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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 head 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 head 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.

Keywords: Cabecar, circumnominal relative clause, internal head, syntactic functions hierarchy, restrictiveness

1 Introduction

1.1 Prolegomenon

This article presents the basic grammatical properties of the relative construction of the Cabecar language of Costa Rica in plain terms.¹ Its primary purpose is, thus, purely descriptive. The general syntactic type of the Cabecar relative clause has been known for long in linguistic typology. It is in certain aspects that it may enrich typological theories and falsify some hypotheses on the (universal) syntax of the relative clause. Where the occasion arises, we will briefly refer to such theories, without any attempt to engage in discussions on formal syntax.

E1 will serve as an introductory example of a Cabecar relative clause. In all of the examples, brackets enclose the relative clause.

E1 Bá amí te chíchi m-á=sa Fernando ia su-á yís te. [2.SG mother ERG dog put/give-PFV=EGR Fernando DAT] see-PFV 1.SG ERG 'I saw the dog that your mother gave to Fernando.' (FOM)

The features to be noted include the following:

¹ We thank the Cabecar speakers named in §1.3 for their cooperation, the members of Martin Haspelmath's PhD student seminar for fruitful discussion, as well as the journal editor and two anonymous reviewers for help with improving our text.

- The relative clause contains the nominal expression here *chíchi* 'dog' which is its semantic head; there is no external head.
- There are no morphological or syntactic properties that would identify the (semantic) head.
- The relative clause has the same structure as an independent declarative clause. It lacks any morphological or syntactic features to mark the subordination.
- In the matrix clause, the relative clause occupies the syntactic function of a noun phrase in E1, it is the absolutive actant of the main verb.

The core section of this article, viz. §3, will analyze each of these features in some depth. In order to contextualize the properties of the relative construction in the rest of the language system, §2 will first present its grammatical prerequisites. In §5, we offer a brief comparison of the Cabecar and the Bribri relative constructions.

1.2 Basic 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, its only sister in the Viceitic subbranch of the Isthmian branch. It is the largest indigenous language of Costa Rica, spoken by approximately 14,000 people in several regions of the eastern interior of the country. 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. There is no grammar of the Cabecar language available yet. A dictionary (González & Obando 2019) and a grammar (González & Lehmann 2019) are underway.

Letters have the same phonemic values as in Spanish orthography, with the following exceptions: <l> is /l/, <y> is /dʒ/, the digraphs <pj tj kj> represent aspirated stops. Vowels may be marked by three diacritics: the underscore <_> marks nasality; the acute <'> marks high tone; the dieresis distinguishes particular vowels as follows: <\"a> is /\"a\/, <\"e> is /\"u/.

1.3 Sources of data

Examples have been drawn from a corpus of Cabecar texts and sentences that comprises a total of 45.955 running words.² They represent both of the principal dialects. The sources of the examples reproduced here may be described as follows:

- a) A set of Cabecar texts is listed at the end as primary sources. Of these, chicha and yebule are unedited oral productions, while the other three were composed. Duchi, ser and yebule represent the northern dialect, the other two texts, the southern dialect.
- b) Several examples were contributed by Freddy Obando Martínez (FOM), a speaker of the northern dialect from Chirripó, Cartago. A few of these were elicited as evidence for relative constructions, but most originated in different contexts. Some

² The corpus is described in detail in González Campos 2016, §5.2.1.

- similar examples are drawn from González & Obando 2019, devoted to the same dialect.
- c) Some examples were elicited from Fidelia Zúñiga Hernández (FZH) and Ronaldo Mayorga Fernández (RMF), both speakers of the southern dialect from Ujarrás, Puntarenas.

Thus, data from source #a represent natural oral and written discourse. Data from source #c were elicited by translation from Spanish. Data from source #b comprise a few examples of the same kind. These will be easily recognized as "linguist's sentences". However, most sentences from source #b were just produced freely in order to illustrate some lexical item and are used here because of the syntactic structure that they happen to display. To the extent possible, the text does not rely on grammaticality judgements. There are only two passages in the text saying that a deviation from a certain rule would render a sentence ungrammatical. In both of these cases, this was the unanimous judgement of the three informants identified.

2 Grammatical prerequisites

2.1 Some relativization terminology

Our terminology in describing relative clauses (cf. Lehmann 1984, 2003) in some cases does not take up terminological innovations where these fail to reflect conceptual improvements. This concerns the following items in particular:

A clause component provided for in the (structural) valency of its verb is the latter's **actant**.³

A relative construction has a conceptual center towards which the relative clause is oriented. The relative clause modifies this center semantically unless it is empty. If it is overt, it is represented by a **domain nominal** (Andrews 2007: 208). We will abide by common usage in calling this semantic center the **head** of the relative clause. The reader is warned that, in the case of a head-internal relative clause, this component is not the head in any structural sense. We are operating with a semantically-based concept which may or may not materialize as a lexical-nominal expression and which, in Cabecar, never materializes as a structural head.

Both the relative clause as a whole and its head constitute nominal expressions which will simply be called **noun phrases** (NPs), as indeed in most of the literature dedicated to relative clauses. For most other languages, it would be necessary to distinguish between a Determiner Phrase and the nominal expression forming the operand of the determiner. The term 'noun phrase' will be used to cover both of these categories in Cabecar. More on this in §3.1.3.1.

A relative clause can be adjoined or embedded. If **adjoined**, it is a co-constituent of its main clause. If **embedded**, it constitutes, together with its head, a nominal expression inside the main clause.

³ Such a component has been called an argument for some time. This term, however, is far from univocal. In Basilico 1996, e.g., any dependent of a verb is called its argument.

⁴ We would much prefer to distinguish terminologically between the concepts of a structural and a semantic head, but were strongly discouraged from doing so.

An **internal-head** relative clause is one which contains its semantic head as an NP occupying its own syntactic function. It may be adjoined (viz., preposed) or embedded. The embedded variety is called **circumnominal** (in analogy to pre- and postnominal).⁵

A **correlative** construction is an adjoined relative construction such that the relative clause contains a pronoun – often, an interrogative or indefinite one – functioning as a relative pronoun, while the main clause contains a pronoun – mostly, a demonstrative – indicating the same referent meant by the relative clause. It comes in two main varieties: If the relative clause is **preposed**, the relative pronoun accompanies an internal head, while the demonstrative anaphorically resumes the relative clause. If the relative clause is **postposed**, its head is in the main clause, accompanied by the demonstrative in cataphoric function.⁶ The construction is called correlative on the basis of the interrelation of the two pronouns shaping it.⁷

2.2 Clause structure

Major clause types in terms of the type of predicate are the verbal (E2), existential (E3), positional (E4) and ascriptive⁸ (E5) clause.

```
E2 Pedro te kalwá tuw-á.
Peter ERG bench deal-PFV
'Peter bought a bench.' (RMF)
```

- E3 Chimo tsó ñala kjấ jami skí-blấ.
 banana EXIST path edge AD five-CL.ARBUST

 'There are five banana plants at the edge of the road.' (González & Obando 2019 s.v. skíblấ)
- E4 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 ...' (⊂ E51)
- E5 jé rö kếgế kếgölö

 D.MED COP major guardian.spirit

 'he was a major guardian spirit' (yer_15)

The verb does not inflect for person. Number conjugation is rudimentary. It is afforded by the postverbal clitic julu, limited to verbs of motion and indicating plural and autono-

In several recent treatments (e.g. Basilico 1996), the term 'internally headed relative clause' is restricted to circumnominal relative clauses (de Vries 2002: 20-23 is hesitant about this). This is unfortunate because these are most similar to preposed relative clauses, to the extent of being indistinguishable from them in many practical cases and generally bearing a diachronic relation to them.

⁶ There are attempts in the literature (e.g., de Vries 2002) to treat the postposed relative clause as a variant of the postnominal one. This is not the place to refute these analyses.

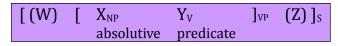
⁷ The term 'co(-)relative', introduced in Keenan 1985 and taken up, among others, in Culy 1990: 234, de Vries 2002: 21f and Andrews 2007, has designated different things depending on the author, has led to confusion with 'correlative' and is actually not needed.

⁸ The ascriptive clause uses a copula to ascribe the predicate to the subject. The copula is a verboid which inflects for a subset of verbal categories. The variants $d\ddot{a}$ and $r\ddot{a}$ are conditioned phonologically, the variant $r\ddot{o}$ (like other forms displaying \ddot{o} instead of \ddot{o}) is of the southern dialect.

mous motion for their absolutive actant. This marking will play a role in E34 – E36 below. All syntactic and semantic relations of noun phrases with the exception of the absolutive are marked by postpositions. In constructions involving an unmarked complement (absolutive of a verb, possessive dependent of a noun, complement of a postposition), constituent order is left-branching. The alignment of the actants of the transitive and intransitive verb in terms of case marking (i.e., by postpositions) follows the ergative system, while most "behavioral" aspects of grammatical relations follow the accusative system (the hierarchy of Figure 4 being one of the features of syntactic ergativity). The system of verb-governed postpositions is complicated by *wa* Dispositive. This is a postposition (and a function marked by it) which combines the functions of the ergative and the dative under complex conditions. 11

In the simple 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 E2 and E4. In Figure 1, W and Z may be anything, including other actants of Y. X is obligatory except with a few verbal categories. E6 illustrates the typical disposition of actants in a transitive clause.

Figure 1 Verbal clause



E6 Yís shtrí-wá taí jí táchí te. 1.SG tire-CAUS:PFV much D.PROX grandfather ERC 'This grandfather has taxed my patience.' (yer_18)

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

⁹ We relegate compliance with the wish of a reviewer to elaborate on the ergativity split to a footnote since it is complex, but immaterial to the argument. Ergative traits properly include the following: the absolutive is obligatory in most constructions, lacks case marking, has obligatory preverbal position and is indexed by verbal number, all of which is not true for the ergative. Accusative traits properly include the following: periphrastic constructions involving existential and positional verboids take a subject; phoric control in certain modal, purpose and causative constructions extends to the subject of an infinitive; the *agent noun* (§2.6; formally identical with the infinitive) is oriented towards its subject argument.

¹⁰The term designates "the one who disposes". Its Bribri equivalent is called agentive in Jara Murillo 2018, which term, however, does not fit the possessive function.

¹¹ Again, the details are complex, but immaterial to the grammar of relative clauses: The dispositive marks an actant of a verb or verboid, rather than an adjunct. Like the other marked complements, it does not appear in monovalent constructions. The actor is marked by the dispositive (instead of the ergative) in the following plurivalent verb constructions: with a middle voice verb in most tense/aspect/mood categories (e.g. E10, E20), with a subjunctive or nonfinite verb and in the causative motion verb construction (E39, E64). In verboidal constructions, the dispositive appears where one might expect the dative, viz. coding the possessor in possessive predications based on the existential verboid (E40) or on a positional.

2.3 Attribution

There are two kinds of attributes, nominal (or possessive) attributes (E7f) and modifiers formed by adjectives (E9) and by some other categories that behave syntactically alike. The latter will simply be called adjectival attributes. The nominal attribute precedes its head, as in E7.

```
E7 konó yéria
paca hunter
'hunter of pacas' (yer_00)
```

In general, an NP may be taken up by the demonstrative *jé*. This affords medial deixis and is the unmarked member of its paradigm. In textual anaphora across a sentence boundary, this pronoun may occupy a syntactic position which cannot be left open, as in E5. In many occurrences, however, it works as a resumptive following a semantically definite or generic NP (thus, not the nominal attribute of E7) inside a clause. This use is optional, but frequent in oral discourse; E19 and E53 below are examples of it. Here we note that it even occurs inside a nominal attribute construction, as in E8:

```
E8 aláklä (jé) jäyí
woman D.MED husband
'the woman's husband' (⊂ E43)
```

We will return in §4.2 to this resumptive in other syntactic constructions. Its use originates in left-dislocation; but in possessive attribution, it is grammaticalized to a kind of close syntactic phora that marks a syntactic relation (Givón 1976).

The adjectival attribute follows its head. It may be adjacent to it, as in E9a. 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 E9b. Other examples include E3, E12 and E50.

```
E9 a. jayí yakáá d-ế=ju=të
male robust emerge-PFV=AM=VEN
'the robust man came' (RMF)
b. jayí d-ế=ju=të yakáá
```

 jayí d-é=ju=të yakáá male emerge-PFV=AM=VEN robust 'there appeared a robust man' (RMF)

Apart from a plural marker for empathic nouns (e.g. in E19 below), there is no declension and no segmental means to signal attribution.

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. E6 features the proximal, E11 the medial demonstrative determiner. The same demonstratives that serve as determiners are also pronouns, i.e. substitutes for an entire NP. E5 is an example.

2.5 Subordination and nominalization

Derivational 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

E10 shows a declarative clause in absolutive function.

```
E10 bếng wa Rogelio sé-r dä Duchí júñé-r all DSP [Rogelio live-D.MID(IPFV) COP Chirripó] know-D.MID(IPFV) 'everybody knows that Rogelio lives in Chirripó' (FOM)
```

While the complement clause of E10 occupies the absolutive position in front of the main verb, E11 shows a very common alternative which may be characterized as 'heavy shift':

```
E11 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' (FOM)
```

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. E12 illustrates a complement clause in ergative function. The complement clause of E13 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') (FOM)
```

```
E13 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.' (FOM)
```

The complement clause may also depend on a noun, which it then precedes like a nominal attribute. Cf. E14 with E7.

```
E14 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.' (FOM)
```

As noted above, 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. E15 illustrates an extraposed content interrogative clause in absolutive function.

```
E15 Shk-ấ i su-a yí=bấ tú-r=kế sút_sút=sí rã. walk-IPFV 3 see-SNR [who=EXCL run-D.MID(IPFV)=IPFV2 jumping=AUTH COP] 'Let's go and see who jumps more often!' (FOM)
```

By the same rules as for dependent declarative clauses, a dependent interrogative may be *in situ*, as in E16a, or may be extraposed, as in #b.¹²

```
E16
         Daniel te
                                bá kaldu
      a.
                        maí
                                              chák-á.
         Daniel
                 ERG
                        [where 2.SG POS.stand] ask-PFV
         Daniel te
                       i chák-á maí
      h.
                                          bá kaldu
         Daniel
                  ERG
                        3 ask-PFV [where 2.SG POS.stand INT]
         'Daniel asked where you were.' (FOM)
```

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 *né* Emphatic, as in E17f.

```
kálbatiöglö=né
E17
                               ts-á=u=mi
                                                      duláglé të
                                                                     busí ia.
                      =EMPH transport-PFV=AM=AND boy
                                                              ERG
                                                                     girl DAT
      'This is the hat that the boy took away from the girl.' (FZH)
E18
      ¡Bá=né
                      yís
                             maléch-é káte!
                  te
      2.SG=EMPH ERG 1.SG
                            scare-IPFV POS.NTR
```

These are no complex sentences. However, they differ from an ascriptive sentence like E5 only by the copula appearing in the latter.

'You are the one who is scaring me!' (González & Obando 2019 s.v. né)

2.6 Orientation

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

- a) derivation of agent nouns and some other oriented deverbal nouns
- b) formation of the stative perfect.

As for #a, the suffix - \ddot{a} Subject-oriented nominalizer deserves some comment. This morpheme has two functions: it forms the infinitive and derives agent nouns in the construction [X_V - \ddot{a}]_N 'one who Xes'. An intransitive base yields a agent noun by itself. A transitive base is nominalized with its absolutive actant, as shown in E19.

¹²The interrogative particle $n\underline{a}$ is impossible with the clause in absolutive position of version #a, but optional after the extraposed variant #b.

```
E19 jilé tju-a-wá jé=né wa i júñé-r dä [something deal-SNR-PL] D.MED=EMPH DSP 3 know-D.MID(IPFV) COP 'the buyers are those who know' (FOM)
```

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

An agent noun only allows for a moderate degree of syntactic complexity, and only to this extent does it contrast with a relative clause headed by its actor. Like agent nouns in other languages, it categorizes its referent essentially instead of simply identifying it by some situation that it happens to be involved in. The point is briefly taken up in §3.2.

As for #b, the stative perfect is a form oriented towards the absolutive actant of the base. E20 is a construction whose predicate is a stative perfect form of a transitive verb. E21 shows the same form of an intransitive verb in attributive function.

```
E20 (ijé-wá wa) ju rä yố-lế
3.PS-PL DSP house COP form-S.PRF
'the house has been built (by them) / (they) have built the house' (FOM)

E21 ijé-wá tsó chíchi dú-lế=wa tắbi-ä
3.PS-PL EXIST dog die-S.PRF=TOT bury-SNR
'they are burying the dead dog' (González & Obando 2019 s.v. tấbiä)
```

The replacement of the ergative by the dispositive postposition and the optional use of the copula 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.

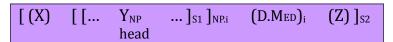
3 Relative constructions

3.1 Relative clauses with lexical-nominal head

3.1.1 General structure

The general structure of a Cabecar relative clause construction with lexical-nominal head is as shown in Figure 2.

Figure 2 Circumnominal relative clause construction



The relative clause S_1 depends on the main clause S_2 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 S_1 as a subordinate clause – let alone as a relative clause – or to identify its head Y. The latter is simply a nominal constituent of S_1 . S_1 is, thus, formally indistinguishable from any other unmarked subordinate clause, including in particular a finite complement clause (§2.5.1). If S_1 is peripheral to S_2 , S_1 may, indeed, even be structurally indistinguishable from an independent clause (§4.2). The relative clause is substantivized implicitly and thus functions as an NP (NP.i) in the main clause. Following Andrews 2007: 206, it will be called NP_{mat}.

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 E22f.

```
E22
      Duláglé të
                     kálbatiöglö ts-á=u=mi
                                                          busí ia.
                                  transport-PFV=AM=AND girl DAT
      boy
               ERG
       'The boy took the hat away from the girl.' (FZH)
      Kálbatiöglö ts-á=u=mi
                                           duláglé të
E23
                                                       busí ia
                   transport-PFV=AM=AND boy
      [hat
                                                    ERG girl DAT]
               yul-ë-gé
      (jé)
                                sá të.
      D.MED
               search-IPFV-IPFV2 1.PL ERG
       'We look for the hat that the boy took away from the girl.' (FZH)
```

The absolutive actant of the main verb in E23 represents a referent identified by the role it plays in the situation designated by the subordinate clause. It is optionally taken up in the main clause by the medial demonstrative $j\acute{e}$. This is a feature of several examples to follow and will be attended to in §4.

The relative clause may be of any of the clause types introduced in § 2.2. E24 is one of the relatively rare occurrences of an ascriptive relative clause.

E24 Dísälélé jé rä bikákla dúi sé-r díklá kjá jami. [kingfisher D.MED COP ceremony.master bird] live-D.MID(IPFV) water edge AD 'The pygmy kingfisher, which is the bird of the master of ceremonies, lives by a river bank.' (González & Obando 2019 s.v. dísälélé)

E25 features an existential, E51 a positional relative clause. Since the full gamut of internal variability of the relative clause is only reached if its predicate is verbal, the discussion will focus on this clause type.

3.1.2 Formation and syntactic function of the head

There are no external-head or adnominal relative clauses in Cabecar. Deferring the discussion on the determination of the domain nominal to §3.1.3.1 and 3.1.4, we here only note that it may be represented by a lexical-nominal expression, by some pronoun or may be zero. In each of these cases, Y has some syntactic function in S_1 of Figure 2. The following set of examples illustrates the possible syntactic functions for the head in the relative clause. In the non-verbal clause of E25, it is the complement of the existence verboid.

```
E25 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' (ser_14)
```

In E26, the head is the absolutive actant of an intransitive verb.

```
E26 ¿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?' (FOM)
```

In E27 (and likewise in $E49^{13}$), the head 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 2019 s.v. paláá)
```

In all of the above examples, the order of constituents in the relative clause is unaffected by the head 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 **head formation**.

Other actants can be head, too. If the subordinate clause contains more than one noun phrase apt for head function, a strategy for its identification is called for. The two main dialects of Cabecar differ in this respect. We will first briefly review the strategy of the southern dialect, which is relatively simple, and then devote more space to the complex northern strategy.

E22, E23, E28 and E29 represent the southern dialect. In E28, the head is the ergative actant, and in E29, the indirect object of the clause seen in E22.

```
E28
      Duláglé të
                     kálbatiöglö ts-á=u=mi
                                                          busí ia
               ERG
                                  transport-PFV=AM=AND girl DAT]
      [boy
              yul-é-gé
      (jé)
              search-IPFV-IPFV2 1.PL ERG
      'We look for the boy who took away the hat from the girl.' (FZH)
E29
                kálbatiöglö ts-á=u=mi
                                                     duláglé të
      Busí ia
      [girl DAT hat
                             transport-PFV=AM=AND boy
                                                              ERG]
              yul-ë-gé
      (jé)
                                sá të.
              search-IPFV-IPFV2 1.PL ERG
      D.MED
      'We look for the girl from whom the boy took away the hat.' (FZH)
```

The crucial difference between the three examples E23, E28 and E29 resides in the clause-initial position of the head. It is demonstrably not the head of a postnominal relative clause, but still an internal head. This is evident from its postposition, marking its role inside the relative clause, independently both of its head role in the relative clause and of the syntactic function of NP_{mat} . Since the selection restrictions of the main-clause predicate in this case do not determine a particular head formation in the relative clause, the relative clause would be ambiguous between the readings of E23, E28 and E29. The informant here disambiguates these readings by putting the head in first position. As will be seen in §5, the same strategy exists in the neighbor language Bribri.

The northern dialect works differently here. In E27, the head in absolutive function is not in clause-initial position, nor is the head in the function of a temporal adverbial in E30.

¹³ The selection restrictions of *jiä* 'put in/on' require an article of clothing, not a person or body part, in absolutive function.

```
E30
      (Jé)
               María
                       kóná
                                          duás
                                                   ka
      [D.MED Mary
                       be.born-D.MID-PFV
                                          summer PER]
              ká
                     júñé-r
                                        s'
      (jé)
                                              wa
                                              DSP
      D.MED
              NEG
                     know-D.MID(IPFV)
                                       1.SG
      'I don't know the year that Mary was born in' (González & Obando 2019 s.v. kua)
```

In the northern dialect, the position of the head in the relative clause does not matter; all of E23, E28 and E29 are synonymous, and so are E31a and b.

```
E31
          Chíchi te wíshka su-á
                                        (jé)
                                                miné=ju.
          [dog ERG cat
                             see-PFV]
                                       D.MED
                                                go:PFV=AM
          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.' (FOM)
```

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 E10f, the subordinate clause is a complement clause.

A few verbs allow concrete objects and propositions as actants. This is the case of the ergative actant of the verb $j\underline{a}n\underline{e}w\underline{a}$ 'make laugh'. E58 below is, indeed, syntactically ambiguous, as there are no segmental or suprasegmental means to mark the difference between a relative clause and a complement clause. The verb $s\underline{u}\underline{a}$ 'see' takes a concrete or propositional object as absolutive actant. Again, a construction like E32 may remain ambiguous.

```
E32 I su-á=rá
3 see-PFV=CLM

kalwá ts-é bité-r=të i kuta te.
[bench transport-IPFV come-D.MID(IPFV)=VEN 3 sister.of.male ERG]
'He could see (that) his sister was bringing a bench.' or 'He could see his sister(, who was) bringing a bench.' (historia_12)
```

As the example renders plausible, the semantic difference associated with the alternate translations is minimal. Since head formation is a purely semantic process in Cabecar, it probably does not happen in constructions like E32.

It is, however, crucial that the subordinate clause here be in the imperfective aspect, which fits a situation happening simultaneously with the matrix situation. Things are different with a subordinate clause in perfective aspect, as in E33.

```
E33 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.' (= E1)
```

The perfective aspect creates an anterior temporal relationship with the matrix. The reading of the subordinate clause as a complement clause is therefore excluded, and head formation is forced.

Such are the contextual conditions under which a head is formed in the relative clause. That nominal expression is chosen as head which satisfies the constraints of the hierarchy of Figure 3, which is run through from top to bottom.

Figure 3 Hierarchy of constraints determining head assignment

1	grammatical features of the superordinate predicate
2	selection restrictions of the superordinate predicate
3	hierarchy of syntactic functions (Figure 4)

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 head formation according to Figure 3, either, the sentence is ungrammatical.

The series of E34 - E36 features three NPs 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.

```
E34 Jäyí te kốchi-wá tju-á busí <u>ia</u> miné=julu.
[man ERG pig-PL deal-PFV girl DAT] go:PFV=AM:PL
'The pigs that the man bought for the girl went away.' (FOM)
```

- E35 Jäyí-wá te kốchi tju-á busí <u>ia</u> m<u>i</u>né=julu. [man-PL ERG pig deal-PFV girl DAT] go:PFV=AM:PL 'The men who bought the pig for the girl went away.' (FOM)
- E36 Jäyí te kốchi tju-á busí-wá <u>ia</u> m<u>i</u>né=julu. [man ERG pig deal-PFV girl-PL DAT] go:PFV=AM:PL 'The girls for whom the man bought the pig went away.' (FOM)

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 head, independently of its syntactic function (condition 3).

In E37, 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 head irrespective of its syntactic function.

```
E37 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.' (FOM)
```

Finally, if the upper constraints of Figure 3 do not determine head 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 ~ dispositive actant	
indirect object	
other syntactic function	

In E33, 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 head of E33 must be the absolutive actant, as in E31. 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 E38, 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.

```
E38 Jäyí-wá te kốchi tju-á busí-wá <u>ia</u> m<u>i</u>né=julu.
[man-PL ERG pig deal-PFV girl-PL DAT] go:PFV=AM:PL
"The men who bought the pig for the girls went away." (FOM)
```

The bottom level of Figure 4 includes complements of the verb governed through other postpositions and adjuncts like the temporal adjunct of E30 and the benefactive adjunct of E38. No rules of grammar have been found to hierarchize these.

The position of the dispositive actant in Figure 4 is demonstrated by the series E40 – E39. These examples are unambiguous; none of the other nominal components of the relative clauses can be head.

- E39 Aláklä wa tsirú d-é min-é=ju. [woman DSP cocoa emerge-PFV] go-PFV=AM 'The woman who brought cocoa left.'
- E40 Aláklä wa chíchi tsó min-é=ju. [woman DSP dog EXIST] go-PFV=AM 'The dog that the woman has went away.'
- E41 Aláklä wa tsirú d-é yís yaba ia jé min-é=ju. [woman DSP cocoa emerge-PFV 1.SG child DAT] D.MED go-PFV=AM 'The woman who brought my child cocoa left.'
- E42 Jäyí-wá wa kốchi tó-n-á busí-wá ia min-é=julu. [man-PL DSP pig deal-D.MID-PFV girl-PL DAT] go:PFV=AM:PL 'The men by whom the pig was bought for the girls went away.' (FOM)

Like E37, E39 shows that before the syntactic function hierarchy becomes relevant, the semantic requirements must be met. Like E31 and E33, E40 shows that the absolutive takes precedence over the dispositive. Like E38, E40 shows that the dispositive takes precedence over the indirect object. E42 is the passive version of E38; the dispositive has the same priority over the adjunct as the ergative of the active version. The dispositive occupies the same level as the ergative in Figure 4 because these two never contrast in one clause.

To complete the picture of the syntactic functions of the head, E43 shows the head in the function of a possessive attribute.

```
E43 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 2019 s.v. jäyí)
```

In E43, the head is taken from the lowest level of Figure 4 although its highest level would seem to be available, too. Selection of *jäyí* for head is precluded by two properties of the sentence not accounted for by Figure 3: Both the internal dissociation of the pos-

sessive construction as described in §2.3 and the aspect of the relative clause verb would be unmotivated if *jäyí* were the head.

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

Table 1 Frequency of syntactic functions of the head

absolutive	43%		
ergative	20%		
adjuncts	16%		
ascriptive	11%		
dative	5%		
genitive	2%		
dispositive	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 head formation, there is no difference between a relative construction and the kind of attribution seen in E21: 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 NP_{mat}

3.1.3.1 Number and determination

A relative clause may bear the plural suffix, as in E44. The subordinate clause of E44 is oriented towards the absolutive actant of the existential verboid and substantivized.

```
E44 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-SNR
```

'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,') (González & Obando 2019 s.v. $p\underline{\phi}$)

In contrast to simpler nominals (§2.4), the nominal constituted by a relative clause cannot be determined by a determiner preceding it.¹⁴ E45 may serve as a test case.

```
E45 jéra jé s<u>i</u>wá sh-é=gé rö k<u>ó</u>a
then [D.MED knowledge say-IPFV=IPFV2] COP different
'then the knowledge [song] to be recited is different.' (chicha_7.4)
```

The relative clause is restrictive, so the determiner at its beginning relates semantically to NP_{mat}. Structurally, however, it is a coconstituent of the head. Proof of this is that only a nominal expression can be the first constituent of a relative clause preceded by a determiner. For instance, inserting $k\acute{q}r\acute{q}\acute{q}$ 'always' before $siw\acute{q}$ in E45 would be fine in an

¹⁴ De Vries (2002: 136) has a general principle to exclude this.

independent clause ('they always recite a song'), but renders E45 ungrammatical precisely because the determiner cannot combine with a clause (or with an adverb, for that matter). An analogous argument applies to E49 below. The syntax here is clearly countericonic: In the structure, the determiner combines with the head. Semantically, however, it cannot be determining it because this would force a non-restrictive reading on the construction, while relative clauses like E45 and E49 are clearly restrictive. Instead, the semantic determination relates to NP_{mat} . This topic will be taken up in §3.1.4.

E46 might appear to be counterevidence to the generalization that a Cabecar relative clause cannot be the operand of a preceding determiner.

```
E46 Yís te jé i sh-é r-á=mi s-á.

I ERG D.MED [3 say-IPFV emerge-PROG=AND] feel-PFV

'I heard that, what they have been saying.' (FOM)
```

Here, however, there is an obligatory pause after the demonstrative. It is not a determiner, but a pronoun cataphorically anticipating the nominal expression to follow.

3.1.3.2 Syntactic function

In all of the examples E23 – E46, the syntactic function of NP_{mat} is the function of the absolutive actant of the main verb. In those examples where the relative clause introduces the sentence, the sentence construction almost looks like asyndetic parataxis. However, it is still unambiguously a subordinative construction because NP_{mat} occupies the absolutive slot of the main verb.

The syntactic function born by NP_{mat} is, however, not restricted; it may be any syntactic function. In E47 (as in E58 below), it is the ergative actant; in E48, it is an instrumental adjunct; in E49, it is a possessive attribute.

```
te i duä-wá
E47
          jék k-á=ká
                                            ia i sh-á
      [3 RFL lift-PFV=ASC] ERG 3 cousin-PL DAT 3 say-PFV thus
      'having gotten up, he spoke thus to his cousins' (yébulé 61)
E48
      Yís
                           te yalá ti-á
                                            j-á=mi
            nua
      1.SG maternal.uncle ERG oak cut-PFV go-PFV=AND
            te bák péit-á
                               (jé(=né))
      [1.SG ERG axe lend-PFV] D.MED=EMPH INSTR
      'My uncle went to fell the oak with the axe I lent him.' (FOM)
E49
              datsí ji-ő=gé
                                                   rö batsé
                                        pa
      [D.MED fabric put.in-IPFV=IPFV2] body/color COP red
      'the color of the clothes he wore was red' (yer_14)
```

Finally, in E57 below, NP_{mat} functions as a local adjunct. Like for any other NP, all syntactic functions except the absolutive are marked by a postposition. Together with the number marking demonstrated in §3.1.3.1, these facts corroborate the analysis that the

¹⁵ In E30, too, the optional determiner goes with the proper name.

 $^{^{16}}$ It may be recalled that the prosody of familiar postnominal relative constructions is countericonic in the same way. In the restrictive construction *the girl that we met*, the definite article relates semantically to NP_{mat}. This, however, is not matched by the prosody: A systematic pause is possible after the head noun, while a pause preceding it would just be a hesitation.

circumnominal relative clause functions as an NP in the matrix, with the peculiarity that it cannot be determined.

3.1.4 Determination of the head and restrictivity

There are no constraints on the constitution of the internal head. In E50, the head is the discontinuous nominal *díklá mañá-täwá* 'three rivers'.

```
E50 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 head. If it lacks a determiner of its own, as in E23 - E30 and some other examples, the relative clause may be restrictive. Several languages have been shown not to admit definite determination of the head of a restrictive relative clause, especially if the head is internal; cf. among others Gorbet 1976 for Diegueño, Williamson 1987 for Lakhota and Boyle 2016 for Hidatsa. On the basis of such empirical evidence and following earlier proposals, a principle according to which the head of a restrictive relative clause cannot bear definite or generic determination is postulated in Lehmann 1984, ch. V.2.2. Such a principle presupposes iconicity with regard to the position of the determiner. Adnominal relative constructions in which a definite determiner is clearly a co-constituent of the head have been known for some time (de Vries 2002: 63). Cabecar now falsifies the principle for circumnominal relatives, too, for which it is claimed in Basilico 1996 and de Vries 2002: 38 *et pass.*, among others.

In E47, the head is a personal pronoun representing an established referent in the universe of discourse. In E51, the head of the relative clause is both determined by the possessive pronoun and represents an established referent. The head of the relative clauses of E24 and E52 has generic reference. The head of the relative clause of E53 is a proper name. In all of these cases, the relative clause is non-restrictive.¹⁷

```
E51 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)
```

E52 Tsibấrkä ká kia-r jí yế wấ [mountain.cherry NEG want-D.MID(IPFV) what TRL] fruit

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

'The fruit of the mountain cherry tree, which is good for nothing, is eaten by animals.' (González & Obando 2019 s.v. tsibárkä)

E53 Busúbulu jé rö jíröwák kếgölö jém<u>i</u> tkabế wágế [Busubulu D.MED COP animal guardian.spirit and snake boss] 'Busubulu, who is the guardian spirit of the animals and the boss of the snakes,

¹⁷ Cabecar thus clearly falsifies a possible generalization (Lehmann 1984: 278, de Vries 2002: 35) that circumnominal relative clauses could not be non-restrictive.

```
ká wa káwő mé-n-á jíröle kt-ö-glö
NEG DSP mandate give-D.MID-PFV [something kill-SNR-FIN]
is not going to allow [them] to kill anything.' (yer_36)
```

However, as was seen in §3.1.3.1, a head preceded by a determiner is compatible with a restrictive interpretation. Analogous evidence is provided by the semantically definite pronominal heads of E44, E49, E58f and E64f. The difference between restrictive and non-restrictive relative clauses is 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 head is a personal pronoun may (E44) or may not (E47) be restrictive. The restrictive or non-restrictive modification of Y by S_1 in Figure 2 is produced only at the level of sentence semantics and discourse.

Given these facts, the semantic operations involved in the interpretation of a subordinative construction as a relative construction may be systematized as follows:

- (1) On the basis of the structure common to complement clauses and relative clauses, such an embedded clause is interpreted as a deverbal nominal which may or may not be oriented.
- (2) The embedded clause is interpreted to be oriented towards one of its nominal components, which thus becomes its head, if syntactic and semantic properties of the context (§3.1.2) force this operation.
- (3) If the head is by itself definite or generic, the resulting relative clause is non-restrictive. If it is accompanied by a determiner of this function, an interpretation of this configuration as iconic yields a non-restrictive relative clause, too.
- (4) In the latter case, the scope of the determiner may be reassigned as relating to NP_{mat} instead of the head. The head itself then comes out as devoid of a determination just as if there was no determiner in the first place. In this case, the relative clause is interpreted as restrictive.

The point here is that restrictive interpretation of a relative clause is subject to more conditions that non-restrictive interpretation. There is a commonly accepted universal (Lehmann 1984: 279, de Vries 2002: 35) that if a language has non-restrictive relative clauses, it has restrictive relative clauses. In view of the above, although Cabecar does not actually falsify this universal, it does throw doubts on it.

3.2 Free and adverbial relative clauses

There are what are commonly called headless and light-headed relative clauses (Citko 2004). However, instead of a binary division, a series of constructions containing pronominal heads of increasing explicitness is found.

Since there is no mechanism to mark the head of a relative clause, a **zero head** would only be recoverable in two situations: Either it is a clause component which leaves an identifiable gap since it can only be omitted in a relative clause. Or it is recoverable on a semantic basis. We will first look at the first alternative. The second alternative applies to adverbial relative clauses, discussed further below.

The complement of a postposition is obligatory under all circumstances; there is no postposition stranding. There is, therefore, no question of omitting only the NP of a verb dependent marked by a postposition. From among actant functions, the postpositional phrases functioning as dispositive and indirect object are optional, so their omission

would not leave an identifiable gap. The function of the covert head in a headless relative construction would have to be absolutive or ergative. However, the absolutive cannot remain covert in principle (E19 and E58). The ergative, too, is inomissible in relative clauses. As an example, consider E54f.

```
E54 Naké yaká kät-ế kukä-lế.
mantled.howler flesh eat-IPFV roast-S.PRF
'Howler monkey meat is eaten roasted.' (Lit.: '<they> eat howler monkey meat roasted') (González & Obando 2019 s.v. naké)
```

In an active clause in imperfective aspect like E54, the ergative actant is omissible if unidentified. The attempt, however, to convert E54 into a relative clause whose head in ergative function is zero, as in E55, fails.

```
E55 Yís wa naké yaká kät-ế kukä-lế sú-lế.
I DSP [mantled.howlerflesh eat-IPFV roast-S.PRF] see-S.PRF
'I have seen that howler monkey meat is eaten roasted.' (FOM)
```

E55 only has a complement-clause interpretation as indicated; it cannot mean 'I have seen some who eat howler-monkey meat roasted.' There are two grammatical solutions to this expression problem. One consists in resorting to an agent-noun construction (§2.6) instead of a relative clause, as in E56.

```
E56 Yís wa naké yaká kät-ä-wá sú-lḗ.

I DSP [mantled.howlerflesh eat-SNR-PL] see-S.PRF

'I have seen eaters of howler monkey meat.' (FOM)
```

A close comparison of E56 with E55 reveals that the informant omitted the secondary predicate, evidently in consonance with the function of the agent noun to categorize its referent. The other solution preserves the relative clause, but not the empty head, and is illustrated by E60 below.

What remains as a headless relative clause is the adverbial relative clause. E57 lacks a head of the general meaning 'place'.

```
E57 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?' (FOM)
```

Adverbial relative clauses, viz. local, temporal and manner clauses, differ generally from plain relative clauses in their reduced freedom of choice for the syntactic functions of the head and NP_{mat} : 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) head to have the same function as the entire clause; and for headless adverbial relative clauses this is normally the only possibility. Consequently, the zero head in E57 poses no interpretation problem: it must be a local adjunct.

In E58f, the head is minimally overt.

```
E58 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 2019 s.v. jañéwa)
```

```
E59 Ijé te i shá jé rä chấklế.
[3.SG ERG 3 say:PFV] D.MED COP right
'What he said is right.' (González & Obando 2019 s.v. chấklế)
```

E58f differ in the presence of the resumptive demonstrative in E59. In both, the head is minimally present in the form of the third person pronoun, taking the position of the absolutive actant. This may count as a light head, but a minimal one, as it is an obligatory filler of this position. Observe, incidentally, that these constructions are syntactically ambiguous between a relative-clause and a complement-clause reading (cf. §3.1.2). With a complement-clause reading, E58 would translate as '(the fact) that our professor said it made us laugh'.

A slightly heavier head may be provided for E58 as in E58'.

```
E58'. Sä yuä te ji-lé shá te sá jañé-wá. [1.PL instructor ERG what-ever say:PFV] ERG 1.PL laughter-CAUS:PFV 'Something our professor said made us laugh.' (González & Obando 2019 s.v. jaña)
```

E58' differs formally from E58 only in the substitution of the personal pronoun by the corresponding indefinite pronoun. The semantic difference between them is minimal. One must not be mislead by the interlinear glosses of the two pronouns involved: i in E58 is an expletive element whose semantic definiteness is ignored, and $jil\acute{e}$ in E58' is both lexicalized to mean 'thing' and grammaticalized to mean 'something, anything', as in E19. On balance, E58 and E58' are close to synonymous. Cabecar does not appear to possess the indifferent (a.k.a. free choice) relative construction as a specific construction type.

Likewise, the above problem of converting E54 into a relative clause requires an indefinite light head as in E60.

```
E60 Yís wa manéle te naké yaká kät-é kukä-lé sú-lé. I DSP [somebody ERG mantled.howler flesh eat-IPFV roast-S.PRF] see-S.PRF 'I have seen some who eat howler monkey meat roasted.' (FOM)
```

The following light-head relative clauses have the shape of a content interrogative clause (§2.5.2). The interrogative pronoun represents the ergative actant in E61, and the absolutive actant in E62.

```
E61
      Sá
             të
                   yírö
                         të
                              kálbatiöglö ts-á=u=mi
                                                                   busí ia
                   [who ERG hat
      1.PL
            ERG
                                           transport-PFV=AM=AND girl DAT]
      yul-ë-gé.
      search-IPFV-IPFV2
      'We search the one who took away the hat from the girl.' (FZH)
E62
      Iírö
                            duláglé të
            blá=wa
                                           busí
                                                 yíga
      [what steal:PFV=TOT boy
                                    ERG
                                           girl
                                                 AVERS]
      (ié)
               ku-á
                       sá
      D.MED find-PFV 1.PL
                              ERG
       'We found what the boy took away from the girl.' (FZH)
```

In E63, the head is represented by a local interrogative adverb; and so the relative clause also has the function of a local adverbial in the main clause.

```
kégara i d-ő=gé=ju mái sá yébl-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 lighthead adverbial relative clauses.

Finally, the head may be represented by a demonstrative pronoun, as in E64f.

```
jé wa tsirú dế jé rä yís jayí [D.MED DSP cocoa emerge:PFV] D.MED COP 1.SG husband 'he who brought cocoa is my husband' (FOM)
ñé jéi bäl-á=wa ia i te i shá: [D.AUD RFL hide-PFV=TOT] DAT 3 ERG 3 say-PFV 'to that one who had hidden himself, they said (it):' (historia_15)
```

Observe, again, that despite the definite determination of the head, the relative clause of E64f is restrictive; cf. §3.1.4.

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. (E4 presented above as a declarative sentence is, actually, a relative clause in its text, viz. in E51.) 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

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 . E66 - E69 illustrate what is meant.

```
kétkö vu-á
E66
      jukábata jémi yëlë
      arrow
                 and
                       long.arrow?
                                         form-PFV
                                                   3 ERG
       'The arrows and long arrows he formed'
                     tágölö tëlé wa , jé
                                             tsó
                                                    tkë-lë
                                                              jié-wá
      bactris.gasipaes piece ripe INSTR D.MED EXIST plant-S.PRF 3.PS-PL DSP
       'with pieces of ripe peach-palm that they had planted' (lit.: '... those they had
      planted.') (yer 03)
```

E67 Kế mạtsu rä bế kếklä , jé wa sä wếiká-lế. Kế-mạtsu COP demon primordial D.MED DSP 1.PL mistreat-S.PRF 'Kế-matsu is a primordial demon who had mistreated us.' (lit.: '... that one had mistreated us.') (González & Obando 2019 s.v. *matsu*)

In both E66 and E67, S_1 contains a nominal expression representing a new referent. S_2 takes this up 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 E67 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 E66 nor the demonstrative of E67 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 head 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 E66, 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. E68 is an isolated example sentence from a dictionary entry.

```
E68 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 2019 s.v. tiä)
```

One may construct a preceding context for E68 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 E68 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 an internal-head relative clause. It is left-dislocated and resumed by the demonstrative $j\acute{e}$ in the main clause; so it is a preposed relative clause. Likewise, the initial clause of E69 introduces a specific referent about which little

new is being said, fulfilling thus the text-semantic condition for its reanalysis as a relative clause.

E69 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. E19 is a standard example. E53 shows that it even happens inside a relative clause. Likewise, in the second line of E70, the clause from which the topic is left-dislocated is a complement clause. The first line of E70 exhibits the same structural ambiguity as E68. If the introductory clause is analyzed as a circumnominal relative clause, this might even be non-restrictive.

```
E70
      sá
            kéklä-wá
                         te i su-á
                                        jé
                                              te i sh-ë
      [1.PL ancestor-PL
                         ERG 3 see-PFV] D.MED ERG 3 say-IPFV
                             wäktä ié
          iér bata jula
                                          rä ká
      3
                  arm/hand face
                                   D.MED COP space/time worthless PRP
          breast
      '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. E71 is an example.

```
E71 Yawa te du ju-á=mi (jé) tk-á=sa=ju díklấ 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.' (FOM)
```

Similar examples are E23, E28, E29, E30 and E62.

A different factor favoring the reanalysis is referential semantics at the text level. In E72, S₁ is most plausibly analyzed as a left-dislocated relative clause.

```
E72 sériké sé-r sálwí=sí jé rä i bata jékjé [storm.boy feel-D.MID(IPFV) wild=AUTH] D.MED COP 3 tip definitely 'The storm boy who is the wildest is definitely the youngest.' (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 E25 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 E72 is indeed a relative clause.

Figure 6 formalizes the reanalysis envisaged.

Figure 6 Reanalysis of paratactic construction as relative construction

Input	[X _i] _{S1}	[<i>jé</i> _i] _{S2}	
	introductory clause	resumptive clause	
Output	$ \big[\big[\big[\dots X_i \dots \big]_{S1} \big]_{Nom.i} $	(jé _i)] _{S2}	
	relative clause	main clause	

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 E69 to get a relative construction like E25. E73, 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.

E73 Yaba te bếng 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.' (FOM)

The same goes for several of the above examples, including E47f for relative clauses serving as the complement of a postposition. In E48, 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.

Another decisive difference between the function of a clause as a declarative sentence and as a relative construction and, thus, as a component of a referential expression lies in the semantic scope of determination and quantification. As long as the clause is a sentence, determiners and quantifiers cooccurring with the head can only have scope over it. As soon as the relative clause is a nominal expression, determiners and quanti-

¹⁸De Vries (2002: 38) treats the lack of a resumptive pronoun after a circumnominal relative clause as an empirical generalization. Later on (p. 146), he seems to recognize that it is actually a diagnostic feature that distinguishes circumnominal from preposed correlative clauses.

fiers may have semantic scope over this expression (step 4 in § 3.1.4). The semantic difference becomes palpable in E73: the sentence does not, of course, imply that the child released all of the birds.

As a last step, the resumptive demonstrative may even follow what is clearly a relative clause. In E26, S_1 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 E63, the resumptive demonstrative even ends the entire sentence.

5 A glance at Bribri relative constructions

The Bribri language is not only the closest genetic affiliate of Cabecar, but has also been the closest neighbor and contact partner of southern Cabecar for several centuries. It has three dialects. The variants of the relative construction of the dialect of Salitre-Cabagra are described in Wilson 1984. One of these, the correlative construction, is described for the dialect of Coroma in Coto-Solano et al. 2016. The same dialect is the object of Jara Murillo 2018. From among the similarities between the Cabecar and the Bribri relative construction, the following deserve being singled out:

- (1) All of the variants of the relative construction in Bribri share an internal head. 19
- (2) They also share with the Cabecar relative construction the lack of any mark of subordination, the similarity between the relative clause and the complement clause and an optional, but frequent resumptive demonstrative following the relative clause in the main clause.
- (3) All the Bribri construction variants share a strong tendency for the relative clause to precede the main clause, although there are, for all dialects, at least some examples with center-embedded relative clauses.²⁰ In Cabecar, too, initial relative clauses may be most frequent.

The main differences from the Cabecar construction are the following:

- (1) The head has mostly initial position in the relative clause, and obligatorily so in the Salitre-Cabagra dialect if the preposed relativized NP is resumed by a demonstrative in the matrix. In Cabecar, the position of the internal head does not matter in the northern dialect, while it is clause-initial in the southern dialect. This is the dialect that has had most contact with Bribri. And both of these varieties have had more contact with Spanish than the other dialects.
- (2) Bribri has an interrogative proform, used as pro-adverb 'where' and as pro-adjective 'which', which (apart from introducing local clauses like E63 above) can follow the

¹⁹ Wilson (1984) and Jara Murillo (2018: 8, 205) analyze the preposed relative clause as prenominal.

²⁰ Such examples of the Coroma dialect are in Coto-Solano et al. 2016 (*passim*) and Jara 2018: 206. For the Salitre-Cabagra dialect, Wilson (1984: 181, 196) postulates a constraint that preposing of the relative clause is obligatory, in the face of his own examples (p. 193f) to falsify this.

- internal head, thus identifying it.²¹ Although Cabecar possesses a similar (though not cognate) interrogative proform, this has no function in relative constructions.
- (3) All Bribri dialects have a correlative construction where the relative clause contains the head marked by this interrogative, precedes the main clause and is resumed there by a demonstrative.²² The sequence of relative clause and main clause is convertible only if the former is adverbial (like 'there ... where'). Cabecar has no such construction.

All in all, Bribri and Cabecar share the general structure of the relative construction and several of its variants. Apart from differences in the rigidity of constraints, the main difference lies in the Bribri correlative construction. This can be regarded as a marked variant of the input construction of Figure 6. Apart from this, a unified genesis of the relative construction may be assumed for the Viceitic languages. Moreover, while demonstrative forms are the same for determiners and pronouns both in Bribri and in Cabecar, Bribri determiners follow their head nominal. In a Bribri version of E68 – E70, the demonstrative following the relative clause may be interpreted as a determiner. Thus, Bribri determiner syntax may foster integration of the erstwhile preposed relative construction into the main clause (Figure 6) more than in Cabecar.

6 Conclusion

Circumnominal relative clauses are much rarer worldwide than adnominal ones (Dryer 2013). They do, however, occur in all continents except Europe and constitute the dominant strategy in several languages of America. The construction is known not only from Chibchan languages, with Rama among them, 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 shares with most of these the lack of any mark of subordination or nominalization. Moreover:

- It lacks any structural property that would signal the orientation of the clause and would thus contribute to the identification of its head.
- Head formation is governed by a hierarchy of semantic and grammatical constraints.
- Head formation or orientation of the relative clause works in the same way whether the nominal in question is overt or empty and whether it is determined or undetermined.
- Determination of the head is free, but bears no relation to a restrictive or non-restrictive interpretation of the relative clause.

²¹ Jara Murillo 2018: 147 has an example where the head in absolutive function is not only followed by the interrogative pronoun, but additionally by the personal pronoun immediately preceding the governing verb. Since the latter cannot form a syntagma with the head nominal and would normally by itself occupy the absolutive position of the verb, the analysis of this construction remains unclear.

²² Note, however, that this is not the construction dubbed 'correlative' in Coto-Solano et al. 2016.

²³ While circumnominal relative clauses are attested in languages with any basic word order, languages with a dominant circumnominal relative clause tend to be OV languages. S. Hawkins 2004 on processing of such structures.

All in all, interpretation of a Cabecar nominalized clause as a relative clause is more a matter of semantics than of grammatical constraints.

Abbreviations in glosses

1, 2, 3	first, second, third person	INDF	indefinite
AD	adessive	INSTR	instrumental
AM	autonomous motion	INT	interrogative
AND	andative	IPFV	imperfective
APPP	appropriate	LOC	locative
ASC	ascensive	NEG	negative
AUTH	authentic	NTR	neutral
AVERS	aversive	PER	perlative
CAUS	causative	PFV	perfective
CL.ARBUST	`shrub class	PL	plural
CL.ELONG	elongated class	POS	positional
CLM	culminative	PRP	proprietive
COP	copula	PS	person(al pronoun)
D.MED	medial demonstrative	RFL	reflexive
D.MID	dynamic middle voice	S.PRF	stative perfect
D.PROX	proximal demonstrative	SEP	separative
DAT	dative	SG	singular
DSP	dispositive	SNR	subject-oriented nominalizer
EMPH	emphatic	SUPER	superessive
ERG	ergative	TEL	telic
EXCL	exclusive	TOT	total affectedness
EXIST	existence verboid	TRL	translative
FIN	final (= purposive)	VEN	venitive
IN	inessive		

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