NEGATION IN CHUJ PROGRESSIVES

(AND OTHER EVIDENCE FOR THE BICLAUSAL STRUCTURE OF PROGRESSIVES)*

Elizabeth Carolan & Jessica Coon, lzcarolan@gmail.com, jessica.coon@mcgill.ca
January 2015

1 Introduction

- In this talk, we use data from Chuj negation—as well as from other sources—to argue that progressive clauses involve an aspectual predicate and an embedded nominalized clause. Following previous work on other Mayan languages, this accounts for the appearance of aspect-based split ergativity.
- Like many other Mayan languages, Chuj exhibits aspect-based split ergativity, seen via two sets of markers on the predicate.
- Clauses in non-progressive aspects—like the perfective in (1)—along with aspectless non-verbal predicates, exhibit an *ergative-absolutive* alignment:
 - Transitive subjects are marked with a morpheme immediately preceding the predicate (ergative; "Set A")
 - Transitive objects and intransitive subjects pattern alike (absolutive; "Set B")¹
 - (1) a. Ix-ach-ko-chel-a'.

 PRFV-B2-A1P-hug-TV

 'We hugged you.'

 b. Ix-ach-b'ey-i.
 - PRFV-B2-walk-ITV
 - 'You walked.'
- In the progressive aspect, we find the split: both transitive and intransitive subjects pattern as **Set A**

^{*}We are especially grateful to Magdalena Torres for her time and patience in sharing her language with us. Thanks also to Alan Bale, Cristina Buenrostro, Louisa Bielig, Lauren Clemens, Mitcho Erlewine, Pedro Mateo Pedro, Adán Pascual, and the McGill Chuj Lab for general discussion and feedback. Any errors in data or interpretation are our own. This work is supported by an FRQSC Nouveaux-Chercheurs grant and a SSHRC Insight Grant.

¹Unless otherwise noted, all data are from our elicitation notes. Abbreviations in glosses are as follows: A – Set A (ergative/possessive); B – Set B (absolutive); CLF – nominal classifier; DEM – demonstrative; DET – determiner; DIR – directional; FOC – focus; IMPF – imperfective; IRR – irrealis; ITV – intransitive verb suffix; MASC – masculine; NEG – negation; NML – nominal suffix; P – plural; PRFV – perfective; POS – positional suffix; PROG – progressive; PROSP – prospective; SUB – subordinating suffix; TV – transitive verb suffix.

- (2) a. Lan **hach ko**-chel-an-i.

 PROG B2 A1P-hug-SUB-ITV

 'We're hugging you.'
 - b. Lan **ko**-b'ey-i.
 PROG A1P-walk-ITV
 'We're walking.'
- Set B is impossible on progressive intransitives:
 - (3) * Lan **hach**-b'ey-i.

 PROG B2-walk-ITV
 intended: 'You're walking.'
- In the terminology of Dixon 1979, 1994, this represents an **extended ergative** pattern:
 - We might call it "nominative-accusative" insofar as both transitive and intransitive subjects pattern alike...
 - But note that this is simply an *extension* of the Set A marker to mark subjects of certain intransitive predicates
 - (4) ERGATIVE-PATTERNING (5) "EXTENDED ERGATIVE" transitive: **B-A**-stem intransitive: **B**-stem intransitive: **A**-stem
- Analogous splits are found in other Mayan languages: Chol (Coon 2013), Yucatec (Bricker 1981), Q'anjob'al (Mateo-Toledo 2003), and others (see e.g. Larsen and Norman 1979)
- Comparable "extended ergative" splits in these languages have been explained as follows:
 - The progressive aspect marker (lan) is a predicate
 - It takes a nominalized clause as its complement (in brackets)
 - (6) a. Lan [NP hach ko -chel-an-i].

 PROG B2 A1P-hug-SUB-ITV

 'We're hugging you.' (lit.~ 'Our hugging you is happening.')

 b. Lan [NP ko -b'ey-i].

 PROG A1P-walk-ITV

 'We're walking.' (lit.~ 'Our walking is happening.')
- The Set A marker co-indexes a grammatical *possessor* (ergative and possessive are identical)
 - (7) ko-nun
 A1P-mother
 'our mother.'

•	In languages like Chol, we find support for this not only in the behavior of the aspectual
	marker itself, but also in the morphological form of the complement clause predicates, as in
	(8)—see Coon 2013:

- (8) CHOL INTRANSITIVES
 - a. Tyi <u>wäy-i-yety.</u>
 PRFV sleep-ITV-B2
 'I slept.'
 - b. Choñkol [a-wäy-el].

 PROG A2-sleep-NML

 'I'm sleeping.'
- (9) CHUJ INTRANSITIVES
 - a. Ix-ach way-i.

 PRFV-B2 sleep-ITV

 'You slept.'
 - b. Lan [ha-way-i].

 PROG A2-sleep-ITV

 'You're sleeping.'
- In Chol, non-split perfective (=verbal) predicates appear with a vocalic status suffix, while embedded forms appear with the nominal suffix *-el*
 - VI suffixes are found on nominals throughout Mayan (see e.g. Bricker 1981 and §4.4 below)
- **▶** But in Chuj perfective (ergative) and progressive (split) stem forms like (9) are morphologically identical (we return to transitives below)
- We argue below that progressive stem forms like (9b) are nonetheless nominal

•	Outline	of the	remainder	of this	talk:
	Outilit	or and	1 Cilialiuci	or uns	tans.

§2 Chuj aspect
§3 Progressives as predicates
§4 Predicate stems as nominalizations
§5 Summary and conclusions

2 Chuj background

- Compared with other Mayan languages, there has been relatively little work on Chuj—a language of the Q'anjob'alan branch spoken by around 40,000 people in the department of Huehuetenango in Guatemala
- As in other Mayan languages, predicates in Chuj can be divided into two types:
 - 1. Verbal (\sim eventive) predicates require an aspectual marker
 - 2. Non-verbal (\sim stative) predicates no aspectual marker possible
- A template for a Chuj verbal predicate is given in (10)—nominal arguments may be dropped; when overt they appear either post-verbally, or in pre-verbal topic/focus positions
 - (10) TAM SET B SET A Root VOICE STATUS SUFFIX

• As is common throughout Mayan, Set A (ergative markers) are prefixes, while Set B (absolutive markers) are clitics (Maxwell 1976)²

(11) CHUJ PERSON MARKERS

	Set B (absolutive)	Set A (ergative/possessive)		
			C	_V
1s	hin		hin-	w-
2s	hach		ha-	h-
3s	Ø	3s	S-	<i>y</i> -
1 P	honh	1p	s- ko-	k-
2 _P	hex	2Р	he-	hey- y- heb'
3P	heb'	3P	s- heb'	y- heb'

• Preverbal TAM markers in Chuj (see Carolan 2015):

• First, note that unlike in the perfective, imperfective, and prospective aspects, the stem in the progressive is written orthographically as a separate word (see e.g. Buenrostro 2004, 2007; Domingo Pascual 2007)

(13)	a.	Tz-ach-b'ey-i.
		IMPF-B2-walk-ITV
		'You walk.'
	b.	Ix-ach-b'ey-i.
		PRFV-B2-walk-ITV
		You walked.'
	c.	Ol-ach-b'ey-ok.
		PROSP-B2-walk-IRR
		'You will walk.'
	d.	Lan <u>ha-b'ey-i</u> .
		PROG A2-walk-ITV
		'You're walking.'

- (14) a. Tz-ach-in-chel-a'.

 IMPF-B2-A1-hug-TV

 'I hug you.'
 - b. Ix-ach-in-chel-a'.

 PRFV-B2-A1-hug-TV

 'I hugged you.'
 - c. Ol-ach-in-chel-a'.
 PROSP-B2-A1-hug-TV
 'I will hug you.'
 - d. Lan <u>hach</u> <u>hin-chel-an-i</u>.

 PROG B2 A1-hug-SUB-ITV

 'I'm hugging you.'
- The progressive forms in (13d) and (14d) have a different structure from the forms in (13a–c) and (14a–c)
 - o In §3 we show that *lan* behaves as a predicate; in §4 we show that the embedded form behaves as a nominal

²The initial h- of these markers is an orthographic convention used to indicate that there is no initial glottal stop, as occurs with other vowel-initial forms in Chuj (Buenrostro 2004). Contrast for example *onh* [?oŋ] 'avocado' with h-onh [oŋ] 'your avocado'. For this reason, we use h- only word-initially, though some authors do not transcribe it.

3 Progressives as predicates

3.1 Negation

- In non-progressive aspects, negation in Chuj is expressed by a pre-verbal particle *man* and a particle, *laj* which follows the verb stem:
 - (15) a. **Man** ol-ach-in-chel NEG PROSP-B2-A1-hug NEG 'I will not hug you.'
 - b. Man ol-in-b'ey
 NEG PROSP-B1-walk NEG
 'I will not walk.'
- In the progressive aspect, however, *laj* appears following *lan* and before the stem:
- Lan also appears with the irrealis marker -ok, found on intransitive irrealis predicates
 - (16) a. **Man** lan-**ok laj** hach hin-chel-an-i.

 NEG PROG-IRR NEG B2 A1-hug-SUF-ITV

 'I'm not hugging you.'
 - b. **Man** lan-**ok laj** hin-b'ey-i.

 NEG PROG-IRR NEG A1-walk-ITV

 'I'm not walking.'
- Compare the *lan* forms with other negated stative intransitives:
 - (17) **Man** hin k'ayb'um-**ok laj**.

 NEG B1 teacher-IRR NEG
 'I'm not a teacher.'
- Craig (1977, 93) reports similar facts for related Popti' (Jakaltek)—"The fact that *lanhan* is a higher predicate and a stative verb is indicated by the negative construction"
 - Compare the negated progressive in (18a) with the negated intransitive stative predicate in (18b)
 - (18) POPTI'
 - a. Mat <u>lanhan</u>-oj ha-wayi. NEG PROG-IRR A2-sleep 'You are not sleeping.'
 - b. Mat sonlom-oj hach.

 NEG marimba.player-IRR B2

 'You are not a marimba player.'

3.2 Particles

- The particles =xo 'already' and =to 'still' provide additional evidence for a structural difference between progressive and non-progressive verbal predicates
- In the progressive, these particles attach directly to the progressive predicate:
 - (19) a. Lan=xo hach-ko-chel-an-i.

 PROG=ALREADY B2-A1P-hug-SUB-ITV

 'We're already hugging you.'
 - b. Lan=xo ko-b'ey-i.

 PROG=ALREADY A1P-walk-ITV

 'We're already walking.'
 - (20) a. Lan=to hach ko-chel-an-i.

 PROG=STILL B2 A1P-hug-SUB-ITV

 'We're still hugging you.'
 - b. Lan=to ko-b'ey-i.

 PROG=STILL A1P-walk-ITV

 'We're still walking.'
- In non-progressive aspects, they must appear sentence-initially; they cannot attach to the aspect marker³
 - They also appear attached to a host *to—to* is also a complementizer used to embed finite clauses, and we tentatively suggest that it is inserted here to host the clitic
 - (21) a. To=xo ix-ach-ko-chel-a'. C=ALREADY PRFV-B2-A1P-hug-TV 'We already hugged you.'
 - b. To=xo ix-onh-b'ey-ok.
 C=ALREADY PRFV-B1P-walk-IRR
 'We already walked.'

(i) * Ol=xo=onh-k'och-ok.

PROSP=ALREADY=B1P-arrive-IRR

intended: 'We are already arriving.' (our notes)

(ii) ✓ Ol=to=in-mujlaj-ok.

PROSP=STILL=B1-work-IRR

'I will still work.'

(Buenrostro 2013, 121)

Note that forms like (ii) are not a problem for this analysis—we might simply say that =to and =xo are second-position clitics and do not care about the predicate status of the aspect marker.

³Though Buenrostro (2013, 121) reports that =to and =xo may appear after all aspect markers, our consultant only accepts them after the progressive marker; in other aspects, the must appear initially. More work is needed to determine if this is a more general point of variation.

3.3 Other embedding verbs

- The stem forms embedded under the progressives aspect marker are identical to embedded stem forms embedded under elements that are clearly matrix predicates, like *yamoch* 'begin':
- (22) a. **Lan** <u>hin-munlaj-i</u>.

 PROG A1-work-ITV

 'I'm working.'
 - b. **Ix-in-yamoch** hin-munlaj-i.
 PRVF-A1-begin A1-work-ITV
 'I began to work.'
- (23) a. Lan <u>hach in-chel-an-i.</u>
 PROG B2 A1-hug-SUB-ITV
 'I'm hugging you.'
 - b. **Ix-in-yamoch** hach in-chel-an-i.

 PRVF-A1-begin B2 A1-hug-SUB-ITV

 'I began to hug you.'

3.4 Progressives and positionals

- Though *lan* is the most common progressive we have encountered in our work with Chuj, Domingo Pascual (2007, 155) also lists *wan*, and Buenrostro (2004) adds *leman*:
 - (24) a. **Lan** y-il-an heb'. PROG A3-see-SUB 3PL 'They are seeing it.'
 - b. **Wan** s-way winh.

 PROG A3-sleep CLF.MASC

 'He is sleeping.'
 - c. **Leman**=to y-ak'-an lesal winh.

 PROG=STILL A3-give-SUB pray CLF.MASC

 'He is still praying.'

(Buenrostro 2004, 262)

- While we have yet to determine whether there is any semantic difference among these markers, we suggest that the fact that there are three is consistent with the progressive being expressed as a *lexical stative verb*—not as a functional aspectual particle
- *Lan(h)* can appear with the positional suffix *-an*, forming a stative predicate meaning something like 'extended (over some space)'—also reported for the cognate in related Q'anjob'al (Pascual 2007, 150)
 - (25) a. Lanh-an ek' kamix sat lu'um.
 extended-POS DIR shirt on ground
 'The shirt is lying (extended, carelessly) on the ground.'
 - b. Ling-an ek' nok' chej.
 standing-POS DIR CLF.ANIMAL horse
 'The horse is standing.'

(Domingo Pascual 2007, 190)

▶ Just as the shirt in (25a) is extended over space, the event in the progressive is extended over time; see Bybee et al. 1994 for cross-linguistic similarities between locative and progressive constructions

4 Complements as nominalizations

- In this section we discuss evidence that the stem form embedded under the progressive predicate is a nominal. Like other nominals, these stems may:
 - Serve as sentential subjects (§4.1)
 - Trigger overt agreement (§4.2)
- We provide an analysis of the structure of these forms in §4.3, where we argue that these forms are nominalized above vP
- Time-permitting, we compare them with other nominal stems in §4.4

4.1 As arguments

- Recall the stem forms we're looking at (the final status suffixes delete when not phrase-final; see Henderson 2012):
 - (26) a. Lan [s-way winh].

 PROG A3-sleep CLF.MASC

 'He's sleeping.'
 b. Lan [ko-xik-an k'atzitz].

 PROG A1P-chop-SUB wood

 'We're chopping wood.'
- The non-verbal predicate in (27) has a regular possessed noun as its subject:
 - (27) Man te wach'-ok laj [NP ko-kape].

 NEG very good-IRR NEG AlP-coffee
 'Our coffee isn't very good.'
- This can be replaced by progressive stem forms:
 - (28) a. Man te wach'-ok laj [NP s-way winh].

 NEG very good-IRR NEG A3-sleep CLF.MASC

 'His sleeping isn't very good.'
 b. Man te wach'-ok laj [NP ko-xik-an k'atzitz].

 NEG very good-IRR NEG A1P-chop-SUB wood

 'Our chopping wood isn't very good.'
- As with nominalizations in English, not all nominalizations are appropriate as subjects to all
 predicates (some sound unnatural or awkward), but with the right context, these are perfectly
 acceptable
- Here is another pair, also discussed in Buenrostro 2004:

```
(29) Ix-lajw-i [NP hin-wakax].
PRFV-finish-ITV A1-cow
'My cows finished (e.g. died).'
```

(30) a. Ix-lajw-i [NP hin-munlaj-i].

PRFV-finish-ITV A1-work-ITV

'I finished working.'

b. Ix-lajw-i [NP ko-xik-an k'atzitz].

PRFV-finish-ITV A1P-chop-SUB wood

'We finished chopping wood.'

4.2 Triggering agreement

- Recall that 3rd person absolutive agreement is null in Chuj (and throughout Mayan), and we do not represent it in the examples here
- If *lan* is the predicate, and its complement is a nominal argument, we don't expect to find any overt reflex of this relationship. Compare:

```
(31) a. Lan-\emptyset_i [NP ko-mixnaj-i ]<sub>i</sub>.
PROG-B3 A1P-bathe-ITV

'We're bathing.' (\sim 'Our bathing is happening.')

b. Te tzalajnak-\emptyset_i [NP winh winak ]<sub>i</sub>.
INTS happy-B3 CLF.MASC man

'The man is happy.'
```

- However, in certain contexts we see evidence that nominalized clauses like *ko-mixnaj-i* in (31a) may trigger **overt 3rd person** *Set A* **agreement**:
 - (32) a. Ix-numx-i ko-mixnaji.
 PRFV-stop-ITV A1P-bathe
 'We stopped bathing.'
 b. Lan s-numx-i ko-mixnaji.
 PROG A3-stop-ITV A1P-bathe
 'We're stopping bathing.'

▶ What is the 3rd person Set A morpheme doing in (32b)?

• What's going on: (32a) has an intransitive matrix verb (*numxi*) and a nominalized complement (like (30) above):

```
(33) Ix numx-i [NP ko-mixnaj-i ].
PRFV stop-ITV A1P-bathe-ITV
'We stopped bathing.' (lit.~ 'Our bathing stopped.')
```

• The progressive is more complex...

- As usual under this analysis, *lan* takes a nominal complement
- Here is is a complex possessive construction: *komixnaji* 'our bathing' is the grammatical **possessor** of the nominal *numxi* 'stopping'
- (34) Lan [NP s]-numx-i [NP ko-mixnaj-i]].
 PROG A3-stop-ITV A1P-bathe-ITV
 'We're stopping bathing.' (lit.~ 'Our bathing's stopping is happening.')
- Like other possessors, *komixnaji* follows the possessum and triggers Set A marking on it: here 3rd person s-. Compare:
 - (35) s-pat ko-nun
 A3S-house A1P-mother
 'our mother's house.'
- Side-by-side:
 - (36) a. [NP s -numx-i [NP ko-mixnaji]]
 A3-stop-ITV A1P-bathe
 'our bathing's stopping'
 b. [NP s -pat [NP ko-nun]]
 A3S-house A1P-mother
 'our mother's house.'

4.3 Transitives and intransitives

• Buenrostro (2007) has discussed these constructions, and concluded that the forms embedded under *lan* cannot be nominal:

One of the most frequent explanations for this type of complement clause consists in saying that these are nominalized verbs. The explanation is based in the idea that the ergative marker of the intransitive verb is interpreted as possessive. However, when we see [transitive examples] this hypothesis is not sustainable, since the transitive verb stem has both of its person markers. (Buenrostro 2007, 255)⁴

• We argue that this is not a problem, since these forms are nominalized *above vP*, and the transitive appears with a morpheme which licenses the transitive object

⁴Our translation from Spanish.

• Recall the non-progressive and progressive stem forms from (1) and (2) above

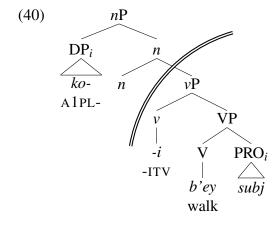
- (37)a. Ix-ach-ko-chel-a'. (38)a. Lan [NP hach ko-chel-an-i]. PRFV-B2-A1P-hug-TV PROG B2 A1P-hug-SUB-ITV 'We hugged you.' 'We're hugging you.' b. Lan [_{NP} ko-<u>b'ey-i</u> b. Ix-ach-b'ey-i. PRFV-B2-walk-ITV A1P-walk-ITV PROG 'You walked.' 'You're walking.'
 - We assume that the -a' and -i suffixes on the non-progressive forms in (37) are instances of transitive and intransitive v^0 respectively
- What about progressives?
 - Transitive stems in the progressive aspect—along with all other embedded transitives—require the suffix -an, glossed SUB (for "subordinate clause")
 - **▶** Both transitive and intransitive stems take the suffix -*i* (dropped in non-final position)

4.3.1 -an

- Following Coon et al. (to appear) on Q'anjob'al, we assume that absolutive arguments in Chuj are licensed by finite Infl⁰ (absolutive = nominative; see Legate 2008 for discussion)
- Absolutives should be impossible in non-finite embedded clauses (i.e. nominalizations)
 - o No absolutive appears in the embedded intransitive in (38b)—the subject is cross-referenced by Set A (which we take to be possessive)
 - The possessor controls the null subject in the embedded vP
 - (39) Lan [NP ko-b'ey-i].

 PROG A1P-walk-ITV

 'You're walking.' (lit.~ 'Your walking is happening.')

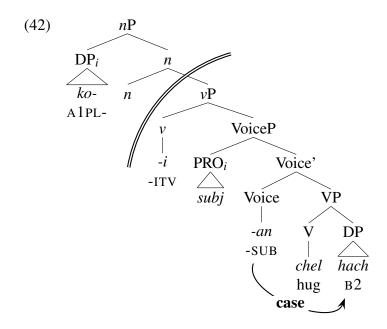


• What about the *hach* (2ABS) in the transitive in (38a)?

(41) Lan [NP hach ko-chel-an-i].

PROG B2 a1p-hug-SUB-ITV

'We're hugging you.' (lit.~ 'Our hugging you is happening.')



- Following Ordóñez (1995) on Popti' and Coon et al. (to appear) on Q'anjob'al, we assume that -an is inserted in non-finite embedded transitives in order to Case-license the transitive object
 - Ordóñez (1995) likens this to of-insertion in English (e.g. 'destruction of the city')
 - As support, note that Mayan languages of the Kichean branch do not use -an (or a cognate) in embedded clauses, and full transitives are impossible in non-finite contexts—all transitives must be either passivized or antipassivized in order to embed (see discussion in Imanishi 2014)

4.3.2 -i

- Mateo Pedro (2009) notes formal similarity between the Q'anjob'al progressive stem suffix -i and the nominalizer -Ik in Kichean-branch languages
- Here we do not take a stance on whether -i in progressives is the -ITV marker, or an accidentally homophonous nominalizer (i.e. located in n^0 in (40–42) above)

4.4 Types of nominalization: -i vs. -el

- Parallelism between progressive stems and nominal forms is not perfect...
- And there are morphological forms that are more clearly nominalized (here we focus only on the intransitives):

```
(43) a. Ix-in-b'at [wa'-el].

PRFV-B1-go eat-NML

'I went to eat.'
b. Ol-ach-b'at [mol-oj kape].

PROSP-B2-go gather-NML coffee

'I will gather coffee.'

(Buenrostro 2007, 262)
```

- -el is cognate with nominal suffixes across Mayan (see e.g. Bricker 1981)
- **▶** Apparently we have two types of nominal intransitives:

	Root		<i>-el</i> nominals	-i nominals
	wa'	'eat'	wa'-el munlaj-el lolon-el	wa'-i
(44)	munlaj	'work'	munlaj-el	munlaj-i
	lolon	'speak'	lolon-el	lolon-i

- -el forms are banned in progressive environments (45a), but required as complements of motion verbs (45b):
 - (45) a. Lan {*[ko-munlaj-el] / ✓[ko-munlaj-i]}
 PROG A1P-work-NML A1P-work-ITV
 'We're working.'
 b. Ix-in-b'at { ✓[munlaj-el] / *[munlaj-i]}.
 PRFV-B1-go work-NML work-ITV
 'I went to work.'
- So far, we have only seen determiners, demonstratives, and fronting with -el forms:⁵
 - (46) [A jun munlaj-el tik] ch'oklaj. FOC one work-NML DEM strange 'This work is strange.'
- But either form is possible with aspectual verbs:
 - (47) a. Ix-a-yamoch [ha-munlaj-el].

 PRFV-A2-begin A2-work-NML

 'You began to work.'
 (Buenrostro 2013, 152)
 b. Ix-in-yamoch [hin-munlaj-i].

 PRFV-A1-begin A1-work-ITV

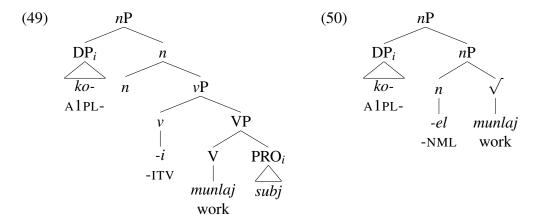
 'I began to work.'

⁵Like other Q'anjob'alan languages, Chuj has a series of nominal classifiers (see e.g. Craig 1986; Zavala 2000; Hopkins 2012), which have a determiner-like function. However, these generally do not appear on abstract nouns and are correctly predicted to be absent from nominalizations.

- As subjects in (48), either is possible:
 - (48) a. Man te wach-ok-laj [ko-munlaj-el].

 NEG very good-IRR-NEG Alp-work-NML

 'Our work isn't very good.'
 - b. Man te wach-ok-laj [ko-munlaj-i]. NEG very good-IRR-NEG A1P-work-ITV 'Our working isn't very good.'
 - **Our consultant remarks:** in (48a), we are talking about the work that was done, i.e. the result; in (48b) it is more like we don't work well
 - o This seems roughly consistent with the English bare noun vs. gerund form in the translations
- Though more work is needed, we tentatively suggest that *-el* forms are smaller nominalizations—perhaps directly from the root—not involving a *vP* layer. Compare:



- The differences between the availability of one form or another may ultimately fall out front these different structures
- \Rightarrow Since the aspectual predicate *lan* does not introduce a thematic subject, it may require the embedded nominalization to assign a θ -role to one (i.e. PRO) in (45a)
- ⇒ The appearance of D⁰ elements only with smaller -el forms like (46) would have some cross-linguistic precedent. Compare, e.g. the ungrammaticality of determiners and demonstratives with English poss-ing gerunds (see Borsley and Kornfilt 2000):
 - (51) a. We discussed this/that/the **criticism of the book**.
 - b. * We discussed this/that/the **criticizing the book**.

5 Conclusions

- In this talk, we examined progressive constructions in Chuj, an understudied Mayan language of Guatemala
 - Building on work on other Mayan languages, we suggested that the appearance of a split in person marking in the progressive aspect, is due to differences in structure between progressive and non-progressive aspects
 - Namely, the progressive aspect marker behaves as a stative predicate, taking a nominalized verb form as its complement
- §3 evidence that the progressive marker behaves like a predicate
- §4 evidence that the stem form behaves like a noun
- ► However, the stem form does not behave like any noun in the language: it behaves like a nominalized *v*P
 - This is especially clear in the case of embedded transitives, which show reflexives of case-assigning Voice morphology
 - o Though not discussed here, passives are also possible in such forms
 - Finally, in §4.4 we examined a different "more noun-like" type of nominal stem form
 - In future work, we hope to connect this to differences in the point at which the root/stem is nominalized

References

Borsley, Robert D., and Jaklin Kornfilt. 2000. Mixed extended projections. *Syntax and Semantics, The Nature and Function of Syntactic Categories* 32:101–131.

Bricker, Victoria R. 1981. The source of the ergative split in Yucatec Maya. *Journal of Mayan Linguistics* 2:83–127.

Buenrostro, Cristina. 2004. El sufijo -an en el Chuj de San Mateo Ixtatán. *Anales de Antropología* 38:255–267.

Buenrostro, Cristina. 2007. Oraciones de complemento en Chuj de San Mateo Ixtatán. *Anales de Antropología* 41:239–266.

Buenrostro, Cristina. 2013. La voz en Chuj de San Mateo Ixtatán. Doctoral Dissertation, El Colegio de México, Mexico City.

Bybee, Joan L., Revere D. Perkins, and William Pagliuca. 1994. *The evolution of grammar*. University of Chicago Press.

Carolan, Elizabeth. 2015. An exploration of tense in Chuj. Paper presented at the Annual Meeting of the *Society for the Study of Indigenous Languages of the Americas* (SSILA), Portland, Oregon.

Coon, Jessica. 2013. Aspects of split ergativity. Cambridge: Oxford University Press.

Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. to appear. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation*.

Craig, Collette. 1986. Jacaltec noun classifiers. *Lingua* 70:241–284.

Craig, Collette Grinevald. 1977. The structure of Jacaltec. Austin: University of Texas Press.

Dixon, R. M. W. 1979. Ergativity. Language 55:59-138.

Dixon, R. M. W. 1994. Ergativity. Cambridge: Cambridge University Press.

Domingo Pascual, Pascual Martín. 2007. *Stzolalil stz'ib'chaj ti' Chuj / Gramática normativa Chuj*. Academia de Lenguas Mayas de Guatemala.

Henderson, Robert. 2012. Morphological alternations at the intonational phrase edge: The case of K'ichee'. *Natural Language and Linguistic Theory* 30:741–787.

Hopkins, Nicholas. 2012. Noun classifiers of the Chuchumatán Mayan languages: A case of diffusion from Otomanguean. *International Journal of American Linguistics* 78:411–427.

Imanishi, Yusuke. 2014. Default ergative. Doctoral Dissertation, Massachusetts Institute of Technology, Cambidge, MA.

Larsen, Tomas W., and William M. Norman. 1979. Correlates of ergativity in Mayan grammar. In *Ergativity: Towards a theory of grammatical relations*, ed. Frans Plank, 347–370. London/New York: Academic Press.

Legate, Julie Anne. 2008. Morphological and Abstract Case. Linguistic Inquiry 39:55–101.

Mateo Pedro, Pedro. 2009. Nominalization in Q'anjob'al Maya. In *Kansas working papers in linguistics*, ed. Stephanie Lux and Pedro Mateo Pedro, volume 31, 46–63. Lawrence: University of Kansas.

Mateo-Toledo, B'alam Eladio. 2003. Ergatividad mixta en Q'anjobal (Maya): Un reanálisis. In *Proceedings of the Conference of Indigenous Language of Latin America 1*.

Maxwell, Judith M. 1976. Chuj intransitives: Or when can an intransitive verb take an object? *Journal of Mayan Linguistics* 1:128–140.

Ordóñez, Francisco. 1995. The antipassive in Jacaltec: A last resort strategy. *CatWPL* 4:329–343. Pascual, Adán F. 2007. Transitividad y dependencia sintáctica y discursiva en Q'anjob'al. Master's thesis, CIESAS, México.

Zavala, Roberto. 2000. Multiple classifier sytems in Akatek (Mayan). In *Systems of nominal classification*, ed. Gunter Senft, 114–146. Cambridge, UK: Cambridge University Press.