ABSTRACT

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EVIDENCE FROM INDONESIAN (NORTH ARAWAK)
SERIAL CONSTRUCTIONS AND VERB COMPOUNDING

STUDIES IN LANGUAGE:
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contrast it with serial verb constructions. Then, in §6, the strategies of verb-sequencing are discussed in a broader typological context, and the differences between them are shown to have their basis in iconic motivation.

Verb serialisation is attested in languages of South-East Asia, Oceania, West Africa, New Guinea, many pidgins and creoles, a few Australian languages (Evans 1985; Green 1995) and a number of languages of Central and South America.

A serial construction is defined as a sequence of several verbs which act together as a single predicate; it has all or some of the following properties (see Durie 1997; Crowley 1987; Foley and Olson 1985; Givón 1991; Zwicky 1990):

(I) A serial construction has the properties of a single predicate: (a) it refers to a single event; (b) it functions on a par with monoverbal clauses in discourse; (c) it has a single subject; (d) verbs in a serial construction often share other arguments; (e) it has shared tense/aspect, modality and, often, polarity value.

(II) A serial construction has the intonational properties of a monoverbal clause, and not of a sequence of clauses.

(III) Each of the verbs which form a serial verb construction is an independent morphological word, and they act together as a syntactic whole. A serial construction occupies one core functional slot in the sentence or clause structure.

(IV) Serial constructions are monoclausal and allow no markers of syntactic dependency between their components. This distinguishes them from subordinate or coordinate clauses. (This is only valid for languages which have explicit markers of subordination or coordination.)

(V) Serial constructions can be distinguished from complex predicates and other Verb + Verb sequences which are syntactically combined, but neither of which can be a predicate on its own. For this reason, complex verb forms like perfect or continuous in English are not serial verbs (cf. Zwicky 1990: 9).

A prototypical serial verb construction is assumed to have all these properties. However, the situation is often much more complex. The important point is that no one of these characteristics is defining per se, since exceptions can be found to each of them.3

Subject sharing is taken by many as a defining property of a serial verb. However, at least one class of what are traditionally considered serial verbs is highly problematic from the point of view of ‘same subjechood’. Causative serial verb constructions (of the kind ‘I pushed (him)–(he) fell’, also known as ‘switch-subject’ serial verbs: Crowley 1987: 48) breach the ‘same subject’ constraint (e.g. Foley and Olson 1985). Serial verbs may also differ in how many arguments have to be shared: frequently, oblique arguments do not have to be shared at all, while direct objects may or may not be shared depending on the type and semantics of the construction.

That a serial verb refers to one event can be challenged (examples of multi-event serial verbs in Yoruba are discussed in Déchaine 1993: 808; see §4).

Within a single language there can be a “good case for distinguishing quite different kinds of serialisation” (Durie 1997: 292) which display different sets of properties. Two important parameters which are relatively independent from each other are discussed below.

a. One parameter for classifying serial constructions involves distribution and position of inflection, and contiguity vs non-contiguity of components (see Durie 1997: 301–307). This concerns, in particular, the relationship between verb serialisation and verb compounding. As noted above, serial constructions consist of several morphological words. The situation when two juxtaposed verb roots which form one predicate also constitute one morphological word is known as verb compounding. Verb compounding has often been compared to serialisation (see Durie 1997). Many languages tend to have either one or the other; the shift from serialisation to verb compounding is not uncommon in the languages of the world. (This development was suggested for Igbo by Lord 1977.)

Durie (1997; forthcoming) provides a unified account of verb sequencing patterns which eliminates the gap between serialisation and verb compounding. He distinguishes four types of serialising languages in terms of whether the components of serial constructions are contiguous (± contiguous), and of whether a verb sequence forms a single morphological and phonological word or not (± incorporating). The interaction of these parameters yields four types (Durie 1997: 302–303): (i) – contiguous; – incorporating, e.g., Sranan (Caribbean Creole); (ii) + contiguous; – incorporating, e.g., Jeh (Mon-Khmer), Tariana; (iii) – contiguous; + incorporating, e.g., Sakao (Melanesian); (iv) + contiguous; + incorporating, e.g., Alamblak (Papuan), Tariana.

Different types of verb sequencing patterns may coexist in one language. Tariana is a rare example of the coexistence of types (ii) and (iv). They have distinct properties, and are used to convey different kinds of meanings.
SERIAL CONSTRUCTIONS AND VERB COMPOUNDS

ALEXANDRA A. ARBELEZ

Section 6.3: but does not work in the same way for all types of verb con-
structions. A similar restriction applies to verbs like "weight" (see
example 1997), in which verb + noun (e.g., "weight of money")
artefacts, etc. In such cases, the noun phrase is part of the verb's
complement. However, this restriction does not apply to verbs like "time"
(see example 1997), in which the noun phrase is a separate clause
introduced by "at" or "in". For example, "at this time" or "in this
moment". The restriction applies to verbs like "weight", which do not
have a similar restriction.

The possibility of certain verbs of verb complementation in serial
constructions is similar to the possibility of certain verbs of verb
complementation in serial sentences. However, in serial sentences,
the verb complementation order is not necessarily the same as in serial
constructions. For example, in the sentence "The book on the table is
opened by John," the verb "is opened" comes before the noun phrase
"the book on the table." In serial constructions, the verb complementation
order is determined not by the order of the verb phrase, but by the order
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sentence.
The question of whether there are any typological properties which correlate with the existence of verb serialisation in a language is still open.

Serialising languages typically have little, or no case-marking (Duric forthcoming), since serial verb constructions are used to mark argument structure. Serialising languages from the Upper Rio Negro linguistic area (Tariana, the Tucanoan languages and Dáw (Makü)) in the Amazonian region are an exception to this generalisation. All of these distinguish between subject and non-subject cases for personal pronouns and topical non-pronominal arguments (see Aikhenvald 1994). Most serialising languages are typologically head marking or else neither head nor dependent marking.

Second, because of the operation of the same subject constraint in serial constructions, all serialising languages must be at least partly syntactically accusative. (Examples of serialising languages which display some syntactic ergativity are Bare and Warekena (North Arawak: Aikhenvald 1995)).

Thus, verb serialisation appears to be relatively independent of most other typological characteristics of a language. However, more studies of serialising languages from across the world are needed to pursue this issue.

2. Typological properties of Tariana

Typologically Tariana is polysynthetic and predominantly head-marking, with a few elements of dependent-marking. Constituent order is free, with a verb-final tendency.

Transitive and active intransitive verbs have one obligatory prefix position for cross-referencing the subject (A/S<sub>a</sub>). When the prefixed negation ma- is used, personal cross-referencing prefixes are omitted, and person/gender/number distinctions are neutralised. Stative (S<sub>a</sub>) verbs do not take any cross-referencing or other prefix. Grammatical relations are marked in two ways — cross-referencing on verbs, and case-marking on nouns. There are three main types of predicates — simple predicates, complex predicates and serial verb constructions.

Simple predicates have one prefix position (if they belong to the A/S<sub>a</sub> (prefixed) type) and up to eight suffix positions (these include causative, negative, passive, purposive, resultative, verbal classifiers, benefactive, reciprocal and nominalisers). Suffixes may be followed by enclitics (which express mood; tense and evidentiality; mode of action, or associated action; aspect; and subordination). Unlike suffixes, enclitics may be omitted; their preferential position is on the predicate (but they may appear on almost any constituent provided it is in focus).

Complex predicates consist of two verbs, one of which cannot be used as an independent predicate while the other one can.

Serial verb constructions in Tariana are discussed in §§3 and 4.

3. Defining properties of serial verb constructions in Tariana

Serial verb constructions are known to be able to include up to seven simple verbs. Serial constructions are strictly contiguous, i.e., no other constituent can intervene between their components. There is just one general restriction: a serial verb construction cannot consist of stative (S<sub>a</sub>) verbs only.

Each component of a serial verb construction is an independent phonological word: it has an independent stress and enclitics can attach to it. All the components of a serial verb require the same subject (cross-referenced on transitive and active intransitive verbs); this means the same inflection for person, number and gender of subject (A/S<sub>a</sub>), as in (2).

\[
\text{(2) } \begin{array}{llllll}
\text{wadu} & \text{di-asa} & \text{di-musu} & \text{di-nu} & \text{di-uka} \\
\text{bucura.bird} & \text{3SGNF-fly} & \text{3SGNF-go.out} & \text{3SGNF-come} & \text{3SGNF-arrive} \\
\text{di-hwa-pidona} & \text{3SGNF-stay.REM.P.INFR} \\
\end{array}
\]

"The bucara-bird arrived here (from there)." (lit. he flew — he went — he came — he arrived — he stayed).

If a serial construction is the predicate of a relative clause, all its components are marked with the relativising prefix ka-, e.g. (3).

\[
\text{(3) } \begin{array}{llll}
\text{kuphe} & \text{ka-na-kari} & \text{ka-hna} \\
\text{fish} & \text{REL-WANT-PAST.REL} & \text{REL-eat} \\
\end{array}
\]

"the one who had wanted to eat fish."

Strong evidence in favour of same subject cross-referencing as a defining property of serial verbs in Tariana comes from serial causative constructions.

The causativised verb and the verb of causation have different underlying subjects. Semantically speaking, causative constructions in serialising languages often require "that the object of one verb and the subject of another be coreferential" (Poley and Olson 1985: 25; Crowley 1987: 38–39) (thus yielding "switch subject" serial verb constructions: see §1). Tariana
When processes or changes are coordinated, serial construction would be multiplication (1). In some cases, a process of shifting down the line would also be multiplication (1). When it comes to multiplication, the process of shifting down the line would also be multiplication (1).
there is a characteristic "enumerating" intonation. (The phrase-final syllable is lengthened and the pitch of the phrase final syllable falls.) This intonation pattern is not used with components of a serial construction.

Serial verb constructions in Tariana function on a par with monoverbal clauses in discourse. A test for the monopredicative reading of serial constructions is provided by repetition as an answer to a yes-no question, a frequent phenomenon in Tariana narratives. A part of the serial construction can be repeated, but never just one word. In (8b), two components of a three-verb serial construction are repeated in an answer to a question in (8a).

(8) a. phia-nihka phita pi-thaketa pi-eme you-rec.p.infor 2sg+take 2sg-cross+caus 2sg-stand+caus ha-ne-na hyapa-na-nuku dem-distal-cl:vert hill-cl:vert-top.non.a/s ha-ne-riku-nase dem-distal-cl:loc-cl:pair-loc ‘Was it you who brought that mountain across (lit. take-cross-put.upright) (the river) to the other side?’ (asked the king)

b. nuna-kha nuta nu-thaketa 1sg-rec.p.vis 1sg+take 1sg-cross+caus ‘(Yes), it was me who brought (it) across (lit. take-cross),’ (said the young man)

The monopredicative reading of serial verbs is corroborated by intuitions of native speakers. A serial construction is best translated with a monoverbal clause into a non-serialising language, such as English or Portuguese. During early fieldwork sessions, one of the consultants remarked ‘It is not like Portuguese, we just cannot say it with one verb’.

An additional property of serial verb constructions in Tariana which provides interesting evidence in favour of their monopredicative character is “affix sharing”. A number of nominalising derivational suffixes each appear once per serial verb construction, characterising it as a whole. In (3) the suffix -kari ‘past relative’ goes on the first component of a serial verb referring to the construction as a whole. Affix sharing implies a high degree of cohesion between the components of a serial verb (which are independent morphological words).

Verbs which form a serial construction cannot take separate markers of syntactic dependency, e.g. complementisers (cf. Durie 1997; Noonan 1985).

This property of serial constructions helps to distinguish them from complement clauses and other subordinate clauses, converbal clauses (e.g. Mary came in laughing), and predicate coordination. (9) shows a complement clause (in square brackets); its predicate, phimaka ‘dry, cooked’, takes a subordinator -ka.

(9) [phimaka-ka] du-ka [cooked-sub] 3sg-see ‘She saw that (it) was cooked.’

A complex predicate, such as passive, can be easily distinguished from a serial verb construction. It is derived from a prefixed (A/S) verb with the prefix ka- and suffix -kana followed by an auxiliary verb -a ‘go, do, give’; thus, ka-na-kana di-a (REL-hit-pass 3sgnp-aux) ‘he was hit’ is a passive of -na ‘hit’. (A passive clause is active intransitive; see Aikhenvald 2000). It does not qualify as a serial construction, because the same subject cross-referencing is violated.

4. Three types of serial verb constructions in Tariana

Tariana distinguishes asymmetrical, ambient and symmetrical serial verb constructions. They express different semantics.

Asymmetrical serial constructions fall into five groups (roughly following Gilvoń 1991) by their semantics and types of verbs which are chosen from a closed class (see §1): aspectual, directional, modal, associative, and causative. The first three do not involve any valency changing, or change in the number of participants, while the last two do.

Aspectual serial constructions contain verbs from the following closed classes which follow the verb from an open class: motion verbs, posture verbs, verbs of beginning and finishing, or the verb ‘do’. For instance, durative action is marked with posture verbs -ema ‘stand’ (used with animate subjects, as in (10)), and -swe ‘stay’ (used with inanimate subjects). Another positional verb, -hwa ‘sit’, can also be used to describe a durative action in a “sitting” position. These verbs cannot be considered auxiliaries (see V in §1, and Heine 1993 on typological properties of auxiliaries).
### Table 1: Combinations in Communication and Sentences

<table>
<thead>
<tr>
<th>Type of Combination</th>
<th>Direction of Communication</th>
<th>Sentence Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inwardleftrightarrow</td>
<td>Closed class open class</td>
<td>Normal</td>
<td>This is a normal sentence.</td>
</tr>
<tr>
<td>Outwardleftrightarrow</td>
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### Note on the Order of Components

The order of components in communication is often influenced by the temporal sequence of events. However, in some cases, the order can be reversed based on the context.

### Example

In the example sentence: "The cat sat on the mat," the cat (subject) is followed by the action (sat) before the object (on the mat). This order is reversed in the sentence: "The cat it is, the mat it is.", where the subject (cat) comes before the action (is, is).
always precedes the main verb, as in (15). An active (S₀) “modifier” verb follows it (16).

(16)  thuwa ha-ehkwapi-ne-nuku naviki-nuku
      all DEM-world-PL-TOP.NON.A/S people-TOP.NON.A/S
di-karito di-peya-ka-pidana
      3SGNP-tell 3SGNP-be[first]-DECL-REM.P-INTR

‘He was the first to tell (lit. tell-be first) all the people in the world (about the discovery of the fire).’

The order of components of a symmetrical serial verb is always iconic: it reflects the temporal order of actual events linked together (e.g. catch-kill in (14)). There is often a cause-effect relationship, and the effect verb then comes second in the serial construction, in agreement with Durie’s (1997: 331) predictions.

(ii) Scope of associated action 10 enclitics

In asymmetrical and ambient constructions, associated action enclitics (which refer to the manner or extent of action) characterise the serial construction as a whole, as does the enclitic -thepi ‘into water’ in (17).

(17) du-hwa-thepi du-a
     3SGF-fall-INTO.WATER 3SGF-go.away

‘She (the girl transformed into a snake-woman) was falling into water (away from her father) (fall-go away).’

In contrast, in symmetrical serial verb constructions each enclitic has a single component as its scope. In (18), the same enclitic is used in a symmetrical construction; it refers to just one component, -hwa ‘fall’. Another enclitic, -khâ ‘away’, refers to the other component (‘dive’).

(18) di-hwa-thepi di-aphua-khâ
     3SGNP-fall-INTO.WATER 3SGNP-dive-AWAY

‘It (otter) fell into water diving away.’

(iii) Transitivity value and argument sharing

The transitivity of an asymmetrical serial verb is determined by the “main” verb; the whole construction “inherits” its argument structure. In (11) ‘manioc flour’ is the direct object of the whole construction which consists of a transitive verb ‘carry’ and intransitive ‘go out’. Similarly, ambient serial verbs inherit the argument structure of the main verb: both (15) and (16) are transitive because their main verb is transitive (though one verb in the construction is transitive, and the other is intransitive). Oblique arguments are shared in asymmetrical serial verbs (see (11) and (12)), and in ambient serial verbs (16).

Symmetrical serial verb constructions conform to the principle that the serial verb complex as a whole does not have duplicate roles (there cannot be two direct objects, or two instruments). In Tariana, all the components must have the same transitivity value: either all are intransitive, as in (18), or all are transitive, as in (8a,b). This means that an intransitive verb has to be transitivised to be used in a symmetrical serial verb construction with a transitive verb. This looks like “agreement” in transitivity (and is one of the functions of morphological causative in Tariana — see Aikhenvald 2000). However, oblique arguments do not have to be shared: the constituent ‘to the other side’ in (8a) is an argument of ‘make stand’, and not of other verbs.

(iv) Prosodic properties

In asymmetrical serial constructions, the phrase accent falls on the verb from an open class. In symmetrical and ambient serial constructions, it falls on the last verb. All the other components have a weaker stress.

(v) Grammaticalisation and lexicalisation

Asymmetrical and ambient serial verb constructions tend to undergo grammaticalisation, while symmetrical serial verbs tend to lexicalise.

Components of asymmetrical serial verbs which come from closed classes tend to get grammaticalised as (a) auxiliaries in aspectual constructions and (b) postpositions in directional constructions.

Motion verbs, verbs of beginning and finishing and the verb ‘do’ tend to become auxiliary-like in aspectual serial constructions. The grammaticalisation of stance and motion verbs as aspect markers is well attested both in serialising and non-serialising languages (cf. Lord 1993; Bybee et al. 1994).

The same root often has different meanings when used as an auxiliary-like verb within an asymmetrical serial construction and when used independently. This tendency has been often observed in the literature on verb serialisation; cf. Durie (1997: 323), on how in serialising languages the verb ‘give’ “is used serialised to add a benefactive or goal role without there necessarily being an actual ‘giving’ involved”. In Tariana, the verb -a usually means ‘say’, or ‘give’ when used as the main predicate. In directional
Table 2: Asynchronous, synchronous and mutual shared communications

Exclusion and communication of synommetrical neural waves. The works of neural processes and speech are only small outside the brain.

The four main processes of neural waves. (1) the step, as, walked with the seven right foot, the right foot, the right foot.

Step over.

The seven right foot, the right foot.

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(vi) Types of verbs

Different verb classes appear in serial constructions of different types. Motion and posture verbs, transitive verbs of the beginning and finishing type (phase verbs), modal verbs ('want') and the verb -ni 'do' are used in asymmetrical serial verb constructions. Verbs of speech, perception and mental processes appear in symmetrical serial constructions. Stative verbs, when serialised, can only be used in ambient serial constructions.

Table 2 summarises the properties of asymmetrical, ambient and symmetrical serial verb constructions in Tariana.

5. Verb compounding

An unusual property of Tariana is that, besides extremely productive contiguous verb serialisation, it also has two kinds of verb compounding (i.e. verb root sequencing of the contiguous incorporating type: Durie 1997; §1) which is functionally and semantically distinct from verb serialisation.

The first kind of compounding involves the stative verb mafa 'be proper' used to modify any other stative verb. In spite of being restricted, this compounding type is interesting in that it is the only instance in the language of two stative verbs occurring together in a verb-sequencing structure. Recall that a serial verb construction cannot consist just of stative verbs. The sequence mafa + stative verb behaves as a single morphological word: no enclitics or suffixes can come between them. The compound verb has a single stress which falls on the antepenultimate syllable of the compounded root, e.g. mafa-hui (be.proper-be.tasty) 'be really tasty', mafa-puhui (be.proper-be.happy) 'be really happy'.

Since in these compounds mafa 'properly, really' modifies the second stative verb root, this compounding strategy might appear superficially similar to ambient serialisation. But unlike ambient serial verb constructions (which have no restrictions on what verb can be employed in the "modifier" slot, provided it is intransitive) mafa-compounds cannot contain any other verb as the "modifying" component. They are also the only instance the language has of two stative verbs in a verb sequencing structure (ambient serial verbs cannot consist only of stative verbs).

The other kind involves a small number of verbal roots (transitive or intransitive) which are encliticised to inflected verbs and have become grammatical morphemes marking associated action, aspect and syntactic dependency. I call this "cliticised" root compounding. These enclitics form a single phonological word with the verb, acquiring a secondary stress. The largest class (of about twenty) are "associated action" enclitics used to specify mode of action. Most of them come from intransitive verbs, e.g. dhala 'away, come unстuck' (cf. So verb dhala 'peel (intransitive), unstick'); hala 'open' (cf. So verb hala 'be wide open'), kahwi 'early' (cf. So verb kahwi 'get up early'). (23) shows dhala as an associated action enclitic (underlined). The active intransitive verb dhala is shown in (24).

(23) halem di-ni-dhala di-ruku-i-nipe
always 3SGNF-do-COME.UNSTUCK 3SGNF-fall-CAUS-NOM
di-na
3SGNF-OBJ
'He (the forefather) always let him (the son who turned into a fish) unstick and fall (off the canoe)

(24) diya-tupe-mia-pidana di-dhala
3SGNF-bark-DIM.PL-ONLY-REM.P.INFR 3SGNF-unstick
'Only the pieces of bark (of the tree) were falling down'

Three verbs become aspect markers when their roots are cliticised to the main verb (-sita 'perfective', from -sita 'finish' (see (19)), -mapa 'almost', from -mapa 'cheat, do wrongly' and -ina 'do little by little', from -yena 'pass'). One verb, whyume 'be last', is grammaticalised as a sequencing enclitic hyume 'after:SS'.

Associated action enclitics, aspect enclitics and the sequencing enclitic are grammatical morphemes. Unlike grammaticalised components of serial verbs and mafa- compounds, they undergo phonological deletion. For instance, the enclitic -sita undergoes metathesis and becomes -ifla and -fia in rapid speech register. -Hyume is in free variation with -yume in a rapid speech. This phonological deletion, which involves metathesis and vowel reduction, is characteristic of bound morphemes (cf. -hyu, -yhu 'purposive', -hyuna, -yuhna 'habitual', -seka, -ska 'resultative'), and is another indication of the rather advanced grammaticalisation of this type of root compounding in Tariana (which also confirms the Parallel Reduction Hypothesis which suggests that "form and meaning covary" in grammaticalisation — Bybee et al. 1994: 19–21).

The properties of the two types of verb compounding are summarised
serial constructions and verb compounding

6. idiomatic motion

and semantic similarity between them. It

Thus, serial verb constructions and verb compounding, in terms of their sinusoidal

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Structural differences. Thus, serial verb constructions and verb compounding, in terms of

Verb compounding is often viewed as the result of grammaticalisation or lexicalisation of serial constructions (e.g. Edo or Alamblik). The data of Tariana shows that the degree of grammaticalisation and lexicalisation is higher the more contiguous the verb sequencing constructions are.

The ultimate explanation for this lies in the principle of iconic motivation. It has been shown (Haiman 1985: 147) that “the lexical independence of a word reflects the conceptual independence of the entity it represents”. Closeness in surface structure tends to be motivated (directly or indirectly) by conceptual closeness (cf. Kirsner 1985: 253). The diminution of conceptual distance between several verbs correlates with their closeness in surface structure (see examples and discussion in Haiman 1985: 122–128). “Lexicalisation”, or “auxiliarisation”, of verbal roots in a number of languages (Káte: Huon peninsula; Chickasaw: Muskogean; Menya: Angan; Swahili, etc.) correlates with the ways in which a verb sequence denotes one, and not two events; reduction of the form of the verb “signals its semantic fusion with another verb to the point where the two verbs tend to denote a single act” (Haiman 1985: 123). We observe a gradient degree of fusion in a “continuum” of verb sequencing structures within one language which goes from non-contiguous to contiguous to incorporating sequences.

We conclude that verb serialisation and verb compounding in Tariana are independent grammatical processes each with a grammaticalisation path of its own, and that they are used to convey different types of grammatical meaning. Verb compounding yields morphemes which are more grammaticalised than components of asymmetrical serial verb constructions: like other bound morphemes in the language, they undergo phonological depletion. The coexistence of these two mechanisms of verb sequencing is consistent with the principle of iconic motivation: the closeness between the elements leads to their semantic fusion and grammaticalisation, or lexicalisation.

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ABBREVIATIONS

A — transitive subject; AG — agentive; AN — animate; AUX — auxiliary; CAUS — causative; CL — classifier; COMPL — do.completely; DECL — declarative; DEM — demonstrative; DEM — diminutive; DS — different subject; EXIST — existential; f — feminine; IMM.FUT — immediate future; IMP — impersonal; INFR — inferred; INT — intentional; LOC — locative; NEG — negative; n — non-feminine; NOM — nominalisation; O — direct object; OBJ — object case; PASS — passive; PAUS — pause; PL — plural; POS — possessive; PREZ.PART — present eyewitness; REC.P — recent past; REL — relative; REM.P — remote past; S — intransitive subject; SS — singular; SS — same subject; SUB — subordinate; TOP — topical; VST — visual.

Tariana examples are given as pronounced by the particular speaker on the particular occasion, thus including variation in such matters as vowel length, tap versus lateral (as in examples (11)–(12)).

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APPENDICES

VERBAL CATEGORIES IN TARIANA

Table 6a. Evidentials and tense in affirmative clauses

<table>
<thead>
<tr>
<th></th>
<th>present</th>
<th>recent past</th>
<th>remote past</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>-naka</td>
<td>-ka</td>
<td>-na</td>
</tr>
<tr>
<td>Non-visual</td>
<td>-mha</td>
<td>-mahka</td>
<td>-tina</td>
</tr>
<tr>
<td>Inflected</td>
<td>-nika</td>
<td>-nikka</td>
<td>-pidana</td>
</tr>
<tr>
<td>Secondhand</td>
<td></td>
<td>-pidaka</td>
<td>-nhana</td>
</tr>
</tbody>
</table>
NOTES

1. A morphological word is understood as a morphologically well-formed unit, which could be used independently. In many languages morphological words do not necessarily coincide with phonological words. The latter are defined in terms of one stress per phonological word (see Aikhenvald 1996b).

2. Difficulties which arise with respect to a definition of what is a serial verb construction and what is not have led some scholars to deny the very existence and the cross-linguistic importance of this phenomenon, especially within an analysis limited by a particular formalism, e.g., Law and Veenstra (1992).

3. An example of a non-contiguous incorporating serial verb in Sakao is:

\[ \text{ro-phet-gypt-w-jujan} \]

1-stop-

3pl-phoe-t-cocoin-perfect-2i-come to-baskets\]

'They plucked coconuts, throwing them to the baskets.' (Guy 1974:49)

(The morpheme -ri indicates that the object of transitive \(V_1\) is understood as the theme of \(V_2\): Durie 1997: 303.)

4. The distinction between symmetrical and asymmetrical serial constructions corresponds to the distinction between "balanced" and "unbalanced" serial constructions suggested by Durie (forthcoming).

5. It has also been frequently mentioned in the literature that serialising languages tend to be either verb-final, or verb-medial (cf. Foley and Olson 1985:47; Givón 1991; Lord 1993; Durie forthcoming). There are a few verb-initial serialising languages, e.g. Raviṇa (Mon-Khmer) and Noooka (Durie forthcoming). Serialising languages of the Upper Río Negro Baniwa, Warehouse, Bare (Arawak) and Dáw (Makú) (Martins 1994) allow verb-initial and verb-medial constituent orders on equal terms.

6. Kayardild, a Northern Australian language with verb serialisation, also has grammatical cases (Evans 1985).

7. Tariana is spoken by around 100 people in the Vaupés river basin, Upper Río Negro region (Brazil). It is the only Arawak language spoken in the multilingual context of the Vaupés linguistic area (see Aikhenvald 1996a), and it has undergone a heavy areal influence from Tucanoan languages. It shares its head marking properties with other North Arawak languages, while the dependent marking is the result of areal diffusion (Aikhenvald 1996a). My corpus consists of several hundred pages of sentences and word lists and about 700 pages of texts.

8. English and Portuguese do not have productive serialisation. There are, however, a few contiguous sequences of predicates with a mono-predictive interpretation, such as American English go eat (see examples and discussion in Zwicky 1990). An example of a contiguous sequence of predicates which form a single predicate in collocational Brazilian Portuguese is pegou folho (lit. 'he took he spoke') - he spoke all of a sudden' (see Martins 1994).

9. Similar behaviour for derivational suffixes in serial verbs has been attested in a few other serialising languages (e.g. Ikoro 1996: 250-251, for Kamba). This suggests a possibility of postulating morphological units of different levels, similar to distinctions between verbal themes and verbal bases in the Athapaskan linguistic tradition (e.g. Kari 1990). This issue is beyond the scope of this paper.

10. The term "associated action" was coined under the influence of the term "associated motion" employed by Australianists (Koch and Simpson 1993; Green 1995). This term means 'doing something while moving somewhere'; cf. 'coming' and 'going' aspects in Yidiny (Dixon 1977:219).

11. Tariana inherited verb serialisation from proto-North-Arawak. Verb root compounding structures probably emerged as a result of areal diffusion from East Tucanoan (see Aikhenvald 1996b).

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