

# Nominal Constructions and Split Ergativity in Chol (Mayan)\*

JESSICA COON

*Reed College*

## 0. Introduction

In this paper I will make three claims about Chol: first, that imperfective verb stems in Chol are formally nominal; second, that roots in Chol are underspecified with respect to semantic and grammatical features; and finally, that a correlation may be drawn between the nominality of imperfectives and Chol's aspect-based ergative split.

I begin here with an examination of the ergative split. In Chol there are two possibilities, by all accounts semantically equal, for expressing an intransitive construction in the imperfective aspect. These are shown in examples (1) and (2) below.<sup>1</sup> In the first, which I will call the *muk'* form, person is marked on the auxiliary, *muk'*, and verbal information appears in a subordinated nominal form, *wäyel*. In the second, or *mi*, construction, aspect is expressed as a proclitic and person is marked directly on the verb stem. When we contrast these two forms with the transitive construction in (3), we see evidence of Chol's ergative split.

(1) muk'-oñ tyi wäy-el  
IMPF-1ABS PREP sleep-NOM  
'I sleep.'

(2) mi k-wäy-el  
IMPF 1ERG-sleep-NOM  
'I sleep.'

---

\* Many thanks to my Chol teachers: Virginia Vázquez Martínez, Dora Angélica Vázquez Vázquez, and Matilde Vázquez Vázquez. I am also grateful to Gülşat Aygen, Matt Pearson, and John Haviland for their helpful suggestions on this paper. All data presented here is the result of fieldwork conducted by the author in the village of Campanario in Chiapas, Mexico.

<sup>1</sup> ä = [i]; j = [h]; y = [j]; ty = [tʰ]; ch = [tʃ]; x = [ʃ]; ñ = [nʲ]; ' = [ʔ]; k' = ejective k, etc.; all other symbols represent their standard IPA values. 1 = speaker; 2 = addressee; 3 = non-local person; ABS = absolutive; DET = determiner; EPN = epenthetic insertion; ERG = ergative; EXT = existential; IMPF = imperfective; NC = numeral classifier; NOM = nominal suffix; PASS = passive; PERF = perfective; PREP = preposition; PROG = progressive; VI = intransitive verb; VT = transitive verb.

- (3) mi k-mek'-ety  
 IMPF 1ERG-hug-2ABS  
 'I hug you.'

The source of this split in Chol, I argue, stems from the fact that the “verb” in the construction in example (2), like the subordinated form in (1), is formally nominal (i.e., has the same distributional properties as nouns). The nominal nature of non-perfectives has been previously argued for nearby members of the Yucatecan sub-family by Victoria Bricker (1981). Her claims have since been dismissed by Lois and Vapnarsky (2003) based partially on faulty or insufficient information about Chol, which this paper intends to remedy.

In Section 1 I begin with a brief overview of Chol morphosyntax, where we will see that a distinction must be drawn between predicative verb and noun stems based on whether or not they mark for aspect. Aspect is outlined in Section 2, where I argue for a division between aspect-carrying verbal auxiliaries and aspectual clitics, previously analyzed as allomorphs of the same form. The argument for the formal nominality of non-perfective constructions is presented in Section 3. Next, in Section 4 I propose that the simplest account of roots in Chol is to claim that they are underspecified with respect to semantic as well as morphosyntactic features. Here I follow the general framework of Distributed Morphology, which I outline briefly before moving on to Section 5, where I discuss Chol stem formation. Finally, I examine a similar argument for nominality put forth for languages of the Yucatan in Section 6, concluding that the relationship between nominality and split ergativity deserves further exploration.

### 1. About Chol

Chol is a Mayan language spoken in the lowlands of the Mexican state of Chiapas by between one hundred and two hundred thousand people. The basic ordering of constituents in Chol is VOS for transitive clauses and VS for intransitives. Overt subject and object pronouns, however, are used only for emphasis.

Like other members of the Mayan family, Chol uses a predominantly ergative-absolutive agreement system to head-mark grammatical relations. As seen in examples (1)–(3) above, ergative markers appear as prefixes while absolutive is marked with suffixes. These are listed in the table in (4).

- (4) Ergative and absolutive agreement affixes

	Ergative	Absolutive
1 <sup>st</sup> person	<i>k-</i>	<i>-oñ</i>
2 <sup>nd</sup> person	<i>a-</i>	<i>-ety</i>
3 <sup>rd</sup> person	<i>i-</i>	<i>-∅</i>

In a transitive clause, an ergative prefix marks the subject, while an absolutive suffix marks the object, as shown in (5).

- (5) **mi i-jats'-oñ**  
 IMPF 3ERG-hit-1ABS  
 'She hits me.'

Intransitive constructions in the perfective aspect mark their single argument with the absolutive suffix, as shown in example (6). As we saw above, imperfective intransitives have recourse to two different constructions.

- (6) **tyi jul-i-y-oñ**  
 PERF arrive-VI-EPN-1ABS  
 'I arrived.'

The same agreement affixes that cross-reference the arguments of verbs are also used to mark relationships between nouns. A noun's possessor is marked with an ergative prefix on the head noun, as shown in (7), while an absolutive suffix marks the argument of a predicate nominal construction, as in (8).

- (7) **k-otyoty**  
 1ERG-house  
 'my house'

- (8) **wiñik-oñ**  
 man-1ABS  
 'I am a man.'

Both ergative and absolutive morphology may appear on the same noun stem, as shown by the sentence in example (9), where the ergative prefix *a-* cross-references the noun's possessor and the absolutive suffix *-oñ* marks the theme of the predicate nominal.

- (9) **a-chich-oñ**  
 2ERG-big.sister-1ABS  
 'I'm your big sister.'

Note that the only formal difference between the noun construction in example (9) and the verb construction in example (5) is the aspect marker: predicative nouns are unable to mark for aspect while verbs do so obligatorily.

## 2. Aspect

Aspect in Chol is marked via pre-verbal auxiliaries. For the purpose of this paper, I will focus only on the distinction between the perfective and imperfective aspects, though progressive exists as well. In the Tila dialect, on which I conducted fieldwork, perfective is marked with *tyi* and *ta'* and imperfective is marked with *mi* and *muk'*. Previous authors (cf. Vázquez Alvarez 2002) have

treated these auxiliaries as allomorphs of the same two morphemes: *tyi* and *mi* are considered the underlying forms and *ta'* and *muk'* are said to be used when any morphology is attached. For example, Chol possesses a number of second-position modal enclitics which often appear affixed to the first-position aspect marker. When the clitics are present the *ta'* and *muk'* forms are used, as shown in (10). The same constructions with the *tyi* and *mi* forms are ungrammatical, as shown in example (11).

(10) **ta'-bi** lok'-i-y-ety  
 PERF-REP go.out-VI-EPN-2ABS  
 'They say you went out.'

(11) \***tyi-bi** lok'-i-y-ety  
 PERF-REP go.out-VI-EPN-2ABS  
 'They say you went out.'

Considering the *ta'* and *muk'* forms as allomorphs of *mi* and *tyi*, governed simply by the presence or absence of additional morphology, ignores the structural differences found between *muk'* and *mi* constructions. I argue that *tyi* and *mi* are in fact clitics and their so-called allomorphs should be considered different, full root auxiliaries. The claim that *mi* and *tyi* are clitics is supported first by the fact that they themselves may *not* take clitics, as we saw in (11) above. Second, they are of the form CV rather than the CVC shape associated with full root forms in the Mayan language family. And finally, it is often unclear where to draw the word boundary between these aspect markers and the verb stem, both to myself and to native speakers. This suggests that the clitic-stem complex is in fact a single phonological word. The distribution of these forms will be discussed in the following section.

### 3. Non-Perfective Constructions as Nominal

Returning now to the two types of intransitive imperfectives given above in examples (1) and (2), I will analyze each in turn and argue that the stems in both of these constructions are in fact nominal; one is subordinated and one is marked directly for person. In the *muk'* type of imperfective, another example of which is shown in (12), *muk'* is marked for person and the root '*uk*' 'cry' appears with a nominal *-el* suffix subordinated to Chol's all-purpose preposition, *tyi*. The nominality of these forms is evidenced in Chol by the fact that *-el* forms occur only in NP positions, as I will demonstrate below.

(12) muk'-ety tyi 'uk'-el  
 IMPF-2ABS PREP cry-NOM  
 'You cry.'

First, like other nominals, when not serving as the argument of a verb, as in (13), these forms must be licensed by the preposition *tyi*, as in (14). In (13) the stem *wäyel* acts as the direct object of the transitive stem *amulañ* and thus requires no preposition. In (14) no argument slot is available to the *-el* form, which must receive case from the preposition *tyi*.

- (13) mi a-mulañ-Ø<sub>i</sub> wäy-el<sub>i</sub>?  
 IMPF 2ERG-like-3ABS sleep-NOM  
 ‘Do you like sleeping?’
- (14) tyi majl-i-Ø<sub>i</sub> tyi wäy-el jiñi wiñik<sub>i</sub>  
 PERF go-VI-3ABS PREP sleep-NOM DET man  
 ‘The man went to sleep.’

Additionally, compare the *muk’* construction in (15) with the locative construction in (16) which uses the existential auxiliary, *’añ*. Formally, these two constructions are identical, and there is no question as to the grammatical category of *’otyoty* ‘house’, which fulfills all the requirements of a typical noun.

- (15) muk’-oñ tyi wäy-el  
 IMPF-1ABS PREP sleep-NOM  
 ‘I sleep.’
- (16) ’añ-oñ tyi k-otyoty  
 EXT-1ABS PREP 1ERG-house  
 ‘I’m in my house.’

Furthermore, we see in example (17) that some *-el* forms, like nouns, may take determiners and serve as the subject of a sentence.<sup>2</sup>

- (17) jiñi ’uch’-el mach sumuk  
 DET eat-NOM NEG tasty  
 ‘This food isn’t tasty.’

Our next piece of evidence comes from constructions involving one of a set of what have been called “nominal verbs.” These are in fact simply nouns used to express what English speakers might consider to be verbal information. In (18), for example, the equivalent of the English *I sing* is conveyed in Chol using the inflected aspectual auxiliary and the noun *k’ay* ‘song’.

- (18) muk’-oñ tyi k’ay  
 IMPF-1ABS PREP song  
 ‘I sing.’

<sup>2</sup> This type of construction, however, is marginal in Chol and not entirely productive.

In (19) the nominal form *k'ay* appears as an argument of the verb, preceded by the determiner *jiñi*; inflecting *k'ay* as a regular intransitive verb results in ungrammaticality, as shown in (20).

(19) *mi k-mulañ-∅ jiñi k'ay*  
 IMPF 1ERG-like-3ABS DET song  
 'I like that song.'

(20) \**mi a-k'ay-el*  
 IMPF 2ERG-song-NOM  
 'You sing.'

We thus have three types of words that may appear immediately after the preposition *tyi*: what have been called “nominal verbs” like *k'ay* ‘song’ and *soñ* ‘dance’, uncontroversial nouns like *'otyoty* ‘house’ and *ja* ‘water’, and finally, *-el* forms like *wäyel* ‘sleep’ and *julel* ‘arrive’. Since in all other cases these *-el* forms behave like nouns (i.e., by taking determiners, serving as subjects, and appearing as verbal arguments) there is no good reason to treat them as anything but nominal. Finally, suffixes of the shape *-Vl* are found on noun stems throughout the Mayan family, making these stems nominal in both form and distribution.

Let’s now return to the second type of imperfective construction involving the clitic *mi*, repeated here in example (21).

(21) *mi k-jul-el*  
 IMPF 1ERG-arrive-NOM  
 'I arrive.'

In this form, the stem *julel* takes an ergative prefix to mark person, rather than the absolutive expected for intransitives in ergative-absolutive languages. This form seems to represent an innovation in Chol. For example, Chol’s nearby cousin Tzeltal, which shows no ergative split, uses constructions similar to our *muk'* forms to express intransitives in the progressive aspect. *Mi*-type constructions, however, are not available (Kirill Shklovsky, p.c.). Because of the nominality of *-el* forms, if they are to serve as the main (rather than subordinated) verb of the sentence, they must mark aspect with the clitic *mi*.

Note that there is nothing inherently inconsistent with the claim that a nominal verb stem may mark for aspect. Above I distinguished noun stems, which may not take aspect, from verb stems, which require it. I made, however, no claim as to the formal grammatical status of imperfective verb stems, which we have now seen to be nominal. Further support for the nominality of these forms may be found in the nature of roots and stem formation in Chol, which I will discuss in the following sections.

#### 4. Mayan Roots

The classification of Mayan roots has received a great deal of attention in recent literature, partially due to the fact that these roots seem to defy attempts at a neat classification. In example (22) the root *wäy* ‘sleep’ appears in an intransitive verbal construction with the meaning ‘I slept’. In (23), however, the same root surfaces as a noun, the word for the spirit animal of shamans that comes out at night to cause trouble.

(22) tyi **wäy**-i-y-oñ  
 PERF sleep-VI-EPN-1ABS  
 ‘I slept.’

(23) tyi a-k’el-e-Ø juñ-tyikil **wäy**?  
 PERF 2ERG-see-VT-3ABS one-NC.PEOPLE *wäy*  
 ‘Have you seen a (person’s) *wäy*?’

Additionally, while many roots appear (underived) only in verb stems, such as *mek* ‘hug’, some of these may show up in either transitive or intransitive constructions, with no additional valence-changing morphology. One example is the root *lok*, shown in examples (24) and (25).

(24) tyi **lok**’-i-y-ety  
 PERF go.out-VI-EPN-2ABS  
 ‘I went out.’

(25) tyi k-**lok**’-o-y-ety  
 PERF 1ERG-take.out-VT-EPN-2ABS  
 ‘I took you out.’

Countless other examples of category overlap exist, where a semantic relationship may be drawn between the various stems created from a single root. Although *wäy* appears in different stems above (the meanings of which are unpredictable from one another), the two bear a clear semantic relationship. Haviland (1994:716) calls such roots “semantic portmanteaus” because they contain “several interrelated notions bundled up inside.”

Traditionally, two theories have been used to account for single roots which produce different classes of stems: a root is either argued to have separate (homophonous) lexical entries for each type of stem it forms (cf. Laughlin 1975), or a root is thought to create different stems through derivation, often using zero morphemes (cf. Stefflre 1972). One obvious drawback to the first proposal is that it fails to capture the semantic similarities between *lok* ‘go out’ and *lok* ‘take out’, for example, and also leaves us with an unnecessarily large lexicon. On the other hand, Lois and Vapnarsky (2003:16) criticize accounts that rely on zero derivational morphology to produce different stems from the same CVC root. The

use of zero derivational morphology, they argue, is not independently justified. Additionally, we are left with the problematic decision of which grammatical category the underlying root belongs to.

Due to this ambivalent nature of roots, it has been recently argued that it is simply not possible to distinguish completely between nouns and verbs (and classes of verbs) at the root level (Lois and Vapnarsky 2003). To address this problem, Lois and Vapnarsky (2003:23) propose new broader root classes: verbo-nominal roots and nominal roots. The former category may or may not be associated with TAM (tense-aspect-mode) particles and the latter cannot. By insisting on retaining the idea of root classes, however, their account loses explanatory power. In Chol, for example, there are a number of roots which (in underived stem forms) *must* take aspect, a number which may not, and a number for which either option is available. This first possibility is not recognized by either of their proposed classes.

A more powerful account, I propose, is to abandon root classes altogether, and conclude that roots in Chol and other Mayan languages are not entirely specified for grammatical category (Coon 2004). In making this claim I adopt the framework of Distributed Morphology (DM) (Halle and Marantz 1993, Marantz 1997), which rejects the Lexicalist assumption that “words” are created in the lexicon through the combination of completely specified roots and morphemes, and then enter the syntax as fully formed units (cf. Lieber 1992). Instead of splitting the generative power of language between the syntax and the lexicon, DM takes a “single engine” approach to word and phrase formation: “grammar constructs all words in the syntax by the same general mechanisms...that it constructs phrases” (Marantz 1997).

In Chol, for instance, the root *wäy* may appear in noun stems, verb stems, and what Mayanists call “positional” stems. Rather than assigning the root to one of these three categories (or to all of them), we instead consider it to be a bundle of semantic and morphosyntactic information, without a category feature. These root bundles, however, are not entirely *unspecified*. Few (if any) roots may appear in all stem forms, and in spite of the morphological similarities between predicative nouns and verbs in Chol, a distinction must be made between stems which may not take aspect (nouns) and stems which require aspect (verbs). That is, a root contains features which select which types of stems it will form.

In order to form these stems, the underspecified root merges with a head  $x$  under a locality domain. Under this domain the root fixes its grammatical category as well as its meaning. Subsequent applications of merge, however, which now combine with a word or stem of a specific grammatical category, no longer have access to the flexibility of the root; they cannot “see” through the structure (cf. Marantz 1997). Special meanings of words and phrases, previously acquired in the lexicon, are achieved under this locality domain. Details of this analysis are spelled out in more detail in Coon (2004). Important here is my proposal that under this account it is no longer necessary to force Mayan roots into rigid categories. Instead, we can account for the semantic and grammatical

multiplicity of roots through underspecification at the root level and merge under a locality domain.

### 5. Chol Stem Formation

Above we saw that intransitive verb stems in the imperfective aspect require a nominal *-el* suffix to form a stem. Imperfective transitives, like nouns, require no suffix in order to predicate, as shown in example (26).

- (26) mi i-mek'-oñ  
 IMPF 3ERG-hug-1ABS  
 'She hugs me.'

*Perfective* verb stems, on the other hand, must first acquire a *-V* suffix before they may inflect for person and number: *-i* for intransitives and a harmonic *-V* for transitives, as shown in (27) and (28) below.

- (27) tyi jul-i-y-ety  
 PERF arrive-VI-EPN-2ABS  
 'You arrived.'

- (28) tyi a-mek'-e-y-oñ  
 PERF 2ERG-hug-VT-EPN-1ABS  
 'You hugged me.'

These suffixes and others like them have previously been labeled “thematic vowels” or “status suffixes” (Vázquez Alvarez 2002), though no attempt has been made to explain their presence. I argue that these suffixes are best described as “specificational” suffixes, used to fix the meaning, grammatical category, and argument structure of a previously underspecified root (cf. Coon 2004). Note that I am purposefully avoiding the problematic term “derivational,” which typically describes the process of changing from one grammatical category to another. Instead, by “specificational,” I wish to convey the notion that these roots do not *have* a grammatical category prior to entry into the syntax, and thus cannot be said to be *derived* in the traditional sense of the word.

This proposal also provides a unified account of other suffixes in Chol found immediately post-root. The suffix *-le*, for example, has been labeled both a passive suffix in cases like example (29), as well as a positional “status suffix,” as in example (30) (Vázquez Alvarez 2002).

- (29) tyi k'ux-le-y-oñ  
 PERF bite-'PASS'-EPN-1ABS  
 'I was bitten.'

- (30) tyi buch-**le**-y-oñ  
PERF sit-‘POS’-EPN-1ABS  
‘I was sitting.’

In both cases the CVC root receives the suffix *-le*. Both forms also contain a single argument with a similar thematic role: theme. Why should we call one suffix a “passivizer” and the other a “status suffix” when their uses are so clearly related? Instead, I claim that this suffix, and others like it, take the underspecified root and assign it an argument structure and thematic grid.

One question remains, however: why should active *imperfective* stems require no such suffix? These nominal stems, like nouns and adjectives, do not require a “thematic vowel” or a “status suffix” to inflect.<sup>3</sup> Since underspecified roots, like many nominal stems, also do not have an argument structure, nominal may be considered the *default* form into which roots may enter. In the sections that follow I will return to the proposed correlation between these nominal verb stems and split ergativity.

## 6. Nominality and Split Ergativity

Victoria Bricker (1981) is the first Mayanist to have argued for the nominality of specifically non-perfective constructions. She argues that the *-Vl* suffix found on Yucatecan intransitives looks “suspiciously like a nominal suffix” (Bricker 1981:87). She writes that:

Nouns take ergative pronouns as possessors. If intransitive complements also take nominal suffixes, then the fact that they take ergative pronouns as subjects suggests that they are being inflected like nouns, without relinquishing their syntactic function as verbs. (Bricker 1981:87)

Though I would argue that by inflecting and behaving formally as nominals, these forms do indeed relinquish their syntactic function as verbs, Bricker’s observations for Yucatec seem to parallel the facts for Chol. Bricker ultimately does not find sufficient support for the ergative split corollary, and her claims have been recently dismissed by Lois and Vapnarsky (2003) in their work on “polyvalence” of root classes. They write that “in Chol, a language close to the Yucatecan branch, split ergativity exists without there being any overt sign of nominalization” (Lois and Vapnarsky 2003:110).

I hope to have demonstrated above that imperfective constructions in Chol *are* formally nominal. The ergative split in Chol, I argue, may be explained based on the nominality of *-el* forms. Because stems like *julel* in example (31) below are nominal they may, like other nouns, be marked for person or possession using one of the ergative prefixes. Perhaps a more literal translation of the sentence in (31) would then be something like ‘do my arriving’.

---

<sup>3</sup> *-el* should not be considered a “status suffix.” In addition to being found on other noun stems, *-el* is of the form *-VC* rather than the *-CV* or *-CVC* shape of the other suffixes in this category.

- (31) *mi k-jul-el*  
 IMPF 1ERG-arrive-NOM  
 ‘I arrive.’

This is further supported by the fact that some *-el* forms have taken on non-eventive meanings. The intransitive stem *kuch’el*, for example, can mean not just ‘I eat’ when coupled with the aspectual clitic *mi*, but may also stand on its own to mean ‘my food’, as illustrated in (32).

- (32) *jiñi k-uch’-el mach sumuk*  
 DET 1ERG-eat-NOM NEG tasty  
 ‘This food isn’t tasty.’

Furthermore, in nearby languages like Tzeltal, which exhibit no ergative split, this nominality does not appear to be present (Kirill Shklovsky, p.c.). The correlation between nominality and split ergativity warrants further investigation.

## 7. Conclusions

In this paper I began with a discussion of the two types of imperfective intransitive constructions present in Chol. The first type discussed, the *muk’* form, conforms to the standard ergative-absolutive pattern of marking agreement, and analogous constructions are found in nearby languages like Tzeltal. The nominative-accusative *mi* construction, on the other hand, seems to represent an innovation in Chol. This ergative split may be explained, I argued, based on the nominality of the imperfective verb stems. Since imperfective intransitive stems like *julel* are nominal they may, like other nominals, be “possessed” using one of the ergative prefixes. This nominal verb stem then, must mark aspect using the imperfective clitic *mi*, rather than the verbal auxiliary *muk’*.

Further motivation for the nominality of imperfectives was presented in the sections that followed. Previous attempts to classify Mayan roots have encountered problems by making the assumption that all roots must be stored in the lexicon fully specified for grammatical features. Instead, following the framework of Distributed Morphology, I propose that roots should be considered underspecified with respect to semantic and grammatical features. The underspecified root fixes its meaning and forms a stem of a particular grammatical category by merging with a category head under a locality domain. In Chol, evidence for this merge is found in one of the set of immediately post-root suffixes, previously labeled alternately as “thematic vowels,” “status suffixes,” and “voice morphology.” These suffixes should all be unified under the label “specificational” suffixes, used to specify the meaning and grammatical features of the previously underspecified root.

Nominal intransitive stems take a different type of suffix, a *-Vl* suffix found also on noun stems in Chol and other Mayan languages, while imperfective transitives take no suffix at all. Since roots, like many other nominals, do not have

an argument structure, the default form into which they may enter is nominal. This account provides a more satisfactory explanation of the source of Chol's ergative split, the nature of Chol roots, and the discrepancies in stem formation between perfective and non-perfective stems.

## References

- Aulie, Wilbur, and Evelin Aulie. 1978. *Diccionario Ch'ol-Español, Español-Ch'ol*. Mexico: Summer Institute of Linguistics.
- Bricker, Victoria. 1981. The source of the ergative split in Yucatek Maya. *Journal of Mayan Linguistics* 2(2):83-127.
- Coon, Jessica. 2004. Roots and words in Chol (Mayan): A Distributed Morphology approach. Unpublished B.A. thesis, Reed College.
- Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In K. Hale and S. J. Keyser, eds., *The View from Building 20*, 111-176. Cambridge, MA: MIT Press.
- Haviland, John. 1994. "Ta xa setel xulem" [The buzzards were circling]: Categories of verbal roots in (Zinacantec) Tzotzil. *Linguistics* 32:691-741.
- Laughlin, Robert. 1975. *The Great Tzotzil Dictionary of San Lorenzo Zinacantán*. Washington, D.C.: Smithsonian Institution Press.
- Lieber, Rochelle. 1992. *Deconstructing Morphology*. Chicago: University of Chicago Press.
- Lois, Ximena, and Valentina Vapnarsky. 2003. *Polyvalence and Flexibility of Root Classes in Yucatekan Mayan Languages*. Munich: Lincom Europa.
- Marantz, Alec. 1997. No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon. In A. Dimitriadis, L. Siegel, C. Surek-Clark, and A. Williams, eds., *UPenn Working Papers in Linguistics, vol. 4.2, Proceedings of the 21st Annual Penn Linguistics Colloquium*, 201-225. Philadelphia: Penn Linguistics Club.
- Stefflre, Marlys McClaran. 1972. Lexical and syntactic structures in Yucatec Maya. Ph.D. diss., Harvard University.
- Vázquez Alvarez, Juan Jesús. 2002. Morfología del verbo de la lengua Chol de Tila Chiapas. Maestría de Lingüística Indoamericana, CIESAS-DF.

c/o John Haviland  
Reed College  
3203 SE Woodstock Blvd.  
Portland, OR 97202

JessicaCoon@alumni.reed.edu