

## The inflectional role of tone in Soninke (West Mande)

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### 1. Introduction

Soninke (*sòonìnkàñqánnè*), spoken by approximately 2 million speakers living mainly in Mali, Mauritania, Senegal, and The Gambia, belongs to the Soninke-Bozo sub-branch of the western branch of the Mande language family.

(1) The Mande language family (adapted from Vydrin 2009)

South-East Mande	South Mande	Dan Guro Mano etc.
	East Mande	Bisa San Busa etc.
West Mande	Soninke-Bozo	<i>Soninke</i> Bozo languages
	Bobo-Samogo	Bobo Dzuun etc.
	Central	Manding languages Jogo-Jeri Kono-Vai etc.
	Soso-South-West-Mande	Soso-Jalonka South-West Mande languages (Mende, Kpelle, Loma, etc.)

Soninke does not have a standard variety, but the dialectal variation across Soninke varieties is relatively limited and does not hinder intercomprehension, with the only exception of two outliers: Azer (a now-extinct Soninke variety formerly spoken in Oualata and Tichit (Mauritania)), and Sillanka (an endangered Soninke variety spoken in Burkina-Faso)

The data analyzed in this paper is from the variety spoken in Kingi (**Kíngí**), a traditional Soninke province in North West Mali whose main urban center is Nioro (**Ñóoró**). On the basis of the data I have at my disposal, a reasonable hypothesis is that the tonal system described in this presentation is at least substantially representative of the Eastern Soninke varieties (i.e. roughly speaking, the varieties located east of Kayes (**Qàayí**)).<sup>1</sup> By contrast, the field work I had the opportunity to do in collaboration with Anna Marie Diagne on Bakel Soninke suggests that Western varieties may have substantially different prosodic systems.

The main references on Soninke phonology and grammar are O.M. Diagana (1980, 1984, 1995) and Y. Diagana (1990a, 1994). Among the other publications available on Soninke, Y. Diagana (1990b), Riiland (1990) and Creissels (1992) deal specifically with tone. All the aforementioned works refer to Kaedi Soninke – cf. Footnote 1.

## 2. A sketch of Soninke segmental phonology

### 2.1. Vowels

Soninke has five contrasting vowel qualities. Vowel length is distinctive, but long vowels cannot occur in closed syllables, or in word-final position.

(2) The vowel phonemes of Soninke

	front	back
close	<b>i</b>	<b>u</b>
mid	<b>e</b>	<b>o</b>
open	<b>a</b>	

	front	back
close	<b>ii [i:]</b>	<b>uu [u:]</b>
mid	<b>ee [e:]</b>	<b>oo [o:]</b>
open	<b>aa [a:]</b>	

<sup>1</sup> Note that Kaedi Soninke (the only well-documented Soninke variety, mainly due to the works of Ousmane Moussa Diagana and Yakouba Diagana), in spite of its geographical location west of all the other Soninke varieties, is linguistically an Eastern Soninke variety.

## 2.2. Consonants

Eastern Soninke varieties have the inventory of consonant phonemes given in (3).<sup>2</sup>

(3) The consonant phonemes of Eastern Soninke

	labials	dentals	palatals	velars	uvular	glottal
voiceless plosives	<b>p</b>	<b>t</b>	<b>c</b>	<b>k</b>	<b>q</b>	
voiced plosives	<b>b</b>	<b>d</b>	<b>j</b>	<b>g</b>		
fricatives		<b>s</b>				<b>h</b>
nasals	<b>m</b>	<b>n</b>	<b>ñ</b>	<b>ŋ</b>		
lateral approximant		<b>l</b>				
rhotic		<b>r</b>				
glides	<b>w</b>		<b>y</b>			

Gemination is an important aspect of Soninke phonology. In intervocalic position, **p**, **c** and **ŋ** occur only as geminates, whereas gemination is distinctive for the following consonants: **t**, **k**, **q**, **m**, **n**, **ñ**, **l**. Geminate **b**, **d**, and **j** are marginal, and geminate **g**, **s**, **h**, **r**, **w** or **y** are not attested at all.<sup>3</sup>

Non-geminate **q** in intervocalic position is represented by the allophone [ʁ] (written **x**).

NC clusters can be found in word-internal position, but neither in word-initial or word-final position. The C element of such clusters must be a plosive, and the N element must be homorganic with the following plosive.

With the only exception of ideophonic adverbs, no Soninke word can end with a consonant other than **N**, a nasal underlyingly unspecified for place articulation features which manifests itself as follow:

- immediately followed by a pause, **N** is deleted;
- if no pause intervenes immediately after **N**, in most Soninke varieties (including Kingi Soninke and all the other Eastern varieties), the initial of the following word is modified in such a way that **N** can only be followed by a plosive, a nasal, or **l**:
  - ∅** → **ŋ**
  - r** → **l**
  - w** → **ŋ**
  - y** → **ñ**
  - s** → **c**
  - h** → **p**

<sup>2</sup> In addition to this inventory, Western Soninke varieties also have a labio-dental fricative **f**. Depending on the individual words, Eastern Soninke **h** may correspond to Western Soninke **h** or **f**, but the words that have **h** in all Soninke varieties are overwhelmingly (if not exclusively) Arabic borrowings.

<sup>3</sup> Geminate nasals are written **nm** [m:], **nn** [n:], **ññ** [ɲ:], and **ŋŋ** [ŋ:].

- N followed by l loses its nasal feature, and N + l surfaces as a geminate l;
- N followed by a nasal or a plosive copies the place of articulation of the following consonant (yielding a geminate nasal or a homorganic NC cluster)

Note that no nominal, adjectival or verbal lexeme intrinsically includes a final N. With the exception of some grammatical words, the presence of N in word-final position always results, either from the suffixation of the definite marker -N, or from the attachment of the enclitic -N marking focalized NPs or interrogatives in subject function.

### 2.3. Syllabic nasals

In Soninke, a high-toned syllabic nasal exists only as a variant of the 1st person singular pronoun *ín* immediately followed by a pause (see Ex. (6a) below).

### 2.4. Syllabic structure of words

Canonical Soninke words are sequences of CV, CV: and C<sub>1</sub>VC<sub>2</sub> syllables with the following constraints: CV: syllables cannot occur in word-final position, the only possible coda in word-final position (except for ideophonic adverbs) is a nasal unspecified for its place of articulation which has a zero-realization when immediately followed by a pause, and at syllable junctions in word-internal position, the only possible ‘coda – onset’ sequences are the geminate consonants and the NC clusters enumerated in section 2.2. With the exception of personal pronouns, and of Arabic borrowings beginning with a, null onsets are exceptional.

## 3. The tonal system

### 3.1. H vs. L

As illustrated in (4), Kingi Soninke has two contrastive level tones, H and L.

- |      |           |                         |                          |
|------|-----------|-------------------------|--------------------------|
| (4a) | LH vs. HH | <b>kàrá</b> ‘die’       | <b>kárá</b> ‘break’      |
|      |           | <b>qòoró</b> ‘grow’     | <b>qóoró</b> ‘pick up’   |
| (4b) | HH vs. HL | <b>légé</b> ‘dance’     | <b>légè</b> ‘catch fire’ |
|      |           | <b>qáwá</b> ‘get moist’ | <b>qáwà</b> ‘be similar’ |

Ex. (5) illustrates the minimal pair *ì* (3rd person pronoun) / *í* (reflexive pronoun, here in logophoric function).

- (5a) **Hàatú tì ì kànú.**  
 Fatou say 3PL be afraid  
 ‘Fatou said that they were afraid.’

- (5b) **Hàatú tì í kànú.**  
 Fatou say REFL be\_afraid  
 ‘Fatou<sub>i</sub> said that she<sub>j</sub> was afraid.’

Another example of segmentally identical sentences than can only be distinguished by their tonal melody is given in (6).

- (6a) **Ń tì ín dàgá.** [ńtìíndàgá]  
 1SG say 1SG go  
 ‘I said that I went away.’

- (6b) **Ń tì ì n dàgá.** [ńtììndàgá]  
 1SG say 3PL SUBJ go  
 ‘I said that they must go.’

### 3.2. Contour tones and downstep

#### 3.2.1. Vowel elision and downstep

In normal speech, the final vowel of words that do not occupy the final position in the prosodic phrase tends to be elided (without compensatory lengthening) if the following word is **ín** (1st person singular pronoun), **án** (2nd person singular pronoun), **à** (3rd person pronoun), **ó** (1st person plural pronoun), **ì** (3rd person plural pronoun), or **í** (reflexive pronoun). However, the tone of the elided vowel is maintained as a floating tone, which means for example that the L tone of an elided vowel may manifest itself by a downstep, if the elided vowel is both preceded and followed by H-toned vowels, as in (7).

- (7) **Hàatú d(à) ín qírí → Hàatú ‘d’ín qírí.**  
 Fatou TR 1SG call  
 ‘Fatou called me.’

#### 3.2.2. Downstep and falling modulation as manifestations of an underlyingly floating L tone

Apparent contour tones better analyzed as the realization of dissyllabic sequences with identical vowels associated to opposite tones and no intervening consonant can be observed in a handful of words, such as **dáàrú** ‘yesterday’ or **hàámù** ‘understand’. The only true contour tone in Kingi Soninke is the falling tone observed on the final syllable of monosyllabic noun forms such as **sí** ‘horse’, or of polysyllabic noun forms with a penultimate L tone, such as **sèrê** ‘human being’ or **yàxàrê** ‘woman’. This falling modulation can only be perceived when such noun forms are immediately followed by a pause, in particular in the quotation form of nouns. As illustrated in (8), if another word follows with no pause intervening, a final nasal appears, and the falling modulation gives way to a H tone, but a downstep is observed if the following word begins with a H-toned syllable. The explanation is that Soninke

speakers quote nouns in the so-called definite form, which in fact tends to be used as the semantically least marked form of nouns. This form is characterized by a suffix -N̄ whose nasal element is deleted in immediate prepausal position. With noun stems ending with two successive H tones, the L tone introduced by the definite marker replaces the H tone of the last syllable of the stem. When this is not the case, depending on the context, the L element of the definite marker may combine with the preceding H into a falling tone (8a), be deleted (8b), or manifest its presence by a downstep (8c).

(8a) **yàxàré** ‘the/a woman’ < **yàxàré-N̄** cf. **yúgò** ‘the/a man’ < **yúgò-N̄**

(8b) **ń dà yàxàré-n ɲàrí.** cf. **ń dà yúgò-n ɲàrí.**  
 1SG TR woman-D see 1SG TR man-D see  
 ‘I saw a/the woman.’ ‘I saw a/the man.’

(8c) **ń dà yàxàré-n ʼtíríndí.** cf. **ń dà yúgò-n tíríndí.**  
 1SG TR woman-D ask 1SG TR man-D ask  
 ‘I asked a/the woman.’ ‘I asked a/the man.’

## 4. Tonal classes of lexemes

### 4.1. General constraints on lexical tone patterns

The possible tone patterns for simplex nominal, verbal or adjectival lexemes can be predicted by the following two constraints:

- within the limits of simplex lexemes, sequences of two or more syllables with identical tones are only possible if they include the first syllable of the lexeme;
- lexical tone patterns must include at least one H tone.

In an autosegmental framework, the lexical tone of simplex lexemes can therefore be described by positing melodies (<H>, <HL>, <LH>, <HLH>, <LHL>, etc.) whose elements are mapped onto syllables from right to left in a one-to-one relation. If the number of syllables outnumbers the number of tones in the melody, the first element of the melody extends its association to the remaining syllables.

It is however impossible to really prove that this is the right generalization, given the relative scarcity of simplex lexemes with four or more syllables.

### 4.2. Tone classes of verbs

Monosyllabic verbal lexemes divide into two tone classes, H and LH. In the contexts in which verbs show their inherent tone pattern, monosyllabic H verbs are consistently realized with a H tone, whereas monosyllabic LH verbs are characterized by the following alternation: H at the beginning of a prosodic phrase, or immediately after a word ending with a L-toned syllable, L immediately after a word ending with a H-toned syllable. This alternation, illustrated in (9) by **ńí** ‘(tr.)

find, (intr.) be found’, is also found with many monosyllabic grammatical words. It can be analyzed as the realization of an underlying <LH> melody whose initial element (L) remains floating at the level of the lexical association rules, and can only associate at post-lexical level.

(9a) **Ñí sáxà-n ɲá qùnbàné!**  
 be\_found market-D at tomorrow  
 ‘Be at the marker tomorrow!’

(9b) **Ñ dà Múusá ñì sáxà-n ɲá.**  
 1SG TR Moussa find market-D at  
 ‘I found Moussa at the market.’

(9c) **Ñ dà Dénbà ñí sáxà-n ɲá.**  
 1SG TR Demba find market-D at  
 ‘I found Demba at the market.’

Disyllabic verbal lexemes divide into three tone classes: HH, HL, and LH. Trisyllabic verbal lexemes divide into five tone classes: HHH, HHL, LLH, LHL, and HLH. However, the HLH class includes only a handful of verbs.

### 4.3. Tone classes of nouns

In principle, nouns divide into the same tone classes as verbs. There are however some complications due to the fact that the so-called definite form of nouns, which as already mentioned tends to act as the least marked form of nouns, includes a suffix **-N`** whose interaction with the noun stem leads to the neutralization of some distinctions between lexical tone classes.

Monosyllabic nominal lexemes divide into two tone classes, like verbal lexemes, but in contrast to verbs, the distinction is only apparent when monosyllabic nominal lexemes constitute the first formative of polysyllabic words. As monosyllabic words, they invariably show the tonal realizations expected for underlyingly <H> lexemes. For example, the words for ‘oil’ and ‘field’ are equally indef. **té** def. **tê**, but in the plural, indef. **tée-nú** def. **tée-nù** ‘oils’ contrasts with indef. **tèe-nú** def. **tèe-nú** ‘fields’.

With polysyllabic words, the addition of the definite suffix **-N`** neutralizes the distinction between <H> and <HL> lexical melodies. The correspondences between possible tone patterns in the indefinite and definite forms are given in (10) for disyllabic and trisyllabic nouns.

(10) indefinite definite

(10a)

HH	HL
HL	
LH	LHL

(10b)

HHH	HHL
HHL	
HLH	HLHL̄
LHL	LHL
LLH	LLHL̄

The problem is that this neutralization in the definite form of nouns leads to considerable instability in the choice between (H)HL and (H)HH for the indefinite form of nouns whose definite form has a (H)HL pattern. A given noun may occur with two different patterns in the indefinite form in the speech of the same speaker, and when asked, speakers often accept both possibilities as equally correct.

Further investigation would however be necessary in order to establish possible regularities in this variation.

### 5. Tone and morphosyntax: introductory remarks

In tone languages, systematic modifications may affect the lexical tone pattern of the units involved in morphological operations, whether constructional or inflectional.

The morphological operations may involve two or more units including tone bearing units (for example, a stem and an affix including at least one vowel), in which case it may happen that the variation in their surface tone has a natural explanation in terms of interaction between the tones of adjacent units. For example, Soninke has several constructions in which ...H-L\*H... configurations (where the hyphen represents the boundary between the two units involved in the construction) are simplified as ...H-H\*H... by a ‘tonal bridge’ rule. This rule operates in particular when nouns are modified by the proclitic demonstrative *ké* – Ex. (11).

(11)	<i>ké</i>	(DEM)	+	<i>yúgó</i>	‘man’	→	<i>ké yúgó</i>	‘this man’
	<i>ké</i>	(DEM)	+	<i>sélinṅé</i>	‘chicken’	→	<i>ké sélinṅé</i>	‘this chicken’
	<i>ké</i>	(DEM)	+	<i>dòròké</i>	‘cloth’	→	<i>ké dóróké</i>	‘this cloth’
	<i>ké</i>	(DEM)	+	<i>kítáabè</i>	‘book’	→	<i>ké kítáabè</i>	‘this book’
	<i>ké</i>	(DEM)	+	<i>kèréhùné</i>	‘bat’	→	<i>ké kéréhùné</i>	‘this bat’

But such an explanation is not always possible. The tonal alternations that affect a unit involved in a morphological operation and cannot be straightforwardly attributed to the interplay with tones inherent to another unit can be divided into at least three types:

- (a) The morphological operation may result in a complexification of the lexical tone pattern, which can be accounted for by positing an *additive morphotoneme*.



- (b) The morphological operation may result in a simplification of the lexical tone pattern.
- (c) The tone pattern resulting from the morphological operation may be independent from the lexical tone pattern, and attributable to the action of a *replacive morphotoneme*.

In Soninke, the L tone of the definite marker is a good example of an additive morphotoneme. This suffix does not include any tone bearing unit and does not modify the number of syllables of nouns, since segmentally, the only difference between indefinite and definite noun forms is the final N of the definite form. Tonally, as illustrated in (10) above, the tone pattern of the definite form of nouns is either identical to that of the indefinite form (if the tone pattern of the indefinite form ends with L), or includes an additional L element (if the tone pattern of the indefinite form ends with L).

The non-autonomous form of Soninke nouns illustrates the possibility of morphological operations involving a simplification of the lexical tonal melody of lexemes. The non-autonomous form of Soninke nouns occurs when a nominal lexeme constitutes the first component of a compound, and in combination with some derivational suffixes. As illustrated in (12), in addition to possible segmental modifications, it differs from the free form of nouns by a tonal alternation that can be described as a reduction of the tonal melodies of nominal lexemes to their first element, resulting in an all-H or all-L tone pattern. Crucially, as can be seen by comparing for example **jàxà-hàté** ‘sheepskin’ with **jàxà-yínmé** ‘sheep’s head’, this alternation is independent of the tone pattern of the second component.

(12)	free form of nouns (indefinite)	non-autonomous form of nouns	
	<b>jàxé</b>	<b>jàxà-</b>	‘sheep’
	<b>kitàabè</b>	<b>kitàabi-</b>	‘book’
	<b>sàgàràn mé</b>	<b>sàgàràn-</b>	‘porcupine’
	<b>qálísí</b>	<b>qálísí-</b>	‘money’
	<b>héréñèqqé</b>	<b>héréñèqqí-</b>	‘spark’

Morphological operations consisting in the mere replacement of the lexical tone pattern of a unit by a fixed tone pattern, without any modification of the segmental form of the input or addition of segmental material, are pervasive in Soninke inflection. They will be described in detail in the following sections. Ex. (13) provides a first illustration.

(13a) **À má rì.**  
 3SG CPL.NEG come  
 ‘(S)he did not come.’

(13b) **Á mà rí.**  
 3SG mother come  
 ‘His/her mother came.’

The two sentences in (13) are segmentally identical, but have different tones on each of the three words they include. However, **à** in (13a) and **á** in (13b) are not completely different words, but inflected forms of the same 3rd person pronoun, and similarly, **rì** in (13a) and **rí** in (13b) are inflected forms of the same verb ‘come’. The explanation is that:

- In Soninke, the 3rd person pronouns **à** (singular) and **ì** (plural) are inherently L-toned, but in some syntactic contexts (in particular in genitive function), they occur in an inflected form characterized by a tonal alternation – see Section 9.1.
- The verb ‘come’ belong lexically to the H tone class, but in combination with some negative markers, Soninke verbs occur in an inflected form characterized by an all-L pattern, irrespective of their inherent tonal melody – see Section 6.

## 6. Replacive morphotonemes in the inflection of verbs

As already mentioned in Section 4, the lexical tonal melody of Soninke verbs must include at least one H element. However, in some syntactically determined environments, they occur in an inflected form characterized by an all-L tone pattern, irrespective of their lexical tonal melody, which can be accounted for by positing a substitutive morphotoneme L as the inflectional marker of this form. The syntactic contexts requiring the use of this form are as follows:

- (a) When the verb combines with the negative markers **má** (completive negative) or **ntá** (incompletive negative). Note that other negative markers, such as **máxà** ‘prohibitive’ or **ntáxà** ‘cessative’, do not trigger this tonal alternation. The verbs affected by this alternation are not necessarily in contact with the negative marker that triggers it, and the gerundive form of verbs is affected in the same way as bare verbal lexemes.

(14a) **Ó dà Múusá qírí.**  
 1PL TR Moussa call  
 ‘We called Moussa.’

(14b) **Ó má Múusá qìrì.**  
 1PL CPL.NEG Moussa call<sup>L</sup>  
 ‘We didn’t call Moussa.’

(15a) **Ń njá ké kónpé sèllà-ná.**  
 1SG INCPL DEM room sweep-GER  
 ‘I am sweeping this room.’

(15a) **Ń ntá ké kónpé sèllà-nà.**  
 1SG INCPL.NEG DEM room sweep-GER<sup>L</sup>  
 ‘I am not sweeping this room.’

- (b) When an interrogative word or an NP marked by the enclitic focus particle `yá is included in the part of the clause that precedes the verb (i.e. if the interrogative word or focalized NP in question is in subject or object function, since Soninke, like the other Mande languages, has a rigid SOVX constituent order). Interrogative words or focalized NPs following the verb do not trigger this tonal alternation. Note that interrogative words and focalized NPs in subject function are flagged by a special enclitic **-n** which does not occur with subjects other than interrogative words or focalized NPs.

(16a) **Ó dà Múusá qírí.**  
 1PL TR Moussa call  
 ‘We called Moussa.’

(16b) **Ó yà-n dà Múusá qìrì.**  
 1PL FOC-SBJ TR Moussa call<sup>L</sup>  
 ‘WE called Moussa.’

(16c) **Ó dà Múusá yà qìrì.**  
 1PL TR Moussa FOC call<sup>L</sup>  
 ‘We called MOUSSA.’

(16d) **Ó dà Múusá qírí Dénbà yá dānǵá.**  
 1PL TR Moussa call Demba FOC for  
 ‘We called Moussa FOR DEMBA.’

(16e) **Kó-n dà Múusá qìrì?**  
 who-SBJ TR Moussa call<sup>L</sup>  
 ‘Who called Moussa?’

(16f) **Qá dà kó qìrì?**  
 2PL TR who call<sup>L</sup>  
 ‘Whom did you call?’

(16g) **Qá dà Múusá qírí kó dānǵá?**  
 1PL TR Moussa call who for  
 ‘For whom did you call Moussa?’

- (c) In hypothetical clauses, characterized by the combination of the subordination marker **gà** and the ‘projective’ marker **ná**.

(17a) **Ń dà tíyè-n qóbó.**

1SG TR meat-D buy

‘I bought some meat.’

(17b) **Án gà ná hàyi-hó-n qòbò, án dò hàyaaná-n cú báané.**

2SG SBD PROJ steal-thing-D buy<sup>L</sup> 2SG and thief-D all one

‘If you buy a stolen thing, the thief and you are the same.’

- (d) When the verb combines with the concessive marker **wó**. This marker triggers the reduplication of the verb and is inserted between the verb and its copy. The first reduplicand shows the lexical tone of the verb, whereas the second one has an all-L melody.

(18) **Gàjánṅèn gà dàllá wó dàllà,**

conflict.D SBD last CONC last<sup>L</sup>

‘No matter how long a conflict may be,

**m(à) à gà ñèmé kòotá yì.**

OBLG 3SG SBD end.DETR day POSTP

it will necessarily end one day.’

## 7. Replacive morphotonemes in the inflection of nouns

### 7.1. The replacive morphotoneme LH in the inflection of nouns

In the genitival construction, if the head noun is monosyllabic, it shows a L tone instead of the H tone that characterizes monosyllabic nouns in other contexts. If the head noun includes two or more syllables, irrespective of its lexical tonal melody, its last syllable shows a H tone, and all non-final syllables a L tone.

(19) **móbìlì** ‘the car’ → **Múusá mòbìlì** ‘Moussa’s car’

**dòròkê** ‘the cloth’ → **Múusá dòròkê** ‘Moussa’s cloth’

**qàlisì** ‘the money’ → **Múusá qàlisì** ‘Moussa’s money’

**kitàabè** ‘the book’ → **Múusá kitàabè** ‘Moussa’s book’

In other words, the inflection of Soninke nouns includes a construct form (i.e. a form whose selection is conditioned by the presence of a given type of modifier) marked by a replacive morphotoneme LH.

Note incidentally that the tonal alternations affecting nouns preceded by a demonstrative modifier and nouns in the function of head of a genitival construction

are crucial for the distinction between demonstrative pronouns in genitive function and demonstrative determiners.

(20)	<b>ñéxé</b>	‘fish’	<b>ké ñèxê</b>	‘this one’s fish’
			<b>ké ñéxé</b>	‘this fish’
	<b>hàré</b>	‘donkey’	<b>ké hàrê</b>	‘this one’s donkey’
			<b>ké háré</b>	‘this donkey’
	<b>qálisí</b>	‘money’	<b>ké qàlisí</b>	‘this one’s money’
			<b>ké qálisí</b>	‘this money’
	<b>kitàabè</b>	‘book’	<b>ké kitàabê</b>	‘this one’s book’
			<b>ké kítáabè</b>	‘this book’

## 7.2. The replacive morphotoneme L in the inflection of nouns

The concessive marker **wó** mentioned in Section 6 is in fact a transcategorial marker which also combines with nouns, with exactly the same morphological properties: the noun combined with **wó** is reduplicated, **wó** is inserted between the noun and its copy, segmentally, both reduplicands are in the indefinite singular form, but tonally, the second reduplicand shows an all-L tone pattern, irrespective of the lexical tonal melody of the noun. In combination with nouns, **wó** expresses a distributive or free choice meaning (‘every’, ‘any’).

(21)	<b>yúgó wó yùgò</b>	‘any man’, ‘every man’
	<b>yàxàré wó yàxàrè</b>	‘any woman’, ‘every woman’
	<b>kitàabè wó kitàabè</b>	‘any book’, ‘every book’
	<b>sèlìnné wó sèlìnnè</b>	‘any chicken’, ‘every chicken’
	<b>kèrèhùnè wó kèrèhùnè</b>	‘any bat’, ‘every bat’

## 8. Replacive morphotonemes in the inflection of adjectives

Morphologically, Soninke adjectives are a subclass of nouns. As noun modifiers, they occur as the second component of compound nouns whose first component is the nominal lexeme they modify, as can be seen by comparing the forms of ‘dog’, ‘black dog’ and ‘white dog’ inflected for number and definiteness – Ex. (22). The analysis of ‘black dog’ or ‘white dog’ as compounds rather than word combinations follows from the fact that, in such combinations, ‘dog’ occurs in the non-autonomous form **wùllì-**, used exclusively as the first element of compounds and in combination with some derivational suffixes.

(22)		indef.sing.	def.sing.	indef.pl.	def.pl.
	‘dog’	wùllé	wùllé(n)	wùllú	wùllú(n)
	‘black dog’	wùlli-bìnné	wùlli-bìnné(n)	wùlli-bìnnú	wùlli-bìnnú(n)
	‘white dog’	wùlli-xùllé	wùlli-xùllé(n)	wùlli-xùllú	wùlli-xùllú(n)

A property that distinguishes adjectives from plain nouns is the predicative use of an inflected form of adjectives marked by a replacive morphotoneme LH (i.e. identical to the construct form of plain nouns). This form occurs in secondary predicate function, or as the main predicate of ascriptive clauses such as (23a-b), consisting of a noun phrase in subject function, an adjective in predicate function, and the equative copula `ní. Note that the tonal difference between ‘black’ (LH) and ‘white’ (HH), apparent in (22), is neutralized in (23).

(23a) **Ké wùllé bìnné-n nì.**  
 DEM dog black-D<sup>LH</sup> EQCOP  
 ‘This dog is black.’

(23b) **Ké wùllé qùllé-n nì.**  
 DEM dog black-D<sup>LH</sup> EQCOP  
 ‘This dog is black.’

## 9. Replacive morphotonemes in the inflection of personal pronouns

### 9.1. The replacive morphotoneme H in the inflection of third person pronouns

As already illustrated in Section 5, the third person pronouns à (sg) and ì (pl) are inherently L-toned, but they have inflected forms á and í occurring in the following contexts:

- in genitive function,
- as subjects of predicative adjectives,
- as complements of some postpositions,
- immediately followed by `dó ‘with, and’,
- immediately followed by the focus particle `yá.

### 9.2. The replacive morphotoneme L in the inflection of the second person plural pronoun

The second person plural pronoun qá has an inflected form qà occurring exclusively as subject of imperative clauses. As illustrated by Ex. (24), this tonal alternation is

the only thing that distinguishes clauses in the imperative plural from clauses in the completive aspect with the second person plural pronoun in subject function.<sup>4</sup>

(24a) **Qà táaxú!**            ≠    **Qá táaxú.**  
       2PL<sup>L</sup> sit                    2PL sit  
       ‘Sit down! (pl.)’        ‘You (pl.) sat down.’

(24b) **Qà dà Múusá qírí!**    ≠    **Qá dà Múusá qírí.**  
       2PL<sup>L</sup> TR Moussa call        2PL TR Moussa call  
       ‘Call Moussa! (pl.)’        ‘You (pl.) called Moussa.’

## 10. Replacive morphotonemes in the inflection of numerals

In Soninke, numerals divide into three subsets with respect to the way they combine with the nouns they modify:

- **báané** ‘one’ occurs as the second component of nominal compounds, exactly like attributive adjectives (for example, in **kitàabì-báané** ‘one book’, **kitàabè** ‘book’ is in the non-autonomous form **kitàabì-**)
- some other numerals behave like genitival modifiers (they precede the noun, and the noun is in the construct form, marked by a morphotoneme LH, as in **tánpíllé kitàabé** ‘twenty books’, to be compared with **kitàabè** ‘book’; in this construction, nouns are in the singular),
- others behave with nouns in a specific way.

This latter subset includes **hílló** ‘two’, **sikkó** ‘three’, **nàxató** ‘four’, **kàràgó** ‘five’, **tùnmú** ‘six’, **ñéru** ‘seven’, **ségú** ‘eight’, **kàbú** ‘nine’, and **tánmú** ‘ten’. In isolation, the numerals of this subset may have <H> or <LH> tonal melodies, and they may end with **o** or **u**. As noun modifiers, they follow their head, and this construction requires the plural form of the noun and a special form of the numeral, characterized by an **i** ending and an all-L melody.

(25) **sélinṅé** ‘chicken’ + **sikkó** ‘three’ → **sélinṅú sikkì** ‘three chickens’  
       **lémíné** ‘child’ + **tánmú** ‘ten’ → **lémúnú tàmì** ‘ten children’  
       **yàxàré** ‘woman’ + **nàxató** ‘four’ → **yàxàrú nàxàtì** ‘four women’  
       **kitàabè** ‘book’ + **ségú** ‘eight’ → **kitàabù sègì** ‘eight books’

<sup>4</sup> In the singular, the distinction between the imperative and the completive aspect with a second person subject is ensured by the fact that the subject slot is left empty in the imperative singular, whereas in independent clauses expressing any other TAM value, the presence of an overt subject is a constraint that suffers no exception.

## 11. Conclusion

In this presentation, I have tried to show that Kingi Soninke, like Kaedi Soninke as described by Ousmane Moussa Diagana, has a rich system of tonal inflection involving replacive morphotonemes. The pervasiveness of syntactically-driven tonal alternations is probably the reason why the tonal nature of Soninke was recognized only relatively recently in the history of Mande linguistics. From superficial observation, it would seem that Soninke prosody is characterized by an instability hardly compatible with the hypothesis of a tonal system. In fact, the question of the exact nature of the prosodic system of Western Soninke varieties remains an open question, but in Kingi Soninke, whose tonal system can be assumed to be substantially representative of Eastern Soninke varieties, the only zone of instability is the choice between H and HL melodies for the indefinite form of nouns whose definite form has a HL melody. All other variations obey strict rules involving in particular the systematic use of replacive morphotonemes in the inflection of nouns, verbs, adjectives, pronouns, and numerals.

## Abbreviations

CONC: concessive, CPL: completive, D: definite, DEM: demonstrative, DETR: detransitivization marker, EQCOP: equative copula, FOC: focus marker, GER: gerundive, H: high, INCPL: incompletive, L: low, NEG: negative, OBLG: obligative, PL: plural, POSTP: multifunction postposition, PROJ: projective, REFL: reflexive, SBD: subordination marker, SBJ: subject marker, SG: singular, TR: transitivity marker

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