

Nominalization in Q'anjob'al (Maya)*

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Introduction

Q'anjob'al typically makes a rigid distinction between transitive and intransitive verb inflections. Transitive verbs cross-reference their subjects with an ergative prefix while intransitive verbs cross-reference their subjects with an absolutive prefix. Transitive verbs have one set of status suffixes, while intransitive verbs have a different set of status suffixes. However, an exception to this rule occurs in complement clauses that lack an aspect marker. Two phenomena are known: split ergativity and syntactic dependency (Francisco Pascual, 2007; and Mateo Toledo, 2008). In split ergativity, intransitive verbs take ergative cross-reference markers instead of absolutive markers, as in (1)a. In contrast, in syntactic dependency, transitive verbs in the same contexts bear the suffix *-on*¹ but continue to cross-reference the subject and object via ergative and absolutive affixes, shown in (1)b.

- (1) a. lanan [ha-way-i].
 PROG² E2s-sleep-IV
 'You are sleeping.'
- b. lanan [hach w-il-on-i].
 PROG A2S E1s-see-DM-IV
 'I am seeing you.'

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¹ The morpheme *-on* shows two allomorphs; the form *-on* appears with root transitive verbs, while the allomorph *-n* appears with derived transitive verbs. Throughout the paper I will refer to this distribution as *-on*.

² Abbreviations: A(bsolutive), ABS(tract), AP(Antipassive), CAU(sative), CL(assifier), COMPL(ementizer), COND(itional), COM(pletive aspect), DM(Dependent marker), DAT(ive), DEP(endent), DER(ivation), DET(erminer), DIR(ectional), DTV(Derived transitive verb), DUR(ative), E(rgative), INC(ompletive aspect), INTR(ansitivizer suffix), IRR(ealis), ITNS(Intensifier), IV(Intransitive verb), NEG(ation), NF(Nonfinite), NOM(inalizing suffix), PROS(odic licensing), PAS(sive), PL(ural), POT(ential), PRE(position), PRO(noun), PROG(ressive), RCOM(Remote completive aspect), RN(Relational noun), RTV(Root transitive verb), S(ingular), SUF(fix), TOP(ic), VS(Verb stem). Symbols: / (Two different morphemes with different contexts of use, ~ (Variation of a morpheme), - - - (Absence of morpheme), ? (Lack of data). For uniformity, I modified the abbreviations of the data from their original sources.

To date, studies on split ergativity and syntactic dependency in Q'anjob'al (Francisco Pascual, 2007; Mateo Toledo, 2004a, 2008) do not provide a unified explanation for the fact that both intransitive and transitive verbs occur in complement clauses that lack an aspect marker. They raise questions regarding agreement on transitive verbs and change of a transitive verb into intransitive.

In this paper I propose that split ergativity with intransitive verbs and syntactic dependency with transitive verbs can be explained by assuming a nominalization hypothesis in complement clauses that lack an aspect marker (c.f. Larsen & Norman, 1979; Bricker, 1981). In this context the split ergative marking on intransitive verb stems follows the regular pattern of ergative possessor marking on nouns that is common in ergative languages. The nominalization of transitive verbs in Q'anjob'al requires intransitivization. Transitive verb stems must be intransitivized before they can undergo nominalization. The intransitivization constraint accounts for the intransitivizing derivational suffix *-on* that appears on complement transitive verbs. The nominalization hypothesis rejects the idea that complement transitive verbs continue to cross-reference both subjects and objects after undergoing intransitivization. I will argue that the ergative prefix on nominalized transitive verb stems is identical to the ergative prefix on nominalized intransitive verb stems; it cross-references the possessor of the nominalized verb. I further argue that the absolutive marker cross-references the subject of intransitive matrix predicate rather than the object of the nominalized complement transitive verb.

I will focus on intransitive and transitive verbs in complement clauses that lack an aspect marker in Q'anjob'al although I introduce data from other Mayan languages to support my analysis of nominalization for Q'anjob'al. The paper proceeds as follows: The next section introduces the ergative system in Q'anjob'al. Section 2 presents the nominalization hypothesis for Q'anjob'al, which includes a subsection on intransitivization showing that transitive verbs in complement clauses that lack an aspect marker are morphologically intransitive. Section 3 presents comparative data on nominalization from other Mayan languages. These data show that the nominalization constraint is widespread across the Mayan language family; and that intransitivization must come first before nominalization. In section 4 I present my conclusion.

1. Ergative system in Q'anjob'al

Inflection is marked on the verb as shown in the template in (2). Transitive verbs take aspect, absolutive, ergative and status suffix, as in (3)a, while intransitive verbs take aspect, absolutive, and status suffix, as in (3)b. Three aspects are marked in Q'anjob'al: *ch-* incomplete, *max-* complete, and *hoq-* potential. The complete aspect *max-* is shown in (3).

(2) Q'anjob'al verb template

ASPECT + ABSOLUTIVE + (ERGATIVE) + VERB + (STATUS SUFFIX)

- (3) a. **max-ach** **w-il-a'**.
 COM-A2S E1S-see-RTV
 'I saw you.'

- b. **max-ach** way-i.
 COM-A2S sleep-IV
 ‘You slept.’

3.1 Absolutive and ergative morphemes

Ergative morphemes cross-reference transitive subjects while absolutive morphemes cross-reference intransitive subjects and transitive objects (3). In (3)a the ergative *w-* cross-references the subject of the transitive verb *il* ‘see’ while *-ach* cross-references the object. In (3)b the same absolutive morpheme (*-ach*) cross-references the subject of the intransitive verb *way* ‘to sleep’. Ergative morphemes have two sets of allomorphs as shown in Table 1.

Table 1. Ergative and absolutive morphemes in Q’anjob’al

Ergative	Absolutive	Person/number
w-/hin-	-in	1person singular
∅-/ha-	-ach	2person singular
y-/∅-	-∅	3person singular
j-/ko-	-on	1person plural (dual)
j-/ko-... hon	-on... hon	1person plural (excl)
j-/ko-... heq	-on... heq	1 person plural (incl)
hey-/he-	-ex	2person plural
y-/∅-... heb’	-∅... heb’	3person plural

While discussing the functions of ergative and absolutive morphemes it is important to mention split ergativity and syntactic dependency in Q’anjob’al. Split ergativity occurs when an intransitive subject is cross-referenced by an ergative morpheme instead of an absolutive morpheme (Zavala, 1992; Raymundo González, et. al, 2000; Mateo Toledo, 2003; Francisco Pascual, 2007; Mateo Pedro, to appear) in complement clauses that lack an aspect marker (Mateo-Toledo, 2004a). In (4)a the intransitive verb *b’ey* ‘to walk’ is cross-referenced by the absolutive morpheme in simple clause. However, the same intransitive verb *b’ey* is cross-referenced by an ergative morpheme in (4)b given that the verb appears in an complement clause that lacks an aspect marker. Using aspect and absolutive marking instead of ergative marking is ungrammatical (4)c.

- (4) a. **ch-ach** b’ey-i. Absolutive
 INC-A2S walk-IV
 ‘You walk.’
- b. **chi-∅** uj [ha-b’ey-i]. Ergative (Split ergativity)
 INC-A3S can E2S-walk-IV
 ‘You can walk.’
- c. ***chi-∅** uj [ch-ach b’ey-i]. *Absolutive
 INC-A3S can INC-E2S walk-IV
 ‘You can walk.’

In contrast, syntactic dependency occurs when a transitive verb bears the suffix *-on*, but continues to cross-reference the subject and object via ergative and absolutive affixes. On one hand, (5)a shows the ergative system in Q'anjob'al, in which the transitive subject is cross-referenced by the ergative morpheme *w-* and the transitive object is cross-referenced by the absolutive morpheme *-ach*. On the other hand, in (5)b the transitive verb bears the suffix *-on* but continues to cross-reference the subject and object with ergative and absolutive affixes.

- (5) a. *ch-ach w-il-a'*.
 INC-A2S E1s-see-RTV
 'I see you.'
- b. *lanan [hach w-il-on-i]*.
 PROG A2S E1s-see-DM-IV
 'I am seeing you.'

1.2 Status suffixes

Status suffixes in Q'anjob'al vary according to aspect, transitivity, whether the verb is root or derived, and the position of the verb in a clause (Mateo-Pedro, 2005, to appear). Transitive verbs are considered root when they contain the syllable structure vowel-consonant-vowel (CVC), and derived if they show a syllable structure different than CVC.

Transitive verbs take *-V'* and *-j* as their status suffixes. Examples in (6) show that root transitive verbs take the status suffix *-V'* while examples in (7) show that derived transitive verbs take *-j*. In this respect, transitive verbs select their status suffixes in accordance with whether they are root or derived. The status suffix *-V'* occurs final position (6)a and not in non-final position (6)b. The status suffix *-j* occurs in final (7)a and non-final positions (7)b.

- (6) a. *max-ach y-il-a'*.
 COM-A3S E3s-see-RTV
 'S/he saw you.'
- b. *max-ach y-il ewi*.
 COM-A2S E3s-see yesterday
 'S/he saw you yesterday.'
- (7) a. *ch-ach hin-way-tzene-j*.
 INC-A2S E1s-sleep-CAU-DTV
 'I make you sleep.'
- b. *ch-ach hin-way-tzene-j yekal*.
 INC-A2S E1s-sleep-CAU-DTV tomorrow
 'I will make you sleep tomorrow.'

The status suffix of root transitive verbs *-V'* captures the morpho-phonological processes shown in the short list of root transitive verbs in (8). Root transitive verbs that contain the vowels /*a, o, u*/ show vowel harmony in the status suffix. The vowel of the root transitive verb is copied

as the status suffix with the addition of the glottal stop, while the form *-a'* surfaces only with root transitive verbs that contain the vowels /i, e/ and they do not show vowel harmony (Mateo Toledo, 1999).

(8) Root transitive verbs and status suffix.

<i>maq'-a'</i>	'hit'	<i>t'un-u'</i>	'carry'
<i>aq'-a'</i>	'give'	<i>sik'-a'</i>	'pick (up)'
<i>man-a'</i>	'buy'	<i>xiq-a'</i>	'cut'
<i>jaq-a'</i>	'open'	<i>il-a'</i>	'see'
<i>kol-o'</i>	'help'	<i>ten-a'</i>	'touch'
<i>txon-o'</i>	'sell'	<i>b'eq-a'</i>	'let'
<i>muq-u'</i>	'bury'	<i>k'ex-a'</i>	'change'

Intransitive verbs have the status suffixes *-i* and *-oq*. Intransitive verbs in completive and incompletive aspects take the status suffix *-i* (9)a, while intransitive verbs in the potential aspect take the status suffix *-oq* (10)a. Both *-i* and *-oq* only occur in final position (9)b & (10)b.

(9) a. max-ach way-i.
 COM-A2S sleep-IV
 'You slept.'

b. max-ach way b'ay tx'at.
 COM-A2S sleep PRE bed
 'You slept on the bed.'

(10) a. hoq-in way-oq.
 POT-A1S sleep-IV
 'I am going to sleep.'

b. hoq-in way b'ay tx'at.
 POT-A1S sleep PRE bed
 'I am going to sleep on the bed.'

In this section we have seen that the verb template in Q'anjob'al requires inflection of aspect, absolutive, ergative, and status suffix (11). Status suffixes for root transitive verbs and status for intransitive verbs do not remain in non-final position; only the status suffix for derived transitive status suffix remains in both positions.

(11) Ergative system in Q'anjob'al

Intransitive	Transitive
+ aspect	+ aspect
+ absolutive	+ absolutive & ergative
+ status suffix <i>-i/-oq</i>	+ status suffix <i>-v'/-j</i>

2. Nominalization hypothesis for Q'anjob'al

Studies on complementation in Q'anjob'al have argued that, in contexts like in (1)(5)b, and repeated below as (12), transitive verbs take *-on* to indicate syntactic dependency. The suffix *-i* that appears in final position is only an attachment to *-on* (Mateo Toledo, 2008) or an indication of sentence closure (Francisco Pascual, 2007).

- (12) lanan [hach w-il-on-i].
 PROG A2S E1S-see-DM-IV
 'I am seeing you.'

These studies have shown properties of split ergativity and syntactic dependency in Q'anjob'al as in (13). Some verbs that trigger split ergativity and syntactic dependency are listed in (14) (Francisco-Pascual, et. al, 2007).

(13) Properties of split ergativity and syntactic dependency in Q'anjob'al

Split ergativity (Intransitive Verbs)	Syntactic dependency (Transitive Verbs)
- aspect	- aspect
+ ergative	+ ergative & absolutive
- - -	+ morpheme <i>-on</i>
+ suffix <i>-i</i>	+ suffix <i>-i</i>

(14) Some verbs that trigger split ergativity and syntactic dependency in Q'anjob'al:

<i>je -k'ul</i>	'to desire, accept'	<i>ojtaq</i>	'to know (pleasure)'
<i>kan yul -k'ul</i>	'to know how'	<i>kuyu'</i>	'to learn how'
<i>ab'ej</i>	'to hear'	<i>il</i>	'to see'
<i>waychilnej</i>	'to dream'	<i>etz'ej</i>	'to imitate'
<i>matz'ej</i>	'to observe'	<i>ab'lej</i>	'to taste, feel'
<i>cha'</i>	'choose for'	<i>cha -k'ul</i>	'to like'
<i>echb'anej</i>	'to wait for'	<i>aq'lej</i>	'to try'
<i>na'</i>	'to think of'	<i>al</i>	'to invite, say'
<i>cheq</i>	'to send, order'	<i>iqej</i>	'to obey'

However, these studies on complementation in Q'anjob'al do not take into account the changes to both intransitive and transitive verbs in complement clauses that lack an aspect marker. In this section I will focus on transitive verbs that take *-on* and *-i* in contrast to intransitive verbs in complement clauses that lack an aspect marker. I will argue that in Q'anjob'al intransitive and transitive verbs in this type of clauses undergo nominalization.

If the nominal hypothesis is correct then it has the following implications for the nominalization of intransitive and intransitive verbs in Q'anjob'al. On the one hand, nominalized intransitive verbs take ergative morphemes instead of the expected absolutive morphemes and the nominalizing suffix *-i*. On the other hand, nominalized transitive verbs must a) undergo intransitivization before nominalization; b) take the intransitivizer *-on*; c) they are cross-referenced by ergative morphemes only and cannot have both absolutive and ergative morphemes. The absolutive morpheme from the complement intransitivized transitive verb for nominalization cross-references the subject of the intransitive matrix clause. Then, in complement clauses that lack an aspect marker, the suffix *-i* indicates nominalization of

transitive and intransitive verbs and not just an attachment to *-on* (Mateo Toledo, 2008), sentence closure (Francisco Pascual, 2007), or intransitivity (Mateo Pedro, to appear). I agree (Mateo Toledo, 2008, p.c.) that the suffix *-i* is problematic, however one possible explanation is that it indicates nominalization. Intransitivization must come before the nominalization of intransitive and transitive verbs in complement clauses that lack an aspect marker; and only intransitive stems are licensed for nominalization in Q'anjob'al. Generalizing that only intransitive verbs in this type of clauses are licensed for nominalization explains why intransitive verbs in the same type of clauses take ergative morphemes. It also explains why the suffix *-i* is attached to intransitive and transitive verbs. Similar implications for nominalization are seen in other Mayan languages such as K'iche' (Law, et. al, 2006; Pye, 2007, p.c.), or across Mayan languages (Mora Marin, 2000).

The nominalization hypothesis suggests that split ergativity and syntactic dependency in Q'anjob'al follow one general rule, nominalization (Larsen & Norman, 1979). Split ergativity in Q'anjob'al was presented in (1)a, which occurs with intransitive verbs in complement clauses that lack an aspect marker. Switching from ergative system to nominative/accusative system in complement clauses is seen in other Mayan languages, Bricker (1981) for Yucatec; Lengyel (1978) for Ixil. The nominalization hypothesis for Q'anjob'al is reflected in the glossing of *-on* as an intransitivizer (INTR) and *-i* as a nominalizer (NOM) throughout the examples of what remains in the paper. In (15) I present a summary of the nominalization of transitive and intransitive verbs in complement clauses in Q'anjob'al (Pye, et. al., 2008).

(15) Nominalization of intransitive and transitive verbs in Q'anjob'al

Nominalization of intransitive verbs	Nominalization of transitive verbs
-aspect	-aspect
+ergative morpheme	+ergative morpheme
- - -	+intransitivizer <i>-on</i>
+nominalizing suffix <i>-i</i>	+nominalizing suffix <i>-i</i>

The nominalization hypothesis raises a question about the status of split ergativity in Q'anjob'al (Zavala, 1992; Raymundo González, et. al, 2000; Mateo Toledo, 2004a; Francisco Pascual, 2007; Mateo Pedro, to appear). Assuming that the nominalization hypothesis is correct, then split ergativity does not occur in Q'anjob'al. The argument for nominalization instead of split ergativity in Q'anjob'al could be true for other Mayan languages that display split ergativity, except split ergativity in Mocho, where the split is conditioned by the person hierarchy (Larsen & Norman, 1979).

Accounting for argument structure of intransitive and transitive verbs in complement clauses that lack an aspect marker is a weakness of the nominalization hypothesis for Q'anjob'al. However, I assume the same problem of argument structure applies to Francisco Pascual (2007) and Mateo Toledo's (2008) analyses; especially when they argue that even though a transitive verb takes *-on* it is semantically transitive because it takes absolutive and ergative morphemes. Also, their argument that the suffix *-i* indicates sentence closure (Francisco Pascual, 2007) or it is just attached to *-on* (Mateo Toledo, 2008) becomes problematic for argument structure. A possible solution is to argue that the absolutive morpheme in the nominalized complement transitive verb raises to the intransitive matrix clause to cross-reference the intransitive subject.

2.1 Intransitivization

Transitive verbs in complement clauses that lack an aspect marker in Q'anjob'al shows that intransitivization must occur before nominalization. Intransitivization before nominalization raises the question for transitive verbs in complement clauses like in (16)c, in which the verb takes the passive morpheme *-lay* and not the expected form *-on*. In (16)a ergative cross-referencing is shown; in (16)b only the patient is marked on the verb by *-lay* and the agent is introduced by the relational noun *-uj* cross-referenced by the ergative morpheme *y-*. In (16)c even though the form *-lay* is marked on the verb it is not cross-referenced by an absolutive marking (16)b; instead, it is cross-referenced by ergative an marking instead because the transitive verb *maq'* 'to hit' is complement to the intransitive verb *xew* 'to finish'.

- (16) a. max-ach s-maq'-a'.
 COM-A2S E3s-hit-RTV
 'S/he hit you.'
- b. max-ach maq'-lay y-uj.
 COM-A2S see-PAS E3s-RN
 'You were hit by him/her'
- c. max-∅ xew [ha-maq'-lay] y-uj.
 COM-A3S finish E2s-hit-PAS E3s-RN
 'You finished being hit by him/her.'

If the syntactic dependency analysis of the morpheme *-on* in Q'anjob'al (Francisco Pascual, 2007; Mateo Toledo, 2008) is true, then one should expect *-on* in other contexts such as (17). In (17)a there is a combination of *-lay* and *-on* on the transitive verb *maq'* 'to hit'. The morpheme *-on* is required to indicate syntactic dependency. However, combining both *-lay* and *-on* is ungrammatical. Then, (17)b shows that intransitivization cannot occur twice in Q'anjob'al; therefore (17)c is expected.

- (17) a. *max-∅ xew [ha-maq'-lay-on] y-uj.
 COM-A3S finish E2s-hit-PAS-INTR E3s-RN
 'You finished being hit by him/her.'
- b. max-∅ xew [ha-maq'-lay] y-uj.
 COM-A3S finish E2s-hit-PAS E3s-RN
 'You finished being hit by him/her.'

3. Nominalization in Mayan languages

Comparing the nominalizing suffix *-i* of Q'anjob'al with other Mayan languages will provide a better understanding of nominalization. For this purpose I present data from Mayan languages by grouping them in branches (Kaufman, 1990): K'ichean branch: Kaqchikel, K'iche', Achi, Poqom del Sur, Q'eqchi'; Yucatecan branch: Yucatec and Mopan; Tzeltalan branch: Ch'ol and Tzeltal;

Mamean branch: Ixil; and Q'anjob'alán branch: Tojol'ab'al, Chuj, Akatek, Jacalteco, and Q'anjob'al.

The Kaqchikel data in (18) show the use of *-ik* and *-Vn* for nominalization. In (18)a and (18)b *-ik* and *-Vn* mark nominalization of intransitive verbs. In contrast, in (18)c only *-ik* marks nominalization of transitive verbs and the transitive base *tz'ib'-a* 'write' undergoes intransitivization before taking the nominal suffix *-ik*. Both nominalizing suffixes in Kaqchikel remain in non-final position (18)c.

- (18) a. rat x-ø-a-chöp [atin-**ik**] Kaqchikel (Mateo Pedro)³
 you COM-A3S-E2S-start bathe-NOM
 'You started to bathe.'
- b. y-in-ajin [che wa'-**in**].
 INC-A1S- PROG PRE eat-NOM
 'I am eating.'
- c. x-ø-u-chäp [__ tz'ib'-a-n-**ik**] ri ak'wal (Ajsivinac Sián, 2007)
 COM-A3S-E3p-grab write-VS-AP-NOM DET child
 'The boy started to write.'

In K'iche' *-Vm* and *-ik* indicate nominalization (19). The suffix *-Vm* indicates the nominalization of intransitive verbs (19)a, while the suffix *-ik* indicates the nominalization of both intransitive and transitive verbs (19)b. In (19)b there is no overt intransitivization marking, which happens sometimes in Kaqchikel although the interpretation indicates that passivization has occurred. Both nominalizing suffixes in K'iche' remain in non-final position (19)c. Par Sapón's (2007) data do not show alternation of *-Vm* or *-ik* for the nominalization of intransitive verbs or vowel lengthening of the vowel of *-ik* when it indicates nominalization. Other studies in K'iche' (Kaufman, 1900; Larsen, 1988; Mondloch, 1978; Pye, et. al, 2008) have shown that *-Vm* and *-iik* can be suffixed to intransitive verbs; and the nominal suffix *-ik* shows for example vowel lengthening (see Table 2).

- (19) a. x-ø-u-maj [wa'-**im**] K'iche' (Par Sapón, 2007)
 COM-A3S-E3S-start eat-NOM
 'S/he started to eat.'
- b. ma x-in-b'e ta [chi r-il-**ik**]
 NEG COM-A1S-go IRR COMPL A3S-see-NOM
 'I did not go to see him/her/it.'
- c. x-at-ki-taqchi'-j ri aw-achi'l [chi u-tij-**ik** q'or]
 COM-A2S-E3S-force-DTV DET E2S-mate COMPL E3S-eat-NOM dough
 'Your mates forced you to eat corn dough.'

³ Field notes on Kaqchikel (Spring-2007) from the dialect of Patzún, Chimaltenango.

- (23) a. k u-lúub-**ul**. (Pye, et. al., 2008)
 INC E3s-fall-NOM
 ‘S/he falls.’
- b. t-uy-il-ah-ø tàal-**ik**-en.
 COM-E3s-see-statis-A3s come-NOM-A1s
 ‘S/he saw me coming.’
- c. táan in kon-**ik**-ø.
 PROG E1s sell-NOM-A3s
 ‘I am selling it.’

In Mopan, nominalization is shown by *-Vl* and *-ik* (24). The nominalization of intransitive verbs is shown by *-Vl* (24)a while the nominalization of transitive verbs by the suffix *-ik* (24)b. There is no overt derivation marking in Mopan when the suffix *-ik* is used for nominalization. Larsen (1990) labels *-Vl* and *-ik* only as suffixes in contexts of split ergativity in Mopan.

- (24) a. tan a-lub’-**ul** Mopan (Larsen, 1990)
 PROG E2s-fall-NOM
 ‘You are falling.’
- b. tan in-lox-**ik**-ech
 PROG E1s-hit-NOM-A2s
 ‘I am hitting you.’

Ch’ol uses only the suffix *-Vl* for the nominalization of transitive and intransitive verbs (25). However, even though Ch’ol uses only *-Vl* it shows overt marking of intransitivization before nominalization (25)b. Tseltal also uses *-Vl* for the nominalization of intransitive and transitive verbs (26), but without overt marking of intransitivization before nominalization. The nominalizing suffixes remain in non-final position; (25)b for Ch’ol and (26)b for Tseltal.

- (25) a. chonkol-ø-ix [k-bo’y-**el**]⁴ Ch’ol (Vázquez Alvarez, 2007)
 PROG-A3s-already E1s-agonize-NOM
 ‘I am already agonizing.’ Lit: ‘I am getting tired.’
- b. mi k-mul-añ-ø [wuts’-oñ-**el** tyi ñojpa’]
 INC E1s-like-SUF-A3s wash.clothes-AP-NOM PRE river
 ‘I like to wash clothes in the river.’
- (26) a. ya j-mulan-ø nux-**el** Tseltal (Santiz & Polian, 2007)
 COM E1s-appreciate-A3s swim-NOM
 ‘I like to swim.’

⁴ The nominalized form in brackets is from Vázquez-Alvarez’s (2007) data.

- b. ma x-ju'-ø k-u'un [s-tsum-el te k=ajk' e]
 NEG INC-can be-A3S E1S-RN E3S-start-NOM DET fire CL
 'I cannot start the fire.'

Tojol'ab'al also uses *-VI* for the nominalization of transitive and intransitive verbs (27) with overt marking of intransitivization before nominalization (27)b. The nominalized verb can be headed by a determiner as shown in (27)a-b.

- (27) a. ø-s-mon-a-won [ja way-el i]⁵
 COM-E3S-convince-status-A1S DET sleep-NOM TOP
 'S/he convinced me to sleep.'
- b. kala wab' lek [ja s-k'uts'-j-el ja si'i]
 I told you good DET E3S-cut-PAS-NOM the.firewood
 'I promised you to split the firewood.'

Ixil uses the suffix *-e'* to mark nominalization of intransitive and transitive verbs in progressive context as shown in (28). Lengyel (1978) observes that the suffix *-e'* occurs on transitive and intransitive verbs. In (28)b the transitive verb takes absolutive and ergative morphemes. Lengyel argues that the suffix *-e'* does not indicate nominalization in Ixil since the verb has nominative/accusative case marking. The comparison of nominalization in Mayan languages suggests that the suffix *-e'* in Ixil indicates nominalization (Ayres, 1981).

- (28) a. n(i) i-q'os-ø-e'. Ixil (Lengyel, 1978)
 PROG-E3S-hit-A3S-NOM
 'He is hitting it/him/her.'
- b. n(i) i-wat-e'.
 PROG-A3S-sleep-NOM
 'He is sleeping.'

In Chuj only the suffix *-i* is used to mark nominalization of intransitive and transitive verbs (29)a and (29)c. Even though there is only one suffix for nominalization there is overt intransitivization marking before nominalization (29)c. The nominalizing suffix *-i* does not remain in non-final position (29)d. Also, the nominalizing suffix *-i* can alternate with the suffix *-VI* as seen in the contrast between (29)a and (29)b.

- (29) a. ix-ø-in-yamoch [in-munlaj-i] Chuj (Buenrostro, 2007)
 COM-A3S-E1S-start E1S-work-NOM
 'I started to work.'
- b. ix-in-b'at [wa'-el]
 COM-A1S-go eat-NOM
 'I went to eat.'

⁵ Tojol'ab'al (Peake & Curiel, 2007).

- c. ix-ø-in-yamoch [ach-in-mak'-an-i]
 COM-A3S-E1S-start A2S-E1S-hit-INTR-NOM
 'I started to hit you.'
- d. ø-w-ojtak [in-b'o-an te' pat]
 A3S-E1S-know E1S-make-INTR CL house
 'I know how to make houses.'

In Jacaltec, the suffix *-i* indicates nominalization of intransitive and transitive verbs (30) (Craig, 1977). Based on Delgado Rojas & Ross Montejo (2000) I suggest that the morpheme *w-* in (30)a derives an intransitive verb from the nominal *kanhal* 'dance' while the morpheme *-n* in (30)b also derives an intransitive verb. What I have discussed in this section on nominalization in Mayan languages is summarized in Table 2. Indicative refers to the use of the status suffix in simple clause; Pros refers to prosody, whether the status suffix remains in non-final position or not; Nom IVs refers to the nominalization of intransitive verbs; and Nom IVs refers to the nominalization of intransitive verbs.

- (30) a. x-ø-w-il [ha-kanhal-w-i]. Jacaltec (Craig, 1977)
 COM-A3S-E1S-see E2S-dance-INTR-NOM
 'I saw you dance.'
- b. x-ø-wilwe hach [hin-kol-n-i].
 COM-A3S-E1S-try A2S E1S-help-INTR-NOM
 'I tried to help you.'

Table 2. Nominalization in Mayan languages

Branches	Languages	Indicative	Pros	Nom IVs	Nom TVs	Pros
K'ichean	Kaqchikel	---	---	-ik/-Vn	-ik	no
	K'iche'	-ik	yes	-Vm	-k/(i)ik	no
	Achi	-(i)k	yes	-VVm	-iik	no
	Poqom Sur	-a	no	-ik	-VVj	no
	Q'eqchi'	-unk	no	-ik	-k/-Vm/-Vl	?
Yucatecan	Mopan ⁶	---	---	-Vl	-ik	no
	Yucatec	-ih (com, A3)	no	-Vl	-ik	no
Tzeltalan	Ch'orti' ⁷	---	---	---	---	---
	Ch'olti' ⁸	---	---	-Vl	?	?
	Ch'ol	-i	no	-Vl	-∅	no
	Chontal ⁹	---	---	-o	?	?
	Tzeltal	---	---	-Vl	-Vl	no
Mamean	Ixil	-ih (punctual)	?	-e'	-e'	no
Q'anjob'alán	Tojol'ab'al	-i	yes	-Vl	-Vl	No
	Chuj	-i	yes	-i/-Vl	-i	yes
	Jacaltec	-i	yes	-i	-i	yes
	Akatek	-i	yes	-i	-i	yes
	Q'anjob'al	-i	yes	-i	-i	yes

The nominalization data in Mayan languages in Table 2 show the following: First, K'ichean languages (Kaqchikel, K'iche', Achi, Poqom del Sur, and Q'eqchi') distinguish nominalization marking depending on verb types. In K'iche' for example intransitive verbs take the nominalizing suffix *-Vn* and *-ik* while transitive verbs take the nominalizing suffix *-ik*. Yucatecan languages (Yucatec and Mopan) follow the K'ichean pattern using two types of nominalizing suffixes, *-Vl* for intransitive verbs and *-ik* for transitive verbs. In contrast, Tzeltalan (Ch'ol and Tzeltal), Ixil (Mamean), and Q'anjob'alán (Tojol'ab'al, Chuj, Jacaltec, Akatek, and Q'anjob'al) languages use only one suffix for the nominalization of transitive and intransitive verbs. Tzeltalan languages use *-Vl*, Ixil (Mamean) uses *-e'*, and Q'anjob'alán languages use *-i*.

Second, nominalization of transitive verbs requires intransitivization; a transitive verb must undergo intransitivization before nominalization. Some languages show overt marking of intransitivization (cf. Q'anjob'al) others do not; they only use the nominalizing suffix (cf. Ch'ol).

Third, the nominalizing suffixes in K'ichean, Yucatecan and Tzeltalan languages remain in non-final position. In contrast, the nominalizing suffixes in Q'anjob'alán languages, except for Tojol'ab'al, do not remain in non-final position, similar to the intransitive status suffix *-i* which does not remain in non-final position.

Fourth, a nominalized verb is optionally headed by a preposition (cf. K'iche' and Achi) or by a determiner (cf. Tojol'ab'al). In some Mayan languages a complementizer is the head of a transitive complement, but when the complement is intransitive the complementizer is optionally used (Aissen, 2008, p.c.). I consider the complementizer as a preposition or determiner given that prepositions or determiners are head of a nominal form as in (31)a for Q'eqchi' and in (31)b for Tojol'ab'al.

⁶ Hofling's (2006) data do not show use of the intransitive status suffix.

⁷ Law, et al, (2006).

⁸ Law, et al, (2006).

⁹ Law, et al, (2006).

- (31) a. x-in-lub' [(chi) r-iiq-a-n-k-il] Q'eqchi' (Xol Choc, 2007)
 RCOM-A1s-tired COMPL E3s-carry-DER-AP-status-NOM
 'I got tired of carrying it.'
- b. kala wab' lek [ja s-k'uts'-j-el ja si'i]¹⁰
 I told you good DER E3s-cut-PAS-NOM the firewood
 'I promised you to split the firewood.'

Fifth, in some Mayan languages the intransitive status suffixes are not used anymore. Kaqchikel (K'ichean), Mopan (Yucatecan), and the Tzeltalan languages, except Ch'ol, do not use the intransitive status suffix (England, 1994); however, they retain the nominalizing suffix with the exception of Ch'orti'. Even though some of these Mayan languages retain the intransitive status suffix, they use it in specific contexts. Yucatec uses the intransitive status suffix *-ih* only in the completive aspect with third person, as in (32)a (Bricker, 1981), while Ixil uses the same suffix *-ih* in progressive context only as in (32)b (Lengyel, 1978). In K'iche' and Achi the intransitive status suffix *-ik* does not remain in non-final position, but in Poqom del Sur, Q'eqchi' or Ch'ol it remains in non-final position. In contrast, in Q'anjob'alan languages the intransitive status suffix *-i* does not remain in non-final position.

- (32) a. h-lúub-**ih**-ø. Yucatec (Pye, et. al., 2008)
 COM-fall-status-A3s
 'S/he fell.'
- b. kat wat-ø-**ih**. Ixil (Lengyel, 1978)
 aspect-sleep-A3s-suffix
 'He slept.'

The nominalization of intransitive and transitive verbs in Q'anjob'al is marked only by the suffix *-i*; this suffix does not remain in non-final position like the intransitive status suffix *-i*. The nominalized complement intransitive stem in complement clauses that lack an aspect marker is not headed by a preposition or a determiner as in the contrast between (33)a and (33)b.

- (33) a. k'am chi-ø uj [ha-maq'-on-i].
 NEG INC-A3s can E2s-hit-INTR-NOM
 'You cannot hit it.'
- b. k'am chi-ø uj [(***b'ay**) ha-maq'-on-i].
 NEG INC-A3s can PRE E2s-hit-INTR-NOM
 'You cannot hit it.'

¹⁰ Tojol'ab'al (Peake & Curiel, 2007).

In summary, the data presented in section 3 and summarized in Table 2 show that nominalization is widespread across Mayan languages. Some Mayan languages (K'ichean and Yucatecan) use nominalizing suffixes by distinguishing the status of the verbs, whether they are transitive or intransitive verbs. Other Mayan languages (Tzeltalan, Mamean, and Q'anjob'al) mark nominalization of both transitive and intransitive verbs by using just one nominalizing suffix. Q'anjob'al falls into the group of Mayan languages that mark nominalization using one suffix. This fact may explain why Q'anjob'al uses the nominalizing suffix *-i* for the nominalization of both intransitive and transitive verbs.

4. Conclusion

In Q'anjob'al, as in other Mayan languages, split ergativity and syntactic dependency have been considered as separate phenomena. In both phenomena, agreement and intransitivity remain a problem. In this paper I argued that split ergativity and syntactic dependency in complement clauses that lack an aspect marker in Q'anjob'al follow a general rule: nominalization. This process of nominalization selects only complement intransitive stems; therefore transitive verbs in this type of clause must undergo intransitivization before nominalization. Nominalization is marked by the suffix *-i*. Then, the suffix *-i* indicates a) intransitivity in intransitive matrix clauses and b) nominalization of intransitive and transitive verbs in complement clauses that lack an aspect marker. The nominalization hypothesis for Q'anjob'al is strengthened by comparing data from other Mayan languages that show nominalization overtly. Assuming that the nominalization hypothesis is correct, it raises the question for the status of split ergativity in Q'anjob'al and in other Mayan languages with split ergativity. It seems that nominalization occurs and not split ergativity in Q'anjob'al. However, the nominalization hypothesis for Q'anjob'al faces the problem of argument structure of nominalized complement verbs. I did not focus on this issue in this paper, but I showed that intransitivization must occur before nominalization of transitive verbs in complement clauses that lack an aspect marker in Q'anjob'al, even though each intransitive construction varies in meaning in the language.

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