Areal diffusion and parallelism in drift
Shared grammaticalization patterns

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For Lars Johanson,
in my appreciation of his inspirational work

Shared features, and especially shared grammaticalization patterns, may result from geographic proximity, contact, and borrowing (“copying”). Related languages “will pass through the same or strikingly similar phases”: this “parallelism in drift” (Sapir 1921: 171–172) accounts for additional similarities between related languages, even for those “long disconnected”. Parallelism in drift may also account for shared patterns of grammaticalization. The paper explores the ways in which patterns of shared grammaticalization which are demonstrably due to areal diffusion may differ from patterns which can be shown to result from parallelism in drift. To work towards an answer, we focus on the data from two different areas of substantial linguistic diversity: the Arawak languages of northwest Amazonia, and the Ndu languages of the Sepik region of New Guinea.

Keywords: languages of New Guinea, languages of Amazonia, grammaticalization, parallel development, innovation

1. The problem: Why and how can languages develop along similar pathways?

Linguistic categories can be similar because they are universal – for instance, every language has some way of asking a question or framing a command. Occasionally, two languages share a form and meaning combination by pure coincidence. Dyirbal, an Australian language, shares the form *bari* ‘axe’ with Jarawara, an Arawá language from southern Amazonia, by pure chance. Numerous languages of the world have a negator *ma*. This feature is shared by Manambu, from the Ndu language family of New Guinea, and by Arawak languages from South America.
Similarities due to universal properties of a language are of interest for general linguistics, while chance coincidences are no more than curious facts. These two kinds of similarities tell us nothing about the history of languages or their speakers. This is in contrast to other types of similarities: those due to genetic inheritance and those due to contact, and interactions thereof.

A shared feature may be based on common linguistic origin; the languages can then be shown to have descended from the same ancestor (this is achieved by using the rigorous procedures of historical and comparative linguistics). Further, it is known that related languages “will pass through the same or strikingly similar phases”: this “parallelism in drift” (Sapir 1921: 171–172) accounts for additional similarities between related languages, even for those “long disconnected”. The similarities are then due to an independent, albeit parallel, development. We will turn to some examples below.

Alternatively, shared features may result from geographic proximity, contact, and borrowing. If two or more languages are in contact, with speakers of one language having some knowledge of the other, they come to borrow, or copy (using Johanson’s 2002 terminology) linguistic features and forms of all kinds. The extent of this varies, but no feature is absolutely borrowing-proof. The likelihood of borrowing – copy or transfer – of a grammatical feature or of a form is determined by a complex interaction of sociolinguistic factors and an array of linguistic and usage-based factors (see the discussion in Heath 1978; Curnow 2001; Aikhenvald 2007, 2011; Gardani 2008). Languages which are not in contact with each other may have copied the same form – or the same pattern – from some common source, or from interrelated different sources (see Tosco 2000, on how shared substrata could have been instrumental for an explanation of similarities across languages of Ethiopia).

A commonality can be due to the interaction of all these features. An additional process may involve reinforcement, or lexico-grammatical accommodation, whereby a form existing in a language is adjusted to one found in a neighboring language (Aikhenvald 2007 provides examples of such processes).

Teasing apart similarities due to genetic inheritance and those due to borrowings of varied kinds is one of the hardest problems in comparative linguistics. As Dench (2001: 113–114) puts it, “It may not be possible to show conclusively for any particular innovation that it results from genetic inheritance rather than that it is motivated by contact with another language. ... We should leave open the possibility that all questions may turn out to be undecidable.” Analyzing languages with no written record, for which we have little in the way of historical documentation of attested contact phenomena, is a particularly difficult task. This is the case of numerous areas of high genetic and structural diversity – Amazonia and New Guinea among them.
The processes of language change which underlie linguistic similarities are manifold. The process of grammaticalization – whereby a lexical item acquires grammatical status – is one of these. Grammaticalization has come to be considered a major parameter in the formation of linguistic areas (Heine 2011; Heine & Kuteva 2005), and reflective of cognitive patterns which underlie contact-induced development.\(^1\)

My aim in this paper is first to contrast the outcomes of grammaticalization as realized in language contact with its outcomes shared by genetically related languages (“long disconnected”). I will then address a number of challenges which we might face.

To be able to accomplish this task, we need the following:

i. information on Language A in contact with genetically unrelated language B, with demonstrable patterns of areal diffusion

ii. materials on language(s) C genetically related to Language A, whereby at least some of speakers of C are not in contact with A or B

Ideally, we require clear-cut instances of intensive contact and demonstrable areal diffusion on the one hand, and geographically discontinuous linguistic subgroups or families on the other hand. Discontinuity of families under consideration precludes the possibility of additional contact between genetically related languages (that this is notoriously complicated has been pointed out by Hock 1991: 380–388).

Prerequisites for our analysis are (i) demonstrable contact between genetically unrelated languages, and (ii) the possibility of comparison with related languages spoken outside the contact zone.

My hypotheses are as follows:

**Hypothesis 1.** Areally induced grammaticalization and reinterpretation of morphological markers in the situation of intensive contact produces languages of unusual types, for their families: this is “change against the grain”.

**Hypothesis 2.** Parallelism in drift helps strengthen typological unity and similarity between genetically related languages: this is “change reinforcing similarities”.

The two areas in the world which show a striking degree of genetic diversity and discontinuity of language families are the Amazon Basin and the Sepik region of

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\(^1\) Whether or not grammaticalization is an independent process of language change, or whether it may be considered epiphenomenal, or derivative, from other, more general processes (see Joseph 2001) is largely irrelevant for the issue of shared patterns.
New Guinea. In each case, I concentrate on linguistic families whose boundaries, and contacts, can be clearly established.

2. Grammaticalization in the Middle Sepik area of Papua New Guinea

New Guinea island is known for its extreme linguistic diversity in every sense (over 1000 languages, c. 4,000,000 people, an area of about 900,000 square kilometres). The Sepik River Basin is home to c. 200 languages (a dozen language families and numerous isolates).

The Ndu family is the largest in terms of number of speakers and is discontinuous: Manambu and Iatmul are spoken along the Sepik River; Kaunga, Gala, and Ambulas/Wosera dialect continuum are spoken away from the Sepik River; and Boiken is spoken near the coastal areas. The internal classification of the family is in Figure 1.

Manambu is in many ways one of the most complex languages of the family (further details are in Aikhenvald 2008, 2009). The language has an elaborate system of cross-referencing prefixes and suffixes, while most languages in the family have either just suffixes (e.g. Iatmul) or no personal cross-referencing at all. Manambu has nine cases (the maximum number of cases in the other languages is four; cf. Staalsen n/d; Freudenburg 1970; Staalsen & Staalsen 1973; Wilson 1980). The ways in which possessive relationships are expressed is also much more complex than in other, related languages (see Aikhenvald 2013 for further details).

Manambu used to be in close contact with Kwoma, a Kwoma-Nukuma language (not demonstrably related to the Ndu languages) (Aikhenvald 2008, 2009); this contact is what may partly explain the emergence of additional structures in Manambu. This is where contact-induced grammaticalization comes into play.

![Figure 1. The Ndu language family](image-url)
2.1 Grammaticalization and language contact: Kwoma impact on Manambu

The impact of Kwoma on Manambu has resulted in the creation of a number of possessive structures, shared by Manambu and Kwoma, but not by any other Ndu languages.

Manambu has a variety of predicative possessive constructions (see also Aikhenvald 2013), including

a. a verbless clause, as in (1):

(1) Manambu

\textit{dəy} samasa:ma wapi.

they many bird

‘They have many birds.’  (Literally: ‘they, many birds’)

This construction type, known as “topicalization strategy” (see, for instance, Heine 1997), is shared with Ambulas/Wosera (Wilson 1980: 158), a related language:

(2) Ambulas/Wosera

\textit{de arigék api}.

they many bird

‘They have many birds.’

b. a possessive verb tə- ‘have’, used mostly to describe temporary possession:

(3) Manambu

\textit{dəy} samasa:ma wapi tə-na-di.

they many bird have\-\textit{ACTION.FOCUS-3PL}

‘They have/possess many birds.’

The verb tə- also means ‘stand, exist’ and is used as an auxiliary. Its cognate, \textit{ti}, is found in Iatmul, Ambulas/Wosera, and Boiken, with the meaning of ‘stay, be, exist’. No other Ndu language has a possessive verb.

Kwoma has a possessive verb \textit{ta} ‘have’ (Bowden 1997: 206):

(4) Kwoma

\textit{Mii him ta-wa?}

you.m tobacco have\-\textit{PRS}

‘Do you have tobacco?’

This verb also means ‘be, exist, stay, live’ (also see Kooyers 1974). In Kwoma, \textit{ta} ‘have’ appears to be used with possession of any sort, while in Manambu, it is restricted to just temporary possession. That a copied form or construction has a more limited use in the Recipient language (in this case, Manambu) than in the
Donor language is typical of contact-induced change (see, e.g., Haugen 1969; Johanson 2002; Aikhenvald 2007).

Contact-induced grammaticalization of the verb 'stand, exist' has resulted in creating a new predicative possessive construction type not found elsewhere in the Ndu family.

2.2 Grammaticalization and parallel development

Manambu has directional markers on verbs. Each of these has grammaticalized from a combination of the verb sɔ- ‘put, plant’ and an inherently directional motion verb, such as ‘go down’, ‘go inside’, ‘go up’, ‘go across’, etc. (a full analysis can be found in Aikhenvald 2008: 377–407). Examples are in (5):²

(5) Manambu
   a. yakɔ-sada-
       yakɔ-sɔ-da-
       throw-put-go.down
       ‘throw down’
   b. yakɔ-sɔwula-
       yakɔ-sɔ-wula-
       throw-put-go.inside/enter
       ‘throw inside or away from the Sepik River and towards the shore’


(6) Ambulas/Wosera
   a. yatjada
       yat-sa-da
       throw-‘put’-go.down
       ‘throw down’
   b. yatjawula
       yat-sa-wula
       throw-‘put’-enter
       ‘throw inside’

This phenomenon is thus shared by Manambu and Ambulas/Wosera. The two languages are “long disconnected”. There is a certain amount of trade contact

². Note that in (5)–(6) the first line represents the surface realization, and the second line provides the underlying form with interlinear glosses.
between the Manambu and the Wosera people through barter markets, but there is hardly any bilingualism, or any substantial linguistic contact.

2.3 Interim conclusion

Manambu is highly unusual for its family: one reason lies in areal diffusion from unrelated languages (including contact-induced grammaticalization). Parallel development may reinforce similarities between related languages, contributing to a common Ndu “typological profile”.

3. Grammaticalization in northwest Amazonia

Lowland Amazonian languages are a locus of considerable linguistic diversity, comprising an estimated 300 languages, at least 15 unrelated families, and a fair number of isolates. The six major linguistic families of the Amazon basin are Arawak, Tupí, Carib, Panoan, Tucanoan, and Macro-Jê; smaller families include Makú, Witotoan, Harakmbet, Arawá, Chapacura, Nambiquara, Guahibo, and Yanomami (see Aikhenvald 2012, Chapter 1).

All the major language families are discontinuous. Arawak languages are spoken in over ten locations north of the Amazon, and over ten south of the Amazon (from the Caribbean islands to the Argentinian Chacos). We focus on one geographically discontinuous subgroup: the Wapuí subgroup. Its members share an origin myth, namely, that they emerged from the Wapuí waterfall on the Aiary River, a tributary of the Içana river.

3.1 The Wapuí subgroup within the North Arawak languages

The Wapuí subgroup consists of the following languages (also see Aikhenvald 2002: 28–30):

- Tariana, spoken by c. 100 people in the Middle Vaupés area
- Baniwa of Içana-Kurripako dialect continuum, spoken by 3000–4000 people along the Vaupés, the Içana and its tributaries, and in the adjacent regions of Colombia and Venezuela
- Guarequena (or Old Warekena, or Warena), spoken by one elderly person on the Xié river, and by a few hundred people in the adjacent areas of Venezuela
- Piapoco, spoken by about 3000 people to the northeast of the Vaupés in the basin of the Meta, Vichada, and Guaviare rivers in Colombia and further north in Venezuela (Klumpp 1990, 1995; Reinoso Galindo 2002).

3. The internal classification of Arawak languages is still a matter of some dispute.
The subgroup is discontinuous. These languages share over sixty percent lexicon (see the lexical counts in Aikhenvald 2001) in addition to numerous phonological, morphological, and lexical innovations. These innovations include:

- lenition of Proto-Arawak stops before front vowels
- loss of Proto-Arawak high central vowel ɨ
- innovation of -ni (suffix and clitic) as a marker of third-person object (O) and the subject of intransitive stative verbs (So) in most languages

The internal classification of the subgroup is given in Figure 2.

3.2 Tariana: The odd one out?

Tariana is the only extant Arawak language spoken in the multilingual Vaupés River Basin linguistic area. The multilingual Vaupés River basin in northwest Amazonia (spanning adjacent areas of Brazil and Colombia) is a well-established linguistic area. Its major social feature is an obligatory societal multilingualism which follows the principle of linguistic exogamy: “Those who speak the same language as us are our brothers, and we do not marry our sisters”. Language affiliation is inherited from one’s father, and is a badge of identity for each person. The major properties of the area are summarized in Box 1 (see Aikhenvald 2012: 79; further references there and in Aikhenvald 2002).

Languages traditionally spoken on the Brazilian side of the area belong to two unrelated genetic groups: East Tucanoan and Arawak. Speakers of East Tucanoan languages (Tucano, Wanano, Desano, Tuyuca, Barasano, Piratapuya, and a few others), and of the Arawak language, Tariana, participate in the exogamous marriage network which ensures obligatory societal multilingualism.

In the absence of borrowed forms, developing forms out of one’s own resources is how Tariana achieves structural similarity with East Tucanoan languages.

![Diagram of internal subgrouping of the Wapuí subgroup of North Arawak languages](image)

**Figure 2.** Internal subgrouping of the Wapuí subgroup of North Arawak languages
This is where contact-induced grammmaticalization of lexical items come into play.4

**Box 1. “We don’t marry our sisters”: marriage network and areal diffusion in the Vaupés River Basin linguistic area**

<table>
<thead>
<tr>
<th>Languages spoken:</th>
<th>East Tucanoan and Tariana (Arawak)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Principles of social organization:</strong></td>
<td>Members of the exogamous network marry someone who speaks a different language: a Tariana cannot marry a Tariana, but can marry a Tucano, a Wanano, a Piratapuya, etc. Shared kinship system is of the Iroquoian type.</td>
</tr>
<tr>
<td><strong>Subsistence and settlement:</strong></td>
<td>Banks of the Vaupés River; slash-and-burn agriculture; fishing, some hunting, and limited gathering.</td>
</tr>
<tr>
<td><strong>Multilingualism:</strong></td>
<td>One’s father’s language is a badge of one’s identity and determines who one marries; one also speaks (and speaks well!) the language of one’s mother and of one’s mates in the longhouse whose mothers speak other languages in the area.</td>
</tr>
<tr>
<td><strong>Language etiquette:</strong></td>
<td>a. Keep your languages strictly apart: inserting forms from another language into one’s own is seen as a mark of incompetence. b. Speak your father’s language to your father and your siblings; if you want to be polite to other people, speak their father’s language to them.</td>
</tr>
<tr>
<td><strong>Outcomes:</strong></td>
<td>Hardly any borrowed forms, numerous similar categories and functions.</td>
</tr>
<tr>
<td><strong>What makes Tariana crucial:</strong></td>
<td>Comparing Tariana with its Arawak-speaking relatives outside Vaupés shows what categories are due to East Tucanoan impact.</td>
</tr>
</tbody>
</table>

### 3.3 Grammaticalization and the impact of language contact on Tariana

Numerous categories absent from Baniwa, Piapoco, and Guarequena have been developed in Tariana. These include evidentials (visual, nonvisual, inferred, assumed, and reported), markers of aspect, Aktionsart and causation, comparative constructions, the expression of grammatical relationships, and many other features. As a result, Tariana displays more structural complexity (see Aikhenvald 2002, 2011, and a summary in Aikhenvald 2012: 79–81).

Examples (7) and (8) illustrate this structural parallelism between Tucano and Tariana. (None of the Arawak languages from the Wapuí subgroup has evidentials, or case markers.)

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(7) Tucano
\[ y'ji-re \, \text{upi-}ka \, \text{pu}r\text{-sa'}. \]
I-TOPNON.A/S tooth-CLF:ROUND hurt-PRS.NONVIS.nothird.person
‘My tooth hurts.’ (Literally: ‘to me, tooth hurts’)

(8) Tariana
\[ nuha-nuku \, \text{nu-e-da} \, \text{kai-mha}. \]
I-TOPNON.A/S 1SG-tooth-CLF:ROUND hurt-PRS.NONVIS
‘My tooth hurts.’ (Literally: ‘to me, my tooth hurts’)

The nonvisual evidential in Tariana comes from a grammaticalized verb root \textit{-hima} ‘feel, hear’, a reflex of Proto-Arawak \textit{*-kima}. It is attested in all the Wapuí languages in the meaning of ‘hear, feel, smell’, but did not develop there into an evidential (except in Tariana).\footnote{Note that in other languages of the Arawak family, this root underwent independent grammaticalization into an evidential of another kind. In Piro, an Arawak language from Peru (distantly related to the Wapuí languages), this root is attested in the meaning of ‘sound’ (\textit{gima}). It grammaticalized into the reported evidential \textit{-gima}. (Matteson 1965: 127).}

Areally induced grammaticalization has affected the typological profile of Tariana in a number of ways. The most remarkable one concerns the expression of grammatical relations.

Languages of the Wapuí subgroup are of active–stative profile. This is a feature inherited from Proto-Arawak, and is shared by most Arawak languages (Aikhenvald 2002: 283–295). However, Tariana is developing a new set of verbal cross-referencing markers following a nominative–accusative principle, under East Tucanoan influence.

The following examples illustrate the active–stative pattern of marking grammatical relations in Baniwa of Içana/Kurripako (a similar principle operates in Guarequena (González-Ñánez 1997) and in Piapoco (Klumpp 1990; Reinoso Galindo 2002); see also the discussion of grammatical relations in Proto-Arawak and Baniwa of Içana in Aikhenvald (1995). In (9), the transitive verb ‘kill’ in Baniwa of Içana is exemplified: the transitive subject (A) is marked with the prefix \textit{li-} and the object (O) is marked with the enclitic \textit{=ni}. The cross-referencing markers are in bold face.

(9) Baniwa: transitive verb
\[ hne\text{-}te-pida \, \text{li-nua-ka}=ni. \]
then-REPORTED 3SG.NFA/SA-kill-DECL=3SG.NF.O/SO
‘Then he reportedly killed him.’
An illustration of an active intransitive verb, ‘walk around’, is given in (10); its intransitive subject (Sa) is marked in the same way as the A in (9), that is, with a prefix:

(10) Baniwa: active intransitive verb
    *hneṭe*-*pida*  *li-emhani*-ka.
    then-reported 3SG.NF.A/sa-walk.around-DECL
    ‘He reportedly walked around.’

A stative verb, ‘be cold’, is illustrated in (11). Its subject (So) is marked in the same way as the object in (9), that is, with a clitic:

(11) Baniwa: stative intransitive verb
    *hneṭe*-*pida*  *hape*-ka-ni.
    then-reported be.cold-DECL-3SG.NF.O/SO
    ‘Then he was reportedly cold.’

Grammatical relations in Tariana are marked in two ways. In line with the other Arawak languages, the same set of prefixes marks A (transitive subject) and Sa (subject of active intransitive verbs). This is shown in (12) and (13):

(12) Tariana: transitive verb
    *nesę* di-*nu*-ka-*pidana*  *diha*-nuku.
    then 3SG.NF-kill-DECL-REM.PST.REP he-top.non.A/S
    ‘Then he killed him.’

(13) Tariana: active intransitive verb
    *nesę*  *di-emhani*-ka-*pidana*.
    then 3SG.NF-walk.around-DECL-REM.PST.REP
    ‘Then he walked around.’

Tariana lost cross-referencing enclitics; as such, stative intransitive verbs, such as *hape* in (14), bear no cross-referencing markers:

(14) Tariana: stative intransitive verb
    *nesę*  *hape*-ka-*pidana*  *(diha)*.
    then be.cold-DECL-REM.PST.REP he
    ‘Then he was reportedly cold.’

The active–stative profile – inherited from Proto-Arawak – survives in the Tariana distinction between prefixing (A/Sa) verbs such as ‘kill’ in (12) and ‘walk around’ in (13), and nonprefixing (So) verbs such as ‘be cold’ in (14). Tariana has developed a case marker -*nuku* ‘topical non-subject’ under the influence of East Tucanoan languages (see (7) and (8) above). Tariana is the only Arawak language...
with cases used for expressing core grammatical functions. This, then, is one way in which the typological profile of Tariana has changed under Tucanoan influence (further details are in Aikhenvald 2002: 101–107).

There is a further areally induced grammaticalization pattern in Tariana, whereby Tariana independent pronouns grammaticalize into a new series of subject-marking enclitics. In Tariana, a non-third (second or first) person pronoun in subject (A/S) function can be repeated, before and after the predicate. Other constituents may intervene between the first occurrence of the pronoun and the predicate, but not between the predicate and the second occurrence of the subject pronoun. This construction is often used when the pronominalized A/S constituent is contrastive (to show this, the A/S constituents in the translation of (15a) and (15b) have been boldfaced). It is more frequent in conversations than in carefully planned narratives.

(15) Tariana
   a. nuha iha-nuku nu-kalite-ka=nhuà.
      I 2pl-top.non.a/s 1sg-tell-rec.pst.vis=1sg
      ‘I have told you.’ (so you have to listen to me)
   b. piha ina ma v
      you woman good+ncl:anim-prs.vis=2sg
      You are a beautiful woman.’ or ‘You are a good woman.’

The “repeated pronoun” constructions have two additional properties:

i. In normal to rapid speech, the second occurrence forms one phonological word with the predicate, and takes secondary stress; that is, it behaves like any other clitic in the language (on the behavior of clitics in Tariana, see Aikhenvald 2003: 53–60).

ii. The second occurrence of a doubled pronoun always occurs in reduced form: that is, nhua is used instead of nuha ‘I’; phia instead of piha ‘you.sg’; wha instead of waha ‘we’; and hya instead of ihya ‘you.pl’. Such reduction is also characteristic of clitics.

This ‘doubling’ construction is used by speakers of all generations and all levels of proficiency. Importantly, it is reminiscent of East Tucanoan cross-referencing patterns in the following ways. Firstly, East Tucanoan languages employ suffixes for cross-referencing, and the “doubled” pronouns are enclitics which appear close to the verbal root. Secondly, East Tucanoan cross-referencing is based on an opposition between third person and “everything else” (also see Ramirez 1997). Examples are in (16)–(17):
Overt personal pronouns – or, more frequently, the context – are crucial for determining who did what:

(17) Tucano

a. \textit{apê-a-pi.} yíi.  
   
   play-rec.pst.vis-nonthird.person I
   ‘I played.’

b. \textit{apê-a-pi.} mii.  
   
   play-rec.pst.vis-nonthird.person you
   ‘You played.’

In contrast, third person distinguishes two genders (feminine versus nonfeminine) and two numbers (singular versus plural), as exemplified in (18):

(18) Tucano

a. \textit{apê-a-mi.}  
   
   play-rec.pst.vis-3sg.nf
   ‘He played.’

b. \textit{apê-a-mo.}  
   
   play-rec.pst.vis-3sg.f
   ‘She played.’

c. \textit{apê-a-ma.}  
   
   play-rec.pst.vis-3pl
   ‘They played.’

The “doubling” construction in Tariana in (15a, b) displays a similar opposition between nonthird person (for which the doubling construction is allowed) versus third person (for which it is not).

This structural similarity between Tariana and East Tucanoan suggests that the construction in Tariana could have arisen as the result of diffusion from East Tucanoan languages. It is absent from other North Arawak languages (including the ones closely related to Tariana).\(^6\)

\(^6\) This restriction is in the process of being lost. A free personal pronoun can be repeated before and after the verb in Colloquial Brazilian Portuguese spoken in the state of Amazonas (Brazil) where the Tariana speakers reside, e.g. \textit{Ele dançou muito na festa ele} [he danced much at
We can conclude that, as a result of an areally induced grammaticalization pattern from independent pronouns to person-marking enclitics, Tariana has developed further nominative–accusative features, and also acquired the third–non-third person opposition in its cross-referencing. This makes Tariana an odd one out in its own family.

3.4 Parallel development: Reinforcing similarities

A systematic comparison between Tariana and Piapoco (belonging to the Wapui subgroup of Arawak languages) reveals shared patterns of grammaticalization within serial verb constructions.7

In both Tariana and Piapoco (Reinoso Galindo 2002: 353), the posture verb -ya- ‘stay’ is used as a marker of durative aspect. This is illustrated in (19) and (20):

(19) Tariana
ita-whya [di-pisa di-ya-ka-na].
canoe-CLF:VEHICLE 3SG.NF-cut 3SG.NF-STAY-DECL-REM.PST.VIS
‘He used to/kept cutting out canoes (out of wood).’

(20) Piapoco
[i-witsúa-ída i-ya-ka]
3SG.NF-cut-CAUS 3SG.NF-STAY-DECL canoe
‘He kept cutting (out) a canoe.’

In both languages, the verb -de within a serial verb construction marks an action which has an endpoint. In Piapoco, the verb -de, when used on its own, means ‘be able, finish, attain, reach, accomplish’ (Klumpp 1990: 223–224; 1995: 67); within a serial verb construction, it precedes the lexical verb.

(21) Piapoco
nu-dé-ka nu-tànàa-ka...
1SG-‘accomplish’-DECL 1SG-WRITE-DECL
‘I have written...’

In view of the limited materials on Guarequena, it is unclear whether the same patterns exist there.

7. In view of the limited materials on Guarequena, it is unclear whether the same patterns exist there.
In Tariana, -de on its own means ‘have, grab’, and it marks prolonged action with an endpoint in a serial verb construction, where it follows the lexical verb:

(22) Tariana
\[
\text{nu-dana nu-de-na} \ldots \\
1\text{sg-write 1sg-’prolonged action with an endpoint’-rem.pst.vis}
\]
‘I have been writing up to now/have written...’

The related verb in Baniwa, -de: means ‘grab, bring, take’.

We can conclude that Tariana and Piapoco, two languages genetically related but “long disconnected” (and typologically rather different) have developed serial verb constructions using cognate forms and with similar meanings. Their parallel development maintains a certain uniformity within the subgroup.

4. Shared grammaticalization patterns: Conclusions and challenges

Areally induced grammaticalization patterns account for divergence and the emergence of linguistic structures atypical of one’s own family. These include the development of the verb ‘have’ in Manambu, and of nominative–accusative patterns and third–nonthird person marking in Tariana.

Parallelism in drift helps maintain unity and uniformity between genetically related languages, in terms of shared typological features. We saw examples of the development of directionals in the Ndu family, and grammaticalization within serial verb constructions in the Wapuí subgroup of North Arawak.

In Bolinger’s (1991: 26–27) words,

One of the happier results of recent turns in linguistics is the search for universals and the emphasis on parallel developments in various languages. ... It is as if given certain elements from a common heritage, plus a need to communicate the same ideas, common solutions are going to be hit upon sometimes, though the element of chance still plays its part. The verb parecer in Spanish and the verb seem in English reveal just such a convergence. The etymological sources are quite different. Yet once set on a path toward the common meaning of that which is evident to the senses, their developing grammars grow more and more alike.

The data from two distinct regions – the Sepik area of New Guinea and northwest Amazonia – confirm our hypotheses 1 and 2 formulated in Section 1. How about the motivation underlying the shared grammaticalization due to areal diffusion, and due to parallel development of genetically related languages?

The idea of parallel development faces a number of challenges. The first major difficulty concerns the nature of parallel development itself. As pointed out by
Brian Joseph (this volume), features which we can interpret as resulting from parallel development may in fact have been present in the proto-languages and may well be interpretable as parallel genetic inheritance. This may well be the case in the examples discussed above. The situation is particularly problematic when we are dealing with languages for which we have no written records, and thus fully rely on reconstruction (which is the case for New Guinea and Amazonia). Also, if shared grammaticalization patterns involve cognate morphemes – as is the case in the examples above – the question of whether we are facing parallel development of cognate morphemes or partial inheritance remains open.

The idea of “parallel development” presupposes that languages have been long disconnected. But can we exclude some prehistoric or ancient contacts between the populations speaking genetically related languages? We cannot. This is the second major challenge to the concept of parallel development. Similarities which – on the surface of it – can be explained by parallel development in genetically related languages may well be due to the traces of ancient contacts, now forgotten.

The third major challenge comes from somewhat different quarters. In many situations, two related languages are in contact with languages from a different family which are typologically similar to each other. Tariana and Baniwa of Içana share quite a few features; Tariana is in contact with many East Tucanoan languages; some varieties of Baniwa of Içana-Kurripako used to be in contact just with Cubeo (also East Tucanoan) (Aikhenvald 2002). Distinguishing in this case between shared substrata and parallel development is next to impossible.

The motivation for areal grammaticalization is to be considered as part of the motivation for contact-induced change in general (this has been discussed in various studies on grammaticalization and on contact-induced change; a summary is given in Aikhenvald 2007). However, we are faced with a number of general questions. Can we predict which way grammaticalization will go? On this matter, opinions vary. The principle of unidirectionality of grammaticalization allows for establishing the likelihood of some paths, rather than others. However, some scholars judge the exact instances of grammaticalization so hard to predict that they suggest that we simply “content ourselves with sitting back and watching how languages change syntactically and semantically according to their own inner, inscrutable laws” (Matisoff 1991: 447).

Grammaticalization paths in languages may also correlate with the frequency of use of particular constructions, in line with Du Bois’ (1985: 363) “Grammars code best what speakers do most”. Note that in the instances of grammaticalization we discussed, directionals and serial verb constructions are highly frequent in texts and conversations.

It is also likely that non-contact-induced grammatical evolution, and grammaticalization processes as part of it, may involve continuous renewal of old
categories, and thus provide robust motivation for “parallel development” (in line with Heath 1998: 756). In that case, then, we cannot exclude that parallel development in grammaticalization may represent a mechanism for “repairing” inherited grammatical categories which may ultimately reflect shared conceptual patterns which somehow “underlie” genetically related languages.

This section poses more questions than it purports to answer. Parallel development will remain a useful descriptive tool, even if its explanatory power is restricted – since a number of basic questions remain unsolved.

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>first person</td>
</tr>
<tr>
<td>3</td>
<td>third person</td>
</tr>
<tr>
<td>CAUS</td>
<td>causative</td>
</tr>
<tr>
<td>CLF</td>
<td>classifier</td>
</tr>
<tr>
<td>DECL</td>
<td>declarative</td>
</tr>
<tr>
<td>M</td>
<td>masculine</td>
</tr>
<tr>
<td>NCL:ANIM</td>
<td>noun class: animate</td>
</tr>
<tr>
<td>PL</td>
<td>plural</td>
</tr>
<tr>
<td>PRS</td>
<td>present</td>
</tr>
<tr>
<td>PRS.NONVIS</td>
<td>present nonvisual</td>
</tr>
<tr>
<td>PRS.VIS</td>
<td>present visual</td>
</tr>
<tr>
<td>REC.PST.VIS</td>
<td>recent past visual</td>
</tr>
<tr>
<td>REM.PST.REP</td>
<td>remote past reported</td>
</tr>
<tr>
<td>REM.PST.VIS</td>
<td>remote past visual</td>
</tr>
<tr>
<td>SA</td>
<td>active intransitive verb</td>
</tr>
<tr>
<td>SO</td>
<td>stative intransitive verb</td>
</tr>
<tr>
<td>SG</td>
<td>singular</td>
</tr>
<tr>
<td>SG.F</td>
<td>singular feminine</td>
</tr>
<tr>
<td>SG.NF</td>
<td>singular non-feminine</td>
</tr>
<tr>
<td>TOP.NON.A/S</td>
<td>topical non-subject.</td>
</tr>
</tbody>
</table>

References


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