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The argument structure of some Caused Motion Constructions in Bribri: a possible (diachronic) explanation

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1. Introduction

The main purpose of this talk is to propose a **tentative** diachronic path that could have given rise to a particular argument structure in Bribri (Chibchan, Costa Rica) found in what I call the Caused Motion Construction with translational verbs of movement (CMC_{MOV}). Typologically, Bribri presents, among others, the following features:

- (i) ABS-V constituent order: the ergative phrase can go either before or after the ABS-V sequence.
- (ii) Ergative-absolutive alignment system but not in all areas of grammar. S/P is never marked. A is marked by means of postpositions both on nouns and pronouns. Optional/intermittent ergative marking related to discourse patterns and information structure (Quesada 1999).
- (iii) Morphologically ergative (i.e. ‘surface’ ergative) but syntactically nominative-accusative (S/A pivot is pervasive in all behavioral properties investigated so far).
- (iv) Only one set of pronouns (same for S, A and P).
- (v) Entirely suffixing verbal morphology. No agreement morphology with A. Marginal and optional agreement morphology on the verb with S/P if 3PL and animate.
- (vi) Verb paradigm based on voice (active vs. middle) and aspect (perfective vs. imperfective).
- (vii) Differential ergative marking (McGregor 2009). There are two non-allomorphic ergative markers: *tõ*¹ and *wã*. *Tõ* appears to be synchronically the most widespread. Variants of *tõ*: *yõ* (abbreviation of 1SG pronoun *ye’ + tõ*), *bõ* (2SG *be’ + tõ*), *sõ* (1PL.INCL and EXCL *se’ + tõ* or *sa’ + tõ*). *Wã* is found in a smaller number of constructions, among which the CMC_{MOV}.

2. Possible origins of the ergative marker *wã* found in CMC_{MOV}

As noted in (vii) above, the ergative marker *wã*, syncretic with the alienable possessor marker in possessive predications, is found synchronically in a restricted number of constructions, among which the CMC_{MOV} and the Anterior (i.e. ‘perfect’) Construction. It has been recently suggested (Pacchiarotti under review) that the ergative marker *wã* derives historically from the possessor marker. In particular, the alienable possessor marker *wã* found in alienable possessive predications was re-analyzed as an ergative

¹ In Bribri orthography, <ë> corresponds to [i] and <ö> to [u]. The symbol <’> represents [ʔ]. The grapheme <y> represents [ɕ], <j> represents [x], <r> represents [r], <l> represents [ɽ], <ch> represents [tʃ] and <sh> represents [ʃ]. In my description, unlike others, falling tone is indicated as <â>, whereas high tone is indicated as <á>. Low tone is not marked in orthography. It should be noted, however, that the tonal system of Bribri is poorly described and more work is needed in order to fully understand it. Tonal transcriptions found in other texts were adapted to the tonal conventions set out above.

marker in the Anterior Construction. As a result, the evolution of an anterior construction from a possessive construction is the mechanism responsible for the innovation of the construction-determined ergative marker *wã*. Briefly, these are the stages that have been proposed, all still attested in Modern Bribri. Re-analysis possibly took place, covertly, in (3):

Stage 1 Possessive predication modified by an adjective

- (1) *ie'* = *wã* *kró* *tso'* *ôjké*
 3SG.PRX.H = PSSR rooster exist fat
 ‘He has a fat rooster’

Stage 2 Possessive predication modified by a participle

- (2) *ie'* = *wã* *kró* *tso'* *kót-ule*
 3SG.PRX.H = PSSR rooster exist kill.PFV.REM-PTCP
 ‘He has a rooster killed/dead’ (the possessor may or may not be the killer of the rooster)

- (3) *ie'* = *wã* *kró* *tso'* *sú-ule*
 3SG.PRX.H = PSSR rooster exist see.PFV.REM-PTCP
 ‘He has a rooster seen’ (the possessor is co-referential with who sees the rooster)

Stage 3 From modified possession to past time schema

- (4) *ie'* = *wã* *kró* *sú-ule*
 3SG.PRX.H = ERG rooster see.PFV.REM-PTCP
 ‘He has seen a rooster’

In stage 3, a possessive interpretation of (4) is no longer available. The NP marked with *wã* is necessarily the Agent. The invariant existential auxiliary is dropped and the participle becomes the main verb in the construction. Thus, (3) of stage 2 ‘he has a rooster seen’, meaning ‘he possesses the rooster and he is the one who saw the rooster’, comes to mean ‘he has seen a rooster’.

3. The argument structure of CMC_{MOV}

In this construction, the instigator of movement (A) is marked by *wã*, the moved entity (P) is unmarked and the verb is formally intransitive², that is, it shows no morphological increase of valency and is formally identical to the verb that would be used in a construction such as ‘the child arrived’:

² Transitivity in Bribri’s verbs is distinguished at the root/stem level in the imperfective aspect (i.e. they take different imperfective suffixes depending on whether they are transitive, *-é / -é̃*, or intransitive, *-ó / -ú̃*). Two of the three verbs found in the CMC_{MOV} are irregular in their inflection. The verb *dók* ‘arrive’ has *dá* as the imperfective form (with a final *-á* not found with other verbs) and thus no formal transitivity can be claimed for this verb. The verb *mínük* ‘go’ takes the middle voice cluster

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|-----|-----------------------|--|------------|----------------------------|--------------|
| | A_{wā} | | P | V | |
| (5) | <i>ie' = wā</i> | | <i>alá</i> | <i>d-ê-kã-tche</i> | <i>diáwa</i> |
| | 3SG.PRX.H=ERG | | child | arrive-PFV.REC-DIR-already | eastward |
- ‘He [Sibö = God] brought (her) daughter already up eastward’ (IHB³: 133)

To my knowledge, only CMC_{MOV} which contain the verbs *dók* ‘arrive’ (5), *mínúk/mík* ‘go’ (6) and *bitúk* ‘come’ (7) display an argument structure in which A is marked by the ergative postposition *wā*. The use of the other ergative postposition, *tö*, results in unacceptability of (5), (6) and (7).

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|-----|---------------------|-------------------------|--|-----------------------|-------------------------------|
| | P | V_{INTR} | | A_{wā} | |
| (6) | <i>i = nõũyö-la</i> | <i>mí-r-kã</i> | | <i>ie' = wā</i> | <i>tsuru'-la</i> <i>bá-ũk</i> |
| | 3SG = niece-DIM | go-MV.IPFV-DIR | | 3SG.PRX.H=ERG | cocoa-DIM heat-INF |
- ‘He was taking his little niece up to heat the cocoa’ (IHB: 58)

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|-----|--------------|-------------------------|--|--------------------------|
| | P | V_{INTR} | | A_{wā} |
| (7) | <i>ditsó</i> | <i>bít-ũ</i> | | <i>sula'-déu-la = wā</i> |
| | seed | come-IPFV.INTR | | deity-dear-DIM = ERG |
- ‘Sula the beloved deity brings the seed’ (adapted from IHB: 165)

In other CMC_{MOV} which do not contain translational motion verbs (8, 9), the A argument is marked by the standard ergative marker *tö* and the verb is transitive:

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|-----|-----------------|---------------|-----------------|
| (8) | <i>ie' = tö</i> | <i>aláköl</i> | <i>ulatch-é</i> |
| | 3SG.PRX.H = ERG | woman | push-IPFV.TR |
- ‘He pushes the woman’ (EL)

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|-----|-----------------|------------|--------------|
| (9) | <i>se' = tö</i> | <i>kál</i> | <i>kuw-é</i> |
| | 1PL.INCL = ERG | tree | drag-IPFV.TR |
- ‘We drag trees’ (EL)

Questions that might arise at this point are: what triggered the presence of the ergative marker *wā* instead of *tö* in the CMC_{MOV} in (5), (6) and (7)? Why do these constructions contain an intransitive verb of movement? What could be a conceivable diachronic path that gave rise to such an argument structure in these cases (5, 6, 7) but not in others (cf. 8, 9)?

suffix *-r/-n* which indicates its formal intransitivity. The verb *bitúk* ‘come’ has the imperfective form *bit-ũ* like all other intransitive verbs ending in *-ũk*.

³ In each example, the abbreviation in parentheses indicates the source from which the example was obtained and the number refers to the page number within that source. HB: Hablemos bribri (2013). EL: elicitation. SOA: Cargos tradicionales del pueblo bribri: Siö'támĩ, Òkòm, Awà (2008). IHB: Ité Historias Bribris (1993). For full references, see bibliography.

4. A possible diachronic path for the argument structure of CMC_{MOV}

In texts, verbs in CMC_{MOV} very often display a verbal suffix which has the shape *-tsẽ/-tsĩ* as in (10) and (11):

- (10) *se'* = *wã* *chak-é* *d-á-tsĩ*
 1PL.INCL = ERG food-DET arrive-IPFV-DIR
 ‘We bring the food’ (SOA: 142)

- (11) *i = mĩ = wã* *ie' = mĩ-n-ẽ-tsẽ* *kõ* *aiẽ*
 3SG = mother = ERG 3SG.PRX.H = go-MV-PFV-DIR place up.there
 ‘His mother took him to a place up there’ (IHB: 91)

The suffix *-tsẽ/-tsĩ* is tentatively glossed here as a directional. Jara (2013) has recently suggested that this suffix means ‘from/to a point in time or space’. Alí García Segura (p.c.) states, however, that often this suffix simply emphasizes the idea that whoever utters the sentence ‘has really brought/took someone (from) somewhere’. This suffix resembles the positional existential *átsẽ~átsĩ* ‘exist in one’s hands, hold’ used in possessive predications (12):

- (12) *Ye' = wã* *alá* *átsẽ*
 1SG = PSSR child exist.POS
 ‘I hold the child in my hands’ (lit: of me the child exists in my hands) (EL)

The construction in (12) seems to provide two pieces of grammar found in constructions such as (10) and (11), namely the ergative marker *wã* and the suffix *-tsẽ/-tsĩ*. Considering that: (i) the suffix on verbs in CMC_{MOV} shows the same alternation in the last vowel as the existential *átsẽ~átsĩ*, (ii) the aphaeresis of /a/ (i.e. *apá* > *pá* ‘body’) is widespread in the language; and (iii) the ergative marker *wã* arose from a possessor marker; my **hypothesis** is that constructions such as those in (5), (6) and (7) evolved from constructions such as (10) and (11), which feature the grammaticalization of the positional existential *átsẽ ~átsĩ* ‘exist in one’s hand’ into a suffix (*-tsẽ~-tsĩ*) on the main verb.

In particular, I argue that CMC_{MOV} started out as a bi-clausal construction (13), namely, as a possessive predication with an internally-headed Relative Clause (RC) containing an intransitive verb of movement and an absolutive. This syntactic environment would allow for a lexical fully finite verb⁴ before the positional existential as well as for the presence of *wã* in the construction:

⁴ Bribri does not have any nominalizing suffixes, except an instrumental nominalizer (i.e. *chk-ók* ‘spoon’ is formed by the verb root *chk-* plus the instrumental nominalizer *-ók* and means literally ‘for eating, thing with which one eats’). Agentive nominalizations such as ‘the cook’ or ‘the runner’ are conveyed with an internally headed relative clause (i.e. ‘the man (who) cooks’, ‘the man (who) runs’).

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|------|---|-------------------------|----------------|--------------|---------------|----------------|
| | [[S | V_{MOV}] | RC=PSSD | EXIST | PSSR] | STAGE I |
| (13) | <i>alá</i> | <i>d-ê</i> | | <i>átsẽ</i> | <i>ye'=wã</i> | |
| | child | arrive-PFV.REC | | exist.POS | 1SG=PSSR | |
| | ‘I have in my hands/hold the child (who) arrived’ | | | | | |

Internally-headed relative clauses are used to relativize a NP in any syntactic role (i.e. ergative, absolutive and obliques) (cf. Wilson 1984). In Bribri, independently of the relativization strategy being used, the NP to be relativized in the main clause must be fronted and, if the NP is an absolutive, then the verb must also be fronted (Wilson 1984: 196), as shown in (14) and (15):

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|------|--|--------------|--------------|------------------|--------------|---------------|-----------|
| | [[P | V | OBL | A] | RC=P | V | A] |
| (14) | [<i>caballo</i> | <i>tũwẽ'</i> | <i>be'=ã</i> | <i>wóbla=tõ]</i> | <i>sũw-ê</i> | <i>ye'=tõ</i> | |
| | horse | buy.PFV.REM | 2SG=from | man=ERG | see-PFV.REC | 1SG=ERG | |
| | ‘I saw the horse (which) the man bought from you’ (Wilson 1984: 181) | | | | | | |

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|------|---|---------------------|-----------------|--------------|----------------|
| | [[S | V |]RC=PSSD | EXIST | PSSR] |
| (15) | <i>alá</i> | <i>kap-ó-wã</i> | | <i>átsẽ</i> | <i>ie'=wã</i> |
| | child | sleep-IPFV.INTR-CPL | | exist.POS | 3SG.PRX.H=PSSR |
| | ‘He has in his hands/holds the child (who) sleeps’ (EL) | | | | |

Because of the fronting requirement, I propose that the order of the bi-clausal construction (Stage I, ex. 13) has the RC coming first, followed by the existential and the possessor. In Stage I, the possessed item would be the whole head-internal RC. In Stage II (16), due to high frequency of use (or to reasons yet to be determined), the positional existential of Stage I became gradually cliticized to the verb on its left (*dê=átsẽ*) and eventually underwent phonological erosion (*dê-tse*), thus losing prosodic independence and ending up being a suffix. The verb of the RC was then primed to be reinterpreted as the main verb, with S of the RC (rather than the whole internally-headed RC) then primed also to be reinterpreted as P of the main clause. At some point in stage II, the former possessor is also primed to be reanalyzed as ergative:

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|------|--|---|-------------------|-----------------|
| | [S_{RC}>P | V_{RC}=EXIST_{POS}>V_{MC} | PSSR>A] | STAGE II |
| (16) | <i>alá</i> | <i>d-ê=átsẽ</i> | <i>ye'=wã</i> | |
| | child | arrive-PFV.REC=exist.POS | 1SG=ERG | |
| | ‘I arrived the woman’ (lit: Of me the woman arrived in my hands) | | | |

In stage III (17), the construction became strictly mono-clausal. S of the erstwhile RC is now P of the main clause, the former possessor was only interpretable as ergative, and the cliticized existential became optional:

- (17) [P V A]
alá d-ê ye'=wã
 child arrive-PFV.REC 1SG=ERG
 'I brought the woman'

STAGE III

Possibly, once the construction was consolidated as mono-clausal, the ergative phrase could then also occupy the position before the absolutive-verb sequence.

To summarize, I have proposed grammaticalization with concomitant reanalysis. Among the most common features of grammaticalization (Lehmann 1995, Hopper and Traugott 1993, Heine and Reh 1984, *inter alia*), in this scenario we would have: (i) desemanticization (concrete 'exist in one's hands/hold' > 'from/to' (or something else?)); (ii) decategorialization (the existential loses its status as a main verb); (iii) prosodic weakening (it becomes cliticized and then suffixed); and (iv) phonological attrition (it loses its initial /a/). The hypothetical stages of the grammaticalization and reanalysis of the CMC_{MOV} are summarized below:

I	[[S	V _{MOV}]RC=	PSSD	EXIST	PSSR]
	NP _∅	V		EXIST	NP _{wã}

II	[S _{RC} >P	V _{MOV} =	EXIST _{POS}	PSSR>A]
	NP _∅	V =	clitic > suffix	NP _{wã}

III	[P	V _{MOV}	A]
	NP _∅	V	NP _{wã}

4.1 Possible problems

One of the (I am sure many) problems with this analysis is illustrated in (18):

- (18) *bikákla = wã dí' tsurû-i d-á-tsĩ-ké-tche*
 master=ERG water cocoa-EMPH arrive-IPFV-DIR-IPFV2-already
 'The ceremonial master is going to bring already the cocoa broth' (SOA: 79)

In (18), the suffix *-ke* (glossed as IPFV2) can express habituality or near future meanings. In terms of verb position classes, this suffix must be attached immediately after the imperfective verb form. I know of no other cases where this is not true, except (18) and similar examples, where the suffix *-tsẽ/tsĩ* disrupts the suffixation of IPFV2 immediately after the imperfective inflection (*-á* in this case). If this is a case of lexicalization (Jara 2013: 131), then there is no explanation as to why an infinitive form such as **dóktse* is not allowed (whereas with other verbs which have lexicalized a directional, the infinitive form includes

the directional, as in *yó̌ktsã* ‘pull out’, literally *yó̌k* ‘pull’ and *-tsã* ‘outwards’). Strangely, the suffix appears in the expected position on other verbs such as *mínũk* ‘go’ (cf. *mĩ-ke-tsẽ* but not **mĩ-tsẽ-ke*). Other possible problems/complications:

-why is the grammaticalization and reanalysis so limited in terms of scope? (or at least it appears to be synchronically?) If this or a similar process happened why would it have affected only three verbs?

-If the suffix *-tsẽ-tsĩ* has come from the grammaticalization of an existential, it has not gone much further on the grammaticalization cline. For example, it did not extend to other verbs. Elsewhere, it is only used with *dók* ‘arrive’, *mínũk* ‘go’ and *bitũk* ‘come’ in constructions with a single core argument:

- (19) *kólĩ bit-ũ-tsẽ*
 rain come-IPFV.INTR-DIR/really
 ‘The rain is really coming’ (IHB: 158)

-In the hypothetical scenario proposed here, Stage I must have started with animate beings as absolutes of the RC (i.e. entities that are able to go, come, and arrive by themselves) and then be extended to inanimates. How common is this path?

-What happens with the deictic center in this hypothesized diachronic path?

5. Other constructions with a lexical verb followed by a positional existential

There are other constructions in this language where a main verb is followed by a positional existential which specifies the position in which A (20), S (21) or P (22) arguments are found with respect to the event described by the main verb:

- | | A | P | V | EXIST_{POS} |
|------|---|------------|-------------|----------------------------|
| (20) | <i>alá = tö</i> | <i>ñã'</i> | <i>ñ-ế</i> | <i>tchěr</i> |
| | child = ERG | corn.tamal | eat-IPFV.TR | exist.POS |
| | ‘The child eats corn tamal seated’ (EL) | | | |

- | | S | V | EXIST_{POS} |
|------|--|-----------------|----------------------------|
| (21) | <i>i = Yábulu</i> | <i>kap-ó</i> | <i>měr</i> |
| | 3SG = Y. | sleep-IPFV.INTR | exist.POS |
| | ‘Mr. Yabulu sleeps streched out/sprawled’ (IHB: 161) | | |

- | | A | P | V = EXIST_{POS} |
|------|---|------------|--------------------------------|
| (22) | <i>Nãmũ = tö</i> | <i>dúk</i> | <i>m-ế = těr</i> |
| | tiger = ERG | seashell | put-PFV.REC = exist.POS |
| | ‘The tiger put the seashell on the floor’ (HB: 66) (lit: the tiger put the seashell lying down) | | |

Notice that in all these examples, the positional existential does not ‘intervene’ in the argument structure of the main verb. In all these cases, the main verb determines the argument structure of the construction. For instance, in (20), it is the transitive stem *ñũk* ‘eat (soft things)’ which determines the marking of the A argument by means of the ergative postposition *tõ* and the presence of an absolutive. The construction in (20) would have exactly the same argument structure if the existential *tchër* were absent.

6. Conclusion

The CMC_{MOV} presented here are also found in the sister language Cabécar (Margery 1989). In this language too, the ergative phrase is marked by *wã*, the absolutive is unmarked and the verb is an intransitive verb of movement. Preliminary data seem to indicate that a greater variety of translational motion verbs can be used in the construction in Cabécar (including *shkók* ‘walk’).

The hypothesis presented here relied heavily on the assumption that, since the ergative marker *wã* derives historically from a possessor marker, a possessive predication built with an existential verb seems to be a good hypothetical source for other constructions in which *wã* is found. However, this hypothesis leaves several problems unsolved. Whatever the truth might be, this topic is worth investigating for two main reasons.

The first is that it relates to differential ergative marking in this language. It would be very beneficial to understand the historical developments behind two ergative markers which seem to reconstruct back to Proto-Chibchan (for *tõ* see Constenla 2008, for *wã* see Pacchiarotti to appear). Which one was the most widespread and which one created at some point in history new patches of grammar?

The second is that this (probably wrong) hypothesis raises questions about the unusual behavior of the suffix *-tsẽ~-tsĩ* in comparison to other verbal suffixes. Many of these evidently come from lexical verbs, such as *-shka* ‘?’ (< *shkók* ‘walk’), *-dë* ‘(movement) up to a certain ending point’ (< *dók* ‘arrive’), *-a* ‘falling movement’ (< *a*’perfective of *ók* ‘let fall’), and *-mĩ* ‘inchoative, start to’ (< *mĩnũk* ‘go’). Another topic worth investigating would be which constructions resulted in the grammaticalization of these lexical verbs as suffixes.

Abbreviations

1 = first person, 2 = second person, 3 = third person, CPL = completive, DIM = diminutive, DET = determinative suffix (indicates an exophorically or endophorically recoverable referent), ERG = ergative postposition, EMPH = emphatic form (nouns only), EXCL = exclusive, H = human, INF = infinitive, INTR = intransitive IPFV = imperfective, IPFV2 = second imperfective (habitual and near future meanings), MV = middle voice cluster, NEG = negation, PFV = perfective, PL = plural, POS = positional (existential verb which specifies the position in which its argument is found), PRX = proximal, PSSR = possessor, PTCP = participle, REC = recent, REM = remote, SG = singular, TR = transitive.

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