

# When Ergative is Default: A View from Mayan

Yusuke Imanishi

## 1. Introduction

In this paper, I will address a puzzle about the alignment between ergative/absolute Case and grammatical relations in Mayan languages. Mayan languages display a prototypical ergative alignment through head-marking – both the intransitive subject and the transitive object are cross-referenced by the absolutive agreement morpheme, whereas the transitive subject is cross-referenced by the ergative agreement morpheme. As in many other ergative languages, many Mayan languages exhibit aspect-based split ergativity – in the perfective aspect, they show an ergative alignment, whereas they display an accusative alignment pattern in the non-perfective aspect. I will focus on alignments in the nominative-accusative side of the ergative split of Kaqchikel, Chol and Q’anjob’al. In the accusative alignment pattern of Kaqchikel, the intransitive subject and the transitive subject alike are cross-referenced by the *absolutive* morpheme. On the other hand, the object of a transitive verb is cross-referenced by the *ergative* morpheme. Strikingly, Kaqchikel appears to exhibit a cross-linguistically rare alignment pattern in the non-perfective aspect – the ergative morpheme, which is normally limited to (transitive) subjects, is associated with the *object* of a transitive verb.

In contrast, other ergative split languages within Mayan such as Chol and Q’anjob’al display a very different alignment pattern in their nominative-accusative side. In these languages, both the intransitive subject and the transitive subject are cross-referenced by the *ergative* morpheme, while the *absolutive* morpheme cross-references the transitive object. The Chol/Q’anjob’al-type alignment pattern of the split side has been the subject of several prominent investigations (Larsen and Norman, 1979; Larsen, 1981; Bricker, 1981; Mateo Pedro, 2009; Coon, 2010, 2013a,b:etc.). By contrast, the Kaqchikel-type alignment of the split side has received little attention (see England 1983b for relevant discussion). The contrastive alignment patterns in these three languages are summarized as *the alignment puzzle in Mayan*.

### THE ALIGNMENT PUZZLE IN THE NOM-ACC PATTERNS OF MAYAN

#### (1) KAQCHIKEL-TYPE

	S	O
Intransitive	ABS	-
Transitive	ABS	ERG

#### (2) CHOL/Q’ANJOB’AL-TYPE

	S	O
Intransitive	ERG	-
Transitive	ERG	ABS

---

\* *Kwansei Gakuin University (Japan)*. Email: [imanishi@alum.mit.edu](mailto:imanishi@alum.mit.edu). I am indebted to my Kaqchikel consultants, Alberto Sipac Aju and Ana López de Mateo, for their assistance with my fieldwork research. I would also like to thank Jessica Coon, Sabine Iatridou, Pedro Mateo Pedro, David Pesetsky, Masha Polinsky, Norvin Richards and the audiences at WCCFL 32 for their helpful comments and stimulating discussions. Unless otherwise noted, the Kaqchikel data are drawn from my field notes. Any shortcomings or errors in the data or analysis are my own.

To explain the alignment puzzle, I will propose that ergative Case may be assigned as a default to an otherwise Case-less DP.<sup>1</sup> I will also argue that the contrastive alignment patterns follow from a single parametric difference between Kaqchikel and Chol/Q'anjob'al. To be precise, I will propose that an unaccusative requirement holds for nominalization in Kaqchikel, whereas the requirement does not obligatorily apply to nominalized verbs in Chol and Q'anjob'al – the requirement that a nominalized verb have an unaccusative structure, and hence cannot have an external argument. As will be discussed, the accusative side of the ergative splits of these languages involves nominalization. Under this analysis, the object receives ergative Case in non-perfective sentences of Kaqchikel because the object is a nominal that would be otherwise Case-less. On the other hand, subjects receive ergative Case in non-perfective sentences of Chol and Q'anjob'al because they would be otherwise Case-less.

## 2. The alignment puzzle in Mayan split ergativity

Mayan languages are head-marking ergative languages. Grammatical relations are cross-referenced, with ergative alignment, by agreement morphemes that appear on the predicate. The ergative and absolutive morphemes are called *set A* and *set B*, respectively, in Mayan linguistics. Set A markers cross-reference transitive subjects and possessors, whereas set B markers cross-reference intransitive subjects and transitive objects. All pronominal arguments in Mayan languages, including subjects, objects and possessors, may be pro-dropped. The examples given in (3), (4) and (5) illustrate (in)transitive sentences in Kaqchikel, Q'anjob'al and Chol, respectively.<sup>2</sup>

- (3) KAQCHIKEL
- a. yïn x-**e-in**-tz'ët tje'.  
I PRFV-Abs3P-ERG1s-see they  
'I saw them.'
- b. tje' x-**e-wär**.  
they PRFV-Abs3P-sleep  
'They slept.'

- (4) Q'ANJOB'AL
- a. max-**ach** w-il-a'.  
PRFV-Abs2s ERG1s-see-Rtv  
'I saw you.'
- b. max-**ach** way-i.  
PRFV-Abs2s sleep-Itv  
'You slept.'

(Mateo Pedro, 2009)

- (5) CHOL
- a. Tyi a-k'el-e-**yoñ**.  
PRFV ERG2s-watch-Tv-Abs1s  
'You watched me.'
- b. Tyi ts'am-i-**yoñ**.  
PRFV bathe-Itv-Abs1s  
'I bathed.'

(Coon, 2010:: 48)

A number of Mayan languages display aspect-based split ergativity (Lengyel, 1978; Larsen and Norman, 1979; Larsen, 1981; Bricker, 1981; England, 1983a,b; Mateo Pedro, 2009, 2011; Coon, 2010,

<sup>1</sup> Throughout the paper, I will use *capital* Case for abstract Case.

<sup>2</sup> The following abbreviations will be used in the paper: Abs-absolutive, AP-antipassive, CL-clitic, ERG-ergative, DET-determiner, DM-dependent marker, IMPF-imperfective aspect, ITV-status suffix for intransitive verbs, NEG-negation, NOML-nominalizer, PAS-passive, PL-plural, PRFV-perfective aspect, PREP-preposition, PROG-progressive aspect, RTV-root transitive, TV-status suffix for transitive verbs.

2013a:among others).<sup>3</sup> As has been discussed by the authors such as Dixon (1994) and Coon (2013b), one can state the following tendency of split ergativity in Mayan languages and other ergative languages : it is likely that the ergative system is observed in the left side of the directionality scale below, while the non-ergative system is on the right side of the scale.

(6) perfective » imperfective » progressive

In the perfective aspect, ergative languages tend to exhibit an ergative pattern, whereas they are likely to display a non-ergative pattern and particularly an accusative pattern in the non-perfective aspect (= imperfective and/or progressive).

Kaqchikel, Chol and Q'anjob'al instantiate this tendency. As shown below, an accusative pattern arises in the non-perfective aspect such as progressive sentences.<sup>4</sup> In the accusative alignment pattern of Kaqchikel, the intransitive subject and the transitive subject alike are cross-referenced by the *absolute* morpheme on the progressive predicate *ajin*, as seen in (7). On the other hand, the object of a transitive verb is cross-referenced by the *ergative* morpheme. Strikingly, Kaqchikel appears to exhibit a cross-linguistically rare alignment pattern in the progressive – the ergative morpheme, which is normally limited to (transitive) subjects, is associated with the *object* of a transitive verb.

- (7) a. y-**in**-ajin che [ki-k'ul-ik ak'wal-a'].  
 IMPF-ABS1s-PROG PREP ERG3p-meet-NOML child-Pl  
 'I am meeting children.'  
 b. y-**in**-ajin che [atin-ik].  
 IMPF-ABS1s-PROG PREP bathe-NOML  
 'I am bathing.'

In contrast, the accusative side of the ergative split of Q'anjob'al and Chol displays a very different alignment pattern in their nominative-accusative side. Both the intransitive subject and the transitive subject are cross-referenced by the *ergative* morpheme, while the *absolute* morpheme cross-references the transitive object, as shown in (8) (= Q'anjob'al) and (9) (= Chol).

- (8) a. lanan-∅ [hach w-il-on-i].  
 PROG-ABS3s ABS2s ERG1s-see-DM-ITV  
 'I am seeing you'  
 b. lanan-∅ [ha-way-i].  
 PROG-ABS3s ERG2s-sleep-ITV  
 'You are sleeping.'

(Mateo Pedro, 2009)

- (9) a. Choñkol-∅ [i-jats'-oñ].  
 PROG-ABS3s ERG3s-hit-ABS1s  
 'She's hitting me.'  
 b. Choñkol-∅ [i-majl-el].  
 PROG-ABS3s ERG3s-go-NOML  
 'She's going.'

(Coon, 2013a:11)

Aside from the difference in alignments between Kaqchikel and Chol/Q'anjob'al (i.e., the alignment puzzle), all subjects are cross-referenced by the same morpheme, while the transitive object is cross-referenced by a different morpheme: i.e., a nominative-accusative alignment pattern. The type of

<sup>3</sup> Following Coon (2010, 2013a) and slightly departing from Comrie 1976, I will use the opposition between *perfective* and *non-perfective* for the often-used opposition between *perfective* and *imperfective* (Comrie, 1976). Non-perfective in our terms corresponds to *imperfective* in Comrie's system. The non-perfective aspect is further divided into *imperfective* and *progressive*. See Coon's work and Imanishi (2014), for example, for discussion on aspects of Chol and Kaqchikel, respectively.

<sup>4</sup> Chol displays an accusative pattern in the imperfective (i.e., habitual and continuous non-progressive sentences) as well as in progressive sentences.(Coon, 2010, 2013a)

alignments found in the nominative-accusative side of Chol and Q'anjob'al has been the focus of much work on split ergativity, and particularly has been called *extended-ergative* (Dixon, 1979, 1994) in the sense that the ergative, which is normally limited to the transitive subject, extends to the intransitive subject (see the references above). In contrast, much less attention has been paid to the Kaqchikel-type alignment in which the ergative is limited to the transitive object. Thus, the split becomes obvious in intransitive sentences of Chol and Q'anjob'al, whereas it is visible in transitive sentences of Kaqchikel. In the sections that follow, I will provide an account of why this sharp difference in alignments of accusative patterns arises.

### 3. Analysis

#### 3.1. Parameterizing split ergativity in Mayan

In this section, I will argue that the contrastive alignment results from the presence or absence of an unaccusative requirement on a nominalized clause, a part of a non-perfective sentence in Kaqchikel and Chol/Q'anjob'al – the requirement that a nominalized verb have an unaccusative structure, and hence cannot have an external argument. I will also propose that ergative Case may be assigned as a default to an otherwise Case-less DP. Under this analysis, all subjects in Chol and Q'anjob'al receive ergative Case because they would be otherwise Case-less. In contrast, it is the transitive object in Kaqchikel that would be Case-less if ergative Case assignment did not take place. I will assume that this default ergative Case is syntactic rather than morphological in the sense of Schütze (2001) (see Imanishi 2014 for detailed discussion of how default ergative assignment takes place).

In the discussion that follows, I will assume that  $\phi$ -agreement (on a probe/head) is a precondition for Case assignment to a goal DP in the syntactic process of *Agree* (Chomsky 2000, 2001, cf. Bobaljik 2008), and that absolutive/ergative Case is morphologically null in Mayan. There is thus a one-to-one correspondence between absolutive/ergative Case and absolutive/ergative morphemes: absolutive and ergative morphemes appear iff absolutive and ergative Case, respectively, are assigned.

##### 3.1.1. Biclausal structure

I adopt a biclausal analysis for the nominative-accusative side of ergative splits in Mayan languages. Laka (2006) argues that an accusative alignment pattern found in the progressive sentences of Basque, an ergative language, forms a biclausal structure. Developing Laka's analysis of the ergative split in Basque, Coon (2010, 2013a) proposes that the nominative-accusative system of the ergative split in Chol also contains two clauses (see also Larsen and Norman, 1979; Bricker, 1981; Larsen, 1981; Mateo Pedro, 2009). Under her analysis, non-perfective sentences such as (9) consist of *a main predicate* and *a nominalized clause*. She claims that the bracketed forms in (9) are nominalized clauses. The non-perfective aspect marker *choñkol* is a main predicate and takes the nominalized clause as its complement.

All subjects in the nominative-accusative system of the split in Chol as in (9) receive ergative Case because they are structurally *possessors* within nominalized verbs – ergative is homophonous with genitive in Mayan languages. Under Coon's analysis, the split between perfective clauses and non-perfective clauses is simply *structural*, and thus need not call for a special rule to explain the different alignments of grammatical relations in the ergative system and the accusative system. In other words, throughout the grammar of Chol, intransitive subjects and transitive objects are assigned absolutive (= set B), while transitive subjects and possessors receive ergative/possessor (= set A). The structural difference comes about when non-perfective clauses are expressed by the aspectual predicate *choñkol*, which embeds a nominalized form.

I adopt the Laka/Coon-style biclausal analysis for the nominative-accusative side of ergative splits of Kaqchikel and Q'anjob'al as well as Chol. The structure of non-perfective clauses in three languages can thus be illustrated as in (10), setting aside the presence of a preposition (i.e., *che*) in Kaqchikel (see below for relevant discussion). The non-perfective clause in these languages consists of a non-verbal predicate, or NVP (= *ajin* in Kaqchikel, *lanan* in Q'anjob'al and *choñkol* in Chol) and a nonfinite nominalized clause (= the bracketed forms in (7), (8) and (9)). For detailed discussion of nominalization found in non-perfective clauses, see Coon (2010, 2013a) for Chol and Q'anjob'al, Mateo Pedro (2009); Mateo Toledo (2003) for Q'anjob'al and Imanishi (2014) for Kaqchikel.

(10) [ NVP ... [ vP<sub>NOMNL</sub> ] ]

With this structure, the spread of ergative Case to all subjects (i.e., extended ergative) in the accusative alignment of Chol and Q'anjob'al seems to receive a natural account. Since the nonfinite clause is nominalized, the ergative in the split can be analyzed as *genitive* like English gerunds. For example, the Chol example in (9-a) can be translated as "Her hitting me is taking place". However, consideration of Kaqchikel raises a nontrivial question: *why* the alignment puzzle arises between Kaqchikel and Chol/Q'anjob'al, despite the fact that all of these languages involve embedded nominalized clauses to form non-perfective sentences. It is the ergative/genitive that is aligned with the transitive object in the nominative-accusative system of Kaqchikel. Therefore, the equation of ergative with genitive alone will not explain the contrastive ergative alignment between Kaqchikel and Chol/Q'anjob'al. In what follows, I will use 'ergative' to unify both types of set A markers (= ergative in transitive sentences and genitive in nominal constructions) under the rubric of default ergative (see Imanishi 2014 for detailed discussion).

### 3.1.2. The unaccusative requirement on nominalization

I claim that the contrastive alignment patterns between Kaqchikel and Chol/Q'anjob'al can be explained by the presence or absence of a particular requirement on nominalization found in their biclausal non-perfective sentences. The requirement that I propose is that nominalized verbs must lack an external argument. Alexiadou (2001) also makes a similar claim for nominalizations of Greek and various Indo-European languages. To be precise, Alexiadou proposes that the type of *v* found in nominalized verbs (and particularly process nominals but not result nominals) generally has an unaccusative structure in which an external argument is absent.

Developing Alexiadou's analysis, I suggest that nominalized verbs in (at least) a subset of Mayan languages including Kaqchikel are subject to the requirement stated as *the Unaccusative Requirement on Nominalization* in (11). I further propose that this requirement is parameterizable. The requirement holds for nominalizations of Kaqchikel, whereas it does not obligatorily apply to nominalizations of Chol and Q'anjob'al.

(11) THE UNACCUSATIVE REQUIREMENT ON NOMINALIZATION OF KAQCHIKEL  
Nominalized verbs must lack an external argument.

There is evidence that nominalizations of Kaqchikel lack an external argument as in Greek. As shown in (12), the nominalization of transitive verbs excludes the external argument (= *Juan*) and only contains the internal argument (= *ri tinamit*). The external argument is introduced in the relative clause modifying the nominalized form. The literal translation of (12) is *the burning of the city that Juan did was scary*.

(12) ri ru-k'at-ik ri tinamit [ri x-ø-b'en ri a Juan] x-ø-xib'i-n.  
DET ERG3s-burn-NOML DET city DET PRFV-Abs3s-do DET CL Juan PRFV-Abs3s-scary-AP  
'Juan's burning of the city was scary.'

Furthermore, when there is only one argument in the nominalized form of transitive verbs as seen in (13), the argument (= *ri a Juan*) must be interpreted as the internal (or theme/patient) argument, but not the external argument.

(13) ru-k'at-ik ri a Juan x-ø-xib'i-n.  
ERG3s-burn-NOML DET CL Juan PRFV-Abs3s-scary-AP  
'Juan's burning was scary.' = Juan was burned. (\*Juan burned something.)

These examples are thus consistent with the claim that nominalized clauses in Kaqchikel must lack an external argument.

By contrast, there is converging evidence that nominalized clauses of Chol and Q'anjob'al may contain an external argument because the unaccusative requirement does not obligatorily apply. As seen in the Chol example of (14), the nominalized clause, which appears in the subject position, contains both the external argument (= second person singular) and the internal argument (= first person singular).

- (14) Mach uts'aty [a-jats'-oñ].  
 NEG good ERG2s-hit-Abs1s  
 'Your hitting me isn't good.'

(Coon, 2013a::141)

Likewise, the nominalized clause of Q'anjob'al appearing in the subject position can express an external argument, as shown in (15). The ergative morpheme in (15) (= *h-*) cross-references the external argument of the nominalized verb. The internal argument is null (=  $\emptyset$ ) since it is third person singular.

- (15) [h-il-on]  $\emptyset$  kawal watx'.  
 ERG2s-see-DM Abs3s intensifier good  
 'Your seeing him/her/it is very good.'

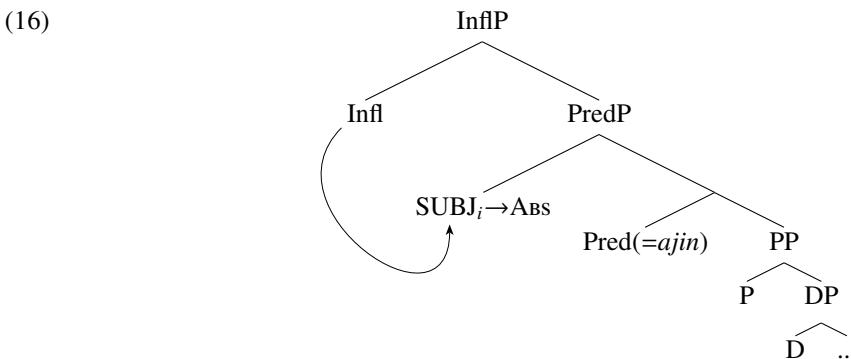
(p.c. Pedro Mateo Pedro)

These examples contrast sharply with the nominalized clause of Kaqchikel, where an external argument is consistently absent. In the following sections, I will show how the presence or absence of the unaccusative requirement derives the contrastive alignment patterns between Kaqchikel and Chol/Q'anjob'al in the accusative side of their ergative splits.

### 3.2. *Kaqchikel*

I show below that the unaccusative requirement and the factors derived from it give rise to the alignment in the accusative pattern of Kaqchikel: ABS = SUBJ and ERG = OBJ. According to the unaccusative requirement in (11), nominalized forms of transitive and unergative verbs in Kaqchikel must have an unaccusative structure, and thus cannot have an external argument inside a nominalized clause, following Hale and Keyser (1993) among others in that only a transitive or unergative *v* projects an external argument. The external argument of these verbs must thus appear outside the nominalized clause. Furthermore, nominalized verbs are unable to assign Case to the object since they are unaccusative and hence intransitive.

The consequences of these two properties caused by the unaccusative requirement are two-fold. First, the subject is base-generated as the argument of the embedding predicate (= *ajin*) in the matrix clause. I analyze *ajin* as a one-place predicate. To be precise, the subject in progressive sentences occupy Spec-PredP, which is headed by *ajin*. I also propose that the matrix Infl assigns absolutive Case to the subject, as illustrated in (16).<sup>5</sup>



If the subject is generated as the argument of *ajin*, the former should receive a  $\theta$ -role from the latter: *ajin* acts just as a control predicate. At first blush, the literal meaning of *ajin* (= *realizarse* 'to come true') provided by Macario et al. (1998) seems incompatible with this. One might then analyze the

<sup>5</sup> I propose that the function of the preposition *che* found in the non-perfective clauses of Kaqchikel as in (7) is to Case-license its complement (= a nominalized clause). As discussed in England (2003), *che* is actually a contracted form of the preposition *chi* and a relational noun (= *-e*) prefixed by the third-person-singular ergative morpheme (= *r-*). I abstract away from relevant discussion due to space limitation (see Imanishi 2014 for detailed discussion).

specifier of *ajin* as a non-thematic position just like raising predicates. However, there is independent evidence that the subject of *ajin* is contentful. For instance, *ajin* can occur with regular nominals as well as nominalized verbs. As seen in (17), the object in the progressive is the nominal *b'ix* 'song'.

- (17) y-in-ajin            che    **jun b'ix**.  
 IMPF-ABS 1S-PROG PREP INDF SONG  
 'I am singing a song. (lit. I'm engaged in a song)'

It is more reasonable to analyze *ajin* in (17) as assigning some sort of a  $\theta$ -role to the subject. The literal interpretation of the sentence in (17) suggests that the subject is agentive. Extending this analysis to progressive sentences such as (7), I conclude that *ajin* assigns a  $\theta$ -role to its argument, though I do not attempt to elaborate on its exact meaning.<sup>6</sup>

The second consequence of the unaccusative requirement is that the object in the progressive sentences of Kaqchikel is Case-less and hence must receive ergative Case as a default. Since the nominalized verb must have an unaccusative structure and thus be intransitive, it has no Case-assigning ability. I demonstrate below that a subset of nominalized (transitive) verbs found in the accusative pattern of Kaqchikel are passivized (and thus intransitized) in order to satisfy the unaccusative requirement.

Transitive verbs in Kaqchikel can be typically divided into root transitives (i.e., monosyllabic or CVC) and derived transitives (-j), like other Mayan languages. Many of root transitives including *k'ul* 'meet' in (7) do not display passive morphology: there is no change in a verbal form. The presence or absence of an ergative morpheme is the sole indicator of active vs. passive voice of these root transitives. It is thus not immediately clear whether nominalization of verbs in Kaqchikel involves passivization.

However, an overt trace of passivization can be found in other types of root transitives. Consider root transitives containing a lax vowel (represented with a diaeresis). They tense the vowel when they are turned into passive forms, as seen in (18).

- (18) a. röj x-e-qa-**tik**                            k'iy k'otz'i'j pa    jardin.  
 we PRFV-ABS3P-ERG 1P-plant many flower    PREP garden  
 'We planted many flowers in the garden.'  
 b. k'iy k'otz'i'j x-e-**tik**                            pa    jardin.  
 many flower    PRFV-ABS3P-plant.PAS PREP garden  
 'Many flowers were planted in the garden.'

These verbs thus enable us to discern whether passivization is involved in nominalization. When root transitives with a lax vowel are nominalized in the complement position of a progressive aspectual marker, the vowel of these verbs is tensed as seen in (19).

- (19) y-øj-ajin            che ru-**tik-ik**                            jun k'otz'i'j.  
 IMPF-ABS 1P-PROG PREP ERG3S-plant.PAS-NOML one flower  
 'We are planting one flower.'

These clearly show that the embedded verb in (19) is a passivized form.

Furthermore, derived transitives whose ending is -j clearly display passivization. When they are passivized, the final -j is replaced by the passivizing suffix -x as shown in (20).

- (20) a. röj x-e-qa-q'ete-**j**                            ri    ak'wal-a'.  
 we PRFV-ABS3P-ERG 1P-hug-TV DET child-PL  
 'We hugged the children.'  
 b. ri    ak'wal-a' x-e-q'ete-**x**.  
 DET child-PL    PRFV-ABS3P-hug-PAS  
 'The children were hugged.'

As in the case of root transitives containing a lax vowel, derived transitives can be employed as diagnostics for whether nominalized verbs involve passivization. Crucially, derived transitives display the passive morpheme -x when they are nominalized by -ik, as shown in (21).

<sup>6</sup> As suggested by Jessica Coon (p.c.), the function of *ajin* may be to mark the subject as being in the process of the event denoted by the nominalized verb.

- (21) röj y-øj-ajin che ki-q'ete-x-ik ri ak'wal-a'.  
 we IMPF-ABS1P-PROG PREP ERG3P-hug-PAS-NOML DET child-PL  
 'We are hugging the children.'

It now becomes clear that at least a subset of nominalized transitive verbs found in the accusative alignment of Kaqchikel undergo passivization to satisfy the unaccusative requirement on nominalization (see Imanishi 2014 for discussion of other nominalizations undergoing different intransitivizing operations such as antipassivization and (pseudo-)incorporation). Based on evidence from transitive verbs overtly displaying passivization, I propose that the nominalization of root transitives which do not show any overt passivization like *k'ul* 'meet' also involves passivization. Given that nominalized verbs found in the accusative pattern of Kaqchikel are passivized, they are unable to assign Case to the object. As a result, the object receives ergative Case as a default.

Crucially, the present analysis reveals that what appears to be object inside the nominalized clause is actually *passive subject*. The nominalized clause such as the one in (21) could thus be literally translated as "the children's being hugged". Under this analysis, the alignment found in the accusative side of the ergative split in Kaqchikel should not come as a surprise. Rather, it comes closer to the accusative side of the ergative split in Chol and Q'anjob'al. In both Kaqchikel and Chol/Q'anjob'al, what is cross-referenced by the ergative morpheme in the nominalized clause is *thematic subject*. The only difference between Kaqchikel and Chol/Q'anjob'al is that the subject in the former is derived (and thus notional object). Nevertheless, I use 'object' to refer to the thematic subject (or notional object) in the nominalized clause of Kaqchikel solely for the purpose of presentation.

### 3.3. Chol and Q'anjob'al

In §3.1.2, I suggested that the unaccusative requirement does not obligatorily apply to nominalization of Chol and Q'anjob'al. I show that this correctly explains the alignment in the accusative pattern of these languages: ABS = OBJ and ERG = SUBJ. First, nominalized verbs assign absolutive Case to the object in Chol and Q'anjob'al because they may remain 'transitive' in terms of Case-assigning ability – they need not be intransitive in contrast to Kaqchikel.

As discussed by Coon et al. (to appear), there is independent evidence that in Chol, Voice or *v* is an absolutive Case assigner in transitive sentences, whereas finite Infl assigns absolutive Case in intransitive sentences. This can be shown by the interaction between non-finite clauses and the presence or absence of absolutive Case. As mentioned above, the bracketed forms in non-perfective sentences of Chol such as the one in (22) are non-finite clauses which undergo nominalization.

- (22) a. Choñkol-ø [k-jats'-ety].  
 PROG-ABS3s ERG1s-hit-ABS2s  
 'I'm hitting you.'  
 b. Choñkol-ø [k-majl-el].  
 PROG-ABS3s ERG1s-go-NOML  
 'I'm going.'

(Coon, 2013a:13)

The contrast between the transitive in (22-a) and the intransitive in (22-b) regarding the presence or absence of the absolutive morpheme follows from the analysis that absolutive Case is assigned by Voice in transitives, whereas it is assigned by finite Infl in intransitives. Following Coon (2010, 2013a) in that nominalization targets a verbal projection in Chol, it can be now argued that the nominalized transitive verb in (22-a) has Voice, which assigns absolutive Case to the object.

As for Q'anjob'al, I suggest, following Coon et al. (2011, to appear), that the non-finite clause of Q'anjob'al has an independent absolutive Case assigner, namely the suffix *-on* (called *dependent marker*) in (8). An important fact about the suffix *-on* is that a transitive verb cannot be nominalized and embedded under the non-verbal predicate *lanan* without *-on*, as shown by the contrast below.

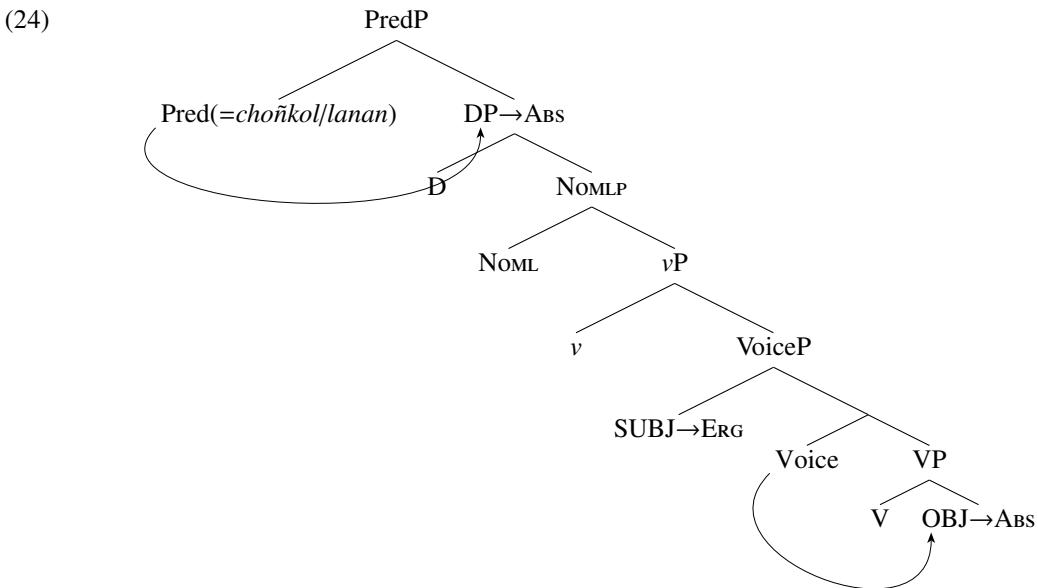
- (23) a. \*lanan [hach hin-laq'-a'].  
 PROG Abs2s ERG1s-hug-Tv  
 intended: 'I am hugging you.'  
 b. lanan [hach hin-laq'-on-i].  
 PROG Abs2s ERG1s-hug-DM-Itv  
 'I am hugging you.'

(Coon et al., 2011::16)

Given that *-on* does not appear in a nominalized intransitive, the contrast in (23) suggests that *-on* correlates with the presence of the object. Coon et al. take this to argue that the suffix assigns absolutive Case to the object.

I follow Coon (2010, 2013a) in that *choñkol* takes a nominalized clause as its complement and assigns absolutive Case to it. Since a nominalized clause is third person singular, the absolutive morpheme is always null as indicated in (22). This is confirmed by the example in (22) with first person subjects – *choñkol* bears the null absolutive morpheme, irrespective of the person and number of the subject. The same analysis can extend to the non-verbal predicate *lanan* in Q'anjob'al. The present analysis can also capture the fact that a preposition does not appear in non-perfective clauses of Chol and Q'anjob'al, in contrast to Kaqchikel. I have argued that the function of the preposition *che* (or *chi*) found in the progressive sentences of Kaqchikel is to Case-license its complement. The absence of a preposition in Chol and Q'anjob'al follows if *choñkol* and *lanan* Case-license its complement (= a nominalized clause): there is no reason a preposition appears in the non-perfective sentences of these languages.

The second consequence of the analysis that the unaccusative requirement does not obligatorily apply to nominalization in Chol and Q'anjob'al concerns subject. The subject (or external argument) may be generated inside the nominalized clause as the nominalized verb does not have an unaccusative structure. The structure of the non-perfective transitive clauses of Chol and Q'anjob'al can be illustrated as in (24).



Since the subject is the only Case-less DP within the nominalized clause under this analysis, ergative Case is assigned to all subjects as a default.

#### 4. Conclusion

I have proposed that ergative Case may be assigned as a default to an otherwise Case-less DP. Combined with the parameterizable unaccusative requirement on nominalization, this default view of

the ergative has been shown to explain the alignment puzzle found in the accusative side of the ergative splits of Kaqchikel, Q'anjob'al and Chol. If this analysis is correct, one can conclude that there is no a priori reason to posit a correlation between ergative Case and grammatical relations in certain languages, contrary to a common view that the ergative is aligned with the transitive subject in the majority of sentences: a DP receiving ergative Case could be either subject or object. In Imanishi (2014), I discuss the unification of the ergative in transitive sentences and the genitive in nominal constructions including nominalized clauses of Mayan under the rubric of default ergative Case.

## References

- Alexiadou, Artemis. 2001. *Functional structure in nominals: Nominalization and ergativity*. Amsterdam/Philadelphia: John Benjamins.
- Bobaljik, David Jonathan. 2008. Where is phi?: Agreement as a post-syntactic operation. In *Phi theory: Phi-features across interfaces and modules*, ed. Daniel Harbour, David Adger, and Béjar Susana, 295–328. Oxford: Oxford University Press.
- Bricker, Victoria. 1981. The source of the ergative split in Yucatec Maya. In *Journal of Mayan Linguistics*, volume 2, 83–127.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. Martin Roger, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chomsky, Noam. 2001. Derivation by phase. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 1–52. Cambridge: MIT Press.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: Cambridge University Press.
- Coon, Jessica. 2010. Complementation in Chol (Mayan): A theory of split ergativity. Doctoral Dissertation, MIT, Cambridge, MA.
- Coon, Jessica. 2013a. *Aspects of split ergativity*. Oxford: Oxford University Press.
- Coon, Jessica. 2013b. TAM split ergativity. *Language and Linguistics Compass*.
- Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2011. The role of Case in A-bar extraction asymmetries: Evidence from Mayan. Manuscript, August 2011.
- Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. to appear. The role of Case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation*.
- Dixon, R.M.W. 1979. Ergativity. *Language* 55:59–138.
- Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- England, Nora C. 1983a. Ergativity in Mamean (Mayan) languages. *International Journal of American Linguistics* 49:1–19.
- England, Nora C. 1983b. *A grammar of Mam, a Mayan language*. Austin, TX: University of Texas Press.
- England, Nora C. 2003. Mayan language revival and revitalization politics: Linguists and linguistic ideologies. *American Anthropologist* 105:733–743.
- Hale, Kenneth, and Samuel Jay Keyser. 1993. On argument structure and the lexical expression of syntactic relations. In *The view from building 20*, ed. Kenneth Hale and Samuel Jay Keyser, 53–110. Cambridge, MA: MIT Press.
- Imanishi, Yusuke. 2014. Default ergative. Doctoral Dissertation, MIT, Cambridge, MA.
- Laka, Itziar. 2006. Deriving split ergativity in the progressive: The case of Basque. In *Ergativity: Emerging issues*, ed. Alana Johns, Diane Massam, and Juvenal Ndayiragije, 173–195. Springer.
- Larsen, Thomas W. 1981. Functional correlates of ergativity in Aguatec. In *Proceedings of the Annual Meetings of the Berkeley Linguistics Society*, volume 7, 136–53.
- Larsen, Thomas 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.
- Lengyel, Thomas E. 1978. Ergativity, aspect and related perplexities of Ixil-Maya. In *Papers in Mayan linguistics*, ed. Nora C. England, 78–91. University of Missouri.
- Macario, Narciso Cojti, Martin Chacach Cutzal, and Marcos Armando Cali. 1998. *Diccionario Kaqchikel*. La Antigua, Guatemala: Cholsamaj.
- Mateo Pedro, Pedro. 2009. Nominalization in Q'anjob'al (Maya). In *Kansas Working Papers in Linguistics*, 46–63.
- Mateo Pedro, Pedro. 2011. Revisiting split ergativity in Q'anjob'al. In *Proceedings of SULA 5: Semantics of under-represented languages in the Americas*, ed. Suzi Lima. GLSA, University of Massachusetts, Amherst.
- Mateo Toledo, B'alam Eladio. 2003. Ergatividad mixta en Q'anjob'al (Maya): Un reanálisis. In *Proceedings of the Conference of Indigenous Language of Latin America I*.
- Schütze, Carson. 2001. On the nature of default case. *Syntax* 4:205–238.

# Proceedings of the 32nd West Coast Conference on Formal Linguistics

edited by Ulrike Steindl, Thomas Borer,  
Huilin Fang, Alfredo García Pardo, Peter  
Guekguezian, Brian Hsu, Charlie O'Hara,  
and Iris Chuoying Ouyang

Cascadilla Proceedings Project   Somerville, MA   2015

## Copyright information

Proceedings of the 32nd West Coast Conference on Formal Linguistics  
© 2015 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 978-1-57473-466-9 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper.  
Reprints for course packs can be authorized by Cascadilla Proceedings Project.

## Ordering information

Orders for the library binding edition are handled by Cascadilla Press.  
To place an order, go to [www.lingref.com](http://www.lingref.com) or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA  
phone: 1-617-776-2370, fax: 1-617-776-2271, [sales@cascadilla.com](mailto:sales@cascadilla.com)

## Web access and citation information

This entire proceedings can also be viewed on the web at [www.lingref.com](http://www.lingref.com). Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:

Imanishi, Yusuke. 2015. When Ergative Is Default: A View from Mayan. In *Proceedings of the 32nd West Coast Conference on Formal Linguistics*, ed. Ulrike Steindl et al., 238-247. Somerville, MA: Cascadilla Proceedings Project. [www.lingref.com](http://www.lingref.com), document #3174.