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Artículo

The syntax of non-verbal predication in Yucatec Maya
La sintaxis de la predicación no verbal en maya yucateco

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Abstract

The objective of this paper is to fill a void in the formal syntactic literature on Mayan languages by proposing a syntactic structure for clauses with non-verbal predicates in Yucatec Maya. The paper attempts to integrate the rich descriptions of non-verbal predicate constructions found in more functionally-oriented accounts (Lehmann 2002 [1998]; Verhoeven 2007; Vapnarsky 2013) with insights from the generative literature on argument licensing and clause structure in Mayan languages (Coon 2016 for an overview) as well as small clauses (Citko 2011 for an overview). I conclude that non-verbal sentences in Yucatec are matrix small clauses embedded under an Infl node, which is the locus for finiteness/stative aspect rather than tense morphology. This simple structure, coupled with independently motivated operations that have been proposed for small clauses and argument licensing/word order in Mayan languages, is able to account for a range of properties of these sentences that improves upon previous accounts developed in Armstrong (2010), Pye (2011) and Coon (2014).

Key words: non-verbal predicates, small clauses, Yucatec Maya

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Resumen

El objetivo de este trabajo es contribuir a los estudios de sintaxis formal de las lenguas mayas mediante un análisis de las cláusulas con un predicado no verbal del maya yucateco. El trabajo pretende integrar las detalladas descripciones de las construcciones de predicado no verbal que se encuentran en la literatura de orientación funcional (Lehmann 2002 [1998]; Verhoeven 2007; Vapnarsky 2013) con las recientes propuestas generativistas sobre la legitimación de argumentos y la estructura oracional de las lenguas mayas (véase Coon 2016) y las llamadas *cláusulas mínimas* (del inglés "small clause", véase Citko 2011). Se concluye que las oraciones no verbales en maya yucateco son cláusulas mínimas incrustadas bajo una proyección Flex (=Infl), que sirve como el núcleo de finitud/aspecto estativo en vez de flexión de tiempo. Se argumenta que esta estructura sencilla y una serie de operaciones morfosintácticas previamente propuestas para explicar ciertos aspectos de las cláusulas mínimas y la legitimación de argumentos/orden de palabras en las lenguas mayas permiten dar cuenta de una gama de propiedades de las oraciones no verbales, lo cual representa una mejora con respecto a los análisis previos de Armstrong (2010), Pye (2011) y Coon (2014).

Palabras clave: predicados no verbales, cláusulas mínimas, maya yucateco

1. Introduction

Yucatec Maya (Yucatec) and other Mayan languages have fully-fledged sentences that consist only of a non-verbal predicate and a bound morpheme that cross-references the argument of that predicate, labeled Set B in the Mayanist literature. In Yucatec, the Set B morpheme attaches to the right edge of the predicate as in (1).

(1) a. Koolnáal-en
farmer-B1SG
'I am a farmer'

b. Muk'a'an-ech
strong-B2SG
'You are strong'

The objective of this paper is to present a step-by-step argument in favor of analyzing sentences like (1) as in (2).

(2) a. Basic configuration
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{NP}}\ \text{koolnáal}]\ [_{\text{DP}}\ \text{-en}]\ ]\ ]$

b. Agreement
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [\sout{u}\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{NP}}\ \text{koolnáal}]\ [_{\text{DP}}\ \text{-en}]\ ]\ ]$

c. Cliticization
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [\sout{u}\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{NP}}\ \text{koolnáal-en}]\ [_{\sout{\text{DP}}}\ \sout{\text{-en}}]\ ]\ ]$

d. EPP-driven movement to spec, InflP
$[_{\text{InflP}}\ [_{\text{NP}}\ \text{koolnáal-en}]\ \text{Infl}_{[\text{-dyn}],\ [\sout{u}\phi],\ [\sout{\text{EPP}}]}\ [_{\text{SC}}\ [_{\sout{\text{NP}}}\ \sout{\text{koolnáal-en}}]\ [_{\sout{\text{DP}}}\ \sout{\text{-en}}]\ ]\ ]$

The main claims made are as follows. All non-verbal predicate sentences in Yucatec are generated in a basic configuration that consists of a small clause constituent, which establishes the subject-predicate relationship, and an Infl head that acts as the locus of finiteness and stative aspect (specified as [-dyn] since it is in opposition with dynamic

or eventive aspect and mood markers). The $\text{Infl}_{[\text{-dyn}]}$ head is endowed with uninterpretable features that drive the syntactic derivation in three steps: (i) agreement, (ii) cliticization and (iii) EPP-driven movement. First, a [*u*ϕ] feature on $\text{Infl}_{[\text{-dyn}]}$ must be valued and eliminated by the interpretable phi-features of the subject (2b). This agreement relation is also the source of abstract case (absolutive here) for the subject. If the subject is a bound Set B morpheme as in (1), agreement is followed by cliticization. As shown in (2c), the subject cliticizes to the right of the predicate. Finally, $\text{Infl}_{[\text{-dyn}]}$ has an EPP feature that requires phonological content in its specifier. Since the subject is cliticized to the predicate in (2), the entire complex moves as a unit to spec, InflP.

The rest of the paper motivates each of these steps. §2 presents an empirical and theoretical background of hierarchical structure, morpheme ordering and argument licensing in verbs and other categories so as to give a more complete picture of the main descriptive properties of Yucatec and how these have been analyzed theoretically. It is a somewhat lengthy background section, but it makes for a clearer picture of how verbal and non-verbal predication structures are connected in the language. §3 gives an overview of the main descriptive properties of non-verbal predicates and discusses the shortcomings of previous analyses. At the end of the section, I demonstrate how the proposal in (2) improves upon these previous analyses. §4 presents detailed derivations of non-verbal sentences with much more complexity than those in (1), showing how the basic mechanism in (2), when combined with other independently motivated operations, accounts for many heretofore unanalyzed properties of these sentences. §5 concludes.

2. Background

The main objective of this section is to outline a working theory of morpheme ordering and argument licensing in Yucatec by looking first at verb phrases and then at the internal structure of phrases headed by other categories. This will serve not only to provide a background on the basic morpho-syntax of the language but also frame the issues that non-verbal predicates raise both empirically and theoretically, which are outlined in §3.

2.1. *The syntax of the verbal template or complex*

Yucatec is a null subject and object language in which a verbal template or complex may instantiate a fully-fledged clause that lacks overt lexical arguments.[1] Such clauses consist of an aspect/mood (AM) marker followed by the verb. The verb itself is composed of three main parts: a root and transitivity marker (verb stem), a suffix known as "status" in the Mayanist literature (Kaufman 1990), which will be explained in more detail below, and a set of morphemes that cross-reference verbal

[1] See Blair 1964; Bricker 1981; Lehmann 1993; 2002 [1998]; Bricker et. al. 1998; Bohnemeyer 2002; Lois & Vapnarsky 2003; Briceño Chel 2006; Verhoeven 2007 for detailed descriptions of YM clause structure, among other phenomena. The descriptions in this section are based primarily on the observations in these works and not on original observations or data. For details on information structure, relative clauses, word order of full DP arguments, and different types of embedding see Durbin & Ojeda 1978; Bohnemeyer 2002; Briceño Chel 2002; Gutiérrez Bravo & Monforte 2010; Gutiérrez Bravo 2015a; 2015b; Verhoeven & Skopeteas 2015.

arguments, labeled Set A and Set B, respectively. The examples in (3–5) provide illustrations of these basic components of Yucatec clause structure using a transitive and intransitive verb in the three main inflectional patterns.

(3) Incompletive/indicative pattern.

a. Táan in líi'-s-ik-ech
PROG A1SG raise-CAUS-TR.INC-B2SG
'I'm lifting you up'

b. Táan in wen-el
PROG A1SG sleep-INTR.INC
'I am sleeping'

(4) Completive pattern.

a. T-in líi'-s-aj-ech
CP-A1SG raise-CAUS-TR.CP-B2SG
'I lifted you up'

b. J wen-Ø-ech
CP sleep-INTR.CP-B2SG
'You slept'

(5) Subjunctive pattern.

a. Sáam in líi'-s-Ø-ech
REC.PST A1SG raise-CAUS-TR.SBJV-B2SG
'I lifted you up a while ago'

b. Sáam wen-ek-ech
REC.PST sleep-INTR.SBJV-B2SG
'You slept a while ago'

As can be observed above, each sentence contains an aspect/mood (AM) marker at the left edge. In (3), the incompletive/indicative pattern, the argument-marking morpheme known as "Set A" in the Mayanist literature cross-references both transitive (3a) and intransitive (3b) subjects and immediately follows the aspect marker. Next comes the verb stem. (3a) contains the root *líi'* ('raise') and the transitivizing causative morpheme *-s* while (3b) contains the intransitive root *wen* ('sleep'). Attached to the right of the verb stems is a suffix called "status" whose form is sensitive to aspect/mood, transitivity, and within different types of intransitive verbs, root class. It is *-ik* for transitive verbs in incompletive/indicative paradigm and *-Vl* (where *V* = harmonic vowel that is identical to the vowel of the root) for the intransitive root class to which *wen* belongs. Finally, the morpheme *-ech*, glossed as "Set B", cross-references the object of the transitive verb and follows the status suffix.

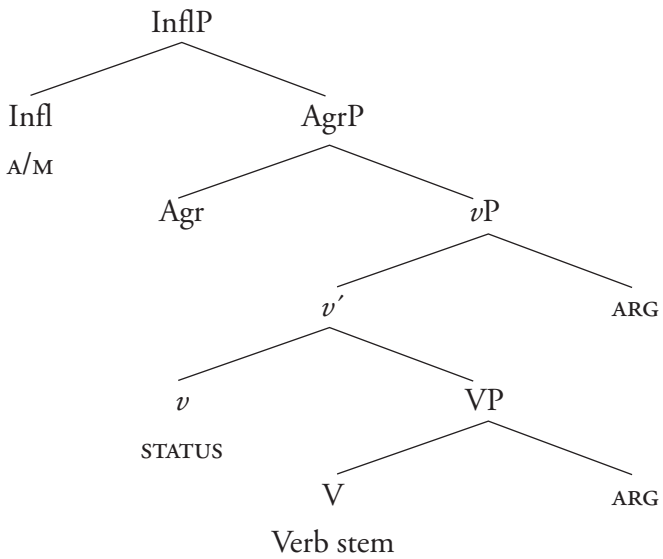
The other two inflectional patterns, completive (4) and subjunctive (5), differ in important ways from that of (3). Not only do the AM

markers and status suffixes have different meanings but the alignment of the Set A and Set B morphemes is ergative-absolutive rather than nominative-accusative. As can be observed in (4) and (5), the Set B morpheme *-ech* that cross-references the object of the transitive verb in the a-examples also marks the subject of the intransitive verb in the b-examples.[2]

In order to establish a working hypothesis about clausal syntax that will form the basis of the subsequent analysis of non-verbal predication in Yucatec, I will closely follow work by Aissen (1992; 1996; 2011), Pye (2011), Coon (2013; 2017), Coon et al. (2014) and Gutiérrez Bravo (2015b), introducing some novel adaptations and simplifying assumptions to these proposals. Based on these works, the clausal architecture of Mayan languages can be organized as follows: a verb stem that may take an argument as its complement, a *v* layer that is instantiated by status suffixes and may introduce an argument in its specifier, a subject agreement projection, AgrP (Pye 2011; Gutiérrez Bravo 2015b), and an Infl layer in which AM markers appear. This is schematized in (6). Following Aissen (1992; 1996; 2011), I assume that lexical/thematic specifiers project right while functional specifiers project left.

[2] For descriptions of different types of alignment of argument-marking morphemes see Dixon (1979). Detailed discussions of split ergativity from both synchronic and diachronic perspectives in Mayan languages can be found in Larsen & Norman (1979), Bricker (1981), Robertson (1992) and Coon (2013), and references therein. For the present work, since subjects of non-verbal predicates are marked with Set B, these fall within the ergative-absolutive alignment pattern of the language and thus we will focus primarily on the ergative-absolutive alignment pattern of Set A and Set B morphemes.

(6)



There are a number of morpho-syntactic operations that derive correct morpheme order and account for the formal licensing of arguments. These are spelled out in (7), and illustrated below with some concrete examples.

(7) Morpho-syntactic operations that occur within InflP (Yucatec version).

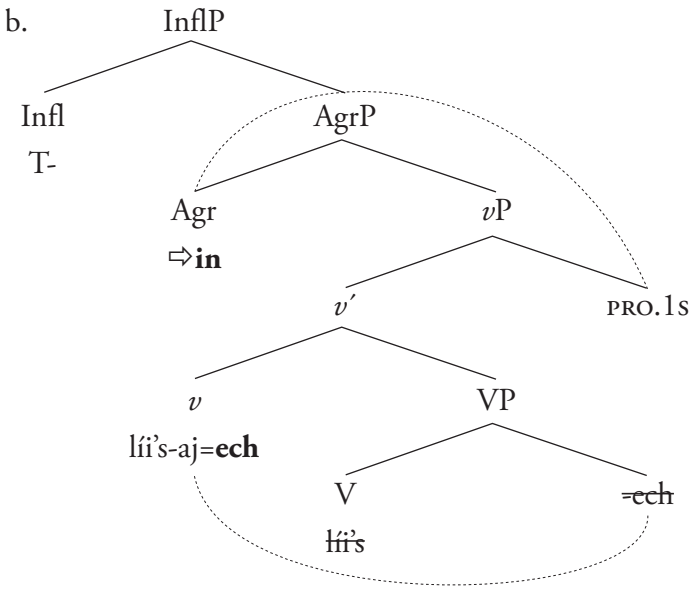
a. **Head movement of** V **to *v***: the verb stem moves to *v* and the status suffix aligns to its right.
b. **Agr**: Agr is an agreement projection that is the locus of the Set A morpheme (Pye 2011; Gutiérrez Bravo 2015a).
c. **Set B morpheme**: the Set B morpheme is a clitic that must cliticize to *v* (Grinevald & Peake 2012; Coon et al. 2014; Coon 2017). The clitic

itself is licensed either by *v* in transitive clauses or by Infl in intransitive ones (Legate 2008; Coon 2013).

The basic derivational operations for the transitive clause in (4a), repeated in (8a), are shown in (8b) and (8c) respectively.

(8) a. T-in líi'-s-aj-ech
CP-A1SG raise-CAUS-TR.CP-B2SG
'I lifted you up'

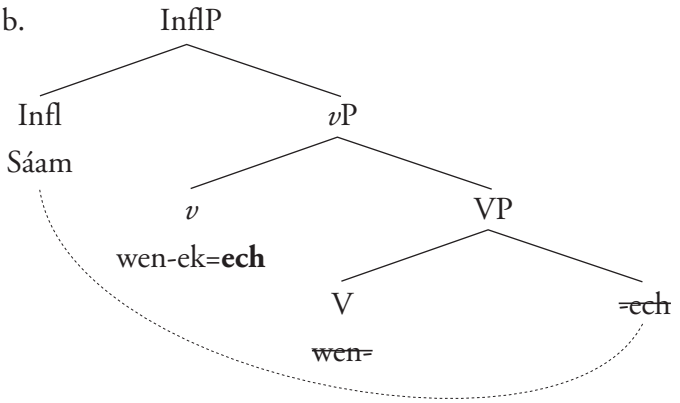
b.



The derivation for a clause with an intransitive verb in (5b) is shown below in (9).

(9) a. Sáam wen-ek-ech
REC.PST sleep-INTR.SBJV-B2SG
'You slept a while ago'

b.



Evidence for locating the Set A morpheme in Agr (in line with Gutiérrez Bravo 2015b, which differs from Coon 2017's claim for Ch'ol) comes from the fact that it is separable from the rest of the verbal complex. Certain monosyllabic quantifiers and adverbs may intervene between the Set A morpheme and the verb as shown in (10) (see Blair & Vermont-Salas 1967; Bohnemeyer 2002; Verhoeven 2007).

(10) a. T-u **láaj** jan-t-aj-Ø
CP-A3SG all eat-APPL-TR.CP-B3SG
'He ate it up completely/ate it all up'

b. …kex tumen ma' t-in **séeb** na'at-aj-Ø u
even because NEG CP-A1SG fast understand-TR.CP-B3SG A3SG
t'aan-e' …
word-TOP
'Even though I didn't understand her words' (ICC: 24)

Though no concrete claim about the syntactic position of the adverbs highlighted in bold in (10) has been made in the literature as far as I am aware, a plausible way of accounting for their position is to claim that they are generated in a projection between Agr and *v*P. This would explain why the Set A morpheme appears separate from the verb stem.

Turning now to the licensing of the Set B morpheme, the primary evidence that it is licensed via different means in transitive and intransitive clauses comes from comparing embedded sentences that exhibit subject control with those that do not. For instance, in (11) below, the matrix predicate *k'áat* ('want') may take a clausal complement that exhibits subject control (11a) or one in which the matrix subject is distinct from the embedded one (11b) (see Bricker 1981 and subsequent work).

(11) a. In k'áat [in w-il-Ø-ech]
A1SG want A1SG PVGL-see-TV.SBJV-B2SG
'I want to see you'

b. A k'áat [káa in w-il-Ø-ech]
A2SG want SUB A1SG PVGL-see-TV.SBJV-B2SG
'You want me to see you'

In the former, no AM marker is possible, the transitive verb is marked for subjunctive status and both Set A and Set B morphemes appear. In the latter, the subordinating particle *káa* appears. This particle has been analyzed as an AM marker since it is in complementary distribution with other AM markers (see Chan Dzul 2010; Gutiérrez Bravo 2015b) and the embedded transitive verb appears in subjunctive status with both Set A and Set B morphemes. The fact that all arguments of a transitive verb can be licensed in the absence of an AM marker (=Infl) supports the idea that they are both licensed by a source other than Infl, mainly transitivity.

Intransitive verbs, on the other hand, show a different pattern. In control environments like (12a), the verb appears in a bare form without a Set A or Set B morpheme. In non-control environments like (12b), the presence of the subordinating particle *káa* correlates with a fully inflected intransitive verb –it appears in subjunctive status and contains a Set B morpheme.

(12) a. In k'áat [meyaj]
A1SG want work
'I want to work'

b. A k'áat [káa meyaj-nak-en]
A2SG want SUB work-INTR.SBJV-B1SG
'You want me to work'

If *káa* is an instantiation of Infl, the pairs of sentences in (12) support linking the formal licensing of the Set B morpheme in intransitive clauses to the presence of Infl. In fact, it can be demonstrated that all intransitive verbs that have Set B morphemes have Infl. For example, for all root classes inflected for subjunctive status, either an AM marker or a subordinating particle *káa* ('that') or *chéen/kéen* ('when') is present when Set B appears. In completive status, the correlation of the presence of Infl with Set B is not as transparent. This is because the aspect marker in intransitive completive sentences can be either aspirated or null. Consider the completive sentences in (13) that have verbs from different intransitive root classes.

(13) a. J bin-Ø-o'on
CP go-INTR.CP-B1P
'We went/left'

b. (J) meyaj-naj-o'on
CP work-INTR.CP-B1P
'We worked'

The verb *bin* ('go') belongs to a root class in which an aspirated completive AM marker appears and the status suffix is null while the verb *meyaj* ('work') belongs to a root class in which there is arguably no overt AM marker and the status suffix is *-naj*.[3] This would appear to

[3] This point was brought up by an anonymous reviewer. I agree that it is an important

question the correlation between the presence of Infl and Set B. One way of maintaining the generalization is to hypothesize that the completive AM marker of intransitive verbs can be aspirated or null but that Infl is always present. This is supported by examining contexts that involve embedding under the perfective connective *káa/ka'aj/ka* (roughly 'when'/'and then'). Bohnemeyer (1998: 486) notes that this connective "occurs exclusively with the perfective (our *completive*, CP) AM marker (*t-* with transitive verbs and *h* with intransitives); combination with any other aspect-mood marker is straightforwardly ungrammatical." In (14a), an example taken from Bohenmeyer (1998) shows that any verb following *káa* must have a completive AM marker. This author represents the intransitive completive AM as aspiration, which is italicized

issue to discuss here since it is relevant for the claim that follows regarding stative aspect in non-verbal predicate sentences, but I would like to highlight two points regarding this discussion. First, I abstract away from the name of intransitive root classes (see Bricker et. al. 1998; Lois & Vapnarsky 2003; Verhoeven 2007; Gutiérrez Bravo 2015b for details) and the status of the morpheme *n-* in *-naj*, which is sometimes glossed as an antipassive. Second, an important piece of information that is lacking in the discussion of aspirated versus null intransitive AM markers is that there is no detailed phonetic analysis of the aspiration that putatively exists before some intransitive root classes in completive status and not others. For instance, the conventions observed in some works on YM cited in this section are inconsistent in this regard –some systematically mark the presence of an aspirated AM marker for *all* transitive root classes in the completive and others do not systematically mark the aspiration at all for any of the root classes (compare Bohnemeyer 1998; 2002; Lois & Vapnarsky 2003; Gutiérrez Bravo 2015b). In sum, I believe it is a valid question to investigate in the future. Regardless of its phonetic status, the argument presented in the text provides evidence that Infl is indeed present even if not phonetically realized for some intransitive verbs in the completive. This will be extended to non-verbal sentences in subsequent sections.

below. In other cases, an intransitive verb may appear embedded under *káa/ka'aj/ka* without an AM marker as in (14b).

(14) a. Le **káa** j naats'-naj-e' **káa** t-u jach
DEF *káa* CP near-INTR.CP.B3SG-TOP *káa* CP-A3SG really
k'ajóolt-aj deeke u paal
know-TR.CP.B3SG that A3SG son
'As (the prodigal son) approached, his father really recognized it was his child' (Bohnemeyer 1998: 487)

b. chéen ba'ale' **ka'aj** suu(t)-naj u paakat u
just but *káa* return-INTR.CP.B3SG A3SG gaze A3SG
y-il-Ø bix u pool j Naat-e'
PVGL-see-TR.SBJV.B3SG how A3SG head CP Nat
'But just when he looked again to see what don Nat's hair was like' (IMM: 26)

Bohnemeyer analyzes the particle as a connective that requires the event it appears with to be aspectually completive. It plays a crucial role in integrating bounded events into the structure of the larger discourse. This plausible analysis of *káa* would require the presence of an aspect marker even if it is not realized phonetically. The fact that an intransitive of any root class may appear after *káa*, regardless of whether there is an aspirated AM marker or not, is evidence in favor of the claim that Infl is always present when Set B is present. Returning to the data in (12), we can now offer a generalization about how Set B morphemes are

licensed differently in transitive and intransitive clauses. In transitive clauses it is transitivity itself that licenses both the subject and object while in intransitive clauses it is finite Infl that licenses the intransitive subject. The same type of pattern shown in (12) has been observed in other ergative languages by Legate (2008) and Coon (2013) and analyzed as "absolutive as default" (ABS=DEF) since absolutive case is not licensed by a single source, but rather varies according to whether the verb is transitive or intransitive. I will adopt this generalization for the licensing of Set B in Yucatec given the discussion above.

Finally, let us consider the evidence for treating Set A and Set B morphemes as agreement and pronominal clitic, respectively. The main evidence for making this distinction is outlined in Grinevald & Peake (2012), Coon et al. (2014) and Coon (2017). The first piece of evidence comes from comparing the position of Set A and Set B morphemes in different Mayan languages. Set A morphemes appear uniformly in the preverbal position or prenominal position (possessors) in all Mayan languages. On the other hand, Set B morphemes appear in different positions across the family. For instance, in Yucatec they appear to the right of the verb stem or any other predicate, but in other Mayan languages such as Q'anjobal, they appear to the right of the pre-verbal AM marker as in (15).

(15) Q'anjobal

a. Max-**ach** y-il-a
ASP-B2SG A1SG-see-TV
'I saw you' (Coon et al. 2014: 190, ex. 17a)

b. Max-**ach** oq'-i
ASP-B2SG cry-ITV
'You cried' (Coon et al. 2014: 190, ex. 17b)

The fixed position of Set A morphemes has been taken as one piece of evidence that they are more like agreement affixes while the variable position of Set B morphemes supports treating them as clitics.

A second piece of evidence that Set B morphemes should be treated as pronominal clitics is that in many Mayan languages, they appear to be reduced forms of strong pronouns. The table below illustrates the similarities between strong pronouns and Set B morphemes in Yucatec, and contrasts these with Set A morphemes (see Coon 2017 for similar information on other Mayan languages).

(16) **Table 1. Yucatec pronouns**[4]

Singular			Plural		
Pronouns	Set B	Set A	Pronouns	Set B	Set A
1 *teen*	*-en*	*in*	1 *to'on*	*-en*	*k … (o'on)*
2 *teech*	*-ech*	*a*	2 *te'ex*	*-e'ex*	*a … e'ex*
3 *leti'*	*-Ø*	*u*	3 *leti'o'ob*	*-o'ob*	*u … o'ob*

As can be observed in the table above, Set B morphemes are reduced forms of strong pronouns while Set A morphemes are not. This situation reflects a tendency across languages that have both agreement morphology and pronominal clitics. While agreement morphemes are

[4] For more information on the pronominal inventory of YM and the variation it exhibits, especially in 1st person plural Set A, see Lehmann (1993; 2002 [1998]), Verhoeven (2007) and Vapnarsky (2013).

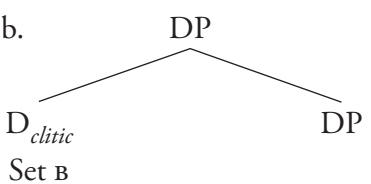
not necessarily formally related to anything in the functional domain of nouns, argumental clitics are usually formally related to determiners or pronouns. This situation is exhibited in Romance languages, where verbal agreement morphology is not related in any systematic way with determiners or subject pronouns whereas the clitic system is formally related to determiners and object pronouns (see Ormazabal & Romero 2013 for detailed discussion of Spanish across dialects).

While a detailed account of agreement and cliticization is beyond the scope of this paper, an explicit proposal about how Set A and Set B morphemes actually appear in the positions they do is important for the sections to come on non-verbal predication. I will follow Pye (2011) and Gutiérrez Bravo (2015b) in assuming that the Set A morpheme appears as a reflex of agreement relation between the Agr head and a pronoun or DP in its c-command domain. Specifically, Agr acts as a probe that needs its phi-features valued and once it finds a goal, those features are spelled out as a Set A morpheme that matches the phi-features of the goal (Chomsky 2000; 2001).

Turning now to Set B, following some recent work on pronominal clitics, I assume that the Set B morpheme is a generated as a determiner in argument position. It may be bare (17a) or adjoined to a strong pronoun or full DP as in (17b) and is licensed by an agreement relation with either transitive *v* or Infl (see discussion above).

(17) a. D_{clitic}
Set B

b.



However, the agreement relation itself is not necessarily a trigger for movement of this determiner to the head that has licensed it. Instead it cliticizes to the right edge of the *lexical head* of the predicate that *thematically* licenses it, which in Yucatec is the complex v-*v* head formed after the verb raises to *v* to pick up the status suffix.

It should be noted that this disconnect between formal/Case licensing and clitic position is similar to how object clitics have been analyzed in Spanish if we combine the classic work of Uriagereka (1995) with more recent observations by Ormazabal & Romero (2013). For example, in (18), the object clitic *lo* is licensed by agreement with a transitive *v*, but it does not cliticize to the verb. Instead it moves to a higher position, labeled F by Uriagereka (1995), which is above T, and cliticizes to the auxiliary.

(18) Juan no **lo** ha dicho
Juan NEG it has said
'Juan hasn't said it'

The point here is that pronominal clitics can be formally/Case licensed through a relation with one functional head but cliticize to a different head for morpho-phonological reasons. While certain details have been glossed over here for reasons of space (see Harizanov 2014; Kramer 2014; Preminger 2014 for recent work), I believe that this working hypothesis provides a plausible account of argument licensing and morpheme ordering in Yucatec clauses headed by a verb.

2.2. *Pre-verbal positions: focus and topic*

A detailed discussion of the word order properties of overt pronominal and lexical arguments of verbs is far beyond the scope of this work (see, for instance, Durbin & Ojeda 1978; Briceño Chel 2002; Skopeteas & Verhoeven 2005; 2009; Gutiérrez Bravo & Monforte 2010, among others). The point that is relevant for non-verbal predicate sentences is that the neutral word order for intransitive subjects is post-verbal as in (19a). Pre-verbal subjects of intransitive verbs may appear in focus and topic positions. For instance, in (19b) and (19c), a focalized or WH subject appears immediately to the left of the AM marker while in (19d), the subject is in a topic position that is marked with the enclitic *-e'*.

(19) a. J el-Ø le naj-o'
CP burn-INTR.CP.B3SG DEF house-DIST
'That house burned down'

b. Domingo-ak-e' teen j jaats'-naj-en ma'alob
Sunday-last-TOP PRO1S CP hit-INTR.CP-B1SG well
'Last Sunday, I hit well (in a baseball game)' (Bohnemeyer 1998: 193)

c. Máax j bin-ij?
Who CP go-INTR.CP.B3SG
'Who left?'

d. Ten-e' j k'uch-en ja'atskab k'iin
PRO1S-TOP CP arrive.INTR.CP-B1SG morning
'As for me, I got here in the morning'

I assume that focalized and WH-subjects move from their post-verbal base position to the specifier of InflP and that topicalized subjects are base-generated in the specifier of CP as shown in (20) (following Aissen 1992; Gutiérrez-Bravo & Monforte 2011; Skopeteas & Verhoeven 2012; Gutiérrez-Bravo 2017).

(20) $[_{CP}$ [TOP]**-e'** C $[_{InflP}$ [FOC] Infl […]]]

2.3. *The internal structure of other types of phrases: NPs, APs, PPs*

The internal structure of the noun phrase in Yucatec is described in Briceño Chel (1996), Bricker et. al. (1998), Lois & Vapnarsky (2003), Verhoeven (2007), Butler (2012) and especially Lehmann (2002 [1998]). The examples in (21) serve as illustrations of some basic components of the noun phrase.

(21) a. le ka'a-túul mejen kóokay-a'
DEF two-CL small fireflies-PROX
'these two little fireflies' (IMM: 44)

b. le uláak' ba'alche'-o'ob-o'
DEF other animal-PL-DIST
'the other animals' (IMM: 42)

(21a) shows that the head noun may be preceded by an adjective and a numeral. The entire noun phrase is flanked by a definite determiner at its left edge and a deictic clitic at its right edge. (21b) shows that a head noun may be marked for plurality by the suffix *-o'ob* (see Lucy 1992; Lehmann 2002 [1998]; Butler 2012 on the general optionality of the plural morpheme).

Much more attention has been paid to the properties of possessors and other nominal arguments and the morphological reflexes they trigger (see especially Bricker et. al. 1998; Lehmann 2002[1998]; Lois & Vapnarsky 2003). Consider the examples in (22) below. In these cases, a possessor is marked by a Set A morpheme that appears in the pre-nominal position just as it does in the verb phrase. The presence of the possessor may also trigger a suffix on certain noun classes but not others. For instance, in (22a), there is no suffix on the possessed noun *otoch* ('house') but in (22b), the suffix *-el* appears on the inalienably possessed noun *k'i'ik'* ('blood').

(22) a. u y-otoch le máak-o'
A3SG PVGL-house DEF person-DIST
'that person's home'

b. in k'i'ik'-el (teen)
A1SG blood-REL (me)
'my blood (in my body)'

Vl (= vowel + l) suffixes like *-el* in (22b) mark different types of relations among the head noun and another NP within the noun phrase.

For instance, in (23), the head noun *kaaj* ('town') may be marked with *-al* when the other noun is interpreted as an inhabitant of the town (23a) while *-il* appears if the other noun names the town as in (23b).

(23) a. u kaaj-al Jacinto
A3SG town-REL Jacinto
'Jacinto's town (where he is from)'

b. u kaaj-il Saki'
A3SG town-REL Valladolid
'the town of Valladolid'

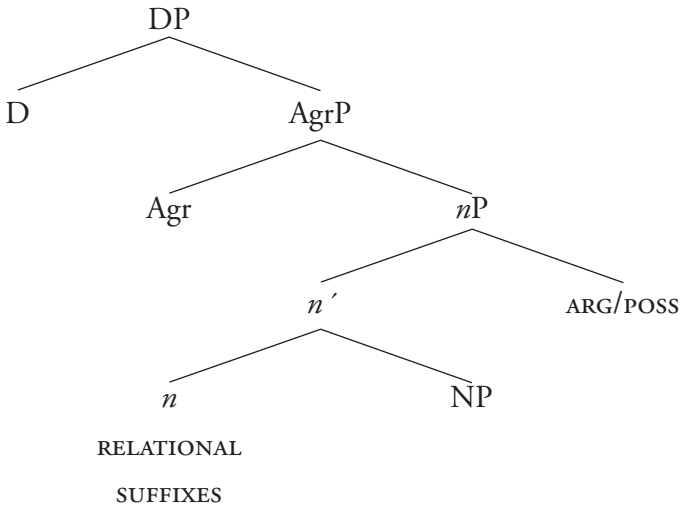
As shown below in (24), the Set A marker can be separated from the head noun by adjectives and possessive classifiers, just like verbal heads can be separated from it by adverbs.

(24) a. in úuchben atan
A1SG old wife
'my former wife' (Lehmann 2002 [1998]: 37, ex. E26)

b. u y-alak' peek' Juan
A3SG PVGL-CL dog Juan
'Juan's (domesticated) dog'

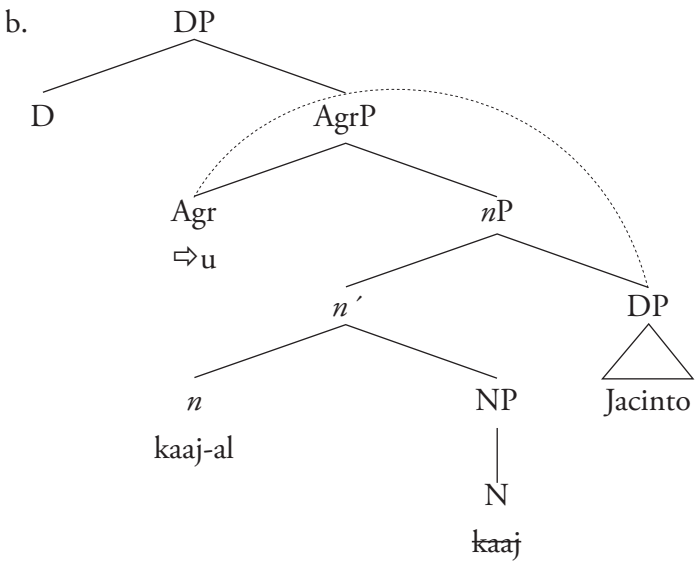
Taking this discussion into consideration, I propose that the internal structure of the noun phrase is as in (25).

(25)



As in the verbal domain, I propose that nouns raise to the projection *n*. The *n* head introduces nominal arguments such as possessors and is the locus of relational suffixes. Its specifier is right-projecting just like *v*. The Agr projection that triggers Set A agreement morphemes in the verbal domain is also present in the extended NP (Pye 2011). Finally, like certain monosyllabic adverbs and quantifiers in the verbal domain, I propose that adjectives are merged between Agr and *n*P. A sample derivation for (23a) is given below.

(26) a. u kaaj-al Jacinto
A3SG town-REL Jacinto
'Jacinto's town (where he is from)'



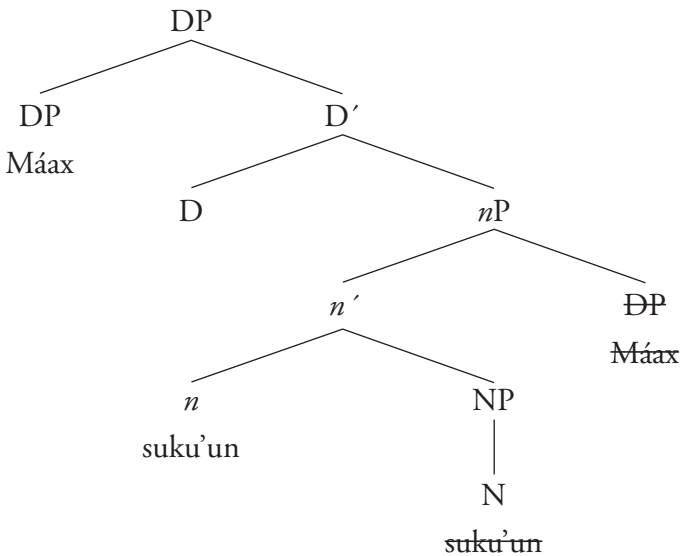
The morphological and syntactic parallelism between verb and noun phrases is very clear based on these properties. A further parallelism is that there is a DP-internal position for interrogative possessors (see Aissen 1996 and Lehmann 2002 [1998]). Interrogative possessors precede the head noun and the entire DP constituent appears in the pre-verbal focus position as shown in (27).

(27) a. [Máax suku'un] bin-Ø Jo'?
Who brother go-INTR.CP.B3SG Mérida
'Whose brother went to Mérida?'

b. [Máax atan] il-ech?
Who wife see.TR.CP.AF-B2SG
'Whose wife saw you?' (Lehmann 2002 [1998]: 41, ex. E34c)

I follow Aissen (1996) in assuming that the interrogative possessors in such cases move within the extended projection of the noun phrase to spec, DP and then the entire DP is pied-piped to spec, InflP. The internal structure of a DP with an interrogative possessor is shown in (28).

(28)



The syntactic properties of adjectival and prepositional phrases are not nearly as well studied as verbs and nouns in any Mayan languages (see Coon 2016: 539 for a brief discussion on Mayan languages generally and Bricker et. al. 1998: 371–382; Lois & Vapnarsky 2003: 72–76; Verhoeven 2007 for morphological and syntactic descriptions of adjectives in Yucatec). For the purposes of this paper, it will suffice to point out two properties of adjectives. First, gradable adjectives may be modified by degree terms, which appear before the head A as in (29a).

Second, some adjectives may take arguments or adjuncts that are typically introduced by the preposition *ti'* as in (29b).

(29) a. jach nojoch
very big

b. sajak ti' le k'ak'as ba'al-o'
scared PREP DEF bad thing-DIST
'scared of the monster'

Rounding out the discussion of internal structure of phrases headed by categories other than verbs are PPs. Mayan languages typically have a very limited inventory of prepositions and express spatial relations with a set of nouns called relational nouns (see Coon 2016 for an overview). Yucatec has two prepositions, *ti'* and *ich(il)*, which are followed by a nominal complement. Example (29b) contains a PP with the preposition *ti'*, which functions as the stimulus argument of the adjective *sajak* ('scared'). As is the case with interrogative possessors of nouns, interrogative complements of prepositions are fronted within the PP and then the entire PP is pied-piped to a pre-verbal focus position as shown in (30) (see Gutiérrez-Bravo 2015a and references therein for details).

(30) [Máax ti'] t-a ts'a-aj le nal-o'?
Who to CP-A2SG give-TR.CP.B3SG DEF corn-DIST
'Who did you give the corn to?'

3. Non-verbal predication in Yucatec: assessing the descriptive and theoretical terrain

In this section, the descriptive properties of sentences with non-verbal predicates are presented and contrasted with those that contain verbs. I also discuss previous analyses of non-verbal predication in Yucatec and other Mayan languages, pointing out certain shortcomings, before outlining a novel proposal.

3.1. *Clauses with non-verbal predicates: descriptive properties*

Clauses that contain non-verbal predicates consist of a predicate to which a Set B morpheme attaches as an enclitic, as in (31).

(31) a. Xooknáal-en
student-B1SG
'I am a student'

b. Ko'oten, xi'ipal! jach ko'-ech
Come child! very mischievous-B2SG
'Come over here, child! You're very mischievous'

c. t-a hun-al-ech
PREP-A2SG one-REL-B2SG
'You're on your own' (Vapnarsky 2013: 55, ex. 31a)

Their defining characteristics are detailed in a number of previous works (see Armstrong 2010; Mateo Toledo 2011; Pye 2011; Vapnarsky 2013; Coon 2014). I will focus on two properties here: the position of Set B clitics and the lack of AM marking and status suffixes.

As we saw above, the Set B clitic always appears in the same position with respect to verbal predicates in Yucatec –it attaches to the right of the status suffix on the verb. In non-verbal predicates, it attaches phrase finally in predicate nouns and adjectives with pre-nuclear modifiers as shown in (32).

(32) a. Teech-e', jach ma'alob j ts'oon-**ech**
You-TOP, very good CL hunter-B2SG
'You, you're a very good hunter' (Vapnarsky 2013: 59, ex. 39)

b. Jach polok-**ech**
very fat-B2SG
'You are very fat'

On the other hand, in cases where a predicate noun or adjective has a post-nuclear argument or adjunct, the Set B morpheme nearly always cliticizes to the head noun or adjective, thus "splitting" the head of the non-verbal predicate from its argument or adjunct (see Lehmann 2002 [1998]: 43 for details). This is shown in (33).

(33) a. u jmeen-il-**en** le kaaj-a'
A3SG *jmeen*-REL-B1SG DEF pueblo-PROX
'I am the *jmeen* (traditional Mayan priest) of this town'

b. Na'aj-**en** yéetel bak'
satisfied-B1SG with meat
'I am satisfied/full with meat' (Verhoeven 2007: 160, ex. 161b)

I have found very few cases in which the Set B morpheme may cliticize phrase-finally in the presence of a post-nuclear argument or adjunct. One such example is shown in (34), where the Set B morpheme cliticizes to the possessor *sajlu'umkeep* rather than the head noun *aal*.

(34) u y-aal sajlu'umkeep-**en**
A3SG PVGL-son scaredmale-B1SG
'I am the son of a weakling' (AMC-I: 94)

Other cases of such phrase-final attachment involve the connective *bey* ('like', 'as'). It may take nominal complements in similative constructions of the form *you are like a dog*. According to the informants consulted for the context in (35), the similative interpretation is possible regardless of the position of the Set B clitic. That is, it does not have to appear on the head adjective *bey* but may also appear phrase-finally, after *soots'* ('bat').

(35) Context: Every time you go out with your friend in the sun, he covers his head because he doesn't like the sunlight – you jokingly tell him that he's like a bat.

Bey-**ech** soots' / Bey soots'-**ech**
Like-B2SG bat / Like bat-B2SG
'You're like a bat/bat-like'

Vapnarsky (2013: 71) reports that for such interpretations in her data, the Set B clitic appears on the head *bey* and if it appears on the noun that follows, the structure is interpreted as a basic NP predicate with a causal conjunction of the type *since/because you are a bat*. One potential way of accounting for this observed difference is to claim that for some speakers like my consultants, *bey* may form a complex head with the nominal complement similar to the English expressions *cat-like* or *bear-like*, and this complex head acts as the locus of cliticization. Moreover, this could be extended to the example in (34), which could be taken as a complex head similar to the English expression *son-of-a-gun* (and variants).[5] In sum, the data in (32–35) simply corroborate the claim in §2.1 that a Set B clitic must cliticize to the right of the lexical head that thematically licenses it. For verbs, this is the complex V-*v* head formed by the verb stem and status suffix and for non-verbal predicates it is the lexical head of the predicate (e.g. 32) or the complex head formed by a noun and a relational suffix (e.g. 33a) or by multiple heads within the predicate (e.g. 34–35).

Prepositional phrases headed by *ti'* and *ich(il)* cannot be directly predicated of an argument and instead require the adjectival existential

[5] In fact, a phenomenon in English that could putatively be taken as evidence that this expression has been reanalyzed as a single head is the presence of a plural morpheme in phrase-final position in examples such as *sons-a-guns* or *sons-a-bitches*.

predicate *yaan* (see Bricker 1981 for description of its origin and Lehmann 1993; 2002 [1998]; Verhoeven 2007; and Vapnarsky 2013 for descriptions of its adjectival properties).[6] *Yaan* appears in at least three types of non-verbal predicate sentences: existentials, locatives and possessives (see Freeze 1992; Myler 2016 for a detailed discussion of these cross-linguistically and Lehmann 2002 [1998]; Verhoeven 2007; and Vapnarsky 2013 for detailed discussions of Yucatec). As can be observed in (36), the position of the Set B clitic is on the adjectival head in each case while the location/possessor can be clause final (36a–b) or between *yaan* and the subject (36c).

(36) a. Yaan-**Ø** waaj ichil le leek-o' (existential)
Existing-B3SG tortilla inside DEF gourd-DIST
'There are tortillas inside the gourd'

b. Tech-e' ti' yan-**ech** te' k'íiwik-o' (locative)
You-TOP LOC existing-B2SG LOC square-DIST
'You are in the square (plaza in center of town)'

c. Yaan-**Ø** ten ya'ab áanalte' (possessive)
existing-B3SG to-me many book
'I have many books' (Lit, 'Many books exist to me')

[6] I am indebted to an anonymous reviewer for pointing out the adjectival nature of *yaan* and suggesting it be glossed as 'existing.' I follow that suggestion in the text.

A second property of non-verbal sentences is that they cannot appear with AM markers and are uninflected for status as shown in (37b).

(37) a. Xooknáal-en
student-B1SG
'I am a student'

b. *Úuch xooknáal-ak-en
DIST.PST student-INTR.SBJV-B1SG
Intended reading: ('I was a student a long time ago')

The lack of AM marking and status suffixes in non-verbal predicates establishes a basic distinction between dynamic predicates that describe changes in time and non-dynamic or stative ones like non-verbal predicates.

One exception to this generalization is discussed in Vapnarsky (2013), who expands on earlier observations reported in Lehmann (1993) and Verhoeven (2007), showing that non-verbal predicates may take a type of status suffix called *extra focal* or *manner focus* status in the literature on Yucatec (Bricker 1981; Lehmann 1993; Bohnemeyer 2002). Extra focal status suffixes appear on verbs when there is a focalized constituent with a manner interpretation to the left of the verbal complex, arguably in spec, InflP (see §2.2 above). In completive aspect, transitive verbs are marked with *-il* and intransitive verbs with *-ik* as shown in (38).

(38) a. BEY t-a jats'-**il**-en-o'
Thus CP-A2SG hit-TR.EX.FOC-B1SG-DIST
'Thus you have hit me' (Lit. 'That is how you hit me') (Bricker 1981: 119)

b. MA'ALOB ween-**ik**-Ø
well sleep-INTR.EX.FOC-B3SG
'He slept well' (Lit, 'Well is how he slept') (Bricker 1981: 121)

Predicate adjectives may appear in this construction and are marked with *-il*, which is homophonous with the extra focal status marker of completive transitive verbs, as in (39).

(39) bey polok-**il**-ech-a' iistikyaj a xíimba
Thus fat-EX.FOC-B2SG-PROX difficult A2SG walk
'Fat as you are, it's difficult for you to walk' (Vapnarsky 2013: 66, ex. 66)

More generally though, non-verbal predicates can themselves be used as a type of manner focus, in which case *yaan* appears with an extra focal status suffix. This may either be the *-ik* of intransitive verbs or the *-il* which is used with non-verbal predicates as can be observed in (40).

(40) a. Ch'eb-ekbal yan-**ik**-Ø le che'-o'
Lean-POS existing-INTR.EX.FOC-B3SG DEF tree-DIST
'That tree is leaning' (Lit, 'Leaning is how that tree is')
(Le Guen 2012: 7, ex. 10)

b. Le yuun cháakó-o' saanto yan-**il**-o'ob xan bey-o'
DEF master thunder-DIST santo existing-EX.FOC-B3PL also as-DIST
'The masters of the thunders, they are also like saints (Lit, it is saint-like how they are), like this' (Vapnarsky 2013: 67, ex. 70)

Finally, the extrafocal status suffix *-il* appears on *yaan* in constructions where certain focused non-verbal predicates are used as "accidental conditions on the participants" (Vapnarsky 2013: 67, citing Andrade 1955 and Lehmann 1993). Some notable examples from Vapnarsky's work are given in (41).[7]

(41) a. su'ulak-ech / su'ulak yan-**il**-ech
Ashamed-B2SG / shy existing-EX.FOC-B2SG
'You are ashamed' / 'You are shy (at the moment)'
(Vapnarsky 2013: 67, ex. 71)

b. u y-atan-ech / u y-atan yan-**il**-ech
A3SG PVGL-wife-B2SG / A3SG PVGL-wife existing-EX.FOC-B2SG
'you are his wife' / 'you are as if you were his wife/acting like his wife'
(Vapnarsky 2013: 67, ex. 72)

[7] A difference between structures used to mark more permanent, characterizing predications versus transitory, stage-level predications has also been noted in negative non-verbal predicate sentences in Ch'ol (Coon 2006; Vázquez Álvarez 2011). Going into the details here would take us well beyond the scope of this paper, but this is an intriguing area of future research.

To sum up, AM marking is universally absent in non-verbal predicate sentences while status-marking is limited only to extra focal contexts, where a manner adverb or the non-verbal predicate itself occupies a focus position to the left of the core elements of the clause.

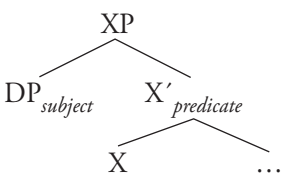
3.2. *Theoretical questions associated with small clauses*

Non-verbal predicate sentences in Yucatec are examples of matrix small clauses since they consist of a subject, a predicate and nothing else. Small clauses have generated many important questions for syntactic theory over the years (see Citko 2011 for an overview). Three of them are relevant for the objective of the current work: (i) establishing what the syntactic structure for relating the subject and predicate is, (ii) determining how the sole argument of the predicate is formally licensed and (iii) diagnosing the presence of higher functional material in the clause headed by the non-verbal predicate. I will consider each of these questions in turn, discussing previous literature that engages with them. There are essentially three ways of relating a non-verbal predicate to its subject. The first is to say that the predicate projects the label of its lexical category when it merges with the subject (Stowell 1983). On this view, the subject-predicate relation is established between a specifier position, where the subject is generated, and the rest of the material within the phrase. This view is criticized by Bowers (1993), who provides a wealth of data in favor of relating subjects and non-verbal predicates via a dedicated predicational head, Pr. Many theories of non-verbal predication share with Bowers the idea that the subject and predicate are

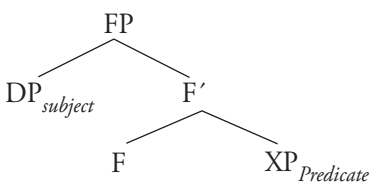
related as a specifier and complement of a particular head, but differ as to its label and whether its sole purpose is to establish predicational relations (Adger & Ramchand 2003; Baker 2003; Den Dikken 2006; Citko 2008). Finally, a third possibility is explored in Moro (1997; 2000), who revives Williams' (1975) original small clause proposal for complements of verbs like *consider*. He claims that small clauses are exocentric, symmetric projections that contain a subject and a predicate. The order of the subject and predicate is determined by a movement operation. Either the subject or predicate raises to a higher functional projection from which it c-commands and precedes the other member of the small clause. These three approaches are represented abstractly in (42) below. The label F is a placeholder for different types of heads that have been proposed in the literature that mediate the subject-predicate relation.

(42) The structure of subject-predicate relations (cf. Citko 2011).

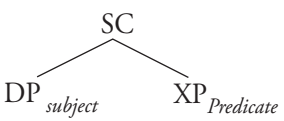
a. Endocentric – internally licensed.



b. Endocentric – externally licensed.



c. Exocentric, symmetrical.



The literature on non-verbal predication in Mayan languages has approached this phenomenon from different perspectives. Armstrong (2010) proposes that non-verbal predication in Yucatec should be an-

alyzed with structure like (42b). Following work by Bowers (1993), Baker (2003) and Den Dikken (2006), he reasons that if predication relations are mediated by a head, which is null in most cases, there should be at least some instances of this head having a phonological realization.

It is important to note that this head is not to be confused with a copular verb, which exists in some languages as an anchor for inflectional morphology generated above the core predication relation (see Baker 2003; Benmamoun 2008 and references therein for discussion) Instead, it should be realized by a head in instances that lack higher inflectional material. Such relators or copular particles have been identified in certain types of embedded small clauses in European languages like English and Spanish, where a preposition arguably mediates the relation between the subject-predicate relation selected by the matrix verb, as in (43).

(43) a. She took me *for* a fool

b. Lo tacharon *de* traidor
Him they branded of traitor
'They branded/labeled him (as) a traitor'

Armstrong (2010) claims that Yucatec has one such element, the term *bey* ('like', 'as', 'thus'), which was introduced in the previous section (see ex. 35). The idea outlined there is that the examples in (44) are both derived from an underlying structure like (42b).

(44) a. Soots'-ech
Bat-B2SG
'You're a bat'

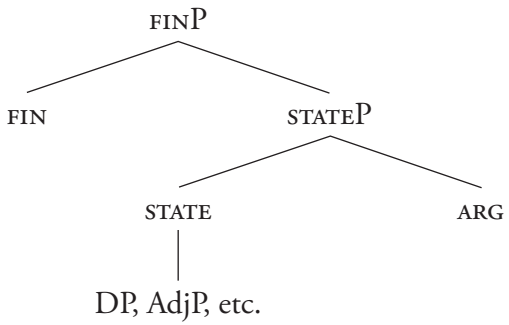
b. Bey soots'-ech / Bey-ech soots'
Like bat-B2SG / Like-B2SG bat
'You're like a bat (you act like one)'

In (44a), the head F is null and the Set B clitic attaches to the predicate. In (44b), the head F is realized by *bey* and the Set B clitic attaches either to the F head or to the predicate. Armstrong is aware that these are not semantic equivalents and claims that there must be two semantically distinct F heads in order to capture the difference in interpretation. While this idea is a possible analysis of *bey*, another analysis is to simply treat *bey* as an adjective that takes a nominal complement, similar to *yaan*, which takes PP complements as shown above. Indeed, like *yaan*, *bey* takes the suffixes *-tal* and *-chaj*, which derive verbs from adjectives. On this view, the two examples in (44) would instantiate different types of non-verbal predications, one with an NP predicate and another with an AP predicate. Thus, the conclusion is that *bey* does not provide definitive evidence for distinguishing between the abstract representations in (42). Vapnarsky (2013) has further shown that there is no other potential candidate for a relator or copular particle in Yucatec that might occupy the F position in (42b).

Alternatives to this approach have been pursued by Pye (2011) and Coon (2014). Pye (2011) claims that non-verbal predicates are instan-

tiations of a STATEP projection that is embedded under another projection that is the locus of finiteness in the clause.

(45) Structure of Mayan Statives (Pye 2011: 193)



In this approach, an entire phrasal projection, such as DP or AP, may be treated itself as the instantiation of the head STATE, which is a predicate that takes an argument as its syntactic sister. It seems to me that this approach is attempting to reconcile the fact that there is little evidence for a relator or copular particle with the idea that predication itself is licensed by something external to the non-verbal predicate. The main problem here is that there is no precedent for inserting an entire phrase into some head that then projects its label like STATE is purported to do.

Coon (2014) proposes something similar that avoids these problems, building on ideas in Baker (2003) and Sabbagh (2011). Baker (2003) claims that the head F in (42b) is Pred and that it is universally required in non-verbal predications because non-verbal categories are unable to license an argument without it. Basically, the defining property of verbs

with respect to other categories is that verbs project specifiers and take arguments without the help of a mediating head. Nouns and adjectives, on the other hand, require Pred in order to be converted into argument-taking expressions. Sabbagh (2011) revises Baker's strong claim, proposing that in some languages there is no distinction between lexical categories based on argument versus non-argument-taking capacity. Instead, all categories can take an argument directly and thus all types of lexical categories can directly instantiate Pred. Sabbagh's (2011) claim is based on data from Austronesian languages and Coon (2014) applies it to Ch'ol Mayan. The proposed representations for the Ch'ol examples in (41) are shown in (42). Following Vapnarsky's (2013) proposal for Yucatec, the main idea is that all classes of roots are predicates and this can be captured by claiming that they project a Pred label. Different types of inflectional material above Pred ultimately derive differences in dynamic versus stative interpretations and the possibility of combining with aspect markers.

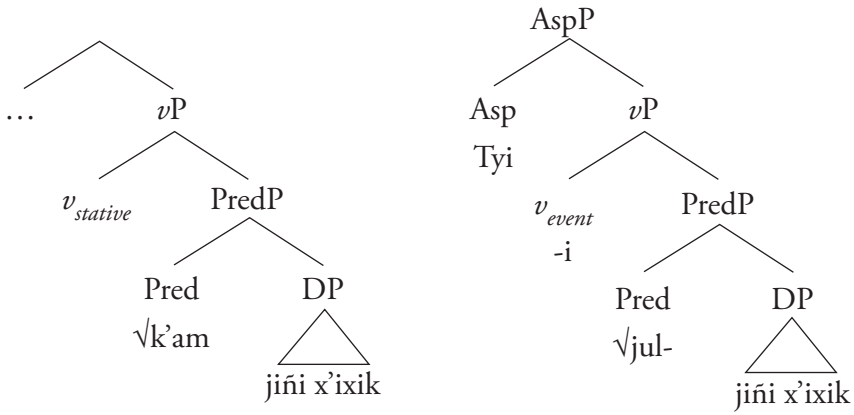
(46) Ch'ol non-verbal and verbal predicates.

a. K'am jiñi x'ixik
sick the woman
'The woman is sick' (Coon 2014: 83, ex. 20)

b. Tyi jul-i jiñi x'ixik
PRFV arrive-ITV the woman
'The woman arrived' (Coon 2014: 83, ex. 21)

(47) Verbal and non-verbal predication structures (Coon 2014: 83).

a. Non-verbal predication (46a) b. Verbal predication (46b)



This proposal does not encounter the problems mentioned for Pye (2011) since it is a root rather than an entire phrase that is inserted under the Pred head. However, it raises some theoretical questions. Consider the pair of examples in (48). The a-example has a non-verbal predicate and the b-example a verbal one. In (48), there is little obvious difference between the morpho-syntactic properties of the possessor in (48a) and the transitive subject in (48b): both appear after the predicate and trigger Set A agreement.

(48) a. U jmeen-il-en le kaaj-a'
A3SG *jmeen*-REL-B1SG DEF town-PROX
'I am the *jmeen* (traditional Mayan priest) of this town'

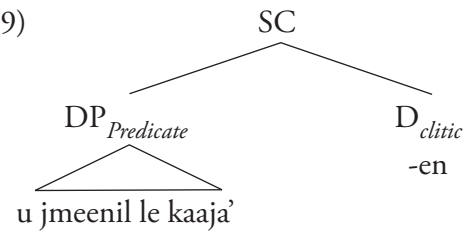
b. Tu y-il-aj-en le máak-o'
CP PVGL-see-TR.CP-B1SG DEF person-DIST
'That person saw me'

Even though Coon (2014) does not discuss the details of how to capture such parallels in the paper, if we take §2 as our base, the conclusion is that the possessor is licensed DP-internally and triggers Set A through a relation with a DP-internal Agr projection. On the other hand, transitive subjects are licensed in *v*, externally to the verbal predicate and trigger Set A through an agreement with Agr in a higher clausal position. If the predication relation established between a noun and its argument and a verb and its internal argument were identical as in (46), it is not clear how to capture the different ways in which nominal possessors and transitive subjects are licensed with respect to themes. In (48a), the noun + possessor is predicated of the theme argument whereas in (48b), it is the other way around, the verb + theme is predicated of the agent. The only way to capture this difference would be go back to Pye's (2011) proposal and claim that the DP *u jmeenil le kaaja'* is inserted under Pred, which leads to the same set of problems. Otherwise, we would have to say that possessors are added to predicate nouns in a fundamentally different way than they are added to non-predicate nouns: they would merge with PredP in the former and with NP in the latter. This seems like an undesirable way to integrate possessors into nominal predications.

The only proposal that has not been explored in the formal syntactic literature in non-verbal predicates in Mayan languages is the one that

can perhaps most easily capture its properties. If we propose that the relation between subject and predicate is an exocentric, small clause constituent as in (42c), none of the problems faced by the previous proposals described above arise. I propose that all non-verbal predicates in Yucatec license their argument as a syntactic sister of a small clause, following Moro (1997; 2000). The basic representation for (48a) is shown in (49). On this view, there is no linking element between subject and predicate, which accounts for the lack of copular particles in the language. Moreover, predicates can be phrasal, which solves the problems highlighted with the proposals in Pye (2011) and Coon (2014).

(49)



Moro (1997; 2000) claims that one member of the small clause must raise to a higher functional projection, mainly spec, TP. The motivations for raising are linked to the extended projection principle (EPP), which states that the specifier of TP must have some phonological material in it and linearization, which in Moro's (2000) proposal is dictated by the linear correspondence axiom (LCA, see Kayne 1994), which states that in order for X to linearly precede Y, X must asymmetrically c-command Y. By raising one member of the small clause to spec, TP, both of these grammatical principles can be satisfied. While this works well for the

languages Moro investigates, English and Italian, there are some complications applying it to Yucatec. First, since there is no AM marking in non-verbal predicates, it is not obvious whether Infl is actually present. Second, in the most common types of non-verbal predicate sentences, the predicate precedes the subject, which is enclitic on the head of the predicate. I give supporting evidence below for the presence of higher functional projections above SC and then propose how to derive the word order in (48a) from a structure like (49).

Both Pye (2011) and Coon (2014) propose that the predicational core is embedded under some functional projection (see Mateo Toledo 2011 for similar conclusions based on an analysis of Q'anjobal). For Pye (2011) it is the locus of finiteness and for Coon (2014) it is stativity. Following the discussion in §2, these two projections correspond roughly to what I have labeled Infl and *v*. Since AM marking and status suffixes are generally absent in non-verbal predicates, it is important to adduce evidence in favor of representing one or both of these projections in non-verbal predictions.

As for status marking, we have already seen that it is possible in the manner focus construction, but absent in all other cases. To simplify representations, I will assume that status marking is present in manner focus contexts but absent in all others. It is highly probable that its presence is triggered by a dynamic reading attributed to the non-verbal predicate that is associated with an episodic interpretation in manner

focus contexts. I will not discuss the issue further here (see Vapnarsky 2013; Coon 2014 for a more detailed discussion).[8]

The next question concerns the presence of Infl. As discussed above, all non-verbal predicate sentences lack AM marking. This means that the presence of Infl above the proposed SC would always be null. Recall from §2.1 that certain completive intransitive verbs may lack an overt AM marker but still have the distribution of other completive sentences that have such overt aspect marking. Thus, it is not without precedent to propose that there is a null Infl in non-verbal sentences (see Mateo Toledo 2011 for similar arguments from Q'anjobal). In order to establish an argument that it exists despite lacking a phonological exponent, I will compare and contrast an intransitive verb with the completive AM marker *j* with a non-verbal predicate. Side-by-side, these two sentences look strikingly similar.

(50) a. J k'uch-Ø-en
CP arrive-INTR.CP-B1SG
'I arrived'

b. Xooknáal-en
student-B1SG
'I'm a student'

[8] In what follows, I leave the manner focus context out of the discussion in order to clearly outline the properties of the more common non-verbal sentences. The structure of non-verbal sentences in manner focus contexts deserves its own study.

While (50a) and (50b) are clearly different in that one is dynamic and the other is stative, they share an important set of semantic and morpho-syntactic properties that can be linked to the presence of a projection responsible for finiteness/aspectuality. First, if both have this projection, we expect it to be the target of a certain class of temporal modifiers. Indeed, temporal modifiers of completive verbs include those that refer to periods prior to speech time such as *jo'oljeak* (yesterday) and appear in either the pre-predicate topic position or in a post-predicate position as shown in (51).

(51) a. Jo'oljeak-e' j k'uch-Ø-en
Yesterday-TOP CP arrive-INTR.CP-B1SG
'Yesterday, I arrived'

b. J k'uch-Ø-en jo'oljeak
CP arrive-INTR.CP-B1SG yesterday
'I arrived yesterday'

Non-verbal predicates also admit temporal adverbs such as *ka'ach(ij)* ('formerly'). This adverb is primarily used with stative predicates in order to describe a state that held at a point prior to speech time but no longer does (see Bohnemeyer 2002). It appears in the same positions as other temporal adverbs.

(52) a. Ka'ach-e' xooknáal-en
Formerly-TOP student-B1SG
'I was a student'

b. Xooknáal-en ka'achij
student-B1SG formerly
'I was a student'

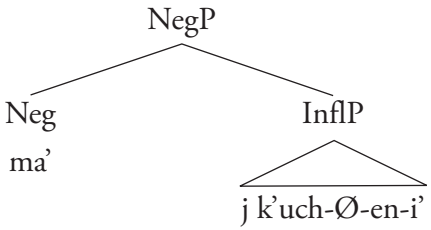
Bohnemeyer (2002) analyzes these adverbs as topic time shifters. They establish a relation between the topic time, or temporal reference interval of the clause, and coding time, the time interval of the act of speech. I suggest that without some kind of higher projection, such as Infl, to establish what the temporal reference interval of the clause is, there would be nothing for these adverbs to modify.[9]

A second reason to believe that there is a null stative counterpart to the dynamic AM marker *j* is that both types of clauses behave identically with respect to negation. Gutiérrez Bravo (2015b: 138, ex. 29) shows that negation is generated above the projection that houses AM markers, which in our case would be above Infl, as in (53b). In completive aspect, this high clausal negation position is filled with *ma'* and triggers the presence of the enclitic *-i'* to the right of the verbal predicate.

(53) a. Ma' j k'uch-Ø-en-i'
NEG CP arrive-INTR.CP-B1SG-NEG
'Yesterday, I didn't arrive'

[9] I remain agnostic as to whether some kind of ordering between topic time and speech time is encoded in Infl. Bohnemeyer (2002) clearly shows that there is no morphological tense in YM. However, Matthewson (2006) claims that even in tenseless languages a tense projection in the clause might be motivated for semantic reasons. The main claim here is that Infl is the locus of finiteness and stative aspect.

b.



Non-verbal predicates behave in the same way as completive intransitive verbs with respect to negation as shown in (54).

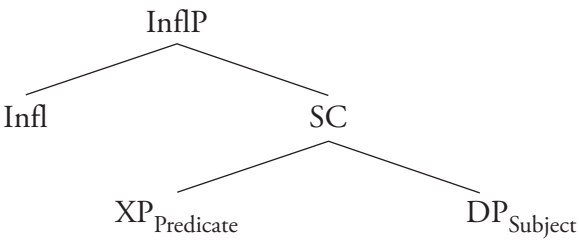
(54) a. Ma' xooknáal-en-i'
NEG student-B1SG-NEG
'I am not a student'

b. Le oon-o' ma' tak'an-Ø-i'
DEF avocado-DIST NEG ripe-B3SG-NEG
'That avocado, it's not ripe'

One might ask how the parallelism between (53a) and (54) could be taken as evidence of Infl. I suggest that by positing the presence of null Infl in (54), clausal negation can be given a uniform syntactic and semantic analysis. Essentially, it selects InflP as its complement and negates the time interval for which the event/state described by the predicate is specified to occur/hold.

Taking these observations into consideration, I propose that non-verbal predicate sentences instantiate the following basic structure.

(55) Basic structure of non-verbal predication.



Proposing that Infl exists in non-verbal predicate sentences not only allows for a unified account of the topic time shifter *ka'ach(ij)* and sentential negation in verbal and non-verbal sentences, it also means that there is no need to introduce a new formal licensing mechanism in order to explain why the subject appears as a Set B clitic in the latter. Recall from §2.1 that all intransitive subjects are licensed through an agreement relation with Infl, and it is no different for non-verbal sentences.

Finally, I claim that Infl in (55) has an EPP feature that requires phonological material in its specifier, thus triggering movement. While the original formulation of the EPP (extended projection principle, see Chomsky 1981) was to ensure the head purportedly responsible for establishing subject-predicate relations, namely IP, had a subject or some other material to occupy its specifier, the nature of the EPP has changed significantly in the years since (Alexiadou & Anagnostopoulou 1998; Adger & Ramchand 2003 and Bowers 2010 for a discussion of different strategies employed cross-linguistically for satisfying the EPP). I will assume that the EPP on Infl in Yucatec is a purely formal feature that can be satisfied by moving an XP to its specifier and, in keeping with the

idea presented in §2.2, the XP in the specifier of Infl is interpreted by the semantic component as the focus of the sentence.[10] Summarizing this information, the general properties of Infl in Yucatec are described in (56).

(56) a. **Infl can be dynamic or non-dynamic [+/- dyn]**: dynamic Infl is where AM markers are inserted and it selects a status-marked *v*P; non-dynamic Infl is null and does not select a status-marked *v*P.

b. **Infl can be a probe, specified as [*u*ϕ]**: intransitive sentences have Infl specified as a probe while transitive sentences do not; a probe searches its c-command domain for a goal with interpretable phi-features, which value and eliminate the uninterpretable phi-features (marked *u*) of the probe.[11]

c. **Infl can have an [EPP] feature**: this feature requires that there be phonological material in the specifier of Infl –the XP in this position is interpreted as the focus of the sentence by the semantic component.

3.3. *Summary*

In this section, I have presented the main descriptive properties of non-verbal sentences in Yucatec, contrasting them with clauses headed

[10] In order to keep the presentation simple, I will not present the possibility that, in addition to an [EPP] feature, Infl may also carry a [WH] or [FOC] feature, which would trigger *Wh*-movement or focus movement. I will work under the assumption that the [EPP] is generally responsible for triggering movement to the specifier of Infl and focus is assigned post-syntactically to this position.

[11] This generalization does not include sentences in which the alignment of Set A and Set B morphemes is nominative-accusative.

by verbs as well as the internal structure of phrases headed by non-verbal categories. I then discussed a number of theoretical issues raised by small clauses with a specific eye toward Mayan languages. I showed that all of the existing formal syntactic accounts of non-verbal predicate sentences are lacking in some respect and proposed that by treating non-verbal predicates as part of a symmetric small clause that takes the subject as a syntactic sister, many of these problematic issues disappear. Finally, I presented evidence for including an Infl node above the small clause, which is the locus of finiteness and stative aspect. I claimed that this Infl node is endowed with the interpretable feature [-dyn] and that it has two uninterpretable features, [*u*ϕ] and [EPP], which drive the syntactic derivation of non-verbal sentences.

4. Illustrative examples of the system at work

Now that we have provided independent support for each of the components of non-verbal sentences proposed in the introduction and motivated these in a way that is internally consistent with the general properties of Yucatec, let us turn to the details of the system. I will start by illustrating how it works in the simplest of cases, where there is a bare predicate and a Set B clitic subject (57). The steps proposed are shown in (58): (i) agreement, (ii) cliticization and (iii) EPP-driven movement to spec, InflP.

(57) a. Xooknáal-en
student-B1SG
'I'm a student'

(58) a. Basic configuration
$[_{InflP}\ Infl_{[\text{-dyn}],\ [u\phi],\ [EPP]}\ [_{SC}\ [_{NP}$ xooknáal$]\ [_{D}$ -en$]\ ]\ ]$

b. Agreement

$[_{InflP}\ Infl_{[\text{-dyn}],\ [\cancel{u}\phi],\ [EPP]}\ [_{SC}\ [_{NP}$ xooknáal$]\ [_{D}$ -en$]\ ]\ ]$

c. Cliticization
$[_{InflP}\ Infl_{[\text{-dyn}],\ [\cancel{u}\phi],\ [EPP]}\ [_{SC}\ [_{NP}$ xooknáal-en$]\ [_{\cancel{D}}\ \cancel{\text{-en}}]\ ]\ ]$

d. EPP-driven movement to spec, InflP
$[_{InflP}\ [_{NP}$ xooknáal-en$]\ Infl_{[\text{-dyn}],\ [\cancel{u}\phi],\ [\cancel{EPP}]}\ [_{SC}\ [_{\cancel{NP}}\ \cancel{\text{xooknáal-en}}]\ [_{\cancel{D}}\ \cancel{\text{-en}}]\ ]\ ]$

When there is a strong pronominal double of the Set B clitic, or an overt lexical subject, three additional derivations are possible. In (59a), the double remains *in situ* and the [EPP] feature is checked by the predicate-Set B complex as in (58). In (59b), the strong pronoun checks the [EPP] feature of Infl and yields subject-predicate order. Finally, the strong pronoun can also be in a higher topic position where it is co-indexed with a null *pro* in the base position within the small clause as shown in (59c). In this case, the predicate-Set B complex raises to spec InflP to check the [EPP] feature.

(59) a. Xooknáal-en teen
Student-B1SG PRO1SG
$[_{InflP}\ [_{NP}$ xooknáal-en$]$ Infl$_{[\text{-dyn}],\ [\pi\phi],\ \{EPP\}}$ $[_{SC}\ \{_{NP}$ ~~xooknáal-en~~$\}$ $[_{DP}\ \{_{D}$ ~~-en~~$\}$ $[_{DP}$ teen $]\ ]\ ]\ ]$

b. Teen xooknáal-en
PRO1SG student-B1SG
$[_{InflP}\ [_{DP}$ teen$]$ Infl$_{[\text{-dyn}],\ [\pi\phi],\ \{EPP\}}$ $[_{SC}\ [_{NP}$ xooknáal-en$]$ $[_{DP}\ \{_{D}$ ~~-en~~$\}$ $\{_{DP}$ ~~teen~~ $\}\ ]\ ]\ ]$

c. Ten-e' xooknáal-en
PRO1SG-TOP student-B1SG
$[_{CP}$ ten$_i$-e' C $[_{InflP}\ [_{NP}$ xooknáal-en$]$ Infl$_{[\text{-dyn}],\ [\pi\phi],\ \{EPP\}}$ $[_{SC}\ \{_{NP}$ ~~xooknáal-en~~$\}$ $[_{DP}\ \{_{D}$ ~~-en~~$\}$ $[_{DP}$ *pro*$_i$ $]]]]]$

In the rest of this section, I discuss six other types of examples of small clauses of varying complexity that can all be explained by this analysis. First, the derivational steps in (59) apply in a straightforward fashion to capture the behavior of phrasal predicates with base-generated material that appears to the left of the predicative head such as in (60).

(60) Teech-e', jach ma'alob j ts'oon-ech
You-TOP, very good CL hunter-B2SG
'You, you're a very good hunter' (Vapnarsky 2013: 59, ex. 39)

In these cases, the predicate-Set B complex moves to spec InflP to satisfy the EPP feature. In this particular example the strong pronominal

subject is base-generated in spec, CP and co-indexed with a null *pro* in the small clause.

Second, and less straightforward, are cases in which the Set B clitic appears right-adjacent to the predicative head and is followed by additional material that is part of the predicate as in (61).

(61) a. U jmeen-il-**en** le kaaj-a'
A3SG *jmeen*-REL-B1SG DEF pueblo-PROX
'I am the *jmeen* (traditional Mayan priest) of this town'

b. Na'aj-**en** yéetel bak'
satisfied-B1SG with meat
'I am satisfied/full with meat' (Verhoeven 2007: 160, ex. 161b)

The simplest way to account for this order is to propose an explicit rule of cliticization for Set B clitics in Yucatec that encompasses both verbal and non-verbal sentences (for details, refer to the discussions in §2.1 and §3.2 above).

(62) Rule for cliticization of Set B in Yucatec.
The Set B clitic cliticizes to the right of the *lexical head* of the predicate that *thematically* licenses it (after all predicate-internal operations have taken place).

Applying rule (62) to example (61a) yields the derivation in (63). What licenses the Set B clitic thematically is the predicate *u jmeenil le*

kaaja'. This predicate contains both an N and an *n* layer with the relational suffix *-il* (see §2.3 for details). After *jmeen* moves to *n* and picks up the relational suffix, the Set B clitic attaches to the newly-formed head *jmeen-il*.

(63) a. Basic configuration

$[_{InflP}\ Infl_{[\text{-dyn}],\ [u\phi],\ [EPP]}\ [_{SC}\ [_{DP}$ u jmeenil le kaaja'$]\ [_{DP}$ -en$]\ ]\ ]$

b. Agreement

$[_{InflP}\ Infl_{[\text{-dyn}],\ [\not{u}\phi],\ [EPP]}\ [_{SC}\ [_{DP}$ u jmeenil le kaaja'$]\ [_{DP}$ -en$]\ ]\ ]$

c. Cliticization

$[_{InflP}\ Infl_{[\text{-dyn}],\ [\not{u}\phi],\ [EPP]}\ [_{SC}\ [_{DP}$ u jmeenil-en le kaaja'$]\ [_{\not{DP}}$ ~~-en~~$]\ ]\ ]$

d. EPP-driven movement to spec, InflP

$[_{InflP}\ [_{DP}$ u jmeenil-en le kaaja'$]\ Infl_{[\text{-dyn}],\ [\not{u}\phi],\ [\not{EPP}]}\ [_{SC}\ [_{\not{DP}}$ ~~u jmeenil-en le kaaja'~~$]\ [_{\not{DP}}$ ~~-en~~$]\ ]\ ]$

A third class of examples involves WH-phrases. It is important to note that either the predicate or the subject may be an interrogative pronoun. Since WH-phrases are focalized and must occupy the spec, InflP position, I claim that if they do not move to satisfy the [EPP] feature of Infl, then the derivation will crash since an alternative would not be legible to the semantic component of the grammar. This will ensure that the predicate moves in (64a) and the subject moves in (64b).

(64) a. Máax-ech?
Who-B2SG
'Who are you?'
[$_{InflP}$ [$_{DP}$ máax-ech] Infl$_{[-dyn],\ [\pi\phi],\ \{EPP\}}$ [$_{SC}$ {~~$_{DP}$ maax-ech~~} {~~$_{D}$ -ech~~}]]

b. Máax u suku'un Pil?
Who A3SG older.brother Felipe
'Who is Felipe's older brother?'
[$_{InflP}$ [$_{DP}$ máax] Infl$_{[-dyn],\ [\pi\phi],\ \{EPP\}}$ [$_{SC}$ [$_{DP}$ u suku'un Pil] {~~$_{DP}$ máax~~}]]

A fourth class of small clause involves predicate-internal movement of an interrogative possessor. Recall from §2.3 above that interrogative possessors must appear at the left edge of the DP and pied-pipe the entire DP to a pre-predicate focus position (Aissen 1996 for a detailed description of the phenomenon in Tzotzil and Lehmann 2002 [1998]; Verhoeven 2007 for Yucatec). The examples in (65) contain predicates with interrogative possessors.

(65) Máax naj-il le je'el-a'?
Who house-REL DEF this.here-PROX
'Whose house is this?' (Verhoeven 2007: 150, ex. 149b)

I claim that these sentences are generated by first carrying out the DP-internal movement operation that fronts the interrogative possessor, as in (66). This basic configuration is then the input to agreement, cliticization (not shown here) and EPP-driven movement. In this case, a

part of the predicate is a WH-phrase and thus must move to spec, InflP, pied-piping the rest of the DP.

(66) a. Basic configuration
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{DP}}\ [_{\text{DP}}\ \text{máax}]\ \text{najil}\ \sout{\text{máax}}]]\ [_{\text{DP}}\ \text{le je'ela'}]\ ]\ ]$

b. Agreement

$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [\sout{u}\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{DP}}\ [_{\text{DP}}\ \text{máax}]\ \text{najil}\ \sout{\text{máax}}]]\ [_{\text{DP}}\ \text{le je'ela'}]\ ]\ ]$

c. EPP-driven movement to spec, InflP
$[_{\text{InflP}}\ [_{\text{DP}}\ [_{\text{DP}}\ \text{máax}]\ \text{najil}\ \sout{\text{máax}}]]\ \text{Infl}_{[\text{-dyn}],\ [\sout{u}\phi],\ [\sout{\text{EPP}}]}\ [_{\text{SC}}\ \sout{[_{\text{DP}}\ [_{\text{DP}}\ \text{máax}]\ \text{najil máax}]]}\ [_{\text{DP}}\ \text{le je'ela'}]\ ]\ ]$

A fifth type of small clause derivation is observed with focalized locatives in *yaan* predications (see §3.1). Note that the locative phrases in (67) appear to the left of *yaan*.

(67) a. **Tu'ux** yan-e'ex?
Where existing-B2PL
'Where are you?'

b. **Way** yan-o'on-e'
Here existing-B1PL-LOC
'We are here'/'Here we are'

c. Le ch'óoy-o' **t-u y-aanal le mayak che'** yan-o'
DEF bucket-DIST PREP-A3SG PVGL-under the table existing-DIST
'The bucket, it's under the table'

Since focalized locatives can be fronted in verbs as well, I claim that sentences like (67) are derived through extraction of the focalized locative out of the AP headed by *yaan* and land in spec, InflP as shown in (68).

(68) a. Basic configuration
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan tu'ux}]]\ [_{\text{D}}\ \text{-e'ex}]\ ]\ ]$

b. Agreement

$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan [tu'ux]}]\ [_{\text{D}}\ \text{-e'ex}]\ ]\ ]$

c. Cliticization
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan-e'ex [tu'ux]}]\ \cancel{[_{\text{D}}\ \text{-e'ex}]}\ ]\ ]$

d. EPP-driven movement to spec, InflP
$[_{\text{InflP}}\ [\text{tu'ux}]\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ \cancel{[\text{EPP}]}}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan-e'ex}\ \cancel{[\text{tu'ux}]}]\ \cancel{[_{\text{D}}\ \text{-e'ex}]}\ ]\ ]$

A variation of this class of small clauses can be observed in locative constructions like (69).

(69) Tech-e' **ti'** yan-ech te' k'íiwik-o' (locative)
You-TOP LOC existing-B2SG LOC square-DIST
'You are in the square (plaza in center of town)'

I claim that *ti'* is a locative pro-form generated as part of the PP *te' k'íiwiko'* (in the town square), and instead of raising the entire PP to spec, InflP, it is only the locative pro-form that moves.

(70) a. Basic configuration
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan}\ [_{\text{PP}}\ \text{ti'}\ [_{\text{PP}}\ \text{te' k'íiwiko'}\ ]]]\ [_{\text{D}}\ \text{-ech}]\ ]\ ]$

b. Agreement
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan}\ [_{\text{PP}}\ \text{ti'}\ [_{\text{PP}}\ \text{te' k'íiwiko'}\ ]]]\ [_{\text{D}}\ \text{-ech}]\ ]\ ]$

c. Cliticization
$[_{\text{InflP}}\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ [\text{EPP}]}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan-ech}\ [_{\text{PP}}\ \text{ti'}\ [_{\text{PP}}\ \text{te' k'íiwiko'}\ ]]]\ \cancel{[_{\text{D}}\ \text{-ech}]}\ ]\ ]$

d. EPP-driven movement to spec, InflP
$[_{\text{InflP}}\ [\text{ti'}]\ \text{Infl}_{[\text{-dyn}],\ [u\phi],\ \cancel{[\text{EPP}]}}\ [_{\text{SC}}\ [_{\text{AP}}\ \text{yaan-ech}\ [_{\text{PP}}\ \cancel{\text{ti'}}\ [_{\text{PP}}\ \text{te' k'íiwiko'}\ ]]]\ \cancel{[_{\text{D}}\ \text{-e' ex}]}\ ]\ ]$

The sixth and final type of small clause construction that I will mention are those that contain more than one constituent in the post-predicate position, usually a possessor or PP licensed within the phrase headed

by the predicate and the subject, which is licensed externally within the small clause. If the two XPs involved are identical in terms of category, definiteness, animacy and phonological weight, the neutral word order for post-predicate constituents is possessor – subject, which is predicted by the structure proposed here and illustrated below in (71).

(71) u y-ilib Juana María
A3SG PVGL-daughter.in.law Juana María
'María is Juana's daughter-in-law'

However, such orders are avoided and typically judged as possible but unnatural by native speakers (for a detailed overview of many questions associated with multiple post-verbal XPs see Clemens & Coon 2016 and references therein). (71) is rendered far more natural by pronouncing the subject *María* in either a pre-predicate topic or focus position as in (72) (see Skopeteas & Verhoeven 2005; 2009; Gutiérrez-Bravo & Monforte 2010 for details regarding constraints on more than one XP constituent in post verbal positions).

(72) a. María-e' u y-ilib Juana
María-TOP A3SG PVGL-daughter.in.law Juana
'María, she is Juana's daughter-in-law'

b. María u y-ilib Juana
María A3SG PVGL-daughter.in.law Juana
'MARÍA is Juana's daughter-in-law'

More complicated cases involve two post-predicate constituents that differ in terms of person, animacy, definiteness and/or weight. For instance, preliminary data on a combination that involves an inanimate, definite possessor *le kaaja'* ('this town') with an overt strong 1st person pronoun *teen* yields the following results.[12]

(73) a. *U jmeen-il-en le kaaj-a' teen[13] POSS – SUBJ
A3SG *jmeen*-REL-B1SG DEF pueblo-PROX PRO1S
'I am the *jmeen* (traditional Mayan priest) of this town'

b. ??U jmeen-il-en teen le kaaj-a' SUBJ – POSS
A3SG *jmeen*-REL-B1SG PRO1S DEF pueblo-PROX
'I am the *jmeen* (traditional Mayan priest) of this town'

Speakers communicated that (73a) is unacceptable. This is due to a number of grammatical constraints it violates, including a ban on

[12] I thank an anonymous reviewer for pointing out the importance of these and urging me to explore them in more detail than I originally had.

[13] It is important to note that there is a way of repairing this sentence that yields an expression that is subtly different both morpho-syntactically and semantically. This is shown in (i).

(i) U jmeen-il le kaaj-a' teen
A3SG priest-REL DEF town-PROX PRO1S
'The priest of this town is me'

Observe that there is no Set B clitic on the predicate in (i). I claim that this sentence involves an inversion of roles: *u jmeenil le kaaja'* is a topicalized subject and the pronoun *teen* is in the predicate position. Since the subject is 3rd person singular, the Set B clitic is null. I thank Miguel Oscar Chan Dzul for help with this example.

having deictic clitics in positions other than the right edge of a prosodic group defined by a predicate and its arguments and also a strong tendency to linearize pronouns to the left of lexical DPs (see Skopeteas & Verhoeven 2009). Inverting the order of pronoun and lexical DP only slightly improves the sentence and it is still marked to the point of being basically unacceptable. Far more natural are sentences in which the strong pronoun appears in pre-predicate focus or topic positions. If *teen* is focused as in (74a), the Set B clitic appears to be optional whereas if it appears in the topic position, the Set B clitic is obligatory.

(74) a. Teen u jmeen-il-(en) le kaaj-a'
PRO1S A3SG *jmeen*-REL-(B1SG) DEF pueblo-PROX
'I am the *jmeen* (traditional Mayan priest) of this town'

b. Ten-e' u jmeen-il-en le kaaj-a'
PRO1S-TOP A3SG *jmeen*-REL-(B1SG) DEF pueblo-PROX
'As for me, I am the *jmeen* (traditional Mayan priest) of this town'

This preliminary data on the occurrence of multiple post-predicate XPs provides initial support for treating the constraints imposed on their occurrence and order as the same as those that apply to multiple XPs in post-verbal positions. In a nutshell, multiple post-predicate XPs are avoided in natural speech using strategies such as *pro*-drop, focalization and topicalization. In the event that more than one XP appears in the post-predicate position, the order generated by the syntax is subject-final but the linear ordering of those XPs is determined post-syntactically

based on factors such as category (pronoun, NP/DP or PP), animacy, definiteness and phonological weight. More research is necessary in order to fully flesh out the details regarding the factors that contribute to the order of post-nominal possessors and subjects (see Clemens & Coon 2016 for a detailed account of post-verbal word orders across the Mayan language family).

An interesting sub-case of multiple post-predicate XPs are existential *yaan* predications. These exhibit a neutral word order in which the subject precedes any locative PP as in (75).

(75) Yaan-Ø waaj ichil le leek-o' (existential)
Existing-B3SG tortilla inside DEF gourd-DIST
'There are tortillas inside the gourd'

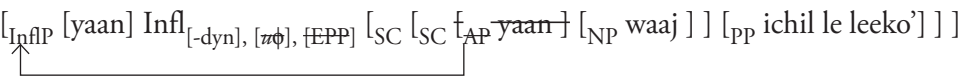
If the locative were licensed internally to AP, we would not expect this to be the neutral word order. However, since existential sentences do not require a locative PP, I claim that the locative is right adjoined to the small clause and the small clause itself consists solely of *yaan* as the main predicate and its subject. The derivation for (75) is shown in (76).

(76) a. Basic configuration
$[_{InflP}\ Infl_{[-dyn],\ [u\phi],\ [EPP]}\ [_{SC}\ [_{SC}\ [_{AP}\ yaan\ ]\ [_{NP}\ waaj\ ]\ ]\ [_{PP}\ ichil\ le\ leeko'\ ]\ ]\ ]$

b. Agreement

$[_{InflP}\ Infl_{[-dyn],\ [\not{u}\phi],\ [EPP]}\ [_{SC}\ [_{SC}\ [_{AP}\ yaan\ ]\ [_{NP}\ waaj\ ]\ ]\ [_{PP}\ ichil\ le\ leeko'\ ]\ ]\ ]$

c. EPP-driven movement to spec, InflP



5. Conclusion

In this paper, I have argued that non-verbal sentences in Yucatec Maya consist of a small clause, which establishes the subject-predicate relation, and a null Infl head, which is endowed with the interpretable feature [-dyn] and the uninterpretable features [*u*ϕ] and [EPP]. I motivated this structure based on previous work on Mayan morpho-syntax and work on small clauses. I claimed that the interpretable feature on Infl accounts for its stativity while its uninterpretable features are responsible for assigning abstract Case to the subject of the small clause and driving syntactic movement to spec, Infl. Finally, I demonstrated how this structure is able to capture a range of facts about non-verbal predication sentences in a way that is internally consistent with general morpho-syntactic properties of verbal sentences that have been proposed in the generative literature on Mayan languages. This proposal provides a base upon which to investigate a number of under explored topics in non-verbal predication in Mayan languages in the future.

Abbreviations

AF = agent focus, CAUS = causative, CL = classifier (nominal, numeral or possessive), CP = completive aspect marker/ completive status, CROSS REFERENCE MARKERS = SetPersNum (example A1SG 1st person singular, set A), DEF = definite marker, DIST = distal deictic clitic, DIST.PST = distant past aspect marker, EX.FOC = extra focal status, HAB = habitual aspect marker, INC = incompletive status, INTR = intransitive, ITV = intransitive verb class marker, LOC = locative proform/determiner/clitic, NEG = negation, PL = plural marker, POS = positional participle, PROG = progressive aspect marker, PRFV = perfective aspect marker, PROX = proximal deictic clitic, PVGL = pre-vocalic glide w/y (part of set A paradigm), REC.PST = recent past aspect marker, REL = relational nominal suffix, SBJV = subjunctive status, TOP = Topic marker *-e'*, TR = transitive, TV = transitive verb class marker.

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