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Volume 89

Ergativity in Amazonia
Edited by Spike GILdea and Francesc Queixalós

Ergativity in Amazonia

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How ergative is Cavineña?*

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1. Introduction

This paper is an investigation of morphological and syntactic ergativity in Cavineña, a language from the Tacanan family that is spoken by about 1200 people in the Amazonian rainforest of northern Bolivia.

Amazonian languages are renowned for their intricate morphological split ergative systems (Dixon 1994:xv), where the ergative properties manifested by the coding system in some (syntactic, semantic or pragmatic) contexts give way to a different pattern (nominative/accusative or other) in other contexts. All four of the splits identified by Dixon are found in the region. Splits conditioned by the nature of the arguments are found in the Panoan languages Waripapano and Yaminawa (Peru; Valenzuela 2000) and Chácobo (Bolivia, in areas directly neighboring Cavineña; Valenzuela Ms.). Splits conditioned by TAM specifications are also present in several Panoan languages: Amahuaca (Southern Peru and Brazil; Sparing-Chávez

* The research presented in this paper is based, for the most part, on first hand data that I collected myself from Cavineña native speakers in traditional communities through 15 months of fieldwork between 1996 and 2003. About 60 texts and conversations were recorded from a total of about 20 male and female adults ranging from about 20 to 80 years old. The recordings consist of personal life recounts, old time stories, myths, descriptions of local fauna, of traditional customs and practices, etc. With the help of informants, the recordings were transcribed and translated (they amount to about 5000 sentences). Another 20 texts were written by Cavineña consultants (about 700 sentences). The corpus was complemented by utterances volunteered or elicited during controlled sessions as well as utterances overheard during participant observation (about 3600 sentences). In addition, I have made use of Cavineña texts collected and published by SIL missionaries Camp and Liccardi (such as Camp & Liccardi 1972 or Tavo Mayo 1977) (about 3500 sentences) and the sentences that illustrate the entries of their (1989) dictionary (about 3000 sentences). The Cavineña people are thanked for their generous hospitality and interest in documenting and describing their language. The present paper greatly benefited from comments made at various stages of its elaboration by Denis Creissels, David Fleck, Spike Glides, Colette Grinevald, Francesc Quetzalós, Pilar Valenzuela, as well as an anonymous reviewer from John Benjamins.
1998), Chácobo (Bolivia; Prost 1962, Loos 1978:137-8, Valenzuela Ms.), and Marubo (Brazil; Costa 2002). Splits conditioned by the nature of the verb, also referred to as active/stative splits or intransitive splits, are reported in many Arawak languages, including Baure and Mjojbo, both spoken in Bolivia close to Cavineña (Alkhendal 1999, Danielsen 2007; 2008, Rose forthcoming). Splits conditioned by the subordinate clause / main clause distinction are attested in the carib family (Gikdea 1998), in the Tupi-Guarani family (Dixon 1994:107) and in Shokleng (JØ, Brazil; Urban 1985). In addition, a pragmatically-conditioned split is attested in Amahuaca (the Panoan language mentioned earlier), with ergative case-marking conditioned by word order (Sparing-Chávez 1998:445-446, Valenzuela 2003:919-920).

Some Amazonian languages are also reported to display syntactic ergativity, Shipibo-Konibo (Panoan, northeastern Peru; Valenzuela 2003:483) has an S/O pivot in internally headed relative clauses. In Katukina (Katukina family, Brazil; Queixalos this volume), an S/O pivot is manifested by relativization constructions, as well as in various intra-clausal syntactic operations, including ellipsis, focalization and questions. Trumai (isolate, Brazil; Guirardello 1999, this volume) manifests an ergative alignment in relativization, reflexivization, causativization, and raising in complement clauses. It is noteworthy that an S/O pivot in relativization is common to all three.

Cavineña, like most languages of the Tacanan family,1 has a case-marking system which operates on an ergative/absolutive basis2 a transitive subject NP receives a case marker (enclitic =ra) while an intransitive subject NP and a transitive object NP are left unmarked.3

1. The Tacanan family comprises 5 languages: Araona, Cavineña, Iae lijia, Reyesano and Tacana. A socio-linguistic presentation of Cavineña and a comprehensive grammatical description can be found in Guillaume (2008).

2. A notable exception within the Tacanan family is Reyesano, in which none of the core NPs receive any case marking (see Guillaume 2009).

3. Cavineña vowel phonemes are i, e (with allophones [ɛ] and [ɛ̃] in free variation), a and u (written as with allophones [a] and [ɔ] in free variation). Cavineña consonant phonemes are p, b, t, d, c (alveolar alveolar), s (alveolar affricate), [s] (alveolar alveolar affricate; written sh), k, kw, ts (alveolar affricate; written sh), h, w (written h), n, m, n, p (written ny), m, k, w (written ny), m, s (written ms), w (with allophones [w] before a and [f] before fand e) and j (written i). Syllable structure is (CV). Cavineña has a non-contrastive pitch accent system whose role is the delimitation of the phonological word as a prosodic domain (see illustration in §2.2). Some words borrowed from Spanish have not been integrated into the Cavineña phonological system at all and are pronounced just as in Spanish. In this study, they are written according to their Spanish orthography (eg., hermano 'brother', pista 'airport', camión 'truck', etc.) See Guillaume (2008:Chapter 2) for a full account of Cavineña phonology.

4. Abbreviations used in this paper are: A, transitive subject; ABIL, abilitative; ABS, absolute; ADVERBS, adverbial AFPTN, affection; ASE, adjective suffix; ASSOC, associative; CONDI; conditional, CONTR, contrastive; COUNTEVID, contrary to evidence; DAT, dative; DIM, diminutive;
at co-reference constraints that apply to a number of clause combination structures and I show that these don't work ergatively. Rather, co-reference either operate according to an S/A pivot or is not sensitive to the grammatical function of the arguments.

2. Cavineña morphological ergativity

In Cavineña, the coding of grammatical functions is realized by two mechanisms: (1) a system of case markers on NPs or independent pronouns (§2.1), and/or (2) a system of bound pronominal clitics in second position in the clause (§2.2).

Within most main clause types, the two systems operate simultaneously. Within dependent clauses and certain types of main clauses (namely "imperative" types), only the first system (case markers on NPs or independent pronouns) is available.

These systems are the only mechanisms for coding grammatical functions in this language; there are no pronominal affixes in the verb/predicate and constituent order is free.

2.1 NPs and independent pronouns

NPs and independent pronouns are mutually exclusive when referring to the same argument in the same clause. They both code grammatical functions according to an ergative pattern by way of case markers, which are enclitics to the last phonological word (in the case of NPs) or suffixes (in the case of independent pronouns), as illustrated in (1); recall that NPs in A function (transitive subject) take the marker -ra 'ERG', whereas NPs in S function (intransitive subject) and in O function (transitive object) are unmarked for case.

NPs can occur anywhere in the clause, so constituent order does not play any role in the coding of grammatical functions, as shown by (1a) (repeated) and (1a):

(1) a. Iba=ra =tu iye-chine takure. AVO
    a. Takure =tu iye-chine iba=ra. OVA
    Iba=ra =tu takure iye-chine. AOV
    takure =tu iba=ra iye-chine. OAV
    iye-chine =tu iba=ra takure. VAO
    iye-chine =tu takure iba=ra. VOA

    'The jaguar killed the chicken.' (elicited)

Instead of being realized by NPs, the arguments can be expressed by independent pronouns. There is an absolutive set, used to encode S or O arguments, and an ergative set, used to encode A arguments. The two sets are given in Table 1.

Table 1. Cavineña independent pronouns

<table>
<thead>
<tr>
<th>Absolutive</th>
<th>Ergative</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-ke</td>
<td>yatse</td>
</tr>
<tr>
<td>1SG-FM</td>
<td>1DL</td>
</tr>
<tr>
<td></td>
<td>1PL</td>
</tr>
<tr>
<td>mi-ke</td>
<td>metse</td>
</tr>
<tr>
<td>2SG-FM</td>
<td>2DL</td>
</tr>
<tr>
<td></td>
<td>2PL</td>
</tr>
<tr>
<td>tu-ke</td>
<td>tate</td>
</tr>
<tr>
<td>3SG-FM</td>
<td>3DL</td>
</tr>
<tr>
<td></td>
<td>3PL</td>
</tr>
<tr>
<td>riya-ke</td>
<td>retse</td>
</tr>
<tr>
<td>3PROX-SG</td>
<td>3PROX-DL</td>
</tr>
<tr>
<td></td>
<td>3PROX-PL</td>
</tr>
</tbody>
</table>

Looking at the non-singular forms of the sets, we can see that the ergative pronouns correspond to the absolutive pronouns plus the suffix -ra. In the singular forms, however, -ra replaces a suffix -ke. In the 1st person singular, the root is i in the absolutive and e in the ergative. The suffix -ke could be analyzed as an absolutive case marker. I have preferred to analyze it as a formative for the reason that it is not found in the non-singular forms.

As an illustration of the use of the independent pronouns, consider (2) below, where we can see that the 2nd person plural is expressed by an ergative form when it is in A function, as in (2a), whereas it is expressed by an absolutive form when it is in S function, as in (2b), or in O function, as in (2c).

(2) a. Mikwana-ra, adeba-ya=a dyu [ai ejiri=ke] 1SG-ERG =3SG-KNOW-IMPFV=POC INT palm.leaf=VN=1SG
    'You (pl) know what ejiri (palm leaf) is (so I won't explain it to you).' 6
    b. Are chamakama mikwana, ju-eti-ya?
    QUEST finally 2PL be-COMB-IMPFV
    'So you (pl) finally arrived?'
    c. Mikwana=piisi r-ya, iwa-ya.
    2PL=JUST 1SG-ERG wait.for-IMPFV
    'I will wait only for you (pl).' (Camp & Liccardi 1989: 90)

Independent pronouns, like NPs, do not undergo any strict ordering restrictions; they typically come first in main clauses, as in (2a,c), which correlates with the fact that they are essentially used for contrast, but this is not a requirement. At any rate, their position in a clause gives no indication of their grammatical function.

6. When no indication of the source of an example is provided, the example comes from my own textual/conversational corpus.
bound pronouns

The second system for the coding of grammatical functions involves bound pronouns. Bound pronouns can co-occur with NPs/independent pronouns, but are not obligatory. In this respect, Cavineña represents an intermediary situation between a language where bound pronouns are obligatory (agreement) and a language where they are in complementary distribution with NPs/independent pronouns (but see §2.3 for some restrictions applying to the coding of the A function).

Cavineña bound pronouns have basically the same forms as independent pronouns but different prosodic and morpho-syntactic properties. Because the distinction between independent and bound pronouns was not made in earlier work on Cavineña (cf. Camp & Licardi 1978, 1983, 1989 and Camp 1985) and because of the system of bound pronouns is fairly complex, it will be necessary to describe it in some detail here.7

Unlike what is most typically found cross-linguistically, Cavineña bound pronouns are not part of the verb/predicate but clitics in second position in the clause, a position which they share with other morphemes coding notions of evidentiality, epistemic modality, discourse status, speaker attitude, etc. As clitics, they are unaccented elements which attach prosodically to the last phonological word of the first immediate constituent of a main clause (NP, PP, verb/predicate, subordinate clause, etc.).

Cavineña has a non-contrastive pitch accent system whose role is the delimitation of the phonological word as a prosodic domain. It is realised as follows: (1) the first syllable of a phonological word receives a high pitch, (2) the last two syllables receive a mid pitch (only the last syllable if it is a two syllable word), and (3) the high pitch of the first syllable extends rightwards to any syllable(s) preceding the last two syllables. (A low pitch is used on the last syllable(s) of an utterance.)

The application of the pitch accent contour to phonologically independent words given in citation form is illustrated in (3), and to phonologically independent words uttered within a phrase in (4) (high pitch is marked by an acute accent, mid pitch is unmarked).

(3) a. bêña
   'two'

b. mätüja
   'caiman sp.'

c. jûtâkijù
   'therefore'

(4) pêre émake
    'raft under'
   'under the raft'

Independent pronouns are assigned the pitch accent contour exactly like any other phonologically independent words, as with yatse '1DL' in (5). On the other hand, when it comes to bound pronouns, the pitch accent contour does not apply to them individually but always incorporated to a host which is normally the last phonological word of the first syntactic constituent of the main clause, as with =yatse '1DL' in the same example.

(5) [jâdyâ jâ-dāsî]=yatse yâtse yâwâ=eke kwâ-chîne.
    thus be-ss=1DL 1DL NPF-ground=PERL GO-REC.PAST
    After doing so we (dl) went by land.'

In their full form, the segmental make-up of bound pronouns is identical to that of the independent pronouns, with one exception: the 3rd person proximal singular absolutive bound pronoun is =ri-ke while its independent counterpart is riyu-ke.

The paradigm of Cavineña bound pronouns is given in the following table.

Table 2. Cavineña bound pronouns

<table>
<thead>
<tr>
<th></th>
<th>Absolutive</th>
<th>Ergative</th>
</tr>
</thead>
<tbody>
<tr>
<td>r=e-ke ~ =0</td>
<td>=ri-ke =yatse =ekwana</td>
<td>=ri-ke =yatse(-ra) =ekwana(-ra)</td>
</tr>
<tr>
<td>=1sg(-fr)</td>
<td>=yatse =ekwana</td>
<td>=yatse(-ra) =ekwana(-ra)</td>
</tr>
<tr>
<td>=mîl(-ra)</td>
<td>=yatse=ekwana</td>
<td>=yatse(-ra) =ekwana(-ra)</td>
</tr>
<tr>
<td>=tû(-ke)</td>
<td>=yatse =ekwana</td>
<td>=yatse(-ra) =ekwana(-ra)</td>
</tr>
<tr>
<td>=3sg(-ra)</td>
<td>=yatse =ekwana</td>
<td>=yatse(-ra) =ekwana(-ra)</td>
</tr>
<tr>
<td>=ri(-ke)</td>
<td>=retse =rema</td>
<td>=retse(-ra) =rema(-ra)</td>
</tr>
<tr>
<td>=3prox.sg(-fr)</td>
<td>=3prox.db =3prox.pl</td>
<td>=3prox.db(-ra) =3prox.pl(-ra)</td>
</tr>
</tbody>
</table>

8. Sometimes sequences of clitics (whether pronominal or not) can form independent phonological words by themselves in Cavineña (cf. Guillaume 2008:59). While more investigation is still necessary, it remains true that bound pronouns never form independent phonological words individually but always need a host, and as such, the prosodic argument made here to distinguish them from independent pronouns remains valid.
The form of a number of bound pronouns can be altered under the effect of a morpho-phonological rule. This rule is notably responsible for the deletion of the ergative suffix -ra 'ERG' and the formative suffix -ke 'FM' in some contexts (see further below) — this is indicated by parentheses in the table. In (1a,b) and (2a) above, for example, the application of this rule explains why we have 3rd person singular absolute bound pronouns showing up as =tu and not as =tu-ke.

The coding of grammatical functions by second position clitic pronouns follows the same ergative pattern that characterizes NPs and independent pronouns (although some complications arise because of the morpho-phonological rule of suffix deletion): a bound pronoun that expresses an argument in A function has an ergative form, as in (6a), while it has an absolutive form when it refers to an argument in S or O function, as in (6b) and (6c), respectively.

(6) a. Eju =mikwana-raq =yate e enajaka yu ya?
   where =2PL-ERG =1DL space give-IMPFFV
   '(When we arrived in their village, we asked them) "Where are you
   (pl) going to give us (dl) a place (to sleep)?"

b. Iriha=ju =mikwana_f je-ya.
   church=1G0 =2PL come-CMPFFV
   '(Tomorrow we will have a service, so) you (pl) will come to the church.'

   thus=reason=FOC =2PL see-CMPFPP
   'This is why I have come to see you (pl).' 

Bound pronouns cluster in second position according to strict ordering rules. First, if there are other second position clitics (coding evidentiality, epistemic modality, etc.,) bound pronouns must occur last in the chain, as illustrated in (7):

(7) a. Enapa-wa =taa =tuna-raq =i-ke0
   cry.for-CMPFPP =REM =3PL-ERG =1SG-FM
   'They (my dogs) cried for me!

b. Pusama=dyu =shana =yate _ ju ya.
   happy=FOC =ISH =1DL be-CMPFFV
   'We (dl) were very happy, poor us.'

c. Karu-leri-kware =pa =tu-raq
   bite-ALMOST-REM.PAST =ERP =3SG-ERG
   'They say that it (the viper) nearly bit him.'

Second, when more than one bound pronoun occurs in second position, their respective order is again controlled by strict ordering rules which involve a 1st>2nd>3rd person hierarchy (the symbol '>' means 'higher than'), as follows: the lower on the hierarchy, the earlier in the sequence, regardless of function. This is exemplified by the pair of sentences below, where the 2nd person singular consistently precedes the 1st person plural, whether it is the A, as in (8a), or the O, as in (8b).

(8) a. E-tya=ama =mi-raq =ekwana_0*
   POT.give-POT=NEG =2SG-ERG =1PL
   'Couldn't you (sg) give one (radio transmitter) to us (pl)?'

b. Aaje. Adeba-ya=dyu =mi-ke0 =ekwana-rq
   yes know-CMPFPP =FOC =2SG-FM =1PL-ERG
   'Yes, we (pl) know you (sg).'

(See also the order =mikwana-ra =yate '2PL-ERG =1DL' in (6a) and =tuna-ra
   =ke '3PL-ERG =1SG-FM' in (7a)).

Bound pronouns, unlike independent pronouns, do not fill NP slots, a claim that is supported by the fact that they can co-occur with (in other words cross-reference/agree with) a noun/NP or even an independent pronoun coding the same argument in the same clause, as shown in (9a), with an A bound pronoun co-occurring with an A NP9 and (9b), with an O bound pronoun co-occurring with an O independent pronoun 10.

(9) a. Jadya =tu-raq =bani-ke
   thus =3SG-ERG =1SG do-REM.PAST giant.ant eater=ERG
   'This is what the giant ant eater did to me (he poked me with its trunk).

b. Aama. Tu-ke0 =a-ke =ama, hermano.
   no 3SG-FM =3SG-FM =1SG do-REM.PAST=NEG brother
   'No. That (straw hat), I didn't make, brother.'

Bound pronouns, unlike independent pronouns (or NPs), are restricted to main clauses — they are not used in subordinate clauses — and they are further excluded from imperative or hortative mood.

In the general literature on ergativity and South American languages, Cavineña has been repeatedly cited as displaying a complex and exotic split-ergative system (see for example Derbyshire 1987: 319-320, Payne 1990: 4, Campbell 1997: 349, Dixon 1994:106–7, Aikhenvald & Dixon 1999:366–67, and Adelaar with Muysken 2004:212–22). This idea came from an analysis by Camp (1985) based on her observation of examples in which the pronouns coding the A argument are left unmarked for case (i.e., they do not show up with their otherwise

9. As we will see, the co-occurrence between an A NP/independent pronoun and an A bound pronoun is subject to some restrictions (§2.3).
10. Note that the first person bound pronoun in A function in (9a) and O function in (9b) is realized as =0 under the application of the deletion rule.
expected suffix -ra). However, as argued in detail in Guillaume (2006), the phenomenon at play in such examples is morpho-phonological rather than morpho-syntactic and, as a result, is not a manifestation of split ergativity (or any other type of split for that matter). Essentially, the suffix of the final (or the sole) clitic in the second-position cluster is regularly deleted whenever the sentence contains a following word. As a consequence, not just the ergative suffix -ra, but also the formative suffix -ke of absolutive clitics disappears, leaving person-markers whose form does not distinguish between ergative and absolutive, as can be seen in (10a,b,c).

(10) a. Muitu =mi a-kware=ama, hermano?
    hat =2SG do-REM.PAST=NEG brother
    'Didn't you (sg) make (straw) hats, brother?'

b. Ejlu =mi kwa-ya?
    where =2SG go-IMPfv
    'Where are you (sg) going?'

c. Are =mi bakwa=ra a-wa=ama?
    quest =2SG viper-ERG do-PERF=NEG
    'Isn't that a viper that bit (lit. did) you (sg)?'

First person singular bound pronouns, both ergative and absolutive, are fully deleted, as in (11a,b).

    fist=ASSOC =3SG-PM =1SG kill-REM.PAST
    'I killed it (the monkey) with my fist.'

    good-ASP=FOC =3PL-ERG =1SG see-COME-REM.PAST
    'They received me (lit. saw me as I came) very well.'

Note that in these examples, the final suffix on the preceding clitic is protected from deletion, which would otherwise be expected if it were truly final in the clitic cluster.

On the surface, bound pronouns coding A can therefore be alternatively formally identical to or formally distinct from bound pronouns coding S or O, depending on whether the deletion applies or not. These alternating patterns were noted in previous studies on the Cavineña pronounal system by Camp (1985) and Camp & Liccardi (1978, 1983, 1989), especially that suffix deletion was sensitive to the person hierarchy — as explained above, the hierarchy conditions clitic ordering, which then conditions suffix deletion. Within the typological literature available at the time (notably Dixon 1972; 1979, Silverstein 1976, and Comrie 1978), Camp (1985) analyzed the Cavineña pronounal system therefore as a split ergative system conditioned by a multiplicity of factors, such as the difference between main and subordinate clause, the mood/polarity of the clause, the constituent order, the person hierarchy, etc. But once we recognize the existence of a category of bound pronouns distinct from the category of independent pronouns, we can see that the alternations are only found with bound pronouns, and that they are the result of a morpho-phonological rule of deletion, rather than the result of the morpho-syntactic organization of the coding of the arguments.11

2.3 Restrictions on the co-occurrence of NPs/independent pronouns and bound pronouns

It was seen that NPs/independent pronouns can co-occur with (second position) bound pronouns. However, there is a co-occurrence restriction that applies to the coding of the A argument, but not to the coding of the S or O arguments: the A enclitic cannot co-occur with a preverbal A NP, as in (12); it occurs only when there is no overt A NP in the clause, as in (13a), or when the A NP follows the verb, as in (13b).

(12) E-ra =fu=f e-kwe tia-chi adeba-ya=ama.
    1SG-ERG =3SG 1SG-GEN father-APTFN know-IMPfv=NEG
    'I do not know my father.'

(13) a. Ebipukaka=tsewe =tu-ke O iye-kware.
    fist=ASSOC =3SG-PM =1SG kill-REM.PAST
    'I killed it (the monkey) with my fist.'

    then =3SG-PM =1SG 3SG-GEN lid open-REM.PAST 1SG-ERG
    'I opened its (bottle) lid.' (Tavo Mayo 1977:18)

Note that in (12), if the A argument had been realized by a bound pronoun (which would be =O in this case), the -ke formative of the 3rd person singular bound pronoun should not have been deleted. And in (13a) and (13b), even though the A bound pronouns are realized as zeros, their "underlying" presence is made clear by the fact that the -ke formative of the 3rd person singular bound pronouns is not deleted.

In combinations involving only 3rd person participants, if there is a postverbal overt A NP or independent pronoun, or if there is no overt A NP, the 3rd person bound pronoun, if present, can only refer to the A. Thus, only one participant can be realized by a bound pronoun (i.e., either the A or the O but never both at the same time). If both 3rd person arguments are singular, there is no way of saying which, of the A or the O, is marked by the bound pronoun (as in (1a) and (1a') for

11. The reader interested in a fuller treatment of this issue can find it in Guillaume (2006).
example). But if one of them is singular and the other plural, the form of the bound pronoun, which marks number, makes it clear that the bound pronoun refers to the A, as exemplified in (14).

(14) a. Jadya =pa =tuna\textsubscript{A} a-wa \textsubscript{3SG} ata=kwana=ra\textsubscript{A},
    thus =REP =3PL do-PERF 3SG-GEN relative=PL=ERG
    'His relatives had told him so.'

b. Amena \textsubscript{O} tupari\textsubscript{O} =tuna\textsubscript{A} iyi-ya.
    BM corn,beer =3PL drink-IMPV
    'They would drink corn beer.'

If the A is realized by a preverbal NP or independent pronoun, then the bound pronoun, if present, can only refer to the O:

(15) Tu-ra=dyu\textsubscript{A} =tuna\textsubscript{O} kweja-diru-kware epu=ju=kwana=ke\textsubscript{O}.
    3SG-ERG=FOC =3PL tell-GO-REM,PAST village=LOC=PL=LIG
    'He told the ones from the village.'

These restrictions do not apply to the coding of the S and O arguments, which can be represented by a bound pronoun even if a co-occurring S or O NP is placed preverbally, as in (16a), with a preverbal S NP, and (16b), with a preverbal S independent pronoun.

(16) a. Trosadora=kamadiya\textsubscript{S} =tu\textsubscript{S} ani-kware.
    3SG=ONLY =3SG SHR-REM,PAST
    '(At that time) there were only hand saws.'

b. Mi-ke\textsubscript{S} =mi\textsubscript{S} kwa-wa=ama escuela=ju.
    3SG-PERF =2SG go-PERF=NEG school=LOC
    'You didn’t go to school?’ the priest asked me.' (Tavo Mayo 1977:39)

For examples of O bound pronouns co-occurring with O NPs/independent pronouns occurring preverbally, see (9b), (12) and (13b).

In a few examples, the constraint that a preverbal A NP cannot co-occur with an A bound pronoun is apparently relaxed. In all these examples, however, it turns out that we have a headless A NP. In (17), for example the A NP chacha=kwana=ra can only be interpreted as 'the ones who were still alive' in that chacha is an adjective and adjectives cannot be the head of an NP in Cavineña (Guillaume 2008:357).

(17) Jadya tirya-ta-wa=ju\textsubscript{A} =tuna\textsubscript{A} chacha=kwana=ra\textsubscript{A},
    thus finish-PASS-PERF=DS =3PL alive=PL=ERG
    inmetupu-kware: ‘Peyakeja ne-diru-ra!’
    think-REM,PAST other side HORT,PL=GO-HORT,PL

After they (the group of Cavineños) had been killed (lit. finished), the ones who were still alive started to think: 'let's go to some other place!'

Two additional examples of this phenomenon are provided below:

(18) a. [ikwene kwa-ya=ra\textsubscript{O} =tu-ke\textsubscript{O} =O\textsubscript{A} dali\textsubscript{O} first go-IMPV=ERG =3SG-FM =1SG tortoise
dadi nati-kware.
    find-GO-REM,PAST
    'As I was going first (lit. I, who was going first), I found a tortoise.'

b. Dutu=ra\textsubscript{A} =tu-ke\textsubscript{O} =ekwana\textsubscript{A} adeba-ya
    all=ERG =3SG-FM =1PL know-IMPV
    [aja ari-da=ke\textsubscript{O}]
    capuchin_monkey big-ASF=LIG
    'We all know (what) capuchin monkeys (are).'

Although more work is needed on this phenomenon and its motivations, the pattern of co-occurrence between full NPs (with a head)/independent pronouns and bound pronouns is another instance in the Cavineña system of coding grammatical functions that manifests an ergative/absolutive pattern. This leads us to conclude that unlike what frequently appears to happen in morphologically ergative languages of South West Amazonia, Cavineña does not display any split in its system of coding grammatical functions.

2.4 Conclusions

Cavineña does not display any split ergativity in its morphological (coding) level of organization: the A argument is consistently treated differently from the S and the O, these last two grammatical functions being treated identically.

In the remainder of this paper I will investigate whether the consistent ergative pattern instantiated by the coding features might be extended to higher and more abstract levels of organization of its grammar (i.e., the domain of behavior-and-control properties), in other words, whether there could any S/O pivot in this language.

3 Searching for syntactic ergativity in Cavineña

In this section, I look in detail at certain complex sentences in Cavineña which have specific co-reference restrictions. I first provide a brief introduction to the morphosyntax of dependent clauses in Cavineña ($\S$3.1), then discuss two types of temporal
adverbial clauses: non-finite temporal same subject clause marked by -(a)tsu 'SS' (§3.2) and finite temporal different subject clause marked by =ju 'DS' (§3.3).

3.1 Dependent clauses in Cavinéña: An introduction

Formally speaking, Cavinéña has two categories of dependent clauses: (1) non-finite dependent clauses, whose verb is marked by a dependency marker attaching to a non-finite verb and (2) finite dependent clauses, whose verb is marked by a dependency marker attaching to a finite verb. The full list of Cavinéña dependent clauses is given in Table 3.

Verbs heading main clauses must be inflected with affixes that belong to a single paradigm coding notions of Tense-Aspect-Modality (imperfective, perfect, remote past, remote future and potential) or commands (imperative, hortative and jussive).

Verbs heading dependent clauses must either take or not take these affixes, depending on the type of clause, as follows:

1 — Verbs heading non-finite dependent clauses cannot take any inflectional affixes. This is illustrated with a general purpose clause in (19). As we can see, the dependency clitic marker =ishu attaches to a verb stem that does not carry any inflectional affix.

(19) [E-ave nama-chi] =bakwe deka=bucha mere ju-kware
1sg-gen mother-afftn =cont adv=smlrk work be-rem.past [ekwana=ju=ishu].
1pl. dress=purp.gnl
'My mother worked like a man so that she could dress us.'

Table 3. Types of dependent clauses in Cavinéña12

<table>
<thead>
<tr>
<th>main function</th>
<th>marker</th>
<th>main function</th>
<th>marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>temporal sequence</td>
<td>-(a)tsu</td>
<td>temporal settings</td>
<td>=ju</td>
</tr>
<tr>
<td>purpose of motion</td>
<td>=ra</td>
<td>reason</td>
<td>=tibu</td>
</tr>
<tr>
<td>general purpose</td>
<td>=ishu</td>
<td>similarity</td>
<td>=bucha</td>
</tr>
<tr>
<td>cause</td>
<td>=ra</td>
<td>conditional</td>
<td>=ke juatsu</td>
</tr>
<tr>
<td>immediate anteriority</td>
<td>=wic</td>
<td>'thx to'</td>
<td>=ade me</td>
</tr>
<tr>
<td></td>
<td></td>
<td>consensive</td>
<td>majaku/amabucha</td>
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<td></td>
<td></td>
<td>relativization</td>
<td>=ke</td>
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</tbody>
</table>

2 — Verbs heading finite dependent clauses must take inflectional affixes. This is illustrated with a reason clause in (20). As we can see, the dependency clitic marker =tibu 'REASON' attaches to a verb that carries an inflectional suffix (coding remote past):

(20) [Tu-ra-kamadya, ijeti, jipe-kware=tibu] =pa -tu5
3sg-erg-only sun approach-rem.past=reason =rep =3sg pude-da.
red-asf
'They say that, because he (the sun bird) was the only one who approached the sun, he is red.'

The verb of a dependent clause, whether non-finite or finite, must come last in the clause; overtly expressed arguments are free to occur in any order before the verb.

Dependent clauses do not have second position clitics, neither those that code evidentiality, epistemic modality, etc. nor bound pronouns.

The coding of core arguments within dependent clauses follows, like in main clauses, an ergative pattern. With all types of dependent clauses but one (general purpose clause), we find the exact same case-marking system: ergative case marker =ra on A NPs (or suffix =ra on independent pronouns) and absence of case marking on S and O NPs; see ergative A NP in (21a), ergative A independent pronoun in (20), absolutive S NP in (21b), absolutive S independent pronoun in (21c), absolutive O NP in (20), and absolutive O independent pronoun in (19).

(21) a. [Dii=ra, karu-ya=ju] =05 pudena-ya.
Mosquito=erg bite-imperf=ds =1sg become-red-imperf
'When a mosquito bites me, I become red.'

b. [Camion, subi=ishu] =tuna-ja =tu5 e-dij5
truck enter=purp.gnl =3pl-dat =3sg npp-path
bajeje-ti-chine.
prepare-go-loc.past
'They went there to arrange the path so that the trucks can enter.'

c. Jadya =pa [tata-chi=jai inime]5 ju-chine
thus =rep father-afftn=gen thouh be-loc.past
[5=ke aputa-chine=ke juatsu].
1sg-fm disappear-loc.past=condit condit
'This is what your father would have thought (lit. thus would your father's thought be) if I had died.' (Liccardi 1983:43)

12. Note that Cavinéña does not have complement subordinate clauses nor coordinate clauses.
General purpose clauses have a distinct, although still ergative, case-marking system, with the A receiving genitive marking, as in (22); the S and the O remain unmarked, as in (21b) and (19), respectively.

(22) Tsekedia =tu₂₃ be-nuka-kware jae₃₄ amenaka then 3SG bring-REFL-REM.PAST fish BM
\{ynte-ja₂₃ ara=ishu\}
\{1DL-GEN cat=PURGGL\}
'The Pacahuara woman first gave us five fish to take away.' Then, she brought more fish, (this time) for us (dl) to eat there.'

Dependent clauses (whether non-finite or finite) can either have or not have co-reference restrictions vis-à-vis their matrix clause. Let us first briefly discuss those types of dependent clauses that do not have co-reference restrictions, such as the general purpose clause and the reason clause illustrated in (19) and (20). These types of clauses very often (although not necessarily) share a core argument with the matrix clause. However, there are no restrictions as to which function this shared core argument has to fulfill within either the dependent or the matrix clause. In both (19) and (20), for example, the A of the dependent clauses is co-referential with the S of the matrix clause. But the A of the dependent clause can just as well be co-referential with the O of the matrix clause, as in (23a), or the A, as in (23b). (Although not illustrated here, this holds true with the S and the O of such dependent clauses as well.)

(23) a. Dependent A = matrix O
[E-ra₂₃ butsejũ salon₃₄ ina-ya=tibu] =tu₂₃ =∅₃₄
1SG-ERG first-time rifle grab-IMPEV=REASON =3SG-ERG =1SG
ejene-kware=ama.
believe-REM.PAST=NEG
'Because it was the first time I was using (lit. grabbing) a rifle, she (my sister-in-law) did not believe me (when I told her that I had killed a deer).'

b. Dependent A = matrix A
Aama. [Mi-ra=dy₄₃ ɪye-wa=tibu] daju-kwe!
no 2SG-ERG=FOC kill-PERF=REASON take-IMPEV
'No. Since you killed it (the caiman), you take it.'

It is also possible for the dependent clause and the matrix clause to share no core argument at all, as in (21b,c).

It is worth having at look a relative clauses, since Cavinéna is typologically (and possibly genetically) related to Shipibo-Konibo, a language that has an S/O pivot in internally-headed relative clauses (Valenzuela, this volume). Cavinéna does have both internally- and externally-headed relative clauses (Guillaume 2008:Chapter 20). Externally-headed relative clauses do not have constraints on the role of the relativized NP (within the relative clause). Notably, the relativized NP can be in A function (although this is not as frequent as relativization on S or O NPs), as shown in (24) (the relativized NP is in bold face):

(24) Tume =tukwe ani-kware
\{bina [i-ke₃₄ susu-tya=ke]₅₆\}
\{bat 1SG-FM suck-GO-IMPEV=INF\}
'There was a (vampire) bat that was going to suck me (during my sleep).'

In all the available examples of internally-headed relative clauses, it is an S or an O NP that is relativized and never an A NP, as shown in (25) below. Unfortunately, I have not had the chance to verify with native speakers whether this is a constraint in Cavinéna or if it is just the fact that internally-headed relative clauses with an A NP relativized have not occurred in the data. More work is needed on that topic.

\{int. name 3SG now=REFL machine sit-IMPEV=INF\}
'What is the name of the machine (used to cut wood) that exists (lit. sits) nowadays?'

b. [Metse-ra₂₃ encomoenda=pijio₇₈ kwadisha-chine=ke]₂₉
\{2DL-ERG package=DIM send-REFL.PAST=INF\}
\{ri-ke₇₈ \=O₈ ina-tsa-chine.\}
\{3PROX.2SG-FOC =1SG grab-COM=REFL.PAST\}
'I received the little package that you (dl) sent me.'
(Camp & Liccardi 1989:61)

In conclusion, we can say that the preceding types of dependent clauses (with the possible exception of internally-headed relative clauses) do not display any particular alignment patterns between the S, the A and the O as far as co-reference constraints are concerned. Therefore, these clauses neither display an ergative/absolutive pattern, nor a nominative/accusative pattern, but rather a neutral pattern.

I will now turn to more interesting types of dependent clauses (for the purpose of the topic of this paper), namely those clauses which do hold co-reference constraints.
Two types of constraints are found within these structures:
1. — the dependent clause must share one argument with the matrix clause and this shared argument must be the subject (either the S or the A) within both clauses. This type will be referred to as "same subject" clauses;
2. — the dependent clause can share an argument with the matrix clause but this shared argument cannot be simultaneously the subject (whether the S or the A) within both clauses. This type will be referred to as "different subject" clauses.

Cavineña has various types of "same subject" dependent clauses, all non-finite. Here I will only discuss one: the temporal dependent clause whose verb is marked by the suffix -(a)tsu ($\S$3.2). Cavineña has only one type of "different subject" dependent clause, which also holds temporal relations vis-à-vis the matrix clause, and whose verb is marked by the clitic =ju ($\S$3.3).

3.2 Non-finite temporal same subject clause

The first type of dependent clause that we will be looking at has its verb marked by the suffix -(a)tsu and is mainly used either to code sequences of events or to modify the matrix clause. This type of clause is by far the most frequently used type of dependent clause (including non-finite and finite adverbial clauses) in Cavineña discourse.13

Similar to the general purpose clause that was illustrated above, the marker -(a)tsu attaches directly to a verb stem that is stripped of any of its inflectional morphology. The short form -tsu is used with polysyllabic verbal stems (e.g., nawi-tsu 'drink-SS', isu-ra-tsu 'greet-SS') while the long form -atsu is used with monosyllabic stems (e.g., je-atsu 'come-SS', ba-atsu 'see-SS').

Dependent clauses marked by -(a)tsu have strict co-reference constraints vis-à-vis their matrix clause: their subject (either S or A) is obligatorily co-referential with the subject (either S or A) of the matrix clause. All combinations of subject co-reference are attested:

(26) a. Dependent-S = matrix-S

```
Tudya =tatse $\_S$ amen-a [kwaba=ju ani-bute-\textit{tsu}] \textit{tsura-}kware.
```

then $\_3$D.L BM CANOE=LOC SI-GO-DOWN-SS GO-UP-REM.PAST

"Then, having sat down in their canoe, they (all) went up (river)."

b. Dependent A = matrix A

```
Tudya =tu-ke $\_A$ ineta-\textit{tsu} mare-kware.
```

then $\_3$SG-PF -1SG POINT-LAT-SS SHOOT-REM.PAST

"Then, having pointed (my rifle) at it (the pecary), I shot it."

c. Dependent S = matrix A

```
[Babi-ra kwa-\textit{atsu}] =tu-ja =tu $\_O$ tsura-kware.
```

hunt=PURP.MOT GO-SS =3SG-DAT =3SG MEET-REM.PAST

13. In an illustrative text provided in Guillaume (2008: 773-798), for example, dependent clauses marked by -(a)tsu are found in 17% of the sentences (26 occurrences out of 153 sentences),

d. Dependent A = matrix S

```
Baji-da=jipene =O $\_S$ ju-kware [tu-ke $\_O$ peta-\textit{tsu}].
```

SCARED-ASF=-ALMOST =1SG BE-REM.PAST 3SG-FM LOOK.AL-SS

"I was a bit scared, looking at it (the deer)."

One corollary to the same-subject co-reference requirement is that the subject of a clause marked by -(a)tsu is always omitted. On the other hand, any other participants (core or oblique) and clausal constituents, can be expressed and if so, they receive the same marking as if they were in a main clause — see the locative postpositional phrase in (26a), a purpose of motion non-finite dependent clause in (26c), and an independent pronoun in O function in (26d).

Returning to the topic of this paper, we can conclude that the co-reference constraints that characterize the arguments of dependent clauses marked by -(a)tsu treat the S and the A similarly and the O differently. Both the S and the A are obligatorily co-referential with one argument of the main clause, namely its subject, and both the S and the A must be omitted from the dependent clause. The O of the dependent clause, on the other hand, does not have co-reference restrictions and can either be present, as in (26d), or omitted, as in (26b). In other words, the co-reference constraints of dependent clauses marked by -(a)tsu operate on a nominative/accusative basis, in contrast to the ergative/absolutive pattern that applies to the morphological coding of the arguments of the same clause.

3.3 Finite temporal different subject clause

The second type of dependent clause that we will be looking at has its verb marked by the clitic =ju. Its main function is to code temporal settings for its matrix clause predicate. Similar to dependent clauses marked by -(a)tsu, finite temporal different subject clauses are extremely frequent in natural discourse.

Being of the finite type, the verb of a clause marked by =ju must bear inflectional affixes. Specifically, this type of clause usually uses the aspectual inflectional markers -ya 'IMPFV' and -wa 'PERF' to code a simultaneous vs. sequential contrast between the temporal clause event and the matrix clause event; the imperfective suffix -ya 'IMPFV' codes simultaneity, as in (27a), while the perfect suffix -wa 'PERF' codes sequence, as in (27b).
Finally, there are examples where the two clauses do not share any core argument, as in (29) below, which proves that there is no S/O pivot between dependent clauses marked by =ju and their matrix clause.

(29) No shared co-argument between dependent and matrix clause
a. [Salon_{s} pututa-ya-ama-ju =tu_{s} kwa-nuka-wa
  rifle explode-IMPFV-NEG-DS =3SG GO-REITR-PERF
  [peya e-tare=ju
  other NPF-LOC
  'As his rifle didn't want to work (lit. explode), he went to another house (to ask for another rifle).
  b. [Peya_{s} kisanat-ya-ju =tu_{s} tejikwa-nuka-ya.
  other talk-IMPFV-DS =3SG-DAT =3SG switch.off-REITR-PERF
  'When the other (the non-Cavineña speaker) talks, he (the linguist) turns it off (his tape-recorder).
]

The conclusion that we can draw is that the S and A are treated alike in the co-reference constraint that holds between dependent clauses marked by =ju and their matrix clause. Although the basis of the S/A grouping instantiated by dependent clauses marked by =ju is not entirely of the same nature as that manifested in dependent clauses marked by -(a)tsu,12 this grouping still reveals a form of sensitivity of the language for a nominative/accusative patterning at the syntactic level.

3.4. Conclusions

Cavineña behavior-and-control properties displayed by the combination of a main clause and any of the two types of dependent clauses discussed here suggests an orientation of the language towards a nominative/accusative syntactic grouping of arguments, rather than an ergative/absolutive one.

4. Conclusions

In this paper, I have intended to answer the following two questions: (1) how rigid is the ergative patterning within the coding system of Cavineña? and (2) how far does ergativity percolate within Cavineña grammar? These questions are of particular interest for languages spoken in the Amazon basin, an area where ergativity is very widespread.

14. Note that the pair made by dependent clauses marked by -(a)tsu and dependent clauses marked by =ju is functionally very close to a switch-reference system (as per Laimain and Numro 1989). Formally, however, these are clearly distinct clause types, in which case the term switch-reference system is perhaps better avoided here. In other words, Cavineña does not have a single clause type that would manifest both same subject and different subject. Rather, what we have are different co-reference constraints associated with different clause types.

15. In the first case, the basis of the S/A grouping is obligatory co-referential, while in the second it is obligatory non-co-referential.
The first task was to look at the Cavinéña coding system carefully, in particular the working of bound pronouns which display a number of peculiar alternations. As we saw, these alternations result from the application of a rule of suffix deletion which is conditioned by morpho-phonological factors (rather than morpho-syntactic). As such, I concluded that the alternations do not affect the pronoun alignment patterns and, contrary to previous analyses (cf. Camp 1985), were not a case of split ergativity.

The second task was to search for syntactic ergativity. In doing so, I investigated in detail two types of dependent clauses with co-reference constraints vis-à-vis their matrix clauses. It was shown that, in these two constructions, co-reference constraints within these structures operate on a nominative/accusative basis, in contrast to the ergative/absolutive coding of their core arguments.

In the present stage of our knowledge of Cavinéña, it would be premature to state with certainty that this language does not manifest any pattern of syntactic ergativity — as we saw, co-reference constraints in relativization could perhaps manifest an S/O pivot. This remark probably holds true for many (morphologically) ergative languages of the Amazon. Firstly, these languages are still, for the most part, under studied. Secondly, the study of these languages is often limited to the analysis of their overt coding features, and rarely to their more abstract/covert behavior-and-control properties. It is very likely that our understanding of ergativity in Amazonia might evolve substantially as more in-depth studies of invidual languages become available.

References


The ergativity effect in Kuikuro (Southern Carib, Brazil)

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This article first gives a typological and morphosyntactic profile of Kuikuro, a Southern Cariban language. Kuikuro has ergative nominal case marking and alignments, as well as nearly identical nominal and verbal inflection. The second part focuses on the absolutive and ergative cases, the former attributed to internal arguments (S and O) and the latter to the external argument (A). The postposition heke may mark either a syntactic adjunct (Perspective) to intransitive verbs or the external (ergative) argument of transitive or transitivized verbs; we present a (semantic) hypothesis on the relation between these distinct syntactic units. We conclude that in Kuikuro, all intransitive verbs behave as inaccusatives. We find evidence that confirms the emergence of a dominant morphosyntactic ergative through realignment of nominalization structures. In the last part, we propose to conjoin two hypotheses, theoretically distinct but empirically convergent. The first one is that offered by Alexiadou (2001) in the frame of the generative formal theory: the state of affairs in ergative languages is similar to the case patterns in nominalizations. The second one is that of Gildea (1998): inside the Cariban family, languages with ergative morphosyntax (Full Set II) are innovative, etymologically relatable to nominalizing and adverbializing morphology of Proto-Cariban.

Introduction

From the very first glance, we can see that Kuikuro is a dependent-marking 'ergative' language. It is the most explicit example of what Gildea (1998) calls a Full Set II system within the Cariban language family; it has absolutive pronoun prefixes, post-verbal ergative pronouns on the way to becoming enclitics, overt case marking of A(gent) nominals, ergatively oriented word order, and (plural) number agreement with the absolutive (O,S) argument. We know that there are only two Cariban languages with this profile: the one I call the 'Upper-Xingu Carib language', of which Kuikuro is a variant and located at the southern edge of the wide