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 *-Vl* 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 *-Vl* 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 (*-V~₁l*), 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'

     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:

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[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

(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

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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   (intransitive infinitive)
             PROG-B:2 PREP climb-PART
             'You are climbing'

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

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[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.

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 *-el* 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:

(10) a. [$_{VP}$ yakal-ABS$_i$ [$_{PP}$ ta [$_{CP}$ [$_{IP}$ PRO$_i$ [$_{VP}$ nuxel]]]]]

b. [$_{VP}$ yakal-ABS$_i$ [$_{CP}$ [$_{IP}$ PRO$_i$ [$_{PP}$ ta [$_{VP}$ nuxel]]]]]

c. [$_{VP}$ yakal-ABS$_i$ [$_{CP}$ [$_{IP}$ PRO$_i$ [$_{VP}$ [$_{PP}$ ta nuxel]]]]]

The structure in (10c) can immediately be ruled out on the grounds that the [$_{VP}$ [$_{PP}$ *ta nuxel*]]]] structure is not endocentric. This leaves (10a) or (10b). (10a) is preferable on the grounds that with this structure *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 (*yakal*) but indirectly. Thus for the constructions such as

(11)   yakal-on ta   nux-el
PROG-B1 PREP swim-el
'I am swimming'

we might posit the following structure:

(12)
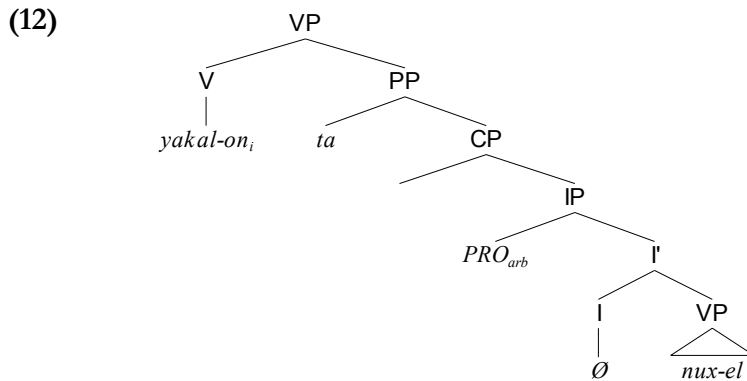
Note that in examples of the type in (11), the PRO will always be arbitrary, that is, it is not possible for PRO to be controlled by the argument of the matrix verb.

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

Coon 2004 departs from the previous analysis of Chol, and argues explicitly for the formal nominality of *-el* forms. Her arguments for this position are as follows: The *-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 *-el* participles in Chol can take determiners and serve as subjects of sentences. Finally she notes that constructions that take *-el* verbs can also take regular (non-*-el*) nouns. Thus she concludes that the *-el* participles are formally nominal.
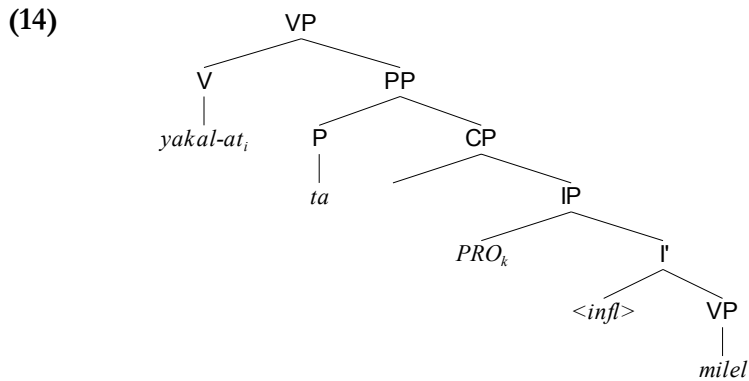
The *-el* Participles are Nominal

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.[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.

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[39] I will ignore the known exceptions (like Portuguese) to this generalization.

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.[40] The structure thus proposed would be:

(14)

```
                        VP
                  ┌──────┴──────┐
                  V             PP
                  │         ┌────┴────┐
             yakal-at_i     P         CP
                            │      ┌───┴───┐
                            ta             IP
                                      ┌────┴────┐
                                    PRO_k       I'
                                            ┌───┴───┐
                                         <infl>     VP
                                                    │
                                                  milel
```

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:

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[40] I am grateful to Matt Pearson for suggesting this avenue of analysis.

(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 fot 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 A:3-beat-bel-B:1
        'He/she/it is beating me'

Likewise, *-bel* participles obligatorily bear ergative 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'

     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:[41]

(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:

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[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.

(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 ptosi 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'[42]

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. Uničtoženie   butylki   piva   za pjat' minut
        extermination bottle-GEN beer-GEN in five   minutes
        dvumja   studentami   — večš' 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 tečenie   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]

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[42] Alexiadou does not provide a free gloss for this example.

b. ta   ganar yaiel   y-u7un a k-man-Ø   k-we7el k-yuch^el-yotik-a
    PREP earn   therefore A:3-for PT A:1-buy-B:3 A:1-food A:1-drink-PL-DIST
    'para ganar entonces es para que compremos nuestro alimento;
    to earn therefore for the buying of our food' [Fra1:0013]

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.[43] The latter property seems to be related to their inability to take absolutive suffixes.[44] 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:[45]

(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.

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[43] This may be for semantic or pragmatic reasons, however.

[44] This ungrammaticality of an *-el* participle with an absolutive 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 absolutive 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):

(26) a.　yakal　a-maj-bel-on
　　　　　　PROG　A:2-hit-bel-B:1
　　　　　　'You are hitting me'

　　　　b.　yakal-on　ta　　maj-el
　　　　　　PROG-B:2　PREP　hit-el
　　　　　　'I am being hit; (someone) is hitting me'

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:

(27)　　　yakal-Ø$_i$　　[　a-maj-bel-on　　]$_i$
　　　　　　PROG-ABS:3　　A:2-hit-bel-B:1
　　　　　　'You are hitting me'

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.

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[46] As John Haviland pointed out to me there may be empirical reasons not to consider *yakal* an auxiliary: first, its morphophonological form (CVC-V$_1l$) 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:

(5)　a.　och-on
　　　　　enter-B:1
　　　　　'I came in'

　　　b.　* yakal-on
　　　　　　yakal-B:1
　　　　　'I am doing (something)'

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:

(6)　　* laj　k-il-Ø　　　winik yakal-Ø
　　　　　PFV　A:3-see-B:3　man　PROG-B:3
　　　　　'I saw a man that was doing (something)' [constructed]

This example requires verification with Tzeltal speakers (which I am unable to do at present).

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 revolusion-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]

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[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*$_i$ [a-maj-bel-on   ]$_i$
          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.[49] 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:

> **(35)**   a.   och-on   ta   muh-el
>   enter-B:1 PREP ascend-B:1
>   'I began climbing'
>
>   b.   lik-Ø   ta   jam-el   me ijin
>   begin-B:3 PREP clean-PART DET this
>   'Empezaron a limpiar ese; They began to clean this' [N01:0514]

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):

> **(36)**   och a-mil-bel-on
>   enter A:2-kill-B:1
>   'You began to beat me'

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:

> **(37)**   a.   och-Ø   te   winik-e
>   enter-ABS:3 DET man-CL
>   'The man entered'
>
>   b.   och-on
>   enter-ABS:2
>   'I entered'

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.

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[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 *laj* auxiliary

The *laj* marker has two major functions: a terminative auxiliary and a perfective aspect marker. The perfective *laj* only occurs with transitive verbs (recall that intransitive verbs are interpreted as perfective with no aspect marking):

(39) a. laj   s-maj-on
          PFV A:3-beat-B:3
          'She beat me; *She finished beating me'

      b. koh-on
          descend
          'I came down'

      c. laj   lok^-on
          finish leave-B:1
          'I finished leaving; *I left'

The terminative *laj* 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

-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 absolute 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:

	Incompletive	Perfective
Intransitive	x-	Ø
Transitive	Ø	laj

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)   a.   och-Ø   s-maj-on
             begin-B:3 A:3-beat-B:1
             'Empezó a pegarme; (He/she/it) began to beat me'

       b.   lok^-Ø   s-mil-on
             leave-B:3 A:3-kill-B:1
             'Salió a matarme; (She/he/it) left / went out to kill me'

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)   a.   boh-on
             go-A:1
             'I went / * I go/was going'

       b.   k-il-at
             A:1-see-B:2
             'I see/was seeing you / * I saw you'

       c.   winik-on
             man-B:1
             'I am a man / * I was a man'

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[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:[52]

> **(45)** a.   * x-winik-on
>   ICMP-man-B:1
>   'I am a man'
>
>   b.   * x-k-maj-at
>   ICMP-A:1-hit-B:2
>   'I hit you'
>
>   c.   x-boh-on
>   ICMP-go-B:1
>   'I go'

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:

> **(46)**   yakal-on   ta   ajk^ot
>   PROG-B:1   PREP   dance
>   'I am dancing'

In the example above *ajk^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 *ajk^ot* must be denominalized and converted to an intransitive verb:

> **(47)**   ajk^ot-aj-on
>   dance-V-B:1
>   'I danced'

The same applies to *ajnumal* ("run"), *k^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,[53] 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

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[52] 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.

[53] These are reviewed in the following chapter.

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 (*a(w)-* 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:

(48) a. laj a-maj-on
PFV A:2-hit-B:1
'You hit me (perfective)'

b. laj a-majbel-on
PFV A:2-hit-B:1
'You finished hitting me'

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:

(49) a. * yakal a-maj-on
PROG A:3-hit-B:1
'You are beating me'

(50) a. yakal a-maj-bel-on
PROG A:3-hit-PART-B:1
'You are beating me'

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

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[54] 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 possessum 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 2003a[56]]

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.

(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'

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[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.

     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.[59] 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.[60] 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 directionals 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"):[61]

(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.[62] 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 *hu -u7un* in my data.

(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.