

Transitivity in Bakel Soninke

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1. Introduction

Soninke (*sooninkanqanne*), 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. 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 O.M. 2011). In this paper, building on these works, on the analysis of voice in Kaedi Soninke provided by Creissels (1991a), and on Anna Marie Diagne's work on the phonology and morphology of Bakel Soninke (Diagne (2008)), we describe the morphosyntactic phenomena related to transitivity in the Soninke variety spoken in Bakel (Senegal).¹

The article is organized as follows. In Section 2, we provide basic information on Soninke phonology and morphosyntax, emphasizing the particularities of Bakel Soninke. In Section 3, we present the three valency-changing morphological derivations found in Bakel Soninke. In Section 4, we discuss the classification of verbs as strict transitive, strict intransitive, A-labile, P-labile, and A/P-labile, and the division of transitive verbs into several sub-classes according to the morphological marking of their deagentive and depatientive uses. In Section 5, we discuss the status of Soninke according to the distinction between transitivizing and detransitivizing languages proposed by Nichols & al. (2004). Section 6 summarizes the main conclusions.

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2. A sketch of Bakel Soninke phonology and grammar

2.1. Segmental phonology

2.1.1 Consonants

Bakel Soninke has the following inventory of consonantal sounds:

Table 1. Phonetic inventory of Soninke consonants

	labials	alveolars	palatals	velars	uvulars	glottal
voiceless plosives	p	t	c	k	q	
voiced plosives	b	d	j [j]	g		
fricatives	f	s			x [χ]	h
vibrant		r				
lateral		l				
glides			y [j]	w		
nasals	m	n	ɲ [ɲ]	ŋ		

There are also geminates, which mostly represent underlying sequences whose elements do not belong to the same morpheme, with [N] as the first or second element of the sequence.

Sequences with [N] in initial position can be illustrated by the concatenation of first person singular [Ṇ] with verbs or nouns:

<i>Ṇ</i> + <i>fâré</i>	‘donkey’	→	<i>ɲpàré</i>	‘my donkey’
<i>Ṇ</i> + <i>sí</i>	‘horse’	→	<i>ɲsí</i>	‘my horse’
<i>Ṇ</i> + <i>xánnè</i>	‘voice’	→	<i>ɲqánnè</i>	‘my voice’
<i>Ṇ</i> + <i>máamè</i>	‘grandparent’	→	<i>ɲmáamà</i>	‘my grandfather/mother’
<i>Ṇ</i> + <i>tá</i>	‘foot’	→	<i>ɲtà</i>	‘my foot’
<i>Ṇ</i> + <i>kà</i>	‘house’	→	<i>ɲkà</i>	‘my house’

When the initial consonant of the stem is a vibrant or a lateral, the concatenation of [Ṇ] gives a lateral geminate:

<i>Ṇ</i> + <i>lébò</i>	‘knife’	→	<i>ɲlébò</i>	‘my knife’
<i>Ṇ</i> + <i>rémme</i>	‘son/daughter’	→	<i>ɲémme</i>	‘my son/daughter’

True prenasals and nasal geminates are rare in Soninke and come mostly from loans.

The consonantal systems of Kaedi and Bakel Soninke are very similar, but in stem-initial position, there is a regular correspondence Kaedi *h* ~ Bakel *f*:

Bakel	Kaedi	
<i>fâré</i>	<i>hàré</i>	‘donkey’

<i>fàabè</i>	<i>hàabè</i>	‘father’
<i>fàté</i>	<i>hàté</i>	‘skin’
<i>màráfà</i>	<i>màráhà</i>	‘gun’
<i>fállè</i>	<i>hállé</i>	‘back’
<i>kófè</i>	<i>kóhè</i>	‘nape of the neck’
<i>fò</i>	<i>hò</i>	‘thing’

There are however cases in which both dialects have an initial *h*:

Bakel	Kaedi	
<i>hóorè</i>	<i>hóorè</i>	‘noble’

The concatenation of *f* and *h* with |Ṇ| gives however equally *mp*, which allows analyzing them as members of the same phonological class:

Bakel	Kaedi	both varieties	
<i>fàré</i>	<i>hàré</i>	<i>mpàré</i>	‘my donkey’
<i>fàabè</i>	<i>haabe</i>	<i>mpàabà</i>	‘my father’
<i>fàté</i>	<i>hàté</i>	<i>mpàté</i>	‘my skin’

The prenasalization of a glide gives rise to a nasal consonant with the same place of articulation as the glide, which allows considering that glides have no consonantal node, and consequently cannot contribute to quantity increase:

<i>Ṇ + yáaxè</i>	→ <i>ñáaxè</i>	‘my eye’
<i>Ṇ + wùllé</i>	→ <i>ɲùllè</i>	‘my dog’

Preceding a stem beginning with a vowel, |Ṇ| surfaces as a velar consonant:

<i>Ṇ + ótò</i>	→ <i>ɲótò</i>	‘my car’
<i>Ṇ + ànjóbè</i>	→ <i>ɲànjóbè</i>	‘my catfish’

|Ṇ| also appears in non-initial position in the gerundive suffix *-NV* (where *V* is an unspecified vowel copying all the features of the last vowel of the verb root). This suffix attaches to an allomorph of verbal lexemes that may end with a consonant or a vowel, and consequently, in this construction, |Ṇ| may occur between two vowels (V_V) or between a consonant and a vowel (C_V). In intervocalic position |Ṇ| surfaces as the alveolar nasal *n*, but when |Ṇ| is preceded by a consonant, the sequence |CṆ| surfaces as a geminate consonant:²

<i>lifi</i>	+ <i>NV</i>	→ <i>lifini</i>	‘sewing’
<i>soxo</i>	+ <i>NV</i>	→ <i>soxono</i>	‘cultivating’
<i>yiga</i>	+ <i>NV</i>	→ <i>yigana</i>	‘eating’

² On the absence of tone marks when verbs are quoted in isolation, see Section 2.2.

√ <i>kat</i>	+ NV	→ <i>katta</i>	‘beating’ ³
√ <i>kan</i>	+ NV	→ <i>kanna</i>	‘fearing’
√ <i>bos</i>	+ NV	→ <i>bocco</i>	‘sucking’
√ <i>gem</i>	+ NV	→ <i>gemme</i>	‘meeting’
√ <i>kar</i>	+ NV	→ <i>kalla</i>	‘dying’

On the basis of their phonological behavior the consonants of Bakel Soninke can be classified as follows:

Table 2. Phonemic inventory of Soninke consonants

		peripheral		alveolar	palatal	posterior	
		labial	glottal			velar	uvular
voiceless stops		p		t	c	k	q
voiced stops	nasal	m		n/N	ɲ		
	lateral			l			
	plain	b		d	j	g	
spirants	non vibrant	f	h		s		x
	vibrant			r			
glides					y	w	

2.1.2. Vowels

Bakel Soninke has five vowel qualities and a contrast between long and short vowels. The five vowel qualities can be represented as follows:

Table 3. The short vowels of Soninke

	anterior	central	posterior
degree 1	i		o
degree 2	e	a	u

Contrary to consonants, there is no evidence that long vowels result from the concatenation of two adjacent vowels. Concatenations of two underlying vowels at morpheme boundaries do not surface as long vowels, as illustrated by the suffixation of the detransitivization marker *-i* (see Section 3.2), which amalgamates with the final vowel of non-monosyllabic verb stems without increasing quantity:

garaba ‘split’ + *-i* → *garabe* ‘be split’

³ √ signals an abstract verb root which in other contexts (in particular, in the quotation form of verbal lexemes) is augmented by the addition of a final vowel: *katu*, *kanu*, *bosi*, *gemu*, *kara*.

yonto ‘push’ + *-i* → *yonte* ‘be pushed’

We therefore consider that Soninke has a series of long vowels contrasting with the short ones:

Table 4. The long vowels of Soninke

	anterior	central	posterior
degree 1	ii		oo
degree 2	ee	aa	uu

2.1.3. Syllable structure

Bakel Soninke has four types of syllables: CV, CVV, CVC and CVN. The CV and CVC (with a non-nasal coda) types can be viewed as light syllables on language-specific grounds. As shown by the examples, the non-nasal coda of CVC syllables is always identical with the onset of the following syllable and forms a geminate with it:

CV	CVC
<i>fâ.ré</i> ‘donkey’	<i>kít.tè</i> ‘hand’
<i>kí.yé</i> ‘sun’	<i>sòk.kí.xá.yè</i> ‘grass’
<i>kà</i> ‘house’	<i>sík.kò</i> ‘three’
<i>sù.xú.bà.fá.nà</i> ‘daybreak’	<i>hac.ci.te</i> ‘have lunch’
<i>sì.yà.xà.ré</i> ‘mare’	<i>fil.ló</i> ‘two’

The two possible types of heavy syllables are CVV and CVN. The nasal coda in CVN syllables may form either a geminate or a pré-nasal with the following onset:

CVV	CVN
<i>sàa.né</i> ‘star’	<i>ré.m.mè</i> ‘son/daughter’
<i>bòo.xí</i> ‘tear’	<i>fún.bún.nè</i> ‘abcess’
<i>xá.báa.nè</i> ‘egg’	<i>xú.rún.gò</i> ‘knee’
<i>juu.ra</i> ‘pray’	<i>kón.pè</i> ‘bedroom’
<i>dáa.rú.mè</i> ‘day before yesterday’	<i>xùn.bá.nè</i> ‘tomorrow’

The homorganic nasal may also appear as a syllabic consonant in the realization of |*Ń*| (1st person singular), but this occurs only when this morpheme is the first element of an intonational phrase.

Ń + *fâabà* → *mpàabà* ‘my father’

Ń + *máamà* → *mmáamà* ‘my grandfather/mother’

In non initial position |*Ń*| appears as *ín*, as in [mìngàrì] ‘I certainly will come’, decomposable as *mà ín gà rì* (*mà* ‘certainly’, *ín* ‘I’, *gà* ‘subordination marker’, *rì* ‘come’).

2.2. Tone

Like Kaedi Soninke, Bakel Soninke has a tone system with two contrasting tones, H(igh) and L(ow), and downsteps analyzable as the trace of floating L tones. Moreover, nouns in isolation show tonal contours similar to those described for Kaedi Soninke, and in both varieties, the tones of nouns in isolation can be analyzed as resulting from the interaction of lexical tones with a grammatical L tone that plays a role in the determination system of nouns. But in other respects, the tone system of Bakel Soninke is very different from that of Kaedi Soninke as described by Diagona (1984) and Diagona (1995). The most striking characteristic of Bakel Soninke is a relatively high degree of variation in the tonal realization of individual words, which sharply contrasts with the relative stability of tonal realizations in Kaedi Soninke. For example, with the determined form of two syllable nouns that can be analyzed as having a HH lexical tone pattern, we observe a free variation between HL and HH[↓] (HH followed by a downstep if the following word begins with a H tone). At this stage of our inquiry, we are not able to exhaustively classify the variations we have observed as free, conditioned by the phonological environment, or conditioned by syntactic structure, although we already have identified cases of free variation, phonological conditioning, and syntactic conditioning.

In particular, in addition to the L tones present in the underlying representations of morphemes, a L tone may be assigned to the first syllable of intonational phrases, if the following syllable is not underlyingly L. This explains for example the alternation in the tonal realization of *ó* ‘we’ illustrated in Ex. (1).⁴

- (1) a. *Ò régé wùró-n mùumá.* (AK)
 1PL dance night-D whole
 ‘We danced the whole night.’
- b. *Ó dà kén mùgù.* (AK)
 1PL TR DEM hear
 ‘We have heard that.’

The question of the lexical tones of verbs is particularly relevant to our topic. In Kaedi Soninke, verbal lexemes divide into five tone classes (H, HL, HLH, LH, and LHL), and all verbs, whatever their inherent tone pattern, take a L contour in particular syntactic configurations – Creissels (1991b). By contrast, in Bakel Soninke, lexical tone contrasts cannot be observed in the quotation form of verbs (in which

⁴ The Soninke sentences we quote are followed by the initials of the consultants with whom they have been recorded. The list of the abbreviations used in the glosses is given at the end of the article.

intransitive verbal lexemes are preceded by *nàn*, and transitive verbal lexemes are preceded by *n'à < nà à*, where *à* is the third person singular pronoun). In our recorded data, we have observed three types of possible contours for verbs:

- a H contour,
- a HL contour,
- a L contour observed so far almost exclusively in contexts in which it can equally be interpreted as the realization of an underlying H contour,

but in addition to a very strong predominance of the H contour, at least in the contexts that we have systematically checked, we observe variations between H and HL in the realization of individual verbs that we are not able to explain by a contextual conditioning (either phonological or grammatical). Additional inquiries with a variety of consultants will be necessary before deciding whether the variation is really free, and Bakel Soninke is engaged in a process of loss of lexical tone contrasts between verbs, or perhaps underlying contrasts are neutralized by processes that we have not been able to analyze yet.

As regards nouns, lexical tone contrasts are unquestionable in quotation, but we have observed in our corpus H realizations of lexically LH nouns suggesting that lexical tone contrasts between nouns are neutralized in more contexts than those that have been recognized as triggering the neutralization of lexical tone contrasts between nouns in Kaedi Soninke. However, we are not in a position to provide a precise description of this phenomenon yet.

Consequently, in this paper, the verbal lexemes are quoted without tone marks, since the evidence at our disposal does not allow us to posit lexical tones for verbs, and the tones of the nouns and sentences we quote are transcribed as they have been pronounced by our consultants when checking with them the data we present, without any interpretation or ‘regularization’ of the variations. In particular, in addition to the symbols for the H tone (ˆ), the L tone (˘), and the downstep (˩), we use the macron (¯) for syllables that are perceived higher than an immediately preceding L syllable but lower than an immediately following H syllable, because it would be premature to decide whether they should be analyzed as the realization of either H or L in the context L_H.

2.3. Clause structure

In Soninke, as in other West Mande languages, verbal predication can be schematized as S (O) V (X).⁵ The rigid constituent order and the fixed position occupied by so-called *predicative markers* immediately after the subject are crucial

⁵ S = subject, O = object, V = verb, X = oblique.

for the recognition of grammatical relations, since there is neither flagging nor indexation of the core syntactic terms S and O. 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 possible.

The predicative markers occupying a fixed position immediately after the subject include aspect-modality-polarity markers such as *má* ‘completive, negative’, and the locative copula *wá* (negative *ntá*) fulfilling the function of incompletive auxiliary – Ex. (2). With the locative copula used as an incompletive auxiliary, the verb is in the gerundive form, marked by a suffix whose underlying form is |NV| (see Section 2.1.1), otherwise it occurs in its bare lexical form.

- (2) a. *Kè yúgó má xàrà.* (AK)
 DEM man CMP.NEG study
 ‘This man did not study.’
- b. *À mā í †fáabá tù.* (AK)
 3SG CMP.NEG REFL father recognize
 ‘He did not recognize his father.’
- c. *À wà táaxú-nú dàagó-n kàmmà.* (LD)
 1SG LOCCOP sit-GER mat-D on
 ‘He will sit on the mat.’
- d. *À wà kē lémunú kóroosi-nì yàxàré-n dà.* (LD)
 1SG LOCCOP DEM child.PL watch-GER woman-D for
 ‘He will watch these children for the woman.’

As discussed by Creissels (To appear 2013) for Mandinka, the recognition of a paradigm of markers occurring 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 (3a) and (3c), 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.

- (3) a. *Sĩ-n †wá wá-rí-ní xùnbàné.* (DB)
 horse-D LOCCOP see-GER tomorrow
 ‘The horse will be seen tomorrow.’
- b. **Ø †Wá sĩ-n †wá-rí-ní xùnbàné.*
 LOCCOP horse-D see-GER tomorrow

- c. *Yillé-n kòrì.* (DB)
 millet-D sift
 ‘The millet has been sifted.’
- d. * \emptyset *Dà yillé-n kòrì.*
 TR millet-D sift

In this construction of potentially transitive verbs, as illustrated by the contrast between (3a) and the agrammatical sequence (3b), 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 (3c) and the agrammatical sequence (3d) shows that the transitivity marker *dà* does not occur in the construction of *kòrì* ‘sift’ with just 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 it does not select the variant *ya* of the focalization marker, used to focalize phrases in functions other than subject, and can only be focalized by means of the variant *yan*, used exclusively to focalize subjects. 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, which implies considering them as instances of a morphologically unmarked passive construction. In other words, the valency properties of Soninke verbs such as *kòrì* ‘sift’, *bayi* ‘spread’, *dabari* ‘repair’ or *wari* ‘see’ must be analyzed in terms of 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*).⁶ However, in Soninke, this

⁶ 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 (To appear 2013) on the zero-coded passives of Mandinka.

phenomenon can be observed almost exclusively with verbs ending with *i*. An explanation is given further.

A striking feature of Soninke is the particularly clear-cut distinction between transitive and intransitive predications, due not only to the rigid S (O) V (X) pattern, which excludes ambiguity between the syntactic roles of object and oblique, but also to the fact that three of the grammatical elements occupying a position immediately after the subject are sensitive to the *transitive* vs. *intransitive* distinction:

- 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;⁷
- the subjunctive positive is marked by *nà* in transitive constructions and *nàn* in intransitive constructions – Ex. (5);⁸
- in clauses including a focalized term, the locative 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. *Fàṅṅē ké káawá fānè yìrìgì.* (AK)

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

b. *Yàxāré-n dà tìyè-n qóbó sáxà-n wà.* (AK)

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

⁷ This *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. We prefer the label ‘transitivity marker’ as more neutral, since we are not aware of any decisive evidence for recognizing this *dà* as forming a phrase with either the subject or the object. This decision is supported by the existence of other instances of transitivity marking that could not be explained as involving (allomorphs of) such an adposition.

⁸ 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. *Xà dà lémíné-n pàabà!* (DB)
 IMPER.PL TR child-D give_assistance
 ‘Give the child assistance!’

(5) a. *À nàn táaxù yítté-n wùrè.* (LD)
 3SG SUBJ.POS.INTR sit tree-D under
 ‘He should sit under the tree.’

b. *Lèmúnú kú nà tíyè-n yìgà.* (AK)
 child.PL DEM SUBJ.POS.TR meat-D eat
 ‘The children should eat meat.’

(6) a. *À Ø sállí-ní yà.* (LD)
 3SG LOCCOPF.INTR pray-GER FOC
 ‘He is PRAYING.’

b. *À n’ à gáagá-ná yà.* (LD)
 3SG LOCCOPF.TR 3SG sell-GER FOC
 ‘He is SELLING it.’

3. Valency-changing derivations

3.1. Introductory remarks

Bakel Soninke has two morphological devices encoding a valency-decreasing operation, and one encoding a valency-increasing operation.

The detransitivizing marker *-i* (glossed DETR) may express a variety of valency-decreasing operations, depending on the verbs it combines with, whereas antipassive *-ndi* (glossed ANTIP) unambiguously expresses patient demotion. In both cases, the demoted argument is normally not expressed, although expressing it as an oblique is not completely impossible.

The only valency-increasing operation that can be encoded morphologically is causativization, expressed by the causative suffix *-ndi*.

Creissels (1991a) argues that in Kaedi Soninke, causative *-ndi* and antipassive *-ndi* have different tonal properties, and can be analyzed as underlyingly *-ndí* (causative) vs. *-ndì* (antipassive). Unfortunately, we cannot confirm this analysis for Bakel Soninke, because of the doubts we have about the possibility of identifying tone contrasts between verb stems in this Soninke variety.

3.2. The detransitivizing marker *-i*

3.2.1. Formal properties of the detransitivizing marker *-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 *-yi* with monosyllabic stems only:

- ka* ‘insult’ → *kayi* (intr.) ‘insult unspecified people’
ku ‘give’ → *kuyi* (intr.) ‘give unspecified things’
tu ‘know’ → *tuyi* (intr.) ‘know unspecified things’

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:

- $a + i \rightarrow e$ (sometimes also i)
 $o + i \rightarrow e$
 $u + i \rightarrow i$

It is therefore possible to consider that the lack of distinct detransitivized forms with 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.

3.2.2. Semantic properties of the detransitivizing marker *-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*, with two semantic subtypes, anticausative (the agent is suppressed from argument structure, and the event is presented as occurring spontaneously, as in Ex. (7b)) and passive (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. *Yúgó-n dà wùlù-séyínté-n yòolà.* (DB)

man-D TR dog-rabid-D drown

‘The man drowned the rabid dog.’

b. *Lémíné-n ‘yóolé fâṅṅé-n wà.* (DB)

child-D drown.DETR river-D OBL

‘The child drowned in the river.’

(8) a. *Yâxàré-n dà yíllé-n gòrò.* (AK)

woman-D TR millet-D pound

‘The woman pounded the millet.’

- b. *Yìllé-n gòrè.* (AK)
 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:⁹

- boora* ‘undress (tr.)’ → *boore* ‘undress oneself’ – Ex. (9)
fubba ‘plunge’ → *fubbe* ‘dive’
kafu ‘gather (tr.)’ → *kafi* ‘gather (intr.)’
fuutu ‘stretch (tr.)’ → *fuuti* ‘stretch (intr.)’

- (9) a. *Yúgó-n d’ í ‘rémmé-n bòorà.* (DB)
 man-D TR REFL son/daughter-D undress
 ‘The man undressed his son.’

- b. *Yúgó-n bòorè.* (DB)
 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 *-ndi*. All the intransitive stems derived by means of *-i* that can be used in depatientive function also have a deagentive (anticausative or passive) use, as illustrated by *yige*, intransitive form of *yiga* ‘eat’ – Ex. (10).

- (10) a. *Lèmúnú kú dà tíyè-n yìgà.* (AK)
 child.PL DEM.PL TR meat-D eat
 ‘The children ate the meat.’

⁹ 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 (9a)), whereas *dú* is a local reflexive used for object or oblique reflexivization. The term ‘autocausative’ is taken from Geniušienė (1987).

b. *Lèmúnú kú yìgè.* (AK)

child.PL DEM.PL eat.DETR

‘The children ate.’

c. *Tíyè-n yìgè.* (AK)

meat-D eat.DETR

‘The meat was eaten.’

3.3. The antipassive suffix *-ndi*

The depatientive function is the only possible function of the antipassive suffix *-ndi*, Ex. (11), and this suffix is very productive.

(11) a. *Sámáqqè-n dà léminé-n qĩ̀nì.* (AK)

snake-D TR child-D bite

‘The snake bit the child.’

b. *Sámáqqè-n qĩ̀nì-ndì.* (AK)

snake-D bite-ANTIP

‘The snake bit (someone).’

Bakel Soninke has a handful of transitive verbs that can be used intransitively in their underived form with a subject representing the agent (see Section 4), and a small set of transitive verbs with which the detransitivizing marker *-i* can be used in depatientive function (see Section 3.2), but all transitive verbs that do not belong to one of these two subsets combine with the antipassive marker *-ndi*.

The antipassive suffix *-ndi* has an allomorph *-yindi* with monosyllabic stems:

ka ‘insult’ → (antip.) *ka-yindi*

si ‘shave’ → (antip.) *si-yindi*

3.4. The causative suffix *-ndi*

Causativization, illustrated by Ex. (12), is the only valency-increasing morphological derivation found in Soninke.

(12) a. *Sĩ-n bàamì.* (DB)

horse-D gallop

‘The horse galloped.’

b. *Yúgó-n d’ ʔí ʔsí-n bàamì-ndì.* (DB)

man-D TR REFL horse-D gallop-CAUS

‘The man made his horse gallop.’

Causative verbs are derived by means of a suffix *-ndi* which has been claimed to be tonally different from antipassive *-ndi* in Kaedi Soninke – Creissels (1991a), but seems to be fully homonymous with it in the Bakel variety.

As illustrated by Ex. (12) above, causativization by means of the causative suffix *-ndi* is fully productive for strict intransitive verbs (i.e., for verbs that cannot be used transitively in their underived form). By contrast, morphological causativization is only marginally available with a transitive input. Most of the time, consultants asked to causativize transitive clauses or the depatientive version of transitive clauses reject the use of *-ndi* and propose analytical causatives instead.

There are however a few transitive verbs for which morphological causativization is accepted by our consultants: *dabari* ‘repair’, *faamu* ‘understand’, *faccari* ‘translate’, *goro* ‘pound’, *kara* ‘cross’, *kari* ‘kill’, *lifi* ‘sew’, *mini* ‘drink’, *saara* ‘give birth’, *soro* ‘cook’, *xara* ‘learn’, and *yiga* ‘eat’. No clear semantic generalization emerges from this list, which includes not only transitive verbs belonging to semantic classes known for lending themselves to causativization even in languages that tend to restrict causativization to intransitive verbs (such as ‘eat’ and ‘drink’), but also transitive verbs belonging to semantic classes for which no such tendency is observed cross-linguistically (for example ‘repair’, or ‘pound’).¹⁰

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. *Lémíné-n dà tíyè-n yìgà.* (AK)

child-D TR meat-D eat

‘The child ate meat.’

b. *Fàatú dà lémínè-n yìgà-ndì.* (DB)

Fatou TR child-D eat-CAUS

‘Fatou made the child eat.’

c. *Fàatú dà tíyè-n yìgá-ndí lémínè-n wà.* (DB)

Fatou TR meat-D eat-CAUS child-D OBL

‘Fatou made the child eat meat.’

Morphologically, a few verbal lexemes ending with *e*, such as *bire* ‘live’, show an irregular change in their last vowel when combined with the causative suffix (*bire* → *bira-ndi*), which may suggest that *bire* was originally decomposable as **bira + -i*.

¹⁰ On causativization in typological perspective, see Creissels (2006: chapter 24) and references therein.

An irregular causative form is also observed with *bogu* ‘go/come out’, caus. *baga-ndi*, and *xara* ‘learn’, caus. *xaraṅṅundi*.

3.5. 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 Bakel Soninke by means of the concatenation *-ndi* ‘antipassive marker’ + *-ndi* ‘causative marker’, or *-i* ‘detransitivization marker’ + *-ndi* ‘causative marker’.

For example, with a verb like *yiga* ‘eat’, for which the demotion of the patient triggers the use of the derived intransitive form *yige*, one could imagine the existence of a causative form **yige-ndi* expressing ‘make someone eat some unspecified food’, but this form does not exist, and Ex. (13b) above shows that *yiga-ndi* ‘make eat’ is used to causativize not only constructions in which the patient is expressed, but also constructions with a demoted patient. Similarly, *faamu* ‘understand’ and *soro* ‘cook’ occur as *faami* and *sore* in intransitive constructions expressing patient demotion, but can only be used causatively as *faamu-ndi* and *soro-ndi*, even if the initial object is not expressed.

By contrast, derived verb stems with an ending *-ndindi* decomposable as *-ndi* ‘causative’ + *-ndi* ‘antipassive’ are perfectly possible, 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-ní-n dà té-n bònò-ndi*. (DB)

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-ní-n bònò-ndi-ndi*. (DB)

cow-PL-D become_spoilt-CAUS-ANTIP

‘The cows caused damage.’

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

3.6. ‘Die’ and ‘kill’

Cross-linguistically, ‘die’ and ‘kill’ may be expressed by two unrelated verbs, by a single labile verb, or by two verbs related by a valency-changing operation (causative or anticausative).

In Soninke, the formal resemblance between *kara* ‘die’ and *kari* ‘kill’ suggests the existence of a relationship, but *kari* cannot be analyzed as the causative form or *kara* ‘die’, since this causative form could only be **kara-ndi*, and *kara* cannot be

analyzed as the anticausative form of *kari*, since verbs ending with *i* cannot have a morphologically distinct anticausative form.

Consequently, in spite of their formal resemblance, *kara* ‘die’ and *kari* ‘kill’ must be viewed as two unrelated lexemes in a synchronic analysis of Soninke.

4. Transitivity in the lexicon

4.1. Labile vs. non-labile verbs

Labile verbs are verbs that can be used in their underived form either transitively or intransitively. The verbs that can be used intransitively with a subject representing the same agent-like participant as the subject of the same verb used transitively are designated as A-labile, and those that can be used intransitively with a subject representing the same patient-like participant as the subject of the same verb used transitively are designated as P-labile. A/P labile verbs (Section 4.7) can be used intransitively with a subject that may correspond to either of the core arguments of the same verb used transitively, and some labile verbs are characterized by a reflexive reading of their intransitive use (Section 4.6).

As discussed in Creissels (2009), in languages in which the presence or absence of a noun phrase showing the same formal characteristics as the noun phrase representing the patient of typical action verbs is the only formal manifestation of the distinction between transitive and intransitive predication (as in most European languages), the recognition of a class of A-labile verbs (i.e., of verbs used intransitively with a subject) may be problematic, since in such languages, it is not always easy to find criteria distinguishing true intransitive predications from transitive predications in which an unexpressed P is either interpreted as non-specific or identified to some discursively or situationally salient entity. Symmetrically, in languages in which the presence or absence of a noun phrase in A role is the only formal manifestation of the distinction between transitive and intransitive predication (as in Avar and many other Nakh-Daghestanian languages), the recognition of a class of P-labile verbs may be problematic, since in such languages, it is not always easy to find criteria distinguishing true intransitive predications from transitive predications in which an unexpressed A is either interpreted as non-specific or identified to some discursively or situationally salient entity. By contrast, in Mande languages in general, and more particularly in Soninke, due to the proliferation of transitivity marking in this language, it is equally unproblematic to distinguish A-labile and P-labile verbs from strict transitive verbs and strict intransitive verbs:

- strict transitive verbs in the completive positive or in the imperative plural obligatorily combine with the transitive marker *dà*, they obligatorily select the *nà* variant of the subjunctive positive marker, and in constructions including a

focalized term, they obligatorily trigger the choice of the *nà* variant of the locative copula;

- strict intransitive verbs in the completive positive or in the imperative plural cannot combine with the transitive marker *dà*, they obligatorily select the *nàn* variant of the subjunctive positive marker, and in constructions including a focalized term, they obligatorily trigger the choice of the \emptyset variant of the locative copula;
- labile verbs in the completive positive or in the imperative plural can be found with or without the transitivity marker *dà*, they are compatible with both variants (*nà* and *nàn*) of the subjunctive positive marker, and they are compatible with both variants (*nà* and \emptyset) of the locative copula; the verbs identified as labile by this definition may have an intransitive construction with an agent-like subject, as illustrated by *soxo* ‘cultivate’ in Ex. (15), or with a patient-like subject, as illustrated by *bayi* ‘spread’ in Ex. (16)).

(15) a. *Bàdàrà d' í 'té-n còxò.* (DB)

Badara TR REFL field-D cultivate
 ‘Badara has cultivated his field.’

b. *Bàdàrà sòxò.* (DB)

Badara cultivate
 ‘Badara has cultivated.’

(16) a. *Yúgó-n dà dàagó-n bàyì.* (DB)

man-D TR mat-D spread
 ‘The man has spread the mat.’

b. *Dàagó-n bàyì.* (DB)

mat-D spread
 ‘The mat has been spread.’

These criteria are particularly useful with compound verbs incorporating a noun fulfilling the same semantic role as the object in the transitive construction, as in Ex. (17b), since otherwise, the incorporated noun could easily be confused with a noun phrase in object role. Note however that, as illustrated by *sókkè* ‘grass’ in this example, incorporated nouns occur in a form (here: *sókkí-*) attested only in combination with adjectives or derivative suffixes, or in compounding. As can be seen from (17b-c), the incorporation of this special form of a noun fulfilling the same semantic role as a noun phrase in the role of object of the transitive construction correlates with the impossibility of introducing the transitive marker *dà*.

- (17) a. *À dà sókkè-n dúqqútà.* (AK)
 3SG TR weeds-D pull_up
 ‘He pulled up the weeds.’
- b. *À sókkí-dúqqútà.* (AK)
 3SG weeds-pull_up
 ‘He did the weeding.’
- c. **À dà sókkí-dúqqútà.*
 3SG TR weeds-pull_up

In applying the transitivity criteria to individual verbs in order to classify them as strict transitive, strict intransitive, or labile, the only problem is that polysemous verbs may have different transitivity properties in their different meanings. Consequently, they cannot be straightforwardly classified as labile or non-labile; rather, the different (although related) meanings of such verbs must be classified separately – see Section 4.8.

4.2. Strict intransitive verbs

Verbs such as *baami* ‘gallop’, *bire* ‘live’, *bono* ‘become spoilt’, etc., can only be used intransitively, and must take the causative suffix (see Section 3.4) in order to be used transitively with a causative meaning.

4.3 Strict transitive verbs

Strict transitive verbs in their non-derived form can only be used transitively, and a derived form must be used in intransitive constructions with a subject corresponding either to the subject or the object of the transitive construction. Two subtypes of strict transitive verbs can be distinguished, those with a single intransitive form, and those with two distinct intransitive forms.

4.3.1. Strict transitive verbs with two distinct intransitive forms

Most strict transitive verbs have the behavior illustrated by *faaba* ‘help, rescue’ in Ex. (18), with two derived intransitive forms: an intransitive form whose subject corresponds semantically to the object of the transitive construction, derived by means of the detransitivizing marker *-i* (see Section 3.2), and an intransitive form whose subject corresponds semantically to the subject of the transitive construction, derived by means of the antipassive suffix *-ndi* (see Section 3.3). Depending on the lexical meaning of the verb, the intransitive form derived by means of *-i* may have an anticausative or passive reading.

(18) a. *Xà dà léminé-n pàabà!* (DB)

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

b. *Léminé ké nàn pàabè káramà!* (DB)

child DEM SUBJ.POS.INTR give_assistance.DETR quickly
‘This child should be given assistance quickly!’

c. *Tángáanú-n pàabà-ndì káramà.* (DB)

fisherman.PL-D give_assistance-ANTIP quickly
‘The fishermen provided assistance quickly.’

The following verbs can be classified as strict transitive verbs with two distinct intransitive forms:

<i>banbu / banbi / banbundi</i>	‘carry on the back’
<i>boora / boore / boorandi</i>	‘undress’
<i>buruta / burute / burutandi</i>	‘reduce the quantity of food’
<i>buruxa / buruxe / buruxandi</i>	‘erase, exterminate’
<i>buuda / buude / buudundi</i>	‘overcook’
<i>cucufu / cucufi / cucufindi</i>	‘sprinkle’
<i>danca / dance / dancandi</i>	‘provide with an additional gift’
<i>danpu / danpi / danpundi</i>	‘trample’
<i>duquta / duqqute / duqqutandi</i>	‘pull up’
<i>fata / fate / fatandi</i>	‘separate, harvest, wean’
<i>fubba / fubbe / fubbandi</i>	‘plunge’
<i>garaba / garabe / garabandi</i>	‘split, crack’
<i>gunu/ guni / gunundi</i>	‘fold’
<i>jaga / jage / jagandi</i>	‘dig’
<i>juura / juure / juurandi</i>	‘pray on a grave’
<i>kafu / kafi / kafundi</i>	‘add, gather’
<i>kaga / kage / kagandi</i>	‘scratch’
<i>kara / kare / karandi</i>	‘break’
<i>katu / kati / katundi</i>	‘hit’
<i>kippa / kippe / kippandi</i>	‘turn over’
<i>langa / lange / langandi</i>	‘curse’
<i>mugu / mugi / mugundi</i>	‘hear’
<i>nafa / nafe / nafandi</i>	‘do a service’
<i>raga / rage / ragandi</i>	‘seize’
<i>saada / saade / saadandi</i>	‘heap up’

<i>safa / safe / safandi</i>	‘write’
<i>saga / sage / sagandi</i>	‘clear out (ground)’
<i>sagara / sagare / sagarandi</i>	‘pick up’
<i>sagata / sagate / sagatandi</i>	‘join’
<i>sella / selle / sellandi</i>	‘sweep’
<i>soxo / soxe / soxondi</i>	‘tattoo, embroider’
<i>taga / tage / tagandi</i>	‘build’
<i>tulu / tuli / tulundi</i>	‘plait (hair)’
<i>waara / waare / waarandi</i>	‘open wide’
<i>wara / ware / warandi</i>	‘release’
<i>wundu / wundi / wundundi</i>	‘waken’
<i>wutu / wuti / wutundi</i>	‘take’
<i>xamu / xami / xamundi</i>	‘milk’
<i>xoso / xose / xosondi</i>	‘break, defeat’
<i>yiriga / yitige / yirigandi</i>	‘count’
<i>yonto / yonte / yontondi</i>	‘push’
<i>yoola / yoole / yoolandi</i>	‘drown’, etc.

4.3.2. Strict transitive verbs with a single intransitive form

The verbs that have the behavior illustrated by *soro* ‘cook’ in Ex. (19) constitute a minor subclass of strict transitive verbs. They have a single intransitive form, derived by means of the detransitivizing marker *-i* (see Section 3.2), whose subject may correspond semantically either to the subject or the object of the transitive construction.

(19) a. *Àmí dà tíyé-n yà sòrò lènkì.* (DB)

Amy TR meat-D FOC cook today

‘It is meat that Amy has cooked today.’

b. *Tíyé-n còrè.* (DB)

meat-D cook.DETR

‘The meat has been cooked.’

c. *Àmí ‘sóre fânè.* (DB)

Amy cook.DETR early

‘Amy did the cooking early.’

This behavior is shared by the following verbs:

<i>faamu / faami / faami</i>	‘understand’
<i>gaaga / gaage / gaage</i>	‘sell’
<i>joppa / joppe / joppe</i>	‘begin’

<i>kuu / kuyi / kuyi</i>	‘give’
<i>saara / saare / saare</i>	‘give birth’
<i>xobo / xobe / xobe</i>	‘buy’
<i>yaara / yaare / yaare</i>	‘glean’
<i>yiga / yige/ yige</i>	‘eat’

We also have recorded *goro / gore / gore* ‘pound’ with one of our consultants, but there seem to be variations in the intransitive forms of this verb.

4.4. A-labile verbs

A-labile verbs are verbs that can be used in their underived form either transitively, or intransitively with a subject representing the same agent-like participant as the subject of the same verb used transitively, but must undergo a detransitivizing derivation in order to be used intransitively with a subject representing the same patient-like participant as the object of the transitive construction. This behavior can be illustrated by *soxo* ‘cultivate’ – Ex. (20).

(20) a. *Bàdàrà d’ í ‘té-n còxò.* (DB)

Badara TR REFL field-D cultivate

‘Badara has cultivated his field.’

b. *Bàdàrà sòxò.* (DB)

Badara cultivate

‘Badara has cultivated.’

c. *Tě-n còxè.* (DB)

field-D cultivate.DETR

‘The field has been cultivated.’

Xara ‘learn’ is the only other verb in our corpus showing this behavior.

4.5. P-labile verbs

P-labile verbs are verbs that can be used in their underived form either transitively, or intransitively with a subject representing the same patient-like participant as the object of the same verb used transitively, but must undergo a detransitivizing derivation in order to be used intransitively with a subject representing the same agent-like participant as the subject of the transitive construction. In all cases, the intransitive form is derived by means of the antipassive suffix *-ndi* (see 3.3).

This behavior can be illustrated by *bayi* ‘spread’ – Ex. (21).

(21) a. *Yúgó-n dà dàagó-n bàyì.* (DB)

man-D TR mat-D spread

‘The man has spread the mat.’

b. *Dàagó-n bàyì.* (DB)

mat-D spread

‘The mat has been spread.’

c. *Yúgó-n ‘báyí-ndí kànbéà.* (DB)

man-D spread-ANTIP yard

‘The man has spread things in the yard.’

Semantically, two varieties of P-lability can be distinguished: causative / anticausative lability, if the subject of the intransitive construction represents a participant undergoing the same process as the object of the transitive construction, but not necessarily as the result of the action of an agent, and active / passive lability, if the intransitive construction implies the participation of an unexpressed agent triggering the process undergone by the referent of the subject.

Cross-linguistically, causative / anticausative lability is extremely common. By contrast, as already mentioned in Section 2.3, active / passive lability is relatively rare, at least in its most grammaticalized form, but Mande languages constitute an exception to this generalization. Mandinka illustrates the extreme case of a language with no strict transitive verb, a very restricted class of A-labile verbs, and limited possibilities of causative / anticausative lability, but in which all the verbs that have a transitive use can be used intransitively in their underived form, without any restriction related to TAM or to semantic features of the participants, with a subject interpreted as undergoing the action of an unexpressed participant that would be encoded as the subject in the transitive construction of the same verb – Creissels (To appear 2013).

Active / passive lability is found in Soninke too, but in Soninke, contrary to Mandinka, both subtypes of P-lability are restricted to a subset of the verbs that can be used transitively. It is striking that the vast majority of P-labile verbs end with *i*, and conversely, all the verbs in our corpus that end with *-i* and can be used transitively are P-labile, which raises the question whether this is really P-lability, or perhaps rather vacuous detransitivization, since Soninke has a detransitivizing suffix *-i*. This point will be discussed further in Section 4.9.

There is no rigid distinction between P-labile verbs with an agent-triggered process reading or a spontaneous process reading of their intransitive construction. Rather, the choice seems to depend on the semantic distinction between processes

easily conceived as occurring spontaneously (such as ‘burn’) and processes that require the intervention of an agent (such as ‘shave’).

Our corpus includes the following P-labile verbs:

<i>anniya / anniyandi</i>	‘make a wish while performing a sacrifice’
<i>araayi / araayindi</i>	‘advise’
<i>bayi / bayindi</i>	‘spread’
<i>betexi / betexindi</i>	‘soil’
<i>boosi / boosindi</i>	‘take out’
<i>bosi / bosindi</i>	‘suck’
<i>booti / bootindi</i>	‘extract’
<i>buyi / buyindi</i>	‘burn’
<i>daabi / daabindi</i>	‘massage’
<i>daari / daarindi</i>	‘coat’
<i>dabari / dabarindi</i>	‘repair’
<i>danbi / danbindi</i>	‘praise’
<i>danpi / danpindi</i>	‘fold’
<i>daro / darondi</i>	‘honor’
<i>faccari / faccarindi</i>	‘translate’
<i>fesi / fesindi</i>	‘hang out’
<i>firi / firindi</i>	‘precede, outdistance’
<i>ganci / gancindi</i>	‘announce’
<i>guuji / guujindi</i>	‘pour’
<i>jaabi / jaabindi</i>	‘answer’
<i>jaarabi / jaarabindi</i>	‘tempt’
<i>jurumi / jurumindi</i>	‘heap up’
<i>kari / karindi</i>	‘kill’
<i>kori / korindi</i>	‘sift’
<i>koroosi / koroosindi</i>	‘watch’
<i>korosi / korosindi</i>	‘shell’
<i>lifi / lifindi</i>	‘sew’
<i>loggi / loggindi</i>	‘hang’
<i>lori / lorindi</i>	‘transplant’
<i>nooni / noonindi</i>	‘delimit’
<i>ñaagari / ñaagarindi</i>	‘decorate’
<i>sanqi / sanqindi</i>	‘scatter’
<i>sembe / sembendi</i>	‘pass on’
<i>sembe / sembendi</i>	‘lean’

<i>sii / siyindi</i>	‘shave’
<i>somi / somindi</i>	‘aggravate (wound)’
<i>wanqi / wanqindi</i>	‘wash’
<i>wuñi / wuñindi</i>	‘open’
<i>xiyili / xiyilindi</i>	‘drag’

4.6. Reflexive lability

Wanqi ‘wash’, already mentioned in Section 4.5 as a P-labile verb, is the only verb in our corpus that can also be used intransitively with a reflexive meaning in its underived form – Ex. (22).

(22) a. *Yàxàré-n dà yíráamú-n wànqì.* (DB)

woman-D TR cloth.PL-D wash

‘The woman washed the clothes.’

b. *Yàxàré-n wànqì-ndì.* (DB)

woman-D wash-ANTIP

‘The woman did the washing.’

c. *Yìràamú-n wànqì.* (DB)

cloth.PL-D wash

‘The clothes were washed.’

d. *Yàxàré-n wànqì.* (DB)

woman-D wash

‘The woman washed (herself).’

4.7. A/P-labile verbs

A/P labile verbs are verbs that can be used in their underived form transitively, intransitively with a subject corresponding semantically to the subject of the transitive construction, and intransitively with a subject corresponding semantically to the object of the transitive construction. We have found three verbs with this behavior: *mini* ‘drink’, *salli* ‘pray’, and *wari* ‘see’ – Ex. (23).

(23) a. *Yúgó-n dà sǐ-n wàrì.* (DB)

man-D TR horse-D see

‘The man saw the horse.’

b. *Sǐ-n wàrì.* (DB)

horse-D see

‘The horse was seen.’

- c. *À wá wàrì-ni.* (DB)
 3SG LOCCOP see-GER
 ‘He is clairvoyant.’ (lit. ‘He sees’)

4.8. Lability and polysemy

Soninke also has verbs which in their non-derived form can be used intransitively or transitively, but also have a causative form. However, as illustrated in Ex. (24) by *bogu* (with the irregular causative form *baga-ndi*), at least within the limits of the data we have been able to gather, such verbs are polysemous verbs whose transitivity properties depend on the precise meaning they express. Consequently, they do not really contradict the classification put forward in this section, and do not really constitute a separate type. For example, there is an obvious semantic link between *bogu* ‘go out’ and *bogu* ‘distinguish’, but *bogu* ‘go out’ has the behavior of an intransitive verb from which a causative form *baga-ndi* ‘take out’ can be derived, whereas *bogu* ‘distinguish’ is transitive.

- (24) a. *Yúgó-n bògù.* (DB)
 man-D go_out
 ‘The man went out.’
- b. *Yúgó-n dà làbó-n bàgà-ndi.* (DB)
 man-D TR knife-D go_out-CAUS
 ‘The man took the knife out.’
- c. *Yúgó-n dà léminè-n bógú sòró-n wà.* (DB)
 man-D TR child-D distinguish person.PL-D OBL
 ‘The man distinguished the child from the crowd.’

4.9. Summary: deagentive and depatientive uses of transitive verbs

The verbs that have the ability to be used transitively in their underived form (i.e., that are not strict intransitive verbs) can be divided into sub-classes according to their ability to be used intransitively with a subject representing either the agent-like or the patient-like participant.

The deagentive use of transitive verbs may be morphologically unmarked, or marked by the addition of the detransitivizing marker *-i*, whereas the depatientive use may be morphologically unmarked, marked by the addition of the detransitivization marker *-i*, or marked by the addition of the antipassive marker *-ndi*, which gives six logical possibilities:

- | | | |
|-----|-------------------|---------------------|
| | <i>deagentive</i> | <i>depatientive</i> |
| (a) | unmarked | unmarked |

- | | | |
|-----|---------------------|-----------------------|
| (b) | unmarked | marked by <i>-i</i> |
| (c) | unmarked | marked by <i>-ndi</i> |
| (d) | marked by <i>-i</i> | unmarked |
| (e) | marked by <i>-i</i> | marked by <i>-i</i> |
| (f) | marked by <i>-i</i> | marked by <i>-ndi</i> |

The only unattested pattern is (d), with the depatientive use morphologically unmarked and the deagentive use morphologically marked. However, the remaining five patterns are not evenly distributed. Three of them are found with a limited number of verbal lexemes:

- pattern (a), illustrated above by *wari* ‘see’ – ex. (23), in which both the deagentive and the depatientive uses are morphologically unmarked, is very rare (three verbs in our corpus) ;
- pattern (b), illustrated above by *soxo* ‘cultivate’ – ex. (20), in which the depatientive use is unmarked, and the deagentive use is marked by the detransitivization marker *-i*, is also very rare (two verbs in our corpus) ;
- pattern (e), illustrated above by *yiga* ‘eat’ – ex. (10) – and *soro* ‘cook’ – Ex. (19), in which both the deagentive and depatientive uses are marked by the detransitivization marker *-i*, is less rare than patterns (a) and (b), but the number of verbs in our corpus that attest this pattern does not exceed ten.

The two productive patterns are:

- pattern (c), illustrated above by *bayi* ‘spread’ – ex. (21), in which the deagentive use is unmarked, and the depatientive use is marked by the dedicated antipassive marker *-ndi* ;
- pattern (f), illustrated above by *faaba* ‘rescue’ – ex. (18), in which the deagentive use is marked by the detransitivization marker *-i*, and the depatientive use is marked by the dedicated antipassive marker *-ndi* ;

The two productive patterns have in common the use of a dedicated antipassive form in depatientive function, they differ in that the deagentive use is morphologically marked in pattern (f), but not in pattern (c). A possible conclusion is therefore that the tendency to overtly mark the depatientive use of Soninke verbs by means of a dedicated antipassive marker is much stronger than the tendency to use a distinct form in deagentive function.

There is however another possible analysis of this situation, based on the observation that the two productive patterns are in nearly complementary distribution: more than 90% of the verbs following pattern (c) (with the same form in

transitive and deagentive use) end with *i*, whereas there is no verb ending with *i* among those following pattern (f).

Consequently, it can be argued that, underlyingly, Soninke has an equally strong tendency to overtly mark the deagentive and the depatientive uses of transitive verbs, but in the case of the deagentive use, which can only be marked by means of the detransitivizing marker *-i*, the manifestation of this tendency is limited by phonological factors.

According to this analysis, there is just one productive pattern, the one in which the deagentive use is marked by *-i* and the depatientive use is marked by *-ndi*, and the apparent productivity of the pattern with the deagentive use unmarked and the depatientive use marked by *-ndi* is simply due to the fact that the phonological process distinguishing bare verb stems from verb stems modified by the detransitivization marker applies vacuously to stems ending with *i* or *e*.

5. Soninke as a transitivizing language

In this section, we analyze the competition between morphological causativization and anticausativization in the organization of the verbal lexicon of Soninke. We use the sample of 18 verb pairs proposed by Nichols & al. (2004) to evaluate the preference languages may have for transitivization or detransitivization in the organization of the lexicon, in order to characterize the situation of Soninke in terms that will enhance comparability with that of other languages.

Each pair consists of a ‘plain’ member and an ‘induced’ member, and the induced member differs semantically from the plain one by the addition of a participant in the semantic role of causer. In the first nine pairs (the ‘animate’ pairs), the plain verb typically expresses a predication about a human or animate, whereas in the following nine pairs (the ‘inanimate’ pairs), the plain verb typically expresses a predication about an inanimate.

Here is the list of the eighteen verb pairs with their Soninke equivalents:

	Plain	Induced
1	‘laugh’ <i>soyi</i>	‘make laugh, amuse’ <i>soyindi</i>
2	‘die’ <i>kara</i>	‘kill’ <i>kari</i>
3	‘sit’ <i>taaxu</i>	‘make sit, seat’ <i>taaxundi</i>

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4	‘eat’ <i>yiga</i>	‘feed, give food’ <i>yigandi</i>
5	‘learn’ <i>xara</i>	‘teach’ <i>xaraṅṅundi</i>
6	‘see’ <i>wari</i>	‘show’ <i>koyi</i>
7	‘be/become angry’ <i>butu</i>	‘anger, make angry’ <i>butundi</i>
8	‘fear, be afraid’ <i>kanu</i>	‘frighten, scare’ <i>kanundi</i>
9	‘hide, go into hiding’ <i>muxu</i>	‘hide, put into hiding’ <i>muxundi</i>
10	‘(come to) boil’ <i>wari</i>	‘(bring to) boil’ <i>warindi</i>
11	‘burn, catch fire’ <i>buyi</i>	‘burn, set fire’ <i>buyi</i>
12	‘break (intr.)’ <i>kare</i>	‘break (tr.)’ <i>kara</i>
13	‘open (intr.)’ <i>wuñi</i>	‘open (tr.)’ <i>wuñi</i>
14	‘dry’ <i>kaawa</i>	‘make dry’ <i>kaawandi</i>
15	‘be/become straight’ <i>telejo</i>	‘straighten, make straight’ <i>teleṅondi</i>
16	‘hang (intr.)’ <i>loggi</i>	‘hang (tr.)’ <i>loggi</i>
17	‘turn over (intr.)’ <i>kippe</i>	‘turn over (tr.)’ <i>kippa</i>
18	‘fall’ <i>xenu</i>	‘drop, let fall’ <i>xenundi</i>

The Soninke verb pairs divide into four of the nine types of correspondences considered in Nichols & al. (2004):

- ‘augmented’ (the induced verb is formally derived), attested by eleven verb pairs: 1, 3, 4, 5, 7, 8, 9, 10, 14, 15, 18;
- ‘reduced’ (the plain verb is formally derived), attested by two verb pairs: 12, 17;
- ‘ambitransitive’ (no formal derivation), attested by three verb pairs: 11, 13, 16;¹¹
- ‘suppletion’ (the two members of the pair have different roots), attested by two pairs, 2,¹² 6.

The augmented correspondences clearly predominate (11 verb pairs out of 18), and Soninke can therefore be characterized as a predominantly transitivizing language. However, the four types of correspondences attested in Soninke are not evenly distributed between animate and inanimate verb pairs, as can be seen from the following chart, in which each pair is represented by its plain member:

	augmented	reduced	ambitransitive	suppletion
animate	<i>soyi</i> ‘laugh’ <i>taaxu</i> ‘sit’ <i>yiga</i> ‘eat’ <i>xara</i> ‘learn’ <i>butu</i> ‘become angry’ <i>kanu</i> ‘fear’ <i>muxu</i> ‘hide’			<i>kara</i> ‘die’ <i>wari</i> ‘see’
inanimate	<i>wari</i> ‘boil’ <i>kaawa</i> ‘dry’ <i>telejo</i> ‘become straight’ <i>xenu</i> ‘fall’	<i>kare</i> ‘break’ <i>kippe</i> ‘turn over’	<i>buyi</i> ‘burn’ <i>loggi</i> ‘hang’ <i>wuñi</i> ‘open’	

It is striking that:

- the predominance of the augmented correspondence is very strong among animate pairs, but this correspondence is found in four of the nine inanimate pairs only;

¹¹ ‘Ambitransitive’ as used by Nichols & al. (2004) is synonymous with P-labile as used in this article.

¹² To be precise, this is a case of ‘partial suppletion’, since the two verbs seem to be cognate, but cannot be related by any morphological process attested elsewhere in the language – see Section 3.6.

- the only animate pairs that are not of the augmented type belong to the suppletion type;
- reduced and ambitransitive correspondences (which in Soninke are in quasi-complementary distribution depending on the final vowel of the verb root) are found exclusively among inanimate pairs.

The obvious conclusion is that, in Soninke, the preference for causativization as the formal device relating the members of plain / induced verb pairs is counterbalanced, in the case of inanimate pairs, by the preferred lexicalization principle stated by Nichols & al. (2004: 172-73) in the following terms:

“Other things being equal, LANGUAGES TEND TO LEXICALIZE ACTIONS OR STATES OF HUMANS (OR ANIMATES MORE GENERALLY) AS PRIMARY; actions or states of inanimates are less preferred [...] Consequently, for animate verbs there is a preference for treating the plain verb as the basic form and deriving the induced one [...] For inanimate verbs there is the opposite preference for treating the induced verb as basic and deriving the plain one.”

7. Conclusion

On the basis of an inquiry carried out with speakers of the Bakel variety of Soninke, we have brought out the following features as characterizing the morphosyntactic phenomena related to transitivity in this Soninke variety:

- the distinction between transitive and intransitive verbal predication is particularly clear-cut, since it is overtly marked in the completive positive, in the imperative plural, in the subjunctive positive, and when the locative copula is used as an incompletive auxiliary in clauses including a focalized term;
- A-lability is exceptional, and the use of the antipassive suffix *-ndi* constitutes the most common depatientivization strategy;
- P-lability constitutes the rule for transitive verbs ending with *i* or *e*, but is exceptional for verbs ending with other vowels;
- there is no formal distinction between anticausativization and passivization: P-labile verbs used intransitively as well as intransitive verbs derived by means of the detransitivization marker *-i* can equally encode more or less spontaneous processes and processes that cannot be conceived without the intervention of an agent;
- according to the typological grid proposed by Nichols & al. (2004), there is a strong preference for transitivization with the verb pairs they characterize as ‘animate’, but not with the ‘inanimate’ ones.

Finally, we would like to emphasize that these conclusions are probably not limited to the Soninke variety spoken in Bakel, since whenever we found in the published sources on Kaedi Soninke examples of use of verbs corresponding to those we have in our corpus, we observed no discrepancy with our own data.

Abbreviations

ANTIP = antipassive

CAUS = causative

CMP = completive

D = determination marker

DEM = demonstrative

DET = detransitivization marker

GER = gerundive

FOC = focalization marker

IMPER = imperative

INTR = intransitive

LOCCOP = locative copula

LOCCOPF = locative copula in focalization context

NEG = negative

OBL = oblique¹³

PL = plural

POS = positive

REFL = reflexive

SG = singular

SUBJ = subjunctive

TR = transitive

¹³ This gloss is used for a postposition with a variety of uses that cannot be covered in a satisfying way by a more precise term.

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Résumé

La transitivité en soninké de Bakel

Dans cet article, après avoir présenté les principales particularités du soninké de Bakel dans le domaine de la phonologie et de la morphosyntaxe, nous examinons de façon détaillée les mécanismes morphosyntaxiques liés à la transitivité : alternances de transitivité non marquées morphologiquement et dérivations exprimant une opération sur la valence verbale. Dans ce domaine, les caractéristiques les plus saillantes du soninké sont une dérivation antipassive productive allant de pair avec la rareté des verbes A-labiles, et un phénomène de P-labilité concernant presque exclusivement les lexèmes verbaux terminés par *i* ou *e*, en quasi-complémentarité avec une dérivation à fonction médiopassive propre aux verbes terminés par *a*, *o* ou *u*.

Key-words: Soninke, transitivity, lability, antipassive, anticausative, passive.