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Relative Clauses in Yucatec Maya:

Light Heads vs. Null Domain*

Abstract

This paper deals with a number of relative constructions in Yucatec Maya (the Mayan language of the Yucatan Peninsula) where no overt nominal head is observed. In these constructions however, several elements are observed in the domain of the relative clause, such as determiners and quantifiers. The paper addresses the question of whether these elements should be analyzed as light heads in the sense of Citko (2004). Evidence is presented to argue that this is not the case. Instead, the evidence indicates that the relatives under consideration do have a nominal head, albeit one that is phonetically null. This null head, however, can still be modified by the ordinary nominal modifiers of the language, including determiners, quantifiers and relative clauses.

1. Introduction

Descriptive works on relative clauses make a standard distinction between headed and headless relatives (Comrie (1989), Kroeger (2005), Andrews (2007)). In a recent study, Citko (2004) proposes that Polish displays a third kind of relative, *light-headed* relative clauses. An

example of this kind of relative is presented in (1), where apparently there is no nominal head that could function as the head of the relative. However, Citko (2004) crucially argues that in these cases the determiner that introduces the relative is formally and structurally the head of the relative clause.

(1) POLISH

Jan czyta to, [co Maria czyta].

Jan reads this what Maria reads

‘Jan reads what Maria reads.’

(Citko 2004: 96)

Citko provides evidence that relatives like (1) are different from both headed and headless relatives. She further notes that these constructions do not seem to be specific to Polish. A preliminary overview of this phenomenon in European languages indicates that a number of them could also have light headed relatives. Spanish is amongst these languages, as illustrated in (2), where the only element that introduces the relative clause is the article *la*.

(2) SPANISH

He visto a la [que me presentaste].

have-1sg seen ACC the that to.me introduced-2sg

‘I have seen the one that you have introduced to me.’

(Citko 2004: 97)

Yucatec Maya, the Mayan language from the Yucatán Peninsula, México, shows relative clauses that are similar to the Polish and Spanish examples in (1) and (2). This is shown in the

constructions in (3) and (4), where the only element introducing the relatives is the demonstrative determiner *le*.¹ Example (3) is like the Polish example in (1) in that it corresponds to a pronominal relative, whereas (4) is like the Spanish example in (2) in that it corresponds to a gap relative.

- (3) *Ma' táan u man- ϕ -o'ob le ba'ax u k'áat- ϕ -o'ob-e'.*
 NEG DUR ERG.3 buy-ABS.3s-3PL DM what ERG.3 want-ABS.3s-3PL-CL
 'They do not buy what they want.' (MDG-B:113)

- (4) *Leti' le ts'a-ik- ϕ to'on le janal-o'.*
 3SG DM give-IND-ABS.3s 1PL DM food-CL
 'HE is the one that gives us food.' (MDG-B: 280)

As such, one could consider the possibility that Yucatec is a language that has light-headed relatives. However, in what follows I argue that constructions like (3) and (4) are not instances of light-headed relatives. Rather, they correspond to cases where the domain of the relative clause (in the sense of Andrews (2007)) is reduced, a possibility in fact considered in Citko (2004). The conclusion I arrive at is that light-headed relatives and relatives with a reduced or null nominal domain correspond to different phenomena. I argue that Yucatec in fact shows the latter, in spite of the superficial resemblance of (3) and (4) to the light-headed relatives of Citko (2004). Before addressing this issue, in the following section I provide a basic description of relative clauses in this language.

2. Preliminary descriptive considerations

2.1 Basic clause structure

Yucatec Maya is a language that has an ergative-absolutive cross-referencing system that is split on the basis of aspect, but the language as a whole displays mostly nominative-accusative syntax. It is a strictly head-marking language. The verb agrees with the object through a set of pronominal suffixes (glossed ABS in what follows), whereas the transitive subject is cross-referenced by a series of proclitics (glossed ERG in what follows) that may attach prosodically to either the verb or to a number of different preverbal elements, most often auxiliary particles. The ergative proclitics are also used to cross-reference the possessor of the head of a noun phrase. Yucatec is a systematically head-initial language, except for the fact that the basic word order of its transitive constructions is SVO (see Briceño Chel (2002), Gutiérrez-Bravo and Monforte (2008), Gutiérrez-Bravo and Monforte (2010)) which makes it different from most other Mayan languages.² The basic structure of the clause in Yucatec (in brackets in the example below) consists of the main verb, the ergative proclitic cross-referencing the subject, and an auxiliary particle that precedes it. Full argument and adjunct phrases in turn appear to either the right or the left of this basic structure of the clause, as illustrated in (5).

(5) *U y-úicham_i [yaan u_i taa-s-ø_j] jun p'út centabo_j.*

ERG.3 EP-husband AUX ERG.3 come-CAUS-ABS.3s one bit money

‘Her husband must bring a little bit of money.’

(MDG-B:189)

2.2 Relative clauses and relativization strategies

Previous works dealing with the description of relatives in Yucatec are scarce. Brief descriptions can be found in Bricker (1978) and Tonhauser (2003). A more elaborate description of the structure of relatives in this language can be found in Gutiérrez-Bravo and Monforte (2009). However, these three works focus mostly on the *agent focus* form of the verb found in some relative clauses, rather than in their general typological properties.³ Hence I first provide a basic typological description of relative clauses in this language. The overall description of relatives that follows relies heavily on the descriptive terminology of Comrie (1989) and Andrews (2007). In all of the examples that follow, the head of the relative is underlined for ease of exposition.

Relatives in Yucatec are clausal in nature. With the exception of subject inversion when the subject of the relative is expressed overtly, they show no significant syntactic or morphological asymmetries with matrix clauses. They display finite morphology identical to that of matrix clauses and they are not introduced by a complementizer or any other element signaling their subordinated status. This is illustrated with the example in (6), where the basic clause structure illustrated in (5) is equally observed in the relative clause.

(6) Le tunich [RC tu'ux k-u pak'-a'a-l le graasia]-o'.

DM stone where AUX-ERG.3 sow-PASS-IND DM stuff-CL

‘The stones where (in between which) the stuff (corn) is sowed.’ (MDG-B:15)

Example (6) also shows another important property of relative clauses in Yucatec, namely, that they are clearly embedded inside the noun phrase. The clitic *-o'* belongs to a set of distal clitics (*-o'* can be translated approximately as 'that'). These phrasal clitics always attach to the right edge of the noun phrase and their presence is obligatory when the noun phrase is introduced by the determiner *le*, as in (7). Hence the presence of this clitic to the right of the relative in (6) indicates that the relative is a constituent inside the noun phrase.⁴

(7) *Le kajtalil way-a'*.

DM hamlet here-CL

'This hamlet here.'

(MDG-B:23)

Relatives in Yucatec display two different relativization strategies, the relative pronoun strategy (as in (6)) and the gap strategy. As noted in Gutiérrez-Bravo and Monforte (2009) and Gutiérrez-Bravo (2010), each kind in turn displays a different behavior with respect to the properties of the head of the relative. Specifically, all kinds of gap relatives may or may not show an overt head, but subject and object pronominal relatives never display an overt head: pronominal relatives can occur with an overt head, however, when an oblique argument or adjunct is relativized, such as the locative expression relativized in (6). In the following subsections I briefly describe the properties of both pronominal and gap relatives.

2.2.1 Pronominal Relatives

Pronominal relatives in Yucatec show a set of relative pronouns that are a subset of the corresponding interrogative pronouns (*ba'ax* 'what/which', *máax* 'who/whom' and *tu'ux* 'where'). Both relative and interrogative pronouns are obligatorily fronted to the left edge of the clause in Yucatec.⁵ This is illustrated for the pronoun *máax* 'who' in the following examples, where (9) corresponds to a subject relative.

- (8) *Pues máax ts'-u paak'áal way-e'?*
 well who TERM-ERG.3 sow.INTRNS here-CL
 'So who from here has already sowed?' (MDG-B:271)

- (9) *Lekan taa-k-∅ le [RC máax bi-s-ik-∅ le paca*
 when come-IRR-ABS.3s DM who go-CAUS-IND-ABS.3s DM bale
ti' Enlace]-o'...
 PREP Enlace-CL
 'When the one who takes the (henequen) bales to Enlace comes...?' (MDG-B:105)

Pronominal relatives in Yucatec are observed for subjects, objects, indirect objects, prepositional complements and locations. Further examples are presented below.⁶

- (10) *Le* [_{RC} *ba'ax k-in tsikbal-t-ik-ø te'ex]-a'*.
 DM what HAB-ERG.1s chat-TRNS-IND-ABS.3s 2.PL-CL
 'This (thing) which I'm telling you.' (MDG-B:108)
- (11) *Jach raro persona* [_{RC} *máax ti' k-u si'ib-il*].
 very rare person who PREP HAB-ERG.3 grant+PASS-IND
 'He's unusual, a person to whom (this power) is granted.' (MDG-B:62)
- (12) *Le lu'um* [_{RC} *tu'ux ken a pak'-ø xan]-o'*.⁷
 DM soil where AUX ERG.2 sow-ABS.3s also-CL
 'The soil where you're going to sow it too.' (MDG-B:224)

Lastly, as mentioned briefly in the preceding section, pronominal relatives in Yucatec may only display an overt nominal head when an oblique is relativized. Hence an overt head can be observed in location relatives like (6) and in indirect object relatives like (11), but not in subject relatives like (9) or object relatives like (10). This restriction is illustrated in the examples below:

- (13) *T-in kax-t-ik-ø le* [*ba'ax k-u y-ok-ol*
 DUR-ERG.1s. look.for-TRNS-IND-ABS.3DM what HAB-ERG.3 EP-enter-IND
t-in kool]-o'.
 PREP-ERG.1s cornfield-CL
 'I'm looking for the (thing) which goes into my cornfield.'

- (14) **T-in* *kax-t-ik-∅* *le kitam* [*ba'ax k-u*
 DUR-ERG.1s. look.for-TRNS-IND-ABS.3 DM boar what HAB-ERG.
y-ok-ol *t-in* *kool]-o'*.
 EP-enter-IND PREP-ERG.1s. cornfield-CL
 ('I'm looking for the boar which goes into my cornfield.')

2.2.2 Gap Relatives

As mentioned in 2.2, relative clauses in Yucatec are not introduced by a complementizer or any other element signaling their subordinate status. As a result, gap relatives in Yucatec are akin to English *contact relatives* like (15), with the addition that in Yucatec this kind of relative can also be observed for subject relativization. This is illustrated by the object relative in (16) and the subject relative in (17).

- (15) The book [I read ____].

- (16) *Mina'an-∅* *u* *chan p'óok* [RC *k-u* *p'at-ik-∅* ____
 NEG.EX-ABS.3s ERG.3 little hat HAB-ERG.3 leave-IND-ABS.3s
t-u *yáanal u* *k'áan]-o'*.
 PREP-ERG.3 under ERG.3 hammock-CL
 'His little hat he used to leave under his hammock was not there.' (MDG-B:48)

(17) *Jmeen, jaaj, jun túul jmeen* [RC _____ *ku*
 priest true one NUMC priest HAB-ERG.3
meen-t-ik-∅ waajil kool].
 make-TRNS-IND-ABS.3s cornfield.ceremony

‘He was a priest, it’s true, a priest that made the cornfield ceremony.’ (MDG-B:61)

As such, except for the fact that they show an obligatory gap corresponding to the relativized constituent, these clauses are identical in their structure to matrix clauses like (5). Besides having gap relatives for subjects and objects, Yucatec also has gap relatives for indirect objects and PP complements, temporal expressions and possessors, illustrated in the examples below. Gap relatives where the complement of a preposition is relativized display “preposition stranding”, as in (18). Observe that these again are contact relatives in that there is no complementizer or any other morphosyntactic element separating the head from the relative.

(18) *Yaan-∅ kex óox túul ko’olel* [RC *k-u*
 EX-ABS.3s even.though three NUMC woman HAB-ERG.3
ts’a-ik-∅ ti’ _____]-e’.
 give-IND-ABS.3s PREP -CL

‘There were even three women he gave it (his money) to.’ (MDG-B:32)

(19) *Le día* [_{RC} *ken-o'on k wa'alkun-t-ø* _____]-o'...

DM day AUX-ABS.1p ERG.1p erect-TRNS-ABS.3s -CL

'The day on which we erect them (the cross bars).' (Bohnmeyer 2002: 258)

(20) *Ti' a nal* [_{RC} *tun jóok'-ol u yi'ij-o'ob* _____]-o'.

PREP ERG.2 corn DUR+ERG.3 come.out-IND ERG.3 tip-PLUR-CL

'To the corn (of yours) whose tips are just sprouting.' (MDG-B: 13)

Finally, it is worth noting that gap relatives are not observed when a location is relativized; relativization of a location in Yucatec necessarily requires the relative pronoun *tu'ux* and so only pronominal relatives are observed in these cases. With this I conclude the preliminary description of relatives in Yucatec. In the following section I introduce the cases where the nominal head of the relative is absent. Here I argue that these are not cases of light-headed relatives, but rather relative clauses that have a domain that is partially or totally null.

3. Light heads vs. null nominal domain

In this section I argue that Yucatec relatives like (3) and (4), repeated here as (21) and (22), are not instances of light-headed relatives in the sense of Citko (2004). Instead I argue that these relatives result from the possibility of having some or all of the elements in the domain of the relative being null. The gist of the argumentation will be that this possibility is

independent of relative clause formation and instead depends on the general properties that are regularly observed in the noun phrase in Yucatec.

- (21) *Ma' táan u man- ϕ -o'ob le [ba'ax u k'áat- ϕ -o'ob]-e'.*
 NEG DUR ERG.3 buy-ABS.3s-3PL DM what ERG.3 want-ABS.3s-3PL-CL
 'They do not buy what they want.' (MDG-B:113)

- (22) *Leti' le [ts'a-ik- ϕ to'on le janal]-o'.*
 3SG DM give-IND-ABS.3s 1PL DM food-CL
 'HE is the one that gives us food.' (MDG-B:280)

Before addressing this issue, a terminological note is necessary here. An anonymous reviewer asks whether the relative constructions in (21) and (22) should be taken to be free relatives, given their absence of an overt nominal head. It's worth noting here that whereas typological works often use the terms *headless relative* and *free relative* interchangeably, theoretical works often provide a more specific characterization of free relatives. Specifically, free relatives are taken to be *pronominal* relatives that lack the referential head noun that is typically modified by restrictive (i.e. headed) relative clauses, as in English *I brought [what you need]* (see Riemsdijk 2006 for a recent survey of free relative constructions). I further assume that free relatives are not modified by any of the modifiers that regularly appear with the missing head noun. This distinction between *headless relatives* and *free relatives* is not purely terminological. The relative pronoun of English free relatives, for instance, is analyzed by Bresnan & Grimshaw (1978) as being in fact the external head of the relative construction.

Hence, in some languages at least, free relatives are not strictly speaking headless. Furthermore, in contrast with other kinds of relatives, free relatives commonly show some properties that are akin with the properties of embedded interrogatives; again, see Riemsdijk (2006) for a summary of these properties. For the purposes of what follows, though, the relevant point is that (21) and (22) are (apparently) headless relatives, but not free relatives under the definition I adopt. This is because (21) is a pronominal relative without a nominal head, but it is introduced by the determiner *le*, and (22) is a gap and not a pronominal relative. Yucatec does have free relatives as defined above, but their analysis goes beyond the scope of this paper. Instead I refer the reader to Gutiérrez-Bravo (2010) for detailed discussion.

Now, returning to central discussion, in an analysis of cases like (21) and (22) as light-headed relatives, it is crucial that the light element in the domain of the relative (the demonstrative *le* in the examples above) is nonetheless the structural head of the noun phrase in which the relative is embedded (Citko 2004: 110). I now present evidence that this is not what is observed in Yucatec relatives. Instead, I argue that the demonstrative *le* in (21), (22), and similar structures is a modifier of a null nominal head, which is represented as \emptyset in what follows. As such, (21) and (22) are neither light-headed relatives nor headless relatives, but a relative structure in which the head of the noun phrase happens to be phonetically null, a typological possibility already considered in Lehmann (1984). Following Gutiérrez-Bravo and Monforte (2009), I thus analyze the noun phrase in (22) and its relative clause as in (23).

(23) [NP *Le* Ø [RC *ts'a-ik-ø* *to'on le janal*]]-o'.

DM give-IND-ABS.3s 1PL DM food-CL

'The (one) that gives us food.'

It is a crucial part of the argumentation in favor of a structure such as the one in (23) to show that null nominal heads are not dependent on the presence of a relative clause. In other words, the possibility of having a null nominal heading the noun phrase appears to be a typological property available in some languages (but not in others, i.e. English) for any given noun phrase (see Gutiérrez-Bravo and Monforte (2009)). This is indeed what is observed in Yucatec. As illustrated in (24) the possibility of having a null nominal is a regular property of noun phrases in Yucatec (see Gutiérrez-Bravo (2002)).

(24) [NP *Le boox* Ø]-a'

DM black CL

'The/this black one.'

In the remainder of this section I present the evidence that favors the analysis in (23), i.e. a null head analysis, over a light head analysis like the one argued by Citko for Polish.

3.1 No distinct set of elements that function as light heads

A first argument against analyzing the Yucatec relatives under consideration as light headed relatives has to do with the range of elements that can appear in their domain. In

Polish, the set of elements that can appear in the domain of a light headed relative includes, but is not limited to, NP determiners. Other possible light heads include indefinites, negative indefinites and universal pronominals (i.e., *everything*, *everywhere*, etc.). In contrast, in Yucatec the elements that can appear in the domain of relatives like (21) and (22) is exactly the same as the set of elements that can precede the head noun in any kind of noun phrase. Thus the determiner *le* of (21) and (22) can equally be observed in the full headed relative in (6), or in noun phrases without relative clauses such as those in (7) and (24). This is further illustrated below with examples that show the quantifier *tuláakal*, ‘all’.

(25) *Tuláakal le meyaj-o'ob-o'*.

all DM worker-PL-CL

‘All the workers.’

(MDG-B:103)

(26) *Tuláakal le gente* [RC *k-u taal*]-o', *k-u*

all DM people HAB-ERG.3 come-CL HAB-ERG.3

ts'a-ik-ø u janal.

give-IND-ABS.3s ERG.3 food

‘All the people that came, he gave them their food.’

(MDG-B:107)

(27) *Ka ka'ans-a'a-k-ø ... tuláakal le Ø* [RC *ts'o'ok in*

that teach-PASS-IRR-ABS.3s all DM TERM ERG.1s

tsikbal-t-ik-ø te'ex]-a'.

chat-TRNS-IND-ABS.3s 2PL-CL

‘So that all this I have already told you about... be taught.’ (MDG-B:109)

The fact that the range of elements that introduce the relatives under consideration is reduced when compared to that of true light-headed relatives in Polish, and the fact that they correspond precisely to the set of pre-nominal modifiers otherwise observed in the language, is what is expected if a null nominal is the head of these structures.

3.2 *Same set of relative pronouns as headed relatives.*

Citko observes that headed and light-headed relatives in Polish make use of different sets of relative pronouns. This is in fact entirely coherent with Citko’s proposal. In her analysis, full-content nominals and the light nominals that function as the head of light headed relatives are two distinct subclasses of nouns. Hence it is not surprising that they make use of different pronominal elements inside the relative clause when they head one (see also Andrews 2007: 218). This distinction, however, is not observed in Yucatec. The relative pronouns of the relatives under consideration are exactly the same as those of fully headed relatives. This is illustrated for the relative pronoun *tu’ux* ‘where’, in the examples below.

(28) *Le lu’um* [_{RC} *tu’ux ken a pak’-ø xan*]-*o’*.

DM soil where AUX ERG.2 sow-ABS.3s also-CL

‘The soil where you’re going to sow it too.’ (MDG-B:224)

(29) *Le* Ø_{[RC} *tu'ux ts'-u* *yáax máan le meyaj*]-*o'*.

DM where TERM-ERG.3 first pass DM work-CL

‘Where they first passed (i.e. went) to work.’

(MDG-B:105)

The same situation is observed for the relative pronoun *máax* ‘who’, in the relative in (9) when compared to the headed relative in (11). In other words, an important property that distinguishes headed from light-headed relatives in Polish is absent in Yucatec. I take this as further evidence that the Yucatec relatives considered here are not a different kind of relative, but instead simply appear to be so because of the independent property of Yucatec that allows the head of a noun phrase to be null.

3.3 *Distribution in existential contexts*

The third argument that supports the null head analysis in (23) comes from the distribution of bare nouns and null bare nouns modified by a relative clause. Yucatec readily allows for bare nouns (i.e. nouns that are not introduced by a determiner), which typically can be found after the existential *yaan*, ‘existing’. Examples are presented below.

(30) *Ka' t-u* *k'áat-aj-ø -e'* *wa yaan-ø* *meyaj*.

and CP-ERG.3 ask-PRF-ABS.3s-CL if EX-ABS.3s work

‘And he asked if there was work (available).’

(Gigante)

- (31) *Wa yaan-∅ k'oja'anil-e'...*
 if EX-ABS.3s disease-CL
 'If there are diseases...'
 (MDG-B:205)

It is important to note that the existential *yaan* in Yucatec is an adjective. As such, the relevant parts of (30) and (31) are non-verbal predications where the adjective *yaan* selects for a single nominal argument.⁸ Agreement between *yaan* and this nominal is expressed with the series of absolutive suffixes of the language. Now, in principle we can expect these bare nouns to be modified by a relative clause. Given that Yucatec nouns have the possibility to be null we thus expect to find these null-head relatives in adjacency to the existential *yaan*. This is indeed what is observed in Yucatec, as illustrated in (32) and (33).

- (32) *Yaan-∅ [k-u púut-ik-∅-o'ob le fibra]-o'*
 EX-ABS.3s HAB-ERG.3 carry-IND-ABS.3s-PL DM fiber-CL
 'There were those that carried the fiber.'
 (MDG-B:101)

- (33) *Yaan-∅ [k-u wéej taal bejla]-e'*
 EX-ABS.3s HAB-ERG.3 still come today-CL
 'There are those that still come today.'
 (MDG-B:270)

Observe that the clausal constituent that follows the existential in these examples is no different from the canonical matrix clause in Yucatec first illustrated in (5). Yet these clauses are not interpreted as matrix or complement clauses, but as relative clauses. Furthermore, the

relation between these clausal constituents and the existential is in itself puzzling. As illustrated in (30) and (31), existential *yaan* selects a noun phrase as its argument, not a clause. The null head analysis I propose here provides a straightforward solution for both problems. As illustrated in (34), in this analysis the existential constructions considered here are no different in their basic structure and properties from existential constructions with overt nominal arguments like (30) and (31), except for the fact that the null nominal head is modified by a gap subject relative.

- (34) *Yaan-∅* [NP ∅ [RC *k-u* *wéej taal* ____ *bejla*]]-*e*’.
 EX-ABS.3s HAB-ERG.3 still come today-CL
 ‘There are those that still come today.’

Descriptively, these are cases where the entire domain of the relative happens to be null because; (a) the noun that heads the noun phrase is null and, (b) none of the ordinary modifiers that precede the noun in Yucatec are present. Hence an appropriate descriptive label for this kind of relative clause would be *null-domain relative*. Observe that this is a natural extension of the analysis presented so far. Specifically, in my proposal the relatives in (32) and (33) do not need to be analyzed as a kind of relative different from the gap relative in (23). In contrast, it is unclear if an alternative light-head analysis can unify all these data as part of the same phenomenon, since in (32) and (33) there is simply no element that could function as the light head to begin with.

Lastly, the behavior of these constructions in the discourse provides further support for the proposal that these relatives are indeed headed by a null nominal. It has been widely observed

that once a nominal is introduced in the discourse, further reference to it is made by means of reduced or null pronominal forms (see for instance Lambrecht (1994)). The heads of relative clauses appear to also be subject to this condition, as first observed by Rojas (2006) for a number of Zapotec relative constructions similar to the ones observed in Yucatec. This is illustrated in (35), from which (32) is originally taken. In this sample of the narrative, the referent of the null head of the relative, *máak* ‘people’, is introduced two clauses before.

- (35) *Cuarenta y cinco máak_i k-u meyaj, u personal le*
 forty and five people HAB-ERG.3 work ERG.3 personnel DM
maquina-o'. Tumen k-u jo'och-kij-o'ob.
 machine-CL because HAB-ERG.3 grate-henequen-PL
Yaan-∅ [NP ∅_i [RC k-u púut-ik-∅-o'ob le fibra]]-o'...
 EX-ABS.3s HAB-ERG.3 carry-IND-ABS.3s-PL DM fiber-CL
 ‘Forty five people worked (there), they were the machine’s personnel. Because they
 used to harvest henequen. There were those that carried the fiber...’ (MDG-B:101)

The text goes on to list and describe the different groups of workers and their specific roles in the production of henequen fiber. For our purposes what is important is that (35) illustrates that the otherwise peculiar constructions like (32) and (33) appear precisely in those contexts where nominals are expected to be phonologically reduced or null. Specifically, they are observed when their antecedents have already been introduced in the previous discourse and so the nominal can be taken to be discourse-old. I take this as further evidence in favor of the analysis where these clauses are headed by a null nominal in their domain.

In summary, in this section I have presented evidence in favor of a null-head analysis of the relative constructions discussed so far. I have argued that three properties of these constructions point to the conclusion that they are not light-headed relative clauses. These three properties are; a) the absence of a distinct set of elements that function as light heads; b) the absence of a distinct set of relative pronouns for the apparent light-headed relatives, and; c) the behavior of these relative constructions in existential contexts. I have further argued that the analysis I propose extends naturally to a number of relative constructions in Yucatec where there is no overt element in the domain of the relative, which I have labeled as *null domain* relative clauses.⁹

4. Conclusions

In this paper I have analyzed a number of relative constructions in Yucatec Maya where the nominal head of the relative clauses is absent. I have presented evidence that these relatives are not light-headed relatives, but rather relatives with a null nominal head, a possibility first considered in Lehmann (1984), and indeed considered by Citko (2004) herself in her analysis of light headed relatives in Polish. I have argued that these relative constructions in Yucatec show most of the characteristic properties of fully headed relatives and not those of the light-headed relatives of Polish. As such, I have proposed that the Yucatec relative clauses under consideration are best understood as headed relative clauses where the domain of the relative is partially or entirely null.

Notes

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¹ Yucatec does not have a copula, so predicative constructions like the cleft in (4) are constructed by simple concatenation of the subject and the constituent that functions as its predicate. All examples are presented according to the orthographic conventions of the *Academia de la Lengua Maya de Yucatán* and so they do not necessarily reflect their phonetic form accurately. The name after each example corresponds to the source in my corpus that the example is taken from, where the abbreviation MDG-B refers to Monforte *et. al.* (2010); all texts consulted correspond to oral narratives. Absence of a corpus reference indicates an elicited example. The abbreviations used in the examples are the following:

ABS	absolutive	EP	epenthesis	IRR	irrealis	s	singular
AUX	auxiliary	ERG	ergative	LOC	locative	TERM	terminative
CAUS	causative	EX	existential	NEX	negative existential	TOP	topic
CIT	reportative	FEM	female	NUMC	classifier	TRNS	transitive
CL	clitic	FOC	focus	PASS	passive		
CP	completive	HAB	habitual	PL	plural		
DM	demonstrative	IND	indicative	PREP	preposition		
DUR	durative	INTRNS	intransitive	PRF	perfect		

² The precise characterization of the basic word order of Yucatec is still subject to much debate, with numerous works assuming that the language's unmarked word order is instead VOS. This issue is tangential to our discussion of relative clauses, and so it will not be addressed any further here. In contrast, there is agreement in the literature that the unmarked order of mono-valent constructions in this language is VS. See Skopeteas & Verhoeven (2005), Gutiérrez-Bravo & Monforte (2010) and Skopeteas & Verhoeven (2009).

³ In traditional Mayan linguistics, *agent focus* refers to a special form of the verb observed when the transitive agent is focused, questioned or relativized. When relatives in Yucatec show the agent focus form, they lack the ergative proclitic and the aspect auxiliary that precedes it, as in (4) and (9). See Stiebels (2006) for a recent summary of agent focus across Mayan languages.

⁴ Space considerations do not allow me to go into detail of other properties of relative clauses in Yucatec, such as the external nature of the head of the relative and the specific position of relative pronouns inside restrictive relative clauses. These issues are dealt in detail in Gutiérrez-Bravo & Monforte (2009), to which I refer the reader for details.

⁵ Both interrogative and relative pronouns in Yucatec are in turn identical to indefinite quantifiers (see Tonhauser 2003). Indefinite quantifiers, however, do not undergo obligatory fronting to the left edge of the clause, whereas homophonous relative (and interrogative) pronouns do. This difference in the behavior of these two kinds of elements is evidence against an alternative analysis where the constructions considered in this paper are instead analyzed as adverbial clauses or as purely nominal constructions headed by an indefinite quantifier.

⁶ Pronominal relatives where a prepositional phrase is relativized, such as (11), display the phenomenon known as *pied-piping with inversion* (see Smith-Stark (1988) for survey and Aissen (1996) for an analysis). As a head-initial language, Yucatec has prepositions and so PPs canonically display the order P+NP. In *pied-piping with inversion*, however, a relative or interrogative pronoun inverts its position with respect to the preposition, as in (11), where the relative pronoun now appears to the left of the preposition. See Gutiérrez-Bravo (2010) for detailed discussion of this phenomenon in relatives in Yucatec.

⁷ The particle *ken* in (12) and (19) is analyzed in Bohnemeyer (2002) as a subordinator, on the basis that it appears exclusively in embedded contexts. It seems to me, however, that this particle is instead an auxiliary that indicates optative aspect. Evidence for this can be found in the fact that in some dialects of Yucatec this particle is inflected with the set of absolutive suffixes to cross-reference the subject (as in (19)). As such, Yucatec resembles Mam, a Mayan language from Guatemala, which has aspect auxiliaries that are only observed in subordinate clauses (England 1983).

⁸ *Yaan* can also select for a dative (oblique) phrase besides this noun phrase. This results in a dative-possessor construction of the kind ‘*X exists to Y*’, which is the standard way in which predicative possession is expressed in Yucatec. This kind of construction, however, is not relevant for our discussion of relative clauses.

⁹ An anonymous reviewer asks how compatible this analysis is with an alternative analysis where the constructions I have analyzed here are taken to be nominalizations instead of relative clauses, as in Shibatani (2010). The reviewer points out that, in such an alternative analysis, the determiner could simply be modifying the nominalized constructions as it would modify any noun. It seems to me that there are two pieces of evidence that make the nominalization account problematic. First, recall that pronominal relatives in Yucatec show pronouns that are just like interrogative pronouns in both their form and the requirement that they appear at the left edge of the clause (see also fn. 5). The nominalization analysis would fail to capture this parallelism between the relative constructions and pronominal interrogative constructions, which are clearly clausal in nature. Secondly, the nominalization analysis would need to explain why, in the constructions I have analyzed here, there is always one argument that is either pronominalized with a *wh*-pronoun (in pronominal relatives) or missing altogether (in gap relatives). These properties have been well attested for headed relative clauses crosslinguistically but not, to the best of my knowledge, for nominalizations.

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