

# AN OUTLINE DESCRIPTION OF BIAFADA

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Biafada or Ganjoola (Guinea-Bissau), is an Atlantic language related to Pajade and to the Konyagi-Basari-Bedik cluster. It operates both nominal class concord and consonant mutation, this latter being a feature not only of the nominal system but also of the verb conjugation. Klingenheben (1924-5) pointed out from Koelle's *Polyglotta Africana* data that Biafada mutation is analogous to Fula's, both being attributable to earlier phonological conditioning, now no longer applicable. Agreement in Biafada between verb and subject is not by class concord but by person and number. The subject marker sometimes differs according to the position of the subject NP. Subject marker and any object marker are placed after the verb or auxiliary.

Le biafada (ou ganjoola) de Guinée-Bissau est une langue atlantique apparentée au pajade et au complexe konyagi-basari-bedik. On y trouve d'une part un système de classes nominales avec accord de classes, et d'autre part une alternance consonantique qui touche aussi bien la morphologie nominale que la conjugaison verbale. Klingenheben (1924-5) a constaté d'après les données de Koelle dans la *Polyglotta Africana* que le système d'alternance consonantique du biafada est analogue à celui du peul, et que tous deux remontent à un ancien conditionnement phonologique, altéré par la suite. L'accord entre le verbe biafada et son sujet est déterminé non pas par la classe mais par la personne et le nombre. La marque du sujet peut varier selon que le SN sujet précède ou suit le verbe. La marque du sujet et du complément éventuel se placent après le thème verbal ou l'auxiliaire.

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## 0. INTRODUCTION<sup>1</sup>

Having collected word lists and data on the noun class system of Biafada (Atlantic group, Guinea-Bissau, 25,000 speakers) in 1959, it was an unexpected pleasure to be able to spend some time at Empada in Biafada country in 1992 exploring the language further, with special attention to the verbal system. Since this had to be the priority for practical reasons, there was no time to study the phonology in any detail. What is presented here is an outline of the main morphological and syntactical features of the language.

The ethnic name is itself a curiosity, and a subject of discussion among the people. It seems the name 'Beafada', assigned to them by the Portuguese, was a mishearing of the name of a village where the people were asked their name, both sides being at cross-purposes as to question and answer. Their own vernacular name for the language is GANJOOLA, the people being UJOOLA/ BŎJOOLA (singular/plural). The Mandinkas call both them and the quite unrelated so-called Diolas of northern Guinea-Bissau and southern Senegal, by the name of Joolaa, which means 'one who pays' or 'one who gives tit-for-tat', and gives rise to etiological yarns among the Bŏjoola. These are proud of their friendship with the Mandinkas, to whom they turn for advanced Islamic teaching, and many are bilingual in Mandinka. It seems many Mandinkas living near the eastern edge of Biafada country are of Biafada descent. There is at Empada a Mandinka community whose elderly leader is bilingual in Ganjoola, having grown up there.

Biafada has been known of since Koelle's *Polyglotta Africana* of 1854, and Klingenheben (1924-5) showed that it has noun classes and consonant mutation analogous to those of Fula. Wilson (1965, 1984) outlined the main features of the nominal system and compared the language with its closest relative, Pajade, spoken round the far northeast corner of Guinea-Bissau. Wilson (1989) discusses the historical speculation concerning the mutation systems of Fula and Biafada, which have aroused great curiosity over the years.

<sup>1</sup>The writer is grateful to Mr. Sambu Chambo for his willing help in exploring his language, and to Tucker Childs, Robert Hedinger, and Denis Winston for valuable comments on this paper at various stages.

According to Sapir (1971:47) the table in (1) gives the lexical count percentages based on the Swadesh 'First 100'.

- (1) Biafada
- |    |        |         |       |      |       |        |          |
|----|--------|---------|-------|------|-------|--------|----------|
| 52 | Pajade |         |       |      |       |        |          |
| 22 | 22     | Konyagi |       |      |       |        |          |
| 26 | 27     | 39      | Bedik |      |       |        |          |
| 22 | 22     | 37      | 65    | Basa |       |        |          |
| 24 | 24     | 40      | 69    | 85   | Tanda |        |          |
| 23 | 24     | 25      | 20    | 22   | 22    | Banyun |          |
| 23 | 22     | 23      | 20    | 18   | 19    | 36     | Cobiana  |
|    |        |         |       |      |       | 72     | Cassanga |

Of the two languages in (1), in which consonant mutation does not operate, one is Pajade, in which there are signs that an earlier system did operate, and in which the class system is much simplified (Wilson 1965). The other is Banyun in which the class system is unimpaired.

The class system of Biafada is typically Bantoid, in that nouns and the words they control grammatically bear the exponents of a given set or CLASS. These exponents indicate whether a noun is singular or plural, and can mark certain other semantic categories of the noun, such as plants versus fruits, and adult versus young animals.

Though demonstratives, numerals, associative (genitive) markers, and adjectives are all subject to class concord, this does not operate in pronouns, nor is the verb's subject indicated by a class exponent. As for the exponents of class, these are not only prefixes, but also the associated MUTATION GRADE of the initial consonant, as will be displayed in (9).

- (2) Nouns  
**u-sa / bə-sa** man/men (both prefixes are followed by s)  
**Ø-puula / maa-fuula** girl/girls (p follows prefix Ø-; f follows maa-)
- (3) Class agreement ( noun + adjective + demonstrative)  
 a. **Ø-nnagä Ø-təbba wa-nnə** this big cow  
 b. **gə-nagä gə-rəbba gec-gə** these big cows  
 c. **nə-nda nə-ntəbba nu-ŋ** this big child  
 d. **ma-dda ma-təbba ma-ggə** these big children

The stem of the noun in (3c) and (3d) has initials **nd**, **dd**.

2Abbreviations used in this article are: 1s, 2s, 3s-first-, second-, third-person singular; 1p, 2p, 3p-first-, second-, third-person plural; aNP<sub>S</sub>-subject marker used after a NP subject; bNP<sub>S</sub>-subject marker used before a NP subject; CAUS-causative; Dp-dependent prefix; EM-emphasis; HAB-habitual; HORT-hortative; HYP-hypothetical; IMPV-imperative; INST-instrument; L-L-prefix, salience marker; LOC-locative; NEG-negative imperative marker; NF-nonfuture; Np-noun's class prefix; O-object; p/pl-plural; PST-past; PROG-progressive; REL-relative; s/sing.-singular; S-subject; SEP-separative; STAT-stative.

The systematic variation of stem initials is known as CONSONANT MUTATION. It owes its origin to presumed phonological conditioning of erstwhile allophones, the sounds persisting when conditions had altered.

In the verbs, the mutation is a feature of the conjugation, tenses being in part characterized by the grade of the stem initial. Compare the forms in (4).<sup>3</sup>

|     |                 |            |              |               |                 |                 |
|-----|-----------------|------------|--------------|---------------|-----------------|-----------------|
| (4) | <b>fərma</b>    | he began   | <b>pər</b>   | if he begins  | <b>mpərma</b>   | when he began   |
|     | <b>rooma</b>    | he went    | <b>to</b>    | if he goes    | <b>ntooma</b>   | when he went    |
|     | <b>salma</b>    | he heard   | <b>cal</b>   | if he hears   | <b>ncalma</b>   | when he heard   |
|     | <b>(h)ajima</b> | he went up | <b>kaji</b>  | if he goes up | <b>ɲkajima</b>  | when he went up |
|     | <b>leegəma</b>  | he came    | <b>reegə</b> | if he comes   | <b>ndeegəma</b> | when he came    |
|     |                 |            |              |               | <b>nreegəma</b> |                 |
|     | <b>waafəma</b>  | he sold    | <b>wwaaf</b> | if he sells   | <b>wwaafəma</b> | when he sold    |

Each form of the verbs shown illustrates a different grade of initial, so enabling one to see the three members of the consonant sets involved.

It is perhaps in its pronoun system that Biafada, Konyagi, and their nearest relatives are most distinctive. The pronouns show person and number only, and with the exception of one plural pronoun (not in Biafada) are not relatable to class exponents. Subject and object forms (when occurring together) cluster together as affixes to the verb.

Though the languages are basically SVO, the orders OV and VS are common, serving to highlight relevant elements in the discourse. In Biafada at least, the subject affix form depends on the presence and position of a subject NP, as well as on the tense morphology and the salience of the verb. Various third-person singular markers are shown in (5)–(7), with the verbs **leeg** ‘come’ and **lee** ‘see’, respectively.

- (5) **leegəl-e / leeg-ma** he came (salient / plain)  
**usa leeg-re / usa leeg-ma** the man came (salient / plain)  
**leeg-i usa** the man came (VS order)
- (6) **leel-i-a / leel-i-ä**  
 saw-3s-1sO / saw-3s-3sO  
 he saw me / he saw him (salient)
- (7) **lee-ra-m / lee-ra-ma**  
 saw-2s-1sO / saw-2s-3sO  
 you saw me / you saw him

The hyphenation in (5)–(7) is solely aimed at showing the subject and object markers.

## 1. PHONOLOGY

### 1.1 VOWELS

- (8) i u  
 e ä ə o  
 a

All but ə and ä can be pronounced long, but no lexical contrasts were noted involving length. The only minimal pair noted was **maaga** / **maggə** ‘these’, both being plural demonstratives used with nouns of different classes, but as well as the **aa** / **a** contrast there is a **g** / **gg** contrast.

The phonemic status of ə is uncertain. ə, but not ä, can be a root vowel in CVC; in some contexts it appears to be anaptyctic, a ‘sandwich’ vowel occurring at morpheme

<sup>3</sup>The forms in the first column are not used in isolation, as explained on page 70, paragraph 3 under Salience.

boundaries, and in utterance-final position after stops it seems to mark an audible release.

ä has two main variants. When weakly articulated it is low front centered, somewhat as English ʌ, very close to, but distinct from, ə. When, less commonly, strongly articulated, and when correcting pronunciation, it is more fronted, suggesting ɛ.

In word-final context it is difficult to tell ə from ä. In palatal context it is difficult to tell ə from i; indeed i then seems to have the anaptyctic and post-final stop uses found elsewhere with ə.

The quality of e and o varies according to context. e can be very close to i, as in reä 'seeing', but it remains just distinct from it. Compare riä 'doing'. Similarly toä 'going' sounds very like \*tuä. e and o are never open to the extent of sounding like ɛ and ɔ.

## 1.2 CONSONANTS

There is a rich array of consonants, notably including double length voiced ones, both stops and nasals, and semivowels. Voiceless stops, too, can be heard long in some contexts. There is no obvious positional restraint on the selection of consonants, except in root initial, where consonant mutation determines the choice.

Since mutation operates so widely in the language it is convenient to list the consonant sets according to its requirements. In view of the clear distinction that is kept between the three members of the sets containing the voiceless stops and r, we may say that, given grade 2 as the norm, grade 1 items are rather laxer, and grade 3 items are nasalized. In the other sets grade 2 is not always distinct from grade 1, while in the nasals and semivowels grade 3 is not distinct from grade 2's longer variant. The mutation grade sets are in the table in (9).

|     |   |    |    |    |           |           |     |    |    |    |    |    |    |      |    |    |    |
|-----|---|----|----|----|-----------|-----------|-----|----|----|----|----|----|----|------|----|----|----|
| (9) | 1 | f  | r  | s  | h, l<br>Ø | bw        | b   | d  | j  | g  | m  | n  | ny | ŋ    | w  | y  |    |
|     | 2 | p  | t  | c  | k         | r         | bw  | b  | d  | j  | g  | m  | n  | ny   | ŋ  | w  | y  |
|     |   |    |    |    |           |           | bbw | bb | dd | jj | gg | mm | nn | nnny | γγ | ww | yy |
|     | 3 | mp | nt | nc | ŋk        | nr,<br>nd | mbw | mb | nd | nj | ŋg | mm | nn | nnny | γγ | ww | yy |

Notes:

1. Items in grade 3 are regarded as units, not as N + C, since they are common as word initials, and since in spontaneous syllabification, speakers are heard to pronounce CV-NCV and not CVN-CV.
2. bw sounds bu when no vowel follows; bbw sometimes sounds gb.
3. r is a brief trill in both sets in which it occurs. nd is also found in two sets: in the l / r / nr, nd set nd is a dialectal/idiolectal variant of nr.
4. In the h, Ø / k / ŋk set, the deletion of h is also dialectal/idiolectal, but happens only initially or when a permitted vowel sequence arises.
5. The role of the variants in grade 2 of the voiced sets is not clear. The simple variant seems to be preferred in verb forms, while in nouns a given variant seems to be associated with a given noun as can be seen in (10) and (11).

- (10) sa-də sa-ggə  
house this  
this house

- (11) ma-dda ma-ggə  
children these  
these children

Though both nouns clearly require grade 2 gg after the prefix in the demonstrative, the noun stems show unlike variants of this grade, viz. d and dd, respectively.

## 1.3 TONE AND STRESS

There clearly are both a tone system and a dynamic stress accent, but research time did not permit this to be explored. Neither tone nor stress seem to carry a very great information load, since minimal pairs distinguished by one or the other are very few, and the commonest ones were well known and joked about. An initial high tone followed by a low tone sounds stressed, including when it is on a noun class prefix, as in **bú-lənnā** 'snake'.

Errors in tone or stress impede comprehension rather than conveying wrong or zero meaning, and my errors of stress were firmly corrected when reading back transcribed examples.

## 1.4 LOANWORDS

There are many loans from both Mandinka and Crioulo. They are well integrated phonologically, and are subject to the same initial mutation as vernacular words. Some noun examples are given in (12) and verbs in (13).

- (12) a. **praat** / **maa-fraat**                      plate/plates                      (Crioulo **pratu**)  
       b. **karelo** / **maa-harelo**                   metal pot/pots                  (Crioulo **kaleron**)  
       c. **ga-ŋkait** / **nya-hait**                   letter/letters                  (Mandinka **kaiti** 'paper')
- (13) a. **uməse-ma** he began                   **ŋkuməse-ma** when he began                  (Crioulo **kumsa**)  
       b. **att-ä**                    you tried                   **katt-o**                    if you tried                   (Mandinka **kata**)

In (12a) the initial **p** of the Crioulo word is naturalized as a grade 2 form requiring mutation to grade 1 **f** in the corresponding plural. In (12b) likewise, the **k** mutates to **h** in the plural. In (12c) the Mandinka noun has been assigned to the **ga-** class, which requires grade 3 initial **ŋk** on the stem in place of the original **k**; the plural is in a class requiring grade 1, as in (12b). In both (12b) and (12c) the **h** variant of grade 1 is kept to avoid merging the class prefix and stem vowels.

In (13a) and (13b) the **k**-initial loan verbs have the zero variant of grade 1 in the first form; in (13a) the 'when' form requires grade 3 and in (13b) the 'if' form requires grade 2. In both, the endings are subject suffixes, for third-person and second-person singular, respectively.

## 2. NOUN CLASSES

Of the class prefixes noted, seventeen mark singulars and eight mark plurals, while one marks collectives and liquids. Three of the prefixes mark singulars in some nouns and plurals in others. One of the plural prefixes is added to the singular prefix.

In the table in (14) the prefixes for nouns are listed, together with the grade number of the stem-initial consonant which the prefixes determine. For each class there is an example of a noun followed by a 'this' demonstrative.

- (14) Noun      Stem-initial Noun + Demonstrative  
       prefix      Grade

## Singulars

|             |       |                         |               |
|-------------|-------|-------------------------|---------------|
| <b>u-</b>   | 1     | <b>u-sa w-e</b>         | this man      |
| <b>Ø</b>    | 2,(3) | <b>Ø-puula wa-nnə</b>   | this girl     |
| <b>Ø</b>    | 1     | <b>Ø-saku gaa-gə</b>    | this sack     |
| <b>bee-</b> | 1     | <b>bee-jo bee-gə</b>    | this rice     |
| <b>bu-</b>  | 1     | <b>bu-r bu-gu</b>       | this tree     |
| <b>bwa</b>  | 1     | <b>bwa-gannä bwa-gə</b> | this blood    |
| <b>faa</b>  | 1     | <b>faa-r faa-gə</b>     | this path     |
| <b>gə-</b>  | 1     | <b>gə-nyal gee-gə</b>   | this calabash |

|                         |   |                                |                                 |
|-------------------------|---|--------------------------------|---------------------------------|
| <b>ga-</b>              | 3 | <b>ga-mpaha ga-nnə</b>         | this shoulder                   |
| <b>gu-</b>              | 3 | <b>gu-ncudu gu-nnə</b>         | this bird                       |
| <b>ha-</b>              | 2 | <b>ha-bbə ha-ggə</b>           | this sea                        |
|                         |   | also <b>Ø-habbə gaa-gə</b>     |                                 |
| <b>jə-, ji-</b>         | 1 | <b>ji-sadə ju-gu</b>           | this dog                        |
| <b>lə-</b>              | 1 | <b>lə-bu lu-gu</b>             | this pus                        |
| <b>nə-</b>              | 3 | <b>nə-nda nu-ŋ</b>             | this child                      |
| <b>nya-</b>             | 1 | <b>nya-sin nya-gə</b>          | this nose                       |
| <b>sa-</b>              | 2 | <b>sa-də sa-ggə</b>            | this house                      |
| Liquids and Collectives |   |                                |                                 |
| <b>ma-</b>              | 3 | <b>ma-mbia ma-ŋ</b>            | this water                      |
| Plurals                 |   |                                |                                 |
| <b>bə-</b>              | 1 | <b>bə-sa mb-e</b>              | these men                       |
| <b>bwa-</b>             | 1 | <b>bwa-nyuny bwa-gə</b>        | these ants                      |
| <b>gə-</b>              | 1 | <b>gə-nagä gee-gə</b>          | these cows                      |
| <b>maa-</b>             | 1 | <b>maa-fuula maa-gə</b>        | these girls                     |
| <b>ma-</b>              | 2 | <b>ma-dda ma-ggə</b>           | these children                  |
| <b>nya-</b>             | 1 | <b>nya-faddä nya-gə</b>        | these cloths                    |
| <b>saa-</b>             | 1 | <b>saa-bəlana saa-gə</b>       | these banana trees              |
| <b>ba- + sing.pfx</b>   |   | <b>ba-Ø-saku ba-gaa-gə</b>     | these sacks (cf. sing. in Ø-)   |
|                         |   | also <b>ba-sa-də ba-sa-ggə</b> | these houses (cf. sing. in sa-) |

## 2.1 CLASS AGREEMENT

In (14), the examples show how agreement between a noun and its dependent words is shown by repeating the class prefix or its variants. This even applies equally to nouns denoting persons as in Ø-puula 'girl' and nə-nda 'child' both of which take dependent words different from what u-sa 'man' requires.

**Singular/plural pairings.** The pairings between singular and plural prefixes are often unpredictable, so that they have to be learned for every noun encountered. There are some favorite pairs as in (15), but they are far from watertight.

|                       |                              |                                |
|-----------------------|------------------------------|--------------------------------|
| (15) <b>u- / bə-</b>  | <b>u-sa / bə-sa</b>          | man / men                      |
| <b>bu- / maa-</b>     | <b>bu-laga / maa-laga</b>    | thigh / thighs                 |
| <b>bu- / saa-</b>     | <b>bu-reegə / saa-reegə</b>  | canoe / canoes                 |
| <b>Ø-(gaa-) / ba-</b> | <b>Ø-saku / ba-Ø-saku</b>    | sack / sacks                   |
| <b>Ø-(wa-) / maa-</b> | <b>Ø-kaneta / maa-haneta</b> | ballpoint pen / pens (Crioulo) |
| <b>gə- / ma-</b>      | <b>gə-raŋka / ma-taŋka</b>   | leg / legs                     |

Other semantically related sets of nouns distinguished by class prefixes are given in (16).

|                             |                                                         |                                                        |
|-----------------------------|---------------------------------------------------------|--------------------------------------------------------|
| (16) <b>u-/bə-/ga-</b>      | <b>u-joola / bə-joola / ga-njoola</b>                   | Biafada person / Biafada people / Biafada language     |
| <b>Ø-(wa-)/ma-/bu-/saa-</b> | <b>Ø-ntia/ma-ntia/bu-ria/saa-ria</b><br>(Mandinka tiya) | groundnut/groundnuts/ground-nut plant/groundnut plants |
| <b>nə-/ba-, indicating</b>  | <b>the young of animals found in</b>                    | <b>other classes</b>                                   |
|                             | <b>nə-ndaaf / ba-nə-ndaaf</b>                           | kid / kids                                             |
|                             | cf. <b>Ø-ndaaf / gə-daaf</b>                            | goat / goats                                           |
|                             | <b>nə-ncadə / ba-nə-ncadə</b>                           | puppy / puppies                                        |
|                             | cf. <b>ji-sadə / ma-cadə</b>                            | dog / dogs                                             |

**Phonological conditioning of consonant mutation.** Traces of the phonological conditioning which is presumed to have originally governed the selection of stem-initial consonant variants may be observed from the forms of the 'this' demonstrative in the various classes, as shown in the table in (14).

After CVV- prefixes the stem-initial consonant is always **g** as in **gaa-gə** and **bee-gə**.

After CV- prefixes the stem-initial consonants include **gg** and nasals, but can also be **g** as in **fu-ggu** / **ga-nnə** / **ma-ŋ** and **bu-gu** / **bwa-gə** / **ju-gu**.

The variations are not two-way predictable.

Certain anomalies may be observed in the following forms.

- A few of the corresponding noun prefixes have neutral vowels, and two are zero.
- The forms **w-e** and **mb-e** for the two personal classes are not comparable with those of the other classes.
- The final vowel of 'this' harmonizes with a CV- prefix in **u**.
- The stem-initial consonants of 'this' are not all members of the regular set **g** / **gg** / **ŋg** met elsewhere. Though **ŋ** could be regarded as a simplification of **ŋg**, this does not account for **nn**.

## 2.2 ADJECTIVES

When in a NP with their controlling noun, these follow the noun. Many of them are related to stative verbs. Their class prefix and mutation grade are identical to those of nouns.

- (17)
- |                          |                  |                  |
|--------------------------|------------------|------------------|
| <b>u-sa</b>              | <b>u-rəbba</b>   | big man          |
| <b>Ø-nnagä</b>           | <b>Ø-təbba</b>   | big cow          |
| <b>sa-də</b>             | <b>sa-təbba</b>  | big house        |
| <b>nə-nda</b>            | <b>nə-ntəbba</b> | big child        |
| compare: <b>rəbb-l-e</b> |                  | he/she/it is big |
| <b>big-EM-3s</b>         |                  |                  |

## 2.3 ASSOCIATIVE (GENITIVE) MARKER

The associative or genitive relationship, indicating possession, part of whole, and the like is, with most nouns, marked by the element **be-** 'of', which is controlled by the noun which precedes it, termed the regent. It takes the same class prefix and mutation grade as the regent noun.<sup>4</sup>

- (18) **nə-nda** **nə-mbe** **u-sa** / **ma-dda** **ma-bbe** **u-sa**  
 Np-child Dp-of Np-man / Np-children Dp-of Np-man  
 the man's child / the man's children.
- (19) **Ø-nnagä** **Ø-bbe** **u-sa** / **gə-nagä** **gə-be** **u-sa**  
 Np-cow Dp-of Np-man / Np-cows Dp-of Np-man  
 the man's cow / the man's cows

When the genitive, or 'possessor' is a pronoun, the marker is **-beel-** or **-bəl-**, and the pronoun is suffixed to it as seen in (20) and (21).

- (20) **gə-nagä** **gə-beel-i**  
 Np-cows Dp-of-1s  
 my cows
- (21) **gə-nagä** **gə-bəl-am**  
 Np-cows Dp-of-3s  
 his cows

<sup>4</sup>**nəmbe** in (18) comes to be used as a noun meaning 'son/daughter', being then a kinship term, e.g., **nəmb-e** 'thy son' and **nəmb-am** 'his son'.

With most kinship terms the marker is not as above, and shows no class agreement. There are several possible markers, each required by one or more kinship terms.

- (22) **Ø-may**                      **de-mma**  
 Np-elder^sibling of-1s  
 my elder sibling
- (23) **nə-mbany**                      **e-mma**  
 Np-younger^sibling of-1s  
 my younger sibling
- (24) **u-məl**                      **e-mma**  
 Np-husband of-1s  
 my husband

## 2.4 DEMONSTRATIVES

There are six dependent demonstrative words: this, that, that (yonder), the (very) one, the very one, and which.

The class prefix of 'this' has grade 1 initial consonants + **-gə**, as shown in the table in (14). The personal classes have **w-e** and **mb-e**.

The class prefix of 'that' has grade 3 initial consonants + **-gə** as in **ɲgaa-gə**, **nru-gu**, **nca-ggə**, etc. The personal classes have **w-o** and **mb-o**.

The class prefix of 'that (yonder)' has grade 3 initial consonants + **-ne** as in **ɲgaa-ne**, **nca-nne**, etc. The **u-** personal class has **w-eene**.<sup>5</sup> It also means 'the aforementioned, the one concerned'.

The class prefix of 'the (very) one' has grade 1 initial consonants + **-m** as in **gaa-m**, **bwa-m**, etc. The personal classes have **u-m**,<sup>6</sup> and **?bə-m**.

The class prefix of 'the very one' has grade 1 initial consonants + **-mä** as in **gu-mmä**,<sup>7</sup> etc.

The dependent demonstrative 'which?' resembles 'this' but with stem **-ga**. (see (149))

## 2.5 NUMERALS

The table in (25) gives the enumeration forms of the cardinal numerals.

|      |    |                                 |     |                                      |
|------|----|---------------------------------|-----|--------------------------------------|
| (25) | 1  | <b>nnəmma</b>                   | 11  | <b>bappo ɲga nnəmma</b>              |
|      | 2  | <b>bihe</b>                     | 20  | <b>bappo bagunke</b>                 |
|      | 3  | <b>bijo</b>                     | 30  | <b>bappo bagunjo</b>                 |
|      | 4  | <b>bənihi</b>                   | 40  | <b>bappo bagunnihi</b>               |
|      | 5  | <b>gəbəda</b> ('hand')          | 50  | <b>bappo bagunnyi gəbəda</b>         |
|      | 6  | <b>mpaaji</b>                   | 60  | <b>bappo bagunnyi mpaaji</b>         |
|      | 7  | <b>mpaaji ɲga nyi</b> (6 + 1 ?) | 70  | <b>bappo bagunnyi mpaaji ɲga nyi</b> |
|      | 8  | <b>wose</b>                     | 80  | <b>bappo bagunnyi wose</b>           |
|      | 9  | <b>liberebo</b>                 | 90  | <b>bappo bagunnyi liberebo</b>       |
|      | 10 | <b>bappo</b>                    | 100 | <b>keme gaanəmma</b>                 |
|      |    |                                 |     | <b>1,000 wil gaanəmma</b>            |

Cardinals '1' to '4' are adjectives showing concord with the noun counted as in (26).

- (26) **u-sa u-nəmma**                      one man                      **bə-sa bə-he**                      two men  
**Ø-nnagä Ø-nnəmma**                      one cow                      **ma-dda ma-ke**                      two children

<sup>5</sup>The **bə-** class form was not recorded.

<sup>6</sup>It seems that the form **um**, strictly of the **u-** class, can also be used as a pronoun referring to a noun of any class, even plural.

<sup>7</sup>This is apparently a stronger form of **-m**. The **gu-** class form **gummä** serves with abstract reference to mean 'therefore', 'in that case'.

**bappo** 'ten' is an invariable noun which controls 'two' to 'four' only; these then take **ba-** + **gu-** class prefixes as in (27).

- (27) **bappo ba-gu-ŋke** 10 x 2  
**bappo ba-gu-njo** 10 x 3  
**bappo-ba-gu-nnihi** 10 x 4

**keme** '100' and **wil** '1,000' (both from Mandinka) are nouns which control 'one' and 'four' as in (28).

- (28) **Ø-keme gaa-nəmma** 100 x 1  
**ba-keme ba-gaa-he** 100 x 2  
**Ø-wil gaa-nəmma** 1,000 x 1  
**ba-wil ba-gaa-he** 1,000 x 2

Cardinals 'five' to 'nine' are invariable. Additions from 'eleven' upwards are expressed with **ŋga** 'with'.

- (29) **bappo ŋga nnəmma** 10 + 1

The **gu-** class form **gu-nnəmma** is used to mean 'once'.

### 3. PERSONAL PRONOUNS

The pronoun morphemes are given in the table in (30).

- (30) List of variants
- |    | Strong<br>pronouns | Subject<br>suffix  | Object<br>suffix    | Genitive<br>suffix |
|----|--------------------|--------------------|---------------------|--------------------|
| 1s | <b>mma</b>         | <b>-m</b>          | <b>-am, -a</b>      | <b>-i, (m)ma</b>   |
| 2s | <b>yi</b>          | <b>-ra, -ä, -o</b> | <b>-e</b>           | <b>-a, -e, -he</b> |
| 3s | <b>mom</b>         | <b>-ma, -i, -Ø</b> | <b>-ma, -ä, -na</b> | <b>-am</b>         |
| 1p | <b>bon</b>         | <b>-ba, -ban</b>   | <b>-bo</b>          | <b>-eebo</b>       |
| 2p | <b>een</b>         | <b>-roon, -oon</b> | <b>-een</b>         | <b>-een</b>        |
| 3p | <b>nimmä</b>       | <b>-mmä</b>        | <b>-mmä, -nnä</b>   | <b>-eemmä</b>      |

Composite forms of subject (horizontal) + object (vertical) suffixes

|    | 1s            | 2s            | 3s            | 1p              | 2p                | 3p             | -re marker    |
|----|---------------|---------------|---------------|-----------------|-------------------|----------------|---------------|
| 1s |               | <b>-ram</b>   | <b>-ia</b>    |                 | <b>-roonia</b>    | <b>-mmaam</b>  | <b>-ram</b>   |
| 2s | <b>-me</b>    |               | <b>-ie</b>    | <b>-banne</b>   |                   | <b>-mme</b>    | <b>-re</b>    |
| 3s | <b>-məna</b>  | <b>-rama</b>  | <b>-iä</b>    | <b>-banna</b>   | <b>-rooniä</b>    | <b>-mmana</b>  | <b>-rama</b>  |
| 1p |               | <b>-raabo</b> | <b>-iaabo</b> |                 |                   | <b>-mmaabo</b> | <b>-raabo</b> |
| 2p | <b>-meen</b>  |               | <b>-ieen</b>  | <b>-baneen</b>  |                   | <b>-mmeen</b>  | <b>-roon</b>  |
| 3p | <b>-mannä</b> | <b>-rammä</b> | <b>-iammä</b> | <b>-banəmmä</b> | <b>-rooniammä</b> | <b>-mmannä</b> | <b>-rammä</b> |

#### 3.1 STRONG PRONOUNS

These function as noun phrases. They can be subject or a verb, and are then emphatic; the subject marker in the verb following is as for any noun NP.

The third-person form controls **bə-** class personal agreement in the phrase in (31).

- (31) **nimmä bə-he**  
they two / the two of them

Strong pronouns, like 'the very one' demonstrative, can be strengthened by the suffix **-oo** as in (32).

- (32) **mm-oo** I myself  
**u-m-oo** the very one itself

## 3.2 PRONOUN SUFFIXES

The simple, unemphatic pronouns take the form of suffixes.

**Subject suffixes.** These are affixed to the verb stem or to the auxiliary, depending on the tense. Such variants as are chosen according to a given tense will be listed in the paradigm.

In the place of the subject, an invariable SUBJECT MARKER can be required if the subject of the verb is present as an NP, even when this NP is a strong pronoun. The shape of the subject marker depends on the position of the NP and on the verb form as seen in (33) and (34).

- (33) a. **mma leeg-re** I came (emphatic subject)  
 b. **u-sa leeg-re** the man came  
 c. **bə-sa leeg-re** the men came

The suffix **-re** is the subject marker affixed to the verb **leeg-** 'come' after a strong first-person singular pronoun, in (33a), a singular noun in (33b), and a plural noun in (33c), each of which is a preceding NP.

- (34) a. **leeg-i u-sa** the man came  
 b. **leeg-i bə-sa** the men came

In (34) **-i** is the subject marker suffixed to the verb **-leeg**, which precedes the NP, consisting of a singular noun in (34a), and a plural noun in (34b). The word order here is verb + subject, which serves to highlight a particular feature; the use of the **-i** suffix is optional, in place of the third-person singular suffix **-ma** or the third-person plural suffix **-mmä**, as suited to the noun concerned. Strong pronouns were not met in this situation.

**Object suffixes.** An object pronoun takes the form of a suffix which, except in one tense, directly follows the subject suffix or marker. The composite subject + object forms are listed in the table in (30), and the abstracted variants are enumerated in the upper part of the table. The following are some observations on the variants.

- The **-i** variant of the third-person singular subject suffix is the one that always precedes an object suffix.
- There is an **i** after the second-person plural subject suffix **-(r)oon** when an object suffix follows. It is not clear where the morpheme boundary should then be.
- The object suffix variants third-person singular **-na** and third-person plural **-nnä** are used when the previous consonant in a subject suffix is bilabial.
- There is after most subject suffixes an **-a-** before the third-person singular and plural object suffixes, and **-aa-** before the first-person plural object suffix **-bo**. Here again, the morpheme boundary is not clear.
- The apparently homophonous composite forms with the second-person singular subject **-ra** and the invariable marker **-re** can never be ambiguous in context, since the **-re** requires a preceding NP. There would appear to be a tonal difference between them, with a high tone on the first syllable of the second-person singular form.

**Genitive suffixes.** The associative (genitive) marker, which is **-be** with genitive nouns, is **-beel-** with the first-person singular suffix **-i**, and **-bəl-** with all the other persons as in (35)–(37). Some kinship terms take a marker **e- ~ de- ~ nde-**, not subject to class agreement, with genitive pronoun suffixes, which are not all the same as with **-beel-** ~ **-bəl-** as in (38). Some kinship terms take the suffixes directly, with no marking element as in (39)–(41).

- (35) **Ø-kaneta gaa-beel-i**  
 Np-ball<sup>^</sup>pen Dp-Of-1s  
 my ballpoint pen
- (36) **Ø-kaneta gaa-bəl-a**  
 Np-ball<sup>^</sup>pen Dp-Of-2s  
 your ballpoint pen

- (37) Ø-kaneta gaa-bəl-am  
Np-ball<sup>^</sup>pen Dp-Of-3s  
his ballpoint pen
- (38) Ø-may de-mma / de-he / d-am  
elder<sup>^</sup>sibling of-1s / of-2s / of-3s  
my / your / his elder sibling
- (39) nna  
mother<sup>^</sup>1s  
my mother
- (40) ni-hi  
mother<sup>^</sup>of-2s  
your mother
- (41) ni-am  
mother<sup>^</sup>of-3s  
his mother

## 4. VERBS

The stem of a verb consists of a root with optional extension suffix(es) (§4.4) that modify its meaning. The stem having a grade 2 initial consonant is regarded as the basic form. It can occur on its own, or as a component of a finite form, referred to as a TENSE.

On its own, the stem occurs after another verb in a serial sequence, such as motion + direction in (42).

- (42) gul-l-e kaj fo bur<sup>8</sup> bwas  
run-EM-3s go<sup>^</sup>up LOC tree top  
it ran up a tree

It follows the auxiliary in some compound tenses, as in (43).

- (43) nd-ma<sup>9</sup> kaj  
HAB-3s go<sup>^</sup>up  
he goes up

The stem with suffix -ä occurs in some contexts; this form may be regarded as a gerund.

- (44) roo-ma kay-ä  
go-3s take-ä  
he went to take
- (45) (mammaŋ) maa kaj-ä  
(now) PROG<sup>^</sup>3s go<sup>^</sup>up-ä  
(now) he is going up

Tenses consist essentially of a verb stem, a subject suffix or marker, and a tense sign or auxiliary. Optional elements can be added, appropriate to the meaning expressed.

In simple tenses the marker consists of the grade of the stem initial and a tense affix which may be zero.

A grade 2 initial consonant occurs in a few tenses, including the dependent conditional. As the third-person singular marker happens to be zero in this tense, the stem appears to be bare in the third-person singular form as seen in (46).

<sup>8</sup>In the analytical hyphenation, nouns will not be divided unless class agreement is relevant to discussing the example.

<sup>9</sup>Pronounced ndəmma. Where the vowel ə occurs at verbal morpheme boundaries between consonants, it is then regarded as anaptyctic, and so is omitted from the hyphenated transcription. The same applies to i after palatals, so hajiləm 'I have gone up' = haj-l-m.

- (46) **kaj-Ø**  
 if<sup>^</sup>go<sup>^</sup>up-3s  
 if he goes up

Grade 1 initial consonants occur in such tenses as the ones in (47) and (48).

- (47) **haj-ma**  
 NF<sup>^</sup>go<sup>^</sup>up-3s  
 he went up
- (48) **maa haj-ä**  
 HORT<sup>^</sup>3s go<sup>^</sup>up-ä  
 he is to go up

Grade 3 initial consonants occur in two known tenses as in (49) and (50).

- (49) **ŋkaj-d-o**  
 grade<sup>^</sup>3<sup>^</sup>go<sup>^</sup>up-IMPV-2s (grade<sup>^</sup>3 . . . -d- = negative imperative)  
 don't go up!
- (50) **ŋkaj-ra**  
 grade<sup>^</sup>3<sup>^</sup>go<sup>^</sup>up-2s  
 when you went up

There is reason to think that the changes as between the basic grade 2 and grades 1 and 3 result from the earlier presence of certain morphemes which cannot now be identified.

In the pages that follow will be given the paradigms of the tenses that have been observed to date, and their meaning and function. The order will be pragmatic rather than morphological, beginning with the common declarative tenses.

**Salience.** In the three declarative tenses, the non-future, the habitual/future, and the progressive, the affirmative form can be marked for SALIENCE by means of an affixed -l- or -d- (symbolized as L-); the forms concerned are referred to as L-forms. For the most part, forms with L- may be regarded as ASSERTIVE, being the principal, or salient, verb in a statement. They can also, however, occur in relative clauses and questions, apparently when highlighting or foregrounding is required.

In narrative, salient forms highlight given events among a sequence of events not so marked. With the non-future, the context usually dictates that an opening statement should be assertive, and so salient, while the non-salient forms appear subsequently in the discourse.

For this reason an isolated verb in the non-future is expected to be in the L-form, such as *leegale* 'he has come'. If a non-L-form such as *leegama* 'he came' is used in isolation, as during language study, it is misunderstood as progressive (*reegama* 'he is coming'), despite the difference of grade in the initial consonant.

The three declarative tenses have two paradigms, one with and one without the L-marker. In the non-future, L-forms are further characterized in that with a subject NP they have a neutral subject marker not showing person or number.

#### 4.1 DECLARATIVE TENSES

**Non-future.** This tense marks a past-completed action or a present state. The full paradigms of the affirmative plain and salient forms are given in (51) and the negative forms are given in (52). In this tense the verb stem has a grade 1 initial consonant.

##### (51) Affirmative

|    | Plain form     | Salient form    |                      |
|----|----------------|-----------------|----------------------|
| 1s | <b>leeg-m</b>  | <b>leeg-l-m</b> | I came / have come   |
| 2s | <b>leeg-ra</b> | <b>leeg-ra</b>  | you came / have come |
| 3s | <b>leeg-ma</b> | <b>leeg-l-e</b> | he came / has come   |

|                              |                                                           |                |                       |
|------------------------------|-----------------------------------------------------------|----------------|-----------------------|
| 1p                           | leeg-ba                                                   | leeg-l-ba      | we came / have come   |
| 2p                           | leeg-roon                                                 | leeg-roon      | you came / have come  |
| 3p                           | leeg-mmä                                                  | leeg-l-mmä     | they came / have come |
| after NP subject             | sg. (usa) leeg-ma                                         | (usa) leeg-re  | (the man) came        |
|                              | pl. (bäsa) leeg-mmä                                       | (bäsa) leeg-re | (the men) came        |
| before NP subject (optional) | sg. leeg-i (usa)                                          | —              | (the man) came        |
|                              | pl. leeg-i (bäsa)                                         | —              | (the men) came        |
|                              | (sg. leeg-ma, pl. leeg-mmä can be used before NP subject) |                |                       |

## (52) Negative

|                  |                      |                                   |
|------------------|----------------------|-----------------------------------|
| 1s               | leeg-al-m            | I did not / have not come         |
| 2s               | leeg-al-a            | you did not / have not come       |
| 3s               | leeg-al-e            | he did not / has not come         |
| 1p               | leeg-al-ba           | we did not / have not come        |
| 2p               | leeg-al-oon          | you did not / have not come       |
| 3p               | leeg-al-mmä          | they did not / have not come      |
| after NP subject | sg. (usa) leeg-al-e  | (the man) did not / has not come  |
|                  | pl. (bäsa) leeg-al-e | (the men) did not / have not come |

Note: The *r* of the second-person singular *-ra* and the second-person plural *-roon*, and the after-subject-NP *-re* is deleted after the negative *-al*.<sup>10</sup>

The third-person singular subject suffix is *-e* after both salient *-l-* and negative *-al-*, but not if stative *-oo-* intervenes.

Some verbs are stative in lexical meaning, e.g., those expressing a quality, while others can be marked as stative by the suffix *-oo-* added to an active verb after the *-l-* or *-al-* elements, if present. The full non-future paradigm is as above.

|      |                              |                                         |
|------|------------------------------|-----------------------------------------|
| (53) | <b>rəbb-ma / rəbb-l-e</b>    | it is big (plain / salient forms)       |
|      | <b>rəbb-al-e</b>             | it is not big                           |
|      | <b>li-oo-ma / li-l-oo-ma</b> | it is / has been done (plain / salient) |
|      | <b>li-al-oo-ma</b>           | it is not / has not been done           |
|      | <b>li-ma / li-l-e</b>        | he has done (plain / salient)           |
|      | <b>li-al-e</b>               | he has not done                         |

In the non-future there are morphophonemic changes when the *L*-suffix is used with *l*-final and *n*-final verb stems. Compare the examples in (54) and (55).

|      |                                     |                              |
|------|-------------------------------------|------------------------------|
| (54) | <b>sal-ma → saləma</b>              | he has heard (plain form)    |
|      | <b>sal-L-e → salle<sup>11</sup></b> | he has heard (L-form)        |
|      | <b>(usa) sal-L-re → (usa) satte</b> | (the man) has heard (L-form) |
| (55) | <b>mən-ma → mənəma</b>              | he is able (plain form)      |
|      | <b>mən-L-e → mənde</b>              | he is able (L-form)          |
|      | <b>(usa) mən-L-re → (usa) mənte</b> | (the man) is able (L-form)   |

**Habitual / Future.** This tense marks a habitual event in most contexts. It also marks a non-imminent future, especially in a main clause consequent on a condition.

This is a compound tense, with an auxiliary having a paradigm very similar to that of the non-future, but with *-add-* as the negative marker. The HABITUAL negative is never used as a future, the future negative being supplied by the progressive.

<sup>10</sup>The negative marker *-al-* is realized as *-ool-* when a verb stem ends in *e* (*e* + *-al-* → *-ool-*). *-ool-* also occurs after the affix *-āk* (§4.5).

<sup>11</sup>This was the only context in which double length *l* was noted, other than in the world *lle* 'today'.

## (56) Affirmative

|           | Plain form                   | L-form                   |                             |
|-----------|------------------------------|--------------------------|-----------------------------|
| 1s        | <b>nd-m reegə</b>            | <b>nd-l-m reegə</b>      | I come / shall come         |
| 2s        | <b>nd-a reegə</b>            | <b>(?nd-l-a reegə)</b>   | you come / will come        |
| 3s        | <b>nd-ma reegə</b>           | <b>nd-l-e reegə</b>      | he comes / will come        |
| 1p        | <b>nd-ba reegə</b>           | <b>nd-l-ba reegə</b>     | we come / will come         |
| 2p        | <b>nd-oon reegə</b>          | <b>(?nd-l-oon reegə)</b> | you come / will come        |
| 3p        | <b>nd-mmä reegə</b>          | <b>nd-l-mmä reegə</b>    | they come / will come       |
| after NP  | sg. <b>(usa) nd-a reegə</b>  |                          | (the man) comes / will come |
| subject   | pl. <b>(bəsa) nd-a reegə</b> |                          | (the men) come / will come  |
| before NP | sg. <b>nd-i reegə (usa)</b>  |                          | (the man) comes / will come |
| subject   | pl. <b>nd-i reegə (bəsa)</b> |                          | (the men) come / will come  |

## (57) Negative habitual

|    |                       |                 |
|----|-----------------------|-----------------|
| 1s | <b>nd-add-m reegə</b> | I don't come    |
| 2s | <b>nd-add-ä reegə</b> | you don't come  |
| 3s | <b>nd-add-e reegə</b> | he doesn't come |
|    | etc.                  |                 |

**Progressive.** This tense marks an event in progress or an imminent event. It therefore can have future meaning when the context is appropriate.

The forms in this paradigm are varied, but they all have grade 2 of the verb initial consonants, and with one apparent exception take -ä after the stem.

## (58) Affirmative

|                   | Plain form                                         | L-form              |                                   |
|-------------------|----------------------------------------------------|---------------------|-----------------------------------|
| 1s                | <b>reeg-a-m</b>                                    | <b>l-m reeg-ä</b>   | I am / shall be coming            |
| 2s                | <b>reeg-ä-ra</b>                                   | <b>raa reeg-ä</b>   | you are / will be coming          |
| 3s                | <b>reeg-ä-ma</b>                                   | <b>l-ee reeg-ä</b>  | he is / will be coming            |
| 1p                | <b>reeg-ä-ba</b>                                   | <b>l-ba reeg-ä</b>  | we are / will be coming           |
| 2p                | <b>reeg-ä-roon</b>                                 | <b>roon reeg-ä</b>  | he is / will be coming            |
| 3p                | <b>reeg-ä-gämmä</b>                                | <b>l-mmä reeg-ä</b> | they are / will be coming         |
| after NP subject  | <b>(usa) ga reeg-ä,</b><br><b>(usa) ree reeg-ä</b> |                     | (the man) is / will be coming     |
| before NP subject | <b>gi reeg-ä (usa)</b>                             |                     | (the man) is / will be coming     |
| after non-subject |                                                    |                     |                                   |
| 1s                | <b>(. . .) mə reeg-ä</b>                           |                     | (. . .) I am / shall be coming    |
| 2s                | <b>(. . .) raa reeg-ä</b>                          |                     | (. . .) you are / will be coming  |
| 3s                | <b>(. . .) maa reeg-ä</b>                          |                     | (. . .) he is / will be coming    |
| 1p                | <b>(. . .) ba reeg-ä</b>                           |                     | (. . .) we are / will be coming   |
| 2p                | <b>(. . .) roon reeg-ä</b>                         |                     | (. . .) you are / will be coming  |
| 3p                | <b>(. . .) gämmä reeg-ä</b>                        |                     | (. . .) they are / will be coming |

Here the non-subject component of the sentence could be a time expression such as **mamman** 'now' or **ɲkudu** 'tomorrow'.

The last set of forms is morphologically parallel to the L-forms listed, but it cannot initiate a sentence.

The occurrence of the elements **ga** and **gi** in the forms after and before a NP subject, and the initial **g** of **gämmä** '3p' suggest that the verb **ga** 'to be' may underlie all the morphology of this tense. Also, the negative marker, shown below after NP subject, has the variant **gaale**, which suggests the negative of **ga** (see§4.6). The **g** of **ga** 'to be' is deletable.

## (59) Negative

|          |                            |                                       |
|----------|----------------------------|---------------------------------------|
| 1s       | <b>al-m reeg-ä</b>         | I am not / shall not be coming        |
| 2s       | <b>al-a reeg-ä</b>         | you are not / will not be coming      |
| 3s       | <b>al-e reeg-ä</b>         | he is not / will not be coming        |
| 1p       | <b>al-ba reeg-ä</b>        | we are not / will not be coming       |
| 2p       | <b>al-oon reeg-ä</b>       | you are not / will not be coming      |
| 3p       | <b>al-mmä reeg-ä</b>       | they are not / will not be coming     |
| after NP | <b>(usa) gaal-e reeg-ä</b> | (the man) is not / will not be coming |
| subject  | <b>(usa) al-e reeg-ä</b>   |                                       |

This negative can have the future meaning which is excluded from the negative habitual.

## 4.2 NON-DECLARATIVE TENSES

**Imperative.** In this tense the affirmative and the negative show different grades of initial consonant, namely 1 and 3, respectively. No first-person forms were noted.

| (60) | Affirmative      |                  | Negative          |                     |
|------|------------------|------------------|-------------------|---------------------|
| 2s   | <b>haj-d-a</b>   | go up!           | <b>ɲkaj-d-o</b>   | don't go up!        |
| 3s   | <b>haj-d-i</b>   | he must go up!   | <b>ɲkaj-d-i</b>   | he mustn't go up!   |
| 2p   | <b>haj-d-oon</b> | go up!           | <b>ɲkaj-d-oon</b> | don't go up!        |
| 3p   | <b>haj-d-mmä</b> | they must go up! | <b>ɲkaj-d-mmä</b> | they mustn't go up! |

When the verb has the suffix **-g-** 'hither' (see §4.4), the **-d-** marker of the tense is deleted in the affirmative but retained in the negative as in (61).

|      |                              |          |                   |                |
|------|------------------------------|----------|-------------------|----------------|
| (61) | <b>haj-g-a</b>               | come up! | <b>ɲkaj-g-d-o</b> | don't come up! |
|      | <b>lee-g-a</b> <sup>12</sup> | come!    | <b>nree-g-d-o</b> | don't come!    |

In verbs with stem-final **l**, this assimilates with the **-d-** marker as in (62).

|      |                               |       |                                 |             |
|------|-------------------------------|-------|---------------------------------|-------------|
| (62) | <b>sal-d-a</b> → <b>sadda</b> | hear! | <b>ncal-d-o</b> → <b>ncaddo</b> | don't hear! |
|------|-------------------------------|-------|---------------------------------|-------------|

In some contexts an imperative chain appears to be avoided. In one context the second verb was observed to be in a form having a prefix **u-**, a grade 1 stem initial and a suffix **-ä**.

|      |                                          |                          |               |           |              |                |
|------|------------------------------------------|--------------------------|---------------|-----------|--------------|----------------|
| (63) | <b>hay-d-a</b>                           | <b>namb-e</b>            | <b>u-ro-ä</b> | <b>fo</b> | <b>gundi</b> | <b>gujaasa</b> |
|      | take-IMPV-2s                             | child <sup>^</sup> of-2s | u-go-ä        | LOC       | land         | distant        |
|      | Take your child and go to a far country. |                          |               |           |              |                |

In another apparently similar context in (64) the second verb is in the imperative, while the first verb would seem to be in a non-finite form.

|      |                          |              |                    |
|------|--------------------------|--------------|--------------------|
| (64) | <b>daa-g-i</b>           | <b>naagä</b> | <b>dam-d-ooniä</b> |
|      | bring-hither-i           | cow          | kill-IMPV-2p + 3sO |
|      | Bring a cow and kill it! |              |                    |

It would seem from examples (63) and (64) that the imperative verb is highlighted, as compared with the other.

**Hortative.** This tense expresses a desire that an event should occur. It is used in the affirmative only. Corresponding negatives are expressed by the progressive or the imperative, as appropriate. No first- or second-person singular forms were noted. The verb stem has a grade 1 initial consonant.<sup>13</sup>

<sup>12</sup>**lee-g** is the strictly analytical form of the stem meaning 'come', but this is usually given as **leeg**, since the hyphenation is not normally relevant.

<sup>13</sup>With verbs having initial consonants which do not distinguish grades 1 and 2, the **maa** form of the verb is ambiguous out of context, as between progressive after non-subject (§4.1) and hortative.

- |      |    |                      |                           |
|------|----|----------------------|---------------------------|
| (65) | 3s | <b>maa leeg-ä</b>    | he is to / should come    |
|      | 1p | <b>bonaa leeg-ä</b>  | we are to / should come   |
|      | 2p | <b>eenaa leeg-ä</b>  | you are to / should come  |
|      | 3p | <b>nimmaa leeg-ä</b> | they are to / should come |

This is the one tense noted where an object suffix is not in combination with the subject suffix as in (66) and (67).

- (66) **maa had-ä-mmä**  
 HORT<sup>3s</sup> leave-ä-3pO  
 He is to leave them.
- (67) **maa wa-iig-a-m**  
 HORT<sup>3s</sup> plough-BEN-a-1sO  
 He shall plough for me.

**Potential.** This tense expresses the possibility or likelihood of an event. It is used in the affirmative only. The verb stem has a grade 2 initial consonant. In corresponding negative contexts the progressive is used.

- |      |    |                     |             |
|------|----|---------------------|-------------|
| (68) | 1s | <b>nt-m reegə</b>   | I may go    |
|      | 2s | <b>(?raa reegə)</b> | you may go  |
|      | 3s | <b>nt-ee reegə</b>  | he may go   |
|      | 1p | <b>nt-ba reegə</b>  | we may go   |
|      | 2p | <b>nt-oon reegə</b> | you may go  |
|      | 3p | <b>nt-mmä reegə</b> | they may go |

The expected second-person singular form **\*nt-aa reegə** seems not to occur.

#### 4.3 SPECIALIZED TENSES

The following tenses are seen as specialized, in that they occur only in and with particular types of dependent clauses. These are time clauses having past reference, and conditions and hypotheses.

**Temporal ('when' in past).** In a time clause having past reference the tense used has a grade 3 initial consonant, as **nreeg-ma** 'when he came'. The notion of 'when' is implicit in the verb form, though the clause may optionally begin with **ngunnä**, **ngu**, or **kabri** (from Mandinka), each of which means 'when'. Any NP subject follows the verb (see also §6.2).

- |      |                                   |            |
|------|-----------------------------------|------------|
| (69) | <b>(ngunnä) ng-äk-m</b>           | <b>yaŋ</b> |
|      | (when) when <sup>be</sup> -PST-1s | here       |
|      | when I was here                   |            |
| (70) | <b>(ngunnä) nreeg-ma</b>          | <b>usa</b> |
|      | (when) when <sup>came</sup> -3s   | man        |
|      | when the man came                 |            |
| (71) | <b>(ngunnä) nreeg-i</b>           | <b>usa</b> |
|      | (when) when <sup>came</sup> -bNPS | man        |
|      | when the man came                 |            |

This tense is not used for indirect questions of the type 'I don't know when he came'. These are expressed by means of a relative construction with **waat** 'time' (from Mandinka) as antecedent, requiring **gaa-** class agreement.

**Conditions.** Dependent clauses expressing affirmative and negative conditions use slightly different constructions. In the affirmative a special 'conditional' tense is used, in which the notion of 'if' is implicit, and with which no 'if' conjunction can be used. Progressive meaning can be expressed in this tense by means of the conditional of **ga** 'to

be' + the gerund of the verb, with suffix *-ä*. The verb stem in this tense has a grade 2 initial consonant. (72) gives the singular of the paradigm.

|      |    |                  |             |                     |                    |
|------|----|------------------|-------------|---------------------|--------------------|
| (72) | 1s | <b>reeg-ee-m</b> | if I come   | <b>gee-m reeg-ä</b> | if I am coming     |
|      | 2s | <b>reeg-o</b>    | if you come | <b>g-o reeg-ä</b>   | if you are coming  |
|      | 3s | <b>reeg-Ø</b>    | if he comes | <b>ge-Ø reeg-ä</b>  | if they are coming |

Any NP subject precedes the verb, which is in the third-person form.

A CV verb root with the vowel *o* raises the vowel to the semi-vowel before the non-zero suffixes. The paradigm is given in (73).

|      |    |               |            |    |                 |            |
|------|----|---------------|------------|----|-----------------|------------|
| (73) | 1s | <b>tw-e-m</b> | if I go    | 1p | <b>tw-e-ba</b>  | if we go   |
|      | 2s | <b>tw-o</b>   | if you go  | 2p | <b>tw-oon</b>   | if you go  |
|      | 3s | <b>to-Ø</b>   | if he goes | 3p | <b>tw-e-mmä</b> | if they go |

*Negative.* In negative dependent conditional clauses the verb is in the negative of the non-future or the progressive, as required. The conjunction **niŋka** or **niya** 'if (not)' heads the clause.

- (74) **niŋka leeg-al-m**  
 if<sup>^</sup>not come-NEG-1s  
 if I don't come

*Main clause.* In main clauses associated with conditions, the verb is in the habitual / future or the imperative, as required.

- (75) **cal-ee-m nd-m reegə**  
 if<sup>^</sup>hear-1s FUT-1s come  
 If I hear, I shall come.

- (76) **cal-o reeg-a**  
 if<sup>^</sup>hear-2s come<sup>^</sup>IMPV-2s  
 If you hear, come.

*Hypotheses.* Here again, the constructions for affirmative and negative dependent clauses differ. In a dependent hypothetical clause, and usually in its associated main clause, the verb contains the element *-äk-*, used elsewhere as a mark of previous time (see §4.5). The hypothetical tense has a further marker *-d-*, and the notion of 'if' is implicit, no 'if' conjunction being permissible. The singular paradigm is as in (77).

|      |    |                    |                            |
|------|----|--------------------|----------------------------|
| (77) | 1s | <b>reeg-äk-d-m</b> | if I came / were to come   |
|      | 2s | <b>reeg-äk-d-ä</b> | if you came / were to come |
|      | 3s | <b>reeg-äk-d-a</b> | if he came / were to come  |

After a NP subject, the subject marker is an invariable *-e*.

*Negative.* In the negative, the conjunction **niŋka** or **niya** 'if (not)' introduces the dependent clause, and the verb has what is basically a non-future form, but with the *-äk-* element, as in the present, and with *-ool-* as negative marker, as is usual after *-äk-*. The paradigm is given in (78).

|      |    |                            |                                      |
|------|----|----------------------------|--------------------------------------|
| (78) | 1s | <b>niŋka leeg-äk-ool-m</b> | if I didn't come / weren't to come   |
|      | 2s | <b>niŋka leeg-äk-ool-a</b> | if you didn't come / weren't to come |
|      | 3s | <b>niŋka leeg-äk-ool-e</b> | if he didn't come / weren't to come  |

*Main clauses.* In the associated main clauses, the verb is in a compound form having the element *-äk-*, and *-ool-* in the negative. The stem has a grade 2 initial consonant. The third-person singular forms are shown in (79).

- (79) **äk-ma reegə** he would come      **äk-ool-e reegə** he wouldn't come

(80) is an example of a hypothetical sentence.

- (80) **reeg-äk-d-m      äk-ma cal**  
 come-äk-HYP-1s    äk-3s    hear  
 If I came, he would hear.

#### 4.4 EXTENSION SUFFIXES

There is a rich and lively use of these suffixes, which are added to the root of a verb to modify its lexical and/or relational meaning. A stem may contain more than one such suffix, provided they are compatible.

**-g** 'hither' is used with verbs of motion or direction to indicate movement towards the speaker's real or imagined location, and with other verbs it indicates that the speaker came home after an event.

- |      |                                                         |  |                                                                        |
|------|---------------------------------------------------------|--|------------------------------------------------------------------------|
| (81) | <b>haj-ma</b><br>went <sup>^</sup> up-3s<br>He went up. |  | <b>haj-g-ma</b><br>went <sup>^</sup> up-hither-3s<br>He came up.       |
| (82) | <b>lii-l-iä</b><br>did-L-3s + 3sO<br>He did it.         |  | <b>lii-g-l-iä</b><br>did-hither-L-3s + 3sO<br>He did it and came home. |
| (83) | <b>bwam-ma</b><br>revived-3s<br>He revived.             |  | <b>bwam-g-ma</b><br>revived-hither-3s<br>He came home alive.           |

**-t** is separative (commonly called reversive). When used with verbs of fixing or closing it indicates separating or opening; with other verbs it indicates severance or collapse.

- |      |                                         |  |                                                     |
|------|-----------------------------------------|--|-----------------------------------------------------|
| (84) | <b>jidd-ma</b><br>shut-3s<br>he shut    |  | <b>jidd-t-ma</b><br>shut-SEP-3s<br>he opened        |
| (85) | <b>waab-ma</b><br>shove-3s<br>he shoved |  | <b>waab-t-ma</b><br>shove-SEP-3s<br>he forced apart |

**-iig** is applicative, or shows benefit or disadvantage. When it is used with verbs implying direction, it indicates that a given person is affected. When it is used with other verbs it indicates that a process or state is to a given person's benefit or disadvantage.

The NP or pronoun referring to the person concerned is an additional object of the verb.

- |      |                                                                         |  |                                                                                                                                |
|------|-------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------------|
| (86) | <b>dug-mmä kodi</b><br>steal-3p    money<br>They stole money.           |  | <b>dug-iig-mmaam kodi</b><br>steal-iig-3p+1sO    money<br>They stole money from me.                                            |
| (87) | <b>dab-mmä kodi</b><br>take-3p    money<br>They brought money.          |  | <b>dab-iig-mmaam kodi</b><br>take-iig-3p+1sO    money<br>They took money to me.                                                |
| (88) | <b>jidd-t-d-a      jiddə</b><br>shut-SEP-IMPV-2s door<br>Open the door! |  | <b>jidd-t-iig-d-a      ulafra    jiddə</b><br>shut-SEP-iig-IMPV-2s old <sup>^</sup> man door<br>Open the door for the old man! |
| (89) | <b>barak-al-e</b><br>good-NEG-3s<br>It is no good.                      |  | <b>barak-iig-al-ia</b><br>good-iig-NEG-3s+1sO<br>It is no good to me.                                                          |

**-en** is instrumental or locative. When it is used as an instrumental it indicates that a given item or process is the instrument or means of doing an action, as in (90). Its locative use indicates that a given place is closely linked with an action, as in (91).

- (90) **nd-l-m ceefar**                      **nd-l-məna ceefar-en**  
 HAB-L-1s write                      HAB-L-1s+3sO write-en  
 I write.                      I write with it.
- (91) **bonaa lee niim**                      **bonaa lee niim-en fo kədä**  
 PROG^1p then die                      PROG^1p then die-en LOC bush  
 We will then be dying.                      We will then be dying in the bush.
- an causative.
- (92) **ḡany-d-a majas**                      **ḡany-an-d-am majas**  
 wear-IMPV-2s shoes                      wear-CAUS-IMPV-2p+3sO shoes  
 Wear some shoes!                      Put some shoes on him!
- (93) **mant-an-d-ia budaanunggu**  
 exceed-CAUS-L-3s+3sO sleep(noun)  
 He put him in a very deep sleep. (literally: He caused him to exceed sleep.)
- ar iterative; 'already'
- (94) **bwal-ma**                      **bwal-ar-ma**  
 refused-3s                      refused-ar-3s  
 He refused.                      He refused again.
- (95) **mən-ar-al-m**  
 able-ar-NEG-1s  
 I no longer can. / I'm dead beat!
- (96) **ndoog-iig-ar-d-mmaabo**  
 NEG!work-BEN-ar-IMPV-3p+1pO  
 They shall not work for us again!
- (97) **to-Ø**                      **to-ar-Ø**  
 if^go-3s                      if^go-ar-Ø  
 if he goes                      if he's already gone
- (98) **hay-ar-l-e kodi**  
 take-ar-L-3s money  
 She's already taken the money.
- and- 'not yet' (with negative verb)
- (99) **leeg-al-e**                      **leeg-and-al-e**  
 come-NEG-3s                      come-yet-NEG-3s  
 He has not come.                      He has not yet come.
- (100) **nreeg-d-o**                      **nreeg-and-d-o**  
 NEG!come-IMPV-2s                      NEG!come-yet-IMPV-2s  
 Don't come!                      Don't come yet!
- (101) **al-e reeg-ä**                      **al-e reeg-and-ä**  
 NEG^PROG-3s come-ä                      NEG^PROG-3s come-yet-ä  
 He's not coming.                      He's not yet coming.
- ndee- '(have) just', immediate past
- (102) **roo-l-e**                      **roo-ndee-l-e**  
 go-L-3s                      go-just-L-3s  
 He has gone.                      He has just gone.

#### 4.5 OTHER VERBAL SUFFIXES

The following suffixes differ formally from the ones in §4.4 by being separable from the verb stem by the L-suffix when it is present and by being part of the auxiliary in a compound tense. Both have been met in paradigms cited earlier.

-oo stative, also passive if the verb is transitive.

- |       |              |                   |
|-------|--------------|-------------------|
| (103) | <b>li-ma</b> | <b>li-oo-ma</b>   |
|       | do-3s        | do-STAT-3s        |
|       | He did.      | It's (been) done. |

- |       |                    |                |               |
|-------|--------------------|----------------|---------------|
| (104) | <b>sə</b>          | <b>nd-oo-i</b> | <b>cətt-ä</b> |
|       | how                | HAB-STAT-3s    | call-ä        |
|       | What it is called. |                |               |

-äk used for a previous time or a hypothesis<sup>14</sup> (see§4.3).

- |       |                     |                      |
|-------|---------------------|----------------------|
| (105) | <b>leeg-l-äk-ma</b> | <b>leeg-äk-ool-e</b> |
|       | come-L-äk-3s        | come-äk-NEG-3s       |
|       | He had come         | He had not come.     |

Examples of hypotheses using -äk are given in §4.3.

#### 4.6 'BE', 'HAVE', 'SAY'

The verbs **ga** 'to be' (copular and stative), **gaade** 'have', and **gace** 'say' all have certain irregularities of conjugation, and they all have a deletable initial **g**. Their behavior is not well understood.

**ga** 'to be' is also met as **ge** and **gə**, but the use of these variants is not clear from our data. The full negative form would seem to be **ga-al-e** (be-NEG-3s), but it usually appears as **ale**. As mentioned in §4.1, -**ga** probably underlies the auxiliary in the progressive tense. The form **gä** is probably the gerund in **ä**, so **g-ä**. The 'when' form (see §4.3) for the third-person singular is **ḡgəma** (**ḡg-ma** 'when he was'), and the -**äk**- 'previous time' marker is found in **gaakəma** or **aakəma** (**ga-äk-ma**) 'he was, he had been' with its optionally deleted **g**.

The data does not include a paradigm of the non-future of **ga**, so we only have the second-person singular form **raa** 'you are', and after a strong third-person singular pronoun **mom aa** 'he is'. Other examples of this verb's use are seen in (106)–(111).

- |       |                                        |                        |
|-------|----------------------------------------|------------------------|
| (106) | <b>yaa ge we</b>                       | <b>we ge yaa</b>       |
|       | what be this                           | this be what           |
|       | What is this?                          | What is this?          |
| (107) | <b>budihi ge</b>                       | <b>al-e budihi</b>     |
|       | well be                                | NEG^be-3s well         |
|       | It is a well.                          | It isn't a well.       |
| (108) | <b>budihi ga yaḡ</b>                   | <b>budihi al-e yaḡ</b> |
|       | well be here                           | well NEG^be-3s here    |
|       | There is a well here.                  | There is no well here. |
| (109) | <b>yaa ga doogo gaa-bəl-am</b>         |                        |
|       | what be work Dp-Of-3s                  |                        |
|       | What is his work?                      |                        |
| (110) | <b>al-m mən-ar-ä g-ä nəmb-e</b>        |                        |
|       | NEG^PROG-1s can-again-ä be-ä son^of-2s |                        |
|       | I can no longer be your son.           |                        |
| (111) | <b>mom aa ḡga sembe</b>                |                        |
|       | 3s be with strength                    |                        |
|       | He is strong (with strength).          |                        |

<sup>14</sup>Mandinka **nup** and Crioulo **ba** both have the same two functions. Compare also the use of past tenses in English: 'I went', 'if I went', and French 'j'allais', 'si j'allais'.

**gaade** 'have' has regular forms, such as those in (112).

- (112) **gaadee-ma**                      **gaadee-l-e**  
       have-3s                            have-L-3s  
       he has (plain)                    he has (salient)

- (113) **gaadoole** (= **gaade-al-e**)  
       have-NEG-3s  
       he doesn't have

The conditional, however, is **ge** (= **ge-Ø**) 'if he has', which appears also to mean 'if he is', being the conditional of **ga** 'be'.

There is also a verb **naŋ** or **naa** 'to own', as in (114).

- (114) **sadə**    **səŋa**    **naa-ra**            **mma**    **naa-re**    **saggə**  
       house    which    own-2s            1s            own-L<sup>a</sup>NPS this  
       Which house do you own? (= Which house is yours?) I own this one. (= This one is mine.)

**gace** 'say' seems to have a regular conjugation, but its initial **g** is readily deleted as in (115) and (116). **gace** also has the meaning of 'tell' as in (117).

- (115) **usa**    **(g)acee-ma**                      **usa**    **(g)acee-re**  
       man say-3s                                man say-L<sup>a</sup>NPS  
       the man said (plain)                    the man said (salient)

- (116) **(g)acoole** (= **gace-al-e**)  
       say-NEG-3s  
       He didn't say.

- (117) **bur**    **mbunne**    **bu-gace-äk-iammä**      (**e + äk → ook**)  
       tree    the<sup>^</sup>one    REL-tell-PST-3s+3pO  
       the tree he had told them (about)

An NP referring to the person spoken to is introduced by **ŋga**, often glossed as 'with', after the verb of speaking as in (118), or in a non-verbal expression as in (119).

- (118) **acee-ma**    **ŋga**    **usa**    **mmä**  
       say-3s        with man QUOTE  
       He said to the man . . .

- (119) **mma**    **ŋga**    **mom**  
       1s        with 3s  
       I said to him

The quote marker **mmä** can stand alone to mean 'he said' or 'I said', as appropriate, when reporting speech. Indeed it is possible that (119) should more correctly be **mmä ŋga mom**, with the same gloss, the speaker's self-reference being understood.

#### 4.7 VERB SEQUENCES

As is common in West African languages, Biafada uses sequences of verbs in several ways, in some of which they are sometimes termed SERIAL VERBS.

In Biafada two syntactical construction types are involved: coordinate and subordinating. In coordinate clauses verbs each have their own subject marker, whether or not they have a common referent, and there are no conjunctions corresponding to 'and' or 'but'. When the L- salience marker is used it is usually in the first verb only. In the subordinating constructions, the non-initial verb is in its stem form with grade 2 initial consonants, and in some contexts takes the gerund suffix **-ä**. No determining factor for this variation was apparent. In some instances when eliciting data, two versions of an example were couched in two different constructions; presumably their choice in discourse would be determined by the emphasis or highlighting required.

In some coordinate clause sequences the verbs are semantically coordinate, as in a narrative sequence. In others, there is a semantic hierarchy between the verbs, as there is in a subordinating construction. Some examples of sequences are in (120)–(126).

*Narrative sequence*

- (120) **roo-ma dampan-ma unaal**  
 go-3s deceive-3s woman  
 He went and deceived the woman.
- (121) **sal-ma gəbwəŋa roo-ma wadi-ma**  
 hear-3s voice go-3s hide-3s  
 He heard the voice and went and hid.

These are typical sequences in which no event is highlighted. In (122), both verbs have the salient L-form, so that each event is given due weight.

- (122) **sal-l-m gəbwəŋa gəbəla yeegee-l-m**  
 hear-L-1s voice of<sup>2</sup>s fear-L-1s  
 I heard your voice, and I was afraid.

*Movement + Direction*

In (123) the sequence is coordinate, with the first verb in the L-form.

- (123) **ndonggi gutte (=gul-re) haj-ma fo bur bwās**  
 cat run-L<sup>a</sup>NPS go<sup>u</sup>up-3s LOC tree top  
 The cat ran up the tree.

Example (124) gives the second verb in the grade 2 stem form.

- (124) **ndonggi gutte (=gul-re) kaj fo bur bwās**  
 cat run-L<sup>a</sup>NPS go<sup>u</sup>up LOC tree top  
 The cat ran up the tree.

It happens that Biafada does not need the direction verb if it is deemed obvious as in (125).

- (125) **ndonggi gutte (=gul-re) fo bur bwās**  
 cat run-L<sup>a</sup>NPS LOC tree top  
 The cat ran up the tree.

*Purpose*

In (126) the second verb is in gerund form.

- (126) **roo-ma wad-ä**  
 go-3s hide-ä  
 He went to hide.

**Comparison.** Various sequences are used involving the verb *fal* 'surpass' as in (127) and (128).

- (127) **jann-äk-ma fal-ma gəlamaar pre**  
 clever-PST-3s surpass-3s animals all  
 He was cleverer than all the animals.

Here the cleverness is in focus, while in (128) the superiority is in focus.

- (128) **fal-ma gəlamaar pre jann-ä**  
 surpass-3s animals all clever-ä  
 He was cleverer than all the animals.

Syntactically, (127) has two coordinate verbs, while in (128) the second verb is in gerund form.

**Use of *fatte*.** The verb *fal* 'surpass' has the L-form *fatte* (= *fal-re*), nonfuture after NP subject. This same form, apparently frozen, occurs in some comparisons as a second

verb, when the basis of comparison is in focus as in (129), rather than the fact of the comparison.

- (129) **dangee-l-me     fatte     nnyi     soos**  
 curse-L-1s+2sO    surpass(ing)    thing    every  
 I have cursed you more than everything.

**Use of nga.** Comparisons can also be expressed by means of the preposition **nga**, often glossable as 'with'. The verb **fal** 'surpass' is not then used. Compare (130) and (131), where (130) uses **fal** and (131) uses **nga**.

- (130) **karu ngaane fatte (=fal-re)     baj-ä     gaaga**  
 car    that    surpass-L^aNPS    last^long-ä    this  
 That car has lasted longer than this one.

- (131) **karu ngaane nda     baj     nga gaaga**  
 car    that    HAB^aNPS    last^long    with    this  
 That car has lasted longer than this one.

In (130), **fatte** is in its regular nonfuture use after NP subject, as against its frozen form in (129).

**'come' and 'go'.** In addition to the verbs **ro ~ to ~ nto** 'go' and **leeg ~ reeg ~ nreeg** 'come' there is another: **bwara** 'come/go', which does not specify direction in relation to the speaker.

- (132) **faa     bwara**  
 where?    come/go^2s  
 Where are you off to?

**bwara** is a defective verb, showing no inflexion and no overt subject marker other than the third-person singular **-ma**. It is never salient and never negative.

It supplies the direction component before a locative if there is no specific verb of movement or direction, as in (133).

- (133) **naaf-g-l-e     kasoti bwara     fo     sada**  
 take^hold-hither-L-3s    box    come/go    LOC    house  
 He took the box home.

Without **bwara** the locative would be static as the scene of action as in (134).

- (134) **naaf-g-l-e     kasoti fo     sada**  
 take^hold-hither-L-3s    box    LOC    house  
 He picked up the box in the house.

**bwara** can be used as an auxiliary with future reference as in (135) and (136).

- (135) **bwara-ma     cal-ä**  
 come/go-3s    hear-ä  
 He is about to hear.

- (136) **bwara-ma     reeg-ä**  
 come/go-3s    come-a  
 He is about to come.

**bwara** does not overtly take the gerund suffix **-ä** in (137).

- (137) **gkudu     maa     bwara**  
 tomorrow    PROG^3s    come/go  
 Tomorrow he is coming/going.

- (138) **gkudu     maa     reeg-ä**  
 tomorrow    PROG^3s    come-ä  
 Tomorrow he is coming.

The verb **lee** (i.e., **lee-g** 'come' without the **-g** 'hither' suffix) occurs as a modal verb. As such it can supply the negative and other forms not available with **bwara** as in (139) and (140).

- (139) **al-e**            **lee**        **cal-ä**  
 NEG<sup>^</sup>PROG-3s come hear-ä  
 He is not about to hear.

- (140) **al-e**            **lee**        **reeg-ä**  
 NEG<sup>^</sup>PROG-3s come come-ä  
 He is not about to come.

This use of **lee** serves as a narrative link, such as 'and then', and often appears with **leeg** 'come' itself.

- (141) **bonaa**   **lee**    **niim-en**   **fo**   **kädä**  
 PROG<sup>^</sup>1p come die-LOC LOC bush  
 We will then die in the bush.

- (142) **bänya**   **leeg-re**        **lee**        **meed-ä**  
 people come-L<sup>^</sup>aNPS come ask-ä  
 People came and (then) asked.

- (143) **leeg-i**        **lee**        **leeg-ä**   **uyama**   **uyagalä**<sup>15</sup>  
 come-bNPS come come-ä chief other  
 Then there came another chief.

#### 4.8 FORWARD PLACING OF OBJECT SUFFIX AND STATIVE SUFFIX

When a verb stem follows an auxiliary or a modal verb, any object suffix semantically linked with it is affixed to the auxiliary or modal. The same applies to the stative suffix **-oo**.

- (144) **ro-mmana**   **re-ä**  
 go-3p+3sO see-ä  
 They went to see him.

- (145) **mmän-d-iammä**        **dam-ä**  
 NEG!able-IMPV-3s+3pO kill-ä  
 He must not be able to kill them.

In both these examples the first verb is intransitive, yet carries the object suffix which refers to the actual object of the transitive verb following.

In (146) the stative marker applies to the second verb, but is affixed to the first verb, whose meaning seems in conflict with the notion of stativeness.

- (146) **umäs(e)**<sup>16</sup> **-oo-mmä**   **jaab-ä**  
 begin-STAT-3p celebrate-ä  
 They began to celebrate (be celebrating).

Compare this structure with (147) and (148).

- (147) **umäsee-mmä**  
 begin-3p  
 They began.

- (148) **jaab-oo-mmä**  
 celebrate-STAT-3p  
 They were celebrating / in a state of celebration.

<sup>15</sup>The tautology in this sentence did not appear to be unusual, though its function is not clear.

<sup>16</sup>Stem final **e** is deleted here.

## 5. QUESTIONS

The interrogative words and their equivalents in direct questions are given in the table in (149).

| (149) Direct      |                         | Indirect                        |
|-------------------|-------------------------|---------------------------------|
| <b>waa?</b>       | who?                    | <b>u</b>                        |
| <b>yaa?</b>       | what?                   | <b>bwa</b>                      |
| <b>faa?</b>       | where?                  | <b>fə</b>                       |
| <b>suga?</b>      | when?                   | <b>waat gaa (a)</b>             |
| <b>bwaya</b>      | why?                    | <b>bwa lee</b>                  |
| <b>bwa sabre?</b> | why?                    | <b>bwa sabre, bwa sabma (b)</b> |
| <b>sia?</b>       | how?                    | <b>sə</b>                       |
| <b>-suga? (c)</b> | how many?               | <b>sə (d)</b>                   |
| <b>-ga? (e)</b>   | which?                  | (relative clause)               |
| <b>a . . . ?</b>  | yes/no question initial | <b>te</b> 'whether'             |

Notes:

- (a) **waat** 'time' is the antecedent of a relative clause of which **gaa-** is the relative marker, showing class concord with **waat** (=Ø-**waat**).  
 (b) **sab** 'cause' (from Mandinka) is a verb; these expressions thus mean 'what causes'. The meaning of **lee** in **bwa lee** is not known.  
 (c) This is an adjective agreeing with the noun counted.  
 (d) **sə** follows the noun referred to, as in (151).  
 (e) **-ga** is morphologically a demonstrative, with forms identical to **-gə** 'this' except for the final vowel; the **g** is replaced by a nasal in the grade 3 classes (see (14) in §2). Some examples of questions and indirect equivalents can be seen in (150)–(153).

- (150) **ma-dda ma-cuga leeg-re**  
 Np-children Dp-how^many? come-L^aNPS  
 How many children have come?
- (151) **(yan-al-m) ma-dda sə leeg-re**  
 know-NEG-1s Np-children how^many come-L^aNPS  
 (I don't know) how many children have come.
- (152) **a ma-dda leeg-re**  
 QUERY Np-children come-L^aNPS  
 Have the children come?
- (153) **(yan-al-m) te ma-dda leeg-re**  
 (know-NEG-1s) whether Np-children come-L^aNPS  
 (I don't know) whether the children have come.

## 6. SUBORDINATE CLAUSES

## 6.1 RELATIVE CLAUSES

A relative clause is marked by an initial verb bearing a class exponent controlled by the antecedent, thus effectively marking it as a dependent nominal unit within the sentence. This class exponent does not show which is the subject of the clause itself; that is shown by the subject marker, as elsewhere in the language. In a non-subjectival relative clause, a subject NP, if present, follows the verb.

Throughout this section, the class exponent referring to the antecedent will be labelled as REL(ative) in the analytical glosses.

- (154) **u-sa u-leeg-re**  
 Np-man REL-come-L<sup>a</sup>NPS  
 the man who came
- (155) **Ø-doogo gaa-li-i u-sa**  
 Np-work REL-do-bNPS Np-man  
 the work the man did

In (154) the relative clause is subjectival and the verb therefore has the subject marker **-re** in the nonfuture tense, indicating that the subject NP precedes it, in this instance being the antecedent, **u-sa** 'man', which controls the relative prefix **u-**.

In (155) the relative clause is non-subjectival. Though the antecedent **Ø-doogo** 'work' controls the relative prefix **gaa-** it is not the subject NP of the verb. This NP subject is **u-sa**, which here follows the verb, which accordingly has the subject marker **-i** in the nonfuture. It would be possible to use instead of **-i** the subject suffix **-ma** '3s' (or **-mmä** '3p' if the NP is plural), but this too would refer away from the antecedent.

The directional implications of the subject marker are shown again in (156) and (157), where the marker alone differs. (156) is subjectival and (157) is not.

- (156) **u-sa u-lee-re nə-nda**  
 Np-man REL-see-L<sup>a</sup>NPS Np-child  
 the man who saw the child
- (157) **u-sa u-lee-ma nə-nda**  
 NP-man REL-see-3s Np-child  
 the man whom the child saw

The grade of the verb-stem initial consonant is determined by the relative class exponent in the nonfuture or in a **g**-initial auxiliary. Otherwise, the requirements of the tense take precedence. In (158) the relative **u-** is followed by a grade 1 **g**, which it determines. In (160) **u-** is followed by grade 3 **nd**, this consonant being required by the tense marker concerned. In both (159) and (161), **nə-** as relative is followed by grade 3 consonants: **ng** is determined by the class exponent, while **nd** is also required by the tense marker, as in (160).

- (158) **u-sa u-gaa reeg-ä**  
 Np-man REL-PROG<sup>a</sup>NPS come-ä  
 the man who is coming
- (159) **nə-nda nə-ngaa reeg-ä**  
 Np-child REL-PROG<sup>a</sup>NPS come-ä  
 the child who is coming
- (160) **u-sa u-nda reeg-ä**  
 Np-man REL-HAB<sup>a</sup>NPS come-ä  
 the man who comes
- (161) **nə-nda nə-nda reeg-ä**  
 Np-child REL-HAB<sup>a</sup>NPS come-ä  
 the child who comes

When the antecedent is object of a main clause, three basic word orders are possible. In (162)–(164), the examples are glossed as 'I saw the man who came'; their selection will depend on topic and highlighting in the discourse context.

- (162) **lee-l-m u-sa u-leeg-re** (Verb + Object + RelCl)  
 see-L-1s Np-man REL-come-L<sup>a</sup>NPS  
 I saw the man who came.
- (163) **u-sa lee-m u-leeg-re** (Object + Verb + RelCl)  
 Np-man see-1s REL-come-L<sup>a</sup>NPS  
 I saw the man who came.

- (164) **u-sa u-leeg-re lee-l-məna** (Object + RelCl + Verb)  
 Np-man REL-COM-L<sup>a</sup>NPS see-L-1s+3sO  
 I saw the man who came.

In (162) the main clause verb is highlighted, while in (163) the noun **u-sa** is highlighted, and the relative clause is perhaps a comment. In (164), which is literally 'the man who came, I saw him', the antecedent and relative clause are the topic, with the main verb as comment.

**Genitival relative marker.** In a relative clause the verbal affix **-adii** is an associative (genitive) marker referring to the antecedent as being linked, as possessor, for example, with a NP in the clause.

- (165) **u-sa u-faramət(e)<sup>17</sup>-adii-re Ø-karu**  
 Np-man REL-spoil-GEN-L<sup>a</sup>NPS NP-car  
 the man whose car is broken down
- (166) **u-sa lee-m sa-də sa-yitt-adii-re**  
 Np-man see-1s Np-house REL-burn-GEN-L<sup>a</sup>NPS  
 I saw the man whose house burned.

In (165), though the noun **karu** 'car' is the passive subject of the verb **faraməte** 'spoil', the marker **-adii** refers the verb back to the antecedent, **u-sa** 'man', which controls both the relative marker and the use of the **-re** 'after-NP-subject marker'.

In (166) the noun **sa-də** 'house' controls the relative clause verb **sa-yitt-...-re** 'which burned', which is marked by **-adii** as being associated with **u-sa** 'man'.

With (165) we may compare (167), where the verb **faraməte** 'spoil' appears between the same two nouns, but instead of **-adii** has the suffix **-iig** indicating that the person is (adversely) affected, and **-oo** showing that the verb is stative. **karu** 'car' is then syntactical subject of the verb, as marked by the suffix **-i**.

- (167) **u-sa u-faramət(e)<sup>18</sup>-iig-oo-i Ø-karu**  
 Np-man REL-spoil-iig-STAT-bNPS Np-car  
 the man the car is broken down on

The **-ne** demonstrative often specifies the antecedent of a relative clause.

- (168) **bu-r mbu-nne bu-gace-äk-iammä gədanä** (e + äk → ook)  
 Np-tree Dp-DEM REL-tell-PST-3s+3pO God  
 the (specific) tree God had told them of

## 6.2 TIME CLAUSES

**Past reference.** Time clauses with past reference have a verb in the TEMPORAL form, which has a grade 3 initial consonant (see §4.3). In the clause the verb stands first, optionally preceded by a conjunction. Any NP subject follows the verb, which then optionally takes the **-i** suffix, showing that this NP follows.

The conjunctions are **ḡgunnä**, **ḡgu**, **kabri** 'when' and **te** 'until' (from Crioulo).

- (169) **(ḡgunnä) nreeg-i usa**  
 (when) when<sup>a</sup>came-bNPS man  
 when the man came
- (170) **ndug-iig-ia bəsa kodi**  
 when<sup>a</sup>stole-from-bNPS+1sO men money  
 when the men stole money from me

<sup>17</sup>Stem final e is deleted here.

<sup>18</sup>Stem final e is deleted here.

- (171) **te mmant-ma**  
 until when<sup>^</sup>exceeded-3s  
 until it exceeded = to excess, very much indeed

**Nonpast reference.** Time clauses with nonpast reference are in effect relative clauses with **waat** 'time' as antecedent, having **gaa-** as the relative marker in the verb as seen in (172) and (173).

- (172) **ntoo-d-o Ø-waat gaa-maa reeg-ä**  
 NEG!go-IMPV-2p Np-time REL-PROG<sup>^</sup>3s come-ä  
 Don't go when he is coming.

- (173) **ntoo-d-o te Ø-waat gaa-leeg-ma**  
 NEG!go-IMPV-2s until Np-time REL-come-3s  
 Don't go until (the time when) he has come.

This same construction applies to indirect questions referring to time (see §5).

### 6.3 PURPOSE CLAUSE

If the referent of the subject or object of the main clause is the same as the one carrying out the purpose, then **bə** 'in order to' can be used, with a grade 1 verb gerund as in (174) and (175).

- (174) **ditt-am bə ro-ä falee baabä**  
 get<sup>^</sup>up-PROG<sup>^</sup>1s bə go-ä LOC my<sup>^</sup>father  
 I am getting up to go to my father.
- (175) **nup-and-al-aam nnyi soos bə li-ä joon**  
 give-yet-NEG-2s+1sO thing every bə make-ä rejoicing  
 You have never yet given me anything to celebrate with.

Purpose can be indicated implicitly by a grade 2 verb gerund following the main verb as in (176)–(178).

- (176) **bat-mmä bwanyar ri-ä nyafaddə**  
 pick-3p leaves make-ä cloths  
 They picked leaves to make cloths.
- (177) **al-e reeg-ä te ceefar-ä nyahait**  
 NEG<sup>^</sup>PROG-3s come-ä except write-ä letters  
 He is not coming except to write letters.
- (178) **roo-ma raal-ä maahumba**  
 go-3s watch-ä pigs  
 He went to watch pigs.

When another than the subject is to carry out the purpose, **te**, here meaning 'so that', is used with the hortative.

- (179) **yiim-iä te maa ro-ä ri-ä . . .**  
 .send-3s+3sO te HORT<sup>^</sup>3s go-ä do-ä . . .  
 He sent him so that he should go and do . . .

In (179) **ro-ä** is the grade 1 gerund of **ro ~ to ~ nto** 'go', as required in the hortative; **ri-ä** is the grade 2 gerund of **li ~ ri ~ nri** 'do, make', as required to express purpose after 'going'.

### 6.4 MANNER CLAUSES

Clauses expressing manner or extent are introduced by various markers as in (180)–(183).

- (180) **sə** 'how'  
**yan-al-m**      **sə**      **li-ia**  
 know-NEG-1s how do-3s+3sO  
 I don't know how he did it
- (181) **te** 'until'  
**te**      **mmant-ma**  
 until when^exceeded-3s  
 until when it exceeded = to excess (see (171))
- (182) **an** '(not) even'  
**an**      **unya**      **nuŋ-al-ia**      **nnyi**  
 not^even person give-NEG-3s+3sO thing  
 No one even gave him a thing.
- (183) **an**      **gunnəmma**      **bwal-al-m**  
 not^even once refuse-NEG-1s  
 I have not refused even once.

## 7. LOCATIVES

Indications of place for the most part begin with **f** or **mp**, which suggest a locative concord class with exponent initial **f** ~ **mp**, comparable with Bantu class 16 prefix **\*pa-** locative (Hinnebusch 1989:466–7). There is a noun **fanyi** 'side' which could be the notional reference of such concords.

- (184) **finy**      somewhere  
**finy fəŋasa**      somewhere far, a long way off  
**fo**      locative preposition (non-persons)  
**falee**      locative preposition (personal)  
**fanəmma**      in one place (cf. **-nəmma** 'one')  
**faa?**      where?  
**fə**      where (indirect question)  
**fəm**      there (= in the place concerned)  
**mpeene**      there (yonder) (cf. **-ne** 'that yonder')

The one locative word which does not have **f** ~ **mp** initial is **yaŋ** 'here' (from Mandinka), which on the analogy of the above, replaces an expected **\*feegə**. **yaŋ** also replaces **fo** as a preposition when the speaker is in the place concerned as in (185).

- (185) **fo**      **mpada-ma**      **yaŋ**      **mpada-ma**  
 LOC place^name-3s      LOC place^name-3s  
 He is at Empada.      He is here at Empada.

The locatives can be used in nonverbal sentences. The paradigms in (186) illustrate these, but show that there are problems of analysis.

- (186) 1s      **faa-g-m?**      where am I?      **yaŋ-m**      here I am  
 2s      **faa-raa?**      where are you?      **yaŋ-ra**      here your are  
 3s      **faa-ma?**      where is he?      **yaŋ-ma**      here he is

The **-g-** of **faa-g-m** suggests the use of **ga** 'to be', but it does not appear with **yaŋ** nor with the other persons shown.

The negative of 'to be' precedes the locative in the negative form as seen in (187).

- (187) **al-m**      **fo**      **mpada**  
 NEG^be-1s LOC place^name  
 I am not at Empada.

- (188) **al-e yaŋ mpada**  
 NEG<sup>be-3s</sup> LOC place<sup>name</sup>  
 He is not here at Empada.

**fo** is used with time expressions as in (189).

- (189) **fo nnagə wannə**  
 LOC day this  
 on this day

**fo** is also used with verb gerunds in certain contexts as in (190).

- (190) **Ø-doogo gaa-ləmaagə gaa-li-i gədanə fo pay-ä pay-an-iammä**  
 Np-work Dp-great REL-do-bNPS God LOC save-ä save-INST-3s+3pO  
 the great work God did in the saving (with which) he saved them

With relative clauses defining a location in relation to the antecedent, the use of a locative marker seems to depend on the type of verb in the clause as in (191) and (192).

- (191) **sa-də sa-taambw-ma yitt-re**  
 Np-house REL-go<sup>in-3s</sup> burn-aNPS  
 The house he went into burned.

- (192) **fo sa-də sa-gg-ma yitt-re**  
 LOC Np-house REL-be-3s burn-bNPS  
 The house he was in burned.

In (191), the verb of direction **taambw** 'go in' is used with no locative marker. In (192), in the presence of **-gg-**, a form of 'to be', a locative marker precedes the antecedent, though it is itself the subject of the main clause verb **yitt-re** 'burned'.

## 8. USES OF **ŋga**

The preposition **ŋga**, often denoting accompaniment, is used in several ways. Between noun phrases it can mean 'and', but it is never a link between clauses.

- (193) **mma ŋga mom**  
 1s and 3s  
 I and he (see (119) in §4.6 for a different gloss)

- (194) **acce-l-e ŋga mma mmä**  
 say-L-3s ŋga 1s QUOTE  
 he said to me . . .

**ŋga** can be used instead of the extension suffix **-en** (see §4.4) to mark the instrument of an action.

- (195) **ob-l-ia ŋga tarsadu**  
 cut-L-3s+3sO INST machete  
 He cut it with a machete.

- (196) **ob-en-d-ia tarsadu**  
 cut-INST-L-3s+3sO machete  
 He cut it with a machete.

The use of **ŋga** in marking a comparison is shown in §4.7.

**ŋga** marks a time expression in the phrase **ŋga bwaləgu** 'in the rainy season'.

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## APPENDIX

### LIST OF TENSES

The Biafada tenses are listed here according to their morphology, beginning with the simple tenses having grade 2 stem-initial consonants, from which the grade 1 and grade 3 variants are derived (see §1.2).

The simple, affixless root **kaj** 'go up' is the stem of the verb illustrated here. The paradigms are given in the sections indicated.

#### Grade 2 – simple tenses

Conditional affirmative (dependent clause) (§4.3)

**kaj-Ø** if he goes up

Progressive affirmative (form 1) (§4.1)

**kaj-ä-ma** he is / will be going up

Hypothetical (dependent clause) (§4.3)

**kaj-äk-d-e** if he went up / were to go up

**niŋka kaj-äk-ool-e** if he weren't to go up

#### Grade 2 – compound tenses

Habitual / Future affirmative (§4.1)

**nd-ma kaj** he goes / will go up

Habitual negative (§4.1)

**nd-add-e kaj** he doesn't go up

Hypothetical (main clause) (§4.3)

**äk-ma kaj** he would go up

**äk-ool-e kaj** he wouldn't go up

Potential affirmative (§4.2)

**nt-ee kaj** he may go up

Progressive affirmative (L-form)(§4.1)

**lee kaj-ä** he is / will be going up

Progressive affirmative (non-initial form) (§4.1)

**. . . maa kaj-ä** . . . he is / will be going up

Progressive negative (§4.1)

**al-e kaj-ä** he isn't going up

#### Grade 1 – simple tenses

Nonfuture (§4.1)

**haj-l-e / haj-ma** he went up (salient / plain)

**haj-al-e** he didn't go up

Imperative affirmative (§4.2)

**haj-d-a** go up!

#### Grade 1 – compound tenses

Hortative affirmative (§4.2)

**maa haj-ä** he should go up

**Grade 3 – simple tenses**

Imperative negative (§4.2)

**ŋkaj-d-o**

don't go up!

Temporal affirmative (§4.3)

**ŋkaj-ma**

when he went up