

## ON RELATIVE CLAUSES AND RELATED CONSTRUCTIONS

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### Abstract

This paper examines the manifestation of relative clauses in Yaqui (Uto-Aztecan). Two major types of relative clauses are identified, subject relatives marked by *-me* and non-subject relatives marked by *-’u*. Furthermore, there are three other construction types which closely resemble relative clauses: ‘non-restrictive’ clauses, the complement of a *seem-like* predicate, and complement clauses of certain main predicates. Structurally, relative clauses in Yaqui show a mixture of nominal and verbal characteristics. As a result, the analysis distinguishes distinct stages between the nominal uses and the sentential functions of Yaqui relatives. Thus, based on the assumption that nominalization is a gradient phenomenon (Comrie and Thompson 1985; Lehmann 1984, Koptjevskaja-Tamm 1993), it is argued that relative clauses modifying subject and agent participants are at one end of the continuum, and clauses modifying object and oblique arguments are at the other end. Functionally, it is shown that truly Rel-clauses introduce or further establish new information into discourse, whereas non-modifying clauses serve as either appositive units –making a comment about a noun without delimiting its references (Keenan 1985; Carlson 1977)–, or as a plain argument of main predicates.

*Keywords:* relative clauses, nominalization, complementation, Yaqui, Uto-Aztecan.

### 1. Introduction<sup>1</sup>

Relative clauses have been the topic of many grammatical studies and not without reason. Firstly, relativization is a helpful mechanism to distinguish grammatical relations, e.g., subject from object, direct object from indirect object, and so on. Secondly, relativization is also a powerful strategy to derive new elements such as nouns, adjectives and participles. And thirdly, relative clauses are a special type of subordination (Lyons 1968: 178) since the dependency is not structural (e.g., complementation) or temporal (e.g., adverbials); rather, what distinguishes relatives from other subordinate relations is argument sharing. In a construction like *the man that*

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*you saw yesterday won the lottery*, there are two related events, one of which (the dependent one) provides certain information about a core argument of the other event (the main one); the shared argument *the man* plays a syntactic and semantic role in both units.

A relative clause (henceforth Rel-clause) consists of a nominal and a subordinate unit interpreted as attributively modifying that nominal (Lehmann 1984: 276). The nominal is referred as the head, and the dependent unit as the relative or restricting clause. Functionally, Rel-clauses delimit the reference of an NP by specifying the role of the referent of that NP in the situation described by the Rel-clause (Bickel 2005; Andrews 2007: 206), and in discourse they introduce or further establish people, objects, time and locations by linking them to known referents and situations (Comrie and Thompson 1985; Fox and Thompson 1990). Formally, and according to the well-known Accessibility Hierarchy (Keenan and Comrie 1977; Comrie and Keenan 1979; Keenan 1985), languages exhibit different constraints with respect to which syntactic functions can be subject of relativization. There is often more than one relativizing strategy on different syntactic-semantic roles of the head noun, i.e. no-reduction, relative pronoun, pronoun retention, gapping (Givón 2001; Comrie and Kuteva 2005). In fact, languages usually have a variety of non-modifying dependent structures that resemble Rel-clauses in various ways (Carlson 1977), e.g. the so-called ‘non-restrictive’ clauses making a comment about an NP or other constituent without delimiting its reference (Keenan 1985: 168), or the ‘pseudo-relatives’ serving as core arguments (Lambrecht 1981; van der Auwera 1985). The function and form of Rel-clauses inside and outside the domain of nominal modification are the central topics of this paper. The analysis is based on the Yaqui language.<sup>2</sup>

In most Uto-Aztecan languages, Rel-clauses fall towards the nominal or non-finite end of the finiteness scale (in particularly those in which the relativized noun functions as the dependent subject), although finite or sentential relatives are found in various languages from the Southern branch (Langacker 1977: 179). In Yaqui, Rel-clauses are mainly expressed via nominalization.

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<sup>2</sup> Yaqui belongs to the Sonoran group of the Southern branch of the Uto-Aztecan family. The language is spoken mainly in Mexico, by more than 15,000 people living along the Yaqui River in the Central West part of Sonora, and by an estimated of 6,000 speakers across the US-Mexican border, in Pascua, Arizona. There are several grammatical studies on Yaqui; among the most significant are Crumrine (1961), Johnson (1962), Lindenfeld (1973), Escalante (1990), Jelinek and Escalante (2000), all based on the Arizona dialect; Dedrick and Casad (1999), Félix (2000), Hernández (2002), Guerrero and Van Valin (2004), Silva (2004), Álvarez (2006), Martínez (2006), Guerrero (2002, and further work), as well as several articles in Estrada et al. (2008) and Estrada et al. (2007), all of them based on the Sonoran dialect.

Two types are identified, subject relatives marked by *-me* (1b) and non-subject relatives marked by *-’u* (1c). As any other attributive modifier, Rel-clauses are structurally optional (1a).<sup>3</sup>

- (1) a. *Aapo siika*  
3SG.NOM go.SG.PFV  
‘He/she left.’
- b. *U o’ou-Ø [enchi bicha-ka-me] siika*  
DET man-NOM 2SG.ACC see-PFV-CLM go.SG.PFV  
‘The man<sub>i</sub> who \_\_\_<sub>i</sub> saw you, left’
- c. *U-me o’ou-im [em bicha-ka-’u] saja-k*  
DET-PL man-PL 2SG.GEN see-PFV-CLM go.PL-PFV  
‘The men<sub>i</sub> who you saw \_\_\_<sub>i</sub>, left.’

Additionally, there are three constructions which closely resemble Rel-clauses in various ways, e.g. the so-called ‘non-restrictive’ clauses making a comment about a definite NP (2a), the ‘pseudo-relatives’ serving as a core argument of perception and similar complement-taking predicates (2b), and the non-actor argument of a *seem-like* verb (2c).

- (2) a. *[In sai-tu-ka-’u] aman tawa-ne*  
1SG.GEN brother-VBLZ-PFV-CLM there stay-POT  
‘The one who was my brother, there he will remain.’ (Hilario: 115)
- b. *Nim achai [jaibu enchi siika-m-ta] te’a-k*  
1SG.GEN father already 2SG.ACC go.SG.PFV-CLM-ACC find-PFV  
‘My father found out that you already left.’ (Guerrero 2006: 142)
- c. *Ivan-Ø [ka tua Torim-meu wee-pea-m-ta] bena*  
Ivan-NOM NEG true Torim-PL.DIR go-DESID-CLM-ACC seem  
‘It seems Ivan doesn’t want to go to Torim.’ (Guerrero 2004: 266)

This paper is concerned with (i) the examination of the Accessibility Hierarchy and the individual relativizing strategy on different syntactic-semantic roles of the head noun; (ii) the exploration of the distribution and pragmatic uses of the two major types of Rel-clauses, and (iii) the establishment of the differentiating properties between truly Rel-clauses and structurally similar constructions. Considering nominalization as a gradient phenomenon (Koptjevskaja-Tamm 1993; Malchukov 2004, 2006; Givón 2007), the analysis for Yaqui establishes different

<sup>3</sup> Abbreviations: ACC: accusative, APPL: applicative, CLM: clause linkage marker, DESID: desiderative, DET: determiners, DIR: directional, GEN: genitive, INSTR: instrumental, INTEN: intensifier, LOC: locative, NEG: negation, NOM: nominative, PASTC: past continuative, PFV.PTC: perfective participle, PFV: perfective, PL: plural, POT: potential, PRES: present, RSLTV: resultative, REF: referential, SG: singular, VBLZ: verbalizer.

points inside a continuum, from clauses genuinely modifying a referential element to different degrees of clausal nominalization governed by a main predicate. The information is organized as follows. Section 2 characterizes Rel-clauses based on its internal syntax; the different relativizing strategies and morpho-syntactic properties are described following the predictions of the Accessibility Hierarchy. Section 3 highlights the nature of Rel-clauses in discourse, and outlines the different degrees of nominalization; the first non-modifying construction exemplified in (2a) is then introduced. Section 4 deals with the formal and functional distinction between modifying clauses and the other two types of non-modifying dependent constructions (e.g. (2b) and (2c)). Section 5 discusses the patterns observed in the Yaqui language from a cross-linguistic perspective, and Section 6 closes this paper.

## 2. Characterizing Yaqui Rel-clauses

Yaqui is a language with both synthetic and agglutinative characteristics. In contrast to the other languages from the same branch, Yaqui has a morphological case system. Lexical nominatives are morphologically unmarked, accusatives are marked by the suffix *-ta* (3a), and dative/oblique cases are marked by postpositions, some of which demand accusative complements as the directional *-u* in (3b). The clause in (3c) shows that accusative and plural marking on nouns are mutually exclusive. Double accusative constructions (3d) are also very common (Guerrero and Van Valin 2004). The pronominal system also keeps track of the major syntactic functions as nominative, accusative, objects of postposition and genitives (Table 1).

- (3) a. *U jamut-Ø Peo-ta bicha-k*  
 DET woman-NOM Pedro-ACC see-PFV  
 ‘The woman saw Pedro.’
- b. *U o’ou-Ø jamut-ta-u nooka-k*  
 DET man-NOM woman-ACC-DIR talk-PFV  
 ‘The man talked to the woman.’
- c. *U goi-Ø u-me chu’u-im ke’e-kan*  
 DET coyote-NOM the-PL dog-PL bite-PASTC  
 ‘The coyote was biting the dogs.’
- d. *Aurelia-Ø Ivan-ta mo’obei-ta jinu-ria-k*  
 Aurelia-NOM Ivan-ACC hat-ACC buy-APPL-PFV  
 ‘Aurelia bought Ivan a hat.’

Table 1. Pronominal system in Yaqui

	Nominative		Accusative	Object of postpositions	Genitive
1 Sg	inepo	= ne	nee, ne	ne-	in, nim
2 Sg	empo	= 'e	enchi	e-	em
3 Sg	aapo		apo'ik / a	a-	apo'ik / a
1 Pl	itepo	= te	itom	ito-	itom
2 Pl	eme'e	= 'em	enchim	emo-	em, enchim
3 Pl	bempo		apo'im / am	ame-	bem, bempo'im

The examples above also illustrate the canonical arrangement of constituents in the Yaqui sentence, which justifies its categorization as a nucleus-final language. As most of the languages of the same type, Yaqui employs postpositions, nominal and verbal suffixes, but adjectives and genitives generally follow the head noun. Although nominal arguments tend to precede the verb (3), it is possible for a core argument to appear extra-posed to the right. When the nominative NP follows the verb (4a), nothing happens. When the accusative (4b) or postpositional (4c) NPs follow the verb, a clitic pronoun co-indexed to the NP must be attached to the verb and, presumably, there is a pause between the verb and the extraposed NP. Notice that the clitic pronoun keeps the relevant case and number coded in the extraposed NP.

- (4) a. *Peo-ta bicha-k u jamut-Ø*  
 Peo-ACC see-PFV DET woman-NOM  
 'As for the woman, (she) saw Pedro.'
- b. *U jamut-Ø a = bicha-k Peo-ta*  
 DET woman-NOM 3SG.ACC = see-PFV Peo-ACC  
 'As for Pedro, the woman saw him.'
- c. *U o'ou-Ø a-u = nooka-k jamu-ta-u*  
 DET man-NOM 3SG-DIR = talk-PFV woman-ACC-DIR  
 'As for the woman, the man talked to her.'

Rel-clauses consistently mark the functional distinction between subjects (nominative) vs. non-subjects (object, oblique) (Lindenfeld 1973; Escalante 1990; Martínez and Langendoen 1996; Dedrick and Casad 1999; Álvarez 2006, Guerrero 2005, 2006).<sup>4</sup> In contrast to adjectives (5a), Rel-clauses must follow its head noun. If the head noun serves as the dependent or relative subject, the modifying unit is marked by the clause linkage marker *-m(e)* (5b) and (5d); if the head noun acts as the direct or oblique arguments inside the relative, then the marker is *-'u*

<sup>4</sup> The nominalizing strategy where subject- and non-subject relatives are overtly marked on the verb is also observed in Ute, O'odham, Shoshoni, Luiseño, Hopi, Cupan inside the Uto-Aztecan family (see Langacker 1977). Comrie (2005) and Comrie and Kuteva (2005) also cite similar patterns in Bereber, Turkish, Kambara, Tukang Besi, Lhasa Tibetan and several other languages.

(5c). Notice that whether the intransitive subject or transitive agent inside the relative is, it must be marked as genitive when pronominal or by the accusative *-ta*; the rest of the core arguments are marked the same way as they appear in independent clauses. In the examples, the relative appears within brackets while coreferential arguments are co-indexed.

- (5) a. *U o'ou-∅ chukui-k mesa-ta kokta-k*  
 DET man-NOM black-ACC table-ACC break-PFV  
 'The man broke the black table.'
- b. *U o'ou-∅ [mesa-ta kokta-ka-me] siika*  
 DET man-NOM table-ACC break-PFV-CLM go.SG.PFV  
 'The man who broke the table, left.'
- c. *Mesa-∅ [em kokta-ka-'u] sikili-tu-kan*  
 table-NOM 2SG.GEN break-PFV-CLM red-VBLZ-PASC  
 'The table you broke was red.'
- d. *Jipi'ikim misi-ta miika-∅ [pa'aku weama-m-ta]*  
 milk.PL cat-ACC give-PRES outside be around-CLM-ACC  
 'Give milk to the cat that is outside.'

Two main aspects of Rel-clauses have been widely documented from the viewpoint of typological variation. First, the fact that there is an argument playing two roles, one in the main clause (head or matrix NP) and one inside the Rel-clause (relative NP). As accurately pointed out by Andrews (2007: 206), the grammatical and semantic functions associated with the delimited NP can sometimes be confusing. In (5b), the matrix NP 'the man' serves as the main subject as well as the dependent subject (relative NP); in (5c) the matrix NP 'table' is the main subject, but also the dependent object; in (5d) 'cat' acts as the main object but also as the dependent subject. That is, the syntactic function of the matrix NP may but not need to be the same to the syntactic function of the relative NP: in (5b) and (5d) the relative NP serves as the subject/agent and so the clause is marked by *-me*, and in (5c) acts as the object and then the clause is marked by *-'u*. Generally, the relative NP appears in a modified or reduced form, or is omitted inside the dependent unit.

Second, languages vary with respect to which syntactic argument can be relativized, e.g., only subject, only core arguments or both arguments and peripheral units. Languages often use more than one strategy to form Rel-clauses and it is not rare that particular strategies occur with certain syntactic functions. Take the English sentence *you always choose the opposite of the party ∅/*

*which / that I recommend (\*it) to you* as an example, where the matrix NP occupies a syntactic position inside the main unit. The first variant exhibiting a  $\emptyset$  is called ‘gap’ or zero relativization; the second one makes use of a relative pronoun *which* filling the ‘gap’ in the relative; and the third one is introduced by a relative complementizer *that*; several languages – but not English – make use of a resumptive pronoun, which can be used to determine the position and function of potential empty elements. Except for the clause linkage marker, there is nothing inside the subject- and object-relatives in Yaqui coding the syntax-semantic function of the notional head noun. Since the Rel-clause strongly tends to follow the head noun, it is sometimes difficult to determine whether the head is inside or outside of it, especially when it serves as the subject in both units, as in (5b). In (5c), *mesa* ‘table’ is expressed only once as the matrix NP, i.e. it undergoes gapping.<sup>5</sup> The situation is more complicated when the matrix NP functions as an oblique core argument inside the relative unit, since three strategies are possible: a missing argument (6a), the occurrence of an internal head noun (6b), and a resumptive pronoun inside the relative (6c); the last one is the most common variant.

- (6) a. *Jamut-ta-u* [ *nim waata-’u* ] *ne waate- $\emptyset$*   
 woman-ACC-DIR 1SG.GEN want-CLM 1SG.NOM miss-PRES  
 ‘I miss the woman that I love.’
- b. [ *Kajlos-ta jamut-ta-u nooka-ka-’u* ] *Maria-tu-kan*  
 Carlos-ACC woman-ACC-DIR talk-PFV-CLM María-VBLZ-PASTC  
 ‘The woman to whom Carlos talked was María.’
- c. *U jamut- $\emptyset_i$*  [ *Joan-ta ili usi-ta a-u\_i* ]  
 DET woman-NOM Juan-ACC little child-ACC 3SG.DIR  
  
*bittua-ka-’u* *siika*  
 send-PFV-CLM go.SG.PFV  
 ‘The woman to whom Juan sent the child left.’

Thus, in (6a) the matrix NP *u jamut* ‘the woman’ is the oblique argument of *waate* ‘miss’ and the object relative NP of *waata* ‘love’ in (6a), hence it is expressed once; in (6b), *u jamut* is the main subject and the oblique relative NP of *nooka* ‘talk’; this arrangement is the same for (6c), but here there is a case-marked anaphoric pronoun inside the Rel-clause. Evidence that the head noun is outside the Rel-clause comes from case-marking: the matrix NP is marked as oblique in (6a), and

<sup>5</sup> There are still some debate about whether the head noun is generated in the matrix clause as in *Jack never reads books<sub>i</sub> [ $\emptyset_i$  I recommend  $t_i$  to him]*, i.e., the ‘standard analysis’, opposed to the ‘raised analysis’ where the head is raised from within the relative as in *Jack never reads [books<sub>i</sub> I recommend  $t_i$  to him]*. See De Vries (2002) for a detailed discussion on this issue.

nominative in (6c), reflecting its syntactic status with respect the main predicate. In (6b), in contrast, the oblique case-marking is determined by the dependent verb *nooka*, not by the copulative phrase, i.e. internally-headed.

Keenan and Comrie (1977, 1979) did not specify what kinds of oblique phrase are accessible to relativization. In Yaqui, it is possible to relativize on dative or experimencer participants (6a) and (7a), interlocutors of speech act predicates (6b) and (7b), instruments (6c) and (7c), and even sources (7d). In addition to the examples in (6) where the relative NP is a non-subject argument, in the examples below it acts as a dependent subject, and so the Rel-clause is marked by *-me*. Again, the relative NP can be inside or outside the dependent clause as indicated by case.

- (7) a. *Joan-Ø jamut-ta-u [a besito-ka-m-ta-wi] wawate-k*  
 Joan-NOM woman-ACC-DIR 3SG.ACC kiss-PFV-CLM-ACC-DIR remember-PFV  
 ‘John remembered the woman who kissed him.’
- b. *Ne [jaamuchi-m ko’okoe-m-make] etejo-k*  
 1SG.NOM woman-PL sick-CLM-with.PL chat-PFV  
 ‘I chatted with the women who were sick.’
- c. *Joan-Ø [a kuta-ta nu’u-ka-m-ta-e] chu’u-ta beba-k*  
 Joan-NOM 3SG.ACC stick-ACC grab-PFV-CLM-ACC-INST dog-ACC hit-PFV  
 ‘John hit the dog with the stick he just grabbed.’
- d. *María-Ø tomi-ta mabeta-k [u-me kobanao-m*  
 María-NOM money-ACC receive-PFV DET-PL governor-PL  
*waria-po kate-ka-m-ta-betana]*  
 guardia-LOC sit.PL-PFV.CLM-ACC-from  
 ‘Mary received money from the governors sitting in the Guardia hall.’

Clauses extraposed to the right are not rare, especially when heavy. In (6c) above, the modifying clause appears right after the modified noun, splitting the main clause down the middle, but in (7d) and (8) below it appears clause-finally. Furthermore, the Rel-clause as a whole agrees in case and number with the modified noun. Apparently, this agreement pattern is more systematic for clauses marked by *-me*, especially for accusative (8a) and oblique cases (7). For *-u* clauses, accusative agreement is atypical but number agreement is very common as seen in (8b); in (8c), the Rel-clause is marked by the instrumental plural postposition *-mea*. The precise conditions for this agreement patterns remains to be investigated; notice, for instance, that the case/plural

marking on the relative in (8a) and (8b) is determined by the head noun in the main unit, but in (8c) it reflects the function of the head noun inside the dependent unit.

- (8) a. *Ju'u yoeme-Ø<sub>i</sub> chu'u-ta me'a-k [a<sub>i</sub> kiki-su-ka-m-ta]*  
 DET man-NOM dog-ACC kill-PFV 3SG.ACC bite-FINISH-PFV-CLM-ACC  
 'The man killed the dog that bit him.'
- b. *Kaa mache'eta-m ne jippue-Ø [em ne reuwa-ka-'u-m]*  
 NEG machete-PL 1SG.NOM have-PRES 2SG.GEN 1SG.ACC lend-PFV-CLM-PL  
 'I don't have the knives that you lent me.'
- c. *Kuchi'i-m<sub>i</sub> ne maka-'e [wakaj-ta em a-mea<sub>i</sub>*  
 knife-PL 1SG.ACC give-IMPR meat-ACC 2SG.GEN 3SG-INST.PL  
*chuk-chukta-'u-m-mea]*  
 RED-cut-CLM-PL-INST  
 'Give me the knives that you chop the meat with.'

Although less common, the locative postposition *-po* may also derive a locative Rel-clause in (9); it is still unclear whether these relatives restrict the identity of a head noun or delimit the event within a time/location frame in discourse, i.e. modification at the level of the phrase or the clause. There is no data on relatives modifying genitives and objects of comparison.

- (9) a. *Poso-po [kuchu'm ane'e-po] a wo'ota-ne*  
 well-LOC fish.PL exist-LOC 3SG.ACC throw-POT  
 '(The fish's skin) it is thrown in the well where the fishes are.' (Johnson 1:2)
- b. *Bwe'ituk inim jiba aane, [junu bwe'u mako'ochin-ta weye-ka'a-po]*  
 because there always exist DEM big guamuchil-ACC be.stand-PFV-LOC  
*[ne senu-k bicha-k sestul ta'a-po]*  
 1SG.NOM one-ACC see-PFV one meet-LOC  
 'Because they have always existed; where the big guamuchil three stands, where I met one, where I saw one.' (Grandfather: 7-9)

Finally, the suffix *-me* is the preferred strategy to derived nouns. Deverbal nouns may either be action oriented (action nominals) or participle oriented (participle nominals); the former denote an event or state while the latter indicate the participant that takes part in the mentioned event or state (cf. Koptjevskaja-Tamm 1993; Malchukov 2006). The examples in (10a) illustrate action oriented nominals, and those in (10b) some encoding physical properties derived from states. The examples in (10c) are slightly more complicated. They easily incorporate unspecified objects like *yee* for human and *ji(ta)* for inanimates, e.g. 'thing-stealing' for 'thief'; some of them

retain some verbal properties like reduplication and the passive suffix *-wa* and, except for *alleewame* ‘happiness’, they are mostly nominal actions encoding acts and events.

- (10) a. *yeye’eme* ‘dancer’  
*majtawame* ‘student’
- b. *ko’okoeme* ‘sick person’  
*jo’ome* ‘native’  
*robbojo’okame* ‘hunchback’
- c. *yee-susua-me* ‘murder’ (lit. people-RED.kill-me)  
*yee-sisibo-me* ‘witch’ (lit. people-RED.bewitching-me)  
*kia-weama-me* ‘cheater’ (lit. nice-be walking-me)  
*ji-e’etb-wa-me* ‘thief’ (lit. thing-steal-PASS-me)  
*na-susua-wa-me* ‘combat, fight’ (lit. together-become crazy-PASS-me)  
*jinko’ola-wa-me* ‘competence’ (lit. competing-PASS-me)  
*allee-wa-me* ‘happiness’ (lit. happy-PASS-me)

The same strategy is used to derive participial phrases. In Yaqui, result states from previous actions can be derived by using perfective suffixes like *-i/-li/-ri* as in *jamt-i* ‘broken’ (Álvarez 2008; Guerrero 2009), as well as the relative *-me* as in *techoakame* ‘muddied’. The so-called participial relatives (Buelna 1891: 16, 50) retain the past perfective suffix *-ka*, and occasionally the passive suffix.<sup>6</sup> Once derived, these deverbal forms behave as any other nominal with respect to case and plural marking, co-occurrence with other adjectives, and word order, i.e. examples of decategorization (from verbs) and re-categorization (as nominal) processes (Malchukov 2004, 2006, Lehmann 1988).

- (11) a. *María-Ø u-ka bwa’a-m-ta kia bwasa-k*  
 María-NOM DET-ACC eat-CLM-ACC nice cook-PFV  
 ‘María cooked a very tasty food.’
- b. *U jamu-t-Ø tajo’o-ta sewa-ka-m-ta jipu’e*  
 DET woman-NOM cloth-ACC flower-PFV-CLM-ACC have-PRES  
 ‘The woman wears a skirt with flowers (lit. a flowered skirt).’
- c. *Ne tijkom ili teta-ka-m jinu-k*  
 1SG.NOM wheat.PL little stone-PFV-CLM buy-PFV  
 ‘I bought the wheat with little stones (lit. having little stones)’

<sup>6</sup> Compared to the productivity of relatives deriving adjectives in Ralámuli (Islas 2010), Guarijío (Félix 2005), Cora (Vázquez 2002) and Huichol (Iturrioz and Gómez 1993), this strategy is very limited in Yaqui (see Guerrero 2009 for comparison).

Leaving aside these lexical relatives, Yaqui Rel-clauses show a mixture of nominal and verbal characteristics. On the one hand, the subject is in genitive case, and the clause linkage marker signals dependency within the construction; on the other, the verb may take any tense-aspect operator and relevant adverbs, while the word order is maintained inside the dependent unit. The degree of clausal nominalization of Yaqui relatives is outlined in the next section, together with a thorough discussion regarding its nature and function in discourse. The first non-modifying related construction is also introduced, the ‘non-restrictive’ clause.

### 3. The nature and function of relative clauses

The distribution of Yaqui Rel-clauses with respect to the syntactic position relativized is shown in Table 2. The analyzed corpus includes data from oral texts, examples from the *Diccionario Yaqui-Español* (Estrada *et al* 2004), as well as fieldwork; only the first two sources are included in Table 2. Although relativization has access to all direct and oblique core arguments, the syntactic function which is most commonly modified is the intransitive subject (S). A gap can be observed between S with respect to transitive agent (A) and object (O) relatives, and even a major gap with regards to oblique relatives.

Table 2. *Distribution of the relativized syntactic function*

	S- relatives	A- Relatives	Obj- relatives	Obl- relatives	Total
Oral texts <sup>7</sup>	85	16	26	9	136
Dictionary	52	19	28	13	112
	137 (55%)	35 (14%)	54 (22%)	22 (9%)	248

This Yaqui preference follows the predictions of the Accessibility Hierarchy as well as Fox’s (1987) findings on English relatives, whereby subjects are more relativizable than objects. Even more interestingly it is the overwhelming correlation between S- and O- relatives and their functions in discourse. In the lines of Du Bois’ (2003: 40) pragmatically-based theory, S and O roles, in contrast to A, are amenable to the introduction of new information, especially as regards human protagonists, into discourse. As for Yaqui, we already said that *-me* derives action nominals, above all those related to character participants in tales and legends such as the

<sup>7</sup> I am grateful to Carlos Silva, Rolando Félix and Cresencio Buitimea for letting me use their oral narratives. For this paper, I have analyzed the following texts (2494 clauses in total): *Don Hilario’s life story, the fox who became human, the wandering toad, the saint and the turtle and the coyote* from Silva (1998, 2004); *maejto and C’s life story* from Félix (n.d.); *my grandfather and I, the priest, experience, star, Guaymas, and little coyotes* from Buitimea (2007); plus two texts from Johnson (1962), *the little boy* and *Cajeme*.

*yebwa'eeme* ‘the raven man (lit. the one eating people)’ or *ju’u boobok bo’ojoame* ‘the wandering toad (lit. the toad making the road)’.<sup>8</sup>

For relativization in general, it has been said that Rel-clauses introduce or further establish people, objects, time and locations, by linking them to known referents and situations (Fox and Thompson 1990; Cristofaro 2003:193). The function of such restrictions is seen as helping the addressee to identify the referent of a term, through a specification of some state of affairs in which that referent is a participant (Dik 1997: 24; Van Valin 2005). It makes sense, therefore, that S and O should be the preferred syntactic position for introducing new information by means of nominalization. Take for example the following passage. The first clause presents the topic of the tale and makes use of a subject Rel-clause marked by *-me* in (12a), e.g., *the true thing [that happened here]*. Then, in (12b) the first mention of the main character is introduced by another *-me* clause, e.g., *a harp person [who was named Loreto]*. Once the new information is introduced, the tale keeps using a definite noun phrase for the main character *ini’i achai* ‘that man’.

- (12) a. *Achai-m emo-u ne etejo-bae; i’i tua lutu’uria*  
 father-PL 2PL-DIR 1SG.NOM chat-DESID DEM INTS true
- [*inim Campani kau-po yeu sika-me*]  
 here bell hill-LOC out go.SG.PFV-CLM
- b. *Aman taewai 27-po iním yoeme apa-reo [Loreto tea-me] jo’a-kan*  
 there year 27-LOC here person harp-AGT Loreto name-CLM live-PASTC
- c. *Ini’i achai into yeu siika Costa-u bichaa.....*  
 DEM father-NOM and out go.SG.PFV Costa-DIR toward

‘Fathers, I want to chat with you; there is a true thing that happened here in the Bell’s Hill. Around 1927, a harp person named Loreto lived here. And that man went towards the Costa...’ (Fox became human: 1-3)

After main intransitive subjects, the function most accessible to relativization is the transitive object. In (13a), the matrix NP *namurokoa* ‘lama’ serves as the main object and the subject relative NP; the same is true of *wa’a yoawa* ‘the sacred animal’ in (13b). In the latter example,

<sup>8</sup> Martínez and Langendoen (1996) previously suggested that the occurrence of S-relatives in Yaqui highlights its nominal function by introducing new referents together with its more relevant attributes; at the time, the authors based their analysis on directly elicited data only.

the relative NP together with the Rel-clause is extraposed to the right, so there is a resumptive pronoun inside the main clause.

(13) a. *senu bea namurokoa-ta soota-k [junum ba'a-po yuka-m-ta]*  
 one then lama-ACC raise-PFV there water-LOC be.inside-CLM-ACC  
 'Then, one raised the lama that was laying there in the water.' (Grandfather: 55)

b. *nien ket wa-me'e itom yo'owa-m a; ju'uneya*  
 thus too DEM-PL 1PL.ACC ancestor-PL 3SG.ACC know

*wa'a yoawa-ta; [potcho'oku ane-m-ta]*  
 DEM.ACC animal-ACC mountain exist-CLM-ACC

'And our ancestors knew about him too, about that animal living in the mountain.' (Saint: 16).

The paragraph below clearly illustrates these discourse functions of Rel-clauses. The narrative starts by setting out the location of the story; the first two clauses express spatial locations by means of Obl-relatives marked by *-po* in (14b) and (14c); soon after there is an O-relative introducing the topic of the story (14g). Once all the settings and new protagonists are laid out, the story continues by introducing the definite NP of the thing that was moving under the water, the 'female lizard'.

(14) a. *Sestul ta'a-po te batwe-po nau rejte-n,*  
 one day-LOC 1PL.NOM river-LOC together walk.PL-PASTC

b. *[susu'e= te kate-ka'a-po]*  
 little.hill=2PL.NOM be.seated.PL-PFV-LOC

c. *[bau ba'a-ta tatawa'a-po]*  
 close water-ACC RED.stay-PRES-LOC

d. *yuku mecha-m sim-su-ko.*<sup>9</sup>  
 rain moon-CLM go.SG-FINISH-CLM

e. *U baa'a-Ø kaa sisime-ka buite-n wassukte-n.*  
 DET water-NOM NEG RED.go.SG-CLM run.SG-PASTC have.year-PASTC

f. *Bea te jita jumak te bicha-k*  
 DM 1PL.NOM thing.ACC thus 1PL.NOM see-PFV

<sup>9</sup> Maybe, there is also a S-relative in (14d) encoding some sort of temporal location *yuku mecha-m* 'being the season of rain'; in Yaqui copulas are Ø in the present and *-tu* when no-present. Otherwise, it is hard to explain the plural marking on *mecha-m* and the singular suppletive verb *sime*.

- g. *[ba'a-po emo yoyoa-ka-m-ta]*  
 water-LOC REFL RED.move-PFV-CLM-ACC

‘Once, we were walking together in the river, we were sat in a small hill, very close where the water stays (e.g. lake) when the raining season was over. Even though the water goes running all year around. Then, we saw a thing moving under the water.’ (Grandfather: 1-8).

According to the cognitive principle of subject primacy (Keenan 1985), S-relatives serve to (i) introduce a new referent by describing it and thereby making it relevant to that discourse, and/or (ii) characterize such a noun by naming “habitual attributes or properties” or describing features of their subjects (cf. Lehmann 1984; Fox 1987: 861-2; Fox and Thompson 1990: 306-7). As said before, the overwhelming occurrence of S-relatives in Yaqui indicates that their discourse function is to introduce new referents. This pragmatic function also explains why they predominantly express stative descriptions of some aspect of the referent. As illustrated in Table 3, out of 137 intransitive S-relatives, almost 70% involve non-active predicates, the most common positional verbs being *joa* ‘live’, *ane/ayu* ‘exist’, and *tea* ‘be named’ where the head is a proper noun. State transitive predicates like *jippue* ‘have’, *bicha* ‘see’, *ta’a* ‘know’ can either relativize the A and the O roles.  $S_U$  refers to patient or undergoer subjects, while  $S_A$  to actor subjects.

Table 3. *Strong preference for non-active predicates*

	$S_U$ - relatives (out of 137)	$S_A$ - relatives	A- stative relatives (out of 35)	O- stative relatives (out of 54)
Oral texts	63	22	5	9
Dictionary	38	14	4	6
	101 (67%)	26 (17%)	9 (6%)	15 (10%)

With respect the degree of finiteness, for the most part Rel-clauses marked by *-me* exhibit the higher degree of nominalization. The subject/agent must be a genitive pronoun or an accusative NP, or be absent when coreferential with a main core argument. Also, the dependent verb is usually unmarked or marked by the past perfective *-ka*; and most importantly, they take the case and postpositional markers of the head noun, and are commonly embedded in the main clause following the head.

- (15) a. *iania yooko bahim-po kupteo kaba'im [mamahae-me] mansote-ne*  
 now tomorrow three-LOC noon horse.PL RED.afraid-CLM tame-POT  
 'Now, tomorrow at three o'clock, you will be taming the horses that are afraid.'  
 (Johnson 218:20)
- b. *jaman = em nee au chachai-ria-bo! = ti*  
 there=2SG.NOM 1SG.ACC 3SG.DIR talk-APPL-PURP.PL= CLM  
  
*te'eka u jamut-Ø [abe muke-me]*  
 say-PFV DET woman-NOM almost die-CLM  
 'You go and talk about me', said the woman who was dying.' (Priest: 25)
- c. *Ju'unakiachi-si ne a bicha-Ø*  
 clear-INTS 1SG.NOM 3SG.ACC see-PRES  
  
*ju-ka jamut-ta [ne-u bichaa weye-m-ta]*  
 DET-ACC woman-ACC 1SG-DIR toward come-CLM-ACC  
 'I see clearly a woman walking towards me.' (Guaymas: 7)
- d. *ne uka wikia-ta woita-taite-k [in wiko-saka-'u]*  
 1SG.NOM DET-ACC rope-ACC unwinding-start-PFV 1SG.GEN waist-go-CLM  
 'I started to unwind a rope that I was having as a belt.' (Priest: 93)

S-relatives are the only clause unit that can function as a main subject (16a), although this function is very restricted and uncommon in texts; compare the pair of examples in (16b) and (16c).

- (16) a. *Kaa tu'ii [yee-sua-wa-me]*  
 NEG good people-kill.PL-PASS-CLM  
 'Killing is really bad.'
- b. *\*[Joan-ta ketgo yepsa-ka-me] maestro-ta gomta-k*  
 Joan-ACC early arrive.SG-PFV-CLM teacher-ACC scare-PFV
- b'. *U Joan-Ø [ketgo yepsa-kai] maestro-ta gomta-k*  
 DET Joan-NOM early arrive.SG-CLM teacher-ACC scare-PFV  
 'John's arriving early surprised the teacher.'

In comparison, Rel-clauses marked by *-u* show a lower degree of nominalization. Even though they may agree in number with its head (17a), case marking is disallowed; the dependent verb usually describes an active event, which is more finite with respect to temporal, aspectual and modal operators as well as adverbs; in addition, they can keep track of the relative NP role by the use of a resumptive pronoun (17c) and, although less common, by an indefinite noun (17b) with extraposed Rel-clause. This is also the most common strategy to express the so-called 'free' Rel-clause in (17d) which arguably lack a domain nominal (Andrews 2007: 213).

- (17) a. *Junak bea te [itom saja-ka'a-'u] yaja-k, wa'imam-me-wi*  
 thus DM 1PL.NOM 1PL.GEN go.PL-PFV-CLM arrive.PL-PFV Guaymas-PL-DIR  
 'Then we arrived to our destination (our going), Guaymas.' (Guaymas: 55)
- b. *Ne tebotua-ne waate-m [ketun in ame-u waate-'u-m]*  
 1SG.NOM greet-POT someone-PL yet 1SG.GEN 3PL-DIR remember-CLM-PL  
 'Sometimes, I greet some of them who I still remember.' (C's life story, 68)
- c. *In ji'aniraa ne lijtaroa-k*  
 1SG.GEN belongings 1SG.NOM prepare-PFV  
  
*[si'ime-ta in waiya-bae-'u]*  
 everything-ACC 1SG.GEN bring-DESID-CLM  
 'I prepared all my belongings, everything I want to bring.' (Little coyotes: 22)
- d. *[In yaa-bae-'u] ne kopta-k*  
 1SG.GEN make-DESID-CLM 1SG.NOM forget-PFV  
 'I forgot what I wanted to do.'

Cross-linguistically, some languages distinguish between 'reduced' and 'unreduced' Rel-clauses; the former are less like full clauses, typically having reduced tense-mood marking and greater restrictions on the relative NP function (Andrews 2007: 211). In addition, reduced Rel-clauses usually appear in the canonical position of the matrix NP, or the positions of adjectival modifiers, whereas unreduced clauses may appear in a different position. As for Yaqui, Rel-clauses marked by *-me* show several of these features, while clauses marked by *-'u* keep more clausal properties, i.e. adjoined (Lehmann 1984: 672) or correlative clauses (Keenan 1985). Indeed, barely 12% of the 137 S-relative clauses are extraposed to the right, leaving an empty slot in the relative clause as illustrated in (15d) above; in contrast, 43% of object and oblique relatives are extraposed to the right. What this distribution shows is that S-relatives prefer to be embedded within the main clause.

So far, we have seen a clear distinction between relative NPs serving as subjects and non-subjects, the latter marked by slightly unreduced *-'u* Rel-clauses marked. All the same, in texts there are a dozen of examples of S-relatives introduced by the clause linkage marker *-'u*. This special type of subject relatives was first noticed by Buelna (1891) and vaguely mentioned in Johnson (1962). From the examples below, we may notice that all are copulative (possessive?) clauses involving noun and adjectives, all are marked by the past perfective suffix *-ka*, and in all

cases the head noun is either a definite noun or a proper name and, crucially, refers to human beings.

- (18) a. *si kubaji-ta poona-Ø [kompae Timo-tu-ka-'u]*  
 INTEN drum-ACC play-PRES compadre Timo-VBLZ-PFV-CLM  
 'The one being the Compadre Timo, (he) play well the drum.' (Hilario: 145)
- b. *[in sai-tu-ka-'u] aman tawa-ne*  
 1SG.GEN brother-VBLZ-PFV-CLM there stay-POT  
 'The one being my brother, (he) will remain there.' (Hilario: 127)
- c. *in maala betana into in maala [yo'o-tu-ka-'u]*  
 1SG.GEN mother from and 1SG.GEN mother old-VBLZ-PFV-CLM  
  
*wiibisim betana jo'o-me*  
 Wiribis from live-CLM  
 'And from my mother, my grandmother, who is old, was from Wiribis.'  
 (C's life story: 13)
- d. *[ili'i 'uusi-tu-ka-'u] yo'o-tu-im-tu-k*  
 little child-VBLZ-PFV-CLM old-VBLZ-PL-VBLZ-PFV  
 'And the ones who were young, became older.' (Johnson: 218:203)

Although more data is necessary, two possible explanations can be suggested. First, the clause linkage marker *-'u* is extending its domain to other syntactic functions, such as it also has access to SU, i.e. *-'u* as a general and multi-functional subordinator, while the functions of *-me* are restricted to the deverbal domain, e.g. nominal actions and certain participials. Second, although this is unusual in the Uto-Aztecan family (Langacker 1977: 176), it is possible that Yaqui is making a distinction between restrictive and non-restrictive relatives. Thus, the information coded in a relative unit may be either essential to understanding who the designated entity is (restrictive), or neither essential nor defining, but merely specifying in further detail some information about that noun (non-restrictive). Although there is a shared argument reference in both relative types, non-restrictive clauses *specify* the head in a way similar to apposite nouns (e.g., *Garibaldi and Bartola, our kittens*), whereas a restrictive does not plainly specify its head, but rather restricts its meaning in a direct way (De Vries 2002: 71). For several authors, non-restrictive clauses are not 'true' relative clauses since they merely made a comment about an NP or other constituent without delimiting its reference (Keenan 1985:168; Carlson 1977; Lehmann 1984).

What is of interest here is that Yaqui S-relatives marked by *-’u* neither delimit nor modify the head noun, but they provide given information made salient in a different way by focusing on some properties about that entity. Take as an example the clause in (18a), which may be paraphrased like *the one, that is, my Compadre Timo*, or *Timo, my Compadre*. Although the referent is already identifiable, it may be relatively less accessible in discourse and so requires a more substantial lexical realization, i.e. tracking old topics. Therefore, S-relatives marked by *-’u* are somewhere between the characterization of subject’s attributes expressed by *-me*, and the most active events expressed by O-relatives marked by *-’u*.

To sum up, structurally speaking Rel-clauses marked by *-me* show the higher degree of nominalization in terms of (a) nominal features, i.e. case and number, (b) argument coding, i.e. strongly omits its dependent subject, and (c) states of affairs, i.e. it strongly encodes states or change of states events. In contrast, *-’u* Rel-clauses exhibit a lower degree of nominalization since (a) only agree in number, (b) encode their dependent subject as genitive, and preferably retain resumptive pronouns for the other syntactic functions, and finally (c), mainly express active events. Functionally speaking, *-me* Rel-clauses introduce new participants and events in the discourse and so are the most frequent type in corpora, followed by object relatives. Although both units can further serve as core arguments outside the nominal domain, the *-’u* clause is the most productive complement type in the language. In the next section, modifying Rel-clauses are formally distinguished from dependent clauses governed by a main predicate.

#### **4. Distinguishing relatives from complement clauses**

In his seminal work on the aspectual classification of predicates, Vendler (1967, 1970) showed that nominalized clauses (e.g., clauses acting as nominal arguments), at least in English, can express a few and clearly defined meaning categories, predetermined by the semantic type of complement-taking predicates. Thus, verbs like *believe in* and *recognize* take a propositional complement; verbs like *know* and *regret* take a factive complement, whereas verbs like *hear* or *continue* take complements referring to events (see also Dixon 2006). Nominalized sentences can be further divided into two categories, “imperfect nominals”, where the verb “is still alive as verb”, and “perfect nominals” in which “the verb is dead as a verb, having become a noun” (Vendler 1967: 130-1). Thus, tense markers, auxiliaries and adverbs can occur in the former but

not in the latter; consequently, propositional and factive complements can be encoded by the first type but not events.

As many other languages of the world, Yaqui makes use of very similar constructions for relatives and other subordinate relations. With respect to complementation, there are, at least, four types of complement strategies; some predicates only take one type, some can take two, and some can take three (Guerrero 2004, 2006 and further works). The first type consists of a morphological structure (19), where the matrix predicate and the linked verb are joined together usually without a complementizer (but see (19b)). The linked verb may be unmarked or be marked by aspectual and modal suffixes, but not for tense, and each predicate may take their own set of core arguments, although they used to share a participant.

- (19) a. *Peo-∅ Goyo-ta toto'i-m sua-tua-k*  
 Pedro-NOM Goyo-ACC hen-PL kill-cause-PFV  
 'Pedro made Goyo to kill the hens.'
- b. *Goyo-∅ Tibu-ta wakas-ta etbwa-ka-t-'ea-n*  
 Goyo-NOM Tibu-ACC cow-ACC steal-PFV-CLM-think-PASTC  
 'Goyo thought Tibu to have stoles the cow.'

There are two sub-types of syntactic-like complements. In the first one, the linked unit overtly expresses all its core arguments, the verb is fully marked for most TAM operators depending upon the semantics of the matrix predicate, and its position with respect to the main clause is variable. Notice that in (20a) the clause linkage marker is *-'u*, the same marker that non-subject relatives. In the second sub-type (20b), the linked unit must omit its dependent subject, the verb cannot take any operator, its position is relatively fixed, and it is marked by *-kai*. Another example was presented in (16b) above.

- (20) a. *Peo-∅ [kaba'i-m enchi jinu-ka-'u] suale-n*  
 Peo-NOM horse-PL 2SG.ACC buy-PFV-CLM believe-PASTC  
 'Peter believed that you had bought the horses.'
- b. *Maria-∅ bo'obicha-∅ [sim-bae-kai]*  
 María-NOM hope-PRES go-DESID-CLM  
 'Mary hopes to leave.'

The last complement type is a nominalized unit marked by *-m(e)*, followed by the accusative suffix in (21). Structurally, this structure is identical to S-relatives.

- (21) a. *Aurelia-Ø [enchi laaben-ta pona-ka-m-ta] jikka-k*  
 Aurelia-NOM 2SG.ACC violin-ACC play-PFV-CLM-ACC hear-PFV  
 ‘Aurelia heard you play the violin.’
- b. *Ivan-Ø [ka tua Torim-meu wee-pea-m-ta] bena*  
 Ivan-NOM NEG true Torim-PL.DIR go-DESID-CLM-ACC seem  
 ‘It seems Ivan doesn’t want to go to Torim.’ (Guerrero 2004: 266)

Among the four complement types, the most common ones are the co-lexical (19) and syntactic (20a) structures. Psych-action, jussives, propositional attitude, knowledge, indirect perception, and speech act verbs, all take the *-’u* complement (e.g., ‘imperfect nominals’) and some of them also take the morphological structure as an alternative. In contrast, the nominalized type is limited to direct perception (21a) and two mental predicates where the content of the complement encodes the perception of an event, such as *te’a* ‘find, discover’ and *teenku* ‘dream, imagine’, and the non-subject of *bená*, a seem-like predicate in (21b).

Before starting the discussion of modifying vs. non-modifying clauses types, a few words on *bená* are needed. *Bená* is a very particular predicate. Outside clauses like those in (21b), it barely appears as a main predicate except in comparative clauses, e.g. *X resembles Y* in (22a). More commonly, it introduces oblique arguments in the same way as ‘like’ in English (e.g. *like your sister*) in (22d); it also serves as a clause linkage marker of some adverbial clauses (22b), which may encode either manner of action or simultaneous events (e.g. *they live under the water, like we live here*); it may also mark one of the complement structures of *’ea* ‘think about’ (22c).<sup>10</sup> Except for speech-act verbs, complement-taking predicates are not frequent in oral texts (see Guerrero 2005 for Yaqui), but *bená* is an exception although its functions are vague. Out of 48 examples from discourse corpora, it functions as a main predicate in 9; it introduces nominal arguments in 19 examples; it marks adverbial clauses in 8, and complement units only in 4; finally, there are 8 instances where *bená* acts as a matrix predicate (22d). The discussion focuses only on the last function.<sup>11</sup>

<sup>10</sup> *’ea* is the only verb that takes this marker, and it is systematically followed by the particle *si*. Historically, then, it is unclear whether *bená* was a verb or a member of the *be*-postpositions, e.g. *beas/beasi* ‘around’, *bepa* ‘over’, *betuk* ‘under’, *betana* ‘from’, *betchi’ibo* ‘for’.

<sup>11</sup> There is a typology of apposite (non-restrictive) Rel-clauses in discourse where one of the types, the continuative type, enables a movement within narrative time, by depicting two successive extra-linguistic events (Look 2007: 339). That may be the function of apposite clauses marked by *benasi* in (22b).

- (22) a. *U ili jamut-Ø ankeles-ta bena*  
 The little woman-NOM angel-ACC seem  
 ‘The girl seems an angel.’
- b. *Ame-t cha-chai-ne bake’o-ta wakas-im nama’a benasi*  
 3PL-LOC RED-yell-POT cowboy-ACC cow-PL guide seem.like  
 ‘He yells to them, like a cowboy guiding his cows.’ (Saint: 7)
- c. *Wa’ame o’owi-m [kaa tuisi wakabaki-ta bwase-ka-benasia] ’ea-Ø*  
 these.PL man-PL NEG good wakabaki-ACC cook-PFV-CLM think-PRES  
 ‘These men have the feeling that the wakabaki was not well cooked.’
- d. *Into au take tua lutu’uria-ta benasi,*  
 and 3.REFL shake really true-ACC CLM  
  
*wante-ka-m-ta benasi*  
 run.SG-PFV-CLM-ACC seem-INTS  
 ‘(“I won, I won” said the turtle), and she shake herself as it was true, like she would had really run.’ (Turtle: 52-4).

In what follows, some formal and functional properties defining nominalized units modifying a head noun vs. nominalized sentences serving as core arguments are outlined.

(i) *Nominal categories.* The most obvious difference between modifying clauses and argument clauses is, of course, the fact that the former offers some information about a particular entity, while complements do not refer to any particular individual but rather expresses a state of affairs in which that individual is involved (Akmajian 1977). Thus, the dependent units in (20) or (21) do not provide any information regarding *empo* ‘2SG.NOM’, *Aurelia* or *Ivan* (i.e. nominal domain) but denotes an event in which they act. When the participant is a common noun, we would be in a borderline area; in this sense, complements are closer in function to non-restrictive clauses. Furthermore, a Rel-clause tends to agree in case and number with the modified noun, but a complement unit cannot. In (23a), the matrix NP is *misi* ‘cat’ which serves as the direct object of ‘give’ and hence is marked by the accusative suffix *-ta*. The complement unit in (23b) is also marked as accusative but not because of nominal agreement, but because it is the direct core argument of the matrix predicate *te’a* ‘find’. The same is true for *-’u* constructions; in (23c), the whole Rel-clause agrees with its plural matrix NP *kaba’im* ‘horses’; regardless of the number of the participants, number agreement is completely disallowed in nominal complements (23d).

- (23) a. *Jipi'ikim misi-ta miiika-Ø [pa'aku weama-m-ta]*  
 milk-PL cat-ACC give-PRES outside be around-CLM-ACC  
 'Give milk (to) the cat that is outside.'
- b. *Nim achai [jaibu enchi siika-m-ta] te'a-k*  
 1SG.GEN father already 2SG.ACC go.SG.PFV-CLM-ACC find-PFV  
 'My father discovered that you already left.'
- c. *Min-Ø kaba'i-m bicha-k [Anselmo-ta jinu-ka-'u-m]*  
 Min-NOM horse-PL see-PFV Anselmo-ACC buy-PFV-CLM-PL  
 'Fermín saw the horses that Anselmo bought.'
- d. *Min-Ø [Anselmo-ta kaba'i-m jinu-ka-'u] bicha-k*  
 Min-NOM Anselmo-ACC horse-PL buy-PFV-CLM see-PFV  
 'Fermín saw that Anselmo bought the horses.'

(ii) *The coding of the dependent subject.* As Langacker (1977) points out, the subject inside Rel-clauses in most Uto-Aztecan languages occurs as genitive or accusative when pronominal; this is true for Yaqui relatives but not for complements. In this language, only the 1<sup>st</sup> and 2<sup>nd</sup> person singular are formally distinguished, whereas the rest are the same for genitive and accusative. In the Rel-clause in (24a) and (24b), the pronominal subjects must be genitive; in (24c) complement unit, the pronominal subject must be accusative; any other combination results in ungrammaticality. When nominal, it is marked by the accusative *-ta* in both cases, i.e. as in Ute (Givón 1980).

- (24) a. *[Em / \*enchi bwika-'u] ne yi'i-ne*  
 2SG.GEN / ACC sing-CLM 1SG.NOM dance-POT  
 'I will dance whatever you sing.'
- b. *Aurelia-Ø bicha-k [tajo'o-ta nim / \*ne baksia-ka-'u]*  
 Aurelia-NOM see-PFV cloth-ACC 1SG.GEN / ACC wash-PFV-CLM  
 'Aurelia saw the clothes that I washed.'
- c. *Aurelia-Ø ne bicha-k, [tajo'o-ta ne / \*nim baksia-ka-'u]*  
 Aurelia-NOM 1SG.ACC see-PFV cloth-ACC 1SG.ACC/GEN wash-PFV-CLM  
 'Aurelia saw me washing the clothes.'

Possessive subjects for Rel-clauses are very common cross-linguistically, i.e. the possessive-accusative nominalized type in Koptjevskaja-Tamm (1993: 110-128), while possessive subjects for complementation are rare (Cristofaro 2003:130-1). As for Yaqui, the strong tendency for marking genitive subjects for modifying clauses and accusative subjects for all other non-

independent clauses (i.e. complements and most adverbials), provides another piece of evidence for the nominalization continuum, with the attributive Rel-clauses at the top. Indeed, there is an additional argument in support of an attributive/possessive function of relatives: sentential nominalization acting as core arguments marked by *-me* demands the main and the dependent subject to be different, while more than the half of S/A-relatives involves coreferential subjects.

Table 4. *Distribution of main and dependent subjects*

Clause-type	Coreferential subjects
Sentential nominalization	Dependent and main subject MUST be DIFFERENT
Subject & Agent relatives	83 clauses: the dependent and the main subjects are the SAME 54 clauses: the dependent and the main subjects are DIFFERENT

In other words, Yaqui nominalized clauses are used in non-control contexts, that is, predicates that (i) disallow same-subject constructions, e.g. causative or jussive verbs, or (ii) predicates that allow both same-subject and different-subject interpretations, e.g. some psych-action and mental verbs. All the same, the control construction alternative is never marked by *-me* or *-’u*, but by the clause linkage marker *-kai*. Contrast the pair of examples below.

- (25) a. *Nepo [Peo-ta enchi kuna-ka-m-ta] teenku-k*  
 1SG.NOM Peo-ACC 2SG.ACC marry-PFV-CLM-ACC dream-PFV  
 ‘I dreamed of Peter marrying you!’
- b. *Tuuka beako Lupe-Ø teenku-k [Peo-ta kuna-kai]*  
 yesterday night Lupe-NOM dream-PFV Peo-ACC marry-CLM  
 ‘Last night, Lupe dreamt of (herself) marrying Pedro.’

The situation for *bená*-clauses is completely different. On the one hand, there is only one subject participant and it notionally belongs to the dependent verb; the clause in (26a) is ruled out because each verbal unit has its own subject. On the other, the notional dependent subject does not occur in its canonical position, but it serves as the matrix subject and so it must be marked nominative (26b), i.e. a ‘raising’ or matrix-coding-as subject construction.

- (26) a. *\*ne [enchi ka tua Suichi-u wee-pea-m-ta] bená*  
 1SG.NOM 2SG.ACC NEG INTS Vicam-DIR go.SG-DESID-CLM-ACC seem  
 ‘It seems to me that you are not going to Vicam.’
- b. *empo [tua Torim-meu wee-pea-m-ta] bená*  
 2SG.NOM INTEN Torim-DIR.PL go.SG-DESID-CLM-ACC seem  
 ‘You seem to want to go to Torim.’

- c. \**[enchi / em tua Torim-meu wee-pea-m-ta] bena*  
 2SG.ACC/ GEN INTS Torim-DIR.PL go.SG-DESID-CLM-ACC seem  
 ‘It seems that you want to go to Torim.’

For a predicate like ‘seem’ in English, there are two possible structures. In the clause *it seems that my cats really enjoy the garden*, the NP *my cats* is the subject of the embedded clause, whereas in the sentence *my cats seem to enjoy the garden*, the NP is the subject of the matrix predicate, and the dependent verb appears in its infinitive form. Yaqui only shows the last option, as shown by the ungrammaticality of (26c). In the matrix-coding, there is no change in the semantic role of the NP; what changes is its syntactic function with respect to the main verb.

(iii) *Argument coding*. Truly Rel-clauses and complement units differ with respect to missing participants. We have seen that inside the Rel-Clause, only the dependent subject must be marked by genitive or accusative case, but rest of the arguments are coding the same way than a simple clause, i.e. there is no re-arrangement of case marking. Also, although Rel-clauses usually follow the head noun, we saw cases where the relative can be extraposed to final position and, most of the time, the head noun remains as a matrix core argument; consequently, there is one verbal slot left empty in the dependent unit, e.g. externally-headed (27a). This phenomenon can be also seen as some sort of NP extraction or ‘raising’. In contrast, all the slots required by the dependent verb in a complement unit must be overtly expressed (27b); the clause in (27c) is ruled out since the dependent subject serves as an argument of the matrix core, something that is fine for relatives. What it is possible for complementation but not for modification, is to copy the dependent subject as a main core argument, as in *Aurelia saw me that I washed the clothes* in (24c) above and repeated below, i.e. perception by means of first-hand evidential (Guerrero 2006: 148).

- (27) a. *Mu’u-ta<sub>i</sub> empo bicha-k [ \_\_\_<sub>i</sub> ito-t wam ne’e-ka-m-ta]*  
 owl-ACC 2SG.NOM see-PFV 1PL-LOC over fly-PFV-CLM-ACC  
 ‘Did you see the owl that flew over us?’
- b. *Min-Ø bicha-k [ne kaba’i-ta jinu-ka-m-ta]*  
 Fermín-NOM see-PFV 1SG.ACC horse-ACC buy-PFV-CLM-ACC  
 ‘Fermín saw me buying the horse.’
- c. \**Min-Ø ne bicha-k [ \_\_\_<sub>i</sub> kaba’i-ta jinu-ka-m-ta]*  
 Fermín-NOM 1SG.ACC see-PFV horse-ACC buy-PFV-CLM-ACC  
 ‘Fermín saw me buying the horse.’

- d. *Aurelia-Ø ne bicha-k, [tajo'o-ta ne baksia-ka-'u]*  
 Aurelia-NOM 1SG.ACC see-PFV cloth-ACC 1SG.ACC wash-PFV-CLM  
 'Aurelia saw me washing the clothes.'

Furthermore, the strategy of pronoun retention recalls the syntactic/semantic role of the head noun inside the Rel-clause (Keenan 1985: 148). Whereas subject and object relatives involve a gapping as seen above, resumptive pronouns are more likely to appear towards the right end of the accessibility hierarchy, e.g. indirect objects and oblique relatives. In (28), the head noun *wikiata* 'the lasso' serves as an oblique argument inside the Rel-clause, such as there is a resumptive pronoun *a-e* 'with it' co-indexed to it.

- (28) *inepo u-ka wikia-ta<sub>i</sub> tamachia-Ø [in a-e<sub>i</sub>*  
 1SG.NOM the-ACC lasso-ACC measure-PRES 1SG.GEN 3SG-INST  
  
*kaba'i-ta jicho'ola-bae-'u]*  
 horse-ACC rope-DESID-CLM  
 'I am measuring the lasso with which I will rope the horse.'

Complementation involves another type of pronoun retention. In a simple clause, when a non-actor core argument is extraposed to the right in (4) above and repeated below as (29a), there is a resumptive pronoun and the two units are separated by an intonation break (Rude 1996). In the same way, when the complement unit marked by *-'u* is extraposed to the right, then the main clause takes a resumptive pronoun co-indexed to the complement unit as a whole, but never to a participant. In (29b), the main predicate takes an accusative singular pronoun *a*, but there is nothing inside the dependent unit to which *a* may agree with.<sup>12</sup>

- (29) a. *U jamut-Ø a<sub>i</sub> = bicha-k Peo-ta<sub>i</sub>*  
 DET woman-NOM 3SG.ACC = see-PFV Peo-ACC  
 'As for Pedro, the woman saw him.'
- b. *Aurelia-Ø a<sub>i</sub> bicha-k, [enchi toto'i-m mea-ka-'u]<sub>i</sub>*  
 Aurelia-NOM 3SG.ACC see-PFV 2SG.ACC hen-PL kill-PFV-CLM  
 'Aurelia saw (it), that you killed the hens.'

(iv) *Finiteness*. Although most relatives encode states generally unmarked for tense or marked as past/perfective, it is possible for any Rel-clause to express a future-oriented event (30a), take some modal markers as in (28) above, and be independently negated (30b).

<sup>12</sup> For a detailed analysis on right-postposition in Yaqui, see Belloro and Guerrero (in press).

(30) a. *bea [nee mujtitua-ne-me] yaja-k, ju-me'e bikenyom*  
 Then 1SG.ACC be.crossed-POT-CLM arrive.PL-PFV DET-PL viqueño.PL  
 'And then, the ones who will made the sing of the cross on me, will arrive,  
 the Viqueños.' (Maejto: 62)

b. *ju-me [kaa tu'i-m kakare-ka-me ] into kaa kimu-k*  
 DET-PL NEG good-PL RED.house-PFV-CLM and NEG enter.PL-PFV

*che'e tu'ii-ne*

more good-POT

(Star: 25)

'Those who do not have its houses clean, do not enter, it won't be good.'

In contrast, the TAM information in a complement crucially depends on the meaning of the matrix predicate. As for perception, there are important restrictions. Since a direct perception situation (marked by the *-me* complement) expresses a simultaneous perceived event, the dependent verb must be unmarked or be equally marked than the matrix clause, it cannot be negated (31a) and it disallows independent temporal adverbs; but all these features are fine with the *-u* construction (31b) describing a non-immediate perception.

(31) a. *Ne kaa [Goyo-ta maska-ta jo'a-m-ta ] bicha-k*  
 1SG.NOM NEG Goyo-ACC mask-ACC make-CLM-ACC see-PFV  
 'I did not see Goyo making the mask/ \*I saw Goyo not making the mask.'

b. *María-Ø a<sub>i</sub> bicha-k [chubala enchi serbesa-ta je'e-ka-'u]<sub>i</sub>*  
 María-NOM 3SG.ACC see-PFV time ago 2SG.ACC beer-ACC drink-PFV-CLM  
 'María saw it, that you drank beer sometime ago (saw the empty bottles).'

The *bená* construction is special with respect to TAM operators. Not only is the dependent verb strongly unmarked (32a), the same as subject relatives, but the matrix verb itself used to appear unmarked too (32b). Also, negation has scope over the dependent unit only.

(32) a. *Kia ne ju'ubwa eje-ta yeu tomte-m-ta bena*  
 INTEN SG.NOM just palo fierro-ACC out born-CLM-ACC bena

*jketun kaa momóli!*

still NEG mature

'I seem to have just born, like a palo fierro, not mature! (Experience 15)

b. *Lili-Ø [kaa tajo'o-ta baksia-su-ka-m-ta] bena*  
 Lili-NOM NEG cloth-ACC wash-FINISH-PFV-CLM-ACC seem  
 'Lili seems to have not washed the clothes.'

Additionally, it is possible that certain kinds of events simply cannot be perceived in particular ways. Nominalized complements marked by *-me* avoid stative predicates (33a), while sentential nominalization marked by *-’u* do not (33d). Recall that subject relatives prefer to occur with stative predicates in Table 3, above.

- (33) a. \**Armando-Ø* [*kafe-ta ama auka-m-ta*] *bicha-k*  
 Armando-NOM coffee-ACC there exist.PFV-CLM-ACC see-PFV  
 ‘Armando saw there is coffee over there.’
- b. *Armando-Ø* [*kafe-ta ama auka-’u*] *bicha-k*  
 Armando-NOM coffee-ACC there exist.PFV-CLM see-PRFV  
 ‘Armando saw that there is coffee over there.’

Finally, in some languages, wh-embedded clauses make use of a nominalized complement also, e.g. Huallaga Quechua (Weber 1989). Wh-embedded clauses in Yaqui usually make use of the same structure that independent sentences, but Dedrick and Casad (1999: 376-8) list a pair of examples where the wh-embedded unit is marked by *-’u*; in all the examples, the matrix predicate is *ju’unea* ‘know’.

- (34) *Kan ne ju’unea jakun-bicha=sa bem saja-ka-’u*  
 NEG 1SG.NOM know where-site=Q 3PL.ACC go.PL-PFV-CLM  
 ‘I don’t know which way they went.’

## 5. Discussion

As Givón had pointed out, there is good evidence to argue for nominalization as the major diachronic pathway for all subordinated clauses in the Uto-Aztecan family (Givón 2006, 2007, and earlier studies). Yaqui relatives are a clear example of this phenomenon, especially those modifying subject and agent participants. Still, we have seen that constructions serving as core arguments for complement-taking predicates have reacquired finite properties, albeit some structures more than others. Then, used in complement clauses, the sentential nominalization marked by *-’u* shows less signs of nominalization compared to the rest, but still it demands a non-nominative subject; the nominalized complement marked by *-me* show a higher degree of deverbalization compared to *-’u* complements, specially in terms of the state of affairs encoded, the TAM operators and negation, and its limited combination with direct perception and certain mental predicates. Finally, the nominal event marked by *-m(e)* inside a matrix-construction shows the highest degree of deverbalization and substantivization, since it avoids subject coding and any TAM operators.

A major question arises as to what is the association between relative relations and certain types of matrix predicates but not others? We may wonder whether the nominalized unit of complement-perception verb is just relevant for Yaqui or it is found elsewhere. In fact, it is not rare that languages use the same constructions for relatives and other subordinate relations (either relatives, complements or adverbials), especially when the language in question has few non-independent structures, e.g. some Australian languages. The crucial point here is that for languages having more than three subordinate structures, certain complement-taking predicates systematically takes a more nominalized sentence (at least as one of their alternatives), where other predicates take a more syntactic unit, but never a nominalized clause. The use of these ‘pseudo-relative’ clauses as syntactic complements occurs, firstly, with direct perception predicates; for Yaqui, the *-me* clause also combines with two other image-mental verbs; some languages include *want*-type predicates (e.g. Krongo, Reh 1985), and others certain knowledge predicates like French (Lambrecht 1981; Koenig and Lambrecht 1999; van der Auwera 1985); Huaraz Quechua (Miller 1989); Huallaga Quechua (Weber 1989); Akatek and Jakalteq (Schüle 2000), Gulf Arabic (cited in Cristofaro 2003:196), even for Spanish (Guasti 1992; Borgonovo 1996). Following this cross-linguistic pattern, several of the non-English examples of Malchukov (2006)’s study of the form and function of nominalization are rather ambiguous between modifying and core arguments units.

A possible explanation may be the need of a participant sharing (Guerrero 2004; 2006). In Rel-clauses the dependent unit provides a specification attribute about a single participant. This property is used to uniquely identify this entity within a set of possible referents (Cristofaro 2003: 197), or to restrict the referent based on its attributive properties (Lehmann 1984; Bickel 2005). What’s more, an act of direct perception involves a state of affairs as a whole, that is, the perceived event and the entity bringing it about. In other words, we simultaneously see, hear, or otherwise perceive not only the event going on but also the entities involved in such state of affairs. As a result, the dependent unit may be construed as a property attributed to the entity bringing it about, as the mental conceptualization of the event as a whole, or something between.

## **6. Final remarks**

This paper has examined the form and function of Yaqui relative clauses, it has explored the distribution of subject and non-subject relatives in discourse, and it has introduced the major

differences between attributive nominal units and sentential nominalized arguments. Although further research focusing on the discourse functions of Rel-clause remains to be undertaken, the contrastive analysis on Rel-clauses and related constructions provides ample examples of what is or can be in-between the two extremes of the nominalizing continuum. On the one hand, Yaqui non-restrictive or appositive clauses make us wonder what constitutes a lexical mention, a new mention and a clausal mention in discourse. On the other hand, the more nominalized a Rel-clause is, the less accessible to various NP positions for relativization and the more restrictive is its occurrence as a complement unit. Finally, since *-’u* clauses are less nominalized than *-me* clauses, it is also the most productive in terms of its functions and distributions.

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