# The Cabecar relative clause

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#### **Abstract**

The Cabecar relative clause is a circumnominal relative clause without any marking of subordination, attribution or nucleus formation. It is recognizable as such by structural criteria only if its syntactic function in the matrix is signaled grammatically, and otherwise only by semantic and prosodic criteria. Elegibility of an internal nominal expression as nucleus of the relative construction follows a complex decision hierarchy of grammatical and semantic conditions. Diachronically, the relative construction is derivable from an asyndetic combination of two independent declarative clauses.

### 1 Introduction

This article aims to present the basic grammatical properties of the relative construction of the Cabecar language of Costa Rica. There is yet no grammar of the language available. The following account relies on data gathered in fieldwork and on excerpts from a grammar the authors are working on and from a dictionary and a text collection prepared by one author.

### 2 Preconditions

# 2.1 Elementary information on the language

Cabecar (ISO 639-3: cjp) is a Chibchan language of the Isthmian branch. Its closest affiliate and geographical neighbor is Bribri. It is spoken by approximately 14,000 people in several regions of the eastern interior of Costa Rica. It is the largest indigenous language of Costa Rica. The dialects are commonly divided into northern and southern Cabecar. There are sizable portions both of monolingual speakers and of persons who are bilingual with Spanish. The language has been written since 1947. However, most speakers never use the language in writing, and only a limited number of texts, including a bible translation, have been published. The most voluminous descriptive work published to date is Margery 1989. A dictionary (González & Obando 2017) and a grammar (González & Lehmann 2017) are underway. Much of the material and analyses presented in the following is taken from the latter work.

### 2.2 Clause structure

Major clause types in terms of the type of predicate are the verbal (E1), existential (E2), positional (E3) and ascriptive (E4) clause.

- E1 Pedro te kalwá tuw-á Peter ERG bench deal-PFV 'Peter bought a bench' (RMF)
- E2 Chimo tsó ñala kjá jami skí-blá. banana EXIST path edge AD five-CL.ARBUST 'There are five banana plants at the edge of the road.'
- E3 I dawá dul kal jula na ... 3 brother.in.law POS.stand tree hand/arm IN 'His brother-in-law was standing on the branch' (yer\_29)
- E4 jé rö kégé kégölö

  D.MED ASP¹major guardian.spirit

  'he was a major guardian spirit' (yer\_15)

The verb does not inflect for person; and number conjugation is limited to rudimentary indexing of a plural absolutive actant, to be resumed in E30 - E32 below. All syntactic and semantic relations of noun phrases with the exception of the absolutive are marked by postpositions. The alignment of the actants of the transitive and intransitive verb in terms of marking by postpositions follows the ergative system, while most "behavioral" aspects of grammatical relations follow the accusative system. In the simple declarative verbal clause, the order of major constituents is rather free, except that the verb governs its absolutive actant immediately to the left, as illustrated by E1 and E3. In Figure 1, W and Z may be anything, including other actants of Y. X is obligatory except with a few verbal categories.

Figure 1 Declarative verbal clause

[ (W)	X <sub>NP</sub>	$Y_V$	(Z)] <sub>S</sub>
	absolutive	predicate	

There is a paradigm of personal pronouns, with full and clitic variants. These also occupy actant positions, especially under anaphora.

# 2.3 Attribution

There are two kinds of attributes, nominal (or possessive) attributes (E5f) and modifiers formed by adjectives (E7) and by some other categories that behave syntactically alike. The latter will simply be called adjectival attributes.

The nominal attribute precedes its head. There are two variants of the construction. In E5, the possessive attribute directly depends on the head. In E6, there is a relation of syntactic phora between the lexical nominal attribute and the intercalated demonstrative  $j\acute{e}$ , the unmarked member of its paradigm, taking it up.

<sup>&</sup>lt;sup>1</sup> What looks like a copula occurs in many positions, including verbal clauses. Pending deeper analysis, it is called 'ascriptive' (Asp).

```
E5 konó yéria
paca hunter
'hunter of pacas' (yer_00)
E6 aláklä jé jäyí
```

woman D.MED husband 'the woman's husband'

Other examples include E2 and E11.

mental means to signal attribution.

The adjectival attribute follows its head. It may be adjacent to it, as in E7a. An attribute of a nominal which functions as the absolutive actant of the verb or as the complement of a postposition may be displaced to some post-head position, possibly to the end of the entire clause, as in #b. This is regularly the case in first mentions of a referent, as in E7b.

```
E7 a. jayí yakáá d-ế=ju=të
male robust emerge-PFV=AM=VEN
'the robust man came'
b. jayí d-ế=ju=të yakáá
```

male emerge-PFV=AM=VEN robust

'there appeared a robust man'

Apart from a plural marker for highly empathic nouns, there is no declension and no seg-

#### 2.4 Determination

Determiners introduce their noun phrase. There are demonstrative determiners, but no articles. The categories of (in-)definiteness and (non-)specificity are not coded; nominal expressions occur freely without any determiner. E8 features the proximal demonstrative determiner.

```
E8 yís shtrí-wá taí jí táchí te
1.SG tire-CAUS:PFVmuch D.PROX grandfather ERG
'this grandfather has taxed my patience'
```

The same demonstratives that serve as determiners are also substitutes for an entire NP. E4 above is an example.

#### 2.5 Subordination and nominalization

Nominalization and non-finite constructions are only marginally relevant to relative clause formation and will be taken up briefly in §2.6. Complement clauses are not overtly subordinated. They have the structure of an independent declarative or interrogative clause. Dependent directive clauses are in the infinitive, the addressee figures in the main clause.

### 2.5.1 Dependent declarative clause

E9 shows a declarative clause in absolutive function.

```
E9 bếna wa Rogelio sé-r dä Duchí júñé-r
all MET[Rogelio live-D.MID(IPFV) ASP Chirripó] know-D.MID(IPFV)
'everybody knows that Rogelio lives in Chirripó'
```

While the complement clause of E9 occupies the absolutive position in front of the main verb, E10 shows a very common alternative which may be characterized as 'heavy shift':

```
E10 yís te i sh-á=wa=pa jé jawá d-ấ=ju jír
1.SG ERG 3 say-PFV=TOT=APPP [D.MED healer emerge-IPFV=AM now/today]
'appropriately I said that the healer would come today'
```

The complement clause is shifted to the end of the sentence and is anticipated in the absolutive position by a cataphoric pronoun.

While the absolutive function is the most frequent for complement clauses, other semantic functions available to propositions are marked by a postposition governing the complement clause just as the postposition would govern any NP. E11 illustrates a complement clause in ergative function. The complement clause of E12 is marked by the instrumental required by the main verb.

```
i já-n-á=të kalwá bata kí te
[3 lower-D.MID-PFV=TEL horse tip SUPER] ERG

parré pj-á=wa bó-täwä
rib break-PFV=TOT two-CL.ELONG
'he broke two ribs because the horse threw him over' (lit.: 'his falling down from the horse broke two ribs')
```

```
E12 S' wấbatsấ ijé te n<u>i</u>ma kuk-ế wa.
1.SG pleased-IPFV [3.SG ERG fish catch-IPFV] INSTR
'I like for him to fish.'
```

The complement clause may also depend on a noun, which it then precedes like a nominal attribute. Cf. E13 with E5.

```
E13 Míkö bälé-n-á=wa biyő sh-é ijé te. [grandmother hide-D.MID-PFV=TOT] news say-IPFV 3.PS ERG 'He tells the news that grandmother died.'
```

Complement clauses are finite and exhibit no symptoms of nominalization. A Cabecar finite clause is less distinct from a non-finite clause than in other languages because it lacks person and number as marks of finiteness. Consequently, such a clause lends itself more easily to subordination without further ado than a finite clause marked for person and number.

# 2.5.2 Dependent content interrogative clause

A content (a.k.a. "wh") interrogative clause is introduced by the proform in focus. Dependent interrogatives again have the same structure as independent ones. E14 illustrates a content interrogative clause in absolutive function.

```
E14 Shk-ấ i sụ-ạ yí=bấ tú-r=kế sút_sút=sí rä. walk-IPFV 3 see-INF [who=EXCL run-D.MID(IPFV)=IPFV2 jumping=AUTH ASP] 'Let's go and see who jumps more often!'
```

By the same rules as for dependent declarative clauses, a dependent interrogative may be *in situ*, as in E15a, or may be extraposed, as in #b.<sup>2</sup>

- E15 a. Daniel te maí bá kaldu chák-á.

  Daniel ERG [where 2.SG POS.stand] ask-PFV
  - b. Daniel te i chák-á maí bá kaldu na.
    Daniel ERG 3 ask-PFV [where 2.SG POS.stand INT]
    'Daniel asked where you were.'

### 2.5.3 Cleft-sentence

The language has no cleft-sentences. The focused constituent may be put in sentence-initial position and followed by the enclitic  $n\underline{\epsilon}$  EMPHATIC, as in E16f.

```
E16 Jí kalbatiöglö ne ts-á=u=mi dulaglë të busi ia.

D.PROX hat EMPH transport-PFV=AM=AND boy ERG girl DAT

'This is the hat that the boy took away from the girl.'
```

```
E17 ¡Bá=né te yís maléch-é káte!
2.SG=EMPH ERG 1.SG scare-IPFV POS.NTR
'You are the one who is scaring me!'
```

These are no complex sentences. However, they differ from an ascriptive sentence like E46<sup>3</sup> only by the ascriptive particle appearing in the latter.

### 2.6 Orientation

Orientation of deverbal nominalizations occurs in two kinds of morphological forms:

- a) derivation of nomina agentis and nomina instrumenti
- b) formation of the stative perfect.

As for #a, the same suffix  $-\ddot{a}$  which forms the infinitive also derives agent nouns in the construction  $[X_V - \ddot{a}]_N$  one who Xes'. An intransitive base yields a *nomen agentis* by itself. A transitive base is nominalized with its absolutive actant, as shown in E18.

```
E18 jilé tju-a-wá jé=né wa i júñé-r dä [something buy-NR-PL] D.MED=EMPH MET3 know-D.MID(IPFV) ASP 'the buyers are those who know'
```

However, a purely syntactic analysis cannot account for the meaning of all *nomina agentis*, since they may be lexicalized, as in *yabalá sua* (child:PL see:INF) 'babysitter'. Other derivations of deverbal nouns are even less regular.

As for #b, the stative perfect is a form oriented towards the absolutive actant of the base. E19 is a construction whose predicate is a stative perfect form of a transitive verb. E20 shows the same form of an intransitive verb in attributive function.

```
E19 (ijé-wá wa) ju rä yő-lế
3.PS-PL METhouse ASP form-S.PRF
'the house has been built (by them) / (they) have built the house'
```

<sup>&</sup>lt;sup>2</sup> The interrogative particle  $n\underline{a}$  is impossible with the clause in absolutive position of version #a, but optional after the extraposed variant #b.

<sup>&</sup>lt;sup>3</sup> E46 is not a cleft-sentence, but a definition.

```
E20 ijé-wá ts<u>ó</u> chíchi dú-lḗ=wa tắbi-ä
3.PS-PL EXIST dog die-S.PRF=TOT bury-INF
'they are burying the dead dog'
```

The replacement of the ergative by the metexitive postposition and the optional use of the ascriptive formative are symptoms of the non-finite, or rather semi-finite, character of this verbal or deverbal form: it is both a conjugation form and a deverbal adjective with passive orientation.

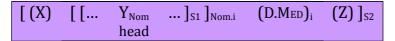
### 3 Relative constructions

### 3.1 Relative clauses with lexical-nominal nucleus

#### 3.1.1 General structure

The general structure of a headed Cabecar relative clause construction is as shown in Figure 2.

Figure 2 Circumnominal relative clause construction



The relative clause S1 depends on the main clause S2 or one of its constituents. X and Z may be anything, but one of them contains the main clause predicate and therefore is non-zero. There is no grammatical formative to either mark S1 as a subordinate clause – let alone as a relative clause – or to identify its head Y. The latter is simply a nominal constituent of S1. S1 is, thus, formally indistinguishable from any other unmarked subordinate clause, including in particular a finite complement clause (§2.5.1). If S1 is peripheral to S2, S1 may, indeed, even be structurally indistinguishable from an independent clause (§4.2). The relative clause is substantivized implicitly and thus functions as a nominal (Nom.i) in the main clause. This will be called the **higher nominal** or **higher NP**, as the case may be.

The Cabecar relative clause is a **circumnominal relative clause**, since it contains a nominal expression which is understood to be semantically modified by the rest of this clause, which is understood to be oriented towards this nominal component. The paradigmatic relationship between an independent declarative clause and a relative clause is illustrated by E21f.

```
E21
      Duláglë të
                     kálbatiöglö ts-á=u=mi
                                                          busí ia.
                     hat
                                  transport-PFV=AM=AND girl DAT
      'The boy took the hat away from the girl.'
E22
      Kálbatiöglö ts-á=u=mi
                                           duláglë të busí ia
      [hat
                   transport-PFV=AM=AND boy
                                                   ERG girl DAT]
      (jé)
               vul-é-gé
                                sá të.
      D.MED search-IPFV-IPFV2 1.PL ERG
      'We look for the hat that the boy took away from the girl.'
```

The absolutive actant of the main verb in E22 represents a referent identified by the role it plays in the situation designated by the subordinate clause. It is optionally resumed in

the main clause by the medial demonstrative  $j\acute{e}$ . This is a feature of several examples to follow and will be taken up in §4.

### 3.1.2 Formation and syntactic function of the nucleus

There are no external-head or adnominal relative clauses in Cabecar. Since the so-called internal head is not a structural head, it will be called the **nucleus** in what follows. And since it is overtly present as the nominal constituent Y in S1, it has some syntactic function in S1. The following set of examples illustrates the possible syntactic functions for the nucleus in the relative clause. In the non-verbal clause of E23, it is the complement of the existence verboid.

```
E23 bếwák tsó ju kjấ jami kjőyí-r tái [animal EXIST house edge AD] cry-D.MID(IPFV) much 'the animals that are near the house make much noise'
```

In E24, the nucleus is the absolutive actant of an intransitive verb.

```
E24 ¿Bá te jíjí tk-á=ju yikí jé s-á?
2.SG ERG [earthquake cross-PFV=AM yesterday] D.MED feel-PFV
'Did you feel the earthquake that happened yesterday?'
```

In E25 (and likewise in E41<sup>4</sup>), the nucleus is the absolutive actant of a transitive verb.

```
Yaba te martillo wa kal wấkuchíi kp-á paláwa [child ERG hammer INSTR tree stump beat-PFV at.one.stroke]

tk-á=wa=ju i jár ka.
cross-PFV=TOT=AM 3 cavity LOC2

'The stump that the boy beat with the hammer with one blow penetrated inside.'
(González & Obando 2017 s.v. paláá)
```

In all of the above examples, the order of constituents in the relative clause is unaffected by the nucleus status of the absolutive actant. Its interpretation as the concept that the referent in question is based on is essentially a semantic process which is subject to certain grammatical constraints to be reviewed presently. This process may be called **nucleus formation**.

Other actants can be nucleus, too. In E26, it is the ergative actant, and in E27, the indirect object of the clause seen in E21.

```
E26
      Duláglë të
                     kálbátiöglö ts-á=u=mi
                                                          busí ia
      [boy
               ERG
                                  transport-PFV=AM=AND girl DAT]
              yul-ë-gé
                                sá të.
      (jé)
      D.MED search-IPFV-IPFV2 1.PL ERG
      'We look for the boy who took away the hat from the girl.'
      Busí <u>ia</u> kálbátiöglö ts-á=u=mi
E27
      [girl DAT hat
                              transport-PFV=AM=AND boy
                                                              ERG]
      (jé)
               yul-ë-gé
                                sá të.
      D.MED search-IPFV-IPFV2 1.PL ERG
       'We look for the girl from whom the boy took away the hat.'
```

<sup>&</sup>lt;sup>4</sup> The selection restrictions of *jiä* 'put in/on' require an article of clothing, not a person or body part, in absolutive function.

The crucial difference between the three examples E22, E26 and E27 resides in the clause-initial position of the nucleus. It is demonstrably not the head of a postnominal relative clause, but still an internal nucleus. This is evident from its postposition, marking its role inside the relative clause, independently both of its nucleus role in the relative clause and of the syntactic function of the higher NP in the matrix. Since the selection restrictions of the main-clause predicate in this case do not determine a particular nucleus formation in the relative clause, the relative clause is, in principle, ambiguous between the readings of E22, E26 and E27. The informant – a speaker of the southern dialect – here obviously tries to disambiguate these readings by putting the nucleus in first position, possibly under Spanish influence. There is sufficient evidence to prove that this does not happen by rule of syntax, at least not in the northern dialect: in E25, the nucleus in absolutive function is not in clause-initial position, nor is the nucleus in the function of a temporal adverbial in E28.

```
E28
      (Jé)
              María
                       kóná
                                                  ka
      D.MED
                       be.born-D.MID-PFV summer PER]
              [Mary
      (ié)
              ká
                    júñé-r
                                              wa
             NEG
                    know-D.MID(IPFV) 1.SG
                                             MET
      D.MED
      'I don't know the year that Mary was born in' (González & Obando 2017 s.v. kua)
```

The northern dialect follows a different strategy. Here, the position of the nucleus in the relative clause does not matter; all of E22, E26 and E27 are synonymous, and so are E29a and b.

```
Chíchi te wíshka su-á
E29
                                       (ié)
                                                miné=ju.
          [dog ERG cat
                             see-PFV]
                                       D.MED
                                                go:PFV=AM
      b. Wíshka su-á
                           chíchi
                                   te
                                         (jé)
                                                  miné=ju.
                  see-PFV dog
                                   ERG] D.MED
                                                  go:PFV=AM
          Both: 'The cat that the dog saw went away.'
```

What matters instead is a complex hierarchy of constraints. First of all, it should be recalled that there is no structural difference between a complement clause and a relative clause. The semantic difference, viz. the orientation to one of the participants in the case of a relative clause, is not coded. Consequently, this distinction is entirely a matter of context conditions: if the superordinate verb selects a propositional actant, as in E9f, the subordinate clause is a complement clause.

Otherwise, a nucleus is formed in the relative clause. That nominal expression is chosen as nucleus which satisfies the constraints of the hierarchy of Figure 3, which is to be run through from top to bottom.

Figure 3 Hierarchy of constraints determining nucleus assignment

```
    grammatical features of the superordinate predicate
    selection restrictions of the superordinate predicate
    hierarchy of syntactic functions
```

Needless to say, if a dependent clause which, given the selection restrictions of the higher verb, cannot be designating a proposition does not lend itself to nucleus formation according to Figure 3, either, the sentence is ungrammatical.

The series of E30 - E32 features three nominal expressions in the relative clause all of which satisfy the selection restrictions of the superordinate verb (condition 2 of Figure 3), which requires an animate absolutive actant.

- E30 Jäyí te kốchi-wá tju-á busí <u>ia</u> miné=julu. [man ERG pig-PL buy-PFV girl DAT] go:PFV=AM:PL 'The pigs that the man bought for the girl went away.'
- E31 Jäyí-wá te kốchi tju-á busí <u>ia</u> m<u>i</u>né=julu. [man-PL ERG pig buy-PFV girl DAT] go:PFV=AM:PL 'The men that bought the pig for the girl went away.'
- E32 Jäyí te kốchi tju-á busí-wá <u>ia</u> m<u>i</u>né=julu. [man ERG pig buy-PFV girl-PL DAT] go:PFV=AM:PL "The girls for whom the man bought the pig went away."

In this series, the one nominal expression of the relative clause which satisfies the number feature of the superordinate verb (condition 1) is chosen as nucleus, independently of its syntactic function (condition 3).

In E33, criterion 1 of the hierarchy of Figure 3 is of no help. However, only one of the two nominal expressions contained in the relative clause, viz. the ergative actant, meets the second-level condition, viz. the selection restrictions of the superordinate verb. It is chosen as nucleus irrespective of its syntactic function.

```
E33 Jäyí te kuấ tk-á yikí miné=ju.
[man ERG corn sow-PFV yesterday] go:PFV=AM
'The man that planted corn yesterday went away.'
```

Finally, if the uppermost constraints of Figure 3 do not determine nucleus selection in the relative clause, its lowest level, which comprises the hierarchy of Figure 4, comes into play.

Figure 4 Hierarchy of syntactic functions

absolutive actant
ergative actant
indirect object
other syntactic function

In E34, all nominal expressions in the relative clause meet the grammatical features and selection restrictions of the superordinate verb. By the logic of Figure 4, the nucleus of E34 must be the absolutive actant.

```
E34 Bá amí te chíchi m-á=sa Fernando ia su-á yís te. [2.SG mother ERG dog give-PFV=SEP Fernando DAT] see-PFV 1.SG ERG 'I saw the dog that your mother gave to Fernando.'
```

The lower positions of Figure 4 only get a chance at this stage of the selection process if none of the higher positions meets the constraints ranging higher in the decision tree of Figure 3. Thus, in E35, the ergative actant is chosen because the absolutive does not satisfy the grammatical features of the superordinate verb, while the benefactive adjunct is lower on the hierarchy of Figure 4.

```
E35 Jäyí-wá te kốchi tju-á busí-wá ia miné=julu. [man-PL ERG pig buy-PFV girl-PL DAT] go:PFV=AM:PL 'The men who bought the pig for the girls went away.'
```

To complete the picture of the syntactic functions of the nucleus, an example is presented showing the nucleus in the function of a possessive attribute.

```
E36 Bá te aláklä jé jäyí duá=wa su-á?
2.SG ERG [woman D.MED man die:PFV=TOT] see-PFV
'Did you see the woman whose husband died?' (González & Obando 2017 s.v. jäyí)
```

In E36, the nucleus is assigned to the lowest position of Figure 4 although its highest position would seem to be available, too. Selection of *jäyí* for nucleus is precluded by two properties of the sentence not accounted for by Figure 3: Both the internal dissociation of the possessive construction by left-dislocation of the possessor with a pause before the resumptive and the aspect of the relative clause verb would be unmotivated if *jäyí* were the nucleus.

In the Cabecar text corpus, nuclei display very different frequencies in the various syntactic functions. This is shown in Table 1.

Table 1 Frequency	of syntactic	functions of the	nucleus
10.510 1 1.090.00.	0, 0, 110010010	,	

absolutive	43%
ergative	20%
adjuncts	16%
ascriptive	11%
dative	5%
genitive	2%
metexitive <sup>5</sup>	2%

This frequency distribution results from the combined effect of Figure 3 and Figure 4, on the one hand, and the overall frequency of these syntactic functions in Cabecar clauses, on the other.

Finally, it should be noted that since there are no markers of subordination, attribution or nucleus formation, there is no difference between a relative construction and the kind of attribution seen in E20: the deverbal form which was there presented as an adjectival attribute may as well be the predicate of a relative clause.

### 3.1.3 Grammatical properties of the higher nominal

#### 3.1.3.1 Number and determination

A relative clause may bear the plural suffix, as in E37. The subordinate clause of E37 is oriented towards the absolutive actant of the existential verboid and substantivized.

<sup>&</sup>lt;sup>5</sup> This is a postposition (and a function marked by it) which combines the functions of the ergative and the dative under complex conditions.

```
I sh-ế m<u>íi</u>le sá báklế-wá
3 say-IPFV [formerly 1.PL EXIST.PFV-PL]

m<u>i</u>=k<u>é</u> k<u>á</u> j<u>á</u>r yul-ä.
go:IPFV=IPFV2 space/time cavity visit-INF

'It is said that our forefathers went to hunt.' (lit.: 'They say that the ones of us having formerly existed went to visit the pit.')
```

Also, the higher nominal – i.o.w. the relative clause – may be preceded by a determiner as was seen in §2.4 for simpler nominals. Examples include E28, E38 and E41.

```
E38 jéra jé siwá sh-é=gé rö kóa
then D.MED [knowledge say-IPFV=IPFV2] ASP different
'then the knowledge [song] to be recited is different.' (chicha_7.4)
```

### 3.1.3.2 Syntactic function

In all of the examples E22 – E38, the syntactic function of the higher NP is the function of the absolutive actant of the main verb. In those sentences where the relative clause introduces the sentence, the sentence construction almost looks like asyndetic parataxis. However, it is still unambiguously a relative construction, because the higher NP occupies the absolutive slot of the main verb.

The syntactic function that the higher NP bears in the matrix is, however, not restricted; it may be any syntactic function. In E39, it is the ergative actant; in E40, it is an instrumental adjunct; in E41, it is a possessive attribute.

```
te i duä-wá
E39
          jék k-á=ká
                                            ia i sh-á
                                                           ñékäi
      [3 RFL lift-PFV=ASC] ERG 3 cousin-PL DAT 3 say-PFV thus
      'having gotten up, he spoke thus to his cousins' (Yebule 61)
E40
      Yís
                               yalá ti-á
            nua
                                            j-á=mi
      1.SG maternal.uncle ERG oak cut-PFV go-PFV=AND
      ſyís te
                bák péit-á]
                                (jé(=né))
      [1.SG ERG axe lend-PFV] D.MED=EMPH INSTR
      'My uncle felled the oak with the axe I lent him.'
E41
      jé
               datsí ji-ö=gé
                                        pa
                                                   rö batsé
      D.MED [fabric put.in-IPFV=IPFV2] body/color ASP red
      'the color of the clothes he wore was red' (yer_14)
```

Together with the evidence adduced in §3.1.3.1, these fact corroborate the analysis that the circumnominal relative clause functions as a nominal in the matrix.

### 3.1.4 Non-restrictive relative clauses

There are no constraints on the constitution of the internal nucleus. In E42, the head is the discontinuous nominal *díklá mañá-täwá* 'three rivers'.

```
E42 sá kéi wa díklá tsó mañá-täwá
[1.PL space/time:SPEC PER river EXIST three-CL.ELONG]

ki-é rä Tälírí Duchí Jäkuí
call-IPFV COP Telire Chirripó Pacuare

'The three rivers which exist in our lands are called Telire, Chirripó and Pacuare.'
(duchi_1.4)
```

The scarcity of constraints on the structure of relative clauses includes the determination of the internal nucleus. If it lacks a determiner of its own, as in E22 - E28 and some other examples, the relative clause may be restrictive. In E39, the nucleus is a personal pronoun representing an established referent in the universe of discourse. In E43, the nucleus of the relative clause is both determined by the possessive pronoun and represents an established referent. The nucleus of the relative clause of E44 has generic reference. The nucleus of the relative clause of E45 is a proper name. In all of these cases, the relative clause is non-restrictive.

```
i dawá dul kal jula na ká jék dalí-n-é [3 brother.in.law POS.stand tree hand/arm IN] NEG RFL move-D.MID-NEG.PFV 'His brother-in-law, who was standing on the branch, did not move.' (yer_29)
```

```
E44 Tsibắrkä ká kia-r jí yế wấ [mountain.cherry NEG want-D.MID(IPFV) what TRL ] fruit
```

kät-é rä béwák te. eat-IPFV ASP animal ERG

'The fruit of the mountain cherry tree, which is good for nothing, is eaten by animals.'

E45 Busúbulu jé rö jíröwák kếgölö jém<u>i</u> tkabế wágế [Busubulu D.MED ASP animal guardian.spirit and snake boss] 'Busubulu, who is the guardian spirit of the animals and the boss of the snakes,

ká wa káwố mé-n-á jíröle kt-ö-glö NEG MET mandate give-D.MID-PFV [something kill-INF-FIN] is not going to allow [them] to kill anything.' (yer\_36)

The difference between restrictive and non-restrictive relative clauses is, however, not structurally marked, not even by intonation (as it is in the postnominal relative construction of modern European languages). In particular, a relative clause whose nucleus is a personal pronoun may (E37) or may not (E39) be restrictive. The restrictive or non-restrictive modification of Y by S1 is produced only at the level of sentence semantics and discourse.

### 3.2 Free and adverbial relative clauses

There are what are otherwise called headless and light-headed relative clauses, which in the case of circumnominal constructions might be called nucleusless and light-nucleus relative clauses. However, instead of a binary division, a series of constructions containing pronominal nuclei of increasing explicitness is found. An absolutely nucleusless construction (oriented to the ergative argument) is illustrated by E46.

```
E46 Ksäklä rä sá núl tséts-á. funeral.singer ASP [1.PL corpse sing.for-IPFV]

'The funeral singer is the one who sings for our deceased.' (González & Obando 2017 s.v. ksä)
```

In principle, the nucleusless relative clause differs from one with overt nucleus just in this feature. In E46, it is only the ascriptive particle which presupposes a kind of nominal status of what follows it.

An adverbial relative clause may be formed by the same strategy, as may be seen in E47.

```
E47 Bá te i tju-á yís te i sh-á ska?
2.SG ERG 3 deal-PFV [1.SG ERG 3 say-PFV] LOC
'Did you buy it where I told you to?'
```

Adverbial relative clauses, viz. local, temporal and manner clauses, differ generally from plain relative clauses in the freedom of choice for the syntactic functions of the nucleus and the higher NP: In principle, the two choices are mutually independent in all relative constructions. However, the tendency in favor of parallel functions is much stronger in adverbial than in plain relative clauses. In adverbial relative clauses, the default is for the (empty or light) nucleus to have the same function as the entire clause; and for nucleus-less adverbial relative clauses this is normally the only possibility. Consequently, the zero nucleus in E47 poses no interpretation problem: it must be a local adjunct.

```
E48 Sä yuä te i shá te sá jañé-wá.
[1.PL instructor ERG 3 say:PFV] ERG 1.PL laughter-CAUS:PFV
'What our professor said made us laugh.' (González & Obando 2017 s.v. jañéwa)

E49 Ijé te i shá jé rä cháklé.
[3.SG ERG 3 say:PFV] D.MED ASP right
'What he said is right.' (González & Obando 2017 s.v. cháklé)
```

E48f differ in the presence of the resumptive demonstrative in E49. In both, the nucleus is minimally present in the form of the third person pronoun, taking the position of the absolutive actant. This may count as a light nucleus, but a minimal one, as it is an obligatory filler of this position.

In E50, the nucleus is a demonstrative pronoun.<sup>6</sup>

```
E50 jé wa tsirú dế jé rä yís jäyí [D.MED MET cocoa emerge:PFV] D.MED ASP 1.SG husband 'he who brought cocoa is my husband'
```

The following light-nucleus relative clauses have the shape of a content interrogative clause. The interrogative pronoun represents the ergative actant in E51, and the absolutive actant in E52.

<sup>&</sup>lt;sup>6</sup> Given the examples of restrictive relative clauses with a definite nucleus like E37, it may be unnecessary to seek an argument to the effect that the initial demonstrative of E50 is not the nucleus. Still, it does not seem excluded that it is a determiner of the nominal represented by the relative clause, as in E38. In effect, Cabecar postpositions in some contexts appear to contain a (zero) pronominal complement, which might be the (zero) nucleus of E50.

```
E51
      Sá
                        të kalbatiöglö ts-á=u=mi
                                                                  busi ia
      1.PL
            ERG
                   [who ERG hat
                                           transport-PFV=AM=AND girl DAT]
      yul-ë-gé.
      search-IPFV-IPFV2
      'We search the one who took away the hat from the girl.'
E52
      Iirô
            blá=wa
                            dulaglë të
                                           busí
                                                 yiga
      [what steal:PFV=TOT boy
                                    ERG
                                           girl
                                                 AVERS]
                       sá
      (ié)
              ku-á
      D.MED find-PFV 1.PL
                              ERG
      'We found what the boy took away from the girl.'
```

In E53, the nucleus is represented by a local interrogative adverb; and so the relative clause also has the function of a local adverbial in the main clause.

```
E53 kégara i d-ő=gé=ju mái sá yëbl-ő=gé jéska always 3 emerge-IPFV=IPFV2=AM [where 1.PL hunt-IPFV=IPFV2] there 'he always shows up at the place where we hunt' (yer_20.1)
```

Here, too, the relative clause is resumed by a demonstrative, in this case a local demonstrative adverb. Temporal and manner clauses, too, are formed on the model of light-nucleus adverbial relative clauses.

The semantic difference between relative constructions with different degrees of reduction of the nucleus is minimal. E48' differs formally from E48 only in the substitution of the personal pronoun by the interrogative pronoun.

```
E48'. Sä yuä te ji-lé shá te sá jañé-wá. [1.PL instructor ERG what-ever say:PFV] ERG 1.PL laughter-CAUS:PFV 'What our professor said made us laugh.'
```

One must not be mislead by the interlinear glosses of the two pronouns involved: *i* in E48 is an expletive element, and *jilé* in E48' is both grammaticalized to mean 'what' and lexicalized to mean 'thing'. Given this, the former relative clause may be used to refer specifically, while the latter may refer non-specifically.

# 4 From independent clause to relative clause

The structure of a relative clause is not only the same as the structure of a complement clause, but also the same as the structure of an independent declarative clause. (E3 presented above as a declarative sentence is, actually, a relative clause in its text, viz. in E43.) Three kinds of construction involving two clauses may be distinguished:

- (1) asyndetic parataxis of two clauses connected by anaphora
- (2) constructions which are structurally ambiguous between interpretation #1 and interpretation #3
- (3) matrix clause containing circumnominal relative clause.

These variants will be discussed in the order enumerated, and this order will be presented as a diachronic dynamism. At the same time, the analytical problems offered by category #2 will be revealed.

# 4.1 New-referent dyad

The configuration sketched in Figure 5 may be called a **new-referent dyad**.

Figure 5 New-referent dyad

$$\begin{array}{cccc} [\;...\;X_i\;...\;]_{S1} & & [\;Y_i\;...\;]_{S2} \\ & \text{introductory clause} & \text{resumptive clause} \end{array}$$

It is an asyndetic paratactic combination of two clauses the first of which contains a referential expression X which introduces a specific referent i into the universe of discourse, while  $S_2$  takes i up anaphorically by a referential expression Y. Given the canonical configuration for the introduction and immediate resumption of a referent, by default X is a lexical-nominal expression, while Y is the dedicated anaphoric device for second mentions. In Cabecar, the latter is the demonstrative of medial deixis  $j\acute{e}$ . Normally though not obligatorily, Y has initial position in  $S_2$ . E54 – E57 illustrate what is meant.

```
kếtkö yu-á
E54
      jukábata jémi yëlé
                       long.arrow?
                                        form-PFV 3 ERG
      arrow
                 and
      'The arrows and long arrows he formed'
      diká
                     tágölö tëlé wa , jé
                                            tsó
                                                   tkë-lë
                                                              iié-wá
      bactris.gasipaes piece ripe INSTR D.MED EXIST plant-S.PRF 3.PS-PL MET
      'with pieces of ripe peach-palm that they had planted' (lit.: '... those they had
      planted.') (yer_03)
```

E55 Kế mạtsu rä bế kếklä , jé wa sä wếiká-lế. Kế-matsu ASP demon primordial D.MED MET 1.PL mistreat-S.PRF 'Kế-matsu is a primordial demon who had mistreated us.' (lit.: '... that one had mistreated us.') (González & Obando s.v. matsu)

In both E54 and E55,  $S_1$  contains a nominal expression representing a new referent.  $S_2$  resumes this anaphorically and adds some new information on it. Neither of these dyads lends itself to a (re-)analysis where  $S_1$  is a relative clause: In both of them,  $S_1$  gives new information apt for an independent declarative clause and inapt for the introduction of a referent. Moreover, in E55 the nominal expression in question is not specific.  $S_2$  could only become a postnominal relative clause, but not a circumnominal one because neither the postposition of E54 nor the demonstrative of E55 would fit such a clause.

Since  $S_1$  is not a constituent of  $S_2$ , it is resumed in  $S_2$  by  $j\acute{e}$ . And since no nucleus is formed in  $S_1$ , the antecedent of the demonstrative is not identified by the hierarchy of syntactic functions (Figure 4), as it is in relative constructions, and instead by a principle of reference tracking which favors textual proximity. This may be seen in E54, where the antecedent of the demonstrative is not determined by its syntactic function, but is simply the closest semantically fitting to the left.

These examples are only meant to show that not every new-referent dyad lends itself to a reanalysis of a complex sentence whose introductory clause is a relative clause. It is intriguing to observe that an idiomatic English translation renders the **second** clause by a relative clause in all three cases.

# 4.2 Ambiguous constructions

Certain clause pairs of the general structure of Figure 5 do admit of a reanalysis such that the first clause is a circumnominal relative clause. E56 is an isolated example sentence from a dictionary.

```
E56 Ñala kíka kal jáná=ká jé te i wätiá=wa. path SUPER tree fall:D.MID=ASC D.MED ERG 3 obstruct:PFV=TOT 'Across the path fell a tree, this blocked it completely.' or: 'A/the tree that fell across the path blocked it completely.' (González & Obando 2017 s.v. tiä)
```

One may construct a preceding context for E56 so that  $S_1$  is an all-new proposition and forms a breath group and intonation unit of its own, with a possible pause after its verb. Then E56 is a paratactic construction as before. Alternatively,  $S_1$  may be prosodically integrated into  $S_2$  and, instead of commenting something new, only identify the referent that acts as the ergative in  $S_2$ . Then  $S_1$  is a circumnominal relative clause. It is left-dislocated and resumed by the demonstrative  $j\acute{e}$  in the main clause. Likewise, the initial clause of E57 introduces a specific referent about which little new is being said, fulfilling thus the text-semantic condition for its reanalysis as a relative clause.

```
E57 ñákái mané-le-wá tsó yakéi-lá, jé-wá te sá wáyu-é=ké also which-INDF-PL EXIST bad-PL D.MED-PL ERG 1.PL cheat-IPFV=IPFV2 'Moreover, some bad people exist, those cheat us.' or: 'some existent bad people cheat us.' (duchi_2.6)
```

Left-dislocation with resumption in the main clause by  $j\acute{e}$  is very frequent in the texts. E18 is a standard example. E45 shows that it even happens inside a relative clause. Likewise, in the second line of E58, the clause from which the topic is left-dislocated is a complement clause. The first line of E58 exhibits the same structural ambiguity as E56. If the introductory clause is analyzed as a circumnominal relative clause, this might even be non-restrictive.

```
E58
      sá
            kéklä-wá
                        te i su-á
                                       jé
                                             te i sh-ë
                        ERG 3 see-PFV D.MED ERG 3 say-IPFV
      1.PL ancestor-PL
          jér bata jula
                             wäktä ié
                                         rä ká
      [3 breast
                                  D.MED ASP space/time worthless PRP]
                  arm/hand face
      'Our ancestors saw him and say that his breast, arms and face had thicket on
      them.' or 'Our ancestors who saw him say that ...' (ser_08)
```

Certain factors favor the (re-)analysis of Figure 5 as a relative construction. The first is well-known from the integration of erstwhile left-dislocated topics into the following clause structure by suppressing the prosodic break and the resumptive pronoun. All of this may apply to Figure 5, too. Many example sentences are provided by the informants in these two alternate versions. E59 is an example.

```
E59 Yawa te du ju-á=mi (jé) tk-á=sa=ju díklá éktá ka. [child ERG bird throw-PFV=AND] D.MED cross-PFV=SEP=AM river side LOC2 'The bird that the boy threw (released) crossed to the other side of the river.'
```

Similar examples are E22, E26, E27, E28 and E52.

A different factor favoring the reanalysis is referential semantics at the text level. In E60, S<sub>1</sub> is most plausibly analyzed as a left-dislocated relative clause.

```
E60 sériké sé-r sálwí=sí jé rä i bata jékjé [storm.boy feel-D.MID(IPFV) wild=AUTH] D.MED ASP 3 tip sibling 'The storm boy who is the wildest is the youngest sibling.' (ser_06)
```

Here the resumptive demonstrative is the subject of the ascriptive main clause. Thus, the criterion for the diagnosis of a subordinate clause which worked for E23 does not apply: the relative clause could be an independent clause, and the paratactic sequence would mean 'a storm boy is the wildest; that is the youngest sibling'. In this particular case, both the intonation contour and the immediately preceding context resolve the issue. In the prosodic structure, there is continuous intonation and no pause between the clauses. The preceding sentence says: 'The storm boys live on the other side of the sea.' Here, for the interpretation of  $S_1$  as an independent sentence to make sense, one would expect the numeral 'one' to be used to single out one element from the set just introduced. Consequently, the first clause of E60 is indeed a relative clause.

Figure 6 formalizes the reanalysis envisaged.

Figure 6 Reanalysis of paratactic construction as relative construction

As usual, the reanalysis itself is imperceptible. However, it is presupposed by the possibility of a construction lacking the resumptive demonstrative, as will be seen in the next section.

### 4.3 Relative construction

As a matter of fact, a paratactic construction as sketched in Figure 5 is at the origin of a relative construction in many languages (Lehmann 1984, ch. VI.1.1, Lehmann 2008, §4.1). The preceding section described the crucial context in which the reanalysis from paratactic construction to relative construction takes place.

Further development leads to the use of an unmarked clause as a circumnominal relative clause in constructions which no longer admit of the original analysis as a paratactic construction. The decisive step here is to suppress the prosodic break after the introductory clause and with it the resumptive pronoun in the following clause. At this moment, the introductory clause becomes a constituent of the main clause. It may then be embedded in a position of the main clause which requires a constituent in a specific syntactic function. For example, it suffices to delete the anaphoric demonstrative from E57 to get a relative construction like E23. E61, too, has the subordinate clause in the function of the absolutive actant of the main verb. Putting a sentence boundary after it would render the following sentence ungrammatical, as it then lacks an absolutive actant.

E61 Yaba te bếna du juámi tkásajulu ñala éktá ka. [child ERG all bird throw-PFV=AND] cross-PFV=SEP=AM path side LOC2 'All of the birds that the child released crossed to the other side of the path.'

The same goes for several of the above examples, including E39f for relative clauses serving as the complement of a postposition. In E40, both the resumptive demonstrative and the additional emphatic identifier are optional. Whether or not they are added, there is – as long as the sentence syntax is intact – no possibility of interpreting the relative clause as an independent clause.

As a last step, the resumptive demonstrative may even follow what is clearly a relative clause. In E24, S<sub>1</sub> must a relative clause because it is embedded in absolutive function. In this particular case, no left-dislocation is involved; the sole function of the demonstrative is to mark the final boundary of the relative clause. In E53, the resumptive demonstrative even ends the entire sentence.

### 5 Conclusion

Circumnominal relative clauses are not exactly rare in America. The construction is known not only from Chibchan languages, but also from the Yuman languages Mohave, Diegueño and Yavapai, from Navaho, Seri (Sonora, Mexico) and Gavião (Rondônia, Brazil) (Lehmann 1984, ch. III.1.3 and Lehmann 2014). The Cabecar relative clause, however, is special in several respects:

- It lacks any mark of subordination or nominalization.
- It lacks any mark that would signal the orientation of the clause and would thus contribute to the identification of its nucleus.
- Nucleus formation is governed by a hierarchy of semantic and grammatical constraints.
- Nucleus formation works in the same way whether the nominal in question is overt or empty and whether it is determined or undetermined.

### Abbreviations in glosses

1, 2, 3	first, second, third person	EXIST	existence verboid
AD	adessive	FIN	final (= purposive)
AM	autonomous motion	IN	inessive
AND	andative	INDF	indefinite
APPP	appropriate	INF	infinitive
ASC	ascensive	INSTR	instrumental
ASP	ascriptive	INT	interrogative
AUTH	authentic	IPFV	imperfective
<b>AVERS</b>	aversive	LOC	locative
CAUS	causative	MET	metexitive
CL.ARBUST	shrub class	NEG	negative
CL.ELONG	elongated class	NR	nominalizer
D.MED	medial demonstrative	NTR	neutral
D.MID	dynamic middle voice	PER	perlative
D.PROX	proximal demonstrative	PFV	perfective
DAT	dative	PL	plural
EMPH	emphatic	POS	positional
ERG	ergative	PRP	proprietive
EXCL	exclusive	PS	person(al pronoun)

RFL	reflexive	TEL	telic
S.PRF	stative perfect	TOT	total affectedness
SEP	separative	TRL	translative
SG	singular	VEN	venitive
SUPER	superessive		

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