# On Copular Sentences in Yucatec Maya* 

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Key Words: copular sentences, predication, clause structure, Yucatec Maya

## 1. Introduction

Mayan languages are among those that lack a verbal copula, thus there are sentences in $t$ hese 1 anguages $w i t h$ no verbs. In (1) t wo su ch ex amples from $Y$ ucatec Maya ar $e$ shown. In each case the main predicate is either a noun (1a) or an adjective (1b). ${ }^{1}$

$$
\begin{align*}
& \text { a. Koolnáal-en (teen) }  \tag{1}\\
& \text { farmer-1s.B I } \\
& \text { 'I am a farmer' } \\
& \text { b. Polok-o'ob (leti'o'ob) } \\
& \text { fat-3p.B they } \\
& \text { 'They are fat' }
\end{align*}
$$

The basic components of copular sentences in Mayan languages are a predicate and an argument. The a rgument is e xpressed as a $p$ ost-predicate pronominal suffix and can optionally surface in full pronominal/nominal form following the predicate-pronominal suffix complex. ${ }^{2}$ These types of sen tences $r$ aise interesting questions ab out the clause structure and morphosyntax of predication. In this paper the primary issue addressed is whether we $n$ eed a sy ntactic head (Pred) to mediate $t$ he relationship between $t$ he predicate and the argument in these sentences.

Following traditional syntactic approaches to predication, a plausible assumption is that there is nothing more than a small clause associated with some type of default $\neq$ stative) tense/aspect (Williams 1980; Stowell 1981, 1983 ; Moro 1997; Benmamoun

[^0]2008) in sentences like (1). This view is presented in a variety of forms: (i) subject and predicate are immediately dominated by a node labeled S or SC (= small clause), (ii) the subject occupies a specifier position projected by the non-verbal predicate (AP or NP for example) or (iii) the subject is generated within a projection that houses tense/aspect that is null (Benmamoun 2008). However, a different set of approaches has argued against the existence of the small clause in any of these forms, claiming instead that all predicative relationships are mediated by a syntactic head called $\mathrm{Pr} / \mathrm{Pred} / \mathrm{R}(=$ Relator) (Bowers 1993, 2001; Adger \& Ramchand 2003; Baker 2003; Den Dikken 2006). ${ }^{3}$ The a rguments presented in favor of the Pred head are quite varied and not all of them agree as to why this head is necessary and what it does morphosyntactically and semantically. The main objective of $t$ his pa peristopr opose a working syntactic structure forthe copular sentences of Yucatec Maya like those in (1) based on some data that was collected in the towns of S anta E lena, O xkutzkab and Y axcabá, Y ucatán. In doing so, I hope to br ing Mayan languages into this important discussion about the morphosyntax of predication and also lend empirical support to one of the possible views mentioned above.

The main claim of this paper is that the sentences in (1) have a syntactic structure in which the single argument is generated in the specifier of a syntactic head, Pred, which takes the n on-verbal predicate as its complement. The da ta offered in support of this claim center on the presence and position of linking elements such as bey ( $=$ like) as well as the presence and position of the set B suffix that cross-references the single argument. It is ar gued $t$ hat $t$ hese $s$ uffixes are cl itics that are m orphological r ealizations of predicative relationships. This correlation is captured by proposing that set B suffixes are agreement morphemes that are generated in Pred. The last sections of the paper explore some phonological a nd semantic restrictions onc opular sentences and attemptto integrate the ov erall idea into a $g$ eneral hypothesis a bout $t$ he types of predicative expressions that have been argued to exist in Yucatec Maya.

## 2. Non-verbal Predicates in Yucatec Maya: Background

Though recently disputed in the literature (Gutiérrez Bravo \& Monforte y Madera 2008), it is generally argued that Mayan languages have a 'basic' or 'neutral' word order in which $t$ he predicate $p$ recedes $t$ he su bject ( Durbin \& O jeda 1978 ; A issen 1992 ; Bohnemeyer 2009). This shown for copular sentences in (2a/b) and for a sentence that contains a verbal core (2c).
(2) a. K'éek'en-ech teech
pig-2s.B you
'You are a pig'
b. K'oja'an- $\varnothing$ in suku'un sick-3s.B 1s.A older brother
'My older brother is sick'

[^1]c. T-u ts'on-aj le kéej-o' in nool.

PERF-3s.A hunt-COMP.3s.B DEF deer-DISTAL 1s.A grandfather
'My grandfather killed the deer'
In each case the subject occurs to the right of its predicate, which is a noun in (2a), an adjective in (2b) a nd a verb phrase in (2c) (note that constituent order within the verb phrase is VO, yielding a basic VOS word order).

Deviations from his ' basic' or ' neutral' w ord o rder a re of ten a trributed $t o$ information $s$ tructure. Wh en su bjects ar et opics, they $p$ recede $t$ he $p$ redicate and a re marked with the topic clitic $-e^{\prime}$. This is shown in (3).
a. Tech-e' k'éek'en-ech
you-TOP pig-2s.B
'As for you, you are a pig'
b. In suku'un-e' k'oja'an-Ø

1 s . A older brother-TOP sick-3s.B
'As for my older brother, he is sick'
c. In nool-e' t-u ts'on-aj le kéej-o'

1s.A grandfather-TOP PERF-3s.A hunt-COMP.3s.B DEF deer-DISTAL
'As for my grandfather, he killed the deer'
Focus constructions have unique properties in all Mayan languages, particularly those in which the A argument of transitive clauses is in focus (see Bricker 1978; B ohnemeyer 1998, 2002; Tonhauser 2003; Gutiérrez Bravo \& Monforte y Madera 2009). In copular sentences, whose sole argument is an $S$ argument, focused subjects appear to the left of the non-verbal predicate just as the subject appears to the left of the verbal core in Afocus constructions. In addition, each these constructions gives rise to a unique type of morphosyntactic marking on the extrafocal constituent: opt ional presence of the set B clitic on $t$ he non-verbal predicate an d the absence of an y asp ect $m$ arking, pronominal subject marking (with the set A prefix) or completive status marking on the verbal core in the A -focus construction. ${ }^{4}$ This is shown in (4) - (6).

[^2]CONTEXT: There are two men and someone asks 'which of you is a farmer?'
Teen koolnáal(-en). Leti'-e' k-u beet-ik jmesero-il
I farmer(-1s.B). He-TOP HAB-3s.A do-INC.3s.B waiter-REL 'I am the one who is a farmer. As for him, he works as a waiter.'
(5) CONTEXT: Someone tells you that everyone in your family is sick at the moment. In suku'un k'oja'an(-Ø). Ten-e' ma'alob in w-u'uy-ik-im-baj 1 s .A older brother sick(-3s.B) I-TOP well 1s.A glide-feel-INC-1s.A-self 'My older brother is the one who is sick. As for me, I feel good'
(6)

CONTEXT: Who killed that deer?
In nool ts'on le kéej-o'
1s.A grandfather hunt.SUBJ.3s.B DEF deer-DISTAL
'My grandfather (was the one who) killed the deer'
Depending on one's particular view of the role that information structure plays in syntax, we might imagine a subject position that is to the right of the predicate and all variations on this basic word order are driven either by some type of displacement (this could be the case for topics) or by a completely different type of clause structure (this could be the case for focused elements). Possible clause structures based on the small clause approach and the Pred approach are shown in table 1. The Pred head structure is meant to mimic that of a verbal core in Yucatec, where the verb takes an internal argument to its right and this verb phrase is followed by the subject.

Table 1

| Small Clause | Projection of Predicate X | Pred Head |
| :--- | :---: | :--- |
| SC | PredP |  |
| $\mathrm{XP}_{\text {PRED }} \quad \mathrm{DP}_{\text {Subj }}$ | Pred |  |

The rest of the paper will be dedicated to answering the question: which of the structures in Table 1 is more adequate for copular sentences in Yucatec Maya?

## 3. Morphosyntactic Arguments in favor of Pred

### 3.1 The Relator bey (= like)

In this section I will go through a few morphosyntactic arguments from Yucatec that support $t$ he Pred head a nalysis for $t$ his 1 anguage. As $m$ any of $t$ he a rguments in $t$ he literature on this subject (principally Bowers 1993, 2001; Baker 2003; Den Dikken 2006) are language specific, I present this section as a rough idea of what morphosyntactic areas
in which we can look for arguments in favor of Pred in Yucatec in the hopes of finding more solid arguments in the future.

One of the major arguments that has been generated in favor of the Pred approach is that this he ad can be morphologically realized in a variety of ways in many different languages. Relator el ements (following Den Dikken 2006) ${ }^{5}$ are w ords such as English like, as, and for, which appear principally in tenseless embedded predicative constructions as shown in (7).
(7) a. I regard John as my best friend.
b. She considers him (as) a fool.
c. He treats her like dirt.
d. She takes him for a fool.

It has been argued that such elements are morphological realizations of a sy ntactic head that mediates predicative relationships (Bowers 1993, Baker 2003, Den Dikken 2006). In English, both its presence and its form depend on the matrix verb; for example, the verb treat selects a PredP in which the Pred head is lexicalized as like. Predicative and copular particles that appear solely in non-verbal predicate constructions have been claimed to exist in Korean and Japanese (Bowers 2001), in Celtic languages (Adger \& Ramchand 2003) as well Edo and C hichewa (Baker 2003). The p resence of relator elements in standard, 'tensed' copular sentences is much more restricted as shown by Moro (1997) (Den Dikken 2006 argues that in these examples the copular verb is the lexical realization of the relator element, though there are arguments against this in Bowers 2001).
(8) a. John is (*as) a singer.
b. Sue is (*for) a dancer.

As far as I can tell, Y ucatec does not allow the types of embedded sm all clause sentences in (7) at all (see Bohnemeyer 1998, chapter 4 for a detailed overview of what types of c onstituents c an be e mbedded unde $\mathrm{r} v$ erbs). Furthermore, t he ' tenseless' environment that is a favorable one for the presence of relator elements is typical of the matrix copular sentences in Yucatec that we have seen in sections 1 and 2, which lack any k ind of a spectual/mood m arking. T he que stion is whether relator el ements ca n surface in these matrix clauses in Yucatec. This will be explored below.

One a pparent e xception to the i dea t hat m atrix co pular sen tences p rohibit the presence of relator elements is exemplified by predicative similes in volving like, which can appear in standard copular constructions in languages such as English and Spanish.
(9) a. John is (like) a bear.
b. Juan es (como) un oso.

Obviously, the sentences in (9) do not mean the same thing in the presence of like/como that they do without it. The question is whether they have a different syntactic structure.

[^3]If we assume that the verb be/ser is a raising verb (just like seem/parecer), we could say that t he s tructure of a sentence w ith or w ithout like/como is b asically t he sam e . Essentially, the co pular verb be/ser can select a co mplement in which the p redicative head is null or realized by a relator. The semantic contribution of the relator in this case could give rise to a different type of predicative relationship between the subject and the predicate. ${ }^{6}$ This is shown in (10).


Den D ikken (2006) argues that a small c lause a nalysis cannot pos sibly a ccount for pervasive p resence of these types of el ements in 'tenseless' predicative constructions cross-linguistically. Put simply, there is no po sition for them. On the other hand, if we assume that there is a syntactic head that mediates the predicative relationship, we have a possible position for these elements.

A possible candidate for a relator element in Yucatec is the word bey (= as, like). Like bot hE nglish like/as and S panish como, this w ord c an a ppear in nominal predications as shown in (11) and (12). Its presence alters the meaning of the sentence slightly, as like/como do in English and Spanish.
a. Ko'olel-ech (teech)
woman-2s.B (you)
'You are a woman'
b. Bey ko'olel-ech (teech)
like woman-2s.B (you)
'You are like a woman'
= You have the characteristics of a woman (but you're not one)
(most common interpretation = you like to gossip)
(12) a. síinik-Ø le xi'ipal-o'
ant-3s.B DEF boy-DISTAL
'That boy is an ant'
(i) He is an ant (he is a wáay, a shape-shifter, who turns into an ant)
(ii) He has the characteristics of an ant (but is not one)

[^4]b. Bey sínik-Ø le xi'ipal-o'
like ant-3s.B DEF boy-DISTAL
'That boy runs non-stop' (lit. that boy is like an ant)
Comparing the relative order of the relator element with the subject and the predicate in English, Spanish and Yucatec leads to an interesting generalization.
a. [That boy] is [like] [an ant].
b. [Ese niño] es [como] [una hormiga.]
c. [Bey] [sínik] [le xi'ipal-o’]

Subj - Relator - Predicate
Subj - Relator - Predicate
Relator - Predicate - Subject
In e ach language, the relator e lements appear in the same positions that a verbal head might ap pear relative to its subject a nd object. The following pos itions of $t$ he relator element in Yucatec are ungrammatical.

$$
\begin{array}{ll}
\text { a. *Ko'olel bey teech } & \text { Predicate }- \text { Relator }- \text { Subject } \mathbf{x}  \tag{14}\\
\text { woman like you } & \\
\text { Intended: 'You're a gossiper' } & \\
\text { b. *Sínik bey le xi'ipal-o' } & \text { Predicate }- \text { Relator }- \text { Subject } \mathbf{x} \\
\text { ant like DEF boy-DISTAL } & \\
\text { Intended: 'That boy runs non-stop' } &
\end{array}
$$

If Den Dikken's (2006) characterization of these elements is correct and we accept the results of the vast majority of work done on basic word order in Mayan languages (i.e., that they are predicate-subject), the predictions for the possible positions of a word like bey follow naturally. On the other a ccounts, the data d on't ap pear to have such a simple e xplanation. It is not c lear what syntactic position they would oc cupy nor is it clear how the fact that the relative order that they exhibit with respect to subject a nd predicate is generally the exact same as that of a verbal head with respect to subject and object in the language. I take this as a $p$ iece of evidence in favor of the idea that relator elements occupy a syntactic head that mediates predicative relationships, thus supporting a Pred head analysis of copular sentences in Yucatec Maya.

### 3.2 The Set $B$ suffix as an agreement clitic

In this section I build a hypothesis about the licensing of the set B suffix that crossreferences the $S$ argument of copular sentences based on an intuition that is prevalent in the descriptive Mayanist literature. The suffix is thought to beam arker of a 'stative verb', which verbalizes a noun or an adjective (Craig 1977; Daley 1985; Bricker, Po'ot Yah, Dzul de Po'ot 1998, among many others). Based on this intuition, I claim that the
suffix is 1 icensed by $t$ he PredP construction. I propose $t$ hat $t$ he set $B$ suffix is an agreement clitic generated in the Pred head. ${ }^{7}$

Building on the conclusion of section 3.1, the first piece of evidence that the suffix is an ag reement clitic that is $g$ enerated in the P red he ad is its pos sible positions in sentences that contain bey (= like/as). In addition to the canonical post-predicate position (15a), the clitic may also surface immediately to the right of bey (15b).
a. Bey ko'olel-ech (teech)
like woman-2s.B (you)
'You are a gossiper'
b. Bey-ech ko'olel (teech)
like-2s.B woman (you)
'You are a gossiper'
[Pred Predicate]-clitic
[Pred]-clitic Predicate]

Consultants detected no difference in meaning between (15a) and (15b). That is, as far as I can tell, (15b) is not an appositive construction that means something like 'that is how you a re, woman.' It se ems to be a matter of choice as to where the clitic ends up. I propose that the c litic is generated in the P red h ead a nd t hat t here is a do main of affixation defined by the syntactic sisters Pred and the $\mathrm{XP}_{\text {PRED }}$ as shown in (16).

 enclitic $n$ ature, may e nd up a tached to the right of any phonol ogically suitable host ${ }^{8}$ within its domain of affixation. This is merely a generalization at the moment. The rest of this section is dedicated to s howing that the g eneralization ho lds ov er a fairly $w$ ide spectrum of data.

[^5]In order to test the prediction made by the structure in (16), it is necessary to review a larger selection of predicate types, paying attention to where the clitic attaches in each case. The c anonical post-predicate $p$ osition is $w$ here $t$ he clitic appears $w$ ith p ossessed nominal predicates as shown in (17).
a. [In wéetmeyaj]-o'ob 1s.A coworker -3p.B
'They are my co-workers'
b. [A taataj]-en

2s.A father-1s.B
'I am your father'
The canonical position for the c litic is c aptured by a r ule like (18). T he only s uitable phonological host that the clitic can attach to that is also in the domain of affixation is $\mathrm{XP}_{\text {PRED }}$.


The sam ep attern a rises with both $n$ ominal an $d$ a djectival $p$ redicates that co ntain a modifier in the pre-nuclear position as shown in (19).
a. Chan máak-ech
small man-2s.B
'You're a small man'
b. Jach kala'an-o'on
(*Jach-o'on kala'an)
very drunk-1p.B
'We're very drunk'
The rule in (18) captures these examples as well. Because the only suitable phonological constituent within the domain of affixation is the entire $\mathrm{XP}_{\text {PRED }}$, the clitic must attach to the right edge of the predicate.

Proper name possessors y ield a p attern similar to w hat is shown in example (15) when bey is pr esent. C onsultants ac cept b oth sen tences in (20) with no a pparent difference in meaning. The clitic can either attach directly to the nominal head (20a) of the predicate or a ttach to the right of the possessor, which follows the nom inal head (20b).
a. Ten-e’ u y-íicham-en Ana

I-TOP 3s.A glide-husband-1s.B Ana
'As for me, I am Ana's husband'

b. Ten-e' u y-íicham Ana-en<br>I-TOP 3s.A glide-husband Ana-1s.B<br>'As for me, I am Ana's husband'

Assuming that b oth thep redicate h ead and t he p redicate-possessor complex ar e phonologically suitable constituents, the rule for these must be one of optionality. The key is that the clitic must attach somewhere within the domain affixation, as is the case in (15). This is shown as a rule in (21).


If the possessor is not a proper name and contains demonstrative/definite morphology, only the position i mmediately to $t$ he $r$ ight of $t$ he nom inal head of $t$ he predicate is permissible. That is, the clitic must 'split' the predicate and its possessor ${ }^{9}$ as shown in (22).
a. U jmeen-il-en le kaaj-a'

3s.A priest-REL-1s.B DEF town-PROX
'I am the priest of this town'
b. *U jmeen-il le kaaj-en-a'

3s.A priest-REL DEF town -1s.B-PROX
Intended: 'I am the priest of this town'
c. *U jmeen-il le kaaj-a'-en

3s.A priest-REL DEF town-PROX-1s.B
Intended: 'I am the priest of this town'
(23)


[^6]Descriptively there are three possible positions for the clitic within its domain of affixation. It c an either (i) remain in the Pred head if there is a su itable phonological constituent bey (= as /like) to a tach tothere, (ii) it m ay at tach toa phonological constituent within the phrase that functions as the predicate (split the predicate) or (iii) to the right edge of the entire predicate. It is beyond the scope of this work to define what the relevant phonological constituents for affixation are. What is clear is if we accept the general hypothesis that is supported here, there is a local syntactic domain that explains both why the clitic a ppears and where it can possibly end up. A s mall clause analysis does not obviously provide the same types of mechanisms to explain the presence or the position of the clitic.

## 4. Predicates with Definite Morphology: Some Observations

A further interesting fact about copular sentences in Yucatec Maya is the apparent lack of p redicates t hat contain d emonstrative/definite m orphology. T his m orphology consists of a d efinite marker le and a glottalized vowel that appears at the right of the entire nou n phr ase c onstituent, indicating r elative d istance. T he g lottalized v owel is called a deictic clitic in Mayanist tradition. An example is the vowel $a^{\prime}$ that appears at the right of the word $k a a j$ ( $=$ town) in (22). If the entire predicate contains such morphology, the set B clitic is ungrammatical in any position as shown in (24).

> a. *Le ts'akyaj-ech-o' teech
> DEF doctor-2s.B-DISTAL you
> Intended: 'You are the/that doctor'
> b. *Le ts'akyaj-o'-ech teech
> DEF doctor-DISTAL-2s.B you
> Intended: 'You are the/that doctor'

These examples are strongly rejected by consultants and I have yet to find any naturally occurring e xamples in which a set B c litic a ppears $w$ ith a $p$ redicate th at contains demonstrative/definite $m$ orphology. O ne p ossible $r$ eason for $t$ heir $u$ ngrammaticality is that t he c litic ha s no suitable pho nological host. I tc ould be the case that demonstrative/definite e ffectively seal s the p redicate $f$ rom a prosodic $p$ erspective, prohibiting anything from attaching within it or to its right edge. If this were the case, it would be difficult to explain the examples in (25), which are locative constructions that lack the definite marker $l e$ but do have the deictic clitic. In (25a), a set B clitic appears between a locative element je'el and a deictic clitic and in (25c) an adverb with sentential scope appears ( for p honological reasons) w ithin a constituent that c ontains a locative element $t e$ ' and a deictic clitic.
a. Je'el-ech-a'

LOC-2s.B-PROX
'Here you are'
b. ??Ba'ax k-a beet-ik te' kaaj-o' ka'achij? ${ }^{10}$

What HAB-2s.A do-INC.3s.B there town-DISTAL formerly
'What did you used to do in that town there?
c. Ba'ax k-a beet-ik te' kaaj ka'ach-o'?

What HAB-2s.A do-INC/3s.B there town formerly-DISTAL
(i) 'What did you used to do in that town there?
(ii) \#'What do you do in that former town?'

Another pos sible e xplanation for t he ungrammaticality obs erved in (24) is th at Yucatec May a p redicative relationships mediated by Pred are sen sitive to the type of expression that acts as the predicate; that is, the attributive feature of predicates must be satisfied in order for a given constituent to occur in the complement of Pred.

Adger \& Ramchand (2003) discuss this issue in terms of how it de termines the morphosyntactic characteristics ofp redicative c onstructions in S cottish G aelic. The authors invoke an idea about noun phrases from Zamparelli (2000), who separates them into layers that determine the overall semantic properties of them.


These different levels of de notation can be established in distinct ways crosslinguistically. Lexical determiners (definite determiners, for example) are a typical way of making a noun phrase referential. We could posit that for Yucatec Maya, which has a very e laborate internal noun ph rase s tructure, $i t$ is the $p$ resence of $t$ he demonstrative/definite morphology that activates the strong (referential, entity-denoting) layer of the extended nominal projection. Note that this morphology can co-occur with possessives, $n$ umerals, classifiers and o ther p ossible c andidates that m ight f ill th is nominal layer.
(27) Le in ka'a-túul w-íits'in-o'ob-a' (Briceño Chel 1996: 100)

DEF 1s.A two-CL.ANI glide-sibling-PL-PROX
'These two younger brothers of mine'

[^7]Note that Briceño Chel (1996) expresses an intuition that is almost exactly the same as Zamparelli's. This is summarized in his table that shows a sequential order that gradually adds layers definiteness, codified as $+/-$ 'determinado.'

| DEMOSTRATIVO | POSESIVO | NUMERAL |
| :--- | :--- | :--- |
| + DET | $1 / 2$ DET | -DET |

An ad equate $g$ eneralization seem sto bethat possessive clitics (set A cross reference markers) are the boundary between a fully saturated, referential expression and one that can act as a p roperty a ttributable to a subject (a predicate). This is shown in (29) in a gradable fashion in which the predicate gradually becomes more 'definite' in B riceño Chel's terms.
a. Ts'akyaj-ech
Doctor-2s.B
'You're a doctor'
b. Jun-túul ts'akyaj-ech

One-CL.ANI doctor-2s.B
'You're a doctor'
c. In ts'akyaj-ech.

1s.A doctor-2s.B
'You're my doctor'
d. *Le ts'akyaj-ech-o'

DEF doctor-2s.B-DISTAL
'You're the doctor'
The question that arises is if there is some type of strategy to circumvent this problem. In many 1 anguages, $p$ redicates that co ntain d efinite morphology can en ter $p$ redicative constructions but these $g$ enerally follow a m orphosyntactic pa ttern di stinct from their prototypical indefinite counterparts ( see A dger \& Ramchand 2003 a nd w orks c ited therein for details). According to the d ata I collected, one strategy is to focalize the subject and simply eliminate the set B clitic. For the examples in (30) - (32) the context is that the speaker has a sick relative and is looking for a particular person in town that he/she knows is the only doctor. They suddenly s ee that person a nd utter "you're the doctor." One possibility is shown in (30). In this case, the subject is focused and the set B clitic does not appear anywhere in the predicate.
(30) Teech le ts'akyaj-o'

You DEF doctor-DISTAL
'You are the doctor'

Variations of $t$ his ph rase were also g iven in w hich t he predicate ' doctor' is s imply described using an A-focus construction as in (31) or using a r elative clause headed by máak (= person) as in (32). These were actually the most frequently recorded answers to the context described above.

## Teech ts'ak-ik máak

(A-Focus)
You cure-INC.3s.B man
'You are the one who cures people'
Tech-e' le máak k-u ts'a-ts'ak-o' (Relative Clause)
You-TOP DEF person HAB-3s.A give-cure-DISTAL
'As for you, you're the doctor (lit. you're the person who cure-gives)
If (30) is really some kind of focus construction, then we have a possible explanation for why the set B clitic does not appear. Following ideas in Bohnemeyer (1998/2002) and Tonhauser (2003), focus constructions a ctually consist of a focalized e lement which is the main predicate. That predicate takes a verbal core/clausal argument that triggers the presence of the null $3 \mathrm{~s} . \mathrm{B}$ clitic on the focused e lement. Thus, the idea is that we do actually have a predicative construction in (30), but the main predicate is teech and its argument is the fully sa turated nominal expression le ts'akyajo'. The following is a slightly modified version of T onhauser (2003: 214, figure 1) that is consistent with overall idea that has been presented thus far. ${ }^{11}$


The basic idea here has been to show that there does appear to be a semantic restriction on w hat c an be a predicate i nb asic co pulars entences: p redicates w ith definite/demonstrative morphology seem to be out. A strategy for expressing these types of sentences is to revert to a d ifferent type of predicative relationship that exists in the language's inventory in which the same restriction may not hol d: focus constructions. More on the relevance of (33) to the overall idea expressed here is discussed in section 5.

## 5. Other Predicative Relationships in Yucatec Maya

I have heretofore defended an idea regarding the clause structure of lexical nominal and adjectival predicates in Yucatec Maya in which a syntactic head, Pred, mediates a

[^8]predicative relationship between a su bjectinits specifier an $d a p$ redicate $i n i t s$ complement. The Pred head is $t$ he locus for the ag reement $r$ elationship between $t$ he argument and the predicate that is spelled out as the set B clitic. The set B clitic then must attach to the $p$ redicate as its 'domain of affixation' is defined by the sy ntactic sp ace delimited by Pred'. This is roughly illustrated in (34) and (35).
(34) Xíib-en (teen)

Man-1s.B (I)
'I am a man'


In th is final section I would like to outline an in teresting area of study where the ideas presented here could pos sibly pl ay a n i mportant role. Since the seminal work of Bohnemeyer (1998), it has become increasingly cl ear that basic c lausal ar chitecture in Yucatec can be understood in terms of a s et of simple intransitive predicates that take different sized arguments and are marked with the set B clitic that cross-references the argument. The three principle types of predicative constructions are shown in (36) - (38).

## STATIVE PREDICATES (= COPULAR SENTENCES)

a. Uts- $\varnothing$ [le tsíimin-o']
good-3s.B DEF horse-DISTAL
'That horse is good'
b. Uts- $\varnothing$ t-in t'aan [in ts'u'uts'-ik chamal]
(B 1998: 168) good-3s.B to-1s.A speech 1 s .A smoke-INC.3s.B cigarrette 'I like smoking cigarettes'
c. Uts-Ø ti' k t'aan [ka t'aan-nak-ech k u'uy-ej]
(B 1998: 187)
good-3s.B to 1 p.A speech SUB talk-SUBJ-2s.B 1s.A listen-SUBJ
'We appreciate that you talk to us'
VERBAL CORES (WITH UNBOUND ASPECT/MOOD MARKING)
a. Ts'o'ok- $\varnothing$ [ in wen-el]

TERM-3s.B 1s.A sleep-INC
'I already slept' (Lit. My sleeping is achieved)
b. Sáam- $\varnothing$ [ok-ok-ech]

PAS.REC-3s.B enter-SUBJ-2s.B
'You entered a while ago' (Lit. You entering happened a while ago)
F CONSTRUCTIONS ('HIGHER-ORDER' PREDICATES) ${ }^{12}$
a. Juan-Ø [il-ik-ech]

Juan-3s.B see-INC-2s.B
'It is Juan who sees you'
b. Ma'ax-Ø [le bo'ot-a'ab u p'aax chúumuk-il-o']?

Who-3s.B DEF pay-PASS 3s.A debt half-REL-DISTAL
'Who was the second to get paid what they were owed?'
(Andrade \& Maas Collí 1999: 61)
Bohnemeyer (1998) shows that these t hree cl asses of predicative relationships are in complementary di stribution in $t$ hree $r$ espects. First, none oft hem can be embedded directly unde r a verb or the c lausal s ubordinator $k a$. Second, it is well known t hat aspectual and mood marking never appears in copular sentences, supporting the idea that these and aspectual and mood marking form a morphsyntactic class. Lastly, there is evidence that focus constructions actually manifest their own system of aspect and mood marking (see the discussion in Bohnemeyer 1998: 192-195 on the irrealis marker kéen in F constructions), further supporting the idea that they are separate members of a natural class of predicative c onstructions. All t hree a re grouped und ert he term ' stative predicates' (following Lehmann 1993, Bohnemeyer 1998). The distributional evidence is grounds for positing an o verall structural configuration that encompasses ach of the classes. I suggest that the configuration that I ha ve proposed for copular sen tences in sections 2 and 3 co uld be used to cap ture the st ructural ch aracteristics that are sh ared among these, verbal cores with aspect/mood marking as well as F Constructions.


Set B cl itic licensed as a greement w ith su bject ( must c liticize within the do main of affixation)

[^9]There are still many open questions with respect to the ideas presented above and it is probably the case that not all of these clause types share the same configuration with the same label. For example, we might expect to find coordinated constructions involving copular sentences and verbal c ores w ith unbo und a spect/moodm arking or F constructions, s omething that I have not seen documented in the literature. The next obvious steps are to relate this to argument realization within the verbal core, expression of a spect $/ \mathrm{mood}$ and to investigate if the predicate - argument order is derived by some kind of mandatory displacement of an underlying argument - predicate order, an area that has received more attention recently (see Coon 2009a/b for an account of such ideas in Chol). I leave these questions for future research.

## 6. Conclusion

In this paper I have supported an analysis of copular sentences in Yucatec Maya in which a functional head mediates the syntactic relation of predication between a subject and a p redicate, which typically a ppear in Pred-Subject or der. It w as ar gued that this functional head is what m akes a particular phrase ap redicate and h ouses the morphological mark typical of such relationships in Yucatec Maya: the set B clitic. It was shown that the set B clitic has a domain of affixation defined by the syntactic sisters Pred and the $\mathrm{XP}_{\text {PRED }}$ (the main predicate of the sentence) within which it can attach to various types of constituents. The restrictions on copular sentences seem to be driven by both phonological factors that play a role in cliticization and semantic factors involving the 'definiteness' of noun phrases. The last sections of the paper were exploratory in nature and attempted to integrate the overall idea into a general configurational theory of clause structure in Yucatec Maya that can explain why copular sentences are in complementary distribution with verbal sentences that contain aspect/mood marking as well as the family of $F$ constructions.

## Abbreviations

Cross Reference Markers $=$ PersonNumber.Set (example 1s.A $=1^{\text {st }}$ person singular, set A), glide $=$ pre-vocalic $\mathrm{w} / \mathrm{y}$ ( part of set A paradigm), TOP $=$ Topic marker $-e^{\prime}$, COMP $=$ completive verbal status, INC $=$ i ncompletive verbal status, SUBJ $=\mathrm{s}$ ubjunctive verbal status, $\operatorname{PERF}=\mathrm{p}$ erfective asp ect m arker, HAB $=$ habitual a spect m arker, TERM $=$ terminative aspect marker, PAS.REC $=$ recent past aspect marker, DEF $=$ definite marker, PROX $=$ proximal deictic clitic, DISTAL $=$ distal deictic clitic, REL $=$ relational nominal suffix $-i l$, CL.ANI $=$ classifier (animate beings), PL = plural marker $-o$ 'ob.

## References

Adger, David and Ramchand, Gillian. 2003. Predication and Equation. Linguistic Inquiry 34(3): 325-359
Aissen, Judith. 1992. Topic and Focus in Mayan. Language 68(1): 43-80
AnderBois, Scott. to appear. Strong Positions and Laryngeal Features in Yukatek Mayan. Proceedings of NELS 39.
Andrade, M anuel J. \& Hilaria M áas C ollí ( recopiladores). 199 9. Cuentos $M$ ayas Yucatecos (Tomo I). Mérida, México: UADY

Avelino, H eriberto. 20 09. I ntonational pa tterns of topic a nd f ocus constructions in Yucatec Maya. In H. A velino, J. Coon and E. Norcliffe (eds.) New Perspectives in Mayan Linguistics, MITWPL 59: 1-21.
Baker, Mark. 2003. Lexical Categories. Cambridge: Cambridge University Press
Benmamoun, Elabbas. 2008. Clause Structure and the Syntax of Verbless Sentences. In R. Freidlin, C.P. Otero \& M.L. Zubizarreta Foudational Issues in Linguistic Theory. Cambridge: MIT Press.
Bohnemeyer, Jürgen. 1998. Time Relations in Discourse: Evidence from a Comparative Approach t o Y ucatec M aya. PhD D issertation, Centre for L anguage S tudies Nijmegen-Tilburg.
Bohnemeyer, Jürgen. 2002. The Grammar of Time Reference in Yukatek Maya. Munich: Lincom.
Bohnemeyer, J ürgen. 20 09. L inking w ithoutg rammatical $r$ elations in $Y$ ucatec: Alignment, extraction, and control. In Y. Nishina et. al. (eds.) Form and Function in Language R esearch. P apers in H onor of C hristian Lehmann. B erlin: Mouton de Gruyter.
Bowers, John. 1993. The Syntax of Predication. Linguistic Inquiry 24: 591-656
Bowers, John. 200 1. P redication. In M. B altin \& C . C ollins (eds.) The H andbook of Contemporary Syntactic Theory. Oxford: Blackwell.
Briceño C hel, F idencio. 1996 . La fra se n ominal en el maya y ucateco. Estudios de Lingüística Aplicada 23/24: 95-104. México: UNAM, Centro de Lenguas Extrajeras.
Briceño C hel, F idencio. 2 006. Los verb os d el maya yu cateco a ctual: I nvestigación, clasificación y sistemas conjugacionales. Mexico City: INALI
Bricker, Victoria. 1978. Wh-questions, relativization and clefting in Yucatec Maya. In L. Martin (ed.) Papers in Mayan Linguistics. Columbia, MO: Lucas Brothers.
Bricker, V ictoria. 1981. The so urce of the e rgative split in Y ucatec Maya. Journal of Mayan Linguistics 2: 83-127.
Bricker, Victoria, Eleuterio Po'ot Yah \& Ofelia Dzul de Po'ot. 1998. A Dictionary of The Maya Language (as spoken in Hocabá, Yucatán). Salt Lake City: University of Utah Press.
Coon, Jessica. 2009a. VOS as Predicate Fronting in Chol. Ms. MIT
Coon, Jessica. 2009b. Rethinking Split Ergativity in Chol. Ms. MIT
Coon, Jessica \& Preminger, O mer. 2009. P ostional Roots a nd C ase A bsorption. In H . Avelino, J. C oon a nd E. N orcliffe ( eds.) New Perspectives in Mayan Linguistics, MITWPL 59: 35-58.
Craig, Colette. 1977. The Structure of Jacaltec. Austin: University of Texas Press.
Dayley, Jon. 1985. Tzutujil Grammar. Berkeley: University of California Press.
Den Dikken, Marcel. 2006. Relators and Linkers. Cambridge: MIT Press.
Durbin, Marshall \& Ojeda, F ernando. 1978. B asic w ord-order in Y ucatec Maya. In N. England (ed.) Papers in Mayan Linguistics 2: 69-77. Columbia, MO: University of Missouri Miscellaneous Publications in Anthropology 6.
Gutiérrez Bravo, Rodrigo. \& Monforte y Madera, Jorge. 2008. On the Nature of Word Order in Yucatec Maya. Ms. CIESAS-Mexico City \& Academia de la Lengua Maya de Yucatán.

Gutiérrez Bravo, Rodrigo. \& Monforte y Madera, Jorge. 2009. Focus, A gent Focus and Relative Clauses in Yucatec Maya. In H. A velino, J. Coon and E. Norcliffe (eds.) New Perspectives in Mayan Linguistics, MITWPL 59: 83-95
Lehmann, Christian. 1993. Predicate Classes in Yucatec Maya. Función 13-14: 195-272
Moro, Andrea. 1997. The Raising of Predicates. Cambridge, UK: Cambridge University Press.
Stowell, Tim. 1981. The Origins of Phrase Structure. PhD. Dissertation, MIT.
Stowell, Tim. 1983. Subjects across categories. Linguistic Review 2: 285-312.
Tonhauser, J udith. 2003. F-constructions i n Y ucatec M aya. In J . A nderssen, P . Menéndez-Benito, and A.Werle (eds.) The Proceedings of SULA 2, Vancouver, BC: 203 - 223. GLSA: University of Massachusetts, Amherst.
Verhoeven, E lisabeth. 2 007. Experiential C onstructions i $n$ Yucatec $M$ aya: $A$ typologically bas ed ana lysis of a functional do maini na Mayanl anguage. Amsterdam: Benjamins.
Williams, Edwin. 1980. Predication. Linguistic Inquiry 11: 203-238.
Zamparelli, Roberto. 2000. Layers in the Determiner Phrase. New York: Garland.

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[^0]:    *I would like to thank Fidencio Briceño Chel, Ismael May May, Sharon Mújica and John Tuxill for helping me learn some Maya and for facilitating every aspect of my time in the Yucatán. I would also like to thank all of the people I had the fortune of working with in Santa Elena, Oxkutzkab and Yaxcabá with special mention to María Luisa Góngora and Santiago Domínguez. I am responsible for all errors.
    ${ }^{1}$ In this paper the main focus is nominal and adjectival predicates. Predicate constructions like those in (1) are also possible with prepositions, question words, adverbial expressions and quantifiers. Sentences containing the existential copula yaan are not treated here.
    ${ }^{2}$ These pronominal suffixes are referred to as set B cross reference markers in the Mayanist lite rature and correspond roughly to absolutive case in that they cross-reference $O$ and $S$ arguments. Yucatec exhibits an aspectual s plit in which the $S$ a rgument of in transitive verbs is o nly marked with thes et Buffix in completive aspect and subjunctive mood. They are enclitics and the morphological paradigm is as follows.

    | Singular |  | Plural |
    | :--- | :--- | :--- |
    | -en |  | -o'on <br> -ech <br> $-Ø$ |
    |  |  | -e'ex |
    | - -o'ob |  |  |

[^1]:    ${ }^{3}$ For Den Dikken (2006) the relator is simply a cover term for predicative relationships. There is no syntactic head that is specified to occur solely in the sentences like those of (1).

[^2]:    ${ }^{4}$ I need to collect more data on this particular point. The contrastive situations in (4) and (5) are the only ones I was able to get a clear judgment on. I have indicated that the predicate takes the set B suffix in parentheses because there $w$ as some variability with $r$ espect to its $p$ resence. H owever, I still don ot k now if th is constitutes a real pattern. The preliminary generalization seems to be that topics need the suffix to appear on the predicate whereas focused subjects may do without the suffix. If this indeed constitutes a real pattern, it could provide a dditional e vidence in favor of the view s upported in B ricker (1978), B ohnemeyer (1998, 2002) and Tonhauser (2003) that focus constructions constitute their own special type of clause in Yucatec and cannot be derived via displacement of constituents from a more basic clause type (Aissen 1992). Topics, on the other hand, would not form a separate clause type, explaining why the suffix appears on the predicate.

[^3]:    ${ }^{5}$ These are also called lexicalizations of Pred (Bowers 1993, 2001) or copular particles (Baker 2003).

[^4]:    ${ }^{6}$ I as sume that an idea like this could acco unt for the different ways in which a s entence like (9) can be expressed morphosyntactically.
    (i) John is like a bear.
    (ii) John is bear-like (incorporation of the nominal head into the Pred head).

[^5]:    ${ }^{7}$ The clitic could also be part of a full DP. The controversy here is similar to that of Romance clitics. These clitics seem to behave as heads and phrases simultaneously. I am as suming that the clitic is generated via agreement with a full (pro)nominal element (that can be null) in spec PredP. It could be the case that the clitic is what is in spec PredP and full pronominal elements are always right or left dislocated if they co-occur with the clitic. Either way, it is the presence of the PredP structure that licenses the clitic.
    ${ }^{8}$ This idea is currently not very developed. It is unknown what the relevant phonological constituent might be: is it a phonological phrase or a prosodic word? I leave this particular aspect to future research. The data that I am basing this proposal on matches the work of Avelino (2009) and AnderBois (to appear) on prosodic structure in Yucatec Maya. That is, all ungrammatical examples are ones in which the clitic attaches to the right edge of something that is not a phonological phrase or a prosodic word according to these works.

[^6]:    ${ }^{9}$ Judith Aissen commented at CILLA that this is the only possibility in Tzotzil, regardless of whether or not the possessor of the predicate is a p roper $n$ ame. I still $n$ eed $t o$ investigate whether $t$ he $h$ eaviness of $f$ he possessor has any say in where the clitic ends up (it seems that it would). This example is from Andrade \& Maas Collí (1999: 94) in which a morphologically complex possessor hosts the clitic to its right. This seems to show that it is n't heaviness alone that will trigger affixation on the head of the predicate (aal = child, in this case). More needs to be done in this respect.
    (i) $u \quad y$-aal saj-lu'um-keep-en 3s.A glide-son fear-earth-penis-1s.B 'I am the son of a wimp'

[^7]:    ${ }^{10}$ I thank Fidencio B riceño C hel for these two e xamples a nd the suggested explanation for the pattern.

[^8]:    ${ }^{11}$ This is not meant to be a definitive proposal for Focus constructions, it is simply meant to show that the structural configuration in which they stand is the same as that of the lexical NP and AP predicates that have been treated here, an idea defended in Bohnemeyer $(1998,2002)$ as well as Tonhauser (2003).

[^9]:    ${ }^{12}$ The en tire family of F -constructions, which i ncludes, a ccording to B ricker (1978), B ohnemeyer (1998, 2002) and Tonhauser (2003), focus, WH-questions and relative clauses has been argued to not instantiate a uniform structural class in Gutiérrez Bravo \& Monforte y Madera (2009). Going into the details is beyond the scope of this short work.

