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Evidence for a grammaticalization path from a verb 'do' to an antipassive marker and further to an event nominalization marker in Manding languages

Abstract. In Manding languages, morphologically unmarked event nominalization is in competition with the use of a suffix **-ri** or **-li**, whose distribution is however not identical across Manding varieties: in some of them, the use of this suffix is bound to strict conditions on transitivity and semantic role assignment, whereas in others its use shows more fluctuations. Internal as well as comparative evidence suggests that this situation can be explained as resulting from the evolution of verb 'do' that first grammaticalized as an antipassive marker. In Manding languages, the finite verb forms including this antipassive marker ceased to be used, but the antipassive marker subsisted in nominalization and in combination with some derivational suffixes. Subsequently, it was reanalyzed as a plain nominalization marker in some Manding varieties, whereas in some others, its use is still bound to conditions on transitivity and argument expression typical for antipassive markers.

1. Introduction

Manding languages are a group of closely related languages included in the western branch of the Mande language family.

The situation of Mande languages with respect to event nominalization is not uniform: in some of them (for example, Soninke), morphologically unmarked nominalization is not a productive mechanism, and the general rule is that event nouns can only be obtained by means of the addition of a derivational suffix to verb stems, whereas in others, for example Soso (Touré 1994) and Jalonke (Lüpke 2005), morphologically unmarked event nominalization is possible without any particular restriction.

Example (1) illustrates morphologically unmarked event nominalization in Jalonke. In this example, dɔɔ 'pull out' does not undergo any derivation process, but the fact that it combines with the definite article -na and that the phrase it projects (láŋgée kwii dɔɔná) is the complement of the postposition yí provides clear evidence of nominalization.

(1) Jalonke (pers.doc.)

Ď bìrà láŋgée kwĭi dòən'έε.

'I started weeding in the garden.'

lit. 'I fell in the pull(ing) out in the garden.'

ή bìrá lángé-ná kwĭi dɔ̌ɔ-ná yí 1SG fall garden-D in pull.out-D POSTP

In Manding languages, which in the current classification of Mande languages are included in the Central sub-branch of the West Mande branch, morphologically unmarked event nominalization

¹ On the genetic classification of Mande languages, see Vydrin (2009).

is in competition with the use of a suffix **-ri** or **-li**, whose distribution is however not identical across Manding varieties: in some of them (represented here by Mandinka), the use of this suffix is bound to strict conditions on transitivity and semantic role assignment, whereas in others (represented here by Bambara) its use shows more fluctuations. On the whole, the use of **li-** in Bambara can be characterized as tending to generalize to situations in which Mandinka speakers consider the use of **-ri** incorrect and exclusively use morphologically unmarked nominalization. For example, in Bambara, with the verb 'kill', the nominalization marker **-li** can be used irrespective of the semantic role of the argument that modifies the nominalized verb – example (2).²

(2) Bambara (pers.doc.)

a. jàrá fàgà-lî

'the fact that the lion was killed'

jàrá-` fàgà-lí-`

lion-D kill-NMLZ-D

b. jàrâ ká fàgà-lî

'the fact that the lion killed (someone)'

jàrá-` ká fàgà-lí-`

lion-D AL kill-NMLZ-D

By contrast, in Mandinka, as illustrated in (3), the suffix **-rí** (glossed ANTIP for reasons that will become apparent later) is obligatory in the construction corresponding to (2b), but cannot be used in the construction corresponding to (2a).

(3) Mandinka (pers.doc.)

a. jàtôo fàâ

'the fact that the lion was killed'

jàtá-ò fǎa-ò

lion-D kill-D

b. *jàtóo fàarôo

intended: 'the fact that the lion was killed'

jàtá-ò fàa-rí-ò

lion-D kill-ANTIP-D

c. jàtôo lá fàarôo

'the fact that the lion killed (someone)'

jàtá-ò lá fàa-rí-ò

lion-D AL kill-ANTIP-D

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² In Manding languages, adnominal possessors precede their head, and alienable possession is marked by a linker whose form varies depending on the individual languages (Bambara ká, Mandinka lá, etc.). If the head of the adnominal possession construction is a verbal lexeme used nominally, irrespective of the possible use of a nominalization marker, subjects transposed into modifiers of nominalized verbs are followed by the alienability marker, whereas objects transposed into modifiers of nominalized verbs are directly juxtaposed to their head.

d. jàtôo lá fàâ

intended: 'the fact that the lion killed (someone)'
jàtá-ò lá fǎa-ò
lion-D AL kill-D

In this article, after presenting some basic aspects of Manding morphosyntax and describing event nominalization in Mandinka and Bambara, I show that internal as well as comparative evidence (mainly from Soninke, a language belonging to another branch of West Mande) suggests that this situation can be explained as resulting from the evolution of a former verb 'do' that first grammaticalized as an antipassive marker. This antipassive marker is still found in Soninke with the properties of a canonical antipassive marker. In Manding languages, the finite verb forms including this antipassive marker ceased to be used, but the antipassive marker subsisted in nominalization and in combination with some derivational suffixes. In Mandinka, its use is still bound to conditions on transitivity and argument expression typical for antipassive markers, but in Bambara and some other Manding varieties, it was reanalyzed as a plain nominalization marker.

2. Some basic aspects of Manding morphosyntax

In the languages of the Mande language family, verbal clauses are characterized by a particularly rigid (and typologically unusual) constituent order, with the object invariably in preverbal position and the obliques in postverbal position, and Manding languages are no exception. The construction of transitive verbal clauses can be schematized as S pm O V X*, and that of intransitive verbal clauses as S pm V X*, with a so-called 'predicative marker' (a kind of auxiliary) invariably found immediately after the subject NP.³

In Manding languages, almost all the grammaticalized TAM and polarity distinctions are expressed by the predicative markers (as in example (4) **kà** 'incompletive', **yè** 'completive, transitive'). The inflection of verbs acting as the nucleus of independent clauses is limited to a suffix expressing 'completive, intransitive' in a construction including no overt predicative marker. This suffix is in complementary distribution with a predicative marker expressing the same value in transitive predication – examples (4a) and (4c). As illustrated in examples (4b) and (4d), the grammaticalized TAM and polarity values other than 'completive, positive' are expressed in the same way in transitive and intransitive predication.

(4) Mandinka (pers. doc.)

a. Yíróo bòyítà sílòo kâŋ.

'The tree fell down on the road.'

yírì-ò bòyí-tà sílà-ò kàŋ.

tree-D fall-CPL road-D on

³ In this schematization, S, O and X must be understood as 'subject, 'object' and 'oblique', respectively. The asterisk must be understood as the Kleene star: X* represents a string consisting of an arbitrary number of obliques, including the empty string.

b. Nèwóo kà kómôŋ jíyòo kónò.

'Iron rusts in water.'

něe-ò kà kómôŋ jíi-ò kónò iron-D ICPL rust water-D in

c. Wùlôo yè díndínó tànkàndí dìmbâa má.

'The dog saved the child from the fire.'

wùlú-ò yè díndíŋ-ò tàŋkàndí dìmbáa-ò má iron-D CPL.TR rust save fire POSTP⁴

d. Kèwóo kà à téerímáa máakóyì kódòo tó.

'The man helped his friend financially.'

kěe-ò kà à téerímáa máakóyì kódì-ò tó man-D ICPL 3SG friend help money-D LOC

As can be seen from example (4), subjects and objects are neither flagged nor indexed, and obliques are commonly encoded as postpositional phrases, although some prepositions can also be found.

Personal pronouns are found in the same positions as ordinary NPs, and have the same form in all their possible functions.

With the exception of the implicit 2nd person singular subject of imperative clauses, in verbal predication, the subject and object slots cannot be left empty. As argued in Creissels (2015), constructions in which one of the core arguments of a potentially transitive verb is left unexpressed must not be analyzed as transitive constructions with a null subject or object, but as intransitive constructions with one of the core arguments in subject function, and the possibility of such intransitive constructions of potentially transitive verbs depends on the valency properties of individual verbs. In this respect, it is noteworthy that Manding languages have very limited classes of A-labile verbs (i.e. verbs used transitively or intransitively with the same semantic role assigned to their subject), whereas P-lability is pervasive. Morover, Manding languages do not have only P-lability of the cross-linguistically common causal / noncausal type, but also active / passive lability, and are even, according to Cobbinah and Lüpke (2009), a particularly clear case of languages with morphologically unmarked passive constructions.

In Bambara and other Manding languages, all verbs that can be used in a transitive construction can also be used without any specific marking in an intransitive construction in which their subject is assigned the same semantic role as the object in the transitive construction, as in (5). In Bambara, apart from the total lack of passive morphology, this construction has all the properties of a canonical passive, including the possibility of expressing the agent as an oblique phrase. As illustrated by example (6), with some transitive verbs (but not all), the intransitive construction is ambiguous between a passive reading and a noncausal (anticausative) reading.⁵

⁴ The generic gloss POSTP is used for postpositions whose range of possible meanings is difficult if not impossible to analyze in terms of extensions of some core meaning.

⁵ In the presentation of these examples, the last line gives indications about the structure of the clause, using the following abbreviations: S = subject, pm = predicative marker (see section 2), O = object, V = verb, X = oblique.

- (5) Bambara (pers. doc.)
 - a. Wùlû má sògô dún.

'The dog didn't eat the meat.'

```
wùlú-`másògó-`dúndog-DCPL.NEGmeat-DeatSpmOV
```

b. Sògô má dún (wùlú fè).

```
'The meat was not eaten (by the dog).'

sògó' má dún wùlú- fɛ̂

meat-D CPL.NEG eat dog-D by

S pm V X
```

- (6) Bambara (pers. doc.)
 - a. Ń má dàgá cì.

'I didn't break the pot.'

```
ń má dàgá-` cì
1SG CPL.NEG pot-D break
S pm O V
```

b. Dàgâ má cì.

'The pot didn't break.' OR 'The pot was not broken.'

```
dàgá-`mácìpot-DCPL.NEGbreakSpmV
```

3. Event nominalization and other uses of the suffix -ri in Mandinka

3.1. Morphologically unmarked event nominalization in Mandinka

As discussed in detail in (Creissels 2017), almost all the verbal lexemes of Mandinka can be found in constructions in which they carry the same reference to event as when used verbally, but behave in all respects like nouns. Example (7) illustrates the nominal use of the intransitive verb **filí** 'disappear' and of the transitive verb **jé** 'see' without anything that could be analyzed as a nominalization marker. In this example, like nouns, **jé** and **filí** combine with the default determiner of nouns **-ò** and with a genitival modifier with which they form a noun phrase in subject function.

⁶ The main exception is **săa** 'die', which cannot be used nominally and corresponds to the verbal noun **sàayáa** 'death'. Note that this is by no means a regular derivational operation: Mandinka does have a derivational suffix **-yaa**, but this is the only case in which the function of this suffix can be analyzed as marking event nominalization. I am aware of no explanation of this oddity.

⁷ On the distribution and use of the default determiner -ò of Mandinka (a former definite article whose use has been extended well beyond the contexts in which definite articles such as that of English are used), see Creissels & Sambou (2013: 171-186). On the adnominal possession construction of Mandinka, and the use of the postposition lá as an alienability marker in adnominal possession, see Creissels & Sambou (2013: 241-257).

(7) Mandinka (pers.doc.)

a. À jéwòo díyàatá ý yè.

'I am glad to see him/her' lit. 'His/her seeing is pleasant for me.'

à jée-ò díyàa-tá ý yè3SG see-D be.pleasant-CPL.INTR 1SG for

b. À lá filôo yè ή jáakálì

'His/her disappearance bothers me.'

à lá filí-ò yè ý jáakálì
 3SG AL disappear-D CPL.TR 1SG bother

However, in Mandinka, it is only for intransitive verbs that the morphologically unmarked use of verbal lexemes as event nouns is the only available option, and is always possible without any particular condition. In the case of transitive verbs, unmarked event nominalization is bound to strict conditions, and when the conditions in question are not met, the nominalization of transitive verbs requires a suffix **-ri**. This suffix has two allomorphs conditioned phonologically: **-li** if the stem includes an **r**, and **-diri** if the stem ends with a nasal. It is found exclusively with transitive verbs in the conditions described in 3.2.

3.2. Event nominalization of transitive verbs and the suffix -ri

In event nominalization of transitive verbs, as illustrated by examples (8) and (9), the suffix **-ri** does not occur if the P argument is expressed as a modifier of the nominalized verb, forms a compound with it, or can be identified to the referent of a noun phrase included in the same construction. If this is not the case, the transitive verb used as an event noun must take the suffix **-ri** in order to be interpreted as an active event noun. In other words, in the absence of **-ri**, it is not possible to assign the role of agentive argument while leaving the patientive argument interpreted as non-specific:

- In (8a), the role that sòosôo 'contradict' assigns to its object in the transitive predication construction is assigned to the genitival modifier of sòosôo used nominally, and the agentive argument of sòosôo is interpreted as non-specific.
- In (8b), Músáa cannot be identified to the agentive argument of sòosôo, since this would leave the role of patientive argument of sòosôo unassigned.
- In (8c), the adjunction of **-ri** blocks the assignment of the semantic role of patientive argument of **sòosôo**, and **Músáa** can be identified to the agentive argument of **sòosôo**.

(8) Mandinka (pers.doc.)

a. Kèebâalú sòosôo mâŋ bétéyâa.

'It is not good to contradict elders.' lit. 'Contradicting elders is not good.'

kèebáa-ò-lú sòosóo-ò mân bétéyâa elder-D-PL contradict-D CPL.NEG be.good

b. Sòosôo mân díyâa Músáa yè.

'Moussa doesn't like to be contradicted.' lit. 'Contradicting is not pleasant for Moussa.'

```
sòosóo-ò mân díyâa Músáa yè contradict-D CPL.NEG be.pleasant Moussa for
```

c. Sòosòorôo díyàatá Músáa yè.

'Moussa likes to contradict.' lit. 'Contradicting.ANTIP is pleasant for Moussa.'

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sòosòo-rí-ò díyàa-tá Músáa yè contradict-ANTIP-D be.pleasant-CPL.INTR Moussa for
```

- In (9a), màaní 'rice' saturates the P valency of tǔu 'pound', and the subject of the copula is identified to the unexpressed A argument.
- In (9b), none of the arguments of t\u00e4u 'pound' is expressed within the phrase projected by t\u00e4u, and in the absence of -ri, the subject of the copula is identified to the unexpressed P argument.
- In (9c), none of the arguments of tǔu 'pound' is expressed within the phrase projected by tǔu, but -ri saturates the P valency of tǔu 'pound', and the subject of the copula is identified to the unexpressed A argument. Note that mùsôo bé tùwôo lá could only be interpreted as 'the woman is being pounded'.

(9) Mandinka (pers.doc.)

a. Mùsôo bé màanìtúwòo lá.

'The woman is pounding rice.' lit. 'The woman is at the rice-pounding.'

```
mùsú-ò bé màanì-túu-ò lá
woman-D COP rice-pound-D POSTP
```

b. Màanôo bé tùwôo lá.

'The rice is being pounded.' lit. 'The rice is at the pounding.' màaní-ò bé tǔu-ò lá

```
contradict-D COP pound-D POSTP
```

c. Mùsôo bé tùurôo lá.

'The woman is pounding.' lit. 'The woman is at the pounding.ANTIP.'

```
mùsú-ò bé tùu-rí-ò lá
woman-D COP pound-ANTIP-D POSTP
```

To summarize, when a transitive verb is used as an event noun, in the absence of **-ri**, the rule in semantic role assignment is that the semantic role assigned by the verb in question to its object in the transitive construction has priority over that of the subject of the transitive construction. By contrast, in the presence of **-ri**, the only semantic role available is that of the subject of the transitive construction, and the patientive argument of the transitive verb must be interpreted as non-specific. In other words, in event nominalization, the *ri*-form of transitive verbs behaves as if it were the nominalized form of an intransitive verb with the A argument of the transitive verb as its sole core argument.

3.3. The use of -ri in combination with other suffixes

The suffix **-ri** is involved, in exactly the same conditions and with exactly the same consequences on semantic role assignment, in several types of morphological operations involving other suffixes, if (and only if) the input is a transitive verb stem. In all cases, **-ri** precedes the suffix with which it combines:

- In the formation of a non-finite form expressing temporal simultaneity, marked by a suffix
 -tôo: as illustrated in (10b), -ri is required in order to avoid a passive interpretation (ή η á mùsóo tùutôo jé could only be interpreted as 'I saw the woman being pounded');
- (10) Mandinka (pers.doc.)
 - a. Ď ná mùsóo màanìtùutôo jé.

'I saw the woman pounding rice.'

```
ń ná mù sú-ò mà anì-tù u-tôo jé
1SG CPL.TR woman-D rice-pound-SIMULT see
```

b. Ď ná mùsóo tùurìtôo jé.

'I saw the woman pounding.'

```
ý ná mùsú-ò tùu-rì-tôo jé
1SG CPL.TR woman-D pound-ANTIP-SIMULT see
```

- In agent nominalization, marked by a suffix -laa ~ -naa: as illustrated in (11b), if the patient is not expressed as the first formative of a compound (as in (11a)) or as an adnominal possessor, the suffix -ri is required.
- (11) Mandinka (pers.doc.)
 - a. **màanìtùuláa**

'person who pounds rice' màanì-tùu-láa rice-pound-AGNR

b. tùuriláa

'person who pounds' tùu-rì-láa pound-ANTIP-AGNR

In instrument nominalization, marked by a suffix -ran ~ -lan ~ -dan: as illustrated in (12b), if the patient is not expressed as the first formative of a compound (as in (12a) or as an adnominal possessor, the suffix -ri is required.

(12) Mandinka (pers.doc.)

a. màanìtùurán

'rice-pestle'

màanì-tùu-ráŋ

rice-pound-INSNR

b. tùurilán

'pestle'

tùu-rì-láŋ

pound-ANTIP-INSNR

When the verb forms part of a nominal compound in which a verb restricts the meaning of a noun: as illustrated in (13b), if the compound does not include a noun referring to the patient as its first formative, the suffix -ri is required.

(13) Mandinka (pers.doc.)

a. màanìtùudúláa

'place dedicated to rice pounding'

màanì-tùu-dúláa

rice-pound-place

b. tùuridúláa

'place dedicated to pounding'

tùu-rì-dúláa

pound-ANTIP-place

In causative derivation: the causative suffix -ndi attaches directly to intransitive verb stems, but with most transitive verb stems, it must be preceded by -ri, as in (14b). Note that the use of -ri in causativization is consistent with the fact that, in the construction illustrated by example (14b), the object slot is filled by the causee, not by the patient of tǔu 'pound'. In this construction, the patient of tǔu is left unexpressed; it could also be expressed, but only as an oblique, and consequently its presence would have no incidence on the obligatoriness of the suffix -ri, as illustrated in (14c).

(14) Mandinka (pers.doc.)

a. Mùsôo vè dèndìkôo nóndì.

'The woman soiled the shirt.' (lit. made the shirt get dirty)

mùsú-ò yè dèndìká-ò nóo-ndì

woman-D CPL.TR shirt-D get.dirty-CAUS

⁸ This is consistent with the fact that Mande languages (contrary to most languages families of Sub-Saharan Africa) do not have multiple object constructions. In Mande languages, the number of core arguments in predicative constructions is strictly limited to two.

b. Mùsôo yè díndínó tùurìndí.

'The woman made the child pound.'

mùsú-ò yè díndíŋ-ò tùu-rì-ndí

woman-D CPL.TR child.D pound-ANTIP-CAUS

c. Mùsôo yè díndíŋó tùurìndí màanôo lá.

'The woman made the child pound the rice.'

mùsú-òyèdíndíŋ-òtùu-rì-ndímàaní-òláwoman-DCPL.TRchild.Dpound-ANTIP-CAUSrice-DPOSTP

3.4. The *ri*-form of transitive verbs in predicative constructions

The effect of the suffix **-ri** on valency and semantic role assignment in the constructions described in sections 3.2 and 3.3 is exactly that expected of an antipassive marker. Moreover, the derivational suffixes that can be preceded by **-ri** in the morphological operations presented in section 3.3 are suffixes that normally attach to verbal stems. Consequently, the *ri*-form of Mandinka transitive verbs could be expected to act also as the verbal nucleus in an antipassive variant of transitive predication. Moreover, this would be consistent with the fact that, in Manding languages, the intransitive use of most transitive verbs implies a noncausal or passive reading.

However, $\mathbf{d\acute{o}m\grave{o}}$ 'eat' is the only transitive verb of Mandinka whose ri-form can be used in such a way. As can be seen in (15), with $\mathbf{d\acute{o}m\grave{o}}$ 'eat', the derived form $\mathbf{d\acute{o}m\acute{o}r\grave{i}}$ is available as an intransitive verb stem assigning the role of agent to its subject, contrasting with the intransitive use of the underived stem $\mathbf{d\acute{o}m\grave{o}}$, which can only lend itself to a passive reading.

(15) Mandinka (pers.doc.)

a. Díndíno vè mbúurò dómò.

'The child ate the bread.'

díndíŋ-ò yè mbúurù-ò dómò child-D CPL.TR bread-D eat

b. Mbúuròo dómòtá.

'The bread was eaten.'

mbúurù-ò dómò-tá

bread-D eat-CPL.INTR

c. Díndínò dómóritá.

'The child ate.'

díndín-ò dómó-rì-tá

child-D eat-ANTIP-CPL.INTR

⁹ For Mandinka, Creissels & Sambou (370-371) give a list of 30 transitive verbs that can be used intransitively without any change in the semantic role assigned to their subject, but with the exception of this limited set of Alabile verbs, the general rule is that the transitive verbs of Mandinka are P-labile, and cannot be used intransitively with a reading other than passive or noncausal.

In other words, with $d\acute{o}m\grave{o}$ 'eat', the behavior of **-ri** is in all respects that expected from a marker of antipassivization. By contrast, with all the other transitive verbs, a verbal use of the ri-form similar to that illustrated in (15c) is impossible, cf. (16c), and the construction commonly used to avoid specifying the patientive argument of transitive verbs is an antipassive periphrasis in which the ri-form of the transitive verb used nominally is the object of $k\acute{e}$ 'do', cf. (16d). The antipassive marker **-ri** is still required, but within a nominalized form of the verb acting syntactically as the object of the light verb 'do'.

(16) Mandinka (pers.doc.)

a. Mùsôo yè sùbôo tábì.

```
'The woman cooked the meat.'

mùsú-ò yè sùbú-ò tábì

woman-D CPL.TR meat-D cook
```

b. Sùbôo tábìtá.

```
'The meat was cooked.'

sùbú-ò tábì-tá

meat-D cook-CPL.INTR
```

c. *Mùsôo tábí-rì-tá.

```
intended: 'The woman did the cooking.'

mùsú-ò tábí-rì-tá

woman-D cook-ANTIP-CPL.INTR
```

d. Mùsôo yè tábíròo ké.

```
'The woman did the cooking.'

mùsú-ò yè tábí-rì-ò ké

woman-D CPL.TR cook-ANTIP-D do
```

3.5. Conclusion of Section 3

The Mandinka suffix **-ri** can be analyzed as an atypical antipassive marker, since on the one hand it is found exclusively with transitive verbs and operates on their valency and semantic role assignment properties exactly like canonical antipassive markers, but on the other hand, with the only exception of $\mathbf{d}\acute{o}m\grave{o}$, the ri-form of Mandinka transitive verbs cannot be used as a finite verb form.

At this point I leave open the question of the diachronic interpretation of the verbal use of **dómó-rì** as an isolated and accidental innovation, or a vestige of a formerly regular verbal use of *ri*-forms. We will return to this question later.

4. Event nominalization in Bambara

A suffix **-li** cognate with Mandinka **-ri** and also involved in event nominalization can be found in Bambara, but the details of its distribution are different. Crucially, morphologically unmarked

event nominalization is possible in Bambara too, but verbs used nominally without any overt nominalization marker are much less frequent in Bambara than in Mandinka, and the distribution of **-li** is not strictly bound to the conditions on valency and semantic role expression described in Section 3 for Mandinka (Dumestre 2003: 74-5).

A first crucial observation is that, contrary to Mandinka -ri, Bambara -li can attach to intransitive verbs used nominally. Forms like sìgì-lí < sìgí 'settle' or nà-lí < nǎ 'come' are perfectly correct (and usual) in Bambara, whereas in Mandinka, intransitive verbs like sǐi 'settle' or nǎa 'come' simply cannot combine with the suffix -ri.

The second crucial observation is that, in Bambara, **-li** is compatible with the expression of the patientive argument of transitive verbs. In the nominalization of transitive verbs, Bambara and Mandinka make the same distinction between direct genitives (simply juxtaposed to their head) referring to the patientive argument of the transitive verb, and indirect genitives (marked by **ká** (Bambara) or **lá** (Mandinka)) referring to the agentive argument. However, in Mandinka, this distinction correlates with the absence vs. presence of the **-ri** suffix, whereas there is no such correlation in Bambara, as illustrated by examples (2) and (3), repeated here as (17) and (18).

(17) Bambara (pers.doc.)

a. jàrá fàgà-lî

'the fact that the lion was killed'

jàrá-` fàgá-lí-`

lion-D kill-NMLZ-D

b. jàrâ ká fàgà-lî

'the fact that the lion killed (someone)'

jàrá-` ká fàgá-lí-`

lion-D AL kill-NMLZ-D

(18) Mandinka (pers.doc.)

a. jàtôo fàâ

'the fact that the lion was killed'

jàtá-ò fǎa-ò

lion-D kill-D

b. *jàtóo fàarôo

intended: 'the fact that the lion was killed'

jàtá-ò fǎa-rí-ò

lion-D kill-ANTIP-D

c. jàtôo lá fàarôo

'the fact that the lion killed (someone)'

jàtá-ò lá fǎa-rí-ò

lion-D AL kill-ANTIP-D

d. jàtôo lá fàâ

intended: 'the fact that the lion killed (someone)'

jàtá-ò lá fǎa-ò lion-D AL kill-D

Consequently, contrary to Mandinka -ri, there would be no justification for analyzing Bambara -li as a kind of antipassive marker. Bambara -li can only be analyzed as an event nominalization marker whose use is obligatory in the conditions in which Mandinka speakers use -ri, and optional in the conditions in which morphologically unmarked nominalization is the only possibility in Mandinka. The description of the use of Bambara -li is made difficult by the fact that the choice between morphologically unmarked event nominalization and event nominalization marked by -li shows puzzling fluctuations. However, what is crucial is that -li is obligatory precisely in the conditions that trigger the use of -ri in Mandinka, and optional in the conditions that rule out the use of -ri in Mandinka.

Moreover, as observed by Dumestre (2003: 75), the extensive use of **-li** is not typical of traditional texts, and is rather found in educational material produced by various non-governmental organizations or within the frame of official literacy programs, that is, in the kind of written texts in which calques from French abound. This suggests that the extension of the use of **-li** constitutes a recent development in the history of Bambara.

5. The diachronic relationship between Mandinka -ri and Bambara -li

As regards the relationship between Mandinka -ri and Bambara -li, two simple hypotheses can be imagined:

- either -ri was formerly a plain event nominalization marker, like Bambara -li, and its use has been restricted to constructions meeting the conditions described in Section 3,
- or -li had formerly the same distribution as Mandinka -ri, but the conditions that limited its use have been relaxed, resulting in its reanalysis as a plain event nominalization marker.

The second scenario is much more plausible, in the first place since, generally speaking, there is nothing strange in the relaxation of constraints that initially limit the use of a marker, whereas it is difficult to imagine a motivation for the introduction of conditions on transitivity and semantic role expression in the use of a nominalization marker initially devoid of such restrictions.

Moreover, as already noted in section 4, the extension of the use of **-li** can be viewed as a recent phenomenon in the history of Bambara, since the tendency to use event nominalization marked by **-li** rather than morphologically unmarked event nominalization is much stronger in 'Modern' Bambara (the language of media, governmental communication, functional literacy, etc.) than in Bambara as it is spoken in traditional setting.

The conclusion I propose is therefore that Mandinka has maintained the situation found in Proto-Manding, with an atypical antipassive marker that has been reanalyzed as a plain nominalization marker in Bambara and some other Manding varieties.

The question that arises at this point is whether it would be possible to go further in the reconstruction of the history of this atypical antipassive marker. In the following section I'll try to show that, in addition to internal evidence, some Mande languages that do not belong to the Manding group provide comparative evidence supporting the hypothesis that the ancestor of this

atypical antipassive marker reanalyzed as a nominalization marker in some Manding languages was a verb 'do' that first grammaticalized as a plain antipassive marker.

5. A plausible etymology of Manding -ri / -li

5.1. Internal evidence that the *ri*-forms of transitive verbs were initially verbal

Internal evidence that the *ri*-forms of Mandinka transitive verbs were originally verbal comes from the fact that **-ri** can precede various other suffixes that attach to verbal stems to mark simultaneous action, agent nominalization, instrument nominalization, and causativization (cf. Section 3.3). This strongly suggests that the verbal use of **dómó-rì** (example (8) above) is a vestige of a formerly fully verbal use of *ri*-forms, rather than an accidental innovation.

5.2. Comparative evidence from Soninke

As illustrated by examples (19), among the other West Mande languages, Soninke has a canonical (and fully productive) antipassive marker **-ndî** / **-ndí** (the choice between the two allomorphs of this suffix depending on the tone pattern of the stem to which it attaches). See Creissels (Forthcoming) for a detailed description of antipassivization in Soninke.

(19) Soninke (pers.doc.)

a. Yàxàrén dà kónpèn céllà.

'The woman swept out the room.'

yàxàré-n dà kónpé-n séllà

woman-D CPL.TR room-D sweep

b. Yàxàrên céllá-ndì.

'The woman swept out the room.'

yàxàré-n séllá-ndì

woman-D sweep-ANTIP

This canonical antipassive marker is probably cognate with Mandinka **-rí** and Bambara **-li**, since alternations between **r**, **l**, **d**, and **nd** are very common in Mande languages (and in other West African language families). In other words, comparative evidence from Soninke converges with internal evidence that the Mandinka *ri*-forms of transitive verbs were initially canonical antipassive verb forms that have ceased to be used as finite verb forms and have only subsisted in event nominalization and in some morphological operations.

5.3. West Mande evidence for 'do' as a possible source of antipassive markers

If we accept the hypothesis that Manding **-ri** or **-li** is a former antipassive marker cognate with the Soninke antipassive marker **-ndi** /**-ndí**, the following question is whether the formal similarity with a causative marker found as **-ndí** in Soninke, **-ndi** in Mandinka, and **-ni** in Bozo (the closest relative of Soninke) is due to chance, or must rather be analyzed as evidence for a common etymology.

Of course, a purely accidental similarity cannot be excluded. But if we could find also a formally similar lexical item reconstructable at Proto-West-Mande level with a meaning that would make it a possible source of both causative and antipassive markers, the hypothesis that precisely the lexical item in question constitutes the common source of all these suffixes would become highly plausible.

Verbs with the meaning 'do, make' commonly occur in causative periphrases, and constitute a well-known source of causative markers. But such verbs are also very commonly involved in constructions that can be viewed as antipassive periphrases, although they are not commonly referred to as such, and the possibility that verbs with the meaning 'do, make' involved in such constructions grammaticalize as antipassive markers must be considered.

For example, French has a causative construction in which **faire** 'do, make' combines with the infinitive of the verb expressing the caused event, as in example (20a), but the use of **faire** with an event noun in object role is also a very common strategy to avoid specifying the object of transitive verbs with which the mere omission of the object does not constitute the normal way to simply omit specifying the object, as in example (20b).

(20) French (pers.knowl.)

a. La femme a fait acheter le pain par son fils.

'The woman made her son buy the bread.'

lafemmeafaitacheterlepainparsonfilsthewomanhasmadebuythebreadbyherson

b. La femme a fait des achats.

'The woman did some shopping.'

la femme a fait des achats the woman has made some buying

In most Mande languages, the verbs expressing 'do, make' are reflexes of two Proto-Mande roots reconstructable as *ma and *k\$\varepsilon\$, which quite obviously cannot be the source of the suffixes we are dealing with. But *ma and *k\$\varepsilon\$ are not the only roots reconstructable at least at Proto-West-Mande level with the meaning 'do, make'. In Mandinka, 'do' is commonly expressed as k\$\varepsilon\$, but Mandinka also has a verb tîŋ ~ tínnà ~ túnnà 'cause', and this verb is probably cognate with Bozo Jenaama tîn (completive) / tîná (incompletive) 'do'. Given the position of Mandinka and Bozo in the genealogical tree of Mande languages, a Proto-West-Mande root *tin 'do' can be reconstructed, and the hypothesis I propose is that the antipassive and causative suffixes mentioned above result from the grammaticalization of *tin 'do', either in causative periphrases or in antipassive periphrases.

These grammaticalization processes may have occurred at different periods, and we will probably never be able to reconstruct the details of the constructions in which they occurred, and of the phonological processes responsible for the precise forms taken by the suffixes in question in present-day languages, but this hypothesis provides at least a plausible explanation for a formal similarity between antipassive and causative markers that otherwise would remain unexplained.

6. Conclusion

In this paper, I have tried to show that internal as well as comparative evidence supports the hypothesis of the following evolutions in the history of West Mande languages:

- 1. The grammaticalization of a verb 'do' in causative periphrases on the one hand, and in antipassive periphrases on the other hand, resulted in the creation of causative and antipassive suffixes.
- 2. The antipassive suffix resulting from this evolution is still found as a canonical antipassive marker in Soninke, whereas in Manding languages, the former antipassive verb forms have lost the ability to be used as the verbal nucleus of independent clauses, and the antipassive marker has only subsisted in event nominalization and in some derivational operations.
- 3. In some Manding varieties (represented in this article by Bambara), the former antipassive marker whose used had first been restricted as indicated in 2 has ceased to be sensitive to the conditions on transitivity and semantic role expression that initially restricted its use, and has been reanalyzed as a plain event nominalization marker.

Abbreviations

AGNR: agent nominalizer, AL: alienable, ANTIP: antipassive, CAUS: causative, COP: copula, CPL: completive, D: default determiner, GEN: genitive, ICPL: incompletive, INSNR: instrument nominalizer, INTR: intransitive, NEG: negative, NMLZ: nominalizer, O: object, PL: plural, pm: predicative marker, POSTP: postposition, S: subject, SG: singular, SIMULT: simultaneous, TR: transitive, X: oblique.

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