

## A sketch of Ganja (Balant)

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### 1. Introduction

#### 1.1. The language and its speakers

Balant (**f-jää**) is spoken by approximately half a million speakers in Senegal and Guinea Bissau. The Balant call themselves **bì-jää** (singular **(h)à-jää**). The term ‘Balant’ (Mandinka **bàlàntá**, etc.) is the name given to them by their neighbours. Popular etymology explains this designation as derived from Mandinka **bàlántà**, completive form of the verb **bàláŋ** ‘oppose, resist’, which fits well with the stereotyped image of the Balant. It seems however more reasonable to consider ‘Balant’ as a distorted form of Balant **bìláantè** ‘men’.

Ganja (**f-gáñjà**), spoken by approximately 100,000 speakers, is a Balant variety located in Senegal, in the southern part of the administrative region of Sédhiou (Balantacounda and Boudhié).

The status of Balant varieties as dialects of a single language or distinct (although closely related) languages is unclear, but as already argued by Wilson (1961), at least Ganja differs enough from the other varieties to be considered a separate language. The specificity of Ganja does not manifest itself in the noun class system, which seems to be rather uniform across Balant varieties, but the verbal system of Ganja is very different from that of Kentohe, the other Balant variety for which some documentation is available.

#### 1.2. Genetic affiliation

Traditionally, Balant is classified as one of the three dialect clusters that constitute the Bak group of languages, alongside with Joola and Mankanya-Manjaku-Pepel.

#### 1.3. Language contact

According to oral traditions, the territory where the Ganja live now is a former Ñun territory that was conquered by the Balant in the wake of wars, and Ganja was the name originally used by the Balant to designate the Ñun (N’Diaye-Corréard 1970). The fact that the Ganja, in contrast to the other Balant, have family names considered as typically Ñun (**Biyáay**, **Jàatá**, **Mànsâl**, **Sàajó**, **Màanî**), can be viewed as a result of the interaction between the Balant invaders and the Ñun. However, the

Ñun language has completely disappeared from Balantacounda and Boudhié, and I am aware of no obvious trace of a Ñun substratum that might have contributed to the differentiation between Ganja and the other Balant varieties.

The main contact language for the Ganja is Mandinka. A tendency for young speakers to abandon Ganja in favor of Mandinka, at least in some Ganja villages, was already noted by N'Diaye-Corréard (1970), and this tendency is reinforced by the spreading of Islam, since the Balant language tends to be associated with the traditional Balant culture. Mandinka borrowings are pervasive in the lexicon of Ganja. Like the other languages of Senegal, Ganja also undergoes some influence from Wolof and French.

### 1.5. Bibliographic information

Ganja is an under-documented language. The only reliable sources on aspects of the phonology and morphosyntax of Ganja are N'diaye-Corréard (1970), N'diaye-Corréard (1973), and Biaye (2012). Contrary to her claims, Fudeman (1999) did not describe a particular variety of Ganja, but only the highly deteriorated idiolect of a semi-speaker. As regards Gomes (2008), her attempt to describe the verbal system of Ganja is full of errors due both to the very bad quality of the transcriptions, and to frequent approximations or errors in the translation of the data.

No comprehensive description of Ganja is available so far, but this gap will be filled soon by the publication of Creissels and Biaye (to appear 2015/2016), and the reader is referred to this work for more details on the phonology and morphosyntax of Ganja.

As regards the other Balant varieties, the main sources on Kentohe grammar and lexicon are Wilson (1961), Doneux (1984a) and Doneux (1984b).

## 2. Phonology

### 2.1. Consonants

#### 2.1.1. *The inventory*

The consonant phonemes of Balant Ganja are summarized in the following chart.

	lab.	interd.	alveol.		palat.	vel.	lab. vel.	glott.
			voiced	voiceless				
plosives	<b>b</b>		<b>d</b>	<b>t</b>	<b>j</b>	<b>g</b>	<b>gb</b>	
prenasalized plosives	<b>mb</b>		<b>nd</b>	<b>nt</b>	<b>ñj</b>	<b>ŋg</b>	<b>ŋgb</b>	
fricatives	<b>f</b>	<b>θ</b>	<b>s</b>				<b>h</b>	
prenasalized fricatives	<b>mf</b>	<b>nθ</b>	<b>ns</b>					
nasals	<b>m</b>		<b>n</b>		<b>ñ</b>	<b>ŋ</b>		
lateral			<b>l</b>					
vibrant			<b>r</b>					
approximants					<b>y</b>		<b>w</b>	

The following consonants are characterized by a particular behavior:

- **b** and **g** immediately followed by a nasal or by a prenasalized obstruent are converted into **m** and **ŋ** respectively;
- **h** has a marked tendency to be elided before unrounded vowels, and to be converted into **w** before rounded vowels;
- when immediately followed by another consonant, **s** in coda position is in principle converted into **h**, but this **h** tends to be replaced by a copy of the following consonant.

### *2.1.2. The voiced vs. voiceless distinction*

The voiced vs. voiceless distinction is relevant for alveolar plosives only. Phonetically, each of the other obstruents has a voiced and a voiceless allophone, depending on the context, but the transcription used in this chapter ignores this variation: the plosives are represented by the letters indicating in principle voiced realizations, and the fricatives by the letter indicating in principle voiceless realization. The justification for this convention is that the voiced allophone has a wider distribution for plosives than for fricatives; in particular, in word-initial position immediately followed by a vowel, plosives are represented by the voiced allophone, and fricatives by the voiceless one.

### *2.1.3. Prenasalization and the underspecified nasal N*

The fact that many nouns have prenasalized initials without any possibility to isolate morphologically the nasal element is consistent with the recognition of prenasalized consonants as phonemes, since in general, initial consonant clusters not interrupted by a morphological boundary are not possible in Ganja. However, there are also many nouns for which prenasalization can be analyzed as the outcome of a morphological process, and in the verbal system, prenasalization is never lexical, and regularly marks the incomplete aspect. Such facts can be accounted for by positing an abstract phoneme (or morphophoneme) **N** defined as a nasal not specified for its place of articulation, whose manifestations can be described as follows:

- immediately followed by an obstruent other than **h**, **N** is realized as a prenasalization;
- ‘**N** + nasal’ is realized as a strong/long nasal;
- **N** followed by **l** or **r** loses its nasal feature, hence strong/long realizations **ll** and **rr** respectively;
- **N** followed by **y**, **w** or **h** surfaces as **ŋ**.

## 2.2. Vowels

### 2.2.1. The inventory

Ganja has the following inventory of vowels:

	short		long	
	front	back	front	back
close +ATR	<b>i</b>	<b>u</b>	<b>i:</b>	<b>u:</b>
close -ATR	<b>ɪ</b>	<b>ʊ</b>	<b>ɪ:</b>	<b>ʊ:</b>
mid +ATR	<b>e</b>	<b>o</b>	<b>e:</b>	<b>o:</b>
mid -ATR	<b>ɛ</b>	<b>ɔ</b>	<b>ɛ:</b>	<b>ɔ:</b>
open	<b>a</b>		<b>a:</b>	

No data is available about the precise phonetic nature of the  $\pm$ ATR contrast. This term must consequently be understood as just a phonological label conventionally used for a contrast involved in a particular type of vowel harmony.

Long vowels are transcribed by doubled letters. Nasality is not a relevant feature of vowels, but the nasalization of vowels immediately following a nasal consonant is perceivable.

### 2.2.2. Vowel harmony

Vowel harmony in Ganja can be described by dividing the vowels other than **a** (whose particular behavior will be described later) into two subsets. +ATR is the marked value of the  $\pm$ ATR feature, i.e. the only one specified in underlying representations, and -ATR is the default value taken by the vowels that are not specified as +ATR after the rules that spread the +ATR value have operated. In words that include a +ATR vowel and do not include any **a**, +ATR spreads to the whole word and may spread further to clitics.

The vowels of most affixes are underlyingly -ATR, which may suggest another analysis, according to which affixes would copy the  $\pm$ ATR feature from stems, but some affixes include a +ATR vowel imposing the +ATR value to the vowels of the stem to which they attach:

**rɛf** ‘fan (V)’ + **-ti** (instrument nominalization) → **rɛf-tí** ‘fan (N)’

As regards the particular behavior of **a**, words like **sùmàaré** ‘crane’ and **gì-làdí** ‘neck’ (where **gì-** represents an underlyingly -ATR prefix) suggest that **a** blocks the rightward spreading of the +ATR value but is transparent to its leftward spreading. However, the rule is a bit more complex, since the transparency of **a** to the leftward spreading of +ATR is conditioned by the absence of a morphological boundary between **a** and the vowel from which +ATR spreads.

In addition to ATR harmony, some affixes and clitics including close vowels are affected by roundedness harmony, which is however always optional. For example,

**bì-fúlá** ‘girls’ (where **bì-** is the +ATR variant of the class prefix **bì-**) can optionally be realized as **bù-fúlá**.

### 2.3. Syllable structure

In Ganja, the canonical syllable structure is  $C_1V(C_2)$ , with a single consonant in onset as well as coda position. Apart from prefixes consisting of a vowel (for example the 2nd person singular prefix **ó-**), empty onsets that do not result from the elision of an initial **h** are exceptional.

An interesting particularity of Ganja is that prefixation is responsible for the existence of initial consonant clusters that contradict the regularities observed in words including no prefix. Ganja has two class prefixes consisting of a consonant only (**b-** and **g-**), and no epenthetic vowel is inserted between them and the initial consonants of noun stems, which means that, in principle, consonant clusters with **b** and **g** as their first element and any consonant as their second element can occur at the beginning of words including the prefixes in question. However, the following transformations can be observed:

**f + h** → **f:**  
**b + h** → **p:**  
**g + h** → **k:**  
**f + b** → **p:**  
**g + j** → **c:**  
**b + gb** → **kp:**  
**g + gb** → **kp:**

Note also that **bb** and **gg** sequences resulting from prefixation are realized [**p:**] and [**k:**] respectively. Since **b** and **g** in word initial position are represented by their voiced allophone, this means that, although non-phonemic, the voiced vs. voiceless distinction contributes to the contrast between **bV** and **b-bV** (as in **b-bàánà** [p:àná:nà] ‘banana-tree’ vs. **Ø-bàánà** [bàná:nà] ‘banana-trees’) or **gV** and **g-gV**.

### 2.4. Tone

As evidenced by minimal pairs such as **sádá** ‘sacrifice’ vs. **sàdá** ‘calf’ or **áfúlá** ‘girl’ vs. **àfúlà** ‘Fula’, Ganja has a tone system relying on a H vs. L contrast. There are also a rising and a falling tone, analyzable as LH and HL sequences associated to single syllables, and a downstep analyzable as manifesting the presence of a floating L tone. The floating L tones may result from phonological processes, as illustrated in (1b), or be part of the underlying form of some morphemes (for example the class prefixes **b-** and **g-**).

Some variation can be observed in the tonal realizations, due to the following rules that tend to operate in some conditions, but are always optional, as illustrated in (1):

$B\boxed{H}H \rightarrow B\boxed{B}H$

HBB → H<sup>1</sup>H<sup>2</sup>B  
 HBH → H<sup>1</sup>H<sup>2</sup>H

(1a) í-ím-mà-dù-sɔɔg ~ í-ím-mà-dù-sɔɔg  
 1SG-NEG-CLha-INEV-appeler 1SG-NEG-CLha-INEV-appeler  
 ‘I was not obliged to call him.’

(1b) À-fúlá mà bɔɔŋj-ò. ~ A-fúlá mà 'bɔɔŋj-ò.  
 CLha-fille DEF être\_beau-FV CLha-fille DEF être\_beau-FV  
 ‘The girl is beautiful.’

## 2.5. Liaison

A striking characteristic of connected speech in Ganja is the pervasiveness of sandhi phenomena at the junction between successive words (liaison). The precise conditions in which liaison must/can operate have not been established, but when it operates:

- if the second word begins with a consonant, the first word invariably ends with a close vowel, whatever its ending in the absence of liaison;
- if the second word begins with a vowel, a long vowel is observed at the junction between the two words, even if the first word has no final vowel.

(2a) b-d̥ɪn + `b-súm-è → bd̥i:n̥<sup>1</sup>psúmè  
 CLb-milk CLb-be\_good-RESULT  
 ‘good milk’

(2b) f-ndéla + `f-jɔɔlè → vndéli<sup>1</sup>fcɔ:lè  
 CLf-wind CLf-cool  
 ‘cool wind’

(2c) Ø-mfɔl + ù-lóodè → mvól̥<sup>1</sup>lɔ:dè  
 CLha-frog CLu-dead  
 ‘dead frog’

(2d) Ø-bítí + ù-mɔɔn → bit̥<sup>1</sup>mɔ:n  
 CLu-dog CLu-black  
 ‘black dog’

## 3. Canonical predication and major lexical categories

### 3.1. Canonical verbal predication

The structure of canonical verbal predication in Ganja can be summarized as SVOX (S = subject, V = verb, O = object, X = oblique). The subject and the object share

the absence of any flagging, and the ability to be indexed by bound forms attached to the verb (indexes). However, they are indexed by distinct sets of indexes occupying distinct positions within the verb form (see 6.2). As evidenced by the phonological processes they undergo, subject and object indexes are morphologically bound to the verb, but they are not obligatory formatives of the verb form: syntactically, they are in complementary distribution with NPs occupying the syntactic slots S and O.

(3a) **F-lìmbírè f-jóólè mà gób-ù.**

CLf-citrus CLf-sweet DEF fall-FV

‘The orange fell down.’

(3b) **F-gób-ù.**

CLf- fall-FV

‘It fell down (the orange).’

(4a) **Mbáǵì-jêd f-lìmbírè f-jóólè mà!**

PROH-take CLf-citrus CLf-sweet DEF

‘Don’t take the orange!’

(4b) **Mbáǵì-f-jêd!**

PROH-CLf-take

‘Don’t take it (the orange)!’

Obliques differ from subjects and objects by their inability to be represented by indexes attached to the verb. They are standardly encoded as prepositional phrases. Among prepositions, the locative preposition **à** and the comitative-instrumental preposition **ngì** are particularly frequent. Other simplex prepositions include **bíthí** ‘toward’, **díinà** ‘more/rather than’ (borrowed from Mandinka), **fó ~ fóndí** ‘except’ (borrowed from Mandinka), **gàntígì** ‘without’, **gìndíumbá** ‘toward’, **hân** ‘until’, **ñjãal** ‘like’, and **títí** ‘since’.

Ganja has double object constructions in which the two objects can be represented by the same object indexes as the single object of monotransitive constructions. In double object constructions, the relative order of the object NPs is free, but if both objects are indexed, the index representing the recipient or beneficiary obligatorily precedes the index representing the theme.

(5a) **Ŋ-gáandâ b-òǵó mà Sáajó.**

1SG-sell CLb-millet DEF Sadio

‘I sold the millet to Sadio.’

(5b) **Ŋ-gáandâ Sáajó b-òǵó mà.**

1SG-sell Sadio CLb-millet DEF

same meaning as (a)

- (5c) **ŋ-gáandâ-bí Sáajó.**  
1SG-sell-CLb      Sadio  
'I sold it to Sadio.'
- (5d) **ŋ-gáandá-mà b-ògó mà.**  
1SG-sell-CLha      CLb-millet      DEF  
'I sold the millet to him.'
- (5e) **ŋ-gáandá-mà-bí.** vs. \* **ŋ-gáandâ-bí-mà.**  
1SG-sell-CLha-CLb  
'I sold it to him.'

Tritransitive constructions are not attested with simplex verbs, but may result from valency increasing operations (see 7.3.2).

### 3.2. Nouns

Nouns are characterized by their ability to head noun phrases occupying the S or O slot in canonical verbal predication, and by an inflection consisting of prefixes (class membership markers) that characterize them as potential agreement controllers in the class agreement system (see 5.2).

### 3.3. Verbs

Verbal lexemes are characterized by an inflectional system generating forms able to occupy the V slot in canonical verbal predication (see 6.1).

## 4. Constructional morphology

Two general characteristics of Ganja constructional morphology are that (a) compounding is not attested as a regular word-formation process, and (b) inflectional class assignment fulfills functions typically fulfilled by constructional morphology in the languages of the world, both in the nominal system (class alternations) and in the verbal system (voice alternations).

### 4.1. The formation of nominal lexemes

In Ganja, class alternations fulfill functions commonly fulfilled by N-to-N derivation in the languages of the world (see 5.2.3), but there is no derivational affix that could be used to form nouns from other nouns.

The derivation of nouns from verbs involves minimally the assignment of a noun class to the derived noun and the assignment of a tone pattern, since verbal lexemes do not have inherent tone. It may also involve prenasalization of the initial (analyzable as the prefixation of N-) and the addition of derivational suffixes.



As illustrated in (6), there is no uniformity in the formation of event nouns, which in particular may be found in different classes, in an apparently unpredictable way.

- (6a) **gì-bàab-á** < **baab** ‘approach’  
**gì-ηgúul** < **gool** ‘empty’  
**gì-ndùf-í** < **dof** ‘raise’

- (6b) **g-béenθ-è** < **béenθ** ‘sharpen’  
**g-dóɔŋ** < **dɔɔŋ** ‘follow’

- (6c) **b-băay** < **baay** ‘play’

In Ganja, manner and result nouns derived from verbs are often distinct from the corresponding event nouns. Most of the time (but there are exceptions), they belong to class B and their stem results from the mere adjunction of a H tone to the verbal lexeme (as for example **b-fót** ‘way of walking’ < **fot** ‘walk’).

The other types of deverbal nouns are agent nouns (which, as illustrated in (7), all belong to the class pairing HA–BI, but show no uniformity in other aspects of their formation), instrument nouns (which as illustrated in (8) are formed by suffixing **-í** or **-tí** to the L-toned verbal lexeme and may be assigned to class pairings F–G or GI–Ø), and place nouns (which, as illustrated in (9), all belong to class pairing GI–Ø, but show no uniformity in other aspects of their formation).

- (7) **à-ríb** pl. **bì-ríb** ‘singer’ < **rɪb**  
**à-yêem** pl. **bì-yêem** ‘thief’ < **yɛem**  
**à-ndàant-í** pl. **bì-ndàant-í** ‘wrestler’ < **daanta**  
**à-ndét-ì** pl. **bì-ndét-ì** ‘runner’ < **det**  
**à-nsùg-té** pl. **bì-nsùg-té** ‘tailor’ < **sug**

- (8) **f-ròt-tí** pl. **g-ròt-tí** ‘object used to beat’ < **rɔs**  
**gì-lìŋ-tí** pl. **Ø-lìŋ-tí** ‘object used to cover’ < **liŋ**  
**f-wòs-í** pl. **g-wòs-í** ‘object used to clean’ < **wɔsa**

- (9) **gì-dáantá-lè** pl. **Ø-dáantá-lè** ‘arena’ < **daanta**  
**gì-fáad-ántè** pl. **Ø-fáad-ántè** ‘forge’ < **faad**

#### 4.2. The formation of verbal lexemes

The formation of verbs from nouns is very marginal. There are a few verbs such as **buuñat** ‘treat with respect and honor’, analyzable as derived form the corresponding noun **bùuñâ** ‘reward’, but interestingly, such N/V pairs have been borrowed from Mandinka, and the **-t** derivational suffix that can be recognized in a strictly synchronic analysis of Ganja results from the reanalysis of an inflectional suffix of Mandinka verbs (**-tá** ‘completive’).

Iterative verbs can be formed by suffixation or reduplication, and an intriguing aspect of Ganja word formation is that exactly the same morphological operations

are available to derive causative verbs: **sub-ur** is the iterative form of **sub** ‘cut’, whereas **gbut-ur** is the causative form of **gbut** ‘be contiguous’; similarly, **θiθ-θiir** is the iterative form of **θiir** ‘write’, whereas **bab-baay** is the causative form of **baay** ‘play’.

Ganja also has a dedicated causative suffix **-Vt** (as in **duul-ut** ‘make small’ < **duul** ‘be/become small’), an applicative suffix **-Vd** (as in **yaaθ-ad** ‘work for someone’ < **yaaθ** ‘work’), a mediopassive suffix **-(V)l** (as in **wubt-ul.e** ‘open (intr.), be opened’ < **wubut** ‘open (tr.)’, and several reciprocal suffixes: **-nd**, **-d**, **-und**, **-dund**, **-ndund** (as in **sum-nd.e** ‘greet each other’ < **sum** ‘greet’).

There are also about ten transitive verbs with an antipassive form. Five of these antipassive forms involve a derivational suffix identical to the causative suffix **-Vt**, but they do not belong to the same inflectional class as causative derivatives. The other five are morphologically identical to reciprocal or mediopassive derivatives.

### 4.3. The formation of adjectival lexemes

There are two productive suffixes deriving adjectives from verbs: **-è ~ -nè** derives adjectives from intransitive verbs (as in **súm-è** ‘good’ < **sum** ‘be/become good’ or **díŋm-è** ‘short’ < **dígum** ‘be/become short’), whereas **-áθ ~ -náθ** derives adjectives from transitive verbs (as in **lòt-áθ** ‘cooked’ < **lòt** ‘cook’).

## 5. The nominal system

### 5.1. NP structure

With the only exception of the negative determiner **ân** (which precedes the noun, as in **ân à-nîn** ‘no woman’), noun modifiers follow the noun they modify. Nouns not accompanied by any determiner have two possible readings: specific indefinite, as in (10a), or generic, as in (10b).

(10a) **θòubó dús ándòmbó.**  
 (CLu)mouse pass here  
 ‘A mouse has been here.’

(10b) **À-jäa ân-nâŋ b-déεŋà.**  
 (CLha)-Balant NEG-like CLb-disregard  
 ‘Balant people don’t like being despised.’

Noun modifiers divide into those expressing class agreement with their head and those that do not show class variation. The (types of) modifiers that do not express class agreement are as follows:

- **ân** (negative determiner)
- the definite marker **mà**
- the anaphoric marker **dágát** ‘aforementioned’

- **bìsámá** ‘so-and-so’
- genitival modifiers
- relative clauses
- part of the numerals

## 5.2. Noun class system

### 5.2.1. The inventory of classes

Ganja has an inventory of seven class prefixes for nouns (**à-**, **bì-**, **b-**, **gì-**, **f-**, **Ø-**, and **g-**), but noun forms divide into twelve subsets according to the relationship between their prefix and the agreement prefixes they trigger as class agreement controllers. However, seven of these subsets (classes HA, BI, B, GI, F, U, and G) can be analyzed as primary classes straightforwardly associated to one of the seven noun prefixes each, and characterized by a maximum degree of similarity between noun prefixes and agreement prefixes, whereas the other five can be analyzed as hybrid classes in which (part of) the agreement prefixes are not those expected from the class prefix of nouns. The five hybrid classes are HA/U, U/HA, B/HA, G/BI, and GI/BI, where the notation X/Y means that nouns have the same prefix as in the primary class X, but (some of) the agreement prefixes are those of the primary class Y.

Hybrid classes always have the human singular class HA or the human plural class BI as one of their two components. The nouns found in hybrid classes are a minority of human nouns that do not belong to the human classes HA–BI, and all non-human animate nouns.

The following chart summarizes agreement in the seven primary classes:<sup>1</sup>

	1	2	3	4	5	6
HA	<b>à-</b>	<b>à-</b>	<b>h-</b>	<b>hí</b>	<b>à-</b>	<b>-mà ~ -hí</b>
BI	<b>bì-</b>	<b>bì-</b>	<b>bìg-</b> ~ <b>b- ... -gV</b>	<b>bá</b>	<b>bì-</b>	<b>-bá</b>
B	<b>b-</b>	<b>b-</b>	<b>b-</b>	<b>bí</b>	<b>b-</b>	<b>-bí</b>
GI	<b>gì-</b>	<b>gì-</b>	<b>g-</b>	<b>gí</b>	<b>gì-</b>	<b>-gí</b>
F	<b>f-</b>	<b>f-</b>	<b>f-</b>	<b>fí</b>	<b>f-</b>	<b>-fí</b>
U	<b>Ø</b>	<b>ù-</b>	<b>w-</b>	<b>wí</b>	<b>ù-</b>	<b>-wí</b>
G	<b>g-</b>	<b>g-</b>	<b>g-</b>	<b>gí</b>	<b>g-</b>	<b>-gí</b>

1: noun prefix

2: agreement prefix for adnominals whose stem begins with a consonant

3: agreement prefix for adnominals whose stem begins with a vowel

4: class pronoun

5: subject index

6: object index

<sup>1</sup> In case of phonological variations conditioned by the context, this chart gives only the allomorph analyzable as reflecting the underlying form most directly.

### 5.2.2. Number and class pairings

The singular vs. plural distinction is encoded by class alternations. Leaving apart a few pairings that are attested by one or two nouns each, the inventory of the possible pairings of singular and plural classes is as follows:

(a) two pairings including exclusively human nouns, among which HA–BI:

HA–BI	<b>à-láantè</b>	pl. <b>bì-láantè</b>	‘man’
U/HA–BI	<b>Ø-fàafá</b>	pl. <b>bì-fàafá</b>	‘father’

(Note that human nouns overwhelmingly belong to the HA–BI pairing)

(b) a pairing including human nouns and non-human animate nouns:

U/HA–G/BI	<b>Ø-mbùutá</b>	pl. <b>ɲ-mbùutá</b>	‘child’
	<b>Ø-dǎal</b>	pl. <b>g-dǎal</b>	‘cat’

(c) two pairings including exclusively non-human animate nouns:

U/HA–GI/BI	<b>Ø-ɲgùbúr</b>	pl. <b>gì-ɲgùbúr</b>	‘tortoise’
HA/U–GI/BI	<b>à-sálà</b>	pl. <b>gì-sálà</b>	‘fly’

(d) four pairings including exclusively inanimate nouns:

GI–U	<b>gì-làdí</b>	pl. <b>Ø-làdí</b>	‘neck’
B–U	<b>b-tá</b>	pl. <b>Ø-tá</b>	‘tree’
F–G	<b>f-bàagé</b>	pl. <b>g-bàagé</b>	‘hat’
U–G	<b>Ø-mbánjì</b>	pl. <b>ɲ-mbánjì</b>	‘knife’

Note that:

(a) With some nouns, class U is a singular class, and the corresponding plural is in class G, whereas with some other nouns, the same class U (with the same zero prefix for nouns and exactly the same agreement markers) is a plural class, and the corresponding singular is in class GI or in class B.

(b) In the subsystem of primary classes, **gì-** ~ **gì-** as a noun prefix is a singular prefix, whereas in the subsystem of hybrid classes, **gì-** ~ **gì-** is a plural prefix.

### 5.2.3. Other class alternations

The following class alternations are fully productive in Ganja:

- tree names belonging to the B–U pairing correspond to fruit names belonging to the F–G pairing (**m-máɲgù** ‘mango-tree’ pl. **Ø-máɲgù** / **f-máɲgù** ‘mango’ pl. **ɲ-máɲgù**);

- ethnonyms belonging to the HA–BI pairing correspond to glosonyms belonging to class F (**à-jǎa** ‘Balant’ pl. **bì-jǎa** / **f-jǎa** ‘the Balant language’);
- class GI assignment of nominal lexemes referring to persons expresses abstraction (**à-nîn** ‘woman’ pl. **bì-nîn** / **gì-nîn** ‘femininity’);
- class B assignment of nominal lexemes referring to concrete entities expresses ‘a particular type of’ (**à-nîn** ‘woman’ pl. **bì-nîn** / **m-nîn** ‘kind of woman’).

There are other semantic distinctions occasionally expressed by class alternations, which must be viewed as more or less lexicalized, and are sometimes quite isolated in the lexicon (as for example **gì-làdí** ‘neck’ / **f-làdí** ‘voice’). In contrast to other Atlantic languages, Ganja has no productive class alternation expressing diminutive or augmentative.

### 5.3. Adjectives

Noun modifiers expressing typically adjectival semantics are included in a wider class of adnominals that agree in class with the noun they modify and show class agreement prefixes that are identical to noun prefixes, with the only exception of class U, in which the prefix of nouns is  $\emptyset$ -, and the prefix of adnominals is  $\grave{o}$ -. The agreement of attributive adjectives is illustrated in (11) with **-ndân** ‘big’.

(11)	<b>à-ndàantí</b>	<b>à-ndân</b>	‘big wrestler’
	<b>bì-ndàantí</b>	<b>bì-ndân</b>	‘big wrestlers’
	<b>gì-gbél</b>	<b>gì-ndân</b>	‘big spoon’
	$\emptyset$ -gbél	$\grave{o}$ -ndân	‘big spoons’
	<b>b-sǎay</b>	$\acute{m}$ -ndân	‘big silk-cotton tree’
	$\emptyset$ -sǎay	$\grave{o}$ -ndân	‘big silk-cotton trees’
	<b>f-dùŋgí</b>	$\acute{f}$ -ndân	‘big pot’
	<b>g-dùŋgí</b>	$\acute{\eta}$ -ndân	‘big pots’
	$\emptyset$ -bálá	$\grave{o}$ -ndân	‘big xylophone’
	<b>g-bálá</b>	$\acute{\eta}$ -ndân	‘big xylophones’

The properties expressed by adjectives can be predicated, either by combining the adjective with the verb **gi** ‘be’, or by means of the completive aspect of a cognate verb.

The interrogative corresponding to attributive adjectives is **-wíŋ** ‘which kind of?’, which expresses class agreement like adjectives. Other adnominals agreeing with their head like adjectives include the numerals that agree in class (see 5.4) and the quantity words **-déemè** ‘how much?, how many?’, **-mbúŋ** ‘much, many’, and **-ndùbá** ‘whole, all’.

### 5.4. Numerals

Numbers from one to ten have a class prefix expressing agreement with a noun, with the only exception of six and seven. When counting without reference to a particular noun, a form including no overt prefix (the ‘absolute’ form) is used:

CL- <b>hóda</b>	‘one’	abs. <b>bóodíbo</b>
~ CL- <b>wóda</b>		
CL- <b>sìbí</b>	‘two’	abs. <b>sùbí</b>
CL- <b>hàbí</b>	‘three’	abs. <b>yàabí</b>
~ CL- <b>yàbí</b>		
CL- <b>tàllá</b>	‘four’	abs. <b>tàllá</b>
CL- <b>jũf</b> <sup>2</sup>	‘five’	abs. <b>jũf</b>
<b>fáaj</b>	‘six’	
<b>fáajîngóda</b> <sup>3</sup>	‘seven’	
CL- <b>táhtàllà</b>	‘eight’	abs. <b>táhtàllà</b>
~ CL- <b>tántàllà</b>		~ <b>tántàllà</b>
~ CL- <b>táttàllà</b>		~ <b>táttàllà</b>
CL- <b>jíntàllá</b>	‘nine’	abs. <b>jíntàllá</b>
CL- <b>jímmîn</b>	‘ten’	abs. <b>jímmîn</b>

Decades from 20 to 90 are invariable:

<b>ñ-jímmîn-sìbí</b>	‘twenty’
<b>ñ-jímmîn-hàbí</b>	‘thirty’
<b>ñ-jímmîn-tàllá</b>	‘forty’
<b>ñ-jímmîn-jũf</b>	‘fifty’
<b>ñ-jímmîn-fáaj</b>	‘sixty’
<b>ñ-jímmîn-fáajîngóda</b>	‘seventy’
<b>ñ-jímmîn-táhtàllà</b>	‘eighty’
<b>ñ-jímmîn-jíntàllá</b>	‘ninety’

Hundreds and thousands are formed by means of **gèmé** pl. **g-gèmé** ‘hundred’ and **wílí** pl. **g-wílí** ‘thousand’ (probably borrowed from Mandinka), which behave grammatically as class U nouns with a regular plural in class G.

As illustrated by (12), the terms for more complex numbers reflect a decimal decomposition, in which **ngì** ‘with’ expresses addition.

(12a) **g-gèmé**    **g-sìbí**    **ngì**    **CL-jímmîn**    **ngì**    **fáaj**  
 CLg-hundred    CLg-two    with    CL-ten    with    six  
 ‘216’

(12b) **g-wílí**    **g-tàllá**    **ngì**    **gèmé**    **ngì**    **CL-jímmîn**  
 CLg-thousand    CLg-four    with    hundred    with    CL-ten  
 ‘4110’

The following types of words can be formed from numerals:

- iterative adverbs, like **n-sìbí** ‘twice’ < **-sìbí** ‘two’;

<sup>2</sup> Probably cognate with **f-jíf** ‘hand’.

<sup>3</sup> Contraction of **fáaj ngì -wóda** ‘six and one’.

- ordinal adjectives, like **CL-n-síbi-l** ‘second’ < **-sìbí** ‘two’;
- ordinal adverbs, like **n-síbi-l** ‘for the second time’ < **-sìbí** ‘two’.

### 5.5. Demonstratives and other determiners

Ganja has the following inventory of demonstratives:

<b>-ó</b>	close to the speaker, non-emphatic
<b>-ó-mbò</b>	close to the speaker, emphatic
<b>-é</b>	close to the addressee, non-emphatic
<b>-é-mbè</b>	close to the addressee, emphatic
<b>-é-lè</b>	far from the speech act participants, non-emphatic
<b>-é-mbé-lè</b>	far from the speech act participants, emphatic
<b>-é-léen</b>	very far from the speech act participants, non-emphatic
<b>-é-mbé-léen</b>	very far from the speech act participants, emphatic
<b>-á</b>	invisible, non-emphatic
<b>-á-mbà</b>	invisible, emphatic

The class BI forms include a class agreement marker **gì**, **gè** or **gà** in addition to the regular class prefix. Note that, contrary to regular class agreement markers, **gì** and **gè** have +ATR vowels.

<b>b-ó-gì</b>	close to the speaker, non-emphatic
<b>b-ó-mbó-gì</b>	close to the speaker, emphatic
<b>b-é-gè</b>	close to the addressee, non-emphatic
<b>b-é-mbé-gè</b>	close to the addressee, emphatic
<b>b-é-gé-lè</b>	far from the speech act participants, non-emphatic
<b>b-é-mbé-gè-lè</b>	far from the speech act participants, emphatic
<b>b-é-gé-léen</b>	very far from the speech act participants, non-emphatic
<b>b-é-mbé-gè-léen</b>	very far from the speech act participants, emphatic
<b>b-á-gà</b>	invisible, non-emphatic
<b>b-á-mbá-gà</b>	invisible, emphatic

Other determiners include the definite marker **mà** (invariable), the negative determiner **ân** (invariable), **dágát** ‘aforementioned’ (invariable), **bìsámá** ‘so-and-so’ (invariable), **-óllò** ‘a certain, another (known)’, **-óllà** ‘a certain, another (unknown)’, and the interrogative determiner **-úlà** ‘which one?’

### 5.6. The distributive form of nouns

Ganja nouns have a distributive form, in which the noun is reduplicated, and **-ôo** ‘every’ is suffixed to the first occurrence of the reduplicated noun, as in **gîlêer-ôo gî-lêer** ‘every pot’. Note that the ATR feature of **-ôo** spreads to the first occurrence of the reduplicated noun, but not to the second one.

### 5.6. Pronouns

The inventory of pronouns referring to speech act participants is as follows:

1 singular	<b>ńí</b>
2 singular	<b>hú</b>
1 plural	<b>báa</b>
inclusive	<b>bân</b>
2 plural	<b>băa</b>

The class pronouns are used to refer to entities for which the speaker assumes that the addressee is able to identify them from the mere mention of the class to which a noun designating them could belong. With the only exception of the irregular form of class BI, they consist of the stem **-í** and a class prefix:

class HA	<b>h-í</b>
class BI	<b>bá</b>
class B	<b>b-í</b>
class U	<b>w-í</b>
class GI	<b>g-í</b>
class F	<b>f-í</b>
class G	<b>g-í</b>

Ganja does not have distinct logophoric pronouns (or indexes).

### 5.7. Genitive and possessives

NPs in genitive function are introduced by a genitival linker that does not express class distinctions, but has two possible forms depending on the nature of the genitive NP: **ná** if the genitive NP is human singular – (13a), **ńí** if it is either non human or plural – (13b-d). the variant **ńí** has a reduced form **N**.

(13a) **b-gó ná mbùutá mà**  
 CLb-head GEN (CLu)child DEF  
 ‘the head of the child’

(13b) **b-gó ńí ‘mfôl mà**  
 CLb-head GEN (CLu)frog DEF  
 ‘the head of the frog’

(13c) **f-rây ńí ‘b-tá mà**  
 CLb-branch GEN (CLb)tree DEF  
 ‘the branch of the tree’



(13d) **bítí ní bì-dánà mà**  
 CLb-dog GEN (CLbi)hunter DEF  
 ‘the dog of the hunters’

Pronouns consisting of a stem **-ìná** (in combination with singular human possessors) or **-íní** (in combination with plural or non-human possessors) are used to represent a possessee whose identity is supposed to be retrievable from the context (‘that/those of ...’):

class HA **h-ìná/í**  
 class BI **bìg-ìná/í**  
 class B **b-ìná/í**  
 class U **w-ìná/í**  
 class GI **g-ìná/í**  
 class F **f-ìná/í**  
 class G **g-ìná/í**

Ganja has a series of possessive enclitics for 1st person singular, 2nd person singular, 1st person plural (exclusive), 2nd person plural, and class HA (human singular):

1 singular **dâ**  
 2 singular **dè**  
 1 plural **ɲgbàŋ**  
 2 plural **díɲ**  
 class HA **ní** or **mà**

For class HA, **mà**, homonymous with the definite marker **mà** (which probably results from the grammaticalization of possessive **mà**) is used only with **yâa** ‘mother’, **fâa** ‘father’, and **măam** (grand-father, grand-mother’).

For the inclusive person and classes other than HA, Ganja uses the personal/class pronoun preceded by the genitival linker in reduced form, as in **b-súm ɲ w-í** ‘its door’ (where the class U pronoun **w-í** substitutes for **hódì** ‘room’).

Ganja also has a paradigm of possessive pronouns consisting of a stem **-ìɲ-** or **-úɲ-**, a prefix expressing the class of the possessee, and a suffix expressing the person-number-class of the possessor:

1 singular **CL-úɲ-dâ**  
 2 singular **CL-úɲ-dè**  
  
 1 plural **CL-úɲ-gbàŋ**  
 inclusive **CL-úɲ-bân**  
 2 plural **CL-úɲ-díɲ**  
  
 class HA **CL-úɲ-dâ** or **CL-íllí**  
 class BI **CL-úɲ-bá**  
 class B **CL-úɲ-bí**



(15a) **Sám̀bà̀ ng̀ì Fàatú̀ bín-tè̀.**  
Samba avec Fatou venir-CTRP  
'Samba and Fatou came.'

(15b) **Sám̀bà̀ bín-tè̀ ng̀ì Fàatú̀.**  
Samba venir-CTRP avec Fatou  
'Samba came with Fatou.'

## 6. The verbal system

### 6.1. Verb inflection

Vowel harmony is essential in the delimitation of verb-forms, in particular as regards the distinction between synthetic verb forms consisting of a verbal stem and one or more inflectional affixes, and analytical verb forms consisting of an auxiliary and a non-finite verb form.

#### 6.1.1. Tonal properties of verbal lexemes

The verbal lexemes of Ganja have no inherent tone, and the tone of verb stems is entirely determined by the grammatical nature of the verb form. In finite verb forms, each affix has a tone of its own, but the stem invariably shows an all-H contour followed by a L element whose manifestation depends on the context: it may associate to the final vowel (in the precise sense that will be given to this term in 6.1.3), manifest its presence by a downstep, or be deleted.

#### 6.1.2. Inflectional affixes

Ganja verb forms may include the following inflectional affixes:

- subject indexes and object indexes (see 6.2),
- the incompletive marker **N**,
- the hypothetical marker **àtí** ~ **àC'**,
- the negative markers **átì** ~ **âC** and **mbágì**,
- the sequential marker **nán**,
- the backgrounding marker **nì**,
- the centripetal marker **tè**,
- the inevitability marker **dó**.

Among the inflectional affixes of verbs, the subject index, the incompletive marker, the hypothetical marker and the negative markers invariably precede the stem, and the subject index invariably occurs in the leftmost position. The object indexes, the sequential marker, the backgrounding marker, the centripetal marker and the unavailability marker are variable-position affixes, which in some tenses precede the stem, but follow it in some others.

Note that past is not an inflectional category of the verb in Ganja. There are two past markers, **gɛ́** (recent past) and **yɔ́** (remote past), but they cannot be analyzed as bound forms, since their vowels invariably remain –ATR, and they are not necessarily adjacent to the verb.

### 6.1.3. Inflectional classes

Ganja has three inflectional classes of verbs (or voices) manifested in the variation of the final vowel of verb stems. This system must probably be analyzed as historically residual, since voice distinctions (tend to) blur when inflectional suffixes attach to the verb stem, or when a verb form including no suffix is followed by another word with no pause intervening, due to the pervasiveness of the sandhi phenomena at word junction (see 2.5). However, they are (still) clearly apparent, and consistently realized, when verb forms including no inflectional suffix occur in clause-final position.

The three inflectional classes of verbs, arbitrarily labeled A, B, and C, are characterized by the following variations of the final vowel of verb stems, in which –∅ for class A, –ɛ for class B, and –ɪ for class C, can be analyzed as the default value found in all but four verb forms:

	A	B	C
completive positive	—ɔ	—ɔ	—ɪ
incompletive (positive and negative)	—ɪ	—ɛ	—ɪ
imperative positive	—ɪ	—ɔ	—ɪ
others	—∅	—ɛ	—ɪ

On the relationship between inflectional classes of verbs and valency, see 7.3.

## 6.2. Subject indexes and object indexes

The subject indexes and object indexes are bound forms expressing the same distinctions as the free pronouns presented in 5.6. The subject indexes vary as follows:

	before simple consonantal onset	before prenasalized onset or vowel
1 singular	<b>N-</b>	<b>í- ~ í-</b>
2 singular	<b>ú- ~ ú-</b>	<b>ú- ~ ú-</b>
1 plural	<b>bâ-</b>	<b>bâ-</b>
inclusive	<b>bân- ~ bá- ... -nà</b>	<b>bân- ~ bá- ... -nà</b>
2 plural	<b>bà-</b>	<b>bà-</b>
class HA	<b>à-</b>	<b>à-</b>
class BI	<b>bì- ~ bì- (~ bù- ~ bù-)</b>	<b>bì- ~ bì- (~ bù- ~ bù-)</b>
class B	<b>b- ~ m-</b>	<b>bì- ~ bì-</b>
class U	<b>ù- ~ ù-</b>	<b>wì- ~ wì-</b>

class GI	<b>gì-</b> ~ <b>gì-</b> (~ <b>gù-</b> ~ <b>gù-</b> )	<b>gì-</b> ~ <b>gì-</b> (~ <b>gù-</b> ~ <b>gù-</b> )
class F	<b>f-</b>	<b>fì-</b> ~ <b>fì-</b>
class G	<b>g-</b> ~ <b>ŋ-</b>	<b>gì-</b> ~ <b>gì-</b>

The object indexes vary as follows:

1 singular	<b>-ní</b> ~ <b>-ní</b>
2 singular	<b>-nà</b>
1 plural	<b>-báa</b>
inclusive	<b>-bân</b>
2 plural	<b>-bãa</b>
class HA	<b>-mà</b> ~ <b>-hí</b> ~ <b>-hí</b>
class BI	<b>-bá</b>
class B	<b>-bí</b> ~ <b>-bí</b> ~ <b>-b</b>
class U	<b>-wí</b> ~ <b>-wí</b> ~ <b>-w</b>
class GI	<b>-gí</b> ~ <b>-gí</b> ~ <b>-g</b>
class F	<b>-fí</b> ~ <b>-fí</b> ~ <b>-f</b>
class G	<b>-gí</b> ~ <b>-gí</b> ~ <b>-g</b>

The only variation whose conditioning is not purely phonological is the **-mà** vs. **-hí** ~ **-hí** variation for the object index of class HA. As illustrated in (16), the **-hí** ~ **-hí** variant is used if and only if the object index of class HA occupies the second position in a sequence of two object indexes.

(16a) **À-wún-mà Sáajó.**  
 CLha-give-CLha Sadio  
 ‘He gave it (the sheep) to Sadio.’

(16b) **À-wôn-ní-hí.**  
 CLha-give-1SG-CLha  
 ‘He gave it (the sheep) to me.’

### 6.3. TAM and negation markers

The following chart summarizes the contribution of TAM and negation markers to verb inflection. In the formulas given in the middle column, SI indicates the position of the subject index, and LEX indicates the position of the stem; the suspension points indicate the position occupied by variable-position affixes.<sup>4</sup> The final vowel of the stem for each of the three inflectional classes of verbs is given in the rightmost column.

<sup>4</sup> The relative ordering of variable-position affixes is OI-CTRP-BGR-OI-INEV, with two possible positions for object indexes: **mà** (class HA) and **nà** (2nd person singular) precede all the other variable-position affixes, whereas the other object indexes occupy the slot between BGR and INEV. In the sequential, the object affixes **mà** and **nà** and the centripetal marker precede the sequential marker, whereas the other variable-position affixes follow it.

completive positive	(SI) LEX ...	ʊ/ʊ/ɪ
completive negative	(SI) âC ... LEX	∅/ɛ/ɪ
subjunctive positive	(SI) LEX ...	∅/ɛ/ɪ
subjunctive negative	(SI) mbáǵì ... LEX	∅/ɛ/ɪ
imperative positive singular	LEX ...	ɪ/ʊ/ɪ
imperative positive plural	LEX nà ...	ɪ/ʊ/ɪ
imperative negative (singular) <sup>5</sup>	mbáǵì ... LEX	∅/ɛ/ɪ
incompletive positive	(SI) N LEX ...	ɪ/ɛ/ɪ
incompletive negative	(SI) átì N LEX ...	ɪ/ɛ/ɪ
hypothetical	(SI) àC' ... LEX	∅/ɛ/ɪ
sequential completive	(SI) LEX ... nán ...	
sequential incompletive	(SI) ... nán ... LEX	∅/ɛ/ɪ

## 6.4. Other inflectional categories of verbs

### 6.4.1. The centripetal marker

I designate as centripetal marker a variable-position affix **tè** (**t(ɪ)** in non-final position) whose centripetal meaning is obvious in combination with movement verbs, as in **à-jíig-ù** '(s)he went back' vs. **à-jíig-t-ù** '(s)he came back'. In combination with some other verbs at least, this marker seems to express aspectual rather than spatial meanings. However, this question calls for further investigation.

### 6.4.2. The backgrounding marker

In the completive aspect (but not in the incompletive), the verb form may include the backgrounding marker **nì**. This marker occurs in relative clauses and in wh-questions. However, in Ganja, contrary to functionally similar markers in other languages, NP focalization does not trigger the presence of the backgrounding marker.

### 6.4.3. The inevitability marker

The use of the inevitability marker **dú** is illustrated in (17).

(17a) **Bì-jíig-tì-dú.**  
 CLbi-go\_back-CTRP-INEV  
 'They were obliged to come back.'

(17b) **Í-ím-mà-dú-sǒǒg.**  
 1SG-NEG-CLha-INEV-call  
 'I was not obliged to call him.'

<sup>5</sup> Ganja has no specific form for the imperative negative singular, and uses the subjunctive negative as a substitute.

## 6.5. Event nouns and the progressive periphrasis

As already explained in 4.1, there is no obvious regularity in the formation of event nouns, which in particular may belong to any non-human class. Event nouns have no morphological or syntactic property distinguishing them from ordinary nouns (in particular, the object of the corresponding verb is converted into a genitival modifier of the event noun, as in (18a), and can be represented by a possessive, as in (18b)). Syntactically, the progressive periphrasis in which event nouns are involved is just a particular case of the use of **gi** ‘be’ with a complement consisting of an NP introduced by the locative preposition **à**.

- (18a) **Bì-nîn mà gî à g-gbúgè ní f-θàambé.**  
 CLbi-femme DEF be LOC CLg-plough.EvN GEN CLf-rice\_field  
 ‘The women are ploughing the rice-field.’  
 lit. ‘The women are in the ploughing of the rice-field.’

- (18b) **À-gî à gî-dàgá dâ.**  
 CLha-be LOC CLgi-plait.EvN POSS.1SG  
 ‘She is plaiting my hair.’  
 lit. ‘She is in my plaiting.’

## 6.6. The infinitive

Ganja has two verbal forms with a very specific distribution for which the label ‘infinitive’ can be used. None of the inflectional affixes described in 6.3 and 6.4 can attach to them, but they show no nominal characteristic either, and never occur in syntactic positions in which they would function as class agreement controllers. One of these two forms (arbitrarily designated as infinitive 1) is used exclusively as the complement of auxiliary verbs. It fully coincides with the default form of the verb stem in the inflected forms presented in 6.3: HL tone pattern and final vowel  $\emptyset$ ,  $\epsilon$ , or  $\iota$ , depending on the inflectional class to which the verb belongs. The infinitive 2 is used as the complement of some auxiliaries, and also in control constructions, in particular with the verbs **jangá** ‘be obliged to’ and **mada** ‘be able to’. For the verbs of class B, the infinitive 2 has exactly the same form as the infinitive 1. For the verb of classes A and C, it has a distinct form, characterized by a suffix **-(n)á** and an all-L tonal contour for the verb stem.

As illustrated in (19), the object of verbs in the infinitive is indexed on the higher verb.

- (19a) **Ñ-jángá bìθà-ná à-fúlá mà.**  
 1SG-must see-INF CLha-girl DEF  
 ‘I must see the girl.’

- (19b) **Ñ-jángá-mà bìθà-ná**  
 1SG-must-CLha see-INF  
 ‘I must see her.’

## 6.7. Auxiliaries and analytical verb forms

Ganja has a rich inventory of analytical verb forms in which finite morphology attaches to an auxiliary, and the auxiliated verb is in one of the two infinitive forms. Note that, in Ganja, the distinction between TAM prefixes in synthetic verb forms and auxiliaries relies mainly on the observation of the spreading of the +ATR feature from the verbal lexeme, and consequently may sometimes be problematic because of the particular behavior of **a**.

The following meanings are commonly encoded by means of auxiliaries: habitual, hypothetical negative, cessative, recent past, continuative, counterfactual ‘never’, ‘not yet’, ‘be about to’, ‘occur/do something early’, ‘occur/do something first’, ‘fail’, ‘occur/do something at the same time’, ‘still’, ‘often’. Sequential is among the meanings expressed by synthetic conjugation, but there are also auxiliaries expressing the same meaning.

## 6.8. Verb focalization

Verb focalization is expressed by adding a second occurrence of the verbal lexeme followed by a suffix **-ní** or **-é** to the verb forms described in the previous sections. The variant **ní** of the suffix is selected by the verbs whose infinitive 2 is formed by means of the suffix the suffix **-ná**. In this form, the second occurrence of the verbal lexeme has an all-L tonal melody.

(20a) **À-júig-júig-é.**

CLha-go\_back-go\_back-VFOC  
‘He WENT BACK.’

(20b) **À-n-sáf-tì-ní-sáf-ní.**

CLha-INCPL-write-CTRP-1SG-write-VFOC  
‘He WILL WRITE me a letter.’

This form is commonly used in the following contexts: in yes/no questions (‘is it really the case that ...?’), in explicative contexts (‘it is because ...’), and in rectification contexts (‘what is happening is rather that ...’).

## 7. The clause

### 7.1. Verbal predication

The main characteristics of canonical verbal predication have been presented in 3.1. Two special cases deserve to be mentioned here: the quotative verb **yaa** ‘say’, and the impersonal use of **ɲat.ɛ** ‘remain’.

The quotative verb **yaa** ‘say’ is morphologically a regular verb, but it occurs in a construction in which no other verb can be found. In addition to a subject



representing a speaker, and an object representing an addressee, it introduces quotations (either direct or indirect) but cannot take a noun referring to speech (such as ‘truth’ or ‘lie’) as its complement, whereas the other verbs of saying are compatible with object NPs referring to speech, but cannot introduce quotations without the use of the complementizer **yàa**, cognate with **yaa** ‘say’.

(21a) **Yáamdè yâa “ìyôô”.**  
 Yamdé say O.K.  
 ‘Yamdé said “O.K.”’

(21b) \***Yáamdè yâa f-nsé.**  
 Yamdé say CLf-truth  
 intended: ‘Yamdé said the truth.’

The verb **ɲat.ɛ** ‘remain’ is to the best of my knowledge the only Ganja verb whose independent forms other than the imperative can be found in a construction including neither a subject NP in preverbal position nor a subject index. With other verbs, the presentational meaning encoded by this construction can only be expressed periphrastically.

(22a) **ɲátè hál à-wódà.**  
 remain (CLu)person CLha-one  
 ‘There is one person left.’

(22b) **ɲátè g-lěy g-sìbí.**  
 remain CLg-day CLg-two  
 ‘There are two days left.’

## 7.2. Equative, ascriptive, locational, existential and possessive clauses

The verb **gi** in the form designated as ‘completive’ (characterized by the lack of any overt TAM marking) expresses the same stative meaning as the present of **be** in English, whereas the incompletive of **gi** implies future reference. However, this not a unique property of **gi**: others verbs, for example **hur** ‘know’ or **gaad.ɛ** ‘have’, are also used in the completive with reference to states not necessarily conceived as the stabilization of dynamic processes.

**Gi** is found in combination with nominal or adjectival complements in equative or ascriptive clauses, but also in combination with prepositional phrases or place adverbs in locational clauses.

(23a) **W-é gî b-jóodi à b-bôor m bá mà.**  
 CLu-DIST be CLb-error LOC CLb-side GEN CLbi.PRO DEF  
 ‘This is an error on their part.’

(23b) **F-θèré dè mà gí f-dòuló.**  
 CLf-basket POSS.2SG DEF be CLf-small  
 ‘Your basket is small.’

(23c) **Blùθí à-η-gí à f-θàambé.**  
 tomorrow CLha-INCPL-be LOC CLf-rice\_field  
 ‘Tomorrow she will be at the rice-field.’

Ganja has a special non-verbal construction for questions about location, in which an NP simply combines with the invariable interrogative word **dúu** ‘where is?’.

(24) **Nnâ ndíun mà dúu?**  
 mother POSS.2PL DEF where\_is  
 ‘Where is your mother?’

Non-verbal identificational clauses, in which the entity identified is not designated explicitly, can be formed by combining the NP expressing the identification with an enclitic expressing class agreement with its host, designated as identification marker. This identification marker, also used in NP focalization (see 7.4) probably results from the grammaticalization of class pronouns, since it only differs from them in that its vowel undergoes ATR harmony, whereas class pronouns invariably have +ATR vowels.

(25a) **Lísà w-í.**  
 (CLu)wine CLu-ID  
 ‘This is wine.’

(25b) **Bì-láantè bá.**  
 (CLbi)man CLbi.ID  
 ‘These are men.’

As illustrated in (26), predicative possession can be expressed interchangeably, either by combining **gí** ‘be’ with the preposition **ηgì** ‘with’, or by means of the transitive verb **gaad.ε** ‘have’.

(26a) **Gì-lêer-ôo gí-lêer gí ηgì gí-gúbéerò η g-í.**  
 CLgi-pot-DISTR CLgi-pot be with CLgi-lid GEN CLgi-PRO  
 ‘Every pot has its own lid.’

(26b) **À-nîn-ôo à-nîn gáadè à-ntó**  
 CLha-woman-DISTR CLha-woman have CLha-husband  
 ‘Every woman has a husband.’

Ganja does not have a dedicated existential construction, and plain locational clauses with indefinite subjects constitute the usual equivalent of the existential constructions found in other languages.

### 7.3. Verbal valency

#### 7.3.1. Verbal valency and inflectional classes of verbs

Among the three inflectional classes of verbs, class A is the unmarked one in the sense that (a) the majority of Ganja verbs belong to this class, and (b) transitive and intransitive verbs are equally common among class A verbs. By contrast, class B verbs are overwhelmingly intransitive, whereas all class C verbs are transitive.

Moreover, some verbal lexemes lend themselves to inflectional class alternations expressing transitivity alternations:

class A (tr.)	<b>beenθ</b> ‘sharpen’	class B (intr.)	<b>beenθ.ε</b> ‘be sharpened’
	<b>gaŋ</b> ‘protect’		<b>gaŋ.ε</b> ‘protect oneself’, ‘be protected’
class B (intr.)	<b>ruθ.ε</b> ‘be full’	class C (tr.)	<b>ruθ.i</b> ‘fill’
	<b>fas.ε</b> ‘be late’		<b>fas.i</b> ‘delay’
class A (intr.)	<b>guθ</b> ‘be long’	class C (tr.)	<b>guθ.i</b> ‘lengthen’
	<b>yaat</b> ‘enter’		<b>yaat.i</b> ‘introduce’

The number of verbs involved in the class A (tr.) ~ class B (intr.) alternation is particularly high.

#### 7.3.2. Valency operations

Reflexivity is only marginally expressed by means of inflectional class alternations or mediopassive derivation, and is standardly expressed by ‘**b-gó** ‘head’ + possessive’ in reflexive pronoun function.

As already mentioned in 4.2, Ganja has productive causative, applicative, reciprocal, and mediopassive derivational suffixes, and about ten transitive verbs have a distinct antipassive form. Moreover, causative verbs can also be formed by reduplication. By and large, these derivatives have the syntactic behavior that can be expected. Two remarks are however in order, about mediopassive derivation and about valency-increasing derivations applied to ditransitive verbs.

The verbs derived by means of the mediopassive derivational suffix, exactly in the same way as the verbs involved in the class A ~ class B alternation when they are used as class B verbs, lend themselves to anticausative or passive readings, depending on contextual and semantic factors, in particular the possibility of conceiving events as more or less spontaneous processes affecting a single participant.

As regards the behavior of ditransitive verbs with respect to valency-increasing derivations, there are probably restrictions on the use of causative or applicative forms of ditransitive verbs, but at least under certain conditions such forms can be

found in tritransitive constructions with three objects that can equally be represented by object indexes attached to the verb.

(27a) **Ñâa-d-ní Sáajó gódi mà !**  
 give-APPL-1SG Sadio (CLu)money DEF  
 ‘Give the money to Sadio for me!’

(27b) **Ñâa-d-mà-ní-wí !**  
 give-APPL-CLha-1SG-CLu  
 ‘Give it to him on my behalf!’

Tritransitive constructions may also result from applicativization of the causative form of monotransitives.

(28a) **Ŋ-wóm-ír-îd Fàatú mbùutá mà f-mbûur mà.**  
 1SG-eat-CAUS-APPL Fatou (CLu)child DEF CLf-bread DEF  
 ‘I made the child eat the bread for Fatou.’

(28b) **Ŋ-wóm-ír-îd-mà-hí-fí.**  
 1SG-eat-CAUS-APPL-CLha-CLha-CLf  
 ‘I made him eat it for her.’

#### 7.4. Focalization

A verb form expressing verb focalization has been presented in 6.8. NP or adverb focalization is standardly expressed by means of a cleft construction in which the focalized term followed by the identification marker already encountered in 7.2 precedes the remainder of the clause. The focalized term is not resumed in the second part of the construction. The verb form undergoes no change, which is somewhat unexpected in a language in which a special backgrounding form of the verb is used in relative clauses and wh-questions.

(29) **Sáajó h-í ŋ-gáandâ b-ògó mà**  
 Sadio CLha-ID 1SG-sell CLb-millet DEF  
 ‘It is to Sadio that I sold the millet.’

#### 7.5. Object fronting

In Ganja, objects can be found in clause initial position without being resumed by an object index, and without the addition of any morphological material. The precise conditioning of this construction is not well understood, but there is no doubt that it is not an alternative way of expressing object focalization. Like left-dislocated objects resumed by an object index, fronted objects are topical. As illustrated in (31b), this construction is particularly common in proverbs, with a non-specific (or ‘impersonal’) index of class BI (human plural) in subject function.

(30a) **G-θàambé g-ṣ tṣom jéd-ù.**  
 CLg-rice-field CLg-PROX (CLu)salt take  
 ‘These rice-fields have been invaded by salt.  
 lit. ‘These rice-fields salt has taken.’

(30b) **F-sàmté f-dàndí bì-ṅgê gbálâg.**  
 CLf-shoe CLf-old CLbi-AUX<sub>never</sub> throw  
 ‘One does not throw away an old shoe.’

## 7.5. Questioning

### 7.5.1. Yes/no-questions

The only difference between *wh*-questions and assertive clauses is either a special interrogative intonation, or the presence of the interrogative particle **gǎ** at the end of the clause.

### 7.5.2. *Wh*-questions

Ganja has four interrogative words inflected for class, and six invariable interrogative words:

CL-ílà	‘which?’
CL-wîŋ	‘which kind of?’
CL-déemè	‘how much/many?’
CL-ndéemè	‘at which rank?’

wí ~ wîŋwí	‘what?’
gìllâ	‘where?’
dóú	‘where is?’
nθílà	‘when?’
hállâ	‘how?’
ndéemè	‘how many times?’

There is no special word for ‘who?’, rendered as **h-ílà** (class HA form of the interrogative determiner **-ílà**).

Syntactically, the interrogative word (or a phrase in which it is included) precedes the remainder of the clause. However, in contrast to focalized NPs or adverbs, interrogative words are usually not followed by the identification marker, but in the completive aspect, the verb form must include the backgrounding marker. *Wh*-questions optionally end with the enclitic particle **Ýy**, whose vowel copies the preceding vowel.

(31) **H-ílà ú-gáandá-nì b-ḡgó mà (áy)?**  
 clHA-which 2SG-sell-BGR CLb-millet DEF Q  
 ‘To whom did you sell the millet?’

Among *wh*-questions, *why*-questions have a special status, since they are expressed by means of a complex construction with the verb **tíngá** ‘cause’.

- (32) **Wí tíngá-nì à-át-tì-bîn?**  
 what cause-BGR CLha-NEG-CTRP-come  
 ‘Why didn’t he come?’  
 lit. ‘What caused (that) he didn’t come?’

## 8. Complex constructions

### 8.1. Relativization

In relative clauses immediately postposed to their head, the gap strategy is not limited to the relativization of subjects and objects. A resumptive element is used only in the relativization of genitives. In the completive aspect, the verb is marked for backgrounding.

- (33a) **a-láantè mà wús-nì f-ñjógúb**  
 CLha-man DEF buy-BGR CLf-chair  
 ‘the man who bought a chair’
- (33b) **f-ñjógúb mà à-láantè mà wús-nì**  
 CLf-chair DEF CLha-man DEF buy-BGR  
 ‘the chair that the man bought’
- (33c) **hòtó mà n-tóo-nì Dàagâr**  
 (CLu)car DEF 1SG-go-BGR Dakar  
 ‘the car with which I went to Dakar’  
 lit. ‘the car (that) I went to Dakar’
- (33d) **b-tá mà bì-bíúθá-nì has**  
 CLb-tree DEF CLbi-see-BGR (CLu)monkey  
 ‘the tree on which they saw a monkey’  
 lit. ‘the tree (that) they saw a monkey’
- (33e) **à-láantè mà à-nîn ní mà dée-nì**  
 CLha-man DEF CLa-woman POSS.CLha DEF give\_birth-BGR  
 ‘the man whose wife has given birth’  
 lit. ‘the man (that) his wife has given birth’

By contrast, the relative clauses referring to stage-level properties introduced by the linker **úhúrún yàa** include an obligatory resumptive element (in (34), **hǎj mà** ‘the place’), and the backgrounding marker, already included in the linker, does not show up on the verb of the relative clause.



- (38) **À-gînθ** **θàg-á** **‘nég** **mà.**  
 CLha-try catch-INF (CLu)hen DEF  
 ‘He tried to catch the hen.’

### 8.3. Adverbial subordination

The conjunction **yàa** already encountered in 8.2 also serves to introduce explicative clauses.

- (39) **Gì-mmíirà** **dâ** **mà** **lígír-ù** **ndáani,**  
 CLgi-think.EvN POSS.1SG DEF become\_big-FV much  
 ‘I am very surprised

**yàa** **bì-nǎŋ** **mà** **ríuθì** **fámfàn.**  
 that CLbi-people DEF be\_numerous really  
 that there are so many people.’

The conjunction **sǎm`** ~ **sǎa`** ~ **sámíndì** already encountered in 8.2 also serves to introduce purpose clauses.

- (40) **À-nǎa-ní** **gódì** **sámíndì** **ŋ-wút-tè** **tîw.**  
 CLha-donner-1SG (CLu)argent so\_that 1SG-buy-CTRP (CLu)meat  
 ‘He gave me money to buy meat.’

The conjunction **ndí** ‘if’ (borrowed from Mandinka) introduces hypothetical and counterfactual clauses.

- (41) **Ndí** **fàlí** **fór-nà,** **ndí** **ú-fór-mà,** **bà-lán-ù.**  
 if (CLu)donkey kick-2SG if 2SG-kick-CLha 2PL-be\_equal-FV  
 ‘If a donkey kicks you and you kick it, you are equal.’

Other conjunctions used for adverbial subordination include **bimâ** ‘when’, **bó** ‘since’, **dóróŋ** ‘as soon as’ (postposed to the subordinate clause, borrowed from Mandinka), **gàatú** ‘because’ (borrowed from Mandinka), **gántí** ‘even if’, **hân** ‘until’ (also used as a preposition), **jándí** ‘before, instead of’ (borrowed from Mandinka), **ndíwí** ‘even if’, **títimà** ‘since’.

### 8.4. Clause co-ordination and sequentialization

Ganja does not have a coordinating conjunction available to join clauses with a meaning similar to that expressed by **and** in English, but has dedicated sequential verb forms (see 6.3 and 6.7). Moreover, a subjunctive clause immediately following another clause is ambiguous between a purpose reading and a sequential reading. For example, in (42), the context rules out a purpose reading of the subjunctive form **à-lôod** and imposes a sequential reading.



- (42) **Wé náan mà θédè à-lôod.**  
then elephant DEF catch\_fire CLha-die  
'Then the elephant caught fire and died.'

## Abbreviations

APPL: applicative, AUX: auxiliary, BGR: backgrounding marker, CAUS: causative, CL: noun class, CTRP: centripetal, DEF: definite, DIST: distal, DISTR: distributive, EvN: event noun, FV: final vowel, GEN: genitive, ID: identification marker, INCPL: incomplete, INEV: inevitability marker, INF: infinitive, LEX: stem, LOC: locative, NEG: negative, O: object, OI: object index PL: plural, POSS: possessive, PRO: pronoun, PROH: prohibitive, PROX: proximal, Q: interrogative particle, RESULT: resultative, S: subject, SG: singular, SI: subject index, V: verb, VFOC: verb focalization, X: oblique.

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