Split intransitivity and non-canonical subject order in Yukuna

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This paper provides a discussion of non-canonical postverbal subjects in the context of an in-depth description of split intransitivity in Yukuna (Arawak, Colombia). In this language, the S argument of an intransitive clause is encoded differently according to the lexical category of the predicate. In intransitive verbal clauses, the S argument precedes the predicate, whereas in non-verbal clauses, the S argument follows the predicate. Various syntactic tests reveal that S in both verbal and non-verbal clauses shows Subject properties along with the A argument of transitive clauses, and in fact constitutes the syntactic pivot of the language. This configuration is rare in Arawakan languages, especially in the Northern branch to which Yukuna belongs, where split intransitivity commonly distinguishes between active intransitive verbs, on the one hand, and stative intransitive verbs and non-verbal clauses, on the other. In the other languages of the branch, active intransitive clauses have a pre-predicate S, whereas stative verbs and non-verbal predicates have a post-predicate S. Diachronically, it is very likely that Yukuna had a similar system in the past and underwent an alignment change. A plausible hypothesis concerning this change is that stative verbs were nominalized and used as predicates in non-verbal predication, so Yukuna’s former post-verbal S corresponds to synchronic post-predicate S in non-verbal clauses.

1. Introduction

Yukuna (ycn) is an underdescribed Arawakan language spoken by approximately 1,000 speakers in Colombian Amazonia.\textsuperscript{1} As most Arawakan languages, Yukuna exhibits patterns of split intransitivity (Durand 2016), in which the sole core argument of an intransitive clause is encoded differently according to a variety of different factors.\textsuperscript{2} Typically, the split distinguishes active intransitive verbs (the sole core argument of which is marked like the A of transitive clauses), from stative verbs (the sole core argument is marked like the P of transitive clauses, and like the sole core argument of non-verbal predicates). This is the case in North-Amazonian Arawak languages such as Tariana, Baniwa, Bare, and Warekena (Aikhenvald 2001: 177).

In this paper, we describe the coding properties of core arguments in Yukuna, on the basis of the first author’s first-hand corpus of 4 hours of transcribed and translated spontaneous texts, as well as some elic-
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ited data collected in the field since 2013. Unless stated otherwise, all Yukuna examples come from this corpus and are labeled for their source with a tag identifying the recording and the line in which they appear.3

We argue that split intransitivity in Yukuna is sensitive to the lexical category (i.e. part of speech) of the predicate. This is a ‘transcategorial’ split (Durand 2016). On the one hand, verbal clauses in Yukuna exhibit nominative-accusative alignment, where both the A argument of transitive clauses (1) and the S argument of intransitive clauses (2) share the same coding properties, distinct from the P argument of transitive clauses. On the other hand, the sole core argument of non-verbal predicates is encoded similarly to the P of transitive verbal clauses (3).

(1) Kája na-nó-cha riká
already 3PL-kill-PST 3SG.NF
‘They have already killed it.’ (ycn0151,149)

(2) Kája na-i’jí-chá
already 3PL-go-PST
‘They have already gone.’ (ycn0068,60)

(3) A’jne-jí=tá riká
food-UNPOSS=EMPH 3SG.NF
‘It is food too.’ (ycn0063,144)

We will use the labels A and S_V to refer to the aligned core arguments of verbal clauses, P for the second core argument of verbal clauses, and S_NV for the sole core argument of non-verbal clauses.

Yukuna shows a major distinction between clause types: verbal versus non-verbal. Different types of Subjects (S_V and S_NV) are clearly mapped onto these clause types. Canonical argument marking is also defined on the basis of these clause types: canonical subjects are defined as the sum of the properties of A/S_V, which will be used to evaluate the SUBJECTHOOD of non-canonical Subjects, i.e. S_NV.

The paper is organized as follows. We begin by describing the coding properties of canonical S (§2) and non-canonical S (§3), from a synchronic perspective. After showing how their marking differs, we discuss the syntactic properties of Subjects in §4, and demonstrate, first, that Yukuna’s post-predicate S in non-verbal clauses does have Subject properties, and, second, that Yukuna has a Subject syntactic pivot. We then adopt a comparative and diachronic approach in §5 to place Yukuna’s system within the Arawakan context. After discussing the particularity of Yukuna’s alignment within the family in §5.1, we propose the hypothesis of a diachronic change in §5.2, and we adduce comparative data to
support our hypothesis in §5.3. The comparative data on Arawakan lan-
guages mainly come from the second author’s first-hand corpus, as well as from various descriptive grammars.

2. Verbal clauses and canonical S

In this section, we will describe the coding properties of core argu-
ments of verbal clauses in Yukuna. ‘Verbal clauses’ are defined here as the clauses in which the semantic predicate is a lexical verb. They can be further classified according to the number of core arguments they have (one or two), as intransitive clauses or transitive clauses. In Yukuna, verbal clauses exhibit nominative-accusative alignment, which distinguishes, on the one hand, the A argument of transitive clauses and the Sv argument of intransitive clauses, and, on the other hand, the P argument of transitive clauses, which has markedly different properties. The coding properties of A and Sv are detailed in §2.1, while §2.2 deals with the properties of P.

2.1. A and S of verbal clauses (A/Sv)

The A and S arguments in verbal clauses are coded through word order, normally by placing an overt NP unmarked for case immediately before the verb. When the referent has already been mentioned in discourse, the A/Sv argument is encoded with a bound person marker, or ‘index’ (Haspelmath 2013) on the verb. It is also possible to use an independent pronoun instead of an index when the A/Sv argument is in focus. However, often a different coding strategy is used in this case (see §4.1.3), which we do not consider to be canonical A/Sv marking.

Overt A/Sv NPs generally do not co-occur with indexes for the same argument in the same clause (4-5), a characteristic feature of so-called ‘pro-indexes’ (Haspelmath 2013). However, some cases with both an overt A/Sv NP and an index are attested with third person A/Sv. In these cases, the overt A/Sv NP is often dislocated to the right, but not obligatorily, which suggests that the presence of an optional ‘cononimal’ (a nominal coreferential with the index, Haspelmath 2013), is not entirely excluded, even though it remains rare.

(4) Transitive
   a. Kája ri-pirá nó-cha riká.
      already 3SG.NF-pet kill-PST 3SG.NF.PRO
      ‘His pet already killed him’. (ycn0053,33)
b. É ri-nó-cha riká=tá.
   then 3SG-kill-PST 3SG.NF.PRO = EMPH
   ‘Then he killed it’. (ycn0079,54)

(5) Intransitive
   a. É ri-i’rti iphí-cha.
      then 3SG.NF-son arrive-PST
      ‘Then his son arrived’. (ycn0189,104)
   
   b. É ri-iphí-cha.
      then 3SG.NF-arrive-PST
      ‘Then he arrived’. (ycn0063,128).

The occurrence of both an independent A/SV pronoun and an index on the verb is excluded, however, as shown in (6), where the independent pronoun is obligatorily understood as a P marker, not co-referential with the index. The complete absence of A/SV marking (either NP or index) in verbal main clauses is also excluded, meaning that zero anaphora for A/SV is not allowed.

(6) [Riká]P ri-li’-chá.
   3SG.NF 3SG.NF-do-PST
   ‘He did it’. (ycn0041,10)

The A/SV NP and the verb form a tightly knit constituent, as no free element can intervene between them. The encoding of A/SV is formally identical to the encoding of arguments of nouns (possessors as in (7)) and postpositions as in (8); the dependent is marked either as an overt NP immediately preceding the head, or as an index on the head, not both.

(7) Argument of Noun (Possessor)
   a. Iná yajálo
      IND.PRO wife
      ‘One’s wife’ (ycn0119,24)

   b. Ri-yajálo
      3SG.NF-wife
      ‘His wife’

(8) Argument of Postposition (Obliques)
   a. Riká nakú wa-jápá.
      3SG.NF on 1PL-work
      ‘We work on that.’ (ycn0018,15)
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b. Kája ri-náku wa-jápá.
then 3SG.NF-on 1PL-work
‘Then we work on that’. (ycn0042,106)

2.2. P of verbal clauses

The P argument of transitive clauses, unlike A/S V, does not form a constituent with the verb. It is simply encoded with an overt NP or an independent pronoun, without case marking. When the referent has already been introduced in the discourse, an independent pronoun is frequently used instead of an NP (see 4). The P argument is canonically placed in post-verbal position, but it does not have to be immediately adjacent to the V (9), and it can also appear in clause initial position (10). Lastly, another crucial difference between P and A/S V is that P allows zero anaphora when recoverable through the context (11).

(9) Na-a’-chá pínó ri-jló [kujnú]₃₃.
3PL-give-PST again 3SG.NF-for cassava
‘They gave cassava to him again’. (ycn0068,153)

(10) [Phirí]₃₃ na-jña’-khé, [riká]₃₃ na-a’-khé na-jímá chuwá.
fruit_sp 3PL-take-FAR.PST 3SG.NF 3PL-give-FAR.PST 3PL-face on
‘They took achiote, and they put it on their faces’. (ycn0151,46)

(11) É ru-nó-cha=tá, é ru-apíro’-cha=tá.
then 3SG.F-kill-PST=EMPH then 3SG.F-suck-PST=EMPH
‘Then she killed (her), then she ate (her)’. (ycn0151,59)

The coding properties of the three types of core arguments of verbal clauses are summarized in Table 1. Clearly, A and S V share the same behavior, and differ from P. A/S V can thus be grouped together under the category of Subjects, and P belongs to the category of Objects. The only common property of all core arguments in Yukuna is the absence of case marking, as opposed to what occurs with oblique arguments, which are marked with postpositions.

<table>
<thead>
<tr>
<th></th>
<th>Zero anaphora</th>
<th>Indexation</th>
<th>Case marking</th>
<th>Word order</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>No</td>
<td>Yes (prefixes)</td>
<td>No</td>
<td>[A V] VP</td>
</tr>
<tr>
<td>S V</td>
<td>No</td>
<td>Yes (prefixes)</td>
<td>No</td>
<td>[S V] VP</td>
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<tr>
<td>P</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>V P ~ P V</td>
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Table 1. Coding properties of grammatical relations in Yukuna


3. Non-verbal clauses and Non-canonical S

In this section, we describe the coding properties of the single core argument of non-verbal clauses in Yukuna. ‘Non-verbal clauses’ are defined here as those in which the semantic predicate is not a verb. This definition is meant to encompass clauses in which there is no verbal element whatsoever, as well as those in which there is a semantically reduced verb (a copula), following Overall et al. (2018).

Yukuna uses a single construction to encode all semantic types of non-verbal predication (identification, categorization, property, location, existential, possessive (Overall et al. 2018)). This construction uses two distinct, alternating, encoding strategies: a juxtaposition strategy (12) and a verbal copula strategy (13). The two strategies alternate depending on the marking of TAM, polarity, and main/dependent clause status. There are some minor differences in the distribution of these strategies across the six types of non-verbal predicates, mostly regarding the marking of polarity, but typically, the verbal copula is used to carry verbal morphology (such as TAM, negation, subordination) that cannot be marked on word classes other than verbs.

The two strategies differ greatly in how they encode the single argument of the predicate. We claim that in the juxtaposition strategy, the single argument (SNV) is coded similarly to the P argument of verbal clauses (12) (cf. 9); whereas in the copular strategy, the single argument (SCOP) is coded similarly to the SV argument of a verbal clause (13) (cf. 4-5).

(12) [Kamejéri=tá]PRED [riká]SNV.
animal=EMPH 3sg.nf
‘It is an animal’. (ycn0079,055)

(13) [Kawayá=tá] PRED ri-i’mi-chá.
deer = EMPH 3sg.nf-cop-pst
‘It was a deer’. (ycn0079, 56)

The same patterns apply regardless of the category of the predicate (nouns, postpositional phrases, adverbs and demonstratives). A particularity of Yukuna is that it has a group of roots that can be used either in nominal modification and property predication, or in verbal modification. Typically, the bare root functions as a verbal modifier (14), and the same root with gender/number markers may function as a property predicate (15), but also as a noun modifier or even as the head of an NP. These modifiers are frequently found in clause initial position, in a focalization construction with a nominalized verbal root carrying action nominalizer -ka (16). Diachronically, it is likely that this class of nomi-
nal and verbal modifiers were formerly stative verbs. Their behavior is thus crucial for our understanding of the evolution of alignment and argument marking in Yukuna, as discussed in detail in §5.

(14) \textit{Pi-ara'-\=ó} =jlá \textit{kaphí.}
2SG-push-MID =FRUST hard
‘Try to push hard’. (ycn0189,48)

(15) \textit{Kaphí-runá \=nu-\=éjéna.}
hard-pl 1SG-brothers
‘My brothers are strong.’ (elicited).

(16) \textit{Kaphí \=wa\=ni} ri-patí-ya-\=ka
Hard very 3SG.NF-shine-PST-ACN.NZ
‘It shone very strongly (lit. Its shining was very strong).’ (ycn0169,12)

The argument coding properties for each non-verbal predication strategy will be described in §§3.1-3.2. We argue that, despite the formal similarities between \textit{S COP} and \textit{S V}, the former still shows some properties unexpected of canonical \textit{S V}, and typical of \textit{S NV} and \textit{P}.

3.1. \textit{S} of non-verbal predicates in juxtaposition strategy (\textit{S NV})

The coding properties of the sole core argument of non-verbal non-copular clauses (\textit{S NV}) are identical to those of the \textit{P} argument of a transitive verbal clause. This argument appears typically as a post-predicate NP (15) or independent pronoun (12). It is crucial for our argumentation to note that this argument does not form a constituent with the predicate. Proof of this statement lies in the fact that non-verbal non-copular clauses can have various free elements positioned between the predicate and the \textit{S NV}, such as discourse particles and even oblique arguments as in (17). These formal properties are similar to those of \textit{P} in verbal clauses, and are distinct from those of \textit{A/S V}.

(17) \textit{[Itewí]\textsc{pred} [wa-\=jló]\textsc{obl} [kélét piyuté]\textsc{snv}}
palm_sp 1PL-for DEM boa
‘That boa is a moriche palm tree for us’ (ycn0108,317)

Also, just like the \textit{P} argument, the \textit{S NV} argument can be omitted when it is recoverable from the context (18), and in some cases, it can also be placed in pre-predicate position (19). Pre-predicate instances of \textit{S NV} are rare, but in all examples the predicate is in focus, often accompanied by adverbs such as ‘still’ and ‘now’, while the \textit{S NV} is pronominal (20). Investigating the pragmatic-semantic properties of post- and pre-predicate \textit{S NV} requires a more in-depth study with a larger database. Hence, this question will not be discussed any further here.
Notice that example (18) exhibits negative polarity. This constitutes a particularity of certain non-verbal predicates (identification, categorization, and property), which can be negated with a specific non-verbal negation strategy that does not require the use of the verbal copula. In contrast, locative, existential, and possessive predicates require the verbal copula with the verbal negation marker (ūká V-la).

3.2. Subjects of non-verbal predicates in copular strategy (S_COP)

The verbal copula i’ma ~ i’mi is used in Yukuna in alternation with the juxtaposition strategy to encode all semantic types of non-verbal predicates. The verbal copula strategy is used specifically in contexts that require the use of verbal morphology such as TAM, negation (with existential, possessive and locative predicates), and subordinators. The strategy shift consists of adding the verbal copula to the corresponding non-verbal predicate. The result is a clause that has the appearance of a verbal clause with a canonical S_V argument. We will show, however, that even if the copula is verbal, the behavior of its argument shows irregularities unexpected of canonical S_V, and that in fact, this argument still has some similarities with P.

Yukuna’s copula i’ma ~ i’mi is an inflecting verb whose behavior is similar to that of an extended intransitive verb: intransitive verbs with an obligatory oblique argument. Its sole core argument is coded similarly to S_V, either with a pre-copular NP (21) or with a person index on the copula (see 13).

However, unlike A/S_V, S_COP need not obligatorily precede the verbal copula. There are some rare instances of post-copular S_COP in existential predicates used to introduce a participant for the first time in the dis-
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course (22). Such examples bring into question whether the $S_{COP}$ and the
verbal copula truly form a constituent, like canonical $S_V$ do with the verb
of the clause.

(22) $R\acute{e}$ [mená e’yá]$_{PRED}$ i’mi-chá [mawíru]$_{SCOP}$
there cropland in COP-PST pineapple
‘There in the cropland there were pineapples’. (ycn0068,317)

The coding of $S_{COP}$ is also similar to the coding of $P$ in certain trans-
itive clauses. Some verbal predicates take a clause-final verbal auxil-
iary, formally identical to the verbal copula. In this construction, the
auxiliary appears carrying the same TAM markers as the main verb, and
optionally the action nominalizer suffix -$ka$. This construction is found
with both intransitive and transitive verbs alike, but with transitive
verbs there is the possibility to index the person of the $P$ argument on
the auxiliary (23). The resulting pattern is remarkably similar structur-
ally to the one found in copular clauses (24). The diachronic pathway
that led to the emergence of a verbal auxiliary construction with the
same form as the copula, as well as the function of the suffix -$ka$ in this
construction remain to be elucidated, but the formal synchronic similari-
ties are undeniable.

(23) Aṹ ŋaké ri-li’-chá ri-i’mi-chá-ká
so DEM.SIMIL 3SG.NF-do-PST 3SG.NF-AUX-PST-ACN.NZ
‘So he did it like that’. (ycn0092,119)

(24) Kája [ru-yajná]$_{PRED}$ ri-i’mi-chá-ká réjéchami
then 3SG.F-husband 3SG.NF-COP-PST-ACN.NZ at that moment
‘Then at that moment he was her husband’. (ycn0058,40)

We have discussed in detail how the coding properties of the $S$
argument of non-verbal predicates differ from canonical $S$ in verbal
predicates: the freedom of placement vis-à-vis the predicate is a property
typical of $S_{NV}$ and of $P$, not of $A/S_V$. The instances of post verbal $S_{COP}$ are
not very frequent, but they are nonetheless revealing of the non-canoni-
cal status of this argument. While it is tempting to summarize them as
$S_{NV}$ being equal to $P$, and $S_{COP}$ being equal to $S_V$, we hope to have shown
that the reality is far more complex than that, and that, even in the pres-
ence of a verbal copula, the sole argument of a non-verbal predicate
remains non-canonical in its coding properties.

Next, we focus on the syntactic properties of the sole argument of
non-verbal predicates versus those of canonical $A/S_V$ and $P$. 
4. Syntactic properties of A, S and P

After describing and illustrating the coding properties of core arguments in Yukuna, this section discusses the behavioral properties of A, S\_V and P. We claim that the conjoined syntactic properties of A/S\_V in Yukuna define the syntactic category of Subject, as they are the privileged arguments of most major syntactic phenomena in the language (Van Valin & LaPolla 1997). As for P, we show that, despite there being far fewer operations that target this argument, some non-finite verbal forms promote P to the possessor slot, to the exclusion of all other grammatical roles. In each case, every syntactic operation characterizing canonical A/S\_V and P is tested with the S argument of non-verbal predicates. In doing so, we demonstrate how, despite their non-canonical coding properties, the S of non-verbal predicates do have subject properties at the syntactic level.

4.1. Syntactic properties of A/S\_V

The behavioral properties that we will discuss for A/S\_V are: control of imperatives (§4.1.1), control of co-reference with clausal complements (§4.1.2), and behavior in relativization and focalization (§4.1.3).

4.1.1. Imperatives

The imperative mood in Yukuna is morphologically unmarked, and it is compatible with second person singular and plural only. Both S\_V and A can control imperatives (25-26).

(25) Transitive Verb
«Chúwa pi-la’á kujnú» ké ri-ímí-cha.
now 2SG-do cassava SIMIL 3SG.NF-say-PST
‘«Make cassava!» he said’. (ycn0068,144-145)

(26) Intransitive Verb
Majó i-pa’-ó
here 2PL-come_back-MID
‘Come back here!’. (ycn0068,57)

The prohibitive mood is marked by suffix -niña on the verb, and is again compatible with A/S\_V (27-28), but unlike the imperative, the prohibitive can be used with 1\textsuperscript{st} and 3\textsuperscript{rd} persons as well.

(27) Transitive Verb
Pi-ajñá-niña riká
2SG-eat-PROH 3SG.NF
‘Do not eat that!’ (ycn0108,41)
Intransitive Verb

Pi-ña-nña-o
2SG-escape-PROH-MID
'Do not escape!'. (ycn0041, 68)

One interesting feature of the imperative mood is that, despite not being marked overtly on the verb, it triggers the alternation from non-copular to copular clauses with non-verbal predicates (29), revealing that non-declarative moods require a verbal element in the clause. In the prohibitive, as expected, the verbal copula is used carrying the prohibitive marker (30).

Ilé=ja pi-i’má, pi-ña-nña-o
there=EMPH 2SG-COP 2SG-escape-PROH-MID
'Stay right there (lit. be right there), don’t escape!' (ycn0041, 28)

Nu-itu, pi-i’ma-nña kawale’ke-ru
1SG-daughter 2SG-COP-PROH big.eater-F
'My daughter, don’t be a big eater'. (elicited, temp3-34)

4.1.2. Control of co-referentiality in complementation

There are several constructions that require clausal complements in Yukuna, and that typically require a non-finite verbal form in the subordinate clause. In the case of verbs like ‘want’ or ‘begin’, when the subjects of both verbs are co-referential, the verb in the complement clause carries the action nominalizer suffix -kana. If the nominalized V is transitive, its object is indexed as a possessor, either with an overt NP (31) or an index on the verb (32), in the same way subjects in main clauses are.

Nu-wáta nu-a’jne-wá ajñá-kána
1SG-want 1SG-food-REFL eat-ACN.NZ
'I want to eat my food' (elicited)

Nu-wáta ri-ajñá-kána
1SG-want 3SG.NF-EAT-ACN.NZ
'I want to eat it.' (elicited)

As is the case with imperatives, this type of subordination strategy with Same Subject constraints is available to non-verbal predicates, as long as the verbal copula is used. Example (33) shows how the non-finite verb form restricted to Same Subject complement clauses is used when one of the clauses is copular.
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(33) Pi-wáta [piká-o i’ma-kána]  
2SG-want 2SG-REFL COP-ACN.NZ  
‘You want to be, by yourself’. (ycn0068,52)

4.1.3. Relativization and focalization

In Yukuna, any argument can be relativized, including the possessor. However, among the various relativization strategies available, one is restricted exclusively to subjects. These relative clauses are formed by completely deleting the S argument from the relative, including indexes on the verb (i.e. the gap strategy, Comrie & Kuteva 2005), and adding a gender/number marker on the V (-rì NF; -yo F; -ño PL). Internally, the relative clause keeps most of its finite features (argument structure, TAM, word order), but externally, it behaves as an NP, a case that can be described in terms of clausal nominalization (Koptjevskaja-Tamm 2006; Genetti et al. 2008; Shibatani 2009). As an NP, the relative clause can occupy the position of an argument within a main clause, with or without an overt head. Examples (34-35) show this strategy used in the relativization of A and S_V respectively.

(34) Nu-aló a’á kujnú kélé [ØA iphá-ri jeĩ́-ná] jlıó.  
1SG-mother give cassava DEM bring-NF snake-PL for  
‘My mother gave cassava to the one(NP) who brings snakes’. (elicited)

1SG-give-PST cassava man arrive-NF for  
‘I gave cassava to the one who arrived’. (elicited)

This relativization strategy is often used in cleft-like constructions, to focalize the semantic agent of the relativized V.

As shown in (36), the relative clause is placed in the position of the S_NV of a non-verbal predicate, and an NP or independent pronoun in the predicate position, following the [NP]_PRED [NP]_SNV pattern of non-copular non-verbal predicates in Yukuna, discussed in §3.1.

(36) [Riká]_PRED kalé [ØA nó-ri kélé to’jmá jlıó kélé kamejérí-na]_SNV  
3SG.NF.PRO EMPH kill-NF DEM kid for DEM animal-PL  
‘He is the one who killed these animals for that kid’. (ycn0053,91)

The S argument of non-verbal predicates too can be relativized and focalized using this construction, by using the same set of gender/number markers on the copula (37).

(37) [Riká]_PRED [i’ma-khé-ri na-le’jé píreña.]_SNV  
3SG.NF COP-FAR.PST-NF 3PL-LNK scissors  
‘It is those that were their scissors’. (ycn0089,78)
4.2. Syntactic properties of P

As we have shown, the nominative argument (A/Sv) of verbal clauses is the syntactic pivot of the language, as it is the exclusive target of various syntactic operations described in the preceding section. By contrast, syntactic operations are hardly ever found to target exclusively the accusative argument (P). There is, for instance, no relativization strategy exclusive to the P argument in Yukuna, as the same strategy used to relativize P (38) can be used for all other arguments, including possessors (39).

(38) Object RC
Ükd ði-aññá-lá=nó [kélé kujnú [nu-a’-karé=no ri-jló]P]
NEG 3SG.NF-eat-NEG = HAB DEM cassava 1SG-give-REM.NZ = HAB 3SG.NF-for
‘... he never eats the cassava that I always give him.’ (ycn0068,160)

(39) Possessor RC
Kélé [nu-i’jna-káre támi amá-je]RC riká wáa’-ri nuká...
DEM 1SG-go-NREC.NZ body see-PURP.MOT 3SG.NF lead-SG.NF PRO1SG
‘That one whose body I had gone to see, he is the one who took me with him
(to his house).’ (ycn0092,109)

P is only singled out as a distinct syntactic role in same subject complement clauses. As described in §4.1.2, complement clauses with co-referential A/Sv arguments are coded by using, in the complement clause, a nominalized form of the verb with no A/Sv marking. In this construction, typically, the verb is preceded by its arguments. However, the P argument is the only one that must always precede the subordinate verb, and that can be indexed on it, as possessors of nouns are. While examples (29-30) are perfectly grammatical, example (40) with P placed after the nominalized subordinate verb is not grammatical.

(40) *Nu-wáta ajñá-kána nu-a’jne-wá
1SG-want eat-ACN.NMLZ 1SG-food-REFL
‘I want to eat my food’. (elicited)

The nominalizer -kana is also found in another function, with the semantics of a middle voice construction, with the semantic patient encoded just like a possessor (41). We showed in §4.1.2 that it is perfectly possible for the verbal copula to carry action nominalizer -kana, but in no case can it simultaneously index the $S_{cop}$ argument, so while (32) is grammatical, (42) is not.

(41) Ri-tuwá-kana ri-ji’wáta
3SG.NF-store-ACN.NZ 3SG.NF-above
‘That is stored above it’. (ycn0108,192)
To conclude, it appears that $S_{NV}$ lacks most properties of canonical subjects while occurring in complementary distribution with $S_V$. We will now present our diachronic hypothesis about the features of $S_V$ and $S_{NV}$ in Yukuna, and then we discuss to what extent these features can be found in other North Arawakan languages.

5. Comparative and diachronic perspective

A split between intransitive verbal and non-verbal predicates as the one found in Yukuna is not very common in the Arawakan family and is mostly found in South Arawakan languages such as Mojeño (Rose 2018), Baure (Danielsen & Granadillo 2008) and Yine (Hanson 2010). A far more frequent split distinguishes two subsets of intransitive predicates, active and stative, where the former encodes its sole core argument like $A$, and the latter encodes it like $P$, and groups together stative verbs and non-verbal predicates. This type of split intransitivity is the most frequent in the Northern branch of the family, and possibly reconstructs to proto-Arawak (Aikhenvald 1999, 2006: 245). In this section, we make the hypothesis that Yukuna formerly had an active/stative split and subsequently lost it. We then discuss the possible diachronic pathway that led to the loss of this system and the rise of a verbal/non-verbal split. Our hypothesis is that the group of erstwhile stative verbs could function as verbal predicates, but they could also be nominalized and then function as predicates in non-verbal non-copular clauses, as noun modifiers or even as verbal modifiers (see 14-15). The non-verbal uses would have expanded, while the lexical verbal predicate function fell progressively out of use.

We begin by situating Yukuna’s split system within the Arawakan family (§5.1). Then we lay out our hypothesis of a diachronic pathway of alignment change in §5.2. Lastly, we provide comparative support for our hypothesis by discussing the properties and functions of stative verbs in Arawakan in §5.3.

5.1. Alignment in Arawakan languages

Most Arawakan languages are characterized by split intransitivity, a phenomenon described by various authors – sometimes not in the same terms (Aikhenvald 1995, Aikhenvald 1998, Facundes 2000, Granadillo
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2006, Haurholm-Larsen 2016, Durand 2016, among others). Two major types of splits can be distinguished: grammatical and lexical split intransitivity. In the grammatical split, each predicate allows both A and P encoding for its core argument, according to semantico-pragmatic or morphosyntactic constraints like the presence of TAM markers. In the next two examples from Garifuna, the affirmative clause uses the A marking (43a) with the n- prefix, whereas the negative one uses the P marking (43b), with the -na suffix.

(43)  Garifuna
   a.  N-ahureru-ba
      1SG-play-FUT
      ‘I will play’
   b.  M-ahureru-ba-di-na
      NEG-play-FUT-LNK-1SG
      ‘I will not play’ (Sheil 2013: 11)

In this paper, we are concerned with lexical split intransitivity. In this type of split intransitivity, there are two intransitive predicate classes, the one taking the A marking and the other the P marking. Two subtypes are found in the Arawakan family:

(i) Transcategorial split: A split between verbal and non-verbal predicates. This is the case of Yukuna (see §3.1), as well as that of Mojeño (44) and Baure.

(ii) Extended split: A split between active verbs, on the one hand, and stative verbal and non-verbal predicates, on the other hand, as in Piapoco (45). This is the most widespread situation in the Arawakan family.

(44)  Mojeño Trinitario
   a.  Active
      N-ute-k=po
      1SG-come-ACT = PERF
      ‘I came.’
   b.  Stative
      N-uuna
      1SG-be.good
      ‘I am good.’
   c.  Non-verbal predicate
      ‘Jiro-nu=po
      man-1SG = PERF
      ‘I was then a man.’ (Rose 2011: 472-3)
(45) Piapoco
   a. Active
      Nu-bala-ka
      1SG-fish-REAL
      ‘I fish.’
   b. Stative
      Inu-ka nua
      feel.lazy-REAL 1SG
      ‘I feel lazy.’
   c. Non-verbal predicate
      Medico nua
      doctor 1SG
      ‘I am a doctor.’ (Durand, personal data)

In both Mojeño and Piapoco, the core argument of non-verbal predicates (44c, 45c) is marked differently from the core argument of active intransitive verbs (44a, 45a). The core argument of stative verbs is marked similarly to that of active intransitive verbs in Mojeño (44b), but it is marked as the core argument of non-verbal predicates in Piapoco (45b).

Arawakan languages use several strategies to encode non-verbal predication, such as verbal copulas (taking indexes for A or P), invariant copulas or juxtaposition. However, it is usual for the core argument of non-verbal predicates to be encoded as the unique argument of stative verbs as in (45b-c). Hence, the predominance of the extended type of split in the family. Yukuna’s transcategorial split is quite rare in contrast, especially when compared to North Arawakan languages, where the extended split is widely attested (Durand 2016: 301-2). Next we present our hypothesis about this singular property of Yukuna.

5.2. Alignment change in Yukuna

Yukuna’s current system of transcategorial split is rare within the Northern branch of the family. The most parsimonious account for this is that Yukuna’s system is an innovation, and that Pre-Yukuna formerly had the extended split type, like most North Arawak languages, and possibly, proto-Arawak (Aikhenvald 1999, 2006: 245). The innovation of a transcategorial split in Yukuna is the result of a diachronic change that affected stative verbs (Figure 1).

Our main hypothesis on the loss of the original extended split is that stative verbs were used in a variety of constructions besides their main function as verbal predications. On the one hand, they could be nominalized with gender and number (G/N) markers, and then used
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as noun modifiers or as property predicates following the PRED $S_{NV}$ pattern of non-verbal predication. On the other hand, stative verbal roots could also be nominalized with no overt derivational morphology and function as modifiers of active verbs. They originally occurred in these functions as well as in the verbal predicate construction, until, gradually, their non-verbal uses became the most frequent ones, leading finally to the loss of the verbal construction. Lacking their original verbal underived counterpart, these roots were re-analyzed as non-verbal modifiers, and the derivational G/N markers (-ni/-ru/-runa) as inflectional morphology. The re-analysis of Pre-Yukuna’s nominalized stative verbs as nominal modifiers is illustrated in Figure 2.
One could also consider a situation in which the change of alignment was brought about through the expansion of the Active verb pattern to all verbs, leading to a shift from a Role Dominated Language – where semantic roles determine argument encoding, making it difficult to identify syntactic subjects and objects (Bakker & Siewierska 2007) – to a Subject Dominated Language. Indeed, there are some languages such as Italian whose history involves oscillations between semantically-driven and syntactically-driven systems of argument marking (Bentley 2006, 2016). However, we argue that this was not the case in Yukuna, as erst-while stative verbs have not been incorporated into the class of active verbs, but rather, into non-verbal predication. This gave rise to Yukuna’s synchronic category of verbal and nominal modifiers (see §3).

In the next section, we will provide evidence in favor of our hypothesis based on data from related languages.

5.3. Stative verbs and non-verbal predication in Arawakan

We argue that Yukuna underwent a change of alignment, from a system with an active/stative distinction in verbs, to a system without an active/stative verb distinction, through the loss of stative verbs. We argue that this change was enabled by certain features and constructions present in the language. We then propose a hypothesis about the diachrony of this change in Yukuna, and support it with data from related languages. Our hypothesis presupposes that in Pre-Yukuna there was a predicate-initial non-verbal predicate construction without a copula, that Pre-Yukuna had G/N markers used as nominalizers and that there was a category of stative verbs whose derived forms were being used in a variety of functions alongside the underived verbal forms. The data reveal that the features we claim to be necessary for an alignment change in Yukuna are well attested and widespread within the Arawakan language family. We address the issue of word order and copulas in non-verbal predication in §5.3.1. Then, we discuss the properties of stative verbs, their use as main verbal predicates, and the different derivations and constructions in which they can appear in §5.3.2.

5.3.1. Word order in non-verbal predication in Arawakan

Arawakan languages use a range of different encoding strategies in non-verbal predication, namely juxtaposition, use of copulas, use of oblique marking or of object marking. However, juxtaposition of the predicate and its core argument is more frequent than the use of copulas, which is generally restricted to specific constructions. Additionally, the copulas attested in the family show various, unrelated, forms, which
suggested that they are recent innovations in individual languages, and not an inherited feature (Durand 2016). Indeed, copulas in different Arawakan languages have developed independently, in parallel, and from different etymological sources. The grammatical functions of the etymological sources for copulas also differ, as they do not all come from lexical verbs.

When it comes to word order in non-verbal predication, there are variations (Durand 2016: 349). Two main patterns are found: a predicate-initial and a predicate-final configuration. In most Arawakan languages, the first pattern is typically used with non-derived nominal predicates (46a), whereas the second is used in many languages with deverbal predicates (46b). Yukuna is an exception to this tendency.5 As we described previously, the same non-verbal predication pattern is used whether the predicate is an underived noun (47a), or an erstwhile nominalized stative verb (47b).

(46) Piapoco
a. Medico nua
   doctor 1SG
   ‘I am a doctor’. (Durand, personal data)

b. Nua yevide-ri
   PRO1SG teach-NFI
   ‘I am a teacher’. (Durand, personal data)

(47) Yukuna
a. A’jne-jí=tá riká
   food-unposs=emph 3SG.NF
   ‘It is food.’ (ycn0063,144)

b. Kamu’jú-ni=tá wáni riká
   small-nf=emph very 3SG.NF
   ‘That is very small!’ (ycn0189,69)

The diachronic changes that led to the distinct word order patterns in non-verbal predication according to whether the predicate is derived or not fall out of the scope of this paper. It is important to note, however, that the use of juxtaposition, the predicate initial position, and the absence of copula in non-verbal predication are well attested in the family. The presence of a verbal copula in Yukuna is then quite possibly a subsequent development.

5.3.2. Stative verbs, functions and derivations
We showed in §5.1 that various North Arawakan languages distin-
guish active verbs from stative verbs. Stative verbs take a marking similar to P marking, generally a suffix (48), an enclitic, or a bound pronoun placed after the predicate (49). Indeed, even though word order in the Arawakan family is quite heterogeneous, in intransitive predicates pre-predicate position corresponds to the A marking, whereas post-predicate position corresponds to the P marking (Durand 2016). The form of these markers may change, but the order remains the same. It is thus very likely that Pre-Yukuna had stative verbs with post-verbal S arguments before its change of alignment.

(48) Kurripako
   Inuna-ka-ni
   be.sad-REAL-3SG.NF.ABS
   ‘He is sad’ (Durand, personal data)

(49) Piapoco
   Inu-ka  nua
   feel.lazy-REAL 1SG
   ‘I feel lazy.’ (Durand, personal data)

Arawakan languages tend to use stative verbal roots for many purposes. Besides their function as heads of stative verbal predicates, these roots are often derived and used in various constructions as nominal modifiers, property non-verbal predicates, and verbal modifiers. Yukuna’s stative roots are no longer used as verbal predicates, but interestingly, in other languages, all of these uses of derived and underived stative verbal roots are still simultaneously attested. We first describe the constructions attested for nominal modification and property predications, then those for verbal modification.

When used as nominal modifiers and property predicates, stative verbal roots are nominalized with G/N markers that agree with the head noun or core argument of the predicate, a characteristic feature specific of North-Arawak languages (Aikhenvald 1995b: 19). For this reason, these words are often categorized in descriptive grammars as adjectives. The forms used as G/N markers in various Arawakan languages show not only striking formal similarities, but they are also functionally similar, as they are found in nominal modification (50), property predication (51), and even in relativization with active verbs (52). The presence of G/N markers in North Arawakan languages is then certainly an inherited feature. Another shared feature of Arawakan languages is the use of nominalization to encode relativization, which is common in South American languages (van Gijn et al. 2011).
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(50) Baniwa
[Enami buwa-tui-Ji]_{NP}
man be.low-DIM-ADJ
‘A small man’ (Aikhenvald 1998: 305)

(51) Piapoco
Nua [karúa-iri]_{PRED}
PRO1SG be.cruel-M
‘I am cruel’ (Durand, personal data)

(52) Piapoco
Ya azirikei [y-ane-ri-ka-te amalakawali-ze]_{RC}
DEM man 3SG-come-M-REAL-REM.PST savannah-from
‘The man who came from the savannah…’ (Durand, personal data)

Another context in which stative verbal roots are found is that of constructions where they semantically function as verbal modifiers. An important difference between this construction and the nominal modification one is that generally the stative root in the verb modifying construction appears with no G/N markers, or any overt derivational morphology, as in Yukuna (§3). The synchronic labels used to describe these roots in descriptive grammars vary for each language, but authors typically agree on the possibility of a specific group of roots to be used in both nominal and verbal modification function. For instance, Aikhenvald (1995b: 25) states that in Baré “almost any adjective can be used as a verbal modifier, i.e. in the adverbial function” (53), and Granadillo (2006: 128-9) argues that, in Kurripako, “there are more stative verbs used as nominal modifiers […] or verbal modifiers […] than being used as predicate” (54).

(53) Baré
Bi bi-tʃeɻeka-ni id’uaɻi baɻe
you 2SG-speak-IMPF good6 Baré
‘You speak Baré well.’ (Aikhenvald 1995b: 25)

(54) Kurripako
a. lino nu-a-kaotsa nu-a-ka pi-uya
be.sad 1SG-go-FUT 1SG-go-T/A 2.S-ABL
‘I sadly leave, I leave from you.’ (Granadillo 2006: 128)

b. Inu-da-li hnua
be.lazy-TH-NFI PRO1SG
‘I am a lazy one.’ (Durand, data)

It appears then that all the conditions that we propose as necessary for the rise of transcategorial split intransitivity in Yukuna (stative verbs
as heads of verbal predicates, derived stative verbs as property predicates, and nominal and verbal modifiers), are common in closely related languages, and in the case of Kurripako, still simultaneously attested in synchrony. In addition to the presence of these constructions, another key factor in support of our hypothesis is frequency. We posit that the verbal use of stative verbs gradually decreased in Yukuna, eventually disappearing, a scenario that is very similar to what Granadillo (2006) described for Kurripako.

Further evidence in support of our hypothesis can be found in synchronic data from Yukuna. Certain adverbial words show irregularities and fossilized morphology that point to their verbal origin. Of particular interest are the cases of adverbs palá ‘well’ and júká ‘far’, which can be negated using the verbal negation strategy (ũká V-la), or many temporal adverbs ending in chami (júpichami ‘a long time ago’, ejéchami ‘afterward’, kéchami ‘later’, lapichámi ‘night’), which are reminiscent of the tense and aspect suffixes -cha PST and -mi PFV found on verbs, in exactly the same order (the sequence *V-mi-cha is ungrammatical).

Although the evidence provided here supports our hypothesis on the loss of extended split intransitivity in Yukuna through the use of nominalized stative verbs as non-verbal predicates, the available data do not support this hypothesis with absolute certainty. Indeed, reconstructing the diachrony of alignment change in Yukuna would require syntactic reconstruction by comparative work at the sub-group level of the family. This paper constitutes a first step towards the diachronic reconstruction of the morphosyntax of Yukuna and the Arawakan family, which will be carried out in future research.

6. Conclusion

In this paper we have discussed subject canonicity through an analysis of Yukuna’s transcategorial split intransitivity. We have discussed the properties of both verbal and non-verbal clause types, and argued that the S argument of non-verbal clauses, placed in post-predicative position, is non-canonical in its encoding vis-à-vis the S argument of verbal predicates. The syntactic properties of both of these arguments were then presented to show that, despite the encoding discrepancies between canonical and non-canonical S, both share a set of properties that groups them together as Subjects.

We then highlighted the particularities of the alignment system of Yukuna within the Arawakan family. A look through Arawakan alignment systems showed that despite the variety of configurations avail-
able, the system of Yukuna with a distinction of subjects in accordance with the lexical category of the predicate is rare. In fact, languages with an active/stative distinction in intransitive verbal predicates, in which active verbs have SV word order and stative verbs have a VS word order, are far more frequent.

The focus of the paper then shifted to the historical processes that might have led to this particularity. We sought possible answers to the question ‘where did Yukuna’s post-verbal S go?’ The authors’ proposal posited that Pre-Yukuna’s stative verbs were nominalized and used as predicates in non-verbal predication, and that, progressively, the verbal function of stative verbs fell out of use, making non-verbal predication the only structure with a post-predicate S in the language. Our hypothesis is supported by comparative evidence from related languages where stative verbs are still attested synchronically.

Finally, the paper argued that split intransitivity between verbal and non-verbal predicates, and non-canonical post-predicate S are the remaining traces of the proto-Arawak active/stative alignment, in a language that has developed a strong syntactic Subject pivot, characteristic of a nominative-accusative system.

**Abbreviations**

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<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
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<tr>
<td>ACN.NZ</td>
<td>Action Nominalizer</td>
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<td>ACT</td>
<td>Active</td>
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<td>ATTR</td>
<td>Attributive</td>
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<td>Diminutive</td>
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<td>EMPH</td>
<td>Emphatic Particle</td>
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<td>Pause</td>
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<td>Purpose of motion</td>
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<td>Verb Stem</td>
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<td>VBLZ</td>
<td>Verbalizer</td>
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Notes

1 We use the term Arawakan to refer to the core group of languages which have been proved to be related, and not to the putative macro-stock often referred to as ‘Maipurean’.
2 Core arguments are those which are part of the semantic representation of a verb, and have specific syntactic properties distinct from adjuncts (Van Valin & LaPolla 1997).
3 The corpus is partially available at <https://elar.soas.ac.uk/Collection/MPI971099>.
4 There are also transitive verbs with three arguments; two direct core arguments and an obligatory oblique. For the purpose of this paper we will focus on simple intransitive and transitive verbs.
5 Another exception to this tendency is found in Kurripako, where, just like in Yukuna, the non-verbal predicate initial pattern is used whatever the nature of the predicate.
6 Original gloss. The word id’uaqi is a nominalized form of a stative verb, hence the adjectival gloss.

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