Classifiers and Constraints in Chuj Topic Constructions

Louisa Bielig, McGill University

Abstract

Like many other Mayan languages, Chuj, a language of the Q´anjob´alan branch, exhibits syntactic ergativity in the form of an extraction asymmetry. The A'-extraction of transitive subjects (ergative arguments) requires the use of a special construction, known as Agent Focus. However, preverbal ergative subjects without Agent Focus are permitted in topic constructions, where a corresponding nominal classifier, which I refer to as a *resumptive classifier*, appears post-verbally. Transitive and intransitive preverbal subjects can appear as topics with resumptive classifiers, while preverbal object topics are strongly dispreferred.

In this paper I propose that the preverbal subject in this construction has not been fronted, as is the case in Agent Focus. I argue that it has instead been base-generated in an external topic position and is co-indexed with the resumptive classifier below, following Aissen's (1992) account of Tsotsil and Popti´ (Jakaltek) external topics. I will employ Aissen´s diagnostics and other tests to show that these topics are not compatible with a movement account, supporting the high base generation analysis. Subsequently, I will present two constraints on the external topic construction, which explain the strong dispreference of object topics.

Keywords: Resumptives, Chuj, Q´anjob´al, Mayan, Topic

Acknowledgements

Contents

1. Introduction

1.1 General

Topicalization in many languages involves fronting of the topicalized argument to a clause-initial position. There are two main ways by which topics can be fronted: either they are derived through A'-movement, or through base-generation. Base-generated topics are often linked with a clitic or pronoun in the main clause. This is illustrated in the following example from Popti' (Mayan), from Craig 1977[1]:

---

[1] Abbreviations in glosses are as follows: A- Set A (ergative/possessive); AF – agent focus; ANTIP – Antipassive; B – Set B (absolutive); C – completive CLF. – classifier; DET – determiner; DTV – derived transitive suffix; ENC – intonational phrase enclitic; INT – interrogative marker; IRR – irrealis; ITV – intransitive verbal status suffix; NEG – negation; S – singular, PASS – passive; PL – plural; PREP – preposition; PRFV – perfect; PROSP – prospective; PST – past tense; PV – preverbal marker; TOP – topic marker; TV – transitive verbal status suffix.

All Chuj examples are from my own notes, unless otherwise specified.

(1) **W-uxhtaj** an [s-loq   **ho'** no'   cheh   k'ej'inh tu']
    A1S-brother 1   he.bought   he CLF.ANIMAL horse black   that
    'As for my brother, he bought that black horse.'

This example shows the topic *w-uxhtaj* ("my brother") preceding the predicate, which is in turn followed by the coindexed pronoun *ho'* ("he").

This paper discusses topics in Chuj, a Mayan language of the Q'anjob'alan branch closely related to Popti'. Chuj topics also appear in the left periphery and require a pronoun in the main clause, though their occurrence is not identical to that of topics in Popti'.

Chuj topics are base-generated in the left periphery, and contrast with constructions that require A'-movement to pre-verbal position, such as *wh*-movement, relativization, and focus extraction. Like many morphologically ergative languages of the Mayan family, Chuj displays an extraction restriction on transitive subjects for these A'-movement constructions. While absolutive arguments can extract freely, ergative arguments cannot. To front an ergative argument to preverbal position, the verb requires the Agent Focus marker *–an*, which attaches to the verbal stem. Furthermore, ergative marking on the verbal stem disappears (2).

(2) [A waj   Petul] ix-ø-il-**an**   jun ix   ix
    A CLF.MASC.NAME Pedro   PRFV-B3S-see-AF one CLF.FEM woman
    'It was Pedro who saw a woman.'

However, ergative subjects may also appear preverbally in topic position. In this case, they do not trigger AF morphology on the verb, and a nominal classifier appears in postverbal subject position, acting as a bound pronoun (3)[2]. Following Aissen's (1992) approach to topics in Tsotsil and Popti', this paper will refer to a preverbal subject with a postverbal classifier as an *external topic construction*, the structure of which will be discussed in section 3.1.

(3) [A waj   Petul] ix-ø-y-il   **winh**   jun ix   ix.
    PV CLF.MASC.NAME Pedro PRFV-B3S-A3S-see   CLF.MASC   one CLF.FEM woman
    'As for Pedro, he saw a woman.'

Chuj topics are restricted to subjects, with object topics being judged ungrammatical. Exceptions to this pattern are discussed in section 4. Parallel topic constructions with transitive

---

[2] The a-marker preceding topic and focus is optional and does not differentiate between the two positions, as seen in (i) (see also data from Buenrostro 2009). It is a preverbal marker and cannot appear postverbally (ii):

(i) [A **ix**   Elsa] [a **te´**   manzan] ix-ø-s-lo'   ix
    PV CLF.FEM Elsa PV CLF.WOOD apple   PRFV-ABS3S-ERG3S-eat CLF.FEM
    'As for Elsa, it was the apple she ate.'

(ii) *Ix-ø-s-xik   te´   [**a** waj   Petul]
     PRFV-B3S-A3S-cut CLF.WOOD PV CLF.MASC.NAME Pedro
     'Pedro cut it.'

and intransitive subjects are shown in (4) and (5), and an ungrammatical object topic is illustrated in (6).

(4) [A ix   Elsa] ix-ø-s-xik   te´   k´atzitz *(**ix**).
    PV CLF.FEM Elsa PRFV-B3S-A3S-chop CLF.WOOD firewood CLF.FEM
    'As for Elsa, she cut the firewood.'

(5) [Nok´   mis] ix-ø-way   **nok**'.
    CLF.ANIMALcat PRFV-B3S-sleep CLF.ANIMAL
    As for the cat, it slept.'

(6) * A ixim   wa´il ix-ø-s-man   **ixim**   winh   winak
      PV CLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.GRAIN CLF.MASC man
    'As for tortillas, the man bought them.'

Notably, objects as foci are grammatical. When an object appear in focus position, it is not coindexed with a postverbal nominal classifier, as seen in (7). Nominal classifiers will be discussed in section 2.2.

(7) A ixim   wa´il ix-ø-s-man   winh   winak.
    PV CLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.MASC man
    'It was tortillas that the man bought.'

Following Aissen´s (1992) analysis of topic and focus in Mayan, I propose that the topic constructions in (4) and (5) are instances of base-generated topics that are co-referenced by a classifier in post-verbal position. I refer to these postverbal classifiers as resumptive pronouns, since they must be coindexed with a higher noun and are not subject to island constraints (see McCloskey 2006). Notably, in this paper the term "resumption" is not intended to signify the pronunciation of a reflex of movement (i.e. a trace), but simply obligatory coindexation with a higher element.

1.2 Outline

The remainder of this paper is organized as follows. In section 2, I offer a brief background on Chuj and the Mayan family, its ergative behavior and classifiers, and Aissen´s (1992) account of topic and focus in Mayan. In section 3, I use diagnostics from Aissen (1992), as well as some additional tests, to establish the Chuj external topic as derived through high base-generation and not movement. I also discuss some differences between Chuj topics, and topics in Tsotsil and Popti'. Section 4 illustrates two constraints on Chuj topics which lead to the ban on objects as topics. Section 5 concludes the paper.

2. Background

2.1 Ergativity in Chuj

Chuj is a member of the Greater Q´anjob´alan branch of the Mayan family (see Campbell and Kaufman, (1985) for a genetic classification). It is spoken by approximately 45,000 speakers, and splits into three main dialects, including the San Mateo Ixtatán dialect, from which all data in this paper are taken. Like other Mayan languages, Chuj is morphologically ergative, in that person-marking on predicates follows an ergative-absolutive alignment. Ergative markers have preconsonantal and prevocalic allomorphs and also function as possessive markers. Third person absolutive markers are null.[3] A full paradigm of ergative and absolutive markers is given in (8).[4] In this paper, I will use the standard Mayanist terms "Set A" and "Set B" to refer to ergative/possessive and absolutive markers respectively. This notation has the advantage of avoiding analytical claims about ergative versus possessive forms, e.g. in split ergativity (see Bennett et al, to appear, see also Grinevald & Peake (2012) and Coon (to appear) for overviews of Mayan morphosyntax).

(8) Chuj person markers

	Ergative _C / _V	Absolutive
1 SG	hin- / w-	hin-
2 SG	a- / h-	ach-
3 SG	s- / y-	Ø-
1PL	ko- / k-	onh-
2PL	e- / ey-	ex-
3PL	s- / y- (+ heb´)	Ø-

In addition to person markers, the basic morphology of a verbal predicate includes aspectual marking as well as the "status suffixes" *-a'* and *-i'* , which signal the transitivity of a verb[5]. The suffix *-a'*, as shown in (9), marks a verb with two core arguments (transitive verb), while the suffix *-i'* in (10) marks a verb with one core argument (intransitive verb). Status suffixes surface only when no further phonological material follows the verbal stem in the same clause and are otherwise not present, as illustrated in (11) (see e.g. Henderson (2012) on K'ichee'). The basic morphology of a verbal predicate is shown in (12):

---

[3] The null marker for third person absolutives are glossed as Ø throughout this paper. My discussion, however, is indepedent of whether it reflects a silent element of absence of agreement (see Coon (2014)).

[4] The initial *h-* on person markers is an orthographic convention used to indicate the absence of an initial glottal stop, which occurs in forms written vowel-initially. See Buenrostro 2004.

[5] I am ignoring derived transitives forms for simplicity.

(9)   Niwan   keneyah   ix-ø-ko-man-a'
      Many   banana   PRFV-B3P-A1P-buy-TV
      'We bought a lot of bananas.'

(10) Ix-in-b'ey-i'
      PRFV-B1S-walk-ITV
      'I walked.'

(11) Ix-ø-in-man   ixim   ixim.
      PRFV-B3S-A1S-buy   CLF.GRAIN   corn
      'I bought corn.'

(12)   TAM — ABS — ERG — Verb root — (Status Suffix)

Chuj, like many other Mayan languages, is verb-initial, with overt subjects and objects canonically appearing in postverbal positions (see Aissen 1992, England 1991 on basic word order in Mayan). Therefore, status suffixes surface when subjects and objects appear pre-verbally or are omitted, though the use of pronominal classifiers is preferred to full omission, which is rather rare (see section 2.3).

Chuj displays predominantly VOS word order, but also frequently allows for VSO order. When NPs appear preverbally, they fill topic and focus positions, with topic preceding focus. This account follows Aissen´s (1992) TOPIC > FOCUS > VERB structure for Mayan. A list of possible word orders is shown in (13). The only impossible word order is *OSV, with an object in topic position and a subject in focus position. This pattern will be discussed further in section 4.

(13) Possible word orders in Chuj

Word order	Structure
VOS	Canonical structure
VSO	Canonical structure
SVO	Subject as Topic / Focus – Verb - Object
OVS	Object as Topic / Focus – Verb - Subject
SOV	Subject as topic – Object as Focus - Verb
*OSV	* Object as topic – Subject as Focus - Verb

In addition to morphological ergativity, Chuj also displays syntactic ergativity in the form of the extraction asymmetry first shown in section 1: transitive (ergative) subjects cannot freely extract in the same way as (absolutive) intransitive subjects and transitive objects. Therefore, the extraction of transitive subjects in *wh*-questions (10), relativization, and focus (i.e. "A-bar" movements; Chomsky 1977), is generally disallowed (Coon et al 2014, Stiebels 2006). In order to extract a transitive subject, the Agent Focus marker *-an* attaches to the verbal stem, and the ergative marker disappears, as in (15).

(14) *Mach ix-ø-s-man   ixim   wa´il ___?
    Who PRFV-B3S-A3S-buy CLF.GRAIN tortilla
    'Who bought the tortilla?'

(15) Mach ix-ø-man-**an**   ixim   wa´il ___?
    Who PRFV-B3S-buy-**AF** CLF.GRAIN tortilla
    'Who bought the tortilla?'

The AF construction in (15) permits ergative subjects to move to the preverbal focus position. The topic construction does not require such morphological marking, but instead usually requires a corresponding resumptive classifier in a postverbal position. A discussion of the nature and function of classifiers is Chuj is provided in the following section.

2.2 Chuj Nominal Classifiers

Chuj nominal classifiers represent a closed class of approximately a dozen words. They have a lexical origin in that they are derived from nominals, but have been semantically bleached beyond the narrower meaning of the original nouns (Hopkins 2012, Buenrostro 2009; see also Craig 1986 on Popti´ and Zavala 2000 on Akatek). Some classifiers are directly derived from nouns, such as the classifier *ix* (female) which stems from the noun *ix* (woman), while others are shortened, for example *lum* (soil), which is derived from the noun *lu'um* (earth). A list of classifiers with their respective domains is shown in (16):

(16) Chuj nominal classifiers

Classifier	Domain	Classifier	Domain
ix	Female (clf.fem)	*anh*	Plants (clf.plant) (growing from the ground)
winh	Male (clf.masc)	*k´en*	Metal (clf.metal)
waj	Male Name (clf.masc.name)	*lum*	Earth, Soil (clf.earth)
nok´	Animal (clf.anm)	*ch´anh*	Vine (clf.vine) (paper)
te´	Wood (clf.wood)	*k´ak / k´apal*	Cloth (clf.cloth)
ixim	Grain (clf.grain)	*atz´am*	Salt (clf.salt)
a´	Water, liquid (clf.water)		

Chuj nominal classifiers have two main functions: they act as articles for referential nouns (17) and as pronouns (18). The pronoun example in (18) also illustrates semantic bleaching of the wood classifier *te'*, which has been extended from referring solely to trees and wood to including all objects made from wood as well as fruit growing on trees, such as apples.

(17) Heb´ winh   unin ix-ø-s-lo'   [te'   manzan] heb´ winh.
     PL   CLF.MASC child PRFV-B3S-A3S-eat CLF.WOOD apple   PL   CLF.MASC
     As for the boys, they ate the apple.'

(18) Ol-ø-s-lo'   **te'**   **ix**
     PROSP-B3S-A3S-eat CLF.WOOD CLF.FEM
     'She (Elsa) will eat it (the apple).'

In Chuj topic constructions, nominal classifiers act as resumptive pronouns that are conindexed with a noun in preverbal topic position. The structure of this topic construction according to Aissen (1992) is discussed in the following section

.

2.3   Topic and Focus in Mayan

As illustrated in section 1.1, topic and focus constituents in Mayan both occur in preverbal position and display morphological differences: topics have a classifier in base position and transitive verbal moprhology, while focus has AF marking and intransitive verbal morphology and cannot be linked to a classifier in base position. The two constructions also differ in their semantic function: generally, focus presents new or contrastive information and is exhaustive (Aissen 2015), while topics point to a discourse referent that has already been introduced into the common ground and receives further information in the form of a "topic + comment" structure. It therefore does not have the properties of exhaustivity and contrastiveness associated with focus. Indeed, Chuj topic constructions cannot appear with contrastive focus semantics, and do not receive an exhaustive interpretation. Example (19) below shows an acceptable contrastive focus construction and example (20) shown an unacceptable topic construction in the same context.

Context: Magda comes home from work to find that the apple she was going to pack as a snack for the next day is gone. She turns to her daughter Estela and asks: "Who ate the apple? Was it Pedro?" Estela answers:

(19) [A ix   Elsa] ix-ø-lo'-an   b´at   te´   manzan,
     mok laj   waj   Petul.

     PV CLF.FEM Elsa PRFV-B3S-eat-AF already CLF.WOOD apple
     NEG IRR   CLF.NAME   Pedro

     'It was Elsa who already ate the apple, not Pedro.'

(20) #[A ix   Elsa] ix-ø-s-lo'   b´at   te´   manzan **ix**,
        PV CLF.FEM Elsa PRFV-B3S-A3S-eat already CLF.WOOD apple   CLF.FEM

     mok laj   waj   Petul.
       NEG IRR   CLF.MASC   Pedro

     'Elsa, she already ate the apple, not Pedro.'

The contrast in (19) and (20) illustrates the difference between topic and focus with respect to contrastiveness. In the context above, the subject "Elsa" has not been previously introduced, and can therefore not be a topic. It is instead treated as new, contrastive focus, which contrasts with Pedro. This can be expressed by the focus fronting in (19), which triggers Agent Focus, but not by the topic construction in (20), which does not trigger AF.

The second semantic difference between topic and focus, namely exhaustivity, is illustrated in (21) and (22). Focus in Chuj is exhaustive and therefore excludes all possible alternatives to the focused phrase, which consequentially renders two coordinated exhaustive focus constructions unacceptable (21).[6] Topics, however, are not subject to this constraint, and may surface in a parallel structure, as illustrated in (22).

(21) #A waj   Petul ix-ø-lo'-an   b´at   te´   manzan,
    PV CLF.MASC.NAME Pedro PRFV-B3S-eat-AF already CLF.WOOD apple

    a ix   Ana ix-ø-lo'-an   b´at   te´   manzan.
    PV CLF.FEM Ana PRFV-B3S-eat-AF already CLF.WOOD apple

    'It was Pedro who already ate an apple and it was Ana who already ate an apple.'

(22) A waj   Petul ix-ø-s-lo'   b'at   te´   manzan winh,
    PV CLF.MASC.NAME Pedro PRFV-B3S-A3S-eat already CLF.WOOD apple   CLF.MASC.

    a ix   Ana ix-ø-s-lo'   b'at   te´   manzan ix.
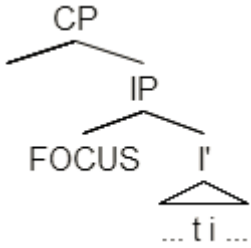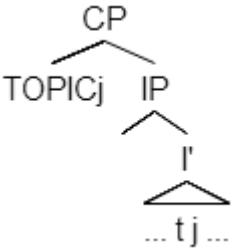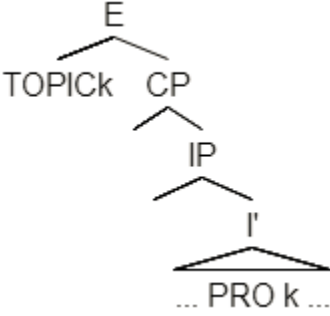   PV CLF.FEM Ana PRFV-B3S-A3S-EAT already CLF.WOOD apple   CLF.FEM

    'As for Pedro, he already ate an apple and as for Ana, she already ate an apple (as well).'

The contrasts between the topic constructions in (20) and (22) and the focus constructions in (19) and (21) show that focus is associated with contrastiveness and exhaustivity, whereas topic lacks these properties.

On a syntactic level, topic and focus in Chuj appear in different preverbal positions and are generated in different ways. Aissen (1992) offers an extensive account of topic and focus constructions in Mayan, based on the study of Tsotsil, Popti' (formerly called Jakaltek), and Tz'utujil. Aissen distinguishes between three preverbal positions. Focus (a), which is situated in Spec IP, and internal topics in Spec CP (b) are derived through movement and bind a post-verbal trace. External topics, on the other hand, are base-generated in an E(xpression) node above the main CP, which is not a landing site for movement. External topics are frequently linked with a coreferential pronoun. A schema of the three preverbal positions is shown in (23):

---

[6] Since Chuj does not display coordination, the two sentences in the exhaustive focus construction appear without a coordinator. However, all translations provided to and by my consultant included the coordinator *and*. The argument is modeled after Szabolcsi (1981).

(23) Focus and Topic Constructions (Aissen 1992)

a) FOCUS	b) INTERNAL TOPIC	c) EXTERNAL TOPIC

CP
  IP
FOCUS I'
… t i …
	CP
	TOPICj IP
	  I'
	… t j …
		E
		TOPICk CP
		  IP
		  I'
		… PRO k …

I propose that Chuj topics are base-generated in their preverbal position, and are therefore external topics. Internal topics derived by movement, in contrast, do not exist in Chuj. An analysis of Chuj topics as base-generated external topics with resumptive pronouns, as well as differences from external topics in Tsotsil and Popti', are discussed in section 3.

3. Chuj Topic constructions

In this section, I will present the Chuj topic pattern in detail and discuss its availability with different syntactic arguments. I will then provide diagnostics from Aissen (1992) as well as some further syntactic tests to show, firstly, that topics are syntactically distinct from focus, and secondly, that topics in Chuj are derived through high base-generation, as opposed to movement, and are therefore not internal topics.

3.1 Subjects versus Objects as External Topics

The topic pattern in Chuj involves an external topic with a coreferential resumptive classifier in postverbal position. Not all arguments can participate in this topic construction: while transitive and intransitive subjects can appear as preverbal topics with resumptive pronouns, preverbal transitive objects with corresponding resumptive classifiers are usually judged ungrammatical. I have also not found any naturally-occuring examples of object topics in semi-natural speech or glossed transcirpts of stories in Buenrostro (2009). This section presents these three syntactic arguments in topic position and contrasts them with focus constructions to clarify their syntactic structures. Evidence to support my generalizations and proposal, including their behavior with respect to syntactic islands and the occurrence of object foci versus object topics, are provided in section 3.2.

3.1.1 Transitive subject topics

Preverbal transitive subjects may appear either in topic or in focus position. Since the focus movement of transitive subjects triggers AF marking, topic and focus are differentiated syntactically: while Agent Focus constructions omit ergative marking and add the AF marker -*an* to the verbal stem, the topic construction displays ergative marking and obligatorily

coindexes the subject topic with a resumptive classifier. Focus and topic versions of the baseline sentence in (24), which contains a postverbal subject, are illustrated in (25a) and (25b), respectively.

(24) Ix-ø-s-xik   te´   k´atzitz   ix   Elsa.
     PRFV-B3S-A3S-chop CLF.WOOD firewood CLF.FEM Elsa
     'Elsa cut the firewood.'

(25) Transitive Subject Focus versus Topic Constructions

a) TRANSITIVE SUBJECT AS FOCUS (AF)

   [A ix   Elsa] ix-ø-xik-an   te´   k´atzitz.
    PV CLF.FEM Elsa PRFV-B3S-A3S-chop CLF.WOOD firewood
    'It was Elsa who cut the firewood.'

b) TRANSITIVE SUBJECT AS TOPIC

   [A   ix   Elsa] ix-ø-s-xik   te´   k´atzitz *(**ix**).
    PV CLF.FEM Elsa PRFV-B3S-A3S-chop CLF.WOOD firewood CLF.FEM
    'As for Elsa, she cut the firewood.'

3.1.2 Intransitive subject topics

Like preverbal transitive subjects, preverbal intransitive subjects may appear either in topic or in focus position. Given that focus movement for intransitive subjects does not trigger AF morphology, topic and focus only differ in the appearance of the classifier pronoun. The postverbal subject in the baseline in (26) can appear in preverbal position, with and without a postverbal classifier, as shown in (27), with a corresponding difference in interpretation.

(26) Ix-ø-way   nok´   mis.
     PRFV-B3S-sleep CLF.ANIMAL cat
     'The cat slept.'

(27) Intransitive Subject Focus versus Topic Constructions

a) INTRANSITIVE SUBJECT AS FOCUS

    [Nok´   mis] ix-ø-way-i'.
     CLF.ANIMAL cat   PRFV-B3S-sleep-ITV
     'It was the cat that slept.'

b) INTRANSITIVE SUBJECT AS TOPIC

    [A nok´   mis] ix-ø-way   **nok´.**
     PV CLF.ANIMAL cat   PRFV-B3S-sleep CLF.ANIMAL
     'As for the cat, it slept.'

The same pattern also applies to the preverbal subjects of non-verbal predicates, which differ from verbal predicates in that they lack TAM marking. A non-verbal predicate with an intransitive subject topic is shown in (28).

(28) A ix   Ana ø   jun ix   k´ayb´un ix.
      PV CLF.FEM Ana B3S one CLF.FEM   teacher   CLF.FEM
      'As for Ana, she is a teacher.'

3.1.3 Transitive object topics

In contrast to subjects, objects cannot freely participate in the external topic construction. Object topics are usually ungrammatical and are rejected by the speaker, with the exception of a few rare examples in O-V-classifier-S order, which will be discussed in section 4. Therefore, preverbal objects generally must be interpreted as foci, without a resumptive classifier, as shown in (30). A baseline with a postverbal object in VOS order is shown in (29).

(29) Ix-ø-s-man   ixim   wa´il winh   winak.
      PRFV-B3S-A3S-buy CLF.GRAIN tortilla CLF.MASC   man
      'The man bought tortillas.'

(30) Transitive Object Focus versus Topic Constructions

a) TRANSITIVE OBJECT AS FOCUS

   [A   ixim   wa´il] ix-ø-s-man   winh   winak.
   PV CLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.MASC   man
   'It was tortillas that the man bought.'

b) TRANSITIVE OBJECT AS TOPIC

   ?* [A ixim   wa´il] ix-ø-s-man   **ixim**   winh   winak.
      PVCLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.GRAIN   CLF.MASC   man

    * [A ixim   wa´il] ix-ø-s-man   winh   winak **ixim**.
      PVCLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.MASC   man   CLF.GRAIN

      Intended: 'As for tortillas, the man bought them.'

In summary, focus constructions are available for all three syntactic arguments, while only subjects can appear in topic position.

While topic constructions clearly differ from focus in terms of morphological marking, they also differ in terms of their syntactic derivation. A priori, a topic could be derived in two different ways: either as an instance of movement or through high base-generation. In the first case, the topic extracts and binds a stranded classifier, which acts as an overt trace for the movement, resulting in an internal topic, in Aissen's terms. This account is comparable to the movement account for A´-movement in Agent Focus constructions and *wh*-questions. In the second case, which I will argue for, the subject topic is base-generated in the left periphery and

simply co-referenced with a pronoun in post-verbal subject position, resulting in an external topic. As it is not crucial for the purpose of this paper to determine how verb-initial word order is derived. I remain neutral on this question and, for the purpose of simplicity, choose the structure from Aissen (1992) to represent Chuj external topics. Alternative proposals for Mayan clause structure are presented in Coon (2010) and references therein.

(31) External topic structure in Chuj
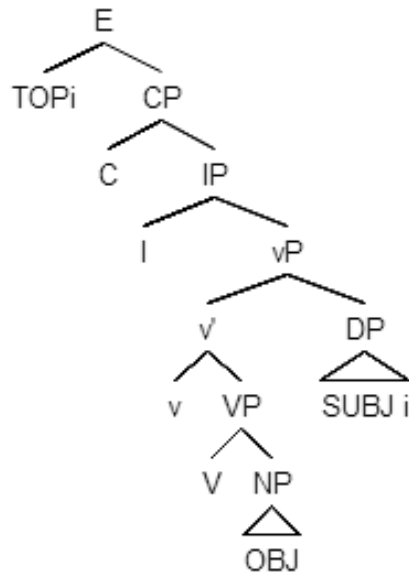
In this structure, the external node (also called Expression node) under which the topic appears is not a landing site for movement. A topic in this position must hence be generated there (Aissen 1992, Emonds 1985). In the following section I will offer diagnostics that show that the preverbal subject in topic constructions has indeed not been fronted, and behaves differently from foci and *wh*-words that have been fronted.

3.2 Base-generation versus Movement diagnostics

3.2.1 Extending Aissen (1992)

Aissen (1992) offers various diagnostics to distinguish between topic and focus in Mayan, as well as between internal and external topics, which will be discussed in the following section. Topic versus focus diagnostics include word order, topic markers, and prosodic cues. While some of Aissen´s diagnostics of external topics are not applicable to Chuj, as will be shown in section 3.2.3, several diagnostics yield comparable results to Popti' and Tsotsil. These diagnostics include topic > focus > verb word order, island-insensitivity, and the fact that resumptive classifiers are pronouns rather than traces. To establish a high base-generation account for Chuj topics, I will first discuss these diagnostics, distinguishing topics from foci and then showing that topics are not derived through movement, and offer further syntactic tests for high base-generation in section 3.2.2.

Distinguishing between topic and focus

In addition to semantic differences between topic and focus, syntactic evidence for the difference between topic and focus in Chuj is provided by the fact that foci can be negated, but topics cannot. Aissen notes that Tsotsil topics precede negation, which is situated in C and separates internal topics in Spec CP and external topics under an external node from foci in Spec IP. Negation can precede foci (32) but follows topics (33).

(32) Negation with Focus:

> **Mu** [chobtik-uk][7] tztz´un.
> NEG corn-UK   3s.plant
> 'It wasn´t corn that he was planting.'   (Tsotsil; Aissen 1992)

(33) Negation with Topics:

> Pero [li   vo´on-e] **mu**   xixanav.
> BUT   DET I-.ENC   NEG   1S.walk
> 'But me, I don´t walk.'   (Aissen 1992)

The position of negation in Chuj is not crucial to my analysis, but like in Tsotsil, foci in Chuj can be negated, with the negation markers *mok* [8] receding the focused constituent (34), while topics cannot receive negation. Example (35) shows that, if a preverbal element is coindexed with a postverbal pronoun, it cannot be negated.

(34) [A   ix   Estela] **mok-laj** te´   manzan ix-ø-s-lo'   ix.
     PV CLF.FEM Estela NEG-IRR CLF.WOOD apple   PRFV-B3S-A3S-eat CLF.FEM
     'As for Estela, it was not the apple that she ate.'

(35) *__Mok-laj__ [a waj   Torres] ix   Matal   ix-ø-y-il   winh.
     NEG-IRR PV CLF.MASC.NAME Torres CLF.FEM Magda PRFV-ABS3S -A3S-see CLF.MASC
     Intended: 'As not for Torres, it was Magda that he saw.'

The above examples also show that the topic precedes focus. As noted in section 2.1, Aissen (1992) shows that the topic position in a number of Mayan languages is situated structurally higher than the focus position, and topics must therefore always precede foci, in the form topic > focus > verb. This fact holds true in Chuj, where topics must precede foci: the preverbal elements that are coindexed with resumptive classifiers must precede foci (36) and *wh*-words (37). The alternative order focus/wh > topic > verb is not acceptable (38).

---

[7] The suffix –uk is not defined in Aissen (1992).
[8] Here the negative head *mok* that precedes the focus attracts the irrealis enclitic –laj, which appears postverbally in sentential negation.

Context: Elsa bought wood and fruits at the market. When she returned, she went to find a machete to cut the things she bought.

(36) [A   ix   Elsa] **[a te´   k´atzitz]**   ix-ø-s-xik   ix.
     Pv CLF.FEM Elsa PV CLF.WOOD firewood   PRFV-ABS3S-ERG3S-chop   CLF.FEM
     'As for Elsa, it was the firewood that she cut.'

(37) [A ix   Ana] **tas**   ix-ø-s-man   ix?
     PV CLF.FEM Ana   WHAT PRFV-B3S-A3S-buy CLF.FEM
     'As for Ana, what did she buy?'

(38) ***Tas** [a ix   Ana] ix-ø-s-man   ix?
     What PV CLF.FEM Ana   PRFV-B3S-A3S-buy CLF.FEM
     Intended: 'What did, as for Ana, she buy?'

These first two diagnostics prove that nouns with a corresponding postverbal classifier must indeed be topics, not foci, as they cannot receive focus negation and must precede foci. However, it does not prove that these constructions are external topics instead of internal topics. To show that Chuj topics are indeed external topics, I will illustrate that they cannot be derived by movement and must therefore be base-generated externally.

Topics as a case of base-generation

As Aissen (1992) notes, if topics arrive at their preverbal position via movement, we would expect them to be subject to island constraints, since these constraints apply to the relation between a moved element and its trace. As A´-movements, the fronting of *wh*-words and foci is subject to these constraints. In contrast, external topics can link to an element in an island, since island constraints do not apply to coindexation. An external topic coindexed with a classifier in a relative clause is shown in (40), and an ungrammatical focus extraction out of the relative clause in (41).

(39) Baseline
     Hin-gana chan   libro [ix-ø-s-tzib´ej   waj   Xun].
     A1S-like CLF.VINE book PRFV-B3S-A3S-write CLF.MASC.NAME   Juan
     'I like the book that Juan wrote.'

(40) TOPIC (Subject)
     A   waj   Xun [hin-gana chan   libro [ix-ø-s-tzib´-ej   *(winh)]]
     PV CLF.MASC.NAME Juan A1S-like   CLF.VINE book PRFV-B3S-A3S-write-DTV CLF.MASC
     'As for Juan, I like the book that he wrote.'

(41) FOCUS
     * A   waj   Xun [hin-gana chan   libro [ix-ø-tzib´-{an-i, ej} ___ₜ]]
       PV CLF.MASC.NAME Juan A1S-like   CLF.VINE book PRFV-B3S-write-{AF-ITV, DTV}
       'It is Juan that I like the book that ___ₜ wrote.'

(41) also shows that focus fronting out of the island is ungrammatical with and without Agent Focus on the embedded verb. A parallel ungrammatical extraction of a *wh*-word out of an island is shown in (42).

(42) * Mach [hin-gana chan   libro   [ix-ø-tzib´-an-i' ___t]]
         Who A1S-like CLF.VINE book   PRFV-B3S-write-AF-ITV
         'Who I like the book that ___t wrote?'

Since the topic construction in (36) is grammatical, while the extractions in (41) and (42) fail, topics in Chuj must indeed be high base-generated external topics, instead of internal topics derived through A´-movement.

Further proof for the external topic account is provided by the impossibility of classifiers to appear in focus constructions. External topics can be linked to an argument position in its scope via a pronominal classifier, instead of a gap. Ungrammatical examples of postverbal classifiers in *wh*-questions and focus constructions are provided in (43) and (44) respectively.

 (43) <u>Wh-question</u>
      Mach winak   winak ix-ø-xik-an   te´   k´atzitz (*winh)?
      Who CLF.MASC man   PRFV-B3S-cut-AF CLF.WOOD firewood CLF.MASC
      'Who cut the firewood?'

(44) Focus
      A ix   Ana ix-ø-mak-an   nok´   mis (*ix).
      PV CLF.FEM Ana PRFV-B3S-hit-AF CLF.ANIMAL cat   CLF.FEM
      'It was Ana who hit the cat.'

This diagnostic, once again, illustrates that topics are not derived by movement, since their supposed traces cannot appear in known A'-extractions. I will now turn to some further tests to establish that Chuj topics are not derived by movement.

3.2.2 Additional base-generation diagnostics

This section will discuss the two diagnostics of classifier mismatches between topics and their resumptive pronouns, and a ban on object topics. Firstly, as illustrated in section 3.2.1, classifiers cannot appear in extractions and are therefore not stranded by movement. Additional evidence for this claim is provided by mismatches between the classifiers in topic constituents themselves and their corresponding postverbal classifiers. If postverbal classifiers were partially-pronounced lower copies of movement, they would be expected to match the classifiers present in the topic DP. Furthermore, the lower copies should only occur when classifiers are present in the subject topic. However, in several contexts there are mismatches between the two classifiers.

Firstly, there is a mismatch between male classifiers in topic constructions. Chuj employs two different male classifiers: *waj* appears as an article in the context of male names, and *winh* acts as the article for all other male nouns and as the male pronoun. In topic constructions, preverbal subjects with the classifier *waj* receive the post-verbal classifier *winh* (45) instead of another instance of *waj,* which results in an ungrammatical sentence (46).

(45) A   waj   Petul ol-ø-s-man   ixim   wa´il   **winh**
      PV CLF.MASC.NAME Pedro PROSP-B3S-A3S-buy CLF.GRAIN   tortilla CLF.MASC
      'As for Pedro, he will buy the tortilla.'

(46) *A   waj   Petul ol-ø-s-man   ixim   wa´il **waj**
       PV CLF.MASC.NAME Pedro PROSP-B3S-A3S-buy CLF.GRAIN tortilla CLF.MASC.NAME
       'As for Pedro, he will buy the tortilla.'

If the resumptive classifier were a partially-pronounced lower copy of movement, we would expect the same classifier, *waj*, to appear. The fact that instead the canonical pronoun form, *winh*, is employed, supports the view that postverbal classifiers are coindexed pronouns instead of traces. It could be assumed that the classifier *winh* in (45) is a defective trace in that it is underspecified for a "name" feature present on *waj*. However, this analysis is not likely, given that the human plural marker *heb´*, which is part of the male human plural pronoun *heb´ winh* shown in (47), also surfaces with resumptive classifiers for plural subjects (48). Notably, *heb'* is specified for a human feature, since it cannot appear with animals and plants, as illustrated in (49).

(47) Ix-ø-way   *(**heb´**) **winh**
    PRFV-B3S-sleep PL   CLF.MASC
    'They slept.'

(48) A heb' winh   unin ix-ø-y-il   nok´   much *(**heb´**) **winh**.
    PV PL   CLF.MASC child PRFV-B3S-A3S-see CLF.ANIMAL bird   PL   CLF.MASC
    'As for the children, they saw the bird.'

(49) *A   heb'   tz'i lanh s-kar-el-wi   heb' nok.
     PV CLF.ANIMAL dog PROG A3S-run-NOM-ANTIP PL   CLF.ANIMAL
     Intended: 'As for the dogs, they are running.'

It would be odd to assume that in the case of *winh*, the male classifier is underspecified for a name feature, but in the case of *heb´ winh*, is not underspecified for a human plural feature and receives overt plural morphology. Furthermore, like *winh*, *heb' winh* is a canonical pronominal form used for third-person plural nouns. Resumptive classifiers always match the form of canonical pronouns, supporting the idea that they are simply pronouns themselves, rather than traces that differ in their specification for various features.

Secondly, there is a mismatch between topic DPs that do not include classifiers and the postverbal classifiers that resume them: nouns with number words may appear with or without

classifiers articles; however, nouns with number words in topic position must be resumed by their regular postverbal classifier,[9] even when this classifier is not present in the topic DP:

(50) A   jun   (winh)   winak   ix-ø-way   *(**winh**)   t´a   te´   b´at.
PV   one   CLF.MASC   man   PRFV-B3S-sleep   CLF.MASC   PREP   CLF.WOOD   house
'As for one man, he slept in the house.'

The classifier in the topic DP can be unpronounced but must be pronounced in the lower argument position. This mismatch provides further evidence that topics are not derived by movement.

A further test for external topics in provided by a ban on object topics. In section 3.1, I have shown that objects are bad topics in that they are usually ungrammatical in combination with postverbal classifiers. Therefore, they should be dispreferred or banned in contexts where they must be topicsi. Two of these environments in which objects are in fact banned are OSV order and island constructions.

As shown in section 3.1, objects can appear preverbally as foci, but cannot – except for in very rare cases, which will be discussed in section 4 – be a preverbal topic, as indicated by the ungrammaticality of the resumptive classifier in (52).

(51) [A   ixim   wa´il]   ix-ø-s-man   winh   winak (***ixim**).
PV   CLF.GRAIN   tortilla   PRFV-B3S-A3S-buy   CLF.MASC   man   CLF.GRAIN
'The man bought the tortilla.'

(52) [A   ixim   wa´il]   ix-ø-s-man   (*?**ixim**)   winh   winak.
PV   CLF.GRAIN   tortilla   PRFV-B3S-A3S-buy   CLF.GRAIN   CLF.MASC   man
'The man bought the tortilla.'

The impossibility of resuming a preverbal object with a postverbal classifier pronouns reflects that objects cannot appear in topic position. This can be tested by filling both preverbal positions, namely the topic and the focus position. Since topics necessarily precede focus, in SOV word order the subject acts as a topic and the object acts as focus, and in OSV order, the object acts as a topic and the subject acts as focus. When comparing these word orders, the expected contrast between subjects and objects surfaces: subjects can appear in either position, but objects are banned in topic position (54).

---

[9] The only topics that do not receive an overt resumptive classifier pronoun are intangible beings such as spirits (Craig 1986). This is due to the fact that these entities are not associated with any material category and therefore also do not receive classifiers in regular DPs. I analyze such cases as regular topic constructions but with a null classifier pronoun, which preserves the ergative marking and topic semantics, as in the example in (i):

(i) A   pixan   ix-in-y-il.
PV   spirit   PRFV-B1S-A3PL-see
'As for the spirits, [they] saw me.'

(53) Subject topic & Object Focus

[A   ix   Elsa] [a te'   k´atzitz] ix-ø-s-xik   ix.
PV CLF.FEM Elsa PV CLF.WOOD firewood PRFV-B3S-A3S-chop CLF.FEM
'As for Elsa, it was the firewood that she cut.'

(54) Object topic & Subject Focus

 * [A te'   k'atzitz] [a ix   Elsa] ix-ø-s-xik   (**te´**).
   PV CLF.WOOD firewood PV CLF.FEM Elsa   PRFV-B3S-A3S-chop CLF.WOOD
   'As for the firewood, it was Elsa who cut it.'

In section 3.1, I also illustrated that subject topics can be coindexed with an argument position in an island. Given that objects are bad topics, they should not be able to appear in topic position and be coindexed with a classifier inside an island. This hypothesis is confirmed by the ungrammatical island construction in (56).

(55) Baseline

Hin-gana [winh   winak ix   tzib´-an chan   libro]
A1S-like CLF.MASC.NAME man   PRFV write-AF CLF.VINE book
'I like the man who wrote the book.'

(56) Topic (Object)

*A chan   libro hin-gana [winh   winak ix-ø-tzib´an   (chan)]
PV CLF.VINE book A1S-like   CLF.MASC.NAME man   PRFV-B3S-write-AF CLF.VINE)
'As for the book, I like the man who wrote (it).'

It is notable that both in the island construction in (56) and in OSV word order, object topics are not just strongly dispreferred, but banned. I will account for the difference between the general dispreference of object topics and a ban on object topics in these configurations in section 4.

In this section, I have provided various syntactic diagnostics to establish Chuj topics as external base-generated topics. Firstly, they can coindex with an argument position in an island, which is not compatible with the movement analysis of internal topics. Secondly, the classifiers associated with topics cannot also appear in known A'-extractions and can differ from classifiers in the topics, making them bad candidates for being partially-pronounced lower copies of movement. Lastly, I show that objects cannot be topics regardless of whether the resumptive is inside a syntactic island or not. Hence, Chuj topics are not extracted, but are instead base-generated, just as external topics in Tsotsil and Popti' are (Aissen 1992). Having established the base-generation of Chuj topics and similarities to external topics in other Mayan languages, I will now turn to differences between Chuj topics and those in Tsotsil and Popti'.

3.2.3 Differences from Tsotsil and Popti'

Chuj topics display a few syntactic differences from topics in Tsotsil and Popti'.[10] Firstly, in Tsotsil, topics are usually preceded by determiners, whereas foci cannot be. This contrast does not hold in Chuj, where topic and focus constituent may both include classifiers acting as determiners. Secondly, Chuj topics lack a designated topic marker (since the *a*-marker also precedes foci) and are not followed by a designated enclitic, which are both present in Tsotsil topics:

(57) **A ti** antz-**e** jun-yo´on ta-xkom
     PV DET woman-ENC happily   stays
     'The wife stays at home happily.'   (Aissen 1992)

More importantly, however, Chuj displays a difference in its closeness to the following CP from topics in Tsotsil and Popti'. There is evidence that, like Tsotsil and Popti' topics, Chuj topics may be rather loosely related to the main sentence. Topics without coreferential pronouns are very rare, but grammatical. An example is given in (58). When the constituent in topic position establishes the aboutness-topic for the comment but has no corresponding argument in this clause, a classifier acting as a resumptive pronoun cannot be used.

Context: My friend and I bought some tortillas, and we are walking over to another friend's house.

(58) Te' pat, ay jun k'in (*te').
     CLF.WOOD house there-is one party CLF.WOOD
     'As for the house, there is a party.'

However, Chuj topics can be in embedded clauses, unlike in Tsotsil and Popti'. Aissen (1992) employs this restriction on topics as an argument for the external topic node being generated exclusively outside the matrix clause. (59) shows an ungrammatical Tsotsil topic in an embedded clause:

(59) *Liyalbe li Xun-e ti a li Petul(-e) taxtal(-e).
     He.told.me DET Xun-ENC COMP TOP DET Petul(-ENC) comes(-ENC)
     'Xun told me that Petul was coming.'   Aissen (1992)

In Chuj, in contrast, topics may appear in finite embedded clauses, though they are often restricted to root clauses (see Emonds 1970; Hooper & Thompson 1973; see also Bianchi & Frascarelli 2010 for a recent review). A Chuj embedded topic is shown in (60).

---

[10] Aissen also offers some prosodic differences between E-topics and foci, such as a separate intonational phrase for the topic, which is marked by a prosodic break. Further investigation into Chuj prosody is required to show potential parallels.

(60) **A ix   Ana** ix-y-al   ix
     Pv CLF.FEM Ana   PRFV-A3S-say CLF.FEM

     [to **a waj**   **Petul** ol-ø-s-man   ixim   wa´il winh]
     That PV CLF.MASC.NAME Pedro PROSP-B3S-A3S-buy   CLF.GRAIN tortilla CLF.MASC

     'As for Ana, she said that, as for Pedro, he will buy the tortilla.'

Hence, Chuj topics can be generated with any CP, not just the matrix clause. Notably, this is also the case in Tz'utujil, a Mayan language of the Quichean branch. Aissen (1992) classifies Tz'utujil topics as internal (A'-moved) topics:

(61) Aa   Xwaan n-0-b'ij   chi Ta Mari'y ma   t-r-aajo'.
      YOUTH Juan   ASP-A3S-say that Miss Maria NEG   ASP-A3S-want
      'Juan says that Maria doesn't want it'   (Dayley:235)

The fact that Chuj topics can appear in embedded CPs is problematic for Aissen's dichotomy between external topics which are base-generated at the matrix clause and internal topics which can be A'-moved to the edge of any CP. The fact that topics in Chuj can appear in embedded CP although it is an external (base-generated) topic suggests that there may be some variation across topics in Mayan with respect to the position of the topic in the clause periphery.

Another similarity between Chuj and Tz'utujil is the fact that third-person pronouns can be topics, which is not possible or at least very rare in Popti' (see Aissen 1992, Craig 1977)[11]. This means that Chuj topics, like Tz'utujil topics, can be continuing topics, while Popti' and Tsotsil topics can only be new or switch topics. (62) illustrates a continuing topic in Chuj:

Context: My mother hasn't seen me in a long time, but she is going to come visit me soon.

(62) [A   ix   hin-un]   ol-ja'   t'a jun ab'il   tik.
      Pv   CLF.FEM A1S-mother PROSP-arrive PREP one summer this
      As for my mother, she is going to come this summer.

      [A   ix]   ol-in-s-chel   ix**.**
      Pv   CLF.FEM   PROSP-B1S-A3S-hug CLF.FEM
      'As for her, she is going to hug me.'

According to Aissen (1992), continuing topics are very common in Tz'utujil. In Chuj, however, they are grammatical but not common, falling somewhere in between Tz'utujil and Popti' in terms of frequency of occurrence.

In summary, Chuj topics pattern most closely with Tsotsil and Popti' topics in that they are externally base-generated in their preverbal position. However, they appear to be more closely

---

[11] Tsotsil does not have any overt third-person pronouns, hence the absence of such pronouns in topic constructions is not particularly informative.

linked to the following CP, as they can occur in embedded clauses, and may be continuing topics, which are properties associated with internal topics in these other languages.

I will now turn to two constraints on Chuj topics that are not present in Popti', Tsotsil or Tz'utujil. I first discuss the constraint on objects in topic position and draw a comparison to a similar pattern from Q´anjob´al, a sister language of to Chuj. I then present a second constraint, which makes the coindexation of topics with their resumptive pronouns fail when a third-person overt subject intervenes between them.

4. Constraints on Chuj Topics

There are two constraints on Chuj topics that limit the configurations in which they can appear. Firstly, objects are dispreferred as topics, and secondly, overt subjects can block the coindexation of topics with their resumptive pronouns. The effects of both constraints are individually detectable, and have an additive effect on (un)grammaticality: when only the object constraint is violated, topics are disprefered but possible, but when both constraints apply at the same time, the result is judged to be entirely ungrammatical.

4.1 Object topic constraint

The first constraint on Chuj topic constructions is the constraint against objects in topic position. Chuj object topics are strongly dispreferred in that they are never suggested by my consultant in a translation task into Chuj and are only rarely accepted in grammatical judgment tasks[12]. (63) shows an object topic example which is consistently judged as ungrammatical, while (64) illustrates an object topic whose acceptability seemed to vary between sessions:

(63) *[A ixim   wa´il] ix-ø-s-man   winh   winak **ixim**.
      PV CLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.MASC man   CLF.GRAIN
      Intended: 'As for tortillas, the man bought them.'

(64) ?*A ixim   wa´il ix-ø-s-man   **ixim**   winh   winak.
      PV CLF.GRAIN tortilla PRFV-B3S-A3S-buy CLF.GRAIN CLF.MASC man
      'It was the man who bought tortillas.'

Note that the ungrammaticality of object topics is not a constraint on thematic patients or themes, since the subjects of passives are fine topics, as shown in (66).

(65)   Ix-ø-say-**chaj**   nok´   chich.
       PRFV-B3S-search-PASS CLF.ANIMAL rabbit
       'The rabbit was looked for.'

---

[12] This observation is in line with corpus data from Buenrostro (2009), which also examines the dialect of San Mateo Ixtatán. Topics generally occur less frequently in corpora than in traditional elicitation and semi-spontaneous speech, but are in line with my findings in that they are only subjects or elements that have no link to the main clause.

(66) **A nok   chich** ix-ø-say-chaj   **nok**.
      PV CLF.ANIMALrabbit PRFV-B3S-search-PASS CLF.ANIMAL
      'As for the rabbit, it was looked for.'

This constraint does not apply to Tsotsil, Popti' and Tz'utujil, where object topics are grammatical, as seen in the object topics in Popti' and Tz'utujil in (67) and (68).

(67) Ix   Malin   s-maq   naj   Pel ix.
      CLF.FEM Mary   A3S-hit   CLF.MASC Peter CLF.FEM
      'As for Mary, Peter hit her.'   (Craig 1977)

(68) Ja tzyaq   ch'ooyaa'x-ee-tij-ow-i.
      Theclothes   rats   ASP-A3PL-eat-AF-ITV
      'The clothes, it's the rats that ate.'   (Dayley 309)

However, the dispreference - or even ban - on object topics is not unique to Chuj; compatible data has been found in Q'anjob'al, which is closely related to Chuj and has VSO word order (Fowlie 2013, ms. UCLA; Mateo-Toledo 2008). Fowlie (2013) refers to the construction comparable to Chuj topics described here as "resumptive topics." Both transitive (69) and intransitive (70) subjects can topicalize freely, but object topics are ungrammatical, once again matching the pattern in Chuj. A contrast between a baseline with a postverbal object and an ungrammatical object topic construction is shown in (71) and (71).

(69) Transitive subject
      [Naq   Xhun]x-lo-ay-toq   naq   te´   tzoyol.
      [CLF.MASC Juan] PRFV-eat-DIR2-DIR3 CLF.MASC CLF.PLANT CHAYOTE.
      'As for Juan, he ate chayote.'   (Fowlie 2013)

(70) Intransitive subject
      [Ix   Malin] s-b´itn-i   ix.
      [CLF.FEM Malin] PROG-sing-ITV CLF.FEM
      'As for Malin, she sings.'   (Fowlie 2013)

(71) Postverbal object
      X-y-il   ix   Alexia   naq   Damien.
      PRFV-A3S-see CLF.FEM Alexia CLF.MASC Damien
      'Alexia saw Damien.'   (Fowlie 2013)

(72) Object topic
      *[Naq   Damien] x-y-il   ix   Alexia naq.
       CLF.MASC Damien PRFV-A3S-see CLF.FEM Alexia CLF.MASC
      'As for Damien, Alexia saw him.'   (Fowlie 2013)

Like in Chuj, this pattern contrasts with a focus fronting construction called "gap topic" by Fowlie (2013), which involves no resumptive classifier, triggers Agent Focus for transitive subjects (73), and is possible with all arguments, including objects (75).

(73) [Ix   Malin] ch´-och-**on** naq   Xhun.
CLF.FEM Malin IC-like-**AF** CLF.MASC Juan
'It was Malin who likes Juan.'   (Fowlie 2013)

(74) [Ix   Alexia]   x-kanalw-i.
CLF.FEM Alexia   C-dance-ITV
'It was Alexia who danced.'   (Fowlie 2013)

(75) [Te´ mansan]   x-ø-ø-lo-ay-toq   ix   Malin.
[CLF.PLANT apple] C-B3S-A3S-eat-DIR2-DIR3 CLF.FEM Malin
'It was the apple that Malin ate.'   (Fowlie 2013)

Notably, Q´anjob´al also displays some variation in terms of disallowing objects as topics (Mateo Pedro, p.c.): while intransitive and transitive subjects in topic position are well documented (see Gonzalez et. al. 2000), transitive objects in topic position produce varied grammatical judgments across speakers. While Fowlie (2013) finds objects to be ungrammatical, England (1994) shows transitive objects in topic position, as illustrated in (76).

(76) **Naq**   **Lwin** max skol   ix   Xhuxhep **naq**.
CLF.MASC Lwin PRFV A3S-help CLF.FEM Isabel   CLF.MASC
'As for Lwin, Isabel helped him.'   (England 1994:46)

Hence, although Q´anjob´al displays some speaker variation, object topics are generally dispreferred, matching the pattern in Chuj, which only allows for object topics to appear in a few O-VclassifierS clauses. However, there are several environments in Chuj where object topics are not just strongly dispreferred, but ungrammatical. These configurations not ony violate the object topic constraint, but also a second constraint, which I will now turn to.

4.2. Intervening subject constraint

The second constraint affecting the grammaticality of Chuj topic constructions concerns the coindexation of topics and their corresponding resumptive pronouns. This constraint prohibits topics from being coindexed with a resumptive pronoun if an overt subject intervenes between them. Since Chuj does not naturally display first- and second-person pronouns, intervening subjects are restricted to nouns and third-person pronouns, which may appear either in the matrix or in the embedded clause. I will first offer a discussion of subject intervention between object topics and their resumptive pronouns, which is a configuration which also violates the object topic constraint. Subsequently I will turn to matrix clause subjects intervening between subject topics and their coindexed pronouns, which shows the independent effect of the intervening subject constraint.

4.2.1 Intervention in object topic constructions

Intervening subjects can be found in four distinct constructions: they may be situated in a main or an embedded clause, and either appear postverbally or in a preverbal focus position. In each of these structures, when they intervene between an object topic and its resumptive classifier, this leads to the violation of the object constraint, resulting in ungrammaticality.

The first prohibited configuration was introduced in section 3.2, where I discussed topics resumed by argument positions inside islands. In this construction, the focused subject of an embedded clause intervenes between the object topic and the resumptive pronoun in the embedded CP. Recall that, while a subject topic can cross an embedded object focus and coindex a classifier pronoun, an object topic cannot cross an embedded subject focus, as shown in example (77). The same holds true for non-focused subjects in embedded clauses, as seen in example (78)[13].

(77) * [A chan libro]$_j$ [hin-gana [**winh winak** ix-ø-tzib´an (chan)$_j$]].
PV CLF.VINE book A1S-like CLF.MASC man PRFV-B3S-write-AF (CLF.VINE)
Intended: 'As for the book, I like the man who wrote (it).'

(78) * [A chan libro]$_j$ [in-k'an b'ey [tato ix-ø-s-tzib´ej
PV CLF.VINE book A1S-ask whether PRFV-B3S-A3S-write

winh winak (chan)$_j$]].
CLF.MASC man (CLF.VINE)

Intended: 'As for the book, I asked whether the man wrote (it).'

The two constructions above are ungrammatical because the coindexation is interrupted by the subject of the embedded clause. The same constraint applies when the intervening subject is situated in the matrix clause. An intervening preverbal subject focus and intervening postverbal subject are shown in (79) and (80) respectively:

(79) * [A te´ k´atzitz] [**a ix Elsa**] ix-ø-xik-an te´.
PV CLF.WOOD firewood PV CLF.FEM Elsa PRFV-B3S-chop-AF CLF.WOOD
Intended: 'As for the firewood, it was Elsa who cut it.'

(80) * [A te´ manzan] ix-ø-s-man [**ix Ana**] te´.
PV CLF.WOOD apple PRFV-B3S-A3S-buy CLF.FEM Ana CLF.WOOD
Intended: 'As for an apple, Ana bought it.'

Notably, an O-V-classifier construction becomes more acceptable when no overt third-person subject intervenes between the topic and its resumptive pronoun. This is the case with first and

---

[13] When the matrix clause subject and embedded subject are both third person subjects, the sentence becomes simply too confusing to be judged. However, when only the matrix clause subject is in third person and the embedded subject is in first or second person, switching the order in (75), the same ungrammaticality arises, which is in line with the effect of other intervening subjects in matrix clauses.

second person subjects, which are indicated only by agreement on the verb. A grammatical example of an object topic across a first-person subject is illustrated in (81).

(81) A   ixim   wa´il   ix-ø-**in**-man   ixim.
     Pv   CLF.GRAIN   tortilla PRFV-B3S-A1S-buy CLF.GRAIN.
     'As for the tortilla, I bought it.'

The same contrast between first and second person subjects and third-person overt subjects holds in subject intervention between subject topics and their resumptive pronoun, as I will illustrate in section 4.2.2.

The effects of this intervening subject constraint have not been described in previous work on Mayan topics such as Aissen (1992). However, a very similar constraint on topics has been observed in Tongan, an Austronesian language of the Polynesian branch with null pronominals (Polinsky, to appear). Tongan is a verb-initial language with a clause-final topic position. In Tongan, like in Chuj, only subjects are generally acceptable as topics, as in (82), while object topics are unacceptable, as shown in (83):

(82) [Na'e kaiha'asi *pro*$_i$ 'a   e   pa'angá] ['e   Sione$_i$].
     PST   steal   ABS DET money   ERG John
     'John, (he) stole the money.'

(83) *[Na'e tuku 'e   Sione *pro*$_i$ 'i   he   loki] ['a   e   pa'anga$_i$].
     PST   leave ERG John   LOC DET room   ABS DET money
     'The money, John left in the room.'

In the example in (83), the subject 'John' is situated structurally higher than the null object pronominal that attempts to be bound by the topic 'the money', and therefore blocks this coindexation. However, Tongan object topic constructions are acceptable once there is no overt subject intervening between the topic and the coindexed pronominal in the following clause. Since Tongan uses null pronominals instead of overt third-person pronouns, there is no third-person versus first- and second-person split in terms of intervening subjects. A grammatical object topic with a coindexed third-person element is shown in (84):

(84) [Na'a nei   tuku *pro*$_i$ *pro*$_k$ 'i   he   loki] ['a   e   pa'anga$_k$].
     PST   3SG.CL leave   LOC DET room ABS DET money
     'The money, [he] left [it] in the room.'

Object topics are possible precisely when there is no intervening subject. This is explained as the null pronominal looking for the closest possible antecedent which c-commands it to coindex with (Polinsky, to appear). If there is an intervening subject, the pronoun will not find the object topic as an antecedent. If, however, there is no intervening subject, the pronominal is coindexed with the external topic.

Pronominals seeking to coindex with the closest possible antecedent, however, cannot fully account for topic constructions in Chuj: while intervening subjects certainly block the relation between a topic and its pronominal, overt objects do not block coindexation between subject topics and their resumptive pronouns. In example (85) repeated from above, we see that a preverbal focused objects does not disrupt the relation between the subject topic and its resumptive pronoun. Similarly, in example (86) repeated from above, we see that the intervening object relativization does not affect the subject topic dependency which crosses it.

(85) [A   ix   Elsa] [a te´   k´atzitz]   ix-ø-s-xik   ___t   ix.
    PV CLF.FEM Elsa PV CLF.WOOD firewood   PRFV-ABS3S-ERG3S-chop   CLF.FEM
    'As for Elsa, it's firewood that she chopped.'

(86) A waj   Xun [hin-gana [**chan**   **libro** ix-ø-s-tzib´ej   *(winh)]].
    PV CLF.MASC.NAME Juan A1S-like CLF.VINE book PRFV-B3S-A3S-write CLF.MASC
    'As for Juan, I like the book that he wrote.'

Therefore, it cannot be assumed that object topics in Chuj are simply ungrammatical because there is always a structurally higher subject which will intervene and block coindexation between the object topic and its resumptive prononoun. Since only subjects block this relation between topics and their resumptive pronouns, which may cross intervening objects, it is necessary to differentiate between subjects and objects in terms of intervention. The same pattern of only subjects acting as interveners can be observed when they intervene between a topic and a lower subject pronoun, which will be discussed in the following section.

4.2.2 Intervention in subject topic constructions

An overt subject may not only intervene between an object topic and its resumptive pronoun, but also between another subject in topic position and its resumptive pronoun. I will present a configuration where a subject topic is blocked by an overt third-person subject in the matrix clause. This configuration violates the intervening subject constraint but not the object topic constraint, allowing us to observe the independent effect of the intervening subject constraint. I begin by presenting baseline examples with first-person and third-person matrix clause subjects and embedded clauses, in (87) and (88):

(87) Baseline (first person matrix subject):

    Ix-Ø-w-al-a'   [to ol-ø-s-man   ixim   wa´il waj   Petul]].
    PRFV-B3S-S1S-say-TV that PROSP-B3S-A3S-buy CLF.GRAIN tortilla CLF.M.N Pedro
    'I said that Pedro will buy tortillas.'

(88) Baseline (third person matrix subject):

Ix-Ø-y-al   ix   Ana [to ol-ø-s-man   ixim   wa´il
PRFV-B3S-A3S-say CLF.F Ana that PROSP-B3S-A3S-buy CLF.GRAIN tortilla

waj   Petul]].
CLF.M.N   Pedro
'Ana said that Pedro will buy tortillas.'

When the subject of the embedded clause in these sentences is topicalized, the expected first-
and second-person versus third-person contrast in grammaticality judgments arises. Example
(89) with a first-person matrix subject is grammatical, while example (90) with an intervening
overt third-person matrix subject is ungrammatical:

(89) [A waj   Petul] [ix-ø-**w**-al-a'   [to ol-ø-s-man
       Pv CLF.MASC.NAME Pedro PRFV-B3S-A1S-say-TV   that PROSP-B3S-A3S-buy

ixim   wa´il   winh]].
CLF.GRAIN tortilla CLF.MASC

'As for Pedro, I said that he will buy the tortilla.'

(90) *[**A waj   Petul**] [ix-ø-y-al   **ix**   **Ana** [ol-ø-s-man
        PV CLF.MASC.NAME Pedro   PRFV-B3S-A3S-say CLF.FEM Ana PROSP-B3S-A3S-buy

ixim   wa´il   **winh**]].
CLF.GRAIN tortilla CLF.MASC

Intended: 'As for Pedro, Ana said that he will buy the tortilla.'

In (90), the intervening subject *ix Ana* blocks the coindexation between the subject topic and its
resumptive pronoun in the embedded clause.[14]

---

[14] Note: when the matrix clause subject is already part of a topic construction, creating a sort of nested topic with
the topic of the embedded CP, the derivation becomes acceptable:

(i) [A waj   Petul]   [**ix**   **Ana** ix-ø-y-al   **ix**
    Pv CLF.MASC.NAME Pedro   CLF.FEM   Ana   PRFV-B3S-A3S-say CLF.FEM

    [to ol-ø-s-man   ixim   wa´il   winh]]
    that PROSP-B3S-A3S-buy CLF.GRAIN tortilla   CLF.MASC

'As for Pedro, Ana said that he will buy the tortilla.'

The structure in (i) is judged as acceptable. I therefore conclude that the third person subject of the matrix clause
intervenes between the topic and its pronoun, unless it is itself a coindexed topic and not available for further
coindexation. Hence, the derivation in (i) is saved by the fact that the intervening subject is already "occupied",
i.e. coindexed with a higher pronoun, so that the lower pronoun may skip it when coindexing with the higher
topic. Crucially, it is the pronoun that is probing upwards, and skips an already coindexed subject. This
observation is similar to the activity condition discussed in Chomsky (2001).

The strong contrast between (89) and (90) not only illustrates that the intervening subject constraint is independent of the object constraint, since it applies to sentences without object topics, but also shows that it is stronger than a mere dispreference. While the object constraint alone does not make object topics impossible, but simply disprefered, the intervening subject constraint renders sentences ungrammatical, independent of the bias against object topics. The following list illustrates all combinations of the two constraints discussed in this section and their grammaticality judgments, with "subjects" referring to third-person overt subjects:

(91) Ungrammatical topic configurations and their constraint violations

Construction	Object Topic Constraint	Intervening Subject Constraint	Judgment
$Object_{j,TOPIC}$ V $Classifier_j$ (1./2. Person Subject)	*		?*
$Object_{j,TOPIC}$ V $Classifier_j$ Subject	*		?*
$Subject_{j,TOPIC}$ V Subject [$_{CP}$ V $Classifier_j$]		*	*
$Object_{j,TOPIC}$ V Subject $Classifier_j$	*	*	*
$Object_{j,TOPIC}$ $Subject_{FOCUS}$ V Classifier	*	*	*
$Object_{j,TOPIC}$ V [$_{CP}$ V Subject $Classifier_j$]	*	*	*
$Object_{j,TOPIC}$ V [$_{CP}$ $Subject_{FOCUS}$ V $Classifier_j$]	*	*	*

The above schema illustrates that, for a topic construction to be grammatical, the constituent coindexed with the lower pronoun must both be a topic and a subject. The coindexation is dispreferred but possible when said constituent is a topic, but not a subject. If, however, a constituent which is a subject but not a topic intervenes, the derivation fails: the pronoun cannot skip this subject and can therefore not be coindexed with the higher topic.

Future research may explore if the coindexation between topics and resumptive pronouns is occurring in terms of the checking of topic and subject features between these topics and pronouns. The intervening subject constraint may then be a case of defective intervention, with the overt subject blocking the coindexation between the topic and its classifier pronoun due to its subject feature, but lack of topic feature.

5. Conclusion

In this paper I have argued that Chuj topics are base-generated high and coindexed with a pronoun in the following clause. This construction contrasts with Agent Focus and *wh*-questions, which are derived by A'-movement. In Aissen's (1992) terms, the Chuj topic construction is an external topic, and Chuj lacks the movement-based internal topic construction. I observed additional differences between Chuj topics and external topics in Tsotsil and Tz'utijil: the former can be continuing topics and may appear in embedded clauses.

Subsequently, I described two independent constraints on Chuj topics. Firstly, objects are generally strongly dispreferred as topics, and secondly, an overt subject can intervene between a topic and its classifier. An investigation of configurations that violate one constraint, the other, or both motivated a characterization where object topics are dispreferred, whereas intervening subjects strictly lead to ungrammaticality.

References

Aissen, Judith. 1992. Topic and Focus in Mayan. *Language* 68:43-80.

Aissen, Judith. 2015. Documenting topic and focus. 4th International Conference on Language Documentation and Conservation (ICLDC4). Presentation slides.

Bennett, Ryan, Jessica Coon, and Robert Henderson (to appear). Introduction to Mayan Linguistics. *Language and Linguistics Compass*, Special issue on Mayan languages.

Bianchi, Valentina & Mara Frascarelli. 2010. Is topic a root phenomenon? *Iberia* 2:43-88.

Buenrostro, Cristina. 2004. El sufijo -an en el Chuj de San Mateo Ixtat´an. *Anales de Antropolog´ıa* 38:255–267.

Buenrostro, Cristina. 2009. Chuj de San Mateo Ixtatan. El Colegio de Mexico.

Buenrostro, Cristina. 2013. La voz en Chuj de San Mateo Ixtat´an. Doctoral Dissertation, El Colegio de M´exico, Mexico City.

Campbell, Lyle. to appear. Mayan history and comparison. In *The Mayan languages*, ed. Judith Aissen, Nora England, and Roberto Zavala Maldonado. London: Routledge.

Campbell, Lyle & Terrence Kaufman. 1985. Mayan linguistics: where are we now? *Annual Review of Anthropology* 14:187–198.

Chomsky, Noam. 2001. "Derivation by Phase", in M. Kenstowicz (ed.), *Ken Hale: A Life in Language*, Cambridge (Mass.): MIT Press, 1-52.

Clemens, Lauren Eby. 2014. Prosodic noun incorporation and verb-initial syntax. Doctoral Dissertation, Harvard University, Cambidge, MA.

Coon, Jessica. 2010. VOS as Predicate Fronting in Chol Mayan. *Lingua* 120:345–378.

Coon, Jessica. 2014. Mayan morphosyntax. Invited contribution to *Language and Linguistics Compass*, Special issue on Mayan languages.

Coon, Jessica (to appear). Mayan morphosyntax. *Language and Linguistics Compass*, Special issue on Mayan languages.

Coon, Jessica, Pedro Mateo Pedro, and Omer Preminger. 2014. The role of case in A-bar extraction asymmetries: Evidence from Mayan. *Linguistic Variation* V 14, 2:179-242.

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

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

Domingo Pascual, Pascual Mart´ın. 2007. Stzolalil stz´ib´chaj ti´ Chuj / Gram´atica normativa Chuj. Academia de Lenguas Mayas de Guatemala.

Emonds, Joseph. 1985. A unified theory of syntactic categories. Dordrecht: Foris.

England, Nora C. 1991. Changes in basic word order in Mayan languages. *IJAL* 57:446-486.

England, Nora C. 1994. Autonomia de los Idiomas Mayas: Historia e Identidad. Cholsamaj. Guatemala.

Fowlie, Meaghan. 2013 A taxonomy of Q´anjob´al fronting constructions. UCLA American Indian Seminar 2013. Manuscript.

Gonzáles et al. 2000. Variación Dialectal en Q´anjob´al. Guatemala : Cholsamaj.

Grinevald, Collette; Peake, Marc. 2012. "Ergativity and voice in Mayan: A functionaly-typological approach". *Ergativity, valency, and voice*: 15–29.

Henderson, Robert. 2012. Morphological alternations at the intonational phrase edge: The case of K'ichee'. *Natural Language and Linguistic Theory*. 30(3), 741-789.

Hooper, Joan B. & Sandra A. Thompson. 1973. On the Applicability of Root Transformations. Linguistic Inquiry 4, 4:465-497.

Hopkins, Nicolas A. 2012. A dictionary of the Chuj (Mayan) language. As spoken in San Mateo Ixtatán, Huehuetenango, Guatemala ca 1964-65.

Hou, Liwen. 2013. Agent Focus in Chuj Reflexive Constructions. BA Honours thesis, Montreal, QC: McGill University.

Lambrecht, K. 1981. Topic, Antitopic and Verb Agreement in Non-Standard French., Bd. II-6 der Reihe Pragmatics and Beyond, John Benjamins, Amsterdam.

Lambrecht, K. (2001), Dislocation, in M. Haspelmath, Hrsg., Language Typology and Language Universals, Bd. 20-2 der Reihe HSK, Walter de Gruyter, Berlin/New York, S. 1050–1078.

Mateo-Toledo, B´alam Eladio. 2008. The family of complex predicates in Q´anjob´al (Maya): their syntax and meaning. PhD thesis, Austin, TX: University of Texas Austin.

McCloskey, James. 2006. Resumption. In *Martin Everaert and; Henk van Riemsdijk*. 94-117.

Polinsky, Maria (to appear).A PP-ergative language: Tongan. Manuscript.

Polinsky, Maria, and Eric Potsdam. Long Distance Agreement and Topic in Tsez. *Natural Language & Linguistic Theory* 19**:** 583–646.

Raymundo Gonz´alez, Sonia, Adan Francisco Pascual, Pedro Mateo Pedro, & Eladio Mateo Toledo. 2000. Sk'exkixhtaqil yallay koq'anej: variaci´on dialectal en Q'anjob'al. Ciudad de Guatemala, Guatemala: Cholsamaj.

Stiebels, Barbara. 2006. Agent focus in Mayan languages. *Natural Language & Linguistic Theory* 24. 501-570.

Zavala, R. (2000). Multiple classifier systems in Akatek (Mayan). In G. Senft (Ed.), Systems of nominal classification (pp. 114-146). Cambridge University Press.