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Reconstructing the history of the Soninke voice system

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1. Introduction

Soninke (*sòonìnkàñqánnè*), spoken mainly in Mali, Mauritania, Senegal, and The Gambia, belongs to the Soninke-Bozo sub-branch of the western branch of the Mande language family.

According to the most recent proposals about the classification of Mande languages (Vydrin 2009), the following groups of languages constitute genetic units within West Mande:¹

- the Soninke-Bozo group,²
- the Bobo-Samogo group,³
- the Central group,⁴
- the Soso-South-Western group.⁵

The only relatively well-documented Soninke variety is that spoken in Kaedi (Mauritania), for which two comprehensive grammars are available (Diagana O.M. (1984 or 1995) and Diagana Y. (1990 or 1994)), as well as a dictionary (Diagana

¹ According to Vydrine (2009), the separation between the four groups of languages that constitute West Mande occurred very early, in the following chronological order: first the Soninke-Bozo branch separated from a branch including the ancestors of the other three groups; the second separation was between the Bobo-Samogo branch and a Central-Soso-South-Western branch, and the last one was between the Central branch and the Soso-South-Western branch.

² Soninke is a single language with a relatively low degree of dialectal variation; Bozo is a dialect cluster within which at least three or four distinct (although closely related) languages must be distinguished.

³ Bobo is the most important language of this branch of West Mande; Samogo is a generic term referring to several languages that belong to the same branch of West Mande but are too different from one another to be considered dialectal variants of a single language.

⁴ The Central branch of West Mande includes the Manding dialect cluster (Bambara, Maninka, Mandinka, Jula, Xasonga, etc.) and several non-Manding languages that have a relatively close relationship to Manding (Kono, Vai, Jeri, etc.).

⁵ This branch divides into two sub-branches, Soso-Jalunka (consisting of two closely related languages) and South Western Mande (Mende, Kpelle, etc.).

O.M. 2011). The only other publications directly relevant to the topic of this article are Creissels (1991) and Creissels and Diagne (2013).

Building on the analysis of Soninke voice in Kaedi Soninke by Creissels (1991) and in Bakel Soninke by Creissels and Diagne (2013), and on comparative data, this article examines possible hypotheses about the grammaticalization processes that have resulted in the emergence of the valency-changing morphology found in present-day Soninke.

The article is organized as follows. Section 2 presents the most salient aspects of Soninke clause structure. Section 3 presents the three verbal suffixes encoding valency operations in Soninke. Section 4 discusses the possible origin of the detransitivizing suffix **-i**. Section 5 discusses the possible origin of causative **-ndí** and antipassive **-ndi**. Section 6 summarizes the conclusions.

2. Soninke clause structure

In Soninke, as in other Mande languages, verbal predication can be schematized as S (O) V (X).⁶ Verb inflection is very reduced, but so-called *predicative markers* expressing grammaticalized TAM distinctions and polarity are systematically present in post-subjectal position. Most West Mande languages have neither flagging nor indexation of the core syntactic terms S and O. In Soninke, S and O are not indexed, and flagging is limited to the use of an enclitic **-n** with interrogative pronouns and NPs including the focus marker **`yá** in subject function.⁷

Predicative constructions with two or more terms encoded in the same way as the patient of typical monotransitive verbs (so-called ‘multiple object constructions’) are not found in Mande languages.

In Soninke, the paradigm of predicative markers includes among others **má** ‘completive, negative’, and the locative copula **wá** (negative **ntá**) fulfilling the function of incompletive auxiliary – Ex. (1). With the locative copula used as an incompletive auxiliary, the verb is in the form called gerundive, otherwise it occurs in its bare lexical form.

(1) a. **Ké yúgó má xàrà.**⁸

SNK DEM man CPL.NEG study
‘This man did not study.’

b. **À má í hàabá tù.**

3SG CPL.NEG REFL father recognize
‘He did not recognize his father.’

⁶ S = subject, O = object, V = verb, X = oblique.

⁷ The enclitic **-n** marking focalized subjects and interrogative pronouns in subject function has the same segmental form as the default determiner **-n**, but its tonal properties are different (the default determiner **-n** is underlyingly associated with a floating low tone, whereas the subject marker **-n** is tonally inert).

⁸ The Soninke examples quoted in this article are from the Kingi variety and have been elicited with Ismael Diawara.

c. **À wá táaxú-nú dàagó-n kànmá.**

1SG ICPL sit-GER mat-D on
 ‘He will sit on the mat.’

d. **À wá dòròkê-n qóbó-nó yàxàré-n dà.**

1SG ICPL dress-D buy-GER woman-D for
 ‘He will buy a dress for the woman.’

In Mande languages, the position occupied by predicative markers immediately after the subject is crucial for the analysis of clauses with just one noun phrase preceding the verb, since it rules out the analysis according to which clauses such as those in (2b) and (2e), in which a bivalent verb is preceded by a unique noun phrase representing the patient-like participant, might have a transitive construction with a null subject.

(2) a. **Yàxàré-n ḡá⁹ yíllè-n kóri-ní xùnbàné.**

SNK woman-D ICPL millet-D sift-GER tomorrow
 ‘The woman will sift the millet tomorrow.’

b. **Yíllè-n ḡá kóri-ní xùnbàné.**

millet-D ICPL sift-GER tomorrow
 ‘The millet will be sifted tomorrow.’

c. ***∅ Wá yíllè-n kóri-ní xùnbàné.**

ICPL horse-D see-GER tomorrow

d. **Yúgò-n dà léminè-n jóogí.**

man-D TR child-D wound
 ‘The man has wounded the child.’

e. **Léminè-n jóogí.**

child-D wound
 ‘The child has been wounded.’

f. ***∅ Dà léminè-n jóogí.**

TR child-D wound

In this construction of potentially transitive verbs, as illustrated by the contrast between (2b) and the agrammatical sequence (2c), the markers that occur between the subject and the object in the transitive construction are found after the unique noun-phrase preceding the verb, not before it, as it should be the case if this noun phrase occupied the object position in a transitive construction with a null subject. Similarly, the contrast between (2e) and the agrammatical sequence (2f) shows that the transitivity marker **dà** does not occur when **jóogí** ‘wound’ combines with just

⁹ In Soninke, **w** in contact with a nasal consonant is automatically converted into **ḡ**, hence the **ḡá** variant of the locational copula / incompletive marker.

one noun phrase representing the patient, whereas it should be found to the left of the patient phrase if this were a transitive construction with a null subject.

The analysis of the unique noun phrase preceding the verb in such constructions as a subject, rather than an object in a null-subject construction, is further confirmed by the fact that, if the patient is represented by a noun phrase including the focus marker `yá (`ñá in contact with a nasal consonant), the enclitic -n marking focalized subjects must be present – Ex. (3).

(3) a. **Múusá yà-n dà lémínè-n jòogì.**¹⁰

SNK Moussa FOC-S TR child-D wound
 ‘MOUSSA has wounded the child.’

b. **Múusá dà lémínè-n ñá jòogì.**

Moussa TR child-D FOC wound
 ‘Moussa has wounded THE CHILD.’

e. **Lémínè-n ñá-n jòogì.**

child-D FOC-S wound
 ‘THE CHILD has been wounded.’

Consequently, the only possible analysis of clauses in which a potentially transitive verb is preceded by a sole noun phrase representing the patient is that, syntactically, they include no object phrase, and the noun phrase preceding the verb fulfills the subject role. This implies considering such clauses as instances of a morphologically unmarked passive construction. In other words, the valency properties of Soninke verbs such as **kóri** ‘sift’ or **jóogí** ‘wound’ involve active / passive lability, a phenomenon common among Mande languages, but relatively rare cross-linguistically, at least in its fully grammaticalized form (that is, without the restrictions and/or aspecto-modal nuances that characterize the use of zero-coded quasi-passives such as English **This book sells well**).¹¹ However, in Soninke, passive lability is general for potentially transitive verbs ending with **i** or **e**, but extremely rare for verbs with other endings. An explanation is given further.

To conclude this introductory section on verbal predication in Soninke, it is important to mention that a striking feature of Soninke is the particularly clear-cut distinction between transitive and intransitive predications. This follows not only from the rigid S (O) V (X) pattern, which excludes ambiguity between the syntactic roles of object and oblique, but also from the fact that three of the grammatical elements occurring in the predicative marker slot immediately after the subject are sensitive to the *transitive* vs. *intransitive* distinction:

¹⁰ In Soninke, verb inflection includes tonal changes triggered by the presence of a focalized phrase in subject or object function.

¹¹ This issue is discussed by Cobbinah and Lüpke (2009), who provide a survey of languages with constructions analyzable as zero-coded passives that depart more or less from canonical passives in other respects too, and analyze Manding languages as illustrating the extreme case of zero-coded passives that in all other respects would qualify as canonical passives. See also Lüpke (2007) on the zero-coded passives of Jalonke, and Creissels (2015) on the zero-coded passives of Mandinka.

- in the completive positive, a morpheme **dà** analyzed here as a transitivity marker is obligatorily found in transitive constructions, but does not occur in the corresponding intransitive constructions – Ex. (4), and this **dà** also occurs with the same distribution in the imperative plural;¹²
- the subjunctive positive is marked by **nà** in transitive constructions and **nàn** in intransitive constructions – Ex. (5);¹³
- in clauses including a focalized term, the locational copula **wá** used as an incomplete marker has two variants depending on the transitivity of the construction: \emptyset in intransitive constructions, and **nà** (homonymous with the subjunctive positive marker) in transitive constructions – ex. (6).

(4) a. **Hànné ké káawá hànέ yírígí.**

SNK river DEM dry_up early this_year
 ‘The river dried up early this year.’

b. **Yàxàré-n dà tíyè-n qóbó sàxà-n ñá.**

woman-D TR meat-D buy market-D at
 ‘The woman bought meat at the market.’

c. **Xà dà lémínè-n qírí!**

IMPER.PL TR child-D give_assistance
 ‘Call the child!’

(5) a. **Lémúnù kú nàn táaxú yíttè-n ñùré.**

SNK child.PL DEM SUBJ.POS.INTR sit tree-D under
 ‘These children should sit under the tree.’

b. **Lémúnù kú nà tíyè-n ñígá.**

child.PL DEM SUBJ.POS.TR meat-D eat
 ‘These children should eat meat.’

(6) a. **À wá sállì-ní.**

SNK 3SG ICPL pray-GER
 ‘He is praying.’

b. **À \emptyset sállì-ní yà.**

3SG ICPLF.INTR pray-GER FOC
 ‘He is PRAYING.’

¹² **Dà** is sometimes labeled ‘completive positive marker’, but this label is hardly compatible with its use in the imperative plural. Alternatively, given its position, it could be analyzed as an ergative postposition or accusative preposition with a restricted distribution. I prefer the more neutral label ‘transitivity marker’, since I am not aware of any decisive evidence for analyzing **dà** as forming a phrase with either the subject or the object..

¹³ The form labeled here ‘subjunctive’ combines with noun phrases in subject function in uses broadly similar to those fulfilled by forms traditionally labeled ‘subjunctives’ in grammars of European languages, but it is also found without an overt subject in uses broadly similar to those of European infinitives. It is in particular used as the quotation form of verbs.

c. **À wá hàrê-n gáagà-ná.**

3SG ICPL donkey-D sell-GER

‘He is selling the donkey.’

d. **À nà hàrê-n gáagà-ná yà.**

3SG ICPLF.TR donkey-D sell-GER FOC

‘He is SELLING the donkey.’

3. Voice in Soninke

Soninke has two morphological devices encoding detransitivization or valency-decrease, and one encoding transitivization or valency-increase.

3.1. The detransitivizing suffix *-i*

3.1.1. Formal properties of the detransitivizing suffix *-i*

Most verbs that have a transitive stem ending with **a**, **o**, or **u** also have an intransitive stem that can be analyzed as derived from the transitive stem by the addition of a detransitivizing marker whose underlying form is **-i**. However, this detransitivizing marker surfaces as a distinct segment (**-yí** or **-nɲí**) with monosyllabic stems only:

kǎ	‘insult’	→	kà-yí	‘be insulted’
tǔ	‘know’	→	tù-yí	‘be known’
ñá	‘do’	→	ñá-nɲí	‘be known’

With non-monosyllabic stems, the presence of detransitivizing **-i** is manifested by a change in the last vowel of the stem that can be explained as the result of the amalgamation of an underlying **i** according to the following rules:

a + i	→ e	(sometimes i) as in kúppè ‘capsize (intr.)’ < kúppà ‘capsize (tr.)’
o + i	→ e	as in sòxé ‘be cultivated’ < sòxó ‘cultivate’
u + i	→ i	as in fúutí ‘stretch (intr.)’ < fúutú ‘stretch (tr.)’

It is therefore possible to consider that the lack of distinct detransitivized forms for non-monosyllabic verbs ending with **e** or **i** follows from the fact that the morphophonological process manifesting the presence of **-i** would apply vacuously to such stems.

The detransitivizing suffix **-i** is tonally neuter: stems including this suffix invariably show the same tone pattern as the corresponding underived stems.

3.1.2. Syntactic and semantic properties of the detransitivizing suffix -i

Depending on the individual verbs with which it combines, **-i** may express various detransitivizing operations, but it is not equally productive in all its possible uses.

Agent demotion is by far the most productive use of the detransitivizing marker **-i**. Two semantic subtypes can be recognized, which however are not always easy to distinguish. In the anticausative subtype, the agent is suppressed from argument structure, and the event is presented as occurring spontaneously, or at least without the involvement of an agent, as in Ex. (7b). In the passive subtype, the agent is semantically maintained, but it is not expressed, and the subject role is fulfilled by the patient, as in Ex. (8b).

(7) a. **Yúgò-n dà wùllì-tùurintê-n ñóolà.**

SNK man-D TR dog-rabid-D drown
 ‘The man drowned the rabid dog.’

b. **Lémínè-n ñóolè hànḡé-n ḡà.**

child-D drown.DETR river-D at
 ‘The child drowned in the river.’

(8) a. **Yàxàré-n dà yillé-n gòró.**

SNK woman-D TR millet-D pound
 ‘The woman pounded the millet.’

b. **Yillé-n gòré.**

millet-D pound.DETR
 ‘The millet was pounded.’

The distinction between these two semantic varieties of deagentive derivation (agent-backgrounding and agent-suppressing) is not rigid. With many verbs, both readings are equally available, depending on the context. What seems to be crucial is the semantic distinction between processes easily conceived as occurring spontaneously (such as ‘drown’) and processes that require the intervention of an agent (such as ‘become pounded’).

With a few verbs among those that have the ability to combine with the detransitivizing marker **-i** in deagentive function, the same form also has a reflexive or autocausative use:¹⁴

bóorà ‘undress (tr.)’	→ bóorè ‘undress oneself’ – Ex. (9)
kàhú ‘gather (tr.)’	→ kàhí ‘gather (intr.)’
húutú ‘stretch (tr.)’	→ húutí ‘stretch (intr.)’

¹⁴ Soninke has two pronouns used productively to express reflexivity: **í** is a long-distance reflexive used in logophoric contexts, and as a reflexive possessive (as in (1b) above and (8a)), whereas **dú** is a local reflexive used for object or oblique reflexivization. The term ‘autocausative’ is taken from Geniušienė (1987).

(9) a. **Yúgò-n dà í rèmmê-n bóorà.**
 SNK man-D TR REFL son/daughter-D undress
 ‘The man undressed his son.’

b. **Yúgò-n bóorè.**
 man-D undress.DETR
 ‘The man undressed.’

The detransitivizing marker **-i** may also have a depatientive function, for which it is in competition with the dedicated antipassive suffix **-ndì ~ -ndí**. There is a clear dissymmetry between the deagentive and depatientive uses of **-i**: many of the intransitive verbs derived by means of **-i** can only be used in deagentive function, but none of them can be used exclusively in depatientive function. As illustrated by **yígé**, intransitive form of **yígá** ‘eat’ – Ex. (10) – the intransitive verbs derived by means of **-i** that can be used in depatientive function also have a deagentive (anticausative or passive) use.

(10) a. **Lémúnù kú dà tíyè-n ñígá.**¹⁵
 SNK child.PL DEM.PL TR meat-D eat
 ‘The children ate the meat.’

b. **Lémúnù kú yígé.**
 child.PL DEM.PL eat.DETR
 ‘The children ate.’

c. **Tíyè-n ñígé.**
 meat-D eat.DETR
 ‘The meat was eaten.’

3.2. The antipassive suffix **-ndì ~ -ndí**

3.2.1. Formal properties of the antipassive suffix **-ndì ~ -ndí**

The antipassive suffix has dissyllabic allomorphs with monosyllabic stems:

kă ‘insult’ → (antip.) **kà-yìndí**
sí ‘shave’ → (antip.) **sí-yìndì**

With non-monosyllabic stems, the antipassive suffix is invariably realized **-ndì** or **-ndí** (depending on the tonal contour of the stem), and triggers no segmental modification of the stem to which it attaches.

Tonally, the antipassive suffix interacts with the stem as indicated in the following chart, where H* and L* must be understood as abbreviations for ‘one or

¹⁵ In Soninke, **y** in contact with a nasal consonant is automatically converted into **ñ**, hence the **ñígá** variant of the verb **yígá** ‘eat’.

more successive H-toned syllables’ and ‘one or more successive L-toned syllables’, respectively:¹⁶

<i>tonal types of non-derived verbs</i>	<i>tonal contour of derived antipassives</i>
(H*)HH	(H*)HH-L
(H*)HL	(H*)HH-L
(L*)LH	(L*)LL-H
(L*)LHL	(L*)LHL-H
H(L*)LH	H(L*)LL-H

The simplest way to account for this situation is to posit two tonal allomorphs of the antipassive suffix: a L-toned allomorph selected by stems whose tonal contour includes no LH sequence, and a H-toned allomorph selected by stems whose tonal contour includes a LH sequence. Once the right allomorph has been selected, HL-L and LH-H sequences created by the suffixation of the antipassive suffix are converted into HH-L and LL-H, respectively.

3.2.2. Syntactic and semantic properties of the antipassive suffix **-ndì** ~ **-ndí**

The depatientive function is the only possible function of the antipassive suffix – Ex. (11).

(11) a. **Sámáqqè-n dà léminè-n qíńí.**

SNK snake-D TR child-D bite
 ‘The snake bit the child.’

b. **Sámáqqè-n qíńí-ndì.**

snake-D bite-ANTIP
 ‘The snake bit (someone).’

The antipassive suffix **-ndì** ~ **-ndí** is very productive. In Soninke, the transitive verbs that can be used intransitively in their underived form with a subject representing the agent are quite marginal, the transitive verbs with which the detransitivizing marker **-i** can be used in depatientive function are not very numerous either, and all transitive verbs that do not belong to one of these two subsets are compatible with the antipassive marker **-ndì** ~ **-ndí**. In Soninke discourse, the use of antipassive derivation is quite obviously the standard strategy to express indeterminacy about the identity of participants otherwise encoded as the object of a transitive verb.

¹⁶ Of the four Soninke varieties for which I have tonal data, Kaedi Soninke, Jaahunu Soninke and Kingi Soninke have very similar tone systems, whereas Bakel Soninke shows a marked tendency toward losing tonal contrasts. The tonal data discussed in this paper are identical in the three varieties (Kaedi, Jaahunu, and Kingi) for which I have data and in which the existence of a tone system is unquestionable.

3.3. The causative suffix *-ndí*

3.3.1. Formal properties of the causative suffix *-ndí*

With very few exceptions, the causative suffix has the form **-ndí** and triggers no segmental modification of the stem to which it attaches. The irregular causative forms include:

tǔ	‘know’	→ (caus.) tù-yìndí
wú	‘cry’	→ (caus.) wú-ndì
qàrá	‘learn’	→ (caus.) qàrá-nḡùndí
bángé	‘appear’	→ (caus.) bángá-ndí
diré	‘make noise’	→ (caus.) dirà-ndí

Tonally, as indicated by the following chart, the only interaction between the causative suffix and the stem to which it attaches is the conversion of LH-H sequences into LL-H:

<i>tonal types of non-derived verbs</i>	<i>tonal contour of derived causatives</i>
(H*)HH	(H*)HH-H
(H*)HL	(H*)HL-H
(L*)LH	(L*)LL-H
(L*)LHL	(L*)LHL-H
H(L*)LH	H(L*)LL-H

As can be seen by comparing this chart with that given above for derived antipassives, the distinction between causative and antipassive forms is ensured by tone for stems whose inherent tone pattern include no LH sequence, but it is not apparent in the case of stems whose inherent tone pattern includes a LH sequence. The risk of confusion is however virtually inexistent, since the antipassive suffix combines exclusively with transitive stems, and the causative suffix has only limited possibilities of combination with transitive stems.

3.3.2. Syntactic and semantic properties of the causative suffix *-ndí*

As illustrated by Ex. (12), causativization by means of the causative suffix **-ndí** is fully productive with verbs used intransitively in their non-derived form.

(12) a. **Lémínè-n cǎxú.**

SNK child-D lie_down
 ‘The child went to bed.’

b. **Yàxàré-n dà lémínè-n cǎxú-ndí.**

woman-D TR child-D lie_down-CAUS
 ‘The woman put the child to bed.’

Morphological causativization is less productive with a transitive input. There are transitive verbs for which morphological causativization is usual (for example **yígá** ‘eat’ > (caus.) **yígá-ndí**), or at least accepted by consultants in elicitation, but with most transitive verbs, analytical causatives are clearly preferred.

As illustrated by Ex. (13), the object of causative verbs derived from transitive verbs may correspond semantically either to the subject or the object of the transitive verb from which they derive, but if both are expressed, as in (13c), the object of the initial construction is maintained as the object of the causative verb.

(13) a. **Lémínè-n dà tíyè-n ñígá**

SNK child-D TR meat-D eat
 ‘The child ate meat.’

b. **Fàatú dà lémínè-n ñígá-ndí.**

Fatou TR child-D eat-CAUS
 ‘Fatou made the child eat.’

c. **Fàatú dà tíyè-n ñígá-ndí lémínè-n ñá.**

Fatou TR meat-D eat-CAUS child-D by
 ‘Fatou made the child eat meat.’

3.4. Causativization of antipassive verbs and antipassivization of causative verbs

Although the causativization of derived intransitive forms encoding patient demotion is perfectly conceivable semantically (‘a causer makes a causee act on an unspecified patient’), it does not seem possible to express it in Soninke by adding the causative suffix to a form already including the antipassive suffix or the detransitivizing suffix.

For example, with a verb like **yígá** ‘eat’, for which the demotion of the patient triggers the use of the derived intransitive form **yígé**, one could imagine a causative form ***yígé-ndí** expressing ‘make someone eat some unspecified food’, but this form does not exist, and Ex. (13b) above shows that **yígá-ndí** ‘make eat’ is used to causativize not only constructions in which the patient is expressed, but also constructions with a demoted patient.

By contrast, derived verbs with an ending decomposable as ‘causative suffix’ + ‘antipassive suffix’ are possible (although not very common in spontaneous discourse), and the antipassive marker operates on causative verbs in the same way as on non-derived transitive verbs: the meaning of such forms is that a causer manipulates an unspecified causee – Ex. (14).

(14) a. **Nàa-nú-n dà té-n bònò-ndí.**

SNK cow-PL-D TR field-D become_spoilt-CAUS
 ‘The cows caused damage to the field.’

(lit. ‘The cows made the field become spoilt.’)

b. **Nàa-nú-n bònò-ndi-ndí.**

cow-PL-D become_spoilt-CAUS-ANTIP

‘The cows caused damage.’

(lit. ‘The cows made an unspecified thing become spoilt.’)

4. Reconstructing the origin of the detransitivizing suffix *-i*

4.1. Possible cognates of the Soninke detransitivizing suffix *-i*

Detransitivizing suffixes with a similar form and a similar variety of functions are found in Bozo (Soninke’s closest relative) and Bobo (a language belonging to another sub-branch of West Mande).

All descriptions of Bozo languages mention the existence of relatively numerous transitive / intransitive verb pairs suggesting that, historically, a suffix *-i* cognate with the Soninke suffix *-i* presented in Section 3.1 was used productively in the ancestor of Bozo languages to detransitivize transitive verbs. For example, Daget & al. (1953) give a list of more than 60 such pairs.

The situation in Bozo languages is similar to that observed in Soninke, both formally and functionally, with however an interesting difference: the antipassive function of this detransitivization device is much more prominent in Bozo languages than in Soninke. It is clear from the lists of transitive / intransitive verb pairs provided by grammars and dictionaries of Bozo languages that, contrary to Soninke, antipassivization is by far the most common function of this derivation in Bozo. It is however not its only possible function, and examples of intransitives derived by means of the same suffix *-i* but carrying a reflexive or passive meaning can also be found.¹⁷

By contrast, in Bobo, the detransitivizing suffix *-i* can only be characterized as vestigial (Le Bris & Prost 1981: 59). However, the range of meanings attested by verbs analyzable as derived by means of this suffix is comparable to that observed in Soninke and Bozo. For example, *zè* ‘see (intr.)’ is functionally the antipassive form of *zà* ‘see (tr.)’, whereas *dòrè* ‘appear, be shown’ is functionally the passive or anticausative form of *dòrō* ‘show’.

This similarity both in form and meaning strongly suggests an ancient detransitivizing derivation involving a suffix cognate with the detransitivizing suffix *-i* found in Soninke and Bozo. The difference is that, in contrast to Soninke and Bozo, Bobo has maintained just a handful of such transitive / intransitive verb pairs.

4.2. A reconstruction hypothesis

The range of functions fulfilled by the Soninke detransitivizing suffix *-i* and its Bozo and Bobo cognates is typical of ‘old’ middle markers, and a midvoice marker **-i* can therefore be reconstructed at least at Proto-West-Mande level.

¹⁷ See Blecke (1996) for a more detailed account of detransitivization in a Bozo language (Tigemaxo).

In other language families, two possible sources have been identified for markers ambiguous between an antipassive function and other semantic types of detransitivization: reflexive pronouns, as in Indo-European languages, or markers of reciprocity / associativity, as in Bantu languages, Oceanic languages, or Turkic languages (Janic 2013).

As regards West Mande, a crucial observation is that the Soninke suffix **-i** and its Bozo and Bobo cognates are never found with a reciprocal or associative meaning, but can be found with a reflexive meaning, which suggests that the expression of reflexivity was probably the original function of this suffix.

The possibility that the detransitivizing suffix **-i** might result from the grammaticalization of a reflexive pronoun in object role must therefore be considered, since **í** is attested in several West Mande languages as a reflexive pronoun. In Soninke, **í** is a long-distance reflexive used in logophoric contexts, and as a reflexive possessive – Ex. (15). In Mandinka and other Manding varieties, a reflexive pronoun **í** is found in object function – Ex. (16).

(15) a. **Yúgò-n kùné tì í má dèmù gàarà-ná.**
 SNK man-D swear that REFL CPL.NEG have_ever_done lie-GER
 ‘The man_i swore that he_i never lied.’

b. **Yúgò-n dà í rèmmê-n bóorà.**
 man-D TR REFL son/daughter-D undress
 ‘The man_i undressed his_i son.’

(16) **Kèw-óo yè í kùu.**
 MDK man-D CPL REFL wash
 ‘The man washed (himself).’

There is however a serious problem with this hypothesis, since all Mande languages invariably show a rigid SOVX constituent order, which consequently must be reconstructed at Proto-Mande level. In languages with such a constituent order, a reflexive pronoun **í** is not expected to grammaticalize as a detransitivizing suffix, but rather as a prefix. Consequently, the hypothesis that the midvoice suffix ***-i** grammaticalized from a reflexive pronoun ***i** implies that at some stage in the evolution of Pre-Proto-Mande, the constituent order in verbal predication was SVOX, and a shift from SVOX to SOVX occurred only after the grammaticalization of the reflexive pronoun ***i** in object function as a detransitivizing suffix.

Unfortunately, there seems to be no other concrete evidence of a shift from SVOX to SOVX in Pre-Proto-Mande, and consequently, it is preferable to leave this question open.¹⁸

¹⁸ Claudi (1994) claimed that, originally, Mande languages had the SVOX order at clause level, but the order GN (*genitival dependent + head noun*) in the noun phrase, and that the SOVX order is an innovation resulting from the reanalysis of constructions of the type *auxiliary + nominalized verb*, in which the NP that would have constituted the object of a finite form of the nominalized verb was treated as a genitival dependent. This is undoubtedly a possible scenario, but Claudi’s paper presents no convincing evidence that it really occurred. The point is that the same reanalysis can operate with the same result in languages with the SOVX / GN order, and consequently, the fact that some of the

5. Reconstructing the origin of the antipassive and causative markers

Given the quasi-homonymy between these two markers, the possibility of a common origin must be considered. This is the reason why they are discussed together.

5.1. Possible cognates of the Soninke causative suffix *-ndí*

Among Mande languages, causative suffixes similar in form to the causative marker of Soninke are found in Mandinka (*-ndí*) and Bozo (*-ní*). Outside Mande, a verbal suffix *-ndi* with causative and passive functions is found in Songhay.¹⁹

5.2. Possible cognates of the Soninke antipassive suffix *-ndì ~ -ndí*

Possible cognates of the Soninke antipassive suffix *-ndì ~ -ndí* are found in Manding, a dialect cluster included in another branch of West Mande. In particular, Mandinka has a suffix *-rí* (with the allomorph *-dírí* in combination with stems ending with a nasal) analyzed as an atypical antipassive marker by Creissels & Sambou (2013).

This Mandinka suffix *-rí* is found exclusively with transitive verbs in constructions in which the P argument is left unexpressed, cannot be identified to the referent of a noun phrase included in the same construction, and is interpreted as non-specific. This distribution makes it possible to analyze *-rí* as a valency operator of the antipassive type. However, in other respects, *-rí* has properties quite unusual for an antipassive marker, since with just one exception (*dómó* ‘eat’), *rí*-forms cannot be used as the verbal predicate of finite clauses, and the suffix *-rí* can be used only in the following conditions:

- when the verb is used nominally as an event noun, as in (17c);
- when the verb is used in a non-finite form expressing temporal simultaneity, marked by a suffix *-tôo*, as in (18b);
- in agent nominalization, marked by a suffix *-láa ~ -náa*, as in (19b);
- in instrument nominalization, marked by a suffix *-ránj ~ -láj ~ -dáj*, as in (20b);
- when the verb is the first formative of a nominal compound in which a verb restricts the meaning of a noun, as in (21b);
- in causative derivation: the causative suffix *-ndí* attaches directly to intransitive verb stems, but with most transitive verb stems, it must be preceded by the antipassive suffix, as in (22b).²⁰

predicative markers found in present-day Mande languages may result from such a reanalysis cannot be considered as evidence that the constituent order at clause level was SVOX rather than SOVX when this reanalysis occurred.

¹⁹ Greenberg (1963) included Mande in the Niger-Congo macro-family, and Songhay in the Nilo-Saharan macro-family, but these two proposals are controversial, and Mande and Songhay are best considered isolated language families, which however share so far unexplained similarities both between themselves and with other language families found in the same area – Dimmendaal (2011).

(17) a. **Mùs-ôo bè màanì-túw-òo là.**

MDK woman-D ICPL rice-pound-D at

lit. ‘The woman is at the rice-pounding.’ → ‘The woman is pounding rice.’

(**màanì** ‘rice’ saturates the P valency of **tũu** ‘pound’, and the subject of the locational copula is identified to the unexpressed A argument)

b. **Màan-ôo bé tũw-óo là.**

rice-D LOCCOP pound-D at

lit. ‘The rice is at the pounding.’ → ‘The rice is being pounded.’

(if none of the arguments of **tũu** ‘pound’ is expressed, in the absence of the antipassive suffix, the subject of the copula is identified to the unexpressed P argument)

c. **Mùs-ôo bé tũu-r-óo là.**

woman-D LOCCOP pound-ANTIP-D at

lit. ‘The woman is at the pounding.ANTIP.’ → ‘The woman is pounding.’

(the antipassive suffix saturates the P valency of **tũu** ‘pound’, and the subject of the copula is identified to the unexpressed A argument)

(18) a. **Ŋá mùs-óo màanì-tũu-tóo jè.**

MDK 1SG.CPL.POS.TR woman-D rice-pound-GER see

‘I saw the woman pounding rice.’

b. **Ŋá mùs-óo tũu-rì-tóo jè.**

1SG.CPL.POS.TR woman-D pound-ANTIP-GER see

‘I saw the woman pounding.’

(19) a. **màanì-tũu-láa**

MDK rice-pound-AGNR

‘person who pounds rice’

b. **tũu-rì-láa**

pound-ANTIP-AGNR

‘person who pounds’

(20) a. **màanì-tũu-ráŋ**

MDK rice-pound-INSNR

‘rice-pestle’

b. **tũu-rì-láŋ**

pound-ANTIP-INSNR

‘pestle’

(21) a. **màanì-tũu-dúláa**

MDK rice-pound-place

‘place dedicated to rice pounding’

b. **tũu-rì-dúláa**

pound-ANTIP-place

‘place dedicated to pounding’

²⁰ The use of an antipassive marker in the causativization of transitive constructions, although cross-linguistically uncommon, is consistent with the fact that, in the construction illustrated by Ex. (22b), the object slot is filled by the causee, not by the patient of **tũu** ‘pound’ (which is left unexpressed in this example, but could also be expressed as an oblique: **Mùsóo yè díníŋò tũurindí màanóo là**). The use of the antipassive form as the stem for the attachment of the causative suffix to transitive verbs is also found in Bozo (Lauschwitzky 2007: 21).

(22) a. **Mùs-óo yè dèndìk-óo nò-ndì.**
 MDK woman-D CPL.POS.TR shirt-D get_dirty-CAUS
 ‘The woman soiled the shirt.’ (lit. made the shirt get dirty)

b. **Mùs-óo yè dín-dín-ò tùu-rì-ndì.**
 woman-D CPL.POS.TR child-DEF pound-ANTIP-CAUS
 ‘The woman made the child pound.’

However, **dómó** ‘eat’ is the only Mandinka verb with which **-rí** has the usual behavior of antipassive markers, i.e. yields a form also used as a finite intransitive verb form whose subject represents the agent – Ex. (23b).

(23) a. **Dín-dín-ò yè mbúur-òo dómò.**
 MDK child-D CPL.POS.TR bread-D eat
 ‘The child ate the bread.’

b. **Dín-dín-ò dómó-rì-tà.**
 child-D eat-ANTIP-CPL.POS.INTR
 same meaning as (a)

With the other transitive verbs, the **rí**-form cannot be used as the verbal predicate of clauses in which the A argument only would be expressed. It is however commonly found in a functionally equivalent antipassive periphrasis in which it is used nominally is the object of **ké** ‘do’ – Ex. (24).

(23) a. ***Mùs-óo yè Ø tùu.** b. ***Mùs-óo tũu-tà**
 MDK woman-D CPL.POS.TR pound woman-D pound-CPL.POS.INTR
 Intended: ‘The woman pounded.’ – sentence (a) is absolutely impossible, and the only possible reading of sentence (b) is ‘The woman was pounded.’

b. **Mùs-óo yè tùu-r-óo kè.**
 woman-D CPL.POS.TR pound-ANTIP-D do
 lit. ‘The woman did the pounding.ANTIP.’ → ‘The woman pounded.’

In descriptions of the other Manding varieties, the cognates of this atypical antipassive suffix are analyzed as nominalization markers. This decision is justified by the lack of a strict relationship with patient demotion comparable to that observed in Mandinka. The cognates of **-rí** in other Manding varieties occur mainly in the same conditions as Mandinka **-rí**, but they are sometimes also used to mark the nominalization of intransitive verbs, and their presence with transitive verbs used as action nouns does not always block the expression of the patient (see for example Dumestre 2003: 74-5 on Bambara **-lí**).

One may therefore wonder whether the ancestor of Mandinka **-rí** and Bambara **-lí** was a canonical antipassive marker which has maintained a strict relationship with patient demotion in Mandinka only, or perhaps this relationship is a Mandinka innovation, and the ancestor of Mandinka **-rí** and Bambara **-lí** was simply a

nominalization marker. In addition to the comparative evidence provided by the probable relationship with the fully canonical antipassive marker of Soninke, internal evidence that the forms resulting from the suffixation of **-rí** were originally verbal comes from the combinability of **-rí** with other suffixes. Crucially, **-rí** can be followed by derivational suffixes that typically attach to verbal stems and mark agent nominalization, instrument nominalization, simultaneous action, and causativization. In particular, as briefly commented in Footnote 13, the use of **-rí** in the causativization of transitive constructions is consistent with the hypothesis that **-rí** was originally used to derive intransitive verbs from transitive ones; by contrast, if **-rí** had been originally a nominalization marker with no particular relationship to the valency system, the absence of **-rí** in the causativization of intransitive constructions would remain unexplained.

5.3. A reconstruction hypothesis

The grammaticalization scenario discussed in this section relies not only on the plausibility of the evolutions involved, but also on concrete comparative evidence, and accounts for the quasi-homonymy between the causative and antipassive markers of Soninke. The crucial aspect of my proposal is the reconstruction of a Proto-West-Mande verbal lexeme which constitutes a plausible etymon of both causative **-ndí** and antipassive **-ndì ~ -ndí**, both formally and semantically.

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 antipassive periphrases (i.e., periphrases that make it possible to avoid expressing the object of transitive verbs) such as English **do the cooking**, in which they combine with action nouns in object function. For example, French has a causative construction in which **faire** ‘do, make’ combines with the infinitive of the verb expressing the caused event, but the use of **faire** with a deverbal noun in object role is also a very common strategy not to specify the object of transitive verbs with which the mere omission of the object does not constitute the normal way to avoid specifying the object. In French, **acheter** ‘buy’ is normally not used with a null object to express non-specification of the patient in reference to a specific buying event, and a construction in which the derived noun **achat** ‘purchase, buying, shopping’ is the object of **faire** is used instead. In other words, in French, **faire** ‘do, make’ is involved both in a causative periphrasis in which it combines with infinitives – Ex. (24b), and an antipassive periphrasis in which it combines with deverbal nouns – Ex. (24d).

(24) a. **J’ai acheté des chaussures pour les enfants.**

FR I-have bought some shoes for the children
 ‘I bought shoes for the children.’

b. **J’ai fait acheter des chaussures pour les enfants**
 I-have made buy some shoes for the children
par mon mari.
 by my husband

‘I made my husband buy shoes for the children.’ (causative periphrasis)

c. ***J’ai** **acheté pour les enfants.**
I-have bought for the children

d. **J’ai** **fait des achats** **pour les enfants.**
I-have made some purchases for the children
‘I did shopping for the children.’ (antipassive periphrasis)

Verbs with the meaning ‘do, make’ constitute therefore plausible sources, not only of causative markers, but also of antipassive markers, although this possibility does not seem to have been discussed in the grammaticalization literature so far.

In most Mande languages, the verbs expressing ‘do, make’ are reflexes of Proto-Mande roots reconstructable as ***ma** or ***kɛ**, which quite obviously cannot be the source of the Soninke antipassive and causative suffixes. But ***ma** and ***kɛ** 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 **ké**, but Mandinka also has a verb **tɪŋ** ~ **tinnà** ~ **tunnà** ‘cause’, and this verb is probably cognate with Bozo Jenaama **tɪn** (completive) **tɪná** (incompletive) ‘do’. Moreover, Soso and Jalonke have a verb **tii** ‘raise’ also used as a light verb ‘do’ in an antipassive periphrasis in which it combines with transitive verbal lexemes used as event nouns. Given the position of Mandinka, Bozo, and Soso-Jalonke in the genealogical tree of Mande languages, a Proto-West-Mande root ***tin** ‘do’ can be reconstructed.

The hypothesis I propose is that the Soninke antipassive and causative suffixes **-ndi** result from the grammaticalization of the same Proto-West-Mande verb (***tin** ‘do’) in two different constructions: a causative periphrasis and an antipassive periphrasis. 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 (and for the tonal difference between them), 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 article, after presenting the three verbal suffixes used in Soninke to express valency operations, I have discussed evidence supporting the following hypotheses:

- (a) The detransitivizing suffix **-i** is the reflex of a Proto-West-Mande reflexive suffix ***-i**, and this reconstructed reflexive suffix may result from the grammaticalization of a reflexive pronoun still found as **í** in some West Mande languages;
- (b) The causative suffix **-ndí** results from the grammaticalization of ***tin** ‘make’ used in a causative periphrasis, and the antipassive suffix **-ndì** ~ **-ndí** results

from the grammaticalization of the same verb used in an antipassive periphrasis.

Abbreviations

AGNR = agent nominalizer, ANTIP = antipassive, CAUS = causative, CPL = completive, D = default determiner,²¹ DEM = demonstrative, DETR = detransitivization marker, CPL = completive, GER = gerundive, ICPL = incompletive, ICPLF = incompletive marker in focalization context, IMPER = imperative, INSNR = instrument nominalizer, INTR = intransitive, LOCCOP = locational copula, NEG = negative, O = object, PL = plural, POS = positive, REFL = reflexive, S = subject, SG = singular, SUBJ = subjunctive, TR = transitive, X = oblique.

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²¹ A default determiner is a grammatical element that has the syntactic distribution of a determiner, but whose presence has implications for the interpretation of noun phrases in limited contexts only, and can otherwise be analyzed as resulting from a mere syntactic constraint.

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