (10b). (10a) is 
preferable on the grounds that with this structure \textit{yakal} and other matrix verbs seem to 
select a PP or VP complement (on Polian’s theory), whereas in (10b) a CP is always selected 
directly by the matrix V head, and the I head in the IP selects the complement appropriate to 
the matrix verb \textit{(yakal)} but indirectly. Thus for the constructions such as 

\[(11)\] 

\text{yakal-on ta nux-el} 

\text{PROG-B1 PREP swim-el} 

‘I am swimming’ 

we might posit the following structure:

\[(12)\]

\[
\begin{array}{c}
\text{VP} \\
\text{V} \\
\text{yakal-on} \\
\text{PP} \\
\text{ta} \\
\text{CP} \\
\text{IP} \\
\text{PROarb} \\
\text{I} \\
\text{Ø} \\
\text{VP} \\
\text{nux-el}
\end{array}
\]

Note that in examples of the type in (11), the PRO will always be arbitrary, that is, it is not 
possible for PRO to be controlled by the argument of the matrix verb.

An alternative analysis that has been proposed is that the \textit{-el} verbal forms are formally 
nominal. Haviland 1981 (§6.5), for example, treats (without an explicit argument) as nouns 
the Tzotzil \textit{-el} participle forms occurring as complements. When discussing auxiliaries (§8.9) 
he notes the passive function of the \textit{-el} suffixed forms, though he acknowledges that these 
have “nominal uses.” He also considers the Tzotzil \textit{-bel} suffix as a combination of the 
applicative (dative) morpheme \textit{-b} and the participle-forming \textit{-el}.

Coon 2004 departs from the previous analysis of Chol, and argues explicitly for the formal 
nominality of \textit{-el} forms. Her arguments for this position are as follows: The \textit{-el} forms can 
serve as an argument to a predicate head, and otherwise must follow a preposition. Normally 
verbs may not appear as a complement to a preposition in the languages under 
consideration. She also notes that the \textit{-el} participles in Chol can take determiners and serve 
as subjects of sentences. Finally she notes that constructions that take \textit{-el} verbs can also take 
regular (non-\textit{-el}) nouns. Thus she concludes that the \textit{-el} participles are formally nominal.

**The \textit{-el} Participles are Nominal**

As Coon 2004 notes, infinitive forms generally seem to show some nominal characteristics: 
they are not inflected for tense and the generally do not show agreement.\textsuperscript{39} In these senses 
infinitives are somewhat deverbal. Keeping this idea in mind, I would like to argue that the 
nominal analysis is preferable to the infinitive one.

\textsuperscript{39} I will ignore the known exceptions (like Portuguese) to this generalization.
The -el Participles are Nominal

Generally infinitive clauses are considered to be lacking a “strong” Infl, and/or missing a Tense projection. However, none of these projections have the ability to satisfy one of the arguments in the theta-grid of a predicate. If the -el participle were indeed an infinitive it would be difficult to explain why the agent of the transitive action may be entirely unexpressed:

(13) yakal-at ta mil-el
    PROG-B:1 PREP kill-el
    ‘You are being killed’

One could argue that the subject of the participle is a PRO, and there is no agreement (with the subject) on the participle because infinitives generally show no agreement. The structure thus proposed would be:

(14)

Two questions arise with this analysis, however. First, as we have seen, ergative agreement morphology can appear on the -el participles, but it cross-references the object argument rather than the subject. The analysis in (14) offers no explanation of this. Furthermore, if milel can bear Set A agreement, why is this agreement unable to cross-reference the PRO argument? Likewise, how the expressed (cross-referenced) argument of the matrix verb (yakal) is interpreted as the patient of the participle (such as milel) is not immediately clear. Furthermore, it is not clear why the PRO must be arbitrary in locutions such as in (13), that is, why PRO may not be co-indexed with an argument of the higher verb. Finally, and perhaps most problematically for the PRO analysis, the appearance of the preposition with the -el participles is left completely unexplained.

Before proceeding with the analysis, however, I would like to justify the separate treatment I accord the -bel participles. It may be tempting to treat the -bel participles (which can only be formed from transitive verbs) as combination of the applicative suffix -be with the participle-forming -el, since the applicative (by definition) is a valence increaser. The argument would then be that -be increases the valence of the stem by one argument, and the -el absorbs one of those arguments. This is attractive because -bel participles are formally two-argument constructions (obligatorily exhibiting both Set A and Set B markers), while -el participles are one place constructions, only cross-referencing one argument at most. This theory is also phonologically plausible, since the final vowel in -be does delete when followed by a (non-zero) absolutive suffix, which, like -el, begins with a vowel:

40 I am grateful to Matt Pearson for suggesting this avenue of analysis.
Chapter 2: Participles

(15)  
a. laj y-a-be-Ø  
PFV A:3-give-APPL-B:3  
‘She gave it to him’  
b. laj y-a-b-on  
PFV A:3-give-APPL-B:1  
‘She gave it to me’

Haviland 1981 does propose this type of analysis for Tzotzil -bel participles, and while I have nothing to say about the Tzotzil facts, I would argue that this type of analysis is not appropriate for Tzeltal, at least not synchronically. The main evidence in Petalcingo Tzeltal against this approach comes from the fact that when -be is followed by -el, an epenthetic /y/ is inserted:

(16)  
yakal-laj ta a-be-y-el s-we7el me Carranza-je7  
PROG-EVID PREP give-APPL-EPN-el A:3-food DET Carranza-CL  
‘(They) are giving the food to Carranza’ [N:321]

Another formal reason for treating the -bel participles separately is the fact that -bel participles never follow a preposition, unlike -el participles:

(17)  
a. yakal s-maj-bel-on  
PROG A:3-beat-bel-B:1  
‘He/she/it is beating me’  
b. * yakal ta s-maj-bel-on  
PROG PREP A:3-beat-bel-B:1  
‘He/she/it is beating me’

Likewise, -bel participles obligatorily bear absolutive cross-reference markers, while -el participles may never take them:

(18)  
a. yakal s-maj-bel-on  
PROG A:3-beat-bel-B:1  
‘He/she/it is beating me’  
b. * yakal (ta) s-maj-el-on  
PROG PREP A:3-beat-bel-B:1  
‘He/she/it is beating me’

Therefore, I will first deal with -el participles in this section, and return to the -bel participles in the following one.

Reviewing the arguments for the nominal status of the -el participles we find that they follow a preposition, and appear in argument positions, identical to those occupied by “indisputable” nouns:

(19)  
a. yakal-on ta yahl-el  
PROG-B:1 PREP fall-el  
‘I am falling’  
b. yakal-on ta maj-el  
PROG-B:1 PREP hit-el  
‘I am being beaten; (They) are beating me’
The -el Participles are Nominal

c. yakal-on ta machit
   PROG-B:1 PREP machete
   ‘I am macheteing; I am working with a machete’

The nominalization account allows us to account for several curious properties of the -el participles: the optionality of the ergative prefix, the optionality of the A argument, and the fact that the ergative prefix cross-references a patient argument, and finally, the ergativity of -el constructions. I will take up each one of these in turn.

The fact that transitive -el participles may only optionally bear ergative prefixes is a strong argument that also speaks to their nominality. A transitive stem normally may not be used without an ergative cross-reference marker:

(20) * laj (7)il-at
   PVF see-B:2
   ‘They see you’

Nouns however, can be either possessed or unpossessed, the possessive/ergative marker being entirely optional (with the exception of obligatorily-possessed forms, of course). Therefore, if the -el participles are nominal, the optionality of a Set A marker is explained straightaway.

The fact that the Set A marker cross-references the theme argument (rather than the expected agent argument) would be entirely puzzling if the -el marker were not a nominalizer. Nominalizations in general vary as to which theta role of the transitive root is absorbed: English features several types of nominalizations that absorb the agent theta role, leaving the resulting noun’s referential index to refer to the patient of the underlying action. The -ee nominalization, although not entirely productive, seems to follow the -el-type nominalization pattern:

(21) a. You are an escapee = you escape (S)
    b. You are an employee = someone employs you (P)

This neatly brings us to the last point: the apparent ergativity of -el constructions. Syntactic ergativity in a Mayan language may not be unexpected from a typological standpoint (though see “Syntactic Ergativity” on page 38 in Chapter 1 on the difficulty of determining the nature of syntactic pivots in Tzeltal). However, the ergative properties of nominalizations even in accusative languages are well-known in the literature by now. Alexiadou 2001, for example, specifically argues that process nominalizations in English, Greek, German, French, Italian, Spanish, Catalan, Hungarian, Polish, Russian, Hebrew, and Arabic are ergative in that the single genitive argument introduced with these construction is construed as object (O) of transitive roots and subjects (S) (for intransitive roots) but not A (subject of transitive verb). When an A argument is introduced it is necessarily an oblique. A few of Alexiadou’s examples might be sited to illustrate the point. Thus, in Greek, the theme and subject of an unaccusative verb both appear as genitively-marked nouns, while the A argument of a transitive verb must appear in a prepositional phrase:

41 I am not considering stems resulting valence-reducing operations such as passive and antipassive as a result of which transitive stem may not take Set A agreement, or the compound forms, where the transitive verb appears with no inflection at all.
Chapter 2: Participles

(22) a. i katastrofi tis polis apo tus vavarus
    the destruction the city-GEN by the barbarians
    ‘The destruction of the city by the barbarians’

          b. i senehis prosi ton tomin anisihi tus pandes
          the constant fall the prices-GEN worries everybody-ACC
          ‘The constant fall of the prices worries everybody’

          c. to kolimpi tu Jani / *api to Jani
          the swimming the John-GEN / by the John
          ‘John’s swimming’

Likewise, in Russian, both S and P arguments of process nominals are introduced as genitive-marked nouns, while the A argument receives instrumental (oblique) case:

(23) a. Uničtozenie butylki piva za pjat’ minut
    extermination bottle-GEN beer-GEN in five minutes
    dvumja studentami — večeš’ vpolne obyčnaja
    two-INSTR students-INTRS — a thing entirely common
    ‘The finishing off of two bottles of beer by two students is a thing entirely common’

          b. Ee polzanie po polu v tečenje celogo večera
          Her-GEN crawling on floor in course whole evening
          zabespokoilo menja
          worried me-ACC
          ‘Her crawling on the floor in the course of the whole evening worried me’

Alexiadou argues that at least some nominalizations project many of the same functional phrases as verbs do, namely AspP, and vP. However, the nominal vP, according to her analysis is different from vP of regular transitive verbs (in accusative languages) in that it does not license an agent argument, and its specifier position is inert. This is similar, at least in spirit, to some of the analyses proposed to account for ergativity in general, such as Johns 1992 and Nash 1996. I will return to the details of this type of analysis of ergativity later in this chapter.

With respect to the Tzeltal -el participles, we might note that the nominalization account also allows us to offer an explanation for a class of nouns that seem morphologically similar to the -el participles. Consider nouns such as nihkel (“earthquake”), we7el (“food”) uch^el (“drink”), xi7el (“fear”), and talel (“comportment”). All of these are plainly derived from underlying verbal stems, both transitive and intransitive. There is usually no controversy with respect to the nominal status of these: they occupy argument positions, can serve as subjects of sentences, follow determiners, and in general have formal nominal properties:

(24) a. k^alal tal-Ø te nijkel
    until arrive DET earthquake
    ‘Until the earthquake came’ [Rio:0027]

---

42 Alexiadou does not provide a free gloss for this example.
While exhibiting many formerly nominal properties, the -el participles are not full nouns: they cannot take the nominal plural -etik suffix, and they seem to be unable to form main predicates. The latter property seems to be related to their inability to take absolute suffixes. The former property, curiously, seems also to be shared by the deverbal nouns mentioned above: most of them do not occur with the -etik suffix (7a7tel - “work”, may be an exception to this).

The nominal analysis of -el participles makes a number of other interesting predictions, which unfortunately, cannot be tested within the framework of this thesis. First of all, -el participles should be able to head relative clauses, which infinitives generally cannot do. Secondly, if -el participles can be headed by determiners or demonstratives or include numerals this would provide more evidence for their nominality. They should also not be able to take overt aspect markers, which in Tzeltal only occur with verbal forms. This last prediction seems to be borne out in my text corpus, however, I have no examples of ungrammaticality of -el participles with aspectual markers. Finally, the -el forms can serve as arguments to an existential predicate, which intransitive verbs at least, may not do:

(25) a. * mayuk och-Ø 
   NEG.EXIST enter
   ‘he has entered’

b. ay s-pas-el 
   EXIST A:3-do-el
   ‘there’s doing (someone is doing something)’

Nonetheless, even without the additional evidence, the evidence already presented seems strong enough to consider -el participles nominal.

---

43 This may be for semantic or pragmatic reasons, however.

44 This ungrammaticality of an -el participle with an absolute suffix may only truly be the case in yakal-type constructions. In my texts there are a few instances of an -el participle (outside of a yakal construction) with an absolute suffix, but the syntax of these constructions is obscure to me. With “agentive” prefixes, the -el nouns may be pluralized:

(4) a. j-cham-el-etik 
    agnt-die/sick-part?-pl
    ‘The dead ones’

b. j-lok^-el-etik 
    AGNT-die/sick-PART?-PL
    ‘The ones leaving’

45 I believe that transitive verbs cannot be a complement to ay as well, but I do not have data to show this.
Progressive Auxiliary Always Bears Agreement

Getting back to the progressive construction (which obligatorily takes a -bel participle or an -el participle headed by a preposition) what’s left to explain is the curious alternation between the “direct” form, where yakal does not take an absolutive marker and its complement is not headed by a preposition, and the form where yakal is obligatorily inflected (with an absolutive marker) and its complement is a PP. Both are exemplified in (26):

\[
\begin{align*}
(26) & \quad \text{a. yakal a-maj-bel-on} \\
& \quad \text{PROG A:2-hit-bel-B:1} \\
& \quad \text{‘You are hitting me’} \\
& \quad \text{b. yakal-on ta maj-el} \\
& \quad \text{PROG-B:2 PREP hit-el} \\
& \quad \text{‘I am being hit; (someone) is hitting me’}
\end{align*}
\]

If we assume that in (26a) yakal is also bearing an inflectional marker this would allow a unified treatment of yakal as a type of intransitive light verb.\(^{46}\) In (26a), rather than agreeing with the person of the participants of the action, yakal agrees with its direct complement, the participle amajbelon. This explains why we never see an overt absolutive marker in this case, because the direct argument is always third person singular, and the third-person singular agreement marker in Tzeltal is Ø. This can be diagrammed as follows:

\[
\begin{align*}
(27) & \quad \text{yakal-Ø, [ a-maj-bel-on ],} \\
& \quad \text{PROG-ABS:3 A:2-hit-bel-B:1} \\
& \quad \text{‘You are hitting me’}
\end{align*}
\]

This can be paraphrased roughly is “the hitting of me by you is going on.” The complement of yakal, the participle amajbelon is the subject of an intransitive predicate. This correlates well with the observed unmarked word order in Tzeltal (if there is such a thing) which is verb-initial.

\(^{46}\) As John Haviland pointed out to me there may be empirical reasons not to consider yakal an auxiliary: first, its morphophonological form (CVC-V1l) more resembles a predicative positional stem than a regular Tzeltal verbal stem (usually CVC). Secondly, unlike all other auxiliaries, yakal is not an independent verb, i.e. it cannot appear by itself:

\[
\begin{align*}
(5) & \quad \text{a. och-on} \\
& \quad \text{enter-B:1} \\
& \quad \text{‘I came in’} \\
& \quad \text{b. * yakal-on} \\
& \quad \text{yakal-B:1} \\
& \quad \text{‘I am doing (something)’}
\end{align*}
\]

This derivation of yakal is compatible with the analysis I propose here, and, I would argue that even if yakal historically originates from a positional stem, it seems to have grammaticalized into an auxiliary. Thus, its positional use, I believe, is ungrammatical:

\[
\begin{align*}
(6) & \quad \text{* laj k-il-Ø winik yakal-Ø} \\
& \quad \text{PFV A:3-see-B:3 man PROG-B:3} \\
& \quad \text{‘I saw a man that was doing (something)’ [constructed]}
\end{align*}
\]

This example requires verification with Tzeltal speakers (which I am unable to do at present).
Progressive Auxiliary Always Bears Agreement

In (26b) then, the matrix verb, *yakal* does agree with one of the action participants. Therefore its theta-grid is already saturated, and the additional arguments must be introduced as obliques—hence the appearance of the preposition *ta*. It is worth pointing out that in the progressive constructions that feature the preposition *ta*, it appears to be bleached of any semantic content: its appearance is for syntactic reasons only.

This theory makes an interesting prediction: we should be able to find *yakal* taking a nominal complement with no preposition. This is exactly what we find: in addition to the nominal complements headed by a preposition, such as given in (28), we also find *yakal*, with no (overt) absolutive marking taking a “regular” noun complement, as in (29):

(28)   yakal-on  ta  machit
       PROG-ABS:1  PREP  machete
       ‘I am macheteing; I am working (with a machete)’

(29)   a.  yakal-Ø  ja7al
       PROG-ABS:3  rain
       ‘It is raining’

   b.  yakal-Ø  me  rebolusion-e7
       PROG  DET  revolucion-CL
       ‘Estaba la revolucion; The revolution was going on’ [N02:1558]

   c.  mientras  yakal-Ø  a7tel  tal-Ø  y-okli-y-ik-ix
       while  PROG-B:3  work  come-B:3  A:3-review-EPN-PL-already
       ‘Mientras se esta trabajando vinieron a revisar;
        While work was going on they already came to review’ [N:1469]

What I am proposing is that (27) has a structure similar to (29), where the complement of *yakal* is the sole argument of the intransitive predicate.

This analysis predicts that -*bel* forms can serve as arguments, and therefore have some degree of nominality.47 This makes a number of predictions. While I am not able to verify many of these, I will briefly list them. First, if -*bel* forms can be arguments they should be able to serve as arguments to transitive verbs. I have not found any textual instances of this in the Petalcingo Tzeltal material available to me. Secondly -*bel* forms should not be able to take overt aspect markings, since non-verbal forms in Tzeltal are generally unable to do so. This seems consistent with my observations and the textual materials available. It would also be interesting to see if -*bel* forms can take determiners or demonstratives. The determiners in Tzeltal are homophonous with the two overt complementizers, however the demonstrative should prove to be a good test: if the -*bel* forms can take demonstratives then they must be quite nominal in character. Finally, it seems that the -*bel* forms can be the complement of an existential predicate (see note 45, on page 97):

(30)   mayuk  a-mil-bel-Ø
       NEG.EXIST  A:3-kill-PART-B:3
       ‘No has matado ninguno; you haven’t killed anyone’48

---

47 I am not necessarily prepared to argue that -*bel* participles are nouns.

48 I am unclear as to what forces the perfective aspectual interpretation.
However, while I propose that -bel participles can be arguments, the argument for their outright nominality is not quite as strong as with the -el participles. First, the -bel participles never seem to follow a preposition. Secondly, unlike the -el participles, they do not seem to be related to a class of nouns. Finally the fact that they obligatorily bear ergative markers, seems to suggest that if they are in fact nominal forms, they are unusual nominal forms.

One of the potential objections to the -bel participles as arguments analysis is the presence of two absolutive markers in the same clause. However, there are cases in Petalcingo Tzeltal, where two absolutive markers must be used. One such case is depictive secondary predication. Thus (31a) is ungrammatical, as it does not bear the appropriate absolutive marker on the secondary predicate: for this type of construction something like (31b) must be used:

(31) a. * laj k-il-at jot^-ol
   PFV A:1-see-B:2 crouched-PRED
   ‘I saw you and you were crouched; I saw you crouched’

   b. laj k-il-at jot^-ol-at
   PFV A:1-see-B:2 crouched-PRED-B:2
   ‘I saw you and you were crouched; I saw you crouched’

Another potential problem with this analysis is that in modern syntactic theory only nouns are able to bear interpretable phi-features such as person, number, grammatical gender (Chomsky 1995). The above analysis, by these terms would necessitate that amajbelon would be treated as a noun. However, we might notice that at least in some languages which feature object agreement, the equivalent of English “I saw that you kissed the man” gets rendered with a third person singular object, which is modified by the complement clause. Thus in Hungarian (Kiss 2002) we get:

(32) a. az [ hogy Éva szereti Gergőt ] nyilvánaló
   it that Eve loves Gergő obvious
   ‘That Eve loves Gergő is obvious’

   b. Azt hiszem [ hogy Éva szereti Gergőt ]
   that-acc think-I that Éve loves Gergő
   ‘I think that Eve loves Gergő’

The third person singular head of the embedded clause may be pro-dropped:

(33) az/pro nyilvánaló [ hogy Éva szereti Gergőt ]
   it obvious that Eve loves Gergő
   ‘It was obvious that Eve loves Gergő’

In Petalcingo Tzeltal, just like in Hungarian, overt pronouns rarely occur (pro-drop). Thus we might postulate that yakal amajbelon actually has the following structure:

(34) yakal-Ø i pro [ a-maj-bel-on ]
   PROG-ABS:3 pro A:2-hit-bel-B:1
   ‘You are hitting me’
This would avoid the potentially uncomfortable conclusion that *amajbelon* is also a nominal form. However, for the rest of this chapter I will refer to the auxiliary agreeing with its complement for simplicity’s sake, whether the *pro* can be postulated or not, except where it would cause confusion.

**Other Auxiliaries**

This analysis readily extends to other auxiliaries of the same type, which also take -el and -bel participles. These include *och* (“begin”), *laj* (“finish”), *jahch* (“start”), and many others (see “Auxiliaries and Directionals” on page 52 in Chapter 1). Thus we have:

\[
\begin{align*}
(35) \quad & \text{a. och-on ta muh-el} \\
& \text{enter-B:1 PREP ascend-B:1} \\
& \text{‘I began climbing’} \\
& \\
& \text{b. lik-Ø ta jam-el me ijin} \\
& \text{begin-B:3 PREP clean-PART DET this} \\
& \text{‘Empezaron a limpiar ese; They began to clean this’} \quad \text{[N01:0514]}
\end{align*}
\]

These auxiliaries, when taking participle forms as complement have an identical syntax to the *yakal*-type constructions: with an -el participle the absolutive agreement marker is attached to the matrix verb, while with a -bel participle matrix verb shows no overt agreement, but the participle features both Set A (ergative) and Set B (absolutive) agreement. Thus compare (35a) with (36):

\[
\begin{align*}
(36) \quad & \text{och a-mil-bel-on} \\
& \text{enter A:2-kill-B:1} \\
& \text{‘You began to beat me’}
\end{align*}
\]

I don’t have an example of non-*yakal* auxiliary with a transitive -el complement, but I believe that it would work the same way as the *yakal* counterpart.

There is evidence that constructions such as (36) are best analyzed exactly like those involving absolutive-less *yakal*—that is, as an intransitive verb which agrees with the -bel participle and thus bears 3rd-person singular absolutive agreement, namely Ø. The evidence comes, again, from overt noun complements such as shown below:

\[
\begin{align*}
(37) \quad & \text{a. och-Ø te winik-e} \\
& \text{enter-ABS:3 DET man-CL} \\
& \text{‘The man entered’} \\
& \\
& \text{b. och-on} \\
& \text{enter-ABS:2} \\
& \text{‘I entered’}
\end{align*}
\]

Since in (37b) *och* can be seen to agree with its argument, it is generally assumed that in locutions such as (37a) it agrees with its argument as well, except that the absolutive agreement morpheme is null in that case. There are no empirical reasons to analyze (36) any differently, while conceptually by eliminating the distinction results in a simple and straightforward account.

---

49 It is of course possible to postulate that the uninterpretable phi-features of participles such as *amajbelon* are checked somewhere in the derivation.
However, participles and nouns are not the only complements that auxiliaries may take. The auxiliaries like *och* (“begin”), and *jahch* (“start”) may also take verbal complements that do not have participle morphology:

(38) a. och k-a-be-tik lek te7  
enter A:1-give-APPL-PL good stick  
‘Le empezamos a dar palos;  
We began to give them sticks (i.e. beat them with sticks)’ [N01:0023]

b. och k-sap-Ø te kapeh-e  
enter A:1-wash-B:3 DET cofee-CL  
‘Empezé a lavar el café; I began to wash the coffee’ [N01:0579]

Notice that all the inflection in these examples appears on the dependent verb: there is no (overt) first-person inflection on the matrix auxiliary *och*. Given the analysis above, it would seem more parsimonious to treat the auxiliary in (38a) as bearing third-person agreement which cross-references the transitive verb complex, which is an argument to the auxiliary. Here, the PRO analysis is not possible, as the dependent verb bears overt agreement. The transitive complement could, of course, be analyzed as a complement clause headed by a null C (there is independent evidence that null complementizers occur in Petalcingo Tzeltal); however, this analysis could easily be tested: if any material may intervene between the auxiliary and the inflected transitive verb, then it would be more appropriate to treat the transitive VP as embedded in a CP, but if even adverbials cannot show up between *och* and *ksap* in example (38b), then the complement/null-agreement analysis would be more appropriate. I believe that no material may intervene between *och* and *ksap* (still using example (38b) above), but unfortunately, I do not have any examples to present at this point.

If *ksap* (perhaps with its arguments) is a complement of the auxiliary, this may lead us to postulate that transitive verbs (or VPs) have a nominal character as well, or, at least, can serve as arguments. I explore the consequences of this analysis in the following two sections.

**The *laʃ* auxiliary**

The *laʃ* marker has two major functions: a terminative auxiliary and a perfective aspect marker. The perfective *laʃ* only occurs with transitive verbs (recall that intransitive verbs are interpreted as perfective with no aspect marking):

(39) a. laʃ s-maj-on  
PFV A:3-beat-B:3  
‘She beat me; *She finished beating me’

b. koh-on  
descend  
‘I came down’

c. laʃ lok^-on  
finish leave-B:1  
‘I finished leaving; *I left’

The terminative *laʃ* behaves exactly the same as the auxiliaries described in the previous sections, that is, it can take a -el or -bel participle complement. Just like the other auxiliaries, with the -el participle complement the auxiliary bears overt absolutive morphology, and the
The laj auxiliary

-el participle complement appears in a prepositional phrase. Also like other auxiliaries with the -bel complement the auxiliary does not bear any overt cross-references and the participle complement appears without a preposition:

(40) a. laj-on ta koh-el
   finish-B:1 PREP descend-PART
   ‘I finished coming down’

b. laj s-maj-bel-on
   finish A:3-beat-PART-B:1
   ‘She finished beating me’

Therefore, if the analysis of auxiliaries proposed above is correct, then the terminative laj should be analyzed the same way: with -bel participles, laj still bears absolutive agreement which cross-references the participle argument.

As was mentioned above perfective laj occurs only with transitive predicates; with intransitives (which are already interpreted as perfective in their most unmarked form) laj is obligatorily interpreted as a terminative auxiliary, rather than a perfective aspect marker. The aspect marking in Tzeltal is a curious phenomenon, and is recapitulated in the following examples:

(41) a. te winike s-mil-Ø chitam
    DET man-CL A:3-kill-B:3 pig
    ‘The man kills a pig’

b. te winike laj s-mil-Ø chitam
    DET man-CL PFV A:3-kill-B:3 pig
    ‘The man killed a pig’

(42) a. x-muh-on
    ICMP-ascend-B:1
    ‘I climb; I will climb’

b. muh-on
    ascend-B:1
    ‘I climbed’

Thus in (41a) the transitive clause features no overt aspect marking and is interpreted as incompletive. The overt aspect marker (laj) is needed to make the perfective interpretation, as in (41b). With intransitives, on the other hand, the clause with no overt aspect marking (42b) induces a perfective interpretation, and overt morphology is needed to force an incompletive reading (42a). This seems to be a very disjunctive way of marking aspect, one that contravenes the transitivity hypothesis, as was mentioned in Chapter 1. The basic facts are reviewed in the following table:

<table>
<thead>
<tr>
<th></th>
<th>Incompletive</th>
<th>Perfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intransitive</td>
<td>x-</td>
<td>Ø</td>
</tr>
<tr>
<td>Transitive</td>
<td>Ø</td>
<td>laj</td>
</tr>
</tbody>
</table>

Table 23: Basic Aspect Marking

The radical disjunctiveness of aspect marking in Petalcingo Tzeltal is rather striking: the perfective and imperfective marking of transitive clauses does not seem to be related in any
way to that of the intransitive clauses. Such a phenomenon must offer a clue to the deep structure of Tzeltal clauses.

In the spirit of the above proposal for auxiliaries we could conceive that the perfective *laj* is also an auxiliary that agrees with its one argument, namely the transitive verb. We've already seen that other auxiliaries\(^{50}\) do take non-participle complements, and I proposed that they cross-reference these complements via the 3rd-person absolutive marker Ø. Two such examples are reviewed below:

\[43\]
\begin{align*}
\text{a. } &\text{och-Ø } s\text{-maj-on} \\
&\text{begin-B:3 A:3-beat-B:1} \\
&\text{‘Empezó a pegarme; (He/she/it) began to beat me’}
\end{align*}

\begin{align*}
\text{b. } &\text{lok^-Ø } s\text{-mil-on} \\
&\text{leave-B:3 A:3-kill-B:1} \\
&\text{‘Salió a matarme; (She/he/it) left / went out to kill me’}
\end{align*}

This proposal, if true, would mean that the *laj* auxiliary when with a transitive clause complement is bleached of its terminative content, and simply “donates” its perfective interpretation to its complement.

If we do treat the perfective *laj* identically to the “terminative” *laj* we would be making a claim that transitive verbs do not really exist as main predicates in Petalcingo Tzeltal, at least, in the perfective clauses. This means that perfective aspect is purely a function of having an intransitive matrix verb. This would help explain the disjoint characteristic of the aspect marking shown in Table 23: intransitives are unmarked in the perfective because they are “inherently” perfective, and *laj* is an intransitive light verb that makes a transitive stem perfective.

The auxiliaries in (43) cannot bear overt absolutive markers, just like the perfective *laj*. One way of interpreting this data is to consider that only intransitive verbs may truly bear (perfective) aspect in Tzeltal: the transitive ones must rely on an intransitive auxiliary to get non-incompletive interpretation.\(^{51}\) This idea is supported by the fact that the aspectual interpretation of nouns in Petalcingo Tzeltal seems to pattern with that of the transitive verbs:

\[44\]
\begin{align*}
\text{a. } &\text{boh-on} \\
&\text{go-A:1} \\
&\text{‘I went / * I go/was going’}
\end{align*}

\begin{align*}
\text{b. } &\text{k-il-at} \\
&\text{A:1-see-B:2} \\
&\text{‘I see/was seeing you / * I saw you’}
\end{align*}

\begin{align*}
\text{c. } &\text{winik-on} \\
&\text{man-B:1} \\
&\text{‘I am a man / * I was a man’}
\end{align*}

\(^{50}\) Some of these are potentially interpreted as directionals, or Aissen’s motion-cum-purpose, as in (43b).

\(^{51}\) We might note that this analysis would make Petalcingo Tzeltal conform to the Transitivity Hypothesis (Hopper and Thompson 1980).
To be sure, it is possible to force a “past-tense” type reading with a noun with the addition of a distal clitic -a, however, in their bare forms the nouns seem to pattern with transitive verbs rather than intransitive with respect to aspectual interpretation.

Likewise the intransitive incompletive marker x- is incompatible with both transitive predicates and nouns:\footnote{As was discussed in the “Tense and Aspect” section of Chapter 1, the intransitive incompletive marker x- does show up in transitive clauses when negation marker ma is present: x- cliticizes to the right edge of the negation marker.}

\begin{enumerate}
\item \* x-wink-on
  \begin{tabular}{l}
  ICMP-man-B:1
  \end{tabular}
  \begin{tabular}{l}
  ‘I am a man’
  \end{tabular}
\item \* x-k-maj-at
  \begin{tabular}{l}
  ICMP-A:1-hit-B:2
  \end{tabular}
  \begin{tabular}{l}
  ‘I hit you’
  \end{tabular}
\item x-bon-on
  \begin{tabular}{l}
  ICMP-go-B:1
  \end{tabular}
  \begin{tabular}{l}
  ‘I go’
  \end{tabular}
\end{enumerate}

This may mean that transitive verbs are somehow less verb-like than intransitive. If, somehow, the presence of an external argument or Agent (in the syntactic sense of the word) was only possible with more nominal forms, it would help explain why many roots that form verbs that are generally considered unergative seem to be nouns. For example, the preferred way of saying “I am dancing” is as follows:

\begin{enumerate}
\item yakal-on ta a\textsuperscript{\textregistered}k\textsuperscript{\textregistered}ot
  \begin{tabular}{l}
  PROG-B:1 PREP dance
  \end{tabular}
  \begin{tabular}{l}
  ‘I am dancing’
  \end{tabular}
\end{enumerate}

In the example above a\textsuperscript{\textregistered}k\textsuperscript{\textregistered}ot is a regular noun, not a (nominal) -el participle formed from a verbal root. In order to say something like “I danced” the noun a\textsuperscript{\textregistered}k\textsuperscript{\textregistered}ot must be denominalized and converted to an intransitive verb:

\begin{enumerate}
\item a\textsuperscript{\textregistered}k\textsuperscript{\textregistered}ot-aj-on
  \begin{tabular}{l}
  dance-V-B:1
  \end{tabular}
  \begin{tabular}{l}
  ‘I danced’
  \end{tabular}
\end{enumerate}

The same applies to a\textsuperscript{n}jumal (“run”), k\textsuperscript{\textregistered}ayoj (“sing”), and tsej (“laugh”), but not yahl (“fall”), cham (“die”), way (“sleep”).

This could be a variation on the “defective vP” account of ergativity in Nash 1996 and Johns 1992, and discussed in Alexiadou 2001,\footnote{These are reviewed in the following chapter.} and if the current proposal is on the right track, I see no reason that the two analyses cannot be reconciled. It would be interesting to see whether the syntax of the ergative languages for which a “defective vP” proposal has been advanced treats unergative verbs as somehow less verbal.

Perhaps it is possible to go further with the present analysis and postulate that even incompletive transitive verbs may not appear without an intransitive auxiliary host, which
just happens to be null in Petalcingo Tzeltal, or at least nearly so. Many dialects of Tzeltal still have an intransitive incompletive marker *ya(k)*, which (as I have argued above) Petalcingo Tzeltal used to have as well, and whose final phone, */k/*, still attaches to the transitive verb when it bears 2nd-person or 3rd-person pre-vocalic markers (*atu*- and *y*). In Petalcingo Tzeltal the reflex of *ya(k)* has been re-analyzed as an emphatic marker and still (optionally) appears in the transitive and intransitive clauses.\(^{54}\)

One of the problems with this analysis then is to explain the difference between bare inflected transitives (like *smajon*) and those with the *-bel* participle-forming suffix (such as *smajbelon*). That these are not the same is clear from the following examples:

\[\begin{align*}
(48) & \quad a. \quad \text{la}j \quad \text{a-maj-on} \\
& \quad \text{PFV} \quad A:2\text{-hit-B:1} \\
& \quad \text{‘You hit me (perfective)’} \\
& \quad b. \quad \text{la}j \quad \text{a-majbel-on} \\
& \quad \text{PFV} \quad A:2\text{-hit-B:1} \\
& \quad \text{‘You finished hitting me’}
\end{align*}\]

While both constructions above are perfective, the first of these makes no reference to finishing an activity, while the second one does.

While some auxiliaries (like those in (48)) can take either a straight transitive complement or a *-bel* participle, others can only take one:

\[\begin{align*}
(49) & \quad a. \quad * \text{yakal} \quad \text{a-maj-on} \\
& \quad \text{PROG} \quad A:3\text{-hit-B:1} \\
& \quad \text{‘You are beating me’} \\
(50) & \quad a. \quad \text{yakal} \quad \text{a-maj-bel-on} \\
& \quad \text{PROG} \quad A:3\text{-hit-PART-B:1} \\
& \quad \text{‘You are beating me’}
\end{align*}\]

One way to resolve this problem is to assume that both *amajon* and *amajbelon* (however verb-like they may be) are associated with a certain aspect or telicity, which is compatible only with some matrix verbs. If, for example, the *-bel* suffix forms an atelic participle (regardless of its grammatical category) then it would not create a well-formed structure as a complement to *yakal*. This could explain the difference between the *-bel* transitive forms and the inflected root forms.

**Are Transitive Verbs Nominal?**

The above analysis of intransitive auxiliaries suggests that even transitive verbs may have nominal-like characteristics in that they appear as cross-referenced arguments of intransitive verbs, and receive a theta role from such verbs. This would parallel an account of ergativity proposed by Johns 1992 for Inuktitut. Johns argues that in Inuktitut transitive verbs are learned as such, and are marked as transitive verbs in the lexicon, however, they never appear this way in syntax. This, under her theory, is a result of the fact that verbs in Inuktitut cannot project a VP. A similar theory of ergativity is discussed in Nash 1996 and Alexiadou

\[^{54}\text{A counterargument to the present line of investigation would be that *ya(k)* does not seem to be grammatical with nouns, though I do not have data to show this.}\]
2001, where the inability of a verb to project an (un-inert) vP is the source of ergativity. Since vP is generally considered to be the locus of Burzio’s generalization, that is, vP is involved with licensing of agents (in [Spec, vP]), and is responsible for assigning the accusative case, failure to project a non-defective vP is theoretically a plausible account of ergative-like phenomena.

However, if we assume that transitive verbs appear as strictly nominal constituents (with the subject expressed as a possessor) there are major problems to be resolved with this account in Petalcingo Tzeltal, and at the moment these problems appear to be quite formidable. I will go through these in order in this section.

First of all, there are word-order mismatches between nominal arguments of transitive verbs and possessed phrases. It will be recalled that the basic verb order in Tzeltal is argued to be verb-initial (either VOS or VSO). The fact that both basic word orders have been proposed suggests that whatever the factors conditioning the variation between VOS and VSO, they are both relatively common. If VOS is one of the possible word orders in Tzeltal (and it is), there is no parallel in the possessive phrase whereby a constituent that is not part of the possessive construction may appear between the possessor and the possessor. Also, while the transitive clause can exhibit fronting of either the A or the P constituent (or both), the possessive phrases in Tzeltal are strictly head-initial, and the possessor cannot be fronted.

Secondly, we would have to argue that all the valence-changing operations (described in Chapter 1) also had an effect as nominalizers (valence-increasing) and denominalizers (valence-decreasing). This may be an uncomfortable assumption, though, if we assume that framework adopted in Alexiadou 2001, whereby at least some nominalizations project much of the same functional structure that verbs do, the valence-changing as nominalization account may be more plausible.

Finally, we would expect transitive verbs to be able to take other transitive verb arguments, with the complement verb receiving aspectual interpretation from the matrix verb. I have only one such example in my data:

(51)  
laj k-il-Ø s-we7-Ø mango Fransisca  
PFV A:1-see-B:3 A:3-eat-B:3 mango Fransisca  
‘I saw Fransisca eat mango’

Unfortunately, I don’t have my informant’s gloss, and therefore it is not clear whether the dependent verb is interpreted as incompletive or perfective in this example. If it is interpreted as perfective even though it lacks an overt aspect marking, this would provide evidence in favor of treating transitive verbs as arguments in all constructions. Usually, however, the dependent verb receives its own aspect marking:

(52)  
laj k-il-Ø laj a-maj a-ba  
PFV A:3-see-B:3 PFV A:2-hit A:2-self  
‘vi que te golpeaste; I saw that you hit yourself’

However, constructions such as (52) may not be strong evidence against the nominal transitive verb hypothesis, as the dependent verb could be embedded in a complement clause headed by a null complementizer, which we know from independent evidence is available in Tzeltal.
Thus, even though the complement verb evidence is rather ambiguous, the other problems discussed, above all word-order, make it difficult to argue that transitive verbs are realized as nouns in Petalcingo Tzeltal.

**Non-Auxiliary Verbs with -el Participles**

So far, I’ve had nothing to say about the use of -el participles with verbs that are not intransitive auxiliaries, even though there are such examples in Tzeltal. Probably the most common are transitive verbs *mulan* (“to like”), *tikun* (“to send, order”), *7al* (“say”, with the meaning to request).55 Some basic (non-participle) examples are shown below:

\[(53)\]

a. s-mulan-Ø te k-tat-ik
   A:3-like-B:3 DET A:1-father-PL
   ‘le gusta nuestro padre; our father likes it’ [HBC:0086]

b. pe7 banti a s-tikun-on bajel te k-tat-ik diyos-e,
   but where COMP? A:3-send-B:1 away DET A:1-father-PL god-CL
   tey nix a x-boj-on 7a
   there only PT ICMP-go-B:3 DIST
   ‘But where our father god sends me, only there I go’ [HBC:1327]

c. spisil laj k-al-be-tik-ix
   everything PFV A:1-say-APPL-PL-already
   ‘ya todo le dijimos; we’ve told (them) everything’ [HBC:1355]

d. ka na7 s-mil-el ala chitam
   ICMP.A:2 know A:3-kill-PART DIM pig
   ‘puedes matar cochito;
   you can kill a piglet (literally: you know how to kill a piglet)’

The *mulan* verb can take either a noun complement or a participle complement as an argument. This is in line with the analysis of participles as nominal forms proposed above:

\[(54)\]

a. k-mulan-at
   A:1-like-B:2
   ‘I like you’

b. ya s-mulan-Ø 7a7tel
   ICMP.EMPH A:3-like-B:3 work
   ‘He likes to work (literally: He likes work)’

c. k-mulan-Ø nux-el
   A:1-like-B:3 swim-PART
   ‘I like to swim’ [adopted from Polian 2003a56]

Thus even in example (54c) I would argue that the matrix verb *mulan* features a Ø 3rd-person agreement cross-referencing its complement. Like the intransitive auxiliaries discussed above, if the theta-grid of the matrix verb is saturated, the complement participle must appear in a prepositional phrase:

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55 This verb usually appears with an applicative.
56 I believe that in Petalcingo variant this example would work the same way.
Non-Auxiliary Verbs with -el Participles

(55)  
k-mulan-at ta mil-el
     A:1-like-B:2 PREP kill-PART
‘I (would) like you to be killed’

With these verbs the -el participles of transitive verbs also cross-reference the theme argument of the underlying transitive stem via Set A marker:

(56)  
k-mulan-Ø s-lo7-el mango
     A:1-like-B:3 A:3-eat-PART mango
‘I like to eat mango(s)’

This was argued above to be a result of the nominalization of the underlying stem, which absorbs the agent theta role, and leaves the theme theta-role to be assigned via the optional possessive Set A marker.

So far the transitive verbs taking participle complements have not presented any problems for the analysis proposed above, but rather provided evidence for the nominalization/Ø absolutive cross-reference account. There are, however, two features of these constructions that are problematic for my account. The first of these is the fact that sometimes -el participles without a preposition appear with a matrix verb whose theta-grid seems to be already saturated:

(57)  
k-tikun-at s-pas-el
     A:1-send-B:3 A:3-do-PART
‘I sent you to do it’

The second problem is in the fact that in constructions such as (57), the Set A cross-reference on the participle complement can only be a third-person marker s-/y.\(^{57}\)

While I do not have a complete account for these types of constructions, an avenue of analysis might be proposed. At least some -el participles can function as adverbial elements, unlicensed by the main verb:

(58)  
y-il-el laj s-mil-Ø
     A:3-see-PART PFV A:3-kill-B:3
‘Apparently he killed him’

They are not licensed in a sense that they are not assigned a theta-role by the verb, and can appear optionally, perhaps adjoined to the clause. Perhaps as a result of their adjoined position, they seem to have a rather free word order:\(^{58}\)

(59)  
  a. y-il-el laj s-mil-Ø
       A:3-see-PART PFV A:3-kill-B:3
‘Apparently he killed him’
  b. laj s-mil-Ø y-il-el
       PFV A:3-kill-B:3 A:3-see-PART
‘Apparently he killed him’

\(^{57}\) I do not have an ungrammatical example in my data, though, my intuitions with respect to ungrammaticality of non-3rd-person markers in these construction accord with what is presented by Polian 2003a.

\(^{58}\) They cannot appear between the aspect marker laj and the verb, but virtually nothing can appear in this position.
Chapter 2: Participles

c. laj s-mil-Ø
   PFV A:3-kill-B:3
   ‘He killed him’

Examples (59a) and (59b) are meant to illustrate the free word order of yilel while example (59c) illustrates the optionality of this element. In this latter trait yilel resembles directionals (discussed in “Auxiliaries and Directionals” on page 52 in Chapter 1). Directionals are always optional, and seem to be adverbial-like elements that most often provide a perspective, or point of view, of the action being described:

(60)  a. koh-Ø bajel
descend-B:3 DIR:away
   ‘He descended away’
  b. koh-Ø talel
descend-B:3 DIR:toward
   ‘He descended toward’

Note that directionals generally are formed from verbs of motion with the participle-like -el suffix. The adverbial-like nature of directionals may relate them to the adverbial use of participles such as yilel, even though the latter (but not the former) is freely ordered with respect to the clause. In fact, the order facts may have to do with the precise nature of the adverbial-like elements in question: yilel is an evidential, and therefore would be expected to appear in a projection quite high in the clause (Rizzi 1997, Cinque 1999). Perhaps the directional are treated as VP-level adverbials in the Tzeltal syntax, which is why they may not appear outside of the aspect+verb complex.

What I would like to propose is that perhaps the participle that appears after the inflected transitive verb in (61) may be fulfilling some sort of adverbial function.

(61)  k-tikun-at s-pas-el
   A:1-send-B:3 A:3-do-PART
   ‘I send you to do it’

This is a plausible line of analysis since in (61) spasel is optional, and ktikunat is entirely grammatical without it, albeit with a different meaning. However, the meaning difference, which seems rather significant in English, may be a matter of an addition of an adverbial in Tzeltal. This idea receives some modicum of support from the fact that in this case spasel must have a third-person Set A prefix, just like yilel in example (58), above. However, more data is necessary to come to a firm conclusion. Word-order data would help shed some light on this hypothesis, i.e. if spasel can appear pre-verbally in (61) this would be a strong argument in favor the theory of these participles as prepositionless adverbials.

The Participle-Taking -u7un Verbs

One part of the Polian 2003a analysis that I have not addressed so far in detail is his proposal for “control via Set A affix.” This type of construction involves an auxiliary verb

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59 I believe in the example above it is preferable for yilel to appear clause-frontally. This may have to do with the fact that it is functioning as an evidential.

60 tal is the only directional that may appear without the -el marker. It is in free variation with talel.
with an inflected preposition -u7un. Most commonly such a construction appears with verb hu7 (“to be able to”).

(62)  a. ya xu7 k-u7un bej-el
     EMPH.ICMP ICMP.can A:1-for walk-PART
     ‘Puedo caminar; I can walk’

   b. ya xu7 k-u7un s-mil-el te ts’i7
     EMPH.ICMP ICMP.can A:1-for A:3-kill-PART DET dog
     ‘Puedo matar el perro; I can kill the dog’

Note that like with other instances of -el participles that the Set A marker on the participle cross-references the theme argument of the underlying transitive stem, and not the agent argument. I have argued above that this is due to the fact that -el participles are nominalizations.

Like the other constructions described in this chapter, the abilitative construction can occur with -bel participles:

(63)  hu7 y-u7un s-mil-bel-on
     can A:3-for A:3-kill-B:3
     ‘pudo matarme; he was able to kill me’

Also like the other auxiliaries hu7 can take a regular noun complement:

(64)  ma xu7 k-u7un te 7a7tel yakal-on-e
     NEG ICMP.can A:1-for DET work PROG-B:1-CL
     ‘I cannot do the work I am doing’

Unlike the progressive construction, with the abilitative construction the preposition never appears preceding the participle. This is what we find with the intransitive auxiliaries with the -bel participles but not with the -el participles.

Haviland 1981 analyzes the Tzotzil cognate of the verb hu7 as a somewhat defective intransitive verb. He notes that it never appears with first or second person absolutive markers. The analysis of hu7 as intransitive for Petalcingo Tzeltal is supported by the fact that it can appear with the intransitive imperfective aspect marker x- (compare examples (62) and (63) above). With this verb, the agent (if expressed) appears in a prepositional phrase with the inflected preposition -u7un. If the agent is not cross-referenced on the verb, the verbal agreement is free to agree with the complement of the intransitive light verb: in the framework proposed in this chapter then, we would analyze hu7 as always bearing a 3rd-person absolutive marker. This explains then why even the -el participles that appear with hu7 are never expressed in a prepositional phrase: rather than being obliques (as they are in yakal-ABS ta construction), with hu7 they are bona fide arguments, cross-referenced on the verb itself. This theory predicts that we should be able to see examples of impersonal abilitative constructions, where the agent is not expressed at all, and their syntax should be identical, minus the -u7un phrase. This prediction is borne out:

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61 When hu7 appears with the incompletive marker x-, /h/ is deleted, yielding the portmanteau form xu7.

62 I do not have examples of ungrammaticality of ta in this construction, however, but there are no instances of ta with hu7-u7un in my data.
Chapter 2: Participles

(65) ma ju7 s-jach-el
    NEG can A:3-lift-PART
    ‘it could not be lifted’

The other feature of the abilitative construction that requires discussion is the fact that the
-el participles of transitive verbs, when appearing in this frame, must bear a Set A marker.
This seems surprising at first, until we consider that the agent argument is always expressed
in an optional -u7un phrase. If the agent expression is optional, and the patient is not
expressed at all, the resulting predicate would be vacuous, that is, it would not say anything
(referentially speaking):

(66) * ma ju7 jach-el
    NEG can lift-PART
    ‘could not be lifted’

Thus it could be argued that the construction grammaticalized into one where the theme
argument always must be expressed.

A final note on the abilitative constructions is that they can also take a transitive verb
complement not in the participle form:

(67) ya xu7 aw-u7un ka mil-on
    ICMP.EMPH ICMP.can A:3-for ICMP.A3 kill-B:1
    ‘You can (able to) kill me’

This example suggests that the analysis of transitive verbs whereby they can be arguments to
predicates could be on the right track. However, it is also possible to analyze constructions
such as (67) as having a clausal complement headed by a null complementizer.

Conclusion

In this chapter I offered an analysis of Petalcingo Tzeltal -el and -bel participles. I have
argued, on the basis of distributional evidence, that -el participles are nominal in character.
This straightforwardly accounts for why transitive -el participles optionally bear Set A
(ergative) markers and why these markers cross-reference the theme (rather than the agent)
arguments. An analysis of Tzeltal intransitive auxiliaries was proposed, whereby all
intransitive auxiliaries obligatorily agree with an argument, even if no overt absolutive
agreement is overtly visible. This analysis was extended to transitive verbs with participle
complements and the abilitative construction with the verb hu7. I also proposed that there is
some evidence to treat transitive verbs as arguments in Petalcingo Tzeltal, though I
concluded that to treat these as fully nominal forms (in the spirit of Johns 1992) would be
premature.
Chapter 3
Possessive and Ergative Marking

This chapter examines a striking phenomenon which exists in Tzeltal and other Mayan languages: ergative agreement markers on transitive verbs are identical to possessor cross-reference markers on nouns. This is a rather curious phenomenon: generally, in linguistic theory, verbs and nouns are taken to be very different lexical categories. For example, Chomsky 1970 postulates that two categorial features, ±NOUN and ±VERB can derive the majority of English lexical categories. The noun/verb distinction is taken (by most linguists) to exist in all languages. Closer to the topic of this thesis, nouns and verbs can be shown to be distinct in Petalcingo Tzeltal using a variety of criteria explored in Chapter 1. If nouns and verbs are different entities, then how is it possible for verbs and nouns to feature an identical set of inflectional markers? Presumably, if they are identical, we would want to treat them as instances of one and the same entity. However, this would seem to force us to give up the noun/verb distinction in Tzeltal. This is the paradox which this chapter attempts to explore.

Since the stance I adopt in this chapter, as in the rest of the thesis, is a form-oriented one, in the first section of this chapter I attempt to determine what the morphological nature of the Set A (ergative/possessive) markers is. Here I argue that these markers, rather than being affixes, as previously considered, are instead clitics. The argument for their clitic status comes mainly from distributional evidence. In the second part of this chapter, I take a broader view of the identity of ergative and possessive marking, and examine it from typological, functional, and syntactic perspectives. While no firm conclusions are reached in the latter part of this chapter, I hope that by focusing attention on this issue as a cross-linguistic phenomenon the present work can serve as a precursor for future research.

Set A Person Markers are Clitics
In this section, I consider the nature of person cross-reference markers in Tzeltal. While the bulk of the evidence will come from Petalcingo Tzeltal, the Bachajon and Ocosingo dialects will be considered as well. Much of the material here is from Shklovsky 2004 and Shklovsky and Coon 2005.

The term “Set A,” it will be recalled, is used in Mayan linguistics to refer to the paradigm of markers that cross-reference both the ergative argument of a transitive verb and the possessor of a possessed noun. The “Set A” paradigm is reproduced below:
Chapter 3: Possessive and Ergative Marking

<table>
<thead>
<tr>
<th>Person</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td></td>
</tr>
<tr>
<td>inclusive</td>
<td>k- / j-</td>
</tr>
<tr>
<td>exclusive</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>tik</td>
</tr>
<tr>
<td>2nd</td>
<td>a- / aw-</td>
</tr>
<tr>
<td></td>
<td>-(r)jik</td>
</tr>
<tr>
<td>3rd</td>
<td>s- / y-</td>
</tr>
<tr>
<td></td>
<td>-(r)yotik</td>
</tr>
</tbody>
</table>

Table 10: Set A markers (reproduced from page 35)

Usually the term “Set A” applies to both the markers that cross-reference person and appear at the left edge of the noun or verb, as well as those that cross-reference number and appear at the right edge. However, here, I will only consider the cross-reference markers that indicate the person agreement and only appear at the left edge of the word (the markers that appear in the “person” column of Table 10). The separation of person and number marking in Set A markers is not entirely unmotivated (as discussed in “Grammatical Relations, Ergativity, and Possessor Marking” on page 33 in Chapter 1): besides the purely formal fact that they appear at the opposite edges of the constituent in question, and that the phi-features (person, number, etc) they cross-reference are different, the left- and right-attaching Set A markers also exhibit different distributional properties: while the person cross-reference is usually obligatory, the number cross-reference is generally optional. Thus, while the rest of this chapter will be concerned only with the left-edge Set A markers, I will be generally referring to these simply as “Set A markers” for the sake of brevity.

Traditionally all ergative/possessive person cross-reference markers in Tzeltal (as well as other Mayan languages like Tzotzil and Chol) have been considered prefixes (Kaufman 1971, Slocum, Gerdel, and Cruz Aguilar 1999, Sánchez Gómez et al 2003, Polian 2003b, Haviland 1981, Aissen 1987, Coon 2004). In this chapter I argue that the left-edge Set A markers are actually clitics.

The bulk of the evidence for my claim is morphological rather than phonological in nature. However, Kaufman (p.c.) reports that the personal cross-reference markers can never bear stress, even in the environments where they would be expected to do so.63 This may offer phonological evidence for the clitic status of these markers.

In the sections that follow, I will deal first with nominal Set A person markers (possessor cross-reference) and then with the verbal Set A person markers (ergative cross-reference).

**Nominal Set A Markers**

In Petalcingo Tzeltal, noun phrases with adjectival modifiers feature Set A markers on the left edge of the phrase, and not on the head noun, as shown in the following examples:

(1) [Petalcingo Tzeltal]
    a. k-tsontson bal-tik
       A:1-hairy cousin-PL
       ‘our hairy cousin’

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63 This claim is based on an assumption that stress in Tzeltal is word-initial, which is not uncontroversial. See “Syllabification and Stress” on page 15 in Chapter 1 for more information.
b. k-sak-il na
   A:1-white-MOD house
   ‘my white house’

c. * sak-il k-na
   white-MOD A:1-house
   ‘my white house’

This is also true of the Bachajon and Ocosingo dialects of Tzeltal:

(2) [Bachajon Tzeltal]
   j-sak-il mut
   A:1-white-MOD chicken
   ‘my white chicken’

(3) [Ocosingo Tzeltal]
   te j-muk^-ul mut
   DET A:3-large-MOD chicken
   ‘my white chicken’

The possessive marker, which semantically applies to the whole noun phrase, appears only on the modifier: in (1b) it is not the “white” that is possessed, but rather the “house.”

It is not possible to analyze these constructions as instances of secondary predication (something like “my white thing, which is a house”) because adjectival stems in Petalcingo Tzeltal (such as sakil,—“white” in (1b), above) are formed from nominal roots with attributive-forming -Vl suffixes, and the resulting adjectival stems may not be predicates or arguments—only nominal stems may:

(4) a. ka-ts^ak-Ø me sak-e
    ICMP.A:2-grab DET white-CL
    ‘Grab the white one!’

b. * ka-ts^ak-Ø me sak-il-e
    ICMP.A:2-grab DET white-MOD-CL
    ‘Grab the white one!’

So while it may be possible to analyze “house” in (1b) as a secondary predicate (c.f. example (67) in “Syntax and Clause Structure” on page 30 in Chapter 1), the modificational stem (such as sakil) may not serve as an argument. This suggests that the secondary predicate analysis is not appropriate.

Moreover, multiple attributives may appear between the Set A marker and the head noun, with the Set A marker appearing at the left edge of the entire NP, as is shown in (5):

(5) [Petalcingo Tzeltal]
   k-naht-il sak-il winik
   A:1-tall-MOD white-MOD man
   ‘my tall white man’
The Bachajon and Ocosingo dialects of Tzeltal seem to exhibit the same features as well, as shown in example (6):

(6) [Bachajon, Ocosingo Tzeltal]
    j-muk^-ul sak-il mut
    A:1-large-MOD white-MOD chicken
    ‘my large, white chicken’

If this was something like secondary predication, we would expect both attributives to bear the person cross-reference.

Another non-clitic analysis might take the forms in (1) to be instances of lexical compounding. If sakil and na formed a compound, then the Set A morpheme on the left edge of the complex could still be treated as a prefix, since na and sakil would be a word formed in the lexicon.

There are several arguments against this approach. First, if this is an instance of N-N compounding, it is not clear what the role of the attributive stem forming -Vl suffix would be: there are many instances of N-N compounding in Tzeltal and none use this morpheme:

(7) [Petalcingo Tzeltal and Ochuk Tzeltal (Polian 2003b)]
    a. tultux tak^in
       dragonfly metal
       ‘helicopter’
    b. tumin chij
       cotton deer
       ‘sheep’

On the other hand, while instances of A-N compounding may exist, these are not very common—I am not aware of any. One might (briefly) entertain the idea that the modifier-forming -Vl suffix is a nominalizer, forming an adjectival noun stem, and then allowing the formation of an N-N compound. However, as is argued in “Are There Adjectives in Tzeltal?” on page 17 in Chapter 1, the modifier stems are already formed from nominal roots, and besides, if the -Vl modifier stems were nouns, they would be able to serve as arguments to predicates. This was shown not to be the case above.

Overall, with respect to any compounding analysis, it would seem rather unusual if the primary way of expressing attributive relations in a language were through compounding.

Finally, lexical compounds would be expected to exhibit non-compositional meaning or semantic drift. None of these phenomena are in evidence with attributive constructions like the ones shown in (1). For this reason, and the others listed above, the compounding analysis seems inappropriate.

What remains is the proposal that the Set A markers are in fact clitics, attaching to the left edge of an NP:

(8) k- [NP tsontson bal] -tik
    A:1- hairy cousin -PL
    ‘our hairy cousin’
This makes sense in light of the fact that in multiple attributive constructions the Set A marker still appears only on the left edge of the NP. The same thing also happens if the modifier is a perfect form of a verbal stem. Both of these phenomena are exemplified in (9):

\[(9) \quad [\text{Petalcingo Tzeltal}]
\]
\[
a. \quad \text{k-naht-il sak-il na}
A:1-tall-MOD white-MOD house
\text{‘my tall, white house’}
\]
\[
b. \quad \text{k-mil-bil ts^i7}
A:1-kill-PERF dog
\text{‘my killed dog’}
\]

However, the clitic analysis faces its own problems. While some (attributive) multi-word constituents may appear between the Set A marker and the head noun, it seems that in some cases the Set A marker may not appear on a word that forms a part of the attributive multi-word constituents, as demonstrated in (10) and (11):

\[(10) \quad [\text{Petalcingo Tzeltal}]
\]
\[
a. \quad \text{la} j \text{ k-chon-Ø k-ala ihk^ ta sak-il pixjol}
PFV A:1-sell-B:3 A:1-DIM black PREP white-MOD hat
\text{‘I sold my black and white hat’}
\]
\[
b. * \quad \text{la} j \text{ k-chon-Ø k-ihk^ ta sak-il pixjol}
PFV A:1-sell-B:3 A:1-black PREP white-MOD hat
\text{‘I sold my black and white hat’}
\]

\[(11) \quad [\text{Petalcingo Tzeltal}]
\]
\[
a. \quad \text{alku ihk^-al pixhol}
\text{something black-MOD hat}
\text{‘almost black hat’}
\]
\[
b. * \quad \text{la} j \text{ k-chon-Ø k-alku ihk^al pixjol}
PFV A:1-sell-B:3 A:1-something black-DEM hat
\text{‘I sold my almost black hat’}
\]

Thus while in (10a) the possessor cross-reference marker \(k\) is placed at the left edge of what appears to be a coordinated modificational modifier (\(ihk^ ta sakil\)), it seems that that the presence of a diminutive \(ala\) is required as is shown in (10b). The example (11) shows that the Set A person marker may not attach to \(alku\) (“something”).\footnote{It is not the case, that the problem with (11b) is that the Set A marker appears on a loanword: in Petalcingo Tzeltal Spanish loanwords appear frequently with various Tzeltal affixes and clitics.}

Other cases of attachment to multi-word constituents seem quite fine, as is demonstrated in (12), though the nature of the constituent seems to be different:

\[(12) \quad [\text{Petalcingo Tzeltal}]
\]
\[
\text{la} j \text{ k-chon k-wen sak-il pixjol}
PFV A:1-sell-B:3 A:1-very white-MOD hat
\text{‘I sold my very white hat’}
\]
Chapter 3: Possessive and Ergative Marking

The ungrammaticality of (10b) and (11b) may be a problem for the clitic theory of the Set A markers, though there may be independent syntactic reasons for ruling out these examples.

**Verbal Set A Markers**

Moving on to verbal Set A markers, we find that just as in the case of nominal Set A markers, various lexical items may intervene between the Set A marker and the verbal stem, as is shown in (13):  

\(13\)  
[Petalcingo Tzeltal]

a. och laj s-wen leh-Ø ta y-ahan s-wab  
   start EVID A:1-very search-B:3 PREP A:3-under A:3-bed  
   ‘He began to really search under his bed’

b. wohe laj s-k^un we7-Ø wah  
   yesterday PFV A:3-slowly eat-B:3 tortilla  
   ‘Yesterday (She/he) ate tortilla(s) slowly’

Under the clitic theory, the ergative cross-reference appears at the left edge of some sort of a phrase, probably a VP, as shown in (14):

\(14\)  
[Petalcingo Tzeltal]

wohe laj s-[VP k^un we7-Ø wah ]  
   yesterday PFV A:3-slowly eat-B:3 tortilla  
   ‘Yesterday (She/he) ate tortilla(s) slowly’

The kinds of items that appear between the Set A marker and the verb are manner adverbials. This would be consistent with the clitization to VP hypothesis, as these types of adverbials are usually taken to be generated inside the VP. More than one manner adverbial may appear between the Set A marker and the stem, but they must occur in a particular order:

\(15\)  
[Petalcingo Tzeltal]

a. s-cha7 k^un we7-Ø wah  
   A:3-again slow eat-B:3 tortilla  
   ‘(He/she/it) eats the tortilla slowly again’

b. * s-k^un cha7 we7-Ø wah  
   A:3-slow again eat-B:3 tortilla  
   ‘(He/she/it) eats the tortilla slowly again’

This construction seems to exhibit similar properties in the Bachajon variant:

\(16\)  
[Bachajon Tzeltal]

a. * la s-le-k^un-pas-Ø na  
   Pfv A:3-well-slow-make-B:3 house  
   ‘He/she made my house slow and (but) well’

---

65 According to Aissen (p.c.), in Tzotzil, \(wen + \text{VERB}\) may not be interrupted by a 2nd-position clitic. If this is true in Tzeltal, then the first example would clearly not be as compelling as the second.
b. la s-k^un-lek-pas-Ø na
   PFV A:3-slow-well-make-B:3 house
   ‘He/she made my house slow and (but) well’

One of the problems for the clitic analysis herein is to explain why not all manner adverbs may appear in this position as with the nominal modifiers multi-word adverbial constituents (such as ta lek (“well”)) cannot appear in this position as well:

(17) [Petalcingo and Bachajon Tzeltal]
   a. * la(j) s-ta lek pas-Ø na
      PFV A:3-PREP good make-B:3 house
      ‘He built my house well’
   b. * la(j) s-ora pas-Ø na
      PFV A:3-fast make-B:3 house
      ‘He built my house quickly’

The ungrammaticality of ora (fast) appearing in this position is perhaps more troubling though it may be that ora seems to be a shortened ta ora, a PP which is still used to mean “fast”. One possible explanation could be that a regular transitive verb tah (“search”) may be blocking the ergative marker from appearing with the preposition ta. The ERG+PREP combination may result in an undesirable homophony with the transitive verb and therefore ERG+PREP combination is banned.

An alternative to the clitic proposal would be an analysis in terms of compounding, which is in fact what was proposed for Chol in Coon 2004. This is also what Boskovic 2001 assumes for Bulgarian mono-syllabic clitics appearing in similar positions. This approach would help explain the limited possibilities of more than one adverbial appearing in the post-Set A slot and the gaps evident in the system. Likewise, the impossibility of adverbs composed of multiple words appearing in the pre-verbal, post-ergative marker position would be easily accounted for, as lexical compounding cannot operate on syntactic constituents. On the other hand, there is some evidence in Petalcingo Tzeltal against the compounding analysis. If k^un we7 (“eat slowly”) (from example (14), above) were a verbal compound headed by we7, we would expect it to be able to take regular verb morphology, such as the participle-forming -el suffix (discussed in the previous chapter). It seems however, that adverbials may not appear in the -el constructions:

(18) [Petalcingo Tzeltal]
   a. yakal-at ta s-mil-el
      PROG-B:2 PREP A:3-kill-PART
      ‘You are killing it’
   b. *? yakal-at ta s-k^un mil-el
      PROG-B:2 PREP A:3-slow kill-PART
      ‘You are killing it slowly’

Under the clitic theory, locutions such as (18b) would be ruled out because they do not involve a VP projection, and thus lack a structure for the adverb. Under the compounding account, it is not immediately clear why (18b) is ungrammatical.

Another non-clitic analysis might be adverbial incorporation. Adverbial incorporation is a phenomenon that has been proposed for Chukchee (Chokotko-Kamchatkan) in Spencer 1995 and Modern Greek in Alexiadou 1997 and Rivero 1992. In Modern Greek, Alexiadou
1997 shows, that only manner adverbs are able to incorporate, while sentential adverbs are unable to do so. This parallels the Tzeltal facts, where temporal adverbs, such as wohe (“yesterday”) and pajel (“tomorrow”) cannot appear between the ergative marker and the verbal stem. Likewise, a byproduct of Alexiadou’s analysis is that incorporation of constituent adverbs (such as modified adverbs) is ruled out, which happens to be the case in Modern Greek, and Petalcingo Tzeltal as well.

On the other hand, Modern Greek, features (at least by some analyses) noun incorporation in reciprocal and reflexive constructions, something that Tzeltal does not seem to have. In fact it is difficult to see how adverb incorporation would fit with the general morphological profile of this language. Nonetheless, adverb incorporation is a possibility that must be considered in this case.

It must be noted, however, that even if the incorporation or compounding account proves to be correct, this by itself would not be evidence against the clitic theory of verbal Set A markers. Rather some of the evidence for the clitic status of verbal Set A markers would disappear.

The final argument in favor of the clitic analysis is that there is very little other prefixation in Tzeltal, outside of the gender and agentive prefixes which may be diachronically related to each other. On the other hand, cliticization is a pervasive phenomenon in Petalcingo Tzeltal, as this language seems to feature clitics of all types.

Conclusions

In this section I argued that Set A person-marking morphemes are actually clitics, both in the verbal and in the nominal paradigm. This analysis has several implications.

First, the nature of the Set A markers partly determines the kind of clause structure we may want to propose for Tzeltal. Clitics are generally taken to exhibit different syntactic properties from affixal agreement as the latter is generally taken to be syntactically inert. Presumably then, having the right analysis for the agreement structures in a language is a prerequisite for a tenable clause structure analysis.

Second, most researchers reconstruct affixes for Set A markers in Proto-Mayan. However, if these markers are clitics in Tzeltal, and if we assume the unidirectionality of grammaticalization hypothesis (Hopper and Traugott 1993), then Set A markers must have been clitics in the proto-language. This suggests that our conception of proto-Mayan person cross-reference must be reconsidered in light of the Tzeltal evidence.

Identical Ergative and Possessor Marking

In this section I examine the phenomenon in Tzeltal whereby the subject of a transitive verb is marked identically to the nominal possessor. This phenomenon is by no means unique to Tzeltal, or even other Mayan languages. Therefore this section will also consider languages outside Chiapas and the analyses proposed for these.

Here I will continue to make use of the terms S, A, and O, popularized by Dixon 1994, whereby S stands for the subject, or the only core argument of an intransitive clause, and A

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66 The clitic-like nature of these markers can also be established for the closely-related Tzotzil, and the less-closely related Chol, as was argued in Shklovsky and Coon 2005.
and O stand for the most agent-like and the most patient-like core arguments of a transitive clause, respectively.

**Functional and Typological Considerations**

This subsection considers the phenomenon of identical ergative and possessive marking from functional and typological perspectives, with the following sections being devoted to diachronic and synchronic syntactic analyses.

**Expected and Attested Types**

* A priori, if we consider possession as a way of marking grammatical relations within the noun phrase, it would not be surprising if languages employed some of the same mechanisms of marking grammatical relations in the sentence / verb phrase and in the noun phrase. One example of such a phenomenon in English is the “by” phrase, which can introduce agent arguments in (verbal) passive clauses, as well as in nominalizations:

```
(19)  a. The city was destroyed by the barbarians

         b. The city’s destruction by the barbarians (shocked the residents)
```

Noun phrases and sentences are different entities, and presumably an identical marking of grammatical relations within NPs would not give rise to ambiguity with respect to grammatical relations within sentences and VPs. Let us call the underlying principle the “efficiency principle” which would hold that all things being equal a language generally deploys fewer morphosyntactic resources rather than more. This would mean that a morphosyntactic strategy utilized in one area of the grammar may be also used in another, subject to the “non-ambiguity principle” which would hold that languages do not tolerate ambiguity well. These principles have their corollaries in phonological theory, where it is often held that opposing forces of economy of gesture and preservation of phonological contrast are responsible for the nature of phonological systems we find in world’s languages.

The “efficiency principle” is often used to explain the typological rarity of tripartite systems of marking grammatical relations in the world’s languages (Dixon 1994, Payne 1997 and others). Tri-partite marking is a phenomenon where A, S, and O all exhibit different markings. The argument usually presented holds that since no clause can be both transitive and intransitive, the S argument could always be marked like the A or the O argument with no ambiguity as to the grammatical relations expressed.

It is clear that languages tolerate some amount of both ambiguity and computational redundancy, meaning that both principles are violated, as they necessarily must be due to their opposing nature. The most obvious examples of these violations are homophones, existence of tri-partite systems of marking grammatical relations, and divergent syntactic constructions that utilize identical phonological structures. An example of the latter might be the English -(e)s morpheme which a) marks agreement with 3rd-person A/S argument, b) marks plural feature on nouns, c) marks the possessor in a possessive construction, and d) in some syntactic environment is the reduced form of 3rd-person singular present tense of the verb be (-s). The English system is “efficient” but some ambiguity results, as when *elephants walk* can be ambiguous between “elephant’s walk” and “elephants walk” when pronounced.
Chapter 3: Possessive and Ergative Marking

As an explanatory principle, the “efficiency/non-ambiguity” approach is one of the cornerstones of modern linguistic theory, and is even formally built into some major theories, such as OT (Optimality Theory).

Now if we take it as basic that the same way of marking grammatical relations between the verb and its arguments could be utilized within a noun phrase, not all logically possible systems of marking such relations are unambiguous. Consider, for example, a hypothetical pure dependent-marking language (in the sense of Nichols 1986) that employs nominative/accusative case-marking for core grammatical relations. If the case system was the only way of marking grammatical relations in such a language, and if such as language “recycled,” so to speak, one of the ways of marking grammatical relations between a verb and its arguments in the noun phrase, we obtain two possible systems of possessor marking:

\[(20)\]
\[
a. \text{woman}(+(S/A)-marking) \text{ father} \\
   \text{‘woman’s father’}
\]
\[
b. \text{woman}(+O-marking) \text{ father} \\
   \text{‘woman’s father’}
\]

If we add to this a common typological fact, captured by Greenberg 1963 universal 38, namely that S/A (in accusative languages) or S/O (in ergative languages) case realization frequently is O-marked, one of the above systems, namely (a), becomes ambiguous. If (in this hypothetical accusative language) the S/A marking is zero marking, then the possessor would remain unmarked and the example in (20a) would give rise to two interpretations: “woman’s father” or “father’s woman” (remember, we are excluding word order for the purposes of disambiguation). Similar arguments hold for a system that uses S/O marking for (dependent-)marking possessive relations in an ergative language.

With head-marking languages the situation is slightly different, yet nonetheless leads to a similar conclusion. A pure dependent marking language would cross-reference some phi-features (person, number, grammatical gender, etc) of the arguments on the head of the phrase, such as verb or a noun. In many head-marking languages the arguments of the head can usually be elided (pro-drop), since the information they provide is often recoverable from the inflection on the head and thus redundant (another type of application of the “efficiency/non-ambiguity” principle). In these languages there is no case-marking that has a zero-marking (because there is no morphological case), however, in head-marking languages that cross-reference two arguments of the verb, it is common that the S/A (for accusative languages) or S/O (for ergative languages) cross-reference include a O allomorph, usually for a third-person (singular) argument. Examples of this are found in Mayan languages (like Tzeltal), Wiyot (Teeter 1964), Hungarian (Szabolcsi 1994), and others. This means that in a hypothetical accusative head-marking language with free word-order, an identical marking for S/A and possessor cross-reference might look something like the following:

\[(21)\]
\[
\text{mother-Ø} \quad \text{husband} \\
\text{mother-POSSESSOR:3sg} \quad \text{husband} \\
\text{‘mother’s husband’}
\]

67 This is admittedly a hypothetical example since word order is always obligatory, at least in the non-signed modality, and is usually significant in possessive constructions.

68 “Where there is a case system, the only case which only has zero allomorphs is the one which includes among its meanings that of the subject of the intransitive verb.”
At the level of the surface form an ambiguity would result since, if the language had free
word order, “mother’s husband” would be indistinguishable from “husband’s mother.”69

Thus, all things being equal (which they never are) we would expect to see fewer instances of
(S/A)=POSS in accusative languages and (S/O)=POSS in ergative languages. This is exactly
what Dixon 1994 implies: “while the unmarked cases—absolutive and nominative—are
almost always used only for basic syntactic relations, the marked case forms—ergative and
accusative—often (but not always) have wider uses.”70

Limiting our field of view of these “wider uses” to specifically possession marking, the
expected (and claimed) typological tendencies are not always borne out by the data. Within
the accusative languages there seem to be at least some counterexamples to the expected
generalization.

One of these is Koyra Chiini, a Songay language spoken in Timbuktu, Mali (all Koyra Chiini
data is from Heath 1999). In this language the basic grammatical relations in a clause are
marked via word order, but the pronominal system exhibits nominative/accusative
dependent marking. The pronouns in Koyra Chiini are summarized in the following table:

<table>
<thead>
<tr>
<th>Subject (S/A)</th>
<th>Object (O)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Singular</strong></td>
<td><strong>Plural</strong></td>
</tr>
<tr>
<td>1</td>
<td>ay</td>
</tr>
<tr>
<td>2</td>
<td>ni</td>
</tr>
<tr>
<td>3</td>
<td>a</td>
</tr>
<tr>
<td>3F</td>
<td>nga ~ na</td>
</tr>
<tr>
<td>3F</td>
<td>gi-yo</td>
</tr>
</tbody>
</table>

Table 24: Personal Pronouns in Koyra Chiini72

As can be seen from the table above, in 1st- and 3rd- person singular forms, as well as
3rd-person plural, the O pronouns differ from the S/A pronouns. This is illustrated in the
following example:

(22) a jisi ga
     3SgS put-down 3SgO
     ‘He put him down’

The possessive construction in Koyra Chiini is marked via a linker *wane*, which is omittable.
The word order in possessive constructions is POSSESSOR-*wane*-HEAD, and when the
possessor is pronominalized, the S/A pronominal set is used:

(23) a. a wane gaabi di
     3sg POSS strength DEF
     ‘its power’

---

69 It must be noted, though, that many head-marking languages frequently do use word-order to
disambiguate A/O grammatical relations when cross-reference marking results in true ambiguity.
70 Dixon seems to consider genitive a non-core case relation.
71 F means “Full” in this context. For more information the reader is referred to Heath 1999.
72 The logophoric and reflexive pronoun forms have been omitted from this table.
b. ay ñaa
   1sg mother
   ‘my mother’

Another famous case of S/A=POSS is Hungarian. The details of Hungarian noun phrase syntax are analyzed extensively in Szabolcsi 1994. Hungarian is a nominative/accusative language with double-marking in its basic grammatical relations: the verb cross-references subject and (definite) object agreement, and overt nominals are case-marked. The verb agreement paradigm is rather complex, as the agreement morphemes are not always easily segmentable into subject and object agreement. In general the constituent order is relatively free.

Possessive constructions in Hungarian come in two flavors. In the first type (the one generally taken to be basic), possessor is nominative (unmarked) and pre-nominal, and can be pro-dropped under same conditions as the subject of a sentence. Possessive inflection is almost identical to verbal object inflection:

\[(24)\]
\[
\begin{aligned}
\text{a. } & \quad \text{a te-Ø kalap-ja-i-d} \\
& \quad \text{the you-NOM hat-POSS-PL-2SG} \\
& \quad \text{‘your hats’} \\
\text{b. } & \quad \text{(a) Mari-Ø kalap-ja-i-Ø} \\
& \quad \text{the Mari-NOM hat-POSS-PL-3SG} \\
& \quad \text{‘Mary’s hats’}
\end{aligned}
\]

Unstressed possessors are dropped:

\[(25)\]
\[
\begin{aligned}
\text{a. } & \quad \text{a MI-Ø kalap-unk} \\
& \quad \text{the we-NOM hat-POSS.1PL} \\
& \quad \text{‘OUR hats’} \\
\text{b. } & \quad \text{a kalap-unk} \\
& \quad \text{the hat-POSS.1PL} \\
& \quad \text{‘our hats’}
\end{aligned}
\]

There is also a dative possessor, which appears before the determiner:

\[(26)\]
\[
\begin{aligned}
\text{Mari-nak a kalap-ja-i-Ø-Ø} \\
\text{Mari-DAT the hat-POSS-PL-3SG-NOM} \\
\text{‘Mary’s hats’}
\end{aligned}
\]

Personal pronoun possessors are not acceptable in the dative possessor construction, but the nominal possessor can be moved away from the noun phrase:

\[(27)\]
\[
\begin{aligned}
\text{Mari-nak fekete volt a kalap-ja-Ø-Ø} \\
\text{Mari-DAT black was the hat-POSS-3SG-NOM} \\
\text{‘Mari’s hat was black’}
\end{aligned}
\]

Thus, even though the “unmarked” possessive construction in Hungarian is of the (S/A)=POSS type, the construction dative possessor construction exhibits free word order (like regular Hungarian main clauses) and the head noun features O-type agreement, rather than S/A type. If the word-order and agreement facts of the dative possessor construction can be taken to mean that the syntax of this possessive construction is more in parallel with
the clausal syntax of Hungarian, then this language may not pose as much of a problem for the typological expectation outlined above.

With respect to the “unexpected” possessor marking in ergative languages (that is, where S/O=POSS), there is very little evidence to suggest that such languages do exist. Part of the problem may be the relative scarcity of such languages with respect to the more common nominative/accusative type, and/or the lack of reference materials. To my knowledge only one ergative language has been claimed to exhibit S/O=POSS, and that is Kolana (Wersing), a language in the Trans-New Guinea family (Mark Donohue, p.c.). However it is possible that this language may not be well-researched enough yet to be certain.

**Accusative versus Ergative**

There is little typological information available on the relative commonality of identical marking of possessive constructions and verbal grammatical relations with respect to ergative versus accusative languages; however, the signs here point to the idea that it is more common in ergative languages than accusative ones. Thus Dixon 1994 (the above-quoted passage notwithstanding) cites examples of only two accusative languages where O=POSS (Pengo and Assyrian), and even in these languages the phenomenon does not seem particularly robust. In Pengo, for example, the O marking is used sometimes “in genitive function with nouns denoting persons” (Burrow and Bhattacharya 1970), while in Assyrian only non-singular genitive case-marking is identical to the accusative. On the other hand Dixon’s examples of ergative languages where A=POSS are easily double that number (Eskimo, Lak, Ladakhi, Burushaski, and “certain Iranian Languages”, though in the latter two O/POSS marking also marks other grammatical relations). This is particularly significant given the fact that among the world’s languages accusative languages far outnumber ergative ones. Likewise, Bittner and Hale 1996a write “many languages which employ the ergative case use it both for the subject of a transitive VP and the subject of a possessed NP, i.e. the possessor. This holds not only for classical ergative languages, like Inuit, but also for languages with three-way or split Case systems, exemplified by Nez Perce and Malagasy, respectively.” Trask 1979 makes the identity of ergative and possessive marking one of the cornerstones of his (diachronic) theory of the genesis of ergativity. Klimov 1973 in arguing against the possessive genesis of ergativity makes reference to the “facts of identity of personal affixes of the verb-predicate and possessive form.”

To be sure, there are counterexamples to the generalization that it is more common for ergative (rather than accusative) languages to "re-use" the verbal grammatical relation marking in the nominal possessor marking. Hungarian is one of these. Another one is Russian, where a well-known case is the so called “genitive of negation.” Normally objects of

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73 Dixon sites other accusative languages where certain “peripheral” genitive functions, that is, not specifically possession, which feature O-marking, such as dative function (Konda), or target of motion (Latin). I do not consider these functions “genitive enough” to regard them as O=POSS marking.

74 I am obliged to Matt Pearson for pointing this out.

75 Arguments could be, and have been, made against the ergativity of “Philippine-type” languages. This debate is especially active with respect to Tagalog.

76 My translation from “Факты тождества личных аффиксов глагола-сказуемого с притяжательными формами....”
transitive verbs (O) in Russian bear accusative case (28c), however, in negated transitive sentence the O-argument bears genitive case (28b), just like in possessive constructions (28a). This presents a restricted O=POSS pattern:

(28) a. Cvet-a ruč-ek
color-PL NEG pen-GEN.PL
‘the colors of the pens...’

b. Ja ne vid-el tvoih ruč-ek
I.NOM NEG see-PST.MASC your-GEN pen-GEN.PL
‘I did not see your pens’

c. Ja ukr-al tvoi ruč-ki
I.NOM steal-PST.MASC your pen-ACC.PL
‘I stole your pens’

From the standpoint of grammatical relations within a clause, a core argument may be marked with accusative or genitive case. Therefore, Russian features O=POSS at some level of grammar. However, what distinguishes the genitively-marked arguments from accusative ones is specifically the fact that these do not receive an unmarked interpretation. Possessive case (as opposed to accusative) is used to mark objects that are not affected in the usual way, that is, objects that are less patient-like.

Many other examples can be adduced, but the point here is that while there are instances of overlap between possessor marking and object marking in accusative languages, these are often characterized precisely by the fact that the objects marked by genitive case in these languages are marked differently from prototypical objects. Another way of putting this is that genitive object marking in such languages is a marked way of expressing the object grammatical relation. Likewise, in many of the O=POSS marking languages cited by Dixon 1994 (such as Assyrian and Pendo) the expression of the possessor relation via canonical object marking is marginal or restricted within the possessive paradigm, as discussed above.

On the other hand, in ergative, or split-ergative languages A=POSS marking is quite robust, even if ergativity is limited to a certain part of grammar. In order to proceed, a distinction must be made between two types of “split-ergativity” found in the literature. On the one hand, there are the grammatical systems that feature ergative alignment of A, S, and O only in the past tense or perfective aspect. Such is the case in Chol (Mayan), Georgian (South-Caucasian) and many others. I will continue calling these languages “split-ergative”. Some researchers (such as Payne 1997), however, also use this moniker to describe direct-inverse languages such as those in the Algonquian family. While perhaps conceptually similar to the languages (such as Yidin’) that feature ergativity split based on the semantic nature of the NPs (described by Silverstein 1976 and Dixon 1994), it is not clear that the grammars of the Algonquian-type languages are even amenable to an accusative/ergative type of analysis. While some efforts have been made in recent years to assimilate direct-inverse language grammars to the accusative paradigm within the P&P framework (one example of such work is Brittain 2001), these attempts have so far not been completely accepted in the field. Therefore, I will remain agnostic on this issue, but continue to call Algonquian-type languages direct-inverse rather than split-ergative.

Some examples of languages that feature split-ergativity but have robust A=POSS marking might be Chol (Coon 2004) and Pashto (Taylor Roberts, p.c.). It seems that ergativity and
Identical Ergative and Possessor Marking

A=POSS phenomenon are a common occurrence in the world’s languages, while O=POSS in accusative languages is not nearly as common. This observation is again amplified by the fact that ergative languages are a decided minority in the world's language stock. However, in all fairness, it must be said that the typological study undertaken in this work cannot be considered anything but preliminary. However, if this idea is on the right track, it then becomes interesting to consider the languages that do not fit neatly in the ergative or accusative schema and see whether the identical marking of grammatical relations in the verb phrase and noun phrase is common in these languages.

Direct-Inverse Languages

Many north American languages, such as those in the Algonquian, Penutian, Muskogean, Dakota and other language families feature direct-inverse marking of grammatical relations as well as S/A/O=POSS patterns. The majority of these languages also exhibit proximate/obviate noun phrase marking ("obviation"): among the discourse-available third-person referents, one is designated as “proximate” while all others are “obviative.” This grammatical device is used to disambiguate between third-person referents in connected discourse. The proximate/obviate status of any particular noun phrase may shift, as the speaker is (generally) free to designate a particular noun as proximate, though some constructions, such as possessive, require that a particular NP, such as the possessed noun, be obviative.

The languages under discussion feature possessive marking on the head noun that is identical to the morphemes that cross-reference core arguments on the verbal word. In Plains Cree (Dahlstrom 1986), for example, transitive verb inflection is divided into local ("you and me") forms, and third-person forms. In the local forms (limited to speech act participants, that is, 1st- or 2nd-person), if the A is 2nd-person (thus making O 1st-person), a “direct” form of the verb is used, otherwise an “inverse” form is employed:

\[
\begin{align*}
(29) & \ a. \ & \text{ki-wa:pam-i-n} \\
& & \text{2-see-DIR-SG} \\
& & \text{‘You see me’} \\
& \ b. \ & \text{ki-wa:pam-iti-n} \\
& & \text{2-see-INV-SG} \\
& & \text{‘I see you (sg)’}
\end{align*}
\]

In non-local forms, that is, when one of the arguments is 3rd-person, if a speech act participant A acts on a third-person O or a 3rd-person proximate A acts on a 3rd-person obviative O, the verb is marked with a direct form; otherwise an “inverse form” is employed:

\[
\begin{align*}
(30) & \ a. \ & \text{ni-wa:pam-a:-w} \\
& & \text{1-see-DIR-3} \\
& & \text{‘I see him’} \\
& \ b. \ & \text{ni-wa:pam-ekw-w} \\
& & \text{1-see-INV-3} \\
& & \text{‘He sees me’}
\end{align*}
\]

On the basis of these cross-referencing patterns a person hierarchy of the form 2 > 1 > 3PROX > 3OBY has been postulated for Algonquian languages. If the highest (leftmost) ranked argument is A (that is, if A outranks O on the person hierarchy), then the
verb appears in the direct form. On the other hand, the inverse form is employed if the O argument outranks the A argument.

With transitive verbs, the person prefix on the verb word cross-references the highest-ranked argument available. The same prefixes are used to cross-reference the person feature of the only argument of an intransitive verb (S):

(31)  

a. ni-pimipahta:-n  
    1-run-SG  
    ‘I run’  

b. ki-pimipahta:-n  
    2-run-SG  
    ‘You run’

These prefixes are also employed to cross-reference the possessor in a possessive construction:

(32)  

a. ni-maskisin  
    1-shoe  
    ‘my shoe’  

b. ki-maskisin  
    2-shoe  
    ‘your shoe’

I have avoided the gory details of Cree nominal and especially verbal inflection in a bow to simplicity, however, what I hope to have shown is that with a direct-inverse language such as this, we would not speak of accusativity or ergativity in the verbal paradigm, at least until a convincing proof is offered. What is interesting, however, is that these languages seem to feature precisely the kind of phenomenon (“re-use” of verbal grammatical relations marking in the possessive construction) that I suggested might be more common in ergative languages. This idea receives some support from the fact that the “recycling” of grammatical marking seems to be fairly robust across the Algonquian language family, and extends to other North American language families. This analysis then, if on the right track, would suggest that if the analysis of the grammar of direct/inverse languages should be assimilated to that of the typologically more common languages, (nominative/accusative or ergative/absolutive), then it is the ergative languages that may be a better candidate.

Philippine-Type Languages

The Philippine-type languages (such as Tagalog, Malagasy, Cebuano, and others), present yet another way of marking core grammatical relations in a clause. In these languages, in transitive sentences, one of the arguments is in a syntactically prominent position traditionally called “topic.” In Tagalog (all Tagalog examples are from Schachter and Otanes 1975) the topic marking particle is ang. With intransitive clauses, the topic particle usually marks the single core argument:

---

77 The relationship between Algonquian languages and ergativity was in fact suggested in Hewson 1987.
The verb is inflected to cross-reference the theta-role of the topic. In transitive clauses with two core arguments and no obliques, one of the core arguments is designated as “topic,” and the verb marking reflects the theta-role of the topic NP. Thus, in Tagalog, a simple monotransitive clause can be in one of the following forms:

\[(33)\]

\[
\begin{align*}
gumising & \text{ ang } \ bata \\
awoke & \quad \text{TOPIC child}
\end{align*}
\]

‘The child awoke’

When a proper name appears in the \textit{ng} + NOUN position, instead of \textit{ng} it follows the participle \textit{ni}. Pronouns in this position take the \textit{ng} form:\[80\]

\[(34)\]

\[
\begin{align*}
a. \quad \text{bumbaba} & \text{ ng } \text{diaryo} & \text{ ang } & \text{titser} \\
& \text{read.AT} & & \text{TOPIC teacher}
\end{align*}
\]

‘The teacher is reading a newspaper’

\[
\begin{align*}
b. \quad \text{bumbaba} & \text{ ng } \text{titser} & \text{ ang } & \text{diaryo} \\
& \text{read.TT} & & \text{TOPIC newspaper}
\end{align*}
\]

‘The teacher is reading a newspaper’

Then \textit{ng} pronoun forms are listed in the following table:

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>1\textsuperscript{st}</td>
<td>ko</td>
<td>x</td>
</tr>
<tr>
<td>inclusive</td>
<td>x</td>
<td>nita</td>
</tr>
<tr>
<td>exclusive</td>
<td>mo</td>
<td>ninyo</td>
</tr>
<tr>
<td>3\textsuperscript{rd}</td>
<td>niya</td>
<td>nila</td>
</tr>
</tbody>
</table>

Table 25: The \textit{ng} Forms of Personal Pronouns in Tagalog

The instrumental and locative arguments (and others) can also be made topics, resulting in different topic-marking affixes on the verb. The exact inventory of topic-marking affixes differs from language to language.

There is currently a controversy in the field with respect to the status of Philippine-type languages: some researchers propose assimilating (at least some of) these languages to the

\[78\] Agent-topic

\[79\] Theme-topic

\[80\] Matt Pearson points out that in Malagasy the linguistic facts make it more difficult to propose the same analysis.
ergative type. They argue that *ang* should be analyzed as an absolutive marker and *ng* as both ergative and oblique case-marker. The agent-topic marking on the verb would then simply be anti-passive morphology.

Tagalog features four possessive constructions. Two of these are best analyzed as relative clauses, and as such will not be considered here. Of the remaining two, one is much more common, and will be considered here as basic. In this type of possessive construction the pronominalized possessor appears in its *ng* form (the form the personal pronouns take when they replace an *ng*-marked noun in transitive construction):

\[ (36) \quad \text{lapis ko pensil ng.1sg} \]

It is interesting to note that on the ergative analysis of Tagalog, the possessive construction would be characterized as ERG=POSS, as we would expect.

**Conclusion**

If it can be shown that identity or near-identity between nominal and verbal grammatical relations marking is a correlate of ergativity, then the fact that direct-inverse and Philippine-type languages also seem to frequently exhibit this phenomenon is a telling one. This may suggest, as was mentioned above, that if the grammars of this languages are to be assimilated either the that of accusative or ergative languages, it is the ergative languages that may provide a more appropriate model.

**Head- versus Dependent- Marking**

It appears that the common pattern of robust ERG=POSS marking is not sensitive to whether the language is head- or dependent-marking. While Mayan and Eskimo are ergative languages which feature this phenomenon and are head-marking, others are dependent-marking. For example, Ladakhi (Koshal 1979), a Sino-Tibetian language spoken in India and China, is thoroughly dependent marking in its clause-level grammar: the verb bears no cross-reference marking, while there is a rich system of nominal case marking. This language likewise marks genitive and ergative case identically (a fact which seems to be almost unnoticed in an otherwise excellent grammar of Koshal 1979, perhaps owing to the fact that in parts of the pronominal system the genitive case marking differs slightly from the ergative). The case endings vary depending on the ending of the stem, but are identical for genitive and ergative case:

<table>
<thead>
<tr>
<th>Stem Ends in ...</th>
<th>Genitive / Ergative Suffix ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-či</td>
</tr>
<tr>
<td>/o/, /o/</td>
<td>-e (stem-final /o/ may be deleted)</td>
</tr>
<tr>
<td>any other V</td>
<td>-yi</td>
</tr>
</tbody>
</table>

**Table 26: Ergative/Genitive Marking in Ladakhi**

Thus we have the following examples:

\[ (37) \quad \text{a. ǝ-mi-yi šin-Ø čǝdduk} \]

that-man-ERG wood-ABS cut

‘That man cuts the wood’
b. khi-yi sŋǝmǝriŋmo duk
dog-GEN tail.long be
‘Dog’s tail is long’

(38) a. kho-e lčǝŋ me-Ø čǝdduk
PRO:2-ERG tree-ABS cut
‘He cuts the tree’

b. ɳǝže ǝčo-e žiŋ-čhen-mo yot
our elder brother-ERG field.big be
‘Our elder brother’s field is big’

Diachronic Considerations

One way of accounting for the typological commonality suggested above (whereby ergative languages are frequently found to exhibit ERG=POSS) is via historical analysis. Many researchers believe that accusative languages can become ergative over time with ergativity developing from passive (c.f. Dixon 1994). In fact, this is the standard analysis of ergative languages such as Indo-Aryan. This particular diachronic analysis, however, provides little explanation as to why ergative case is often identical to genitive. One theory that does offer such an explanation is proposed in Trask 1979. Trask divides ergative languages into two types: Type A and Type B. Trask’s Type A ergative languages are more fully ergative, i.e. they do not exhibit a tense/aspect split, they feature verb agreement with direct objects in person as well as number, and are more commonly head-marking. All of the syntactically ergative languages are in the Type A category. Type B languages are argued to be “less ergative,” meaning they feature tense/aspect splits, and no direct object agreement in person. Trask then proposes that Type A ergative language arises from a reanalysis of passive as active (as in Indo-Aryan), while type B arises from a reanalysis of perfective, specifically “incorporation into the inflectional paradigm of a nominalized deverbal form with stative force.” Herein is the connection with genitive, according to Trask, where, with respect to the nominalized deverbal form “it quite often happens that the agent phrase is attached by means of a possessive construction.”

Trask’s theory is an interesting one, especially in the idea of seeking to identify different types of ergativity. Trask’s hypothesis has the advantage that it makes some clear-cut predictions. Unfortunately many of these simply are not borne out by the data. For example, Trask stipulates that no language combines verbal cross-reference morphology (a type A characteristic) with a tense/aspect ergativity split, and a corollary prediction that no language combines a tense/aspect split with the absence of case-marking. Mayan languages (such as Chol) offer numerous counterexamples to this prediction. Likewise the theory predicts that ERG=POSS languages are type B languages, however, other Mayan languages (like Tzotzil and Tzeltal), which are clearly of Trask’s type A, meaning fully ergative, are counterexamples. Finally Trask’s methodological approach to North American languages must be revised in light of the recent work on direct/inverse in these languages. Trask assumes that the inverse marking in direct/inverse languages is in fact a passive, an analysis that we owe to the original investigators of the Algonquian-type (direct/inverse) languages. However works like Dahlstrom 1986 and Blain 1998 show conclusively that the Algonquian-type inverse is not a passive construction. One especially convincing piece of evidence is the fact that many of the languages in question feature what appears to be a “true” passive construction. This
construction, in contrast with the inverse marking, exhibits the expected characteristics of passives, such as optionality of the A argument.

Even if Trask’s proposal were on the right track, we would still need to find a synchronic explanation for the stability of the ERG=POSS homology. For example, tripartite and identical S/A/O markings have been postulated as a transitional types, however, these seem to not be very common synchronically. So while languages go through stages of tripartite or identical marking, few seem to retain this schema of marking grammatical relations. ERG=POSS, on the other hand, appears to be a stable component of many grammars of ergative or partially ergative languages. Therefore synchronic treatments of this phenomenon are analyzed in the next section.

Synchronic Considerations

Having addressed some existing diachronic explanations of the phenomenon, I now turn to synchronic accounts. Ergative languages only fairly recently have started to receive attention from linguists working in the formal P&P (Principles and Parameters) frameworks. The majority of this work concentrates specifically on how to account for the ergativity phenomenon in general, rather than the ERG=POSS phenomenon in particular.

Within the P&P-style accounts of ergativity, several different types of approaches have been proposed. Some early works on ergativity postulate that ergative and accusative languages differ at D-structure, whereby the A and O arguments are inserted in different positions, contra the Uniformity of Theta Assignment Hypothesis (UTAH) of Baker 1985, 1988. By this hypothesis, the agent argument in ergative languages is projected closer to the verb than the theme argument, whereas in accusative languages it is by now a standard assumption that the theme is projected closer to the verb than the agent. This kind of difference at D-structure, however, is not a comfortable assumption for modern P&P-style analysis. It is now taken as a basic principle within P&P frameworks that all languages look essentially the same at D-structure, with various grammatical principles governing the alternations exhibited by languages at surface structure.81 Baker 1997 provides a set of arguments showing that even in syntactically ergative languages, while some syntactic configurations (such as relativization and inter-clausal coordination) exhibit patterns opposite from accusative languages, others (such as compounding and incorporation) pattern identically with that in accusative languages.82

Thus the majority of later proposals assume that ergative languages look like accusative languages at D-structure, and that some principle of grammar can account for the fact that the case (or agreement) of ergative languages is assigned differently than in accusative languages. There are two major types of proposals in this vein: some researchers equate absolutive case in ergative languages with nominative case in accusative languages, while others argue that ergative case of ergative languages is parallel to nominative case in accusative languages.

Both proposals have their advantages. The ERG=NOM proposal has the conceptual attractiveness that the transitive clauses in both types of languages can be treated identically:

---

81 For an overview of analyses of ergative languages see Baker 1997 and Nash 1996.
82 Dixon 1994 also provides a set of constructions cross-linguistically sensitive to the notion “subject” (S/A), such as deletion in imperatives.
the sole difference between the two language types is found in intransitive clause grammatical relation marking. Conversely with the ABS=NOM treatment of ergativity, the difference between the two language types lies in transitive clauses, while the intransitive constructions can be treated identically. This latter proposal also has one a priori conceptual advantage: since nominative and absolutive (but not accusative or ergative) cases are the ones that tend to be unmarked in the world’s languages, the ABS=NOM treatment captures a markedness phenomenon that is difficult to explain under the ERG=NOM proposal.

The ERG=NOM treatment is proposed in passing in Chomsky 1996. Chomsky assumes that subjects and objects in transitive clauses raise to specifiers of (functional) agreement projections Agr$_s$ and Agr$_o$, to check case features. In an intransitive clause, there is only one argument that requires structural case, and whether it raises to Agr$_s$ or Agr$_o$ will determine whether the language features nominative/accusative case (or agreement) or ergative/absolutive. Thus, Chomsky states, “the distinction between the two language types reduces to a trivial question of morphology, as we expect” (page 9). Bobaljik 1993 also proposes the ERG=NOM analysis, in a similar spirit: in ergative languages, it is the accusative case that must be checked in intransitive clauses, and not nominative, thereby giving rise to the S/O (rather than S/A) pattern. Many other proposals in this spirit have been made before and since (see Nash 1996, Bobaljik 1993, and works cited therein). One problem many ERG=NOM analyses face is how to properly account for syntactically ergative languages (see “Syntactic Ergativity” on page 38 in Chapter 1). Contrary to Chomsky’s off-handed remark, the syntactically ergative languages (i.e. those that feature S/O rather than S/A pivot) show us that at least some types of ergativity cannot be reduced to a trivial question of morphology.

There have been several types of ABS=NOM-style analyses in the literature. Bittner and Hale 1996a, 1996b, for example, propose a structural account of case assignment whereby assignment of marked (accusative or ergative) case depends on the presence of a co-argument, capturing the empirical fact that marked case generally only appears in the presence of unmarked case (nominative or absolutive). In their theory, the difference between ergative and accusative languages is attributed to the presence (in accusative languages) of an “extra” null D head adjoined to the V head, which allows assignment of marked structural case to the VP-internal argument, namely the accusative object. On the other hand, Nash 1996 argues that ergative is not a structural case, but rather is a lexical case, a term usually reserved for case-marking idiosyncratically assigned by a particular verb. The proposal here is that in ergative languages the functional category where the A arguments are considered to be projected, namely the vP, is absent in ergative languages. Though formally, this means that ergative languages differ in some sense from accusative languages at D-structure, the differences in initial projection of arguments are not as “dramatic” as in the analyses outlined above. In fact, the lack of vP, or a presence of “defective” vP has become

83 Whatever the empirical and theoretic consequences of their analysis, the style of inquiry is rather welcome in that unlike many modern syntactic proposals, in Bittner and Hale’s treatment of ergativity it is ergative (largely non-Indo-European) languages that look more “standard”, and accusative languages (the native languages of an overwhelming majority of academic linguists) appear more odd. Unfortunately though this instinct is generally to be applauded, in this particular case it seems rather curious, since typologically-speaking, accusative languages far outnumber ergative ones.

84 An example of verbs assigning “lexical” case in Indo-European languages are the dative-assigning verbs such as helfen in German or gustar in Spanish.
one of the standard accounts of ergativity in P&P-style frameworks (c.f. Alexiadou 2001, Johns 1992).\(^{85}\) Nash’s proposal, though interesting, seems to be less able to deal with the ergativity of languages such as Tzeltal, where ergative marking is present throughout the grammatical structure. The lexical (idiosyncratic) assignment of ergative case simply does not reflect linguistic facts where every transitive verb shows ergative case marking (or agreement). Moreover the presence of regular transitivizers, which form verbs that also invariably assign ergative seems to be a problem for Nash’s account.

Since the ergative languages in general are not (yet) particularly well-researched from a modern syntactic standpoint, there is not an overabundance of syntactic accounts of specifically ERG=POSS phenomena in the literature. There are however, some proposals in the current literature, and these will be examined below.

**Similar Structural Case Assignment**

This type of account is proposed in Bittner and Hale 1996a, 1996b. For these authors the identity of ergative and possessive marking lies in the identity of the mechanism of the case assignment. Some of the aspects of their treatment of ergativity were already reviewed above. The authors proposed a functional head, K, as the locus of case assignment. Marked structural case (accusative or ergative) is assigned in a configuration where two co-arguments are “visible” to the case-assigning head. This proposal is designed to account for both syntactically ergative and morphologically (only) ergative languages: in morphologically ergative languages the VP (verb phrase) is transparent for government by the C head, therefore the absolutive argument can be licensed in situ. In syntactically ergative languages, the VP is opaque to government, and as a result the absolutive argument (S/O) must raise at least as high as [Spec, IP] to get case. This results in the absolutive argument being “more prominent” to syntactic phenomena such as coordination, relativization, etc. Accusative languages feature a D head incorporated into the verb, which functions as a co-argument for the purposes of case-assignment by V (verb), thereby allowing the V head to assign accusative case to the object.

The authors hold that agreement is independent from structural case. In particular this allows them to account for those Australian languages where while case-marking follows ergative/absolutive pattern, the agreement is nominative/accusative.

With respect to the ERG=POSS phenomenon, Bittner and Hale explicitly reject “the special kinship between the lexical categories of noun and verb.” Rather they propose that parallel functional heads in extended nominal and verbal projections are responsible for the ERG=POSS phenomenon. Bittner and Hale’s CP/DP parallelism is as follows:

\(^{85}\) The “defective” vP approach has a major advantage over the “missing” vP analysis in that the structural configuration of ergative and accusative languages (or D-structure in GB terms) can be identical. The only difference is now in the features of the functional category v, which projects a “regular” vP in accusative languages and “defective” vP in ergative languages.
We can now evaluate the applicability of this proposal to the Tzeltal data. The details of Bittner and Hale’s account imply that languages that feature ergative agreement (such as Mayan languages) must be syntactically ergative. Unfortunately, at this point, I do not have any evidence either for or against ergativity of Tzeltal, though while some Mayan (Mam, Jakaltec) are argued to be syntactically ergative, the more closely related Tzotzil has been argued to be syntactically accusative (see “Syntactic Ergativity” on page 38 in Chapter 1).

Another prediction the Bittner and Hale make with respect to ergative languages is that the ergative agreement would be expected to be closer to the verb than absolutive agreement. Though more work needs to be done on Petalcingo Tzeltal number agreement (see “Grammatical Relations, Ergativity, and Possessor Marking” on page 33 in Chapter 1), the preliminary indications are that this prediction is not borne out:

(40)  
\[ \text{s-maj-on-ik} \]  
\[ \text{ERG:3-beat-ABS:1-ERG:PL} \]  
‘They beat me’

Furthermore, if ergative (person) agreement markers are clitics, and assuming that absolutive agreement markers are not (not an innocuous assumption), this would also cause problems for Bittner and Hale’s theory of ergativity as applied to Tzeltal. However, at this point the status of Set B (absolutive) agreement is not at all clear.

Finally Tzeltal may provide a counterexample to the parallel functional projection hypothesis detailed in (39). Since in Petalcingo Tzeltal the two determiners are homophonous with complementizers, it suggests that in this language, if we assume CP/DP parallelism, it is the CP that is parallel to the DP, and not the IP.

Therefore, while the account in Bittner and Hale 1996a is an intriguing one (and one of the most comprehensive to date), so far it seems that the Tzeltal data does not allow it to be immediately applied to this language.

**Nominality and A=POSS**

In ergative languages that feature identical marking of ergative (A) and possessor arguments, it is tempting to analyze transitive verbs as a kind of nominalization. This allows a straightforward non-disjunctive treatment of identical nominal and verbal morphology: (transitive) verbs and nouns feature the same inflectional markings because (transitive) verbs and nouns are the same. Along with the passive analysis of ergative languages, the nominal analysis of ergative verbs has a long history in accounts of ERG=POSS languages. A relatively modern such treatment that has received some attention in the field is Johns’ 1992 analysis of Inuktitut (Eskimo-Aleut).
Inuktitut is an ergative language which features both case marking on nouns and agreement on verbs. The predicate in a transitive construction agrees with both subject and object. The ergative case (traditionally termed “relative”) is used to mark both possessed nominals and A arguments (subjects) of transitive predicates:

\[
\begin{align*}
(41) & \quad \text{a. angut-Ø anijuq} \\
& \quad \text{man-ABS went out} \\
& \quad \text{‘The man went out’}
\end{align*}
\]

\[
\begin{align*}
(41) & \quad \text{b. arna-up angut-Ø kunigaa} \\
& \quad \text{woman-ERG man-ABS kissed} \\
& \quad \text{‘The woman kissed the man’}
\end{align*}
\]

\[
\begin{align*}
(41) & \quad \text{c. Jaani-up nasaa} \\
& \quad \text{John-ERG hat} \\
& \quad \text{‘John’s hat’}
\end{align*}
\]

Johns proposes that three potentially unrelated features of Inuktitut result in a formally ergative language:

- The verb is unable to project a VP
- The passive morpheme is a nominalizer
- The particularities of functional heads available in the grammar of the language

In nominative/accusative languages it is assumed that the verb projects a VP (verb phrase) where the transitive object is lexically inserted. Johns argues that unlike the verbs in nominative accusative languages, no transitive verb in Inuktitut is able to project a VP, and thus internal arguments (objects) are impossible in this language. The derivation of what looks like a transitive clause in Inuktitut, Johns argues, is a three step process.

In the first step, the transitive verbal stem is nominalized. The morpheme \textit{ga}, which seems to be required to form verbal stems in declarative clauses in “participal” mood (both active and passive), Johns argues, is a nominalizer. The attachment of this nominalizer is the first step in the derivation, whereby the internal theta-role of the transitive root is linked to the referential index of the resulting noun:

\[
(42) \quad \text{kapi-jaq} \\
\quad \text{stab-NOM} \\
\quad \text{‘the stabbed one’}
\]

Johns provides some evidence that locutions such as in (42) can function as direct arguments in Inuktitut. The second step in the derivation involves adding a possessor to the deverbal noun from step one:

\[
(43) \quad \text{anguti-up kapi-ja-a} \\
\quad \text{man-ERG/GEN stab-NOM-3s} \\
\quad \text{‘the man’s stabbed one’}
\]

As with the previous example, constructions such as (43) occur in Inuktitут independently (or as a relative clause). The projection that heads the above phrase is argued to be $\text{Agr}_N$, basically the equivalent of an NP (or a DP).
In the third step, the Agr$_V$ (roughly equivalent to Infl) is projected, taking Agr$_P_N$ as a complement, and the O argument as its specifier. The result then looks like an ergative construction:

$$ (44) \quad \text{anguti-up nanuq-Ø kapi-ja-a-Ø} $$

\[
\begin{array}{l}
\text{man-ERG/GEN bear-ABS stab-NOM-3s-3s} \\
\end{array}
\]

‘The bear is the man’s stabbed one; the man stabbed the bear’

The “actor” argument (in the above case *anguti-up*, “the man”), moves to adjoin the Agr$_V$P to continue to receive case from the moved Agr$_N$P. The resulting derivation of (44) can be expressed in the following tree (adopted from Johns’ examples 4 and 29):

$$ (45) $$

Another set of mood markers in Inuktitut, specifically those making the “indicative” mood, do not overtly exhibit in all three stages of the derivation; that is, that no nominal or possessed nominal forms appear. This fact is explained by the idea that the indicative mood markers require attachment to Agr$_V$P, perhaps due to some feature borne by these markers that requires them to scope over the entire clause.

This proposal is similar in spirit to some of the avenues for handling transitive verbs in Tzeltal that were explored in Chapter 2. The nominality of transitive verbs analysis, it will be recalled, was rejected (at least for the moment) due to the fact that significant problems (such as word order, and seeming lack of transitive verbs appearing as complements of other transitive verbs) cannot be accounted for under this type of analysis. The proposal in Johns 1992 differs significantly from Tzeltal data since there is no evidence to postulate a morphological nominalizer derivational affix with all Petalcingo Tzeltal transitive verbs.

On the other hand, one of the crucial factors responsible for Inuktitut ergativity, according to Johns, is the verb’s inability to project a VP. In light of the fact that Johns suggests that “the claim that the Inuktitut verb does not project a VP might be restricted to transitive constructions, depending on how one analyzes the antipassive” (page 60ff) her claim might be updated to make reference to vP rather than VP. In that case, the nominality of (at least some) unergative verbs in Tzeltal seems to point in the same direction, as unergative verbs are generally taken to project a vP in accusative languages.

Johns account shares some similarities with Bittner and Hale’s work in that ergativity is taken to be a result of the failure of the verb to assign accusative case, which also would follow from the lack of (or a “defective”) vP. This parallels some of the theories for ergativity and nominality explored in Alexiadou 2001. However, despite this similarity between Bittner and Hale’s proposal and that of Johns, the details of the proposed arguments diverge.
significantly. For Bittner and Hale, failure to assign accusative case results in ergative case marking, whereas for Johns failure to assign accusative case results in nominality, which then conditions the ergative pattern of case-marking.

Johns’ analysis of the transitive construction in Inuktitut is in the spirit of a VP-shell theory: rather than having subject and object agreement, this analysis argues for agreement with the possessor and agreement with subject. This raises a potential problem for this theory: Johns implies that the correspondence between possessor agreement and transitive A agreement is not perfect (“the agreement found on the possessed noun in a possessive construction is very similar to the agreement that refers to the actor argument in the transitive construction. This is especially clear in examples involving third person patient” (page 68)). If the A agreement is the possessor agreement, it is not clear why they should not be perfectly identical.

Another problem for this analysis is tense. Johns hypothesizes that Agr\text{v} only takes deverbal nominal complements because it requires a tense feature in its complement. However, the majority of present-day P&P-style theories disallow tense with nominal projections. Alexiadou 2001, for example, argues that even in the few languages that seem to exhibit tense morphology on nouns, the tense’s syntax and semantics are rather different from verbal tense. She concludes that “T, even if present inside nominals, does not function like verbal T” (page 65). Therefore while it would be unsurprising for a transitive verb to project a tense category or bear a tense feature, it is not clear how this feature (or category) would survive the nominalization, if it is indeed a verbal tense.

Finally, if verbal transitive roots always appear as nominalized, it is not immediately clear how the acquisition problems are to be solved. Children acquiring Inuktitut would never see the transitive roots outside of a nominalization, and it is not obvious on what grounds they would classify such roots as transitive verbs. Perhaps UG expects transitive stems to exist, and therefore requires a child to look for these type of roots, even though they never show up in the language in the non-nominalized form.

As was mentioned above, this analysis is not readily translatable into Petalcingo Tzeltal as it would require postulating non-overt (null) nominalizers on every transitive root. However, the idea that transitive verbs do not project a VP in the same way that transitive verbs do in accusative languages is intriguing, and has some attractive consequences for Tzeltal, as discussed in Chapter 2.

Conclusions

The first part of this two-part chapter examined the nature of ergative/possessive person agreement markers. A clitic analysis was proposed, based on the fact that adverbials and adjectival modifiers can (and with possessive constructions must) appear between the agreement morpheme and the head of the phrase. This analysis has implications for both Mayan historical linguistics, as well as the kind of syntactic analysis that could be proposed for extended verbal and nominal projections in Tzeltal.

The second part of the chapter is an examination of the identity of the nominal possessive and verbal ergative markers in Tzeltal. To this end the patterns of “recycling” of verbal grammatical relations marking in the nominal paradigm were studied in the context of the world’s languages. It appears that the commonality of ERG=POSS phenomenon among the world’s languages is in accord with the principle of “efficiency/non-ambiguity” which may
account for this feature’s diachronic stability (in contrast with that of tri-partite marking of grammatical relations, for example). However, if it is true that the use of identical linguistic resources for marking grammatical relations in extended verb and noun phrases is more common in ergative languages, this generalization requires more explanation than heretofore has been offered. At the end of the present chapter several specific proposals within the current P&P-style frameworks for dealing with the ERG=POSS phenomenon were examined. Though each offer certain conceptual advantages, none were found to be able to immediately account for the Petalcingo Tzeltal linguistic facts.
Conclusion

This thesis has examined the nature of person marking in Petalcingo Tzeltal. The verb agreement markers are the primary device for disambiguation between subject and object in transitive constructions. Moreover, since few nouns generally occur in Tzeltal discourse, the person markers frequently are the only indication of who is doing what to whom. The same markers are employed with nouns to indicate and specify possession.

The first chapter is an all-too-brief grammatical sketch of this fascinating language, where, among other things, some particularly interesting features of Tzeltal grammar are highlighted. These include radically disjunctive aspect marking, an all-pervasive separation of transitive and intransitive verbs, identity of ergative and possessive cross-reference markers, as well as the indeterminate status of the distinction between the /h/ and /j/ phones.

The second chapter takes up the analysis of the -el participles in Petalcingo Tzeltal. Contrary to previous hypotheses which analyzed these participles as infinitives, a nominal account is proposed. This treatment offers a straightforward explanation of the optionality of ergative/possessive cross-reference markers with the -el participles, their apparent syntactic ergativity, as well as the appearance (or lack thereof) of a preposition in progressive constructions. It is further argued that -bel participles also serve as arguments to auxiliary verbs, though the nominal status of the -bel participles is called into question. Lastly, a nominal analysis of all transitive verbs in Petalcingo Tzeltal is explored, and though it seems to offer attractive explanations for some curious phenomena (such as the disjunctiveness of the aspectual system), this proposal in the end is rejected, because it cannot account for some apparent problems.

The third chapter considers the identity of ergative marking and possessor cross-reference in Tzeltal. First, a clitic analysis is proposed for ergative/possessive person cross-reference. This analysis argues against the previous assumptions that these morphemes are affixes. What follows is a cross-linguistic examination of identity of verbal grammatical relations marking with that in the noun phrase. Various functional and diachronic theories are considered with respect to this phenomenon, as well as several principles-and-parameters (P&P)-style approaches. None of the current theories appear to be able to account for the Tzeltal data.

The basic stance of this thesis is that, all things being equal, identical linguistic forms are reflexes of the same entities. More colloquially this translates into a simple dictum of the introductory linguistics class: “form first!” This principle, is designed to minimize linguists’ temptations to force new (and interesting) linguistic phenomena into the mold of languages previously studied.
Even though plenty of work remains to be done on every language ever researched, linguistics, as a discipline that seeks to understand what human Language is, sometimes appears to be a little too content to concern itself with languages that are rather close to home. If we are to understand what is human Language, we must seek to find out what linguistic phenomena exist in the world. The rapid disappearance of the world’s languages makes it imperative to document existing the linguistic diversity, if not for some altruistic purpose of preserving the multiplicity of tongues and cultures for posterity, then from a purely selfish motive of having more data to check against our sometimes all-to-European-centric theories. To this end, perhaps the most useful part of the present work, if any, is the first chapter and the appendices that follow this conclusion, which attempt to record, however insufficiently, some aspects the language spoken in Petalcingo, municipio de Tila, Chiapas, Mexico.
The following story was produced when I asked one of my consultants to retell the story in Mayer 1969 in Tzeltal. This charming book is a story narrated entirely in pictures about a boy, his dog, and their frog. Lacking any text this engaging story makes a perfect elicitation tool especially due to the many details drawn into the illustrations, as well as the multiple participants in the story. The informant “re-producing” the story is a young man (about 18 years of age) who grew up in a mono-lingual Tzeltal-speaking household.

In this, and following appendices, wherever possible I have included Spanish glosses I obtained from my consultants. Few of the English glosses are direct translations from the Spanish glosses, however, wherever seemed perspicacious I have augmented or created English glosses from the Tzeltal utterances. Some of the Spanish glosses will be found ungrammatical by speakers of standard dialects. The sources of this are two-fold: the deficiencies in my command of Spanish, and the Tzeltal influence on the Spanish spoken in Petaltenco. As the latter can reveal aspects of Tzeltal grammar I left the Spanish glosses as they are.

(1) jich jun wits^ kerem
    like.this NC:generic.1 small boy
    ‘one boy’

(2) nakal-Ø ta s-ts^ehl s-wab
    seated-V-B:3 PREP A:3-near A:3-bed
    ‘sat near his bed’

(3) s-joyok-Ø j-koht y-ala ts^i7
    A:3-accompany-B:3? 1-NC:animal A:3-DIM dog
    ‘his puppy accompanied him’

(4) te s-ts^i7-e yakal y-il-bel-Ø jun boteya
    DET A:3-dog-CL PROG A:3-see-PART-B:3 NC:generic.1 bottle
    ‘his dog is/was looking at the bottle’

(5) binti ta y-util boteya tey ay jun j7onkonak 7a
    what PREP A:3-inside bottle there EXIST NC:generic.1 G-frog DIST?
    ‘where, inside there was a frog’

(6) k^ax j-ts^ihn ... k^ax este...
    pass/happen 1-NC:time? pass/happen this
    ‘pasó un rato; a while passed’
Frog Story

(7) j-ts^ihn tyempo-wan
1-NC:time? time-EVID
‘a little bit of time, I think’

(8) te wits^ kereme baht-Ø ta wayel
DET small boy-CL go-B:3 PREP sleep-PART
‘the little boy went to sleep’

(9) te ts^i7-e may-ix chikan 7a
DET dog-CL NEG.EXIST-already appear DIST?
‘the dog is not seen’

(10) i te 7onkonak-e wi hl-Ø lok^el te ta bote yaje
and DET frog-CL jump-B:3 DIR:exiting DET/COMP PREP bottle-CL
‘the frog jumped out of the bottle’

(11) ta ahk^abal, te.. ta sak-ub-el k^inal
PREP night DET PREP white-INCH-PART sky
‘the night... the sky grew white’

(12) ja7 te este... ts^i7-e baht s-joyin-Ø te wits^ kerem-e
F/T DET this dog-CL go A:3-accompany-B:3? DET small boy-CL.
‘the dog went to accompany the small boy’

(13) i och, ots s-lej-ik te sapo-je
and enter enter A:3-search-PL DET frog-CL
‘and they began to search for the frog’

(14) pe ke may-ix chikan 7a
but COMP NEG.EXIST-already appear DIST?
‘but it did not turn up’

(15) te wits^ kerem-e laj s-lej-Ø ta bote yaje
DET small boy-CL PFV A:3-search-B:3 PREP boot
‘the small boy searched in the bottle’

(16) i ma7 laj s-tah-Ø
and NEG PFV A:3-find
‘and did not find it’

(17) te ts^i7-e laj x-cha7 lej ta bo te yaje
DET dog-CL PFV ICMP.A:3-again search PREP bottle
‘the dog searched again in the bottle’

(18) i may-ix ta ejuk 7a
and NEG.EXIST-already PREP A:3-also DIST?
‘it was not (there) either’

(19) laj s-leh-ik te ventana-je
PFV A:3-search-PL DET window-CL
‘they searched the window’

(20) ots s-k^ehlu-Ø ta fwera
enter A:3-watch-B:3 PREP outside
‘he/they began to look outside’
Appendix A: Frog Story

(21) i mayuk binti laj y-il-Ø and NEG.EXIST what PFV A:3-see ‘they didn’t see anything’

(22) te ts^i7-e laj xoij-Ø s-jol a te ta boteya-je DET dog-CL PFV A:3.insert-B:3 A:3-head PT DET PREP bottle-CL ‘the dog stuck its head into the bottle’

(23) yahl-Ø kohel ta ventana fall-B:3 DIR:descending PREP window ‘he fell (down) out the window’

(24) te wits^ kereme koh-Ø tael DET small boy-CL descend-B:3 DIR:toward ‘the small boy came down’

(25) tal s-tsak-Ø te y-ala ts^i7-e come A:3-grab DET A:3-DIM dog-CL ‘came to take his puppy’

(26) laj s-lok^-es-be-Ø boteya ta s-jol-e PFV A:3-exit-CAUS-APPL-B:3 bottle PREP A:3-head-CL ‘he took the bottle off its head’

(27) i ots s-pet-Ø and enter A:3-hug-B:3 ‘and began to hug it (the puppy)’

(28) patil, namij-ik bajel ta s-na afterwards move away-PL DIR:away PREP A:3-house ‘later, they moved away from the house’

(29) lok^ s-leh-ik te 7onkonak-e exit A:3-search-PL DET frog-CL ‘they left to search for the frog’

(30) te ts^i7-e.. te ala wits^ kerem-e yakal y-au-ta-bel-Ø DET dog-CL DET DIM small boy-CL PROG A:3-yell-TRANS-PART-B:3 banti ay-Ø te 7onkonake where EXIST DET frog-CL ‘the dog... the boy is/was yelling where is the frog’

(31) i te este ts^i7-e och.. och s-wowo-ta-Ø and DET this dog-CL enter enter A:3-bark-TRANS-B:3 ‘and this dog began to bark (for it?)’

(32) i mayuk binti chikan and NEG.EXIST what appear ‘and it (the frog) did not appear’

(33) i jich a bej-en-ik bajel and like.this PT walk-V-PL DIR:away ‘and so they walked farther’
(34) k^alal a k^ot-ik ta jun te7 until PT arrive-PL PREP NC:generic.1 tree
‘until they came to a tree’
(35) tey ay s-na7 jun este baj 7a there EXIST A:3-house NC:generic.1 this chipmunk DIST?
‘there was a chipmunk’s house there’
(36) te wits^ kerem-e ots s-k^ehlu-Ø este te s-na baj-e7 DET small boy-CL enter A:3-watch-B:3 this DET A:3-house chipmonk-CL
‘the little boy began to watch the chipmunk’s house’
(37) i tey ta te7-e te jip-il jun na xux-7a and DET PREP tree-CL DET hanging-PRED NC:generic.1 house wasp-CL
‘and there in the tree a house of wasps was hanging’
(38) te ts^i7-e ots s-wowo-ta-Ø te na xuxe DET dog-CL enter A:3-bark-TRANS-B:3 DET house wasp-CL
‘the dog began to bark at the wasps’ house’
(39) i te wits^ kerem-e yakal s-k^ehlu-bel-Ø te na baj-e7 and DET small boy-CL PROG A:3-watch-PART-B:3 DET house chipmunk-CL
‘and the little boy began to look at the chipmunk’s house’
(40) toj lijk-el a lo7-Ø talel te chambahlam-e directly begin-PART PT exit-B:3 DIR:toward DET animal-CL
‘and unfortunately the animal began to come out’
(41) ti7-b-ot s-ni7 bite-APPL-PASS A:3-nose
‘le mordió su nariz; he got his nose bitten’
(42) te ts^i7-e ots s-wen-wowo-ta-Ø xchahk^ol te xux-e DET dog-CL enter A:3-INT-bark-TRANS-B:3 again DET wasp-CL
‘the dog really began to bark at the wasps’
(43) k^ala-laj s-yahl-tes-Ø kohel until-EVID A:3-fall-CAUS-B:3 DIR:descending
‘until he made it fall’
(44) i beh-em-Ø bajel te wits^ kerem-e and walk-V-B:3 DIR:away DET small boy-CL
‘and the boy walked away’
(45) k^alal a k^ot-Ø ta jun te7 until PT arrive PREP NC:generic.1 tree
‘until he arrived at a tree’
(46) ta jun te7 jot-ol PREP NC:generic.1 tree holey-PRED
‘...at a large tree that had a hole (holes) in it’
(47) pero te te7 jotol-e7 te ay te ay jun.. este..
but DET tree holey-PRED-CL DET EXIST DET EXIST NC:generic.1 this
‘nut the tree with the hole there was one.. this..’
Appendix A: Frog Story

(48) tey ay jun este.. lechusa 7a
   DET exist NC:generic.1 this owl Dist?
   ‘there was an owl there’

(49) toj lihk-cl a lo7-Ø talel
directly begin-DIR:tooward PT exit-B:3
   ‘it came right out’

(50) toj lihkel a lo7 talel te lechusaj-e7
directly begin-DIR:tooward PT exit DIR:toward DET noun-CL
   ‘the owl came right out’

(51) te wits^ kereme laj xi7-Ø
   DET small boy-CL PFV fear-B:3
   ‘the boy got scared’

(52) yahl-Ø kohel ta lum
fall-B:3 DIR:descending PREP ground
‘he fell down to the ground’

(53) jaw-al ta lum-7a te wits^ kereme
lying.face.up.arms.open-PRED PREP ground-CL DET small boy-CL.
‘the boy was sprawled out on the ground’

(54) k^alal a k^ax-Ø ta aahn-el te s-ts^i7-e nuts-im-bil a tal
until PT pass-B:3 PREP escape-DIR:tooward DET A:3-dog-CL flee-TR-PASS PT
   ‘until his dog passed running chased by the wasps’

(55) i tal-Ø ejuk te este te lechusaj-e
and come also DET this DET noun-CL
‘and the owl came as well’

(56) te wits^ kereme laj xi
DET small boy-CL PFV fear
‘the boy got scared’

(57) muh-Ø bahel ta ton
climb DIR:away PREP rock
‘he climbed away onto a rock’

(58) k^ot-Ø ... k^ot-Ø ta y-ahk^ol-al te ton-e
arrive arrive PREP A:3-top-PCHG? DET rock-CL
‘he got to the top of the rock’

(59) laj s-tsak-Ø jun te7...
PFV A:3-grab NC:generic.1 tree
‘he grabbed a (tree) branch’

(60) laj s-tsak-Ø te7..
PFV A:3-grab tree
‘he grabbed a tree’
(61) laj s-tsak-Ø jun te7
PFV A:3-grab-B:3 NC:generic.1 tree
‘he grabbed a (tree) branch’

(62) i ma mati te7-uk
and NEG ? tree-IRR
‘and it wasn’t a tree’

(63) s-ja-mati xuhlub jun.. jun chij
A:3-?- horn NC:generic.1 NC:generic.1 deer
‘it was an antler of a deer’

(64) te chij-e laj s-kuch-Ø bajel te wits^ kerem-e
DET deer-CL PFV A:3-carry-B:3 DIR:away DET small boy-CL
‘the deer carried away the boy’

(65) te s-k^ech-oj bajel ta s-jol-7a
DET A:3-carry-PERF DIR:away PREP A:3-head-DIST?
‘he got carried on his head’

(66) i te ala ts^i7-e tal-Ø-to ejuk
and DET DIM dog-CL come-B:3-stil also
‘and the doggie came too’

(67) pero baht-ik ta ahhn-el x-ch^eb-al-ik
but go-PL PREP escape-PART ICMP-two-MOD?-PL
‘the two went running together’

(68) k^alal a yahl-tes-ot-ik kohel ta jun ch^en
until PT fall-CAUS-PASS-PL DIR:descending PREP NC:generic.1 cliff
‘until they were made to fall down off a cliff’

(69) te chij-e tey tehk^-aj-to jil-el
DET deer-CL there standing-V-still stay-PART
‘the deer remained standing’

(70) k^alal a yahl-ik kohel ta jun ch^en-c7
until PT fall-PL DIR:descending PREP NC:generic.1 cliff-CL
‘until they fell down off a cliff’

(71) ta ay jun ja7-a
PREP EXIST NC:generic.1 water-DIST?
‘there was a river there’

(72) i ta ja-7a k^ot-ik
and PREP water-CL arrive-PL
‘and they got in the water’

(73) te chij-e yakal laj s-k^ehlu-bel-Ø jil-el
DET deer-CL PROG PFV A:3-watch-PART-B:3 stay-PART
‘the deer is watching’

(74) yakal s-k^ehlu-bel-Ø ta toyol
PROG A:3-watch-PART-B:3 PREP high
‘watching from up high’
Appendix A: Frog Story

(75) te wits^ kerem-e lok^-Ø-to talel sok te y-ala ts^i7-e DET small boy-CL exit-B:3-still DIR:toward with DET A:3-DIM dog-CL ‘the small boy still came out with his puppy’

(76) s-kech-oj-Ø lo7-el ta s-jol A:3-finish-PERF-B:3 exit-PART PREP A:3-head ‘he had finished leaving his head’

(77) patil, k^ot-ik ta jun te7 afterwards arrive-PL PREP NC:generic.1 tree ‘after, they came to a tree’

(78) ja te j.. ja7 te te-7e wen muk^ F/T DET F/T DET tree-CL INT large ‘a very large tree’

(79) i jot^-ol ta y-ohlil and holey-PRED PREP A:3-middle ‘it had a hole in the middle’

(80) te7 x-tal-ik-ix a te wits^ kerem sok te y-ala ts^i7-e there ICMP-come-PL-already PT DET small boy with DET A:3-DIM dog-CL ‘the little boy and his doggie come (imperfective)’

(81) och y-al-bel-Ø ma-x k^op-oj-at x-chi-laj y-ut enter A:3-say-PART-B:3 NEG-ICMP word-V-B:2 ICMP-say-EVID A:3-say ‘he began to say “Don’t talk” ’

(82) yakal-Ø ta nux-el tal ta ja7 PROG-B:3 PREP swim-PART come PREP water ‘he is/was swimming in the water’

(83) wits^ kerem-e muh-Ø a te ta te7-e small boy-CL climb PT DET PREP tree-CL ‘the small boy climbed the tree’

(84) i te muh-Ø bajel ejuk 7a and DET? climb DIR:away also DIST? ‘and he climbed away too’

(85) ta yan s-pat och pahk-aj-uk ta y-abkolal te te7 PREP another A:3-back enter flat-V-IRR? PREP A:3-on.top DET tree te wits^ kerem-e DET small boy-CL ‘on the other side of the tree the boy flattened himself’

(86) laj s-k^ehlu-Ø kohel ta yan s-pat PFV A:3-watch DIR:descending PREP another A:3-back ‘he looked down to the other side’

(87) te ts^i7-e yakal s-k^ehlu-bel-Ø kohel ejuk DET dog-CL PROG A:3-watch-PART-B:3 DIR:descending also ‘the dog is looking down too’
Frog Story

(88) laj  y-il-ik  te  ay  x-chuch^-etik  7a
PFV  A:3-see-PL  COMP  EXIST  G-toad-PL  DIST?
‘they saw that there were toads there’

(89) i  te  wits^  kerem-e  ots  s-wen  k^ehlu-Ø  ta  lek
and  DET  small  boy-CL  enter  A:3-INT  watch-B:3  PREP  well
‘the boy began to really look’

(90) k^ax  mih-ix  a  te  x-chuch^-etik-e
very  much-already  PT  DET  G-toad-PL-CL
‘there were a ton of toads there’

(91) laj  s-tsak-Ø  koht
PFV  A:3-grab  NC:animal
‘he grabbed one’

(92) i  wen  ts^el-ix  7a
and  INT  happy-already  DIST?
‘and he was very happy’

(93) ots  s-tuch-Ø  muhel  s-k^ab
enter  A:3-lift.up  DIR:ascending  A:3-arm
‘he began to lift it up his hand’

(94) i  te  ts^-i7-e  ejuk-e  ots  s-wen  k^ehlu-Ø
and  DET  dog-CL  also-CL  enter  A:3-INT  watch-B:3
‘and the dog too began to really look’

(95) i  och-Ø  ta  wowo-t-awan-ej
and  enter-B:3  PREP  bark-TRANS-APAS-PART
‘empezó a ladrar; he began to bark’

(96) pero  k^ax  bayel-ix  7a  te  x-chu7ch-etik-e
but  very  much  PT  DET  G-toad-PL-CL
‘but there were a ton of toads there’

(97) tehk^-aj-tik  ta  y-ahk^olal  te7
standing,V-PL  PREP  A:3-on.top  tree
‘standing on top of the tree’
Appendix B

Fiestas

This story was produced by a woman about 35-45 years of age in response to a request for a story. Ostensibly, an interlocutor—her daughter, is present, however, as this story was videotaped the speech event is clearly more of a staged situation. This is especially evident from the fact that the narrator does not interact with the interlocutor in any way during the telling of the story.

(1) ja wan jich yakal s-jok^o-bel-Ø yaiel te bi7 jich F/T EVID like this PROG A:3-ask-PART-B:3 too DET what like this k^in-k^in-tik 7a k^ax ta pas-el-e7 fiesta-REDUP pass PREP do-PART-CL
‘creo que lo que esta preguntando entonces es com pasaron las fiestas; I think what is being asked is how the fiestas were done’

(2) como te name te ay te karnaval-e7 how DET before DET EXIST DET carnaval ‘como en años anteriores cuando habia el carnaval how before when there was a carnaval’

(3) k^ax t^ujbil-to s-ba ta pas-el i very beautiful-still A:3-REFL PREP do-PART and k^ax lek-to ta k^eluy-el very good-still PREP watch-PART ‘era muy bonito lo que hacia y are muy bueno para ver esso it was beautiful what they did and very good to watch’

(4) me karnaval ta name k^inal-to-je ta namej-e7 DET carnaval PREP before sky-still-CL PREP before-CL ‘el carnaval en años anteriores, en años anteriores the carnaval of before...’

(5) laj-to k-il-Ø j-teb-xan ejuk como me parke PFV-still A:1-see-B:3 one-?-only? also like DET park ba ay parke ora in-e7 REL exist park now this-CL ‘todavia vi un poco tambien como el parque donde esta el parque ahorita; I’ve seen them too like in the park where the park is today’

(6) mero sole akil ta j-ch^ay te nak-aj-tik-otik ta y-il-el only only field PREP ?-lose2 COMP seat-V-PL?-PL? PREP A:3-see-PART ‘era puro pasto de una vez estamos sentados viendo; it was just a field where we were sitting, watching then’
Fiestas

(7) yael a me karnaval-Ø ta ju-el
also PT DET carnaval-CL PROG-B:3 PREP do-PART
‘entonces el carnaval que esta realizando; the carnaval proceeding’

(8) i ay to-xan me choj-e7, me tigrej-e,
and axist still-only? DET tiger-CL. DET tiger-CL.
‘habia tigre, tigre; and there were tigers and tigers’

(9) bitik a ky-al-Ø-e7 i bitik jich me k^in namej-e
everything PT ICMP.A3-say-B:3-CL and everything like this DET fiesta before-CL.
‘todo lo que dicen (la gente) todo como era la fiesta antes;
everything that it is said (there was) in the fiestas before’

(10) pe ora-in-i laj y-ijki-ta-y-ik-ix
but now-DEM-PROX PFV A:3-abandon-TRANS-EPN-PL-already
‘pero ahora ya lo dejaron; but now they have abandoned it’

(11) ma-s s-pas-ik-ix
NEG-ICMP A:3-do-PL-already
‘ya no hacen; they don’t do it’

(12) ma-s s-k^an-ik-ix s-pas-el
NEG-ICMP A:3-want-PL-already A:3-do-PART
‘ya no queren hacer; they do not want to do it’

(13) i ma-s s-k^an-ik-ix a ky-ak^-ik ta 7il-el xchajk^ol
and NEG-ICMP A:3-do-PL-already PT ICMP.A3-give-PL PREP see-PART again
‘ya no queren mostrarlo nuevamente;
they don’t want to show it again’

(14) pero name7 k^ax t^ujbil a k^ax-Ø
but before very beautiful PT happen-B:3
‘pero antes pasaba muy bonito como pasaba
but before it was verry beautiful when it happened’

(15) i yan-to-xan sok a s-pas-ik k^in ta iglesiya
and another-still-only with PT A:3-do-PL fiesta PREP church
‘y hacien otra fistas mas en la iglesia; and another one, fiesta they did in the church’

(16) k^ax bayel s-t^ujbil-al ala s-pas-Ø, k^ax t^ujbil
very very much A:3-beautiful-PCHG? DIM A:3-do-B:3, very beautiful
‘hacian muy bonito, muy bonito;
very beautiful they did, very beautiful’

(17) ay xanix pachunajel
EXIST only? potluck
‘tambien habia con intercambio de comida;
there were potlucks too’

152
Appendix B: Fiestas

(18) ay xanix lek we7el uch^el
EXIST only? good food drink
a lek y-ulata-Ø s-bah-ik me j-pas-Ø ateipatan me name-je
PT good A:3-visit?-B:3 A:3-RELF-PL COMP? A:3-do authorities? DET before-CL
‘... se visitaban los que hacian de autoridades antes; there was good food and drink, and the authorities of before visited (people)’

(19) i asta wen niwak chitam to-xan a s-ti7-ik
and until very big pig still-only? PT A:3-eat.meat-PL
a s-we7-ik-a
PT A:3-eat-PL-DIST?
‘y hasta muy grandes serdos daban de comer tambien que lo comen
Even very large pigs there were to eat’

(20) i te ora in-e7 ay xam-bal ma7ch^a7 yakal y-il-bel-Ø
and DET now DEM-CL EXIST only-Q who PROG A:3-see-PART-B:3
ora in-i7
now this-PROX
‘y ahora ya nadia lo esta viendo aora; and now no one is seing it’

(21) mayuk-ix ma7ch^a7-a7 yakal-Ø y-il-bel-Ø
NEG.EXIST-already who- PT PROG-B:3 A:3-see-PART-B:3
‘lo esta viendo aora...; there isn’t anyone to see it’

(22) laj yihkita-y-ik-ix ta pas-el
PFV abandon-EPN-PL-already PREP do-PART
‘ya lo dejaron de hacer; they abandoned doing it’

(23) y-otan-wan ya-to s-jach-ik
A:3-heart-EVID ICMP-still A:3-begin-PL
‘queren velverlo hacer nuevamente; they would like to begin again, I think’

(24) pe ma-x hu-ix,
but NEG-ICMP can-already
‘pero no se pueden empezar; but they cannot’

(25) ma-x hu-ix ta jach-el
NEG-ICMP able.to-already PREP begin-PART
come laj s-tup-ik-ix abi
because PFV A:3-extinguish-PL-already well
‘como ya lo disapariseiron;
they cannot begin because they stopped them (the carnavals)’

(26) jich ejk te ta y-u7un te k^in-e7 y-u7un karnaval ejk-e
like.this also DET PREP A:3-for PREP fiesta-CL A:3-for carnaval also-CL
‘asi como el de la fiesta del karnaval; like the fiesta of the carnaval’

(27) laj s-laj-in-ik ejuk laj s-tup-ik ejuk
PFV A:3-finish-TRANS-PL also PFV A:3-extinguish-PL also
‘tambien ya lo terminaron; they already stopped those too’
Fiestas

(28) ma7 jich-uk-ix me bi7 u7til a s-pas-ik ora in-e
NEG like.this-IRR-already COMP? what like PT A:3-do-PL now this-CL.
yá no es lo mismo como hacen ahora, ya es otro; it’s not the same what they do
now, it’s different’

(29) yan-ix-a jelon-em-ix
another-already-DIX change-PERF-already
‘it already is changed’

(30) ja7 wan jich me a s-jok^o7-Ø wan-e7
F/T EVID like.this COMP PT A:3-ask-B:3 EVID-CL.
‘I think that’s what was being asked’

(31) ma7-a k-na-tik bi7 jich me a s-jok^-oj-c7
NEG-PT A:3-know-PL what like.this DET PT A:3-ask-PERF-CL.
‘we don’t know if this is what he asked’
This conversation fragment was recorded after a performance of an important ritual. The elder who was supposed to perform the ceremony (FQQ) arrived very late, and the family sponsoring the ritual and their guests had to wait for a long time. Here the conversation begins with one of the guests (NDD), asks FQQ why he came so late.

This appendix utilizes some of the transcription conventions used in the conversation analysis literature. The numbers in parentheses indicate (unfilled) pauses the number being the length of the seconds pause (in seconds). Double parenthesis indicate the authors comments on the situation. Where I (or my consultants) are not confident with regard to the transcription, the text is placed in parenthesis. Latches and overlaps are not indicated.

(1) NDD; pe7 tibil a jul-at k-ermano-tik
but late PT arrive-B:3 A:1-brother-PL
‘llegaste tarde; you came late, brother’

(2) FQQ; huh?
‘huh?’

(3) NDD; pe7 tibil a jul-at
but late PT arrive-B:2
‘llegaste tarde; you came late’

(4) FQQ; tibil a jul-on
late PT arrive-B:1
‘I came late’

(5) NDD; i banti ay-at-7a me x-k^ot s-lej-at-e
and where EXIST-B:2-DIST? COMP ICMP-arrive A:3-search-B:3-CL
‘y donde estabas cuando te fui a buscar;
and where were you when we were arriving to looking for you?’

(6) FQQ; jola namal
damn far
‘hijo de la lejos; damn far’

(7) NDD; ya namal-yotik
EMPH? far-1.PL
‘está lejos entonces; we (you) ware far then’
(8) FQQ;  
ta::: (0.15) Majasil-to ta ts^ehl-to le Lidiyo  
PREP Majasil-still PREP near-still de(sp) Lidiyo  
‘hasta.. hasta Majasil cerca de Lidio; as far as Majasil near Lidio’

(9) NDD;  
jola tey!  
damn there  
‘damn there!’

(10) FQQ;  
jahch-on ta Yajalon  
begin-B:1 PREP Yajalon  
‘comenzé en Yajalon, I started in Yajalon’

(11) baht k-wehlu-Ø jahch-el ta banti a yahl-Ø-e  
go A:1-lift-B:3 lift-PART PREP where PT fall-B:3-CL  
‘lo fuí a levantar donde se cayó; I went to lift it up starting where he fell’

(12) NDD;  
a jul-( ) ta Yajalon?  
PT arrive-B:? PREP Yajalon  
‘did he/they come to Yajalon?’

(13) FQQ;  
a k^alal ta Yajalon x-k^ot-uk k-wehlu-Ø jahch-el  
PT until PREP Yajalon ICMP-arrive-IRR A:1-lift-B:3 begin?-el  
hasta Yajalon lo fuí a traer; I went to begin to lift it as far as Yajalon

(14) NDD;  
jala te:::y!  
damn there  
damn there!

(15) FQQ;  
ja7-i.. (0.5) ja7-i najil puente::: (1.7) sta.. s..  
F/T-PROX? F/T-PROX first bridge  
ta s-ti7 s-na ja7-i mamal j-Enrike-wan.  
PREP A:3-edge A:3-house F/T-PROX? old man G-Enrike-DUB  
‘ese.. el primer puente enfrente su casa el viejo Don Enrique...;  
uhhh... the first bridge... by the edge of the old man Enrique’s house’

(16) bin s-bihil ja7-i mach^a najil puente-to namej-i  
what A:3-call? F/T-PROX who first bridge-still before-PROX  
‘cómo se llama el primer puente de antes;  
what’s its name, the first bridge from before?’

(17) NDD;  
( )

(18) FQQ;  
uh-huh!  
‘yes!’

(19) NDD;  
(a ja7 tey-7a)  
PT F/T there-DIST  
‘ah, there’
(20) FQQ; ay ta.. (1.0) ta behlal (0.6) Chilon a ka7j-i
EXIST PREP PREP way Chilon PT seems-PROX
‘There is a Chilon road, it seems’

(21) NDD; ja7 me to
F/T COMP? still
‘ah sí; ah, yes’

(22) QMD; cham-ix in-i7, k-erman-otik
die-already this-PROX, A:1-brother-PL
‘this one’s dead, brother’ (referring to the chicken)

(23) FQQ; huh?

(24) huh?

(25) QMD; k-ich^-Ø-ix bajel in-i7
A:3-take-B:3-already away this-PROX
‘lo voy a llevar éste; I will take this’

(26) FQQ; yak
ICMP.EMPH
‘yes’

(27) yak, s-k^an-Ø-ix ala pas-el
yes A:3-want-B:3-already DIM do-PART
‘ya se puede hacer; yes, it needs to be done please’

(28) QMD; ah, weno
ah, ok
‘ah, ok’

(29) FQQ; yak
ICMP.EMPH
‘yes’

(30) s-k^an-Ø-ix ka w-ala tsob-ik-ix bajel
A:3-want-B:3-already ICMP.A:2 EPN-DIM join-PL-already away
‘si, esté bueno que lo junta ahí;
yes, it’s good that you collect them there please’

(31) FQQ; yak
ICMP.EMPH
‘yes’

(32) QMD; yak
ICMP.EMPH
‘yes’
(33) (QNP); (1.5) jun-nax sak sok in-i
   one-only? white with this-PROX
   ‘está igual este blanco; this white one too?’

(34) FQQ; jun-nax sak-al k-erman-otik
   one-only? white-MOD A:3-brother-PL
   ‘si, están iguales los blancos; yes, the white ones too, sister(?)’

((many people talking at once))

(35) FQQ; yak abi::::
   yes well
   ‘si pues; well, yes’

(36) jich ay-ik-ix 7a
   like.this EXIST-PL-already DIST?
   ‘así están ya; are they like this?’

(37) (QMD); yak ya7yel
   yes too
   ‘yes’

(38) (FQQ); ala tsob-a-y-ik-ix
   DIM gather-IMP-EPN-PL-already
   ‘juntenlo ya; gather them already, please’

(39) (QMD); (    )

(40) FQQ; uh-huh
   uh-huh
   ‘that’s it’

(3.0)

(41) (BQQ); ja7 a s-muk-Ø k-erman-otik in-i7
   F/T PT A:3-close-B:3 A:1-brother-PL this.PROX
   ‘ásta va a enterrar; this one will be buried, sister(?)?’

(42) (QMD); ja7 in-i
   F/T this-PROX
   ‘this one’

(1.2)

(43) (BQQ); ja7 7a x-baht s-tsak-Ø (bajel)
   F/T PT ICMP-go A:3-grab-B:3 DIR:away
   ‘he/she/they are coming to take it away’

(44) (QMD); (    )

((7 seconds of inaudible conversation and silence))
(45) FQQ; ta k-ok a boj-otik yan namal
PREP A:1-foot PT go-1.PL another far
‘On foot we went somewhere else far’

(46) NDD; ta yan namal
PREP another far
‘To another far place’

(47) FQQ; och-on ta::: Yajal on li7 ta och-on ta (1.0)
enter-B:1 PREP Yajalon here PREP begin-B:1 PREP
‘began in Yajalon here... enter...’

(48) ta Ch^ahpuyil ta bej-i7 bi
PREP Chahpuyil PREP path-PROX ?
‘in Chahpuyil, in the path’

(49) NDD; ah, jola tey
ah, damn there
‘damn there!’

(50) FQQ; ta pwente ta Ch^ahpuyil-i
PREP bridge PREP Ch^ahpuyil-PROX
‘At the bridge to Chahpuyil’

(51) NDD; ta pwente te pwente ta Ch^ahpuyil-i
PREP bridge DET bridge PREP Ch^ahpuyil-PROX
‘The bridge... The Chahpuyil bridge’

(52) FQQ; tey-7a jil-on ta karo 7a
there-DIST? remain-B:1 PREP car DIST?
‘ahí me bajé del carro; there I got off the car’

(53) NDD; ah, tey
ah, there
‘ah, there’

(54) FQQ; puro ta k-ok boj-oryotik
only PREP A:1-foot go-PL.1EXCL
‘nos fuimos puro a pie; we(excl) went only on foot’

(55) baaaah-O (0.6) sole ma7 ka na7-Ø jay
go-B:3?, only NEG ICMP.2 know how many
inhl-ik tal jich a tal s-behel ta s-baj-e7
NC:human-PL arrive like this PT arrive A:3-path PREP A:3-above-EPN-CL
‘no sabes cuantos (caminantes) vinieron allá, arriba;
going(?) you don’t know how many people came walking above’

(56) NDD; ya jich mera
EMPH like this only
‘yeah’

(57) FQQ; ma sole (ma7 )
NEG only NEG
‘Only... ’
(58) (NNP); (  )

(59) NDD;  
  tey jil-ik 7a
  there stay-PL DIST?
  ‘You got left (by the car) there?’

(60) FQQ;  
  ja7 tuhl-ik tal ta beh a k^ax-on bahel
  F/T NC:human-PL arrive PREP walk PT pass?-B:1 DIR:away
  ‘cuántas personas había en el camino; How many people were on the road’

(61) NDD;  
  ya jii:::ch
  EMPH like this
  ‘oh yeah’

(62) FQQ;  
  yan beh-7a, ma7-a-ba toj me beh a k^ax-otik bajel-e
  other path-DIST?, NEG-PT-? direct DET path PT pass-1.PL.away-CL
  ‘es otro camino, no es directo el camino donde pasamos;
  it is another way, it’s not the direct way where we went’

(63) NDD;  
  ma7-ba toj
  NEG-? direct
  ‘It’s not direct’

(64) FQQ;  
  jich-to k^ax-oryotik jich but^ik j-wax-i7
  like this-still pass-1.PL.EXCL like this like this? G-cat-PROX
  ‘hasta así pasamos como el wax;
  until we went as the field of the wildcats from here’

((someone says something inaudible))

(65) NDD;  
  ah, jii:::ch
  ah, like that
  ‘oh, yeah’

(66) FQQ;  
  jii:::ch laj ka-be-ryotik bajel-i7
  like this PFV give-APPL-1.PL.EXCL away-PROX
  ‘hasta así le dimos [la vuelta]; so like this we(excl) gave it (a turn)’

(67) NDD;  
  laj
  PFV
  ‘yes’

(68) FQQ;  
  sole xiben sba me ton-tikil-i
  only fear REFL DET rock-N-PROX
  ‘da miedo el pedregal (lugar de piedras); only that the rock place was scary’

(69) NDD;  
  ya jich mero
  yes like this only
  ‘oh yeah!’

(70) FQQ;  
  sole s-wokol-il a x-muh-otik bahel ba
  only A:3-suffering-PCHG PT ICMP-rise-1.PL away ?
  ‘era difícil subir.. ; It was hard to climb’
Appendix C: Jola Namal!

((someone says something inaudible))

(71) FQQ; ba7 k`ajon xanix ta (1.0)
? seem only? PREP
‘donde parece que..; where it appeared that.’

(72) yak-otik-ix ta muh-el baj-el ((laughs)) ta ch`ulchan
PROG-PL-already PREP rise-PART DIR:away PREP sky
‘ya estamos subiendo al cielo; we were already climbing into the sky’

(73) NDD; bihl-il-wan s-behl-al-e7
slippery-MOD-EVID A:3-way-PCHG-CL
‘tal vez está resbaloso el camino; perhaps the path was slippery’

(74) FQQ; ja7 me s-behl-al-e7
F/T DET A:3-way-PCHG-CL
‘sí es el camino; yup, that’s the way’

(75) NDD; ja7
F/T
‘yeah’

(76) FQQ; ja7
F/T
‘yeah’

(77) NDD; ya ja7
yes F/T
‘yes, that’s it’

(78) FQQ; xiben sba
fearsome REFL
‘scary’

(79) NDD; ya jich me::::
yes like this DET?
‘sí entonces; then yes’

(80) FQQ; jich-i
like this-PROX
‘yeah’

(81) NDD; jich
like this
‘yeah’

(82) FQQ; jich
like this
‘yeah’

(( this section of the recording is inaudible ))

(83) ?: ma-laj a-laj-in-Ø
NEG-EVID A:3-finish-V-B:3
‘no lo acabaste; you have not finished it?’ (referring to the bottle of liquor)
(( this section of the recording is inaudible ))

(84) FQQ; sole xiben xanix sba
only feasome ony? REFL
‘sí, da miedo; only it was scary’

(85) NDD; ya jich li7 nax-i ma7 chopol-uk s-behl-al
yes like this here only-PROX NEG bad-IRR A:3-way-PCHG
‘por aquí nada más no está feo el camino;
it’s only here that the road is not bad’

(86) FQQ; jich ( )
like this
‘yeah’

(87) FQQ; ah, k^ax chopol s-behlal
ah, very bad A:3-way
‘oh yeah, the path is very bad’

(88) NDD; ya chopol
yes bad
‘yeah, bad’

(89) FQQ; sole k^an ma k-tah-O-ix bajel me s-naj-e
only MOD NEG A:3-find-B:3-already away DET A:3-house-CL
‘ya no iba yo a alcanzar su casa;
I was already not going to get to the house’

(90) NDD; ( ) k^an me
MOD DET
‘was going to...’

(91) FQQ; ja7 lum-to ta::: ta ch^en-to ay s-na ejk
F/T ground-still PREP PREP cliff-still EXIST A:3-house too
ba7 x-k^ot-uk-on-e7
where ICMP-arrive-IRR-B:1-CL
‘hasta allá en el barranco está su casa también donde fui;
it’s as far as the cliff, that his house was where we went’

(92) NDD; ta ch^en-to s-na ejuk
PREP cliff-still A:3-house also
‘Up to the cliff of the house too’

(93) FQQ; TEY jich-to ta ch^en-to ta bejel ay-i7
there like this-still PREP cliff-still PREP way? EXIST-PROX
‘en el pie del cerro; there, at the foot of the cliff it is’

(94) NDD; jich ya7yel
like this also
‘yeah’

(0.5)
Appendix C: Jola Namal!

(95) FQQ; je xiben xanix s-ba
yeah, fearsome only A:3-REFL
‘yeah, it was scary’

(96) NDD; ya jich mera
yes like those exactly
‘oh yeah’

(97) FQQ; jich
like this
‘yeah’

(98) NDD; jich, ja7mal me yakal-Ø-ix ja7al-e
like this, worse DET/COMP PROG-B:3-already water-CL
ma7 bil-il-uk s-behl-al
NEG slippery-MOD-IRR A:3-way-PCHG
‘si, peor que está lloviendo a de estar resbaloso el camino;
yeah, all the worse that it was raining for the slipperiness of the road’

(99) FQQ; jola k^ax bilil s-behlal
damn very slippery A:3-road
‘damn, it was slippery’

(100) NDD; ya bilil
yes slippery
‘yes, slippery’

(101) FQQ; ja7 y-u7un (0.6) wokol a (0.6) k-suh-Ø k-bah-tik
F/T A:3-for difficult PT A:1-?-B:3 A:1-REFL-PL
prep way-PART
‘es difícil apurarse a caminar; so it was(is?) difficult to hurry walking’

(102) NDD; aw-il-Ø ja7 y-u7un wokol a (0.3) x-beh-en-otik
A:3-see-B:3 F/T A:3-for difficult PT ICMP-way-V-1.PL
‘es por ese que caminamos con trabajo;
that is why we(incl) walk with difficulty’

(4.2)
((someone says something inaudible))

(0.7)

(103) FQQ; ja7 y-u7un jich me (2.0)
F/T A:3-for like this COMP?
‘so...’

(104) bah-to k-cha7-wehlu-Ø jahch-el tal banti yahl-em ta
go-still A:1-again-lift-B:3 lift-PART arrive where fall-PREF PREP
‘went again to lift it/air it up where (he/they) had fallen...’

(105) ay tey ay ala ja7-a
EXIST there EXIST DIM water-DIST
‘There is a little creek there’
(106) NDD; ay tey ay ja7-a
exist there exist water-dist
‘there is a creek there’

(107) FQQ; pero es ke ay s:::::
but is that exist
‘it’s that...’

(108) ja7 me (1.5) k^ax toyol a x-k^oj-Ø tal ejk me ja7-e
F/T COMP? very high PT ICMP-descend-B:3 come also DET water-CL
‘caye de muy alto el agua; the water fell from very high’

(109) jay jujt-uk xanix ejk me x-lok^-Ø tal me ja7 ta wits-e
how many NC?-IRR only? also COMP? ICMP-exit-B:3 come DET water PREP hill-CL
‘hay muchos aguijeros en el cerro donde sale el agua;
there are many rivulets in the hill where the water comes out’

(110) NDD; ja7 ji::::ch
F/T like this
‘oh, yeah’

(1.1)

(111) FQQ; wen toyol (0.2)
very high
‘very tall...’

(112) NDD; ah wen toyol
ah very high
‘ah, very tall’

(113) FQQ; pe7 ay s-lehch me s-ch^en-e7
but exist A:3-ledge DET A:3-cliff-CL
‘but there is a ledge on the cliff’

(114) NDD; ay s-lehch
exist A:3-ledge
‘there’s a ledge’

(1.1)

(115) FQQ; ya ma jich-uk-to s:::
uh NEG like this-IRR-still
‘it would not be...’

(116) but^ik y-u7un kaye s:::::k^ubulil bajem-i7
like this A:3-for street A:3-holey? depth-PROX
‘ee.. no seria de aqui como a la calle de profundidad;
the depth of the cave is about the same as from here to the street’

(117) NDD; ja7 me s-kubulil-e7
F/T COMP A:3-holey?-CL
‘that deep’
Appendix C: Jola Namal!

(118) FQQ; ja7 me s-kubulil-c7
F/T COMP A:3-holey?-CL
‘that deep’

(119) NDD; ja7 jich
F/T like this
‘oh, yeah’

(0.3)

(120) FQQ; ja7 jich s-toy-IL but^ik pamal naj-e
F/T like this A:3-high-PCHG like this plane house-CL.
pe7 lum-to xij-il but^ik kaye-je
but ground-still long-PRED like this street-CL
‘it’s like the same height as the footprint of the house except from the ground’

(121) NDD; a tey-to xij-il bahel 7a
PT there-still long-PRED away DIST?
‘that long’

(122) FQQ; ja7 to tey baj-em::: (0.4) y-util-a
F/T still there away-PERF A:3-inside-DIST?
‘hasta ahí se ha ido; up to this far in depth (gesture?)’

(123) NDD; jola ja7 tey bah-em y-util 7a
damn F/T there go-PERF A:3-inside DIST?
‘damn that far’

(124) FQQ; ja7 to tey bahem yutil 7a
F/T still there go-PERF A:3-inside DIST?
‘damn that far’

(125) NDD; jola ja7-a
damn F/T-DIST?
‘damn, like that’

(126) FQQ; k^ax kole::::m
very big
‘very big’

(127) NDD; kolem kolem ja7 ya7yel
large large F/T also
‘large too’

(128) FQQ; ya7yel tey a tey a x-k^oj k-ts^um-be-Ø
also there DIST there DIST ICMP-descend A:1-collect-APPL-B:3
s-jel-ol 7a
A:3-change-NOM DIST?
‘hasta ahí le fui a sembrar su cambio;
and there too we descended to make the replacement’
(129) NDD; tey k^oj a-ts^um-be-Ø s-jel-ol 7a
there arrive A:2-collect-APPL-B:3 A:3-change-NOM DIST
‘you went there to collect the replacement’

(130) FQQ; tey k^oj k-ts^um-be-Ø so le:::::k ja7al k-atin-ej
there arrive A:1-collect-APPL-B:3 only well rain A:1-bathe-V-B:3?
‘solo con la lluvia bañé;
I went there to collect, (and) only really bathed in the rain’

(131) NDD; ya jich ya7yel
yes like this too
‘oh yeah too’

(132) FQQ; so lek pak^-al-on ta ja7
only well beat-PRED-B:1 PREP water
‘only I was quite pounded by the rain’

(133) NDD; ya ma7 tulan yakal tey ejk 7a
yes NEG hard PROG there too DIST
‘si no está lloviendo duro tambien allá; as if it was not raining hard there too’

(134) FQQ; jo::la k^ax mi laj y-a-be:::::-Ø
damn very much PFV A:3-give-APPL-B:3
‘le dio mucho; damn it gave it much (rain)’

(135) NDD; (         )

(136) FQQ; solo x-ch^ololet xani:::::x
only ICMP-stream only
‘it was pouring’

(137) NDD; (come ja7 me k^ax) mi ja7al abij-e
because F/T COMP? very much rain well-CL
‘because it was raining a lot’

(138) FQQ; ( k^ax mi7 laj y-a-be-Ø ja7al tey-7a )
very much PFV A:3-give-APPL-B:3 rain there-DIST
‘it rained a lot there’

(139) k^ax mi7 laj y-a-be-Ø ja7al tey-7a
very much PFV A:3-give-APPL-B:3 rain there-DIST
‘llovió bastante allá; it rained a lot there’

(140) NDD; ya mi7 mero
yes much very
‘sí es; oh yeah’

(141) FQQ; solo t^uxul-on ta ja7
only full-A:1 PREP water
‘(I feel) that I am like a pale full of water’
(142) ora tal-on li7-ix a tak-ij tal ta k-nujkul-el-i7
now arrive-B:1 here-already PT dry-? come PREP A:1-skin-PCHG?-PROX
‘me vine rápido ya aquí, se secó en mi piel; I came here fast, drip-drying’

(143) NDD; ( )

(144) ma jichuk a tak-ij ta a-nujkul-el-i7
NEG like this-IRR PT dry-? PREP A:3-skin-PCHG?-PROX
‘As if you did not drip dry’

(145) FQQ; jich a tak-ij ta knujkul-el-i7
like this PT try-V? PREP A:2-skin-PCHG?-PROX
‘like this I drip-dried’

(146) NDD; ya.... ya jich
yes yes like this
‘oh yeah’

(147) FQQ; jich
like this
‘yeah’

(148) NDD; jich ban k’an k’ax-uk k-u7un-tik
like this where want pass-IRR A:1-for-PL
‘si dónde lo íbamos a pasar? where would we weather the rain?’

(149) FQQ; jola ban k’an (0.4) jil-uk-otik
damn where MOD remain-IRR-1.PL
‘dónde íbamos a quedar; where would we stay?’

(150) NDD; ya ma7-a
yes NEG-PT
‘nowhere’

(151) FQQ; ma-ba-7a
NEG-?-PT
‘nope’

(152) NDD; ma-ba-7a
NEG-?-PT
‘nope’

(0.9)

(153) FQQ; ja7 y-u7un tibil a jul-on
F/T A:3-for late PT arrive-B:1
‘por eso llegué tarde; and so I arrived late’
‘no encontré carro en este aquí en el camino de Victoria; I did not get a ride uhm. here on the road to Victoria’

‘I see, you did not catch a car’

‘I didn’t catch a car’

‘I came on foot’

‘you came on foot’

‘a pie llegué hasta aquí; I came on foot as far as here’

‘I see’

‘so I arrived late’

‘yeah, late’

‘so I arrived late’

‘that’s why’

‘yup’
(167) NDD;  ja\textsuperscript{7} \\
F/T \\
‘yup’


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