~ DOSSIER ~
ADPOSICIONES
Artículo

Postpositions in Cabecar

Postposiciones en cabécar

Christian Lehmann
christian.lehmann@uni-erfurt.de
https://orcid.org/0000-0002-9009-1916

Abstract

Cabecar (Chibchan, Costa Rica) is rigidly left-branching at lower syntactic levels, including postpositions instead of prepositions. All functions of an NP except the absolutive are marked by a postposition. While the grammatical postpositions are unanalyzable, the more concrete ones, which adjoin peripheral participants, local, temporal and manner adverbials, may be primitive or complex. Almost all of the latter are based on relational nouns. Concrete postpositions may profitably be divided into event-oriented and participant-oriented ones; the latter mark their complement as a secondary predicate on an actant of the verb. The primitive postpositions are assessed as to their degree of grammaticalization according to a set of criteria. As a result, they are close to case suffixes, yet fall short of this target.

Resumen

Cabécar (Chibchan, Costa Rica) es rígidamente una lengua de ramificación a la izquierda en los niveles sintácticos inferiores, incluyendo postposiciones en lugar de preposiciones. Todas las funciones de una FN, excepto el absolutivo, están marcadas por una postposición. Mientras que las postposiciones gramaticales no son analizables, las más concretas, que se unen a participantes periféricos, adverbiales locales, temporales y de modo, pueden ser primitivas o complejas. Casi todas estas últimas se basan en sustantivos relacionales. Las postposiciones concretas pueden dividirse provechosamente en orientadas al evento y orientadas al participante; estas últimas marcan su complemento como predicado secundario sobre un actante del verbo. Las postposiciones primitivas se evalúan en cuanto a su grado de gramaticalización según un conjunto de criterios. Como resultado, se acercan a los sufijos de caso, pero no alcanzan este objetivo.

1. Introduction

1.1. Presentation

This is a descriptive study of Cabecar postpositions which combines the synchronic and diachronic perspectives. The structure of the presentation is as follows: The rest of this introductory section provides some basic information on Cabecar. Section 2, the bulk of the paper, details the structure of the postpositional phrase, classifies the postpositions, and describes their function and structure. Section 3 assesses the degree of grammaticalization of Cabecar primary postpositions by a set of criteria defined beforehand. To some extent, this is an extract from the Cabecar grammar currently elaborated in cooperation with Guillermo González Campos from Universidad de Costa Rica (González & Lehmann 2023).

Cabecar postpositions are not particularly noteworthy in typological perspective; with few exceptions, they are of nominal origin. Nor is the theory their description is based on here a breakthrough, although two conceptions employed here are not widely used in the description of postpositions: First, it is expedient to distinguish between event-oriented and participant-oriented postpositions (§2.3.2). Second, the degree of grammaticalization of the class of primary postpositions is assessed on a cross-linguistically applicable scale (§3.1).

1.2. Background on the language

Cabecar is spoken by some 14 000 people in certain territories in the south-east of Costa Rica as shown in Diagram 1.

Diagram 1. Map of the official Cabecar territories

1. Naírí Awarí
2. Bajo Chirripo
3. Alto Chirripo
4. Tayní
5. Telire
6. Ujarrás
7. Talamanca
   Cabécar
8. Chína Kicha
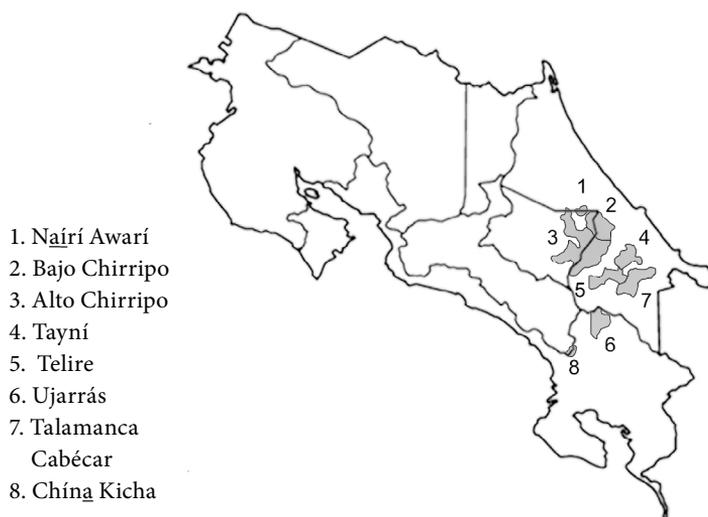
Cabecar is a Chibchan language of the Viceitic branch as shown in Diagram 2. Its dialects are subdivided into a northern and a southern group. Examples from the latter are marked by 's.d.'

Diagram 2. Genetic affiliation of Cabecar

Northern Chibchan				Paya
Southern Chibchan	Votic			Rama
				Guatuso = Maleku
				Huetar†
	Isthmic	Western	Viceitic	Cabecar
				Bribri
			Naso	Terraba†
				Teribe
				Boruca†
		Doracic		Dorasque†
				Changuena†
		Eastern	Guaimiic	Guaymi = Ngäbe
				Bocotá = Buglere
				Cuna
	Magdalenian		…	

The following typological properties of Cabecar are prerequisites for the analysis: Beside usual word classes, the language has a class of verboids which includes positionals. The morphology comprises compounding, derivational and inflectional morphology in nouns, adjectives, and verbs. It is exclusively suffixing, mildly synthetic, and mostly agglutinative. Syntactic relations are characterized exclusively by dependent marking; heads are not indexed for dependents. Alignment of the actants of intransitive and transitive verbs is ergative in terms of case marking, but accusative for most phoric control. Alignment of the ac-

tants of a ditransitive verb is indirective. Word order is organized at two levels. The lower level is characterized by the **inner complement** relation visualized in Diagram 3: a bare NP directly precedes its head $[K]_X$, where K may be a verb, a relational noun, or a postposition.

Diagram 3. Inner complement construction

N	K	
[NP	X	$]_{XP}$
inner	head	
complement		
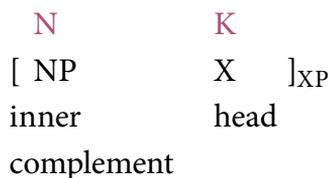
At this lower level, constituent order is rigidly left-branching. At the higher level, i.e., outside the inner-complement construction, constituent order is free.

2. Cabecar postpositions

2.1. Postpositional phrase

The postpositional phrase is an inner-complement construction, with the construction of Diagram 4 instantiating Diagram 3.

Diagram 4. Postpositional phrase

N	P
[noun phrase	postposition]_{PoP}
inner	head
complement	

While the inner structure of P is analyzed comprehensively in the following subsections, it may be noted for N that it, too, may be complex up to the level of a clause (§3.2.1), converted into an adverbial clause by P functioning as a subordinator.

Example (1) illustrates a transitive clause with two postpositional phrases, the first of which is the ergative actant, while the second is an instrumental adjunct. All the three binary syntagms are inner complement constructions.

(1)   *Sá*   *te*   *kjalá*   *wa*   *ni͟ma͟*   *kuk-ḗ.*
     PL   ERG   fishing.net   INSTR   fish   catch-IPFV
     'We catch fish with a net.' (Duchi_9.1)

2.2. Kinds of postpositions

Two criteria are employed in the classification of postpositions:

1) Syntactic function of the postpositional phrase: Most postpositions signal whether the phrase headed by them functions as a complement or as an adjunct. This produces the classes of grammatical vs. lexical postpositions. There are a few postpositions, though, which are polysemous in either marking a complement or specifying the semantic role of an adjunct.

Inside lexical postpositions, a subclassification into event-oriented and participant-oriented postpositions obtains as spelled out in §2.3.2.

2) Morphological structure of the postposition: A monomorphemic postposition is primitive. Postpositions comprising more than one morpheme are complex. In the latter case, the categories of the morphological constituents and their relation constitute subclasses of postpositions as spelled out in §2.4.2.

Cross-classifying postpositions by these criteria produces Table 1:

Table 1. Classes of adpositions

SYNTACTIC FUNCTION MORPHOLOGICAL STRUCTURE \	GRAMMATICAL	LEXICAL
primitive	+	+
complex	-	+

As may be read from Table 1, grammatical postpositions are primitive; complex postpositions are lexical.

2.3. Functions of postpositions

The criterion of syntactic function distinguishes between a postposition required by a rule of grammar and a postposition coding a specific semantic relation.

2.3.1. Grammatical postpositions

A grammatical (or "structural" or "functional") postposition is one that may be governed by a verb or verboid or be otherwise required by a rule of grammar. The paradigm is enumerated in Table 2. In the semantic explanations, N̲ represents the entity designated by the complement N of the postposition of Diagram 4.

Table 2. Grammatical postpositions

FORM	LABEL	MEANING
i̲a̲	DATIVE	to, for N̲
te/të	ERGATIVE	N̲ is the actor in a situation also involving an undergoer
wa̲~kú̲	DISPOSITIVE	by intervention / under control of N̲

There is no known origin for the first two grammatical postpositions.[1] While the criterion of the syntactic function generates the two classes of grammatical and lexical postpositions, these are not neatly disjunct. On the one hand, besides the postpositions of Table 2, a few lexical postpositions are governed by some verbs. On the other, the dative postposition may govern certain adjuncts, including a benefactive one (see example 25); and the ergative postposition is homonymous or cognate with the causal subordinator.

2.3.2. Lexical postpositions

A lexical postposition is one which codes a specific semantic relation between its complement and its head. As it is not governed by the latter, the postpositional phrase functions as a modifier. It modifies a verbal or verboidal clause core. Within the class of lexical postpositions, first the primitive ones will be reviewed. These subdivide by the semantic criterion of their orientation, yielding the classes of event-oriented and participant-oriented postpositions.

2.3.2.1. Event-oriented postpositions

An **event-oriented postposition** signals an oblique (non-direct) syntactic relation of its complement NP vis-à-vis its head – generally a verb or verboid. On a semantic basis, two kinds of event-oriented postpositions are distinguished: A **participative postposition** joins a peripheral participant to a situation. A **situative postposition** situates the modified

---

[1] The dispositive depends on a verboid or on a verb. The latter use derives from the former, where it marks the possessor. Pacchiarotti (2020) reconstructs it as a noun meaning 'property'.

situation according to a local, temporal or manner parameter; typical complements have a low position on the empathy hierarchy. Table 3 enumerates the participative postpositions.

Table 3. Participative postpositions

FORM	LABEL	MEANING
da	COMITATIVE	(simultaneous) with <u>N</u>, at the time of <u>N</u>
wa	INSTRUMENTAL	with (tool) <u>N</u>, from (material) <u>N</u>
wǎsë́(ka)/wőksë	CONDUCTIVE	moving actor takes <u>N</u> with him
yíka	AVERSIVE	from, against <u>N</u>; before (time) <u>N</u>

The first three items of Table 3 specify some sort of accompaniment. The last entry indicates an oppositive relation. N *wa* codes the role of an inanimate <u>N</u> as instrument used by the agent of the situation, as in (1) and (2). *Wa* INSTRUMENTAL is a grammaticalized variant of *wa* PERLA-TIVE (examples 16 and 29; cf. Span. *por).*

(2) *ják   wa*
     stone   INSTR
     'with a stone'

N *da* may code the company of some concrete, typically human entity N and normally relates this to a participant of the situation, as in (3).

(3) *yís   da*
     1.SG   COM
     'with me'

However, frequently N is some temporal or propositional entity, so N *da* (*ra* in (4)) means 'at the time of N, when N, if N'.

(4) *Yoko   bukalë̈i   te   sá   tk-á=wa̠   ra,*
     [fire   wasp:SPC   ERG   1.PL   cross-PFV=TOT]   COM

     sá   dälä́-w-é̠   yökő   kä́i.
     1.PL   burn-CAUS-IPFV   fire   MNR
     'If the fire wasp stung (us), it burns (us) like fire.'

This is an example of the principle that temporal concepts and relations are derived from more concrete ones.

[N *wä́së́*]_PoP codes the relation of the actor of the situation to an additional animate or inanimate participant N which the actor takes along in some movement, as in (5).

(5) *Yaba   tsín̠e   shk-á=mi̠   du   wä́së̈.*
     child   small   walk-PFV=AND   bird   COND
     'The little boy went away with the bird (i.e. taking it with him).'

The conductive differs from the comitative and the proprietive (§2.3.2.2) in this feature of motion. It differs from the instrumental both in this feature and in being insensitive to N's empathy.

As for situative postpositions, there is no dedicated manner postposition. All temporal postpositions are basically local postpositions. Therefore, the set of primitive situative postpositions is exhausted by Table 4.

Table 4. Primitive local postpositions

FORM	LABEL	MEANING
(ja)mi	ADESSIVE/ALLATIVE	at, by <u>N</u> [+ contact]
ka	LATIVE	from <u>N</u>; at, to(wards) <u>N</u>; along (some place or time) <u>N</u>
kí	SUPERLOCATIVE	(up)on, over <u>N</u> [+ contact]; with respect to <u>N</u>
kjane	APUDESSIVE/-LATIVE	near, by, beside <u>N</u> [- contact]
kjë̌	PROSECUTIVE	after <u>N</u>
na	INESSIVE/ILLATIVE	in(side), into <u>N</u>
ska	LOCATIVE	in, on, at, to (place or time) <u>N</u>
wa	PERMEATIVE	through(out) <u>N</u>, past <u>N</u>

Unlike English prepositions such as *at*, *to*, *from* etc., the basic local postpositions are not regularly sensitive to the distinction between rest and motion. On the other hand, most local postpositions have non-local uses, too. By and large the language does not distinguish formally temporal concepts from local concepts. Beside such temporal uses, local postpositions have more abstract senses, too. For *kị́* SUP, some are mentioned in Table 4, including a motivative use illustrated by (6).

(6) *Yís*   *kuta*   *sibí-n-á̱=ká̱*   *duláklë̈i*   *kị́.*
     1.SG   sister   jealous-D.MID-PFV=ASC   boy   SUP
     'My sister got jealous because of a/the boy.'

2.3.2.2. Participant-oriented postpositions

A **participant-oriented postposition** does not (like an event-oriented postposition) assign an oblique role to its complement vis-à-vis the predicate. Instead, its complement bears a **predicative** relation to some actant of the main predicate and shares its semantic role. Consequently, a participant-oriented postpositional phrase may constitute the predicate complement in a copula clause. In a verbal clause, it functions like a secondary predicate on the actant in question.

Again, by a semantic criterion, there are two subclasses of participant-oriented postpositions. **Possessive postpositions** relate a *possessum* to its possessor. The two possessive postpositions of Table 5 form a converse pair.

Table 5. Possessive postpositions

FORM	LABEL	MEANING
cha	PROPERTY	<u>N</u>'s (property), belonging to <u>N</u>
ta	PROPRIETIVE	having <u>N</u>, provided with <u>N</u>

[N *cha*]_{PoP} means '<u>N</u>'s (property), belonging to <u>N</u>'. The main function of N *cha* is as the predicate complement of the copula in a **predication of belonging** (7).

(7) *Bikö́-le   rä   bá   cha.*
     how.much-ever   COP   2.SG   PPY
     'All of them are yours / all of it is yours.'

Although this item has cognates in other Chibchan languages, there is no etymology for it; so, it must be old. It is some sort of relational dummy *possessum* with the original meaning '(someone's) property'; which explains its participant-oriented syntax.

(8) *Jé=ja̱mi̱   sä   te   sájé   cha   wĕik-ё́*
     D.MED=AD   1.PL   ERG   1.PL   PPY   harm-IPFV
     r-á=mi̱   tái̱   ma̱i̱tjá́.
     emerge-PROG=AND   big   wherever
     'Moreover, we constantly despise what is ours everywhere.'

What appears to be the substantivization of a postpositional phrase in (8) may reflect the original category of the formative, viz. a noun.

[N *ta*]$_{\text{PoP}}$ means 'having, provided with N̲, characterized by N̲'. The main function of N *ta* is as the predicate complement of the copula in an ascription of possession, as in (9).

(9)   *Yís   dä   ina̲klä   ta.*
        1.SG   COP   money   PPV
        'I have money.'

The diachronic source of the postposition *ta* is a form of a positional meaning 'be with N̲, have N̲', which, however, is not extant in Cabecar. The semi-finite origin of positionals explains its participant-oriented syntax.

The other subclass of participant-oriented postpositions is **equiparative postpositions**. These function in the formation of comparative constructions of equality (superiority is marked by *kḭ́* SUP, Table 7) and are, except for a variant of *sú̲ta*, enumerated in Table 6.

Table 6. Equiparative postpositions

FORM	LABEL	MEANING
kä̃i	EQUAL	as/like N̲
sú̲ta	SIMILATIVE	like N̲, similar to N̲
yë̃	TRANSLATIVE	in(to) the form of N̲, as N̲

The postpositional phrase [N _kä́i_] (with its allomorphs) means 'like
N, the N way', as in (4) and (21)f. [N _súta_]$_{PoP}$ means 'like, similar to N',
as in (10). Manner constructions and comparative constructions on their
model may use this postposition.

(10) _yís   súta_
      1.SG   SIM
      'like me'

[N _yë́_]$_{PoP}$ means '(turned/transformed) in(to) the form of N, (serv-
ing) as N, behaving like N'. In (11), it functions as a predicate comple-
ment of a verboid.

(11) _jé   rä   koñó   yë_
      D.MED   COP   rat   TRL
      'that one was transformed into a rat'

The TRANSLATIVE is the dynamic counterpart of the SIMILATIVE, as it
involves a transformation.

As noted, at least some of the postpositions of Table 5 and Table 6
originate in an (extinct) positional or a noun. A positional may head a
participant-oriented adjunct; a noun may function as a displaced attri-
bute. Several of the synchronic syntactic peculiarities of these postposi-
tions may thus manifest persistence of their original category.

The two classes of event-oriented and participant-oriented postposi-
tions have counterparts in other languages. Typically, the counterparts

of participant-oriented postpositions either assign no case to their complement or they assign a different case. Generally, equiparative operators assign no case to their operand and are therefore not subsumed under the concept of postposition.[2] This criterion is of no help in Cabecar since no postposition assigns a case to its complement (§3.2.2).

2.4. Morphological structure of postpositions

2.4.1. Primitive postpositions

Primitive (or simple) postpositions are monomorphemic and mostly monosyllabic. They form a closed set and are listed exhaustively in Table 2 – Table 6. Most postpositions are primitive and monosyllabic and lack an etymology. Some members of Table 3 – Table 6 may not have the look of a primitive postposition. However, none of them except *súta* is synchronically morphologically transparent. As will be seen in §3.2.4, primitive postpositions are structurally halfway between postpositions and suffixes.

2.4.2. Complex postpositions

A complex postposition is one consisting of more than one morpheme. It may be a combination of primitive postpositions (§2.4.2.1) or a denominal postposition (§2.4.2.2). There is currently no formation of deverbal postpositions.

---

[2] The German counterpart to the equiparative postpositions is called "adjunctor" in German grammar on the consideration that these elements do not subordinate their complement.

All complex postpositions are lexical postpositions; their postpositional phrases are adjuncts rather than complements. Most complex postpositions have local or temporal functions.

2.4.2.1. Combination of two postpositions

Diagram 4 provides for only one position of P. However, sequences of two postpositions are not excluded. The systematic source for such complex postpositions is Diagram 5:

Diagram 5. Postposition governing postpositional phrase

	N	P_1		P_2	
[[	noun phrase	postposition	]$_{PoP}$	postposition	]$_{PoP}$

Here, P_2 governs the PoP headed by P_1. A subset of postpositions can take the position of P_2 here, allowing either an NP or an adverbial as their complement, and the latter may be a PoP. This subset includes *da* comitative, *ka* LATIVE, *nā̠* INESSIVE and *ta* PROPRIETIVE. Table 7 provides a representative sample of complex postpositions originated by the univerbation (Lehmann 2019, 2020) of P_1 and P_2 in Diagram 5.

Table 7. Postpositions consisting of two primitive postpositions

FORM	STRUCTURE	MEANING
i*a̠*=ra	DAT=COM	according to <u>N</u>
ka=n*a̠*	LAT=IN	since/up to [point in time] <u>N</u>
kí=ka	SUP=LAT	on, over [+ contact] <u>N</u>; because of <u>N</u>; to experiencer <u>N</u>; (more) than <u>N</u>
kí= ta	SUP=PPV	(more) than <u>N</u>
kí=wa	SUP=PER	throughout the surface of <u>N</u>
kj*a̠n̠e*=ka	APUD=LAT	near <u>N</u>, towards <u>N</u>
n*a̠*=ka	IN=LAT	into <u>N</u>; to <u>N</u>['s senses]
ska=ra	LOC=COM	during, in [process] <u>N</u>
wa̋sȅ=ka	COND=LAT	moving subject takes <u>N</u> with him

Example (12) illustrates the univerbation of the dative with the comitative postposition to mark a judivative adjunct.

(12) *Bá   ia̠=ra,   ¿ma̠né   sälírba   ñá-la   kjȅi=ta ...?*
      1.SG   DAT=COM   which   yam   eat-S.POT   taste=PPV
      'According to you, which yam is tastier ...?'

2.4.2.2. Denominal postpositions

Diagram 4 represents the postpositional phrase based on an unanalyzed (and possibly monomorphemic) postposition. For complex postpositions formed by rules of syntax, a dynamic view is more appropriate. These postpositions may be called denominal only in the sense that their lexical basis is a noun. However, they are not derived from it by any process of stem formation. Instead, the origin of a postpositional construction based on a complex postposition of Table 8 is a syntactic construction as shown in Diagram 6. Example (13) features its three components.

Diagram 6. Postpositional phrase with intermediate noun

N^d	$N^{d/h}$	P
[[noun phrase noun $]_{NP}$	postposition	$]_{PoP}$
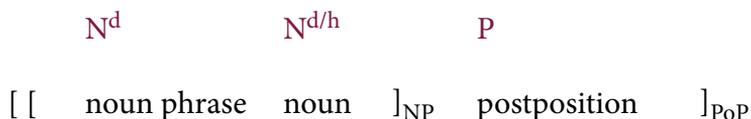
(13) *kal*   *digí̱=na̱*
      tree   bottom=IN
      'below the tree' (s.d.)

In Diagram 6, N^d is typically a concrete noun phrase and $N^{d/h}$ is typically, though not necessarily, a region noun which takes N^d as a possessive attribute. The complex NP thus formed depends on P, typically a primitive local postposition, like *na̱* in (13) and *ja̱mi̱* in (14).

2.4.2.2.1. Local denominal postpositions

If N$^{d/h}$ of Diagram 6 is a region noun and P is a local postposition, they form a specific local postposition. For instance, in (14), *ñ<u>a</u>l<u>a</u> kjä́=j<u>a</u>m<u>i</u>* 'by the roadside, next to the road' describes the subject's position more specifically than a mere *ñ<u>a</u>l<u>a</u> j<u>a</u>m<u>i</u>* 'by the road'. In this way, finer distinctions not made by the local postpositions themselves may be made by such complexes of N$^{d/h}$ P.

(14) *Pablo   kaldu   ñ<u>a</u>l<u>a</u>   kjä́=j<u>a</u>m<u>i</u>.*
      Paul   POS:stand   path   edge=AD
      'Paul is standing by the roadside.'

Table 8 visualizes the degree of productivity of this pattern by listing a representative set of combinations constituted by region nouns which combine with more than one local postposition and local postpositions that combine with more than one region noun.

Table 8. Local postpositions based on region nouns

POSTPOSITION REGION NOUN \		*ka* LAT	*(ja)mi̱* AD	*kí̱* SUP	*na̱* IN	*s(a)ka* LOC	*wa* PER
bata	tip				on top of	at the end of	
kakirĕ́i	side	next to	beside				
kjä́/kŏ́	edge	at the side of	beside, near				
ni̱kí̱	inferior region	under			below	at the bottom of	
ñá̱k	lower end		near the lower end of			at the other end of	along the other side of
shá̱	middle				amidst	in the middle of, among	
tä́	track	after (in a sequence) (15)		behind			after (16)
wä́	face			in front of (17)		opposite (18)	

Some of the formations listed in Table 8 are illustrated by examples (15–18).

(15) *Jié   d-ë́l=ju̱   yís   mína̱   tö́=ga.*
       1.SG   emerge-S.PRF=AM   1.SG   mother   track=LAT
       'He has arrived after my mother.' (Margery 1989 s.v. *töga*, s.d.)

(16)   *Bá*   *shk-ö́*   *yís*   *tǟ=wa!*
         2.SG   walk-SBJ   1.SG   track=PER
         'Walk after me !'

(17)   *S'*   *j-ö́ =a̱*   *min-a̱*   *bá*   *wǟ=ki̱ !*
         1.SG   let-SBJ=TOT   go-SNR   2.SG   face=SUP
         'Let me go in front of you!'

(18)   *Kjö́s*   *káte*   *ö́shkoro*   *ju*   *wǟ=saka*
         black.oak   POS:stand   chicken   house   face=LOC
         'The black oak stands opposite the chicken coop.'

As may be seen, the pattern is uniform, but not fully productive.

2.4.2.2.2. Non-local denominal postpositions

Beside the local postpositions, there is also a set of complex postpositions with a more abstract meaning. Table 9 lists some such postpositions. Examples (19) and (20) illustrate some of their uses.

Table 9. Non-local postpositions based on nouns

FORM	STRUCTURE	MEANING
bala=n̠a	interior=IN	during N̲
kju̠éi=kí̠	restriction=SUP	because of N̲
tä́rí=wa	track=PER	instead of N̲
tsá̠=ta	top=PPV	(more) than N̲
wä́=n̠a	face=IN	to N̲('s mind)

(19) *Yís   m-á̠=ju   tuwín̠a   bala=n̠a.*
      1.SG   go-PROG=AM   night   interior=IN
      'I am going during the night.' (Margery 1989 s.v. *balan̠á*; s.d.)

(20) *Yís   yaba   m-á̠   yís   tä́rí=wa.*
      1.SG   child   go-PROG   1.SG   track=PER
      'My son is going in my stead.'

With the exception of *ta*, the postpositions taking the position of P in these formations are, again, the primitive local postpositions of Table 4. Likewise, except for *kju̠éi*, the nouns forming their erstwhile complements are, again, region nouns from Table 8f. As already observed for primitive postpositions, these complex postpositions undergo metaphorical extension of their basic local meaning.

As long as the combination of the noun with the postposition is a syntactic construction, it takes the regular form of Diagram 6. Now, both the set of nouns operative in the position of $N^{d/h}$ and the subparadigm of primitive local postpositions P are limited. Consequently, the number of recurrent combinations is not large. Semantically, the sequence $N^{d/h}$ P is perceived as a specific relation born by N^d to whatever the PoP of Diagram 6 depends on.

Consequently, in such a configuration, the sequence $N^{d/h}$ P tends to univerbate (against the syntactic structure) and lexicalize as a complex postposition. The result is a construction according to Diagram 4, where the complex postposition takes the position of P. The transition from the combination $N^{d/h}$ P of Diagram 6 to a complex postposition is fluid; writing with or without an intervening blank varies.

The conversion of complexes $N^{d/h}$ P of Diagram 6 into postpositions has been operative in the language for a long time. Consequently, most current postpositions, whether transparent or opaque, are based on nouns. However, the set of postpositions is an open and heterogeneous one, containing members of different age and of different degrees of transparency. Some formations are not easily assignable to either Table 7 or Table 8.

Some postpositional phrases based on *ta* PROPRIETIVE univerbate and lexicalize, too. The similative postposition *súta* (10), listed as primitive in Table 6, is, in fact, one of these. Etymologically, it is denominal, as it is *ta* PPV governing some nominal form of *sua* 'see', thus 'having the view (appearance) of N̲'.

3. Grammaticalization status of postpositions

3.1. Criteria

There is a gamut of increasing grammaticalization of case relators from the relational noun via the postposition to the case suffix. The operationalization of the general parameters of grammaticalization produces criteria for measuring the degree of grammaticality of postpositions (Lehmann 2015; Bisang *et al.* 2020). Table 10 gives a systematic survey of the criteria employed here. Some of them are tailored to the Cabecar system, which does not exclude their usefulness for other languages. Each criterion is a test that can yield a yes-no output. In their combination, however, they arrange the test items on a scale, for two reasons: First, each binary criterion divides the scale of grammaticality at a particular point. For instance, copying a case relator on subconstituents of an NP presupposes a rather high degree of grammaticalization, while direct government of its complement, i.e., without an intervening case, is found even with adpositions of a rather low degree of grammaticality. Second, even such criteria which relate to the same degree of grammaticality in one language need not generate the same result in another. There is so far no theory from which the systematic position of each criterion could be deduced.

Table 10. Relative degree of grammaticalization of adpositions

GRAMMATICALIZED CRITERION \	LESS: LIKE THE MAJOR-CATEGORY SOURCE	MORE: LIKE AN AFFIX
Scope: complexity of complement		
adposition takes clausal complement	yes	no
adposition takes coordinative complement	yes	no: adposition is repeated with each coordinate
adposition is copied on subconstituents of NP	no: there is one occurrence per NP	yes
Bondedness: tightness of bond between adposition and complement		
adposition governs case	yes	no: complement is bare NP
adpositional syntagma can be split by intervening material	yes	no
complement can be left-dislocated and taken up by intercalated resumptive	yes	no
adpositions can be coordinated while sharing their complement	yes	no: complement is repeated for each adposition
Syntagmatic variability:		
position of adposition vis-à-vis complement varies	yes	no

3.2. Application to Cabecar postpositions

In the following, the criteria of Table 10 are taken as yes-no questions and answered for the Cabecar primitive postpositions.

3.2.1. Scope: complexity of complement

The complement of a postposition (N in Diagram 4) may, in general, be of any of the following categories:

     a. pronoun (21)

     b. lexical noun or NP (11)

     c. clause (22)

(21)   *bá*   *kä̃i*
       2.SG   MNR
       'like you'

(22)   *I*   *w-ó̠*   *yís*   *te*   *i*   *sh-é̃=ké̠*   *kä̃i !*
       3   do-SBJ   [1.SG   ERG   3   say-IPFV=IPFV2]   MNR
       'Do as I say!'

    Adposition takes clausal complement? Yes. A postposition can govern a subordinate clause, as demonstrated for *ra* by (4), and for *kä̃i* by (22).

    Adposition takes coordinative complement? Yes. Mostly, a coordinative noun phrase is not governed by one postposition. Instead, the postposition is repeated after each coordinate component, like a suffix.

(23)   *I*   *mu̠-á̠=wa̠*   *i*   *te*   *bí̠s*   *tse-i*   *wa*
       3   tie-PFV=TOT   3   ERG   fique   string-SPC   INSTR

       jémi̠   *tsi̠ni̠*   *yagá*   *wa*
       and   rubber   stuff   INSTR
       'he tied it with a fique string and rubber matter'

However, leaving out the first occurrence of the postposition in such a construction is admissible (24).

(24) I   kt-á=w<u>a</u>   i   te   bák   irä   tebélí   irä   wa.
      3   kill-PFV=EFF   3   ERG axe   CRD knife   CRD   INSTR
      'He killed him with an axe or with a knife.'

Adposition is copied on subconstituents of NP? No. There is one occurrence of the postposition at the end of its phrase; it cannot be copied on subconstituents of an NP, as case suffixes may in some languages.

3.2.2. Bondedness: tightness of bond between adposition and complement

N in Diagram 4 cannot be zero; apart from a few lexicalized cases, postpositions have no alternate use as adverbs (like Engl. *before, inside* etc.). This is another feature in which the relation between a postposition and its complement is like the relation between a verb and its absolutive actant, justifying their subsumption under the concept of inner complement.

Adposition governs case? No postposition governs a case (there is no genitive, anyway); they all combine with a bare NP or an adverbial which may contain a semantically suitable postposition (as in §2.4.2.1).

Adpositional syntagma can be split by intervening material? Yes. The syntagma constituted by a postposition and its complement may be split up by intervening particles, in particular the negator *ká* (25).

(25) a. *ká*   *yís*   *kuta*   *te*   *dí*   *y-e*   *t<u>ái</u>*
          NEG   1.SG   male's.sister   ERG   liquor   drink-IPFV   big
      b. *yís*   *kuta*   *ká*   *te*   *dí*   *y-ë́*   *t<u>ái</u>*
      c. *yís*   *kuta*   *te*   *ká*   *dí*   *y-ë́*   *t<u>ái</u>*
          [#a – #c:] 'my sister does not drink much corn drink.'

It can also be split up by some focus particles (26).

(26) *Yís*   *te*   *yäk-ä-klä*   *älí-w-<u>á</u>*
      1.SG   ERG   dine-SNR-FIN   cook-CAUS-PFV
      bás   *kjë́la=bä*   *i<u>a</u>.*
      2.PL   only=LIM   DAT
      'I cooked food just only for you.'

Since these particles are clearly neither suffixes nor head of the complement of the postposition, the postposition cannot be a suffix.

Complement can be left-dislocated and taken up by intercalated resumptive? Yes. Optionally, the MEDIAL DEMONSTRATIVE *jé* anaphorically takes up the complement even in the inner complement construction (Diagram 3) (as elsewhere), as illustrated by the possessive attribute construction in (27).

(27) *yë́ria*   *(jé)*   *kuta-wá*
      hunter   D.MED   male's.sister-PL
      'hunter's sisters'

Example (28) demonstrates application of this criterion to a dative postpositional phrase.

(28) *jé   rä   sä   yu-ä   kié   Guillermo jé   ia*
      D.MED   COP   1.PL   form-VSN   named   William   D.MED   DAT
      'that is for the professor named William'

Adpositions can be coordinated while sharing their complement?
No. Postpositions cannot be coordinated as in the translations of (29) f. Instead, the complement is repeated for each postposition, either anaphorically, as in (29), or literally, as in (30). This is the same for the primitive postpositions of (30) and the complex postpositions of (29), and for different coordinators.

(29) *ják   bata=kí   jé=jami   i   niki=ka*
      stone   tip=SUP   D.MED=AD   3   bottom=LAT
      'on and under the stone'

(30) *Shára   wa   irä=le   Shára   ska   irä=le*
      Grano.de.Oro   PER   CRD=DUB   Grano.de.Oro   LOC   CRD=DUB
      'near or in Grano de Oro [toponym]'

Suppressing the second occurrence of the complement from the constructions of (29)f renders them ungrammatical. By the criterion of (non-)coordinability, the Cabecar case relators thus behave more like suffixes than like postpositions. This behavior of postpositions vis-à-vis their complement is inherited from the impossibility of having a coordinate head for a single possessive attribute.

3.2.3. Syntagmatic variability

Position of adposition vis-à-vis complement varies? No. Since all adpositions have their origin in inner-complement constructions, all of them are postpositions from the beginning.

3.3. Balance

Table 11 is a copy of Table 10, filled in for Cabecar primitive postpositions.

Table 11. Relative degree of grammaticalization of Cabecar primitive postpositions

GRAMMATICALIZED CRITERION\	LESS	MORE
Scope: complexity of complement		
adposition takes clausal complement	yes	
adposition takes coordinative complement	yes	
adposition is copied on subconstituents of NP	no	
Bondedness: tightness of bond between adposition and complement		
adposition governs case		no
adpositional syntagma can be split by intervening material	yes	
complement can be left-dislocated and taken up by intercalated resumptive	yes	
adpositions can be coordinated while sharing their complement		no
Syntagmatic variability:		
position of adposition vis-à-vis complement varies		no

As it jumps into the eyes, a few more criteria indicate a lesser than a higher degree of grammaticalization. This induces us to say that Cabecar primitive postpositions are still postpositions, but on their way to suffixes.

4. Result

Cabecar postpositions behave differently on the various subparameters of grammaticalization. Not even the criteria spelling out one and the same parameter yield the same result, as announced before. The theoretical consequences of this empirical result remain to be investigated. No doubt the criteria have to be related to a unified theory which provides for the connection of each criterion with a particular position on a general scale of grammaticalization. The theory would also be furthered if there were pairs of criteria whose members were connected by an implicational generalization.

Abstracting from the differences, it may be generalized that Cabecar primitive postpositions are possibly enclitic, but not (yet) suffixes. Complex postpositions are free, but still perceptibly grammaticalized.

Abbreviations

1, 2, 3:	1st, 2nd, 3rd person		LOC:	locative
AD:	adessive		MNR:	manner
AM:	autonomous motion		NEG:	negator
AND:	andative		PER:	perlative
ASC:	ascensive		PFV:	perfective
CAUS:	causative		PL:	plural
COM:	comitative		POS:	positional
COND:	conductive		PPV:	proprietive
COP:	copula		PPY:	property
CRD:	coordinator		PROG:	progressive
D.MED:	medial demonstrative		S.POT:	stative potential
D:	demonstrative		S.PRF:	stative perfect
D.MID:	dynamic middle		SBJ:	subjunctive
DAT:	dative		SG:	singular
DUB:	dubitative		SIM:	similative
ERG:	ergative		SNR:	subject-oriented nominalizer
FIN:	final		SPC:	specifier
IN:	inessive		SUP:	superessive
INSTR:	instrumental		TOT:	totally affected
IPFV:	imperfective		TRL:	translative
LAT:	lative			
LIM:	limitative			

References

Bisang, Walter; Malchukov, Andrej; Rieder, Iris & Sun, Linlin. 2020. Measuring Grammaticalization: A questionnaire. In Bisang, Walter & Malchukov, Andrej (eds.), *Grammaticalization scenarios. Cross-linguistic variation and universal tendencies (*Comparative Handbooks of Linguistics, 4), vol. 2, ix - xxiii. Berlín: Mouton de Gruyter. https://doi.org/10.1515/9783110712735-203

Givón, Talmy. 2021. *The life cycle of adpositions*. Amsterdam: John Benjamins. https://doi.org/10.1075/z.236

González Campos, Guillermo & Lehmann, Christian. 2023. *The Cabecar language*. Unpublished ms.

Himmelmann, Nikolaus P. & Schultze-Berndt, Eva. 2005. Issues in the syntax and semantics of participant-oriented adjuncts: an introduction. In Himmelmann, Nikolaus P. & Schultze-Berndt, Eva (eds.), *Secondary predication and adverbial modification. The typology of depictives,* 3-67. Oxford: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780199272266.003.0001

Lehmann, Christian. 2015. *Thoughts on grammaticalization* (Classics in Linguistics, 1). 3rd edition. Berlin: Language Science Press. https://doi.org/10.17169/langsci.b88.99

Lehmann, Christian. 2019. *Complex spatial prepositions from Latin to Castilian.* In Fagard, Benjamin; Pinto de Lima, José & Stosic, Dejan (eds.), *Les prépositions complexes dans les langues romanes.* Revue Romane 54(1). 93-125. https://doi.org/10.1075/rro.00017.leh

Lehmann, Christian. 2020. Univerbation. *Folia Linguistica Historica* 41. 205-252. https://doi.org/10.1515/flih-2020-0007

Margery Peña, Enrique. 1989. *Diccionario cabécar-español, español-cabécar*. San José, C.R.: Universidad de Costa Rica.

Pacchiarotti, Sara. 2020. On the origins of the ergative marker wã in the Viceitic languages of the Chibchan family. In Barðdal, Jóhanna; Gildea, Spike & Lujan, Eugenio R. (eds.), *Reconstructing syntax* (Brill's Studies in Historical Linguistics, 11), 241-288. Leiden/Boston: E.J. Brill. https://doi.org/10.1163/9789004392007_007