

The Reconstruction of Baka-Mundu (Ubangi, Niger-Congo): On the Historical Comparison of the Nominal System

MA Project

- + My MA thesis consists of two general parts: Firstly of a lexical reconstruction of ca. 190 items and secondly of a reconstruction of the nominal system.
- + The present talk treats the second part of my thesis and is structured as follows:

1 Introduction

- 1.1 Baka-Mundu
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1 Introduction

1.1 Baka-Mundu

- + Representatives of this group are found in a wide area of central Africa north of the Equator, distributed with an east-west extension from South Sudan to Gabon and Cameroon.
- + Baka-Mundu consists of farming as well as pygmy/forager peoples.
- + The family has been called Ngbaka and more recently Ngbakaic in former research contributions.

1.2 Doculects and Material

- + Initially the project deals with 'doculects' (variety per research contribution) to treat the data as unbiased as possible and to give a complete overview of all contributions.¹
- + On this basis, the corpus consists of 33 doculects (Table 1), which differ considerably in the amount of available data.
- + While lexical data is available for all doculects but one, the comparison of grammatical elements is limited to 6 better described languages (15 doculects covered). These descriptions cover all sub-groups of Baka-Mundu that have been proposed so far.
- Grammatical descriptions of the remaining doculects are short sketches or not available at all.
- + All earlier classificatory accounts are based exclusively on lexical data. Some are based on only a small number of innovations.

- + Interestingly the speaker communities of the doculects 1–7 as well as 12 and 13 are foraging pygmy populations, while all other speaker communities predominantly² practice farming.
- + No information on subsistence can be given regarding doculect 14 due to a lack of evidence.
- The variety of doculect 14 is likely to be identical with those of doculects 12 and 13 which are spoken by foragers/pygmies.

- + Traditionally Baka-Mundu is classified into a western and an eastern branch (Figure 1).
- The western branch is further divided into four subgroups.
- The eastern branch is divided into two subgroups.

¹ For example the literature distinguishes several Baka varieties. Despite the increased probability of an identical classificatory entry, such cases are first considered individually and treated separately.

² Pastoralism and fishing are also practiced among most non-pygmy populations.

Niger-Congo

 Atlantic-Congo

 Volta-Congo

 North

 Ubangi

Baka-Mundu

I Western

- a. Baka, Ganzi, Gundi, Limasa, Ngombe
- b. Monzombo, Kpala, Yango
- c. Ngbaka-Ma'bo³, Gilima
- d. Gbanziri-Boraka

II Eastern

- a. Mayogo, Bangba
- b. Mundu

Figure 1: Classification of Baka-Mundu (following Boyd 1989, Hammarström et al. 2013 and the Lewis et al. 2015)

+ Since this classification is the starting point of my analysis, I will apply the references by roman numbers for the branches and latin letters for the sub-groups in the following.

1.3 Orthography

- + While high tone (́) and low tone (̀) are generally marked, mid tone is marked (̄) in some sources but unmarked in others. Throughout my paper mid tone is not marked.
- + Affixes are written separately in some sources, while linked to their host by a hyphen in others. I illustrate affixes according to the latter approach.

2 Typological Features of Baka-Mundu

- + Syllable structure: CV, CVV and CVCV(CV) in polysyllabic lexemes
- + Notable phonemes: Labial velars (/kp/, /gb/), implosives (/ɓ/, /ɗ/), prenasalised consonants (/nd/, /mb/, /nz/, etc.)
- + 7 vowel system (/i, e, ε, a, ɔ, o, u/)
- + ATR-based vowel harmony is wide spread among Baka-Mundu languages.

³ This variety is often referred to only as Ngbaka in the literature. This group may be confused with Ngbaka ISO 639-3: [nga] of the Gbaya (North Volta Congo < Niger Congo) group.

- + All languages are tone languages with three tones (high, mid, and low). Only Monzombo also shows a forth (super high) tone.
- Every syllable constitutes a tone bearing unit. Tone is both lexical and grammatical.
- + The canonical sentence has SVO word order.
- + Fairly isolating
- + All Baka-Mundu languages show a strong head-initial tendency.

$$(1) \quad (\text{verbal QUAL}) + N + \left\{ \begin{array}{l} \text{POSS} \\ \text{NUM} \\ \text{ATTR} \\ \text{QUANT} \\ \text{DEM} \\ \text{DET} \end{array} \right.$$

- + Quality expressions exist in a nominal and in a verbal form (treated in 3.1.2 below), the latter of which is the only element that occurs before the head noun.

3 Complex Nouns

- + The vast majority of noun stems in Baka-Mundu languages are monosyllabic.
- Strict rules for the usage of nominal forms apply in all documented varieties.
- + Nouns in Baka-Mundu are found in two versions, simple and complex.
- + Monosyllabic simple nouns, i.e. the ‘bare’ nominal stems, are considered incomplete and do not appear as citation forms and cannot be used unaltered.
- + A simple form can be modified into a complex form by means of reduplication, affixation, and compounding.
- A ‘ready-for-use’ noun is thus always a morphologically complex word.

3.1 Reduplication

3.1.1 Independent Nouns

- + Reduplication is used to set a noun in a state, where it is not determined or possessed.
- This strategy enables the independent use of nouns.

Baka 3, 4 (3, 4)

(2) <i>kpa-kpa</i>	(3) <i>tè-te</i>
RED-hand	RED-nest
‘hand’ (Djoupee 2002: 30)	‘nest’ (Djoupee 2005: 76)

(4) **Monzombo 1 (15), Gilima (22), Gbanziri (23)**

te-te

RED-house

‘house’ (Boyeldieu & Cloarec-Heiss 1986: 372)

(5) **Monzombo 1 (15)**

nzò-nzò

RED-head

‘head’ (Boyi 1983: 167)

(6) **Ngbaka-Bokanga 1 (19)**

mò-mò

RED-mouth

‘mouth’ (Thomas 1981: 219)

Gbanziri 1 (23)

(7) ***kpa-kpa***

RED-hand

‘hand’

(8) ***bú-búma***

RED-heart

‘heart’ (Rombi & Thomas 2006: 42)

(9) **Mayogo (26-28), Bangba (29-30), Mundu (31)**

se-se

RED-stench

‘stench, smell’ (Boone 1994:46)

+ Examples (10-12) below accordingly show that reduplication is used to reference a (left out) possessor in the third person singular. Reduplication marks such nouns as inalienable.⁴

(10) **Monzombo 1 (15)**

a. *nìi mi si*

DEM.PROX tongue fish

‘This is the tongue of a fish’ (ceci est la langue d’un poisson)

b. *nìi mì-mi*

DEM.PROX RED-tongue

‘This is the tongue’ (ceci est la langue (d’un poisson)) (Boyi 1983: 167)

⁴ Cf. also Jeffrey & Polley (1981: 10, 26)

(11) Mayogo (25-28)

- a. *na-tulu kute eti ne doto*
INF-put body house with dirt
'to put dirt on the body of a house'
- b. *na-tulu kute kute ne doto*
INF-put RED body with dirt
'to put dirt on the body of it' (Sawka 2001: 66)

(12) Mundu (Faradje) (33)

- a. *kóté*
body
'body'
- b. *kó-kóté*
RED- body
'his/her/its body' (Jeffrey & Polley 1981: 10)

+ It seems that nouns in Baka-Mundu languages are inherently possessed and can be enabled to appear independently by a reduplicated complex form.

(13) Ngbaka-Bokanga 1 (19)

- a. *mò*
mouth
'mouth of'
- b. *mò-mò*
RED-mouth
'mouth'

3.1.2 Verbal Nouns

- + Verbs (mostly quality expressions) are nominalised by means of reduplication.
- Total (of monosyllabic stems) and partial (of polysyllabic stems) reduplication are used as mechanisms of word formation.
- This can be shown for all varieties with the exception of Mundu.

a) Total Reduplication

(14) Baka 3, 4 (3, 4)

- | | | | |
|------|--------------------------------------|------|--|
| a.I | <i>kpo</i>
reject
'to reject' | b.I | <i>kpó-kpò</i>
RED-reject
'rejection' |
| a.II | <i>ngbe</i>
be.big
'to be big' | b.II | <i>ngbe-ngbe</i>
RED-be.big
'bigness' (Djoupee 2002: 45) |

(15) **Monzombo 1 (15)**

- | | | | |
|-------------|--------------|-------------|--------------------------------|
| a.I | <i>g̪</i> | b.I | <i>g̪-g̪</i> |
| | leave | | RED-leave |
| | ‘to leave’ | | ‘departure’ (Thomas 1971: 114) |
| a.II | <i>ngi</i> | b.II | <i>ngi-ngi</i> |
| | be.long | | RED-be.long |
| | ‘to be long’ | | ‘length’ (Boyi 1983: 126) |

(16) **Ngbaka-Bokanga 1 (19)**

- | | | | |
|-----------|---------------|-----------|--------------------------------|
| a. | <i>ndu</i> | b. | <i>ndu-ndu</i> |
| | be.short | | RED-be.short |
| | ‘to be short’ | | ‘shortness’ (Thomas 1963: 125) |

(17) **Mayogo (25-28)**

- | | | | |
|-----------|-------------|-----------|----------------------------|
| a. | <i>ngbe</i> | b. | <i>ngbe-ngbe</i> |
| | be.big | | RED-be.big |
| | ‘to be big’ | | ‘bigness’ (Sawka 2001: 63) |

b) Partial reduplication

+ In partial reduplication the first syllable is reduplicated. This is sometimes accompanied by a tonal change.

(18) **Baka 3, 4 (3, 4)**

- | | | | |
|-----------|---------------|-----------|----------------------------|
| a. | <i>déké</i> | b. | <i>dè-déké</i> |
| | be.young | | RED-be.young |
| | ‘to be young’ | | ‘youth’ (Djoupee 2002: 44) |

(19) **Ngbaka-Bokanga 1 (19)**

- | | | | |
|-----------|-------------|-----------|-------------------------------|
| a. | <i>síti</i> | b. | <i>sí-síti</i> |
| | be.bad | | RED-be.bad |
| | ‘to be bad’ | | ‘evil (n)’ (Thomas 1963: 124) |

(20) **Mayogo (25-28)**

- | | | | |
|-----------|---------------|-----------|------------------------------|
| a. | <i>djedje</i> | b. | <i>dje-djedje</i> |
| | be.small | | RED-be.small |
| | ‘to be small’ | | ‘smallness’ (Sawka 2001: 78) |

- + The varieties of Ib and Ic (cf. Figure 1) furthermore show the use of reduplication to form the infinitive (verbal noun form).
- This phenomenon is attested nowhere else in Baka-Mundu.

(21) Monzombo 1 (15)

ngó gbo-t̪í-tóò
water PROG-RED-cook

‘The water is in the state of boiling’ (l’eau est en train de bouillir) (Thomas 1971: 114)

(22) Ngbaka-Bokanga 1 (19)

ʔé té hò-ho yée
3S with RED-eat 3P

‘He/she is in the state of eating’ (il est en train de le manger) (Thomas 1981: 218)

- + Reduplication is used to form deverbal nouns and non-finite verb forms.

3.2 Affixation

3.2.1 Nominal Affixes

- + Nouns with affixes (including number markers) are also considered as complex.

3.2.1.1 The Plural Affix

- + Plural is marked with the affix *o* (details and examples follow in section 5.1 below).

(23) Baka 3, 4 (3, 4)

gba-o
village-P
'villages' (Kilian-Hatz 1995: 21)

(24) Monzombo 1 (15)

sí-o
animal-P
'animals' (Boyi 1983: 245)

(25) Ngbaka-Bokanga 1 (19)

bóno-ʔó
dog P
'dogs' (Thomas 1963: 168)

(26) Gbanziri 1 (23)

bo-o
person-P
'people' (Rombi & Thomas 2006: 47)

(27) Mayogo (26-28), Bangba (29-30)	(28) Mundu (Faradje) (33)
<i>o-bòngó</i>	<i>wo-bòngó</i>
P-cloth	P-cloth
‘clothes’ (Boone 1994: 38)	‘clothes’ (Vallaey 1991: 19)

3.2.1.2 The prefix *E-* (Mayogo/Bangba)

- + In the varieties of Mayogo and Bangba (IIa), the prefix *E-* occurs only with monosyllabic singular forms in isolation.
- I apply the term prefix *E-* simply because it appears in the form of the front vowels *i*, *e*, *ɛ*.

(29) Mayogo (25-28)

a.I	<i>kpí</i>	<i>bini</i>	b.I	<i>e-kpí</i>
	day	one		E-day
		‘one day’		‘day’ (Sawka 2001: 12)
a.II	<i>li</i>	<i>ma</i>	b.II	<i>i-li</i>
	name	1S		E-name
		‘my name’		‘name’ (Sawka 2001: 12)

- + This prefix seems to have the purpose of completing monosyllabic nouns.
- + Other purposes according to Sawka (2001: 50ff) are singular-marking, definiteness marking?
- The purpose of coding definiteness is only vaguely described.
- Not all, but only the monosyllabic singular forms are marked by *E-*.
- + Mundu is the only member of the eastern branch that does not show the E-marker.
- One possibility is that Mundu lost the marker as an exclusive innovation.

3.2.1.3 The Suffix *-bo*

- + This suffix is a grammaticalisation of the lexeme *bo* ‘person, human’ (Kilian-Hatz 1995: 75) and is found only in the varieties of Ia of the western branch.
- + The suffix attaches to nouns describing inalienable concepts (such as body parts and kinship terms).
- Similar to the reduplicated forms in 3.1.1, this strategy enables the independent use of nouns, but applies only to nouns with inalienable meaning, and possibly the semantic feature +human.

(30) **Baka 1, 2 (1, 2)**

te-bo
tooth-HUM
'tooth' (Paulin 2001: 455)

(31) **Limassa 3 (11), Ngombe 1 (12)**

te-bo
tooth-HUM
'tooth' (Klieman 1997: f.n. A2)

(32) **Ganzi (5), Gundí (Mbímu) (6), Gundí (Bodingue) (8), Limassa 1 (9)**

te-bo
tooth-HUM
'tooth' (Ouzilleau 1910-1: 82, 80, 89, 90)

3.2.2 Verbal Nouns

+ In the varieties of Ia and the eastern branch (II) (cf. Figure 1), the infinitive is expressed by the nominal prefix ***na-***.

(33) **Baka 3, 4 (3, 4)**

wó à tongòà *na-bébè*
3P IPFV begin.PRS INF-dance
'They begin to dance.' (Kilian-Hatz 1995: 306)

(34) **Mayogo (25-28)**

u *a-kunda* *na-sia* *tia*
3P PST-like INF-get money
'They want to get money.' (Sawka 2001: 97)

+ The sources of the relevant varieties also cite verbs with the infinitive marker (Paulin 2010: 616; Djoupee 2002: 32; Boone 1994: 50; Sawka 2001: 96).

+- ***ma*** marks the infinitive in several Mayogo and Bangba varieties (IIa or doculects 27-30). This might be an innovation here (***ma-tima*** 'to send' Mayogo-Bangba (25-30)).

+ ***a*** marks the infinitive only in Mundu (IIb or doculects 31, 33). (***a-tima*** 'to send' Mundu (31-33))

- No further information is available on these two markers.

3.3 Compounding

+ Compound nouns are structurally lexicalised possessive-constructions, and are therefore considered as complex.

(35) **Baka 3, 4 (3, 4)**

ngó-mbilà

water-palm.tree

‘palm wine’ (Djoupee 2002: 46)

(36) **Monzombo 1 (15)**

mò-te

mouth-house

‘door’ (Boyi 1983: 205)

(37) **Gbanziri 1 (23)**

mbε-bo

brightness-person

‘white person, european’ (Blanc, Européen) (Rombi & Thomas 2006: 44)

(38) **Mayogo (26-28), Bangba (29,30)**

ngu-tε

water-body

‘blood’ (Boone 1994: 34)

+ These same lexemes outside compounds would have to be reduplicated (cf. e.g. Baka: *ngóngó* ‘water’; Monzombo: *mòmò* ‘mouth’, *tete* ‘house’) and affixed (Mayogo/Bangba: *engu* ‘water’, *εtε* ‘body’).

4 Nominal Attributive Constructions

+ The Baka-Mundu languages show several nominal attributive constructions. In all cases, the modifying element follows the head noun.⁵

4.1 Juxtaposition

+ The possessor and a proposed possessee are simply juxtaposed. Cross-linguistically this type of attributive construction is very frequent and thus typologically unmarked (Nichols & Bickel 2013.)

⁵ The plural formation in the varieties of the eastern branch is an exception to this and will be treated in section 5.1 below.

(39) **Baka (Cameroon) (3, 4)**

wɔ lè
woman 1S.POSS
'my wife' (Kilian-Hatz 1995: 19)

(40) **Monzombo 1 (15)**

nzò kpú
head snake
'head of the snake' (Boyi 1983: 126)

(41) **Ngbaka-Bokanga 1 (19)**

mò vo
mouth person
'mouth of the person' (Thomas 1981: 212)

(42) **Gbanziri 1 (23)**

búme é
heart 3S.POSS
'his/her heart' (Rombi & Thomas 2006: 36)

(43) **Mayogo (25-28)**

di nu
horn animal
'horn of the animal' (Sawka 2001: 34)

(44) **Mundu (Faradje) (33)**

yí dzàdzi
mother child
'mother of the child' (Vallaey 1991: 35)

- + The construction *[N_{Head} + N_{Mod}] can be reconstructed for Proto-Baka-Mundu.
- The probable function of this reconstruction is inalienable possession.

4.2 Attributive Markers

4.2.1 [N_{Head} + ?a + N_{Mod}]

- + This construction is found in Baka, Monzombo and Ngbaka-Bokanga (Ia, b, c).

(45) **Baka 3, 4 (3, 4)**

<i>gbe</i>	<i>a</i>	<i>lè</i>
village	ATTR	1S.POSS
'my village' (Kilian-Hatz 1995: 20)		

(46) **Ngbaka-Bokanga 1 (19)**

<i>nu</i>	<i>?a</i>	<i>bele</i>	<i>?ó</i>
bird	ATTR	forest	P
'birds of the forest' (Thomas 1963: 177)			

- + In Monzombo, the attributive marker is suffixed to the possessed Element, and assimilated to its final vowel.

(47) **Monzombo 1 (15)**

a.	<i>tité-é</i>	<i>yandèngà</i>	b.	<i>gbá-á</i>	<i>yé</i>
	house-ATTR	pygmy		village-ATTR	3S
	'house of the pygmy'			'his village' (Boyi 1983: 262)	

- + This construction is found in varieties of the western branch only and does not exist in the eastern branch of Baka-Mundu.
- + All viewed contexts can be semantically described as cases of alienable Possession.

4.2.2 [N_{Head} + na + N_{Mod}]

- + This construction exists in all examined varieties except of Mundu.
- Semantically, this construction encodes a goal-oriented relation between possessor and possessee.

(48) **Baka 3, 4 (3, 4)**

<i>gbié</i>	<i>nà</i>	<i>mbòmbò</i>
field	ATTR	corn
'corn field' (Djoupee 2002: 77)		

(49) **Monzombo 1 (15)**

<i>bò</i>	<i>nàá</i>	<i>mbóngà</i>
bag	ATTR	money
'purse' (Boyi 1983 :274)		

(50) **Ngbaka-Bokanga 1 (19)**

no ña na ngó
kettle 1S.POSS ATTR water
'my water kettle (kettle for water)' (Thomas 1963: 177)

(51) **Gbanziri 1 (23)**

ya tɔ tima ná gbíe
1P.EX ? work ATTR field
'We do work on the field' (Rombi & Thomas 2006: 113)

(52) **Mayogo (25-28)**

Abule, a ko i-li gba obhukosi na o-bhosibhosí
Abdule 3S is E-name ATTR twin ATTR P-RED-man.
'Abdule, this is a name for male twins.' (Sawka 2001: 66)

- + In varieties of Ia and IIa, this construction type includes attributive constructions with nominalised quality expressing verbs (cf. examples (53) and (54) with (55)).

(53) **Baka 3, 4 (3, 4)**

si na ngbe-ngbe
fish ATTR RED-be.big
'big fish' (Kilian-Hatz 1995: 19)

(54) **Mayogo (25-28)**

e-ngu na bu-bu
E-chicken ATTR RED-be.white
'a white chicken' (Sawka 2001: 37)

- + The attributive marker **na** might go back to a goal-oriented preposition.
- 3.2.2 showed that this morpheme is also used to mark infinitives. The grammaticalisation of a goal-oriented preposition into an infinitive marker is a typologically common development (Kilian-Hatz 1995: 295ff) (cf. e.g. English 'to (go)' or German '...zu (gehen)').

4.2.3 [N_{Head} + ka + N_{Mod}]

- + This construction is found in varieties of sub-groups Ic and IIb.
- + All examples that I found represent instances of alienable possession.
- + A possible origin is the preposition **ka** 'of' (Vallaeyns 1991: 123).

(55) **Ngbaka-Bokanga 1 (19)**

ngóto ka mòkònzi
dove ATTR chef
'the dove of the chief' (Thomas 1963: 175)

(56) **Mundu (Faradje) (33)**

kàmbó ka iyè
house ATTR child
'house of the child' (Vallaey 1991: 123)

- + It can be supposed that the attributive markers in 4.2.1, 4.2.2, and 4.2.3 go back to prepositions.
- This development constitutes a frequently attested way of grammaticalisation⁶.

4.2.4 [N_{Head} + gba + N_{Mod}] ⁷

- + This construction is restricted to Mayogo and has the function of coding alienable possessive constructions.

(57) **Mayogo (28-28)**

bongo gba bhóko
clothing ATTR man
'clothing of (a) man' (Sawka 2001: 34)

5 Nominal Morphology

5.1 Number Marking

- + In all varieties of Baka-Mundu the noun shows the number categories singular and plural.
- + Number can be marked by different means.
- An affixed morpheme is the most common and thus the default strategy.
- Other strategies are total or partial reduplication.

⁶ Cf. Heine & Kuteva (2002: 54ff), similar e.g. in Modern Arabic or Nigerian Pidgin English

⁷ Cf. Sawka (2001: 34).

5.1.1 Plural Marking

- + The plural is expressed by an affix ***o*** (***wo/bo***)⁸. This is realised as a suffix in the western branch and as a prefix in the eastern branch (cf. Table 2)

#	Doculect	Plural marker	Example		Source	Position
Western (I)	2 Baka (Gabon)	-o	<i>kop̥a-o</i>	'hooks'	Paulin (2010)	Suffix
	3 Baka (Cameroon)	-ó	<i>là-ò</i> ⁹	'children'	Brisson (2010)	
	13 Monzombo 1	-o	<i>si-o</i>	'fish'	Boyi (1983)	
	14 Monzombo 2	-o			Calloc'h (1911)	
	17 Ngbaka-Bokanga 1	-o	<i>nu-o</i>	'birds'	Thomas (1963)	
	18 Ngbaka-Bokanga 2	-o			Calloc'h (1911)	
	21 Gbanziri 1	-o	<i>mbebo-o</i>	'white people'	Rombi&Thomas (2006)	
	22 Gbanziri 2	-o			Calloc'h (1911)	
Eastern (II)	23 Mayogo 1	<i>o-</i>	<i>o-kpála</i>	'people'	Sawka (2001)	Prefix
	24 Madipia 2	<i>o-</i>	<i>o-kpála</i>	'people'	Boone (1994)	
	25 Mayogo-Madimadoko	<i>o-</i>	<i>o-bòngó</i>	'clothes'	Boone (1994)	
	26 Mayogo-Madingbolo	<i>o-</i>	<i>o-bòngó</i>	'clothes'	Boone (1994)	
	27 Bangba (Kopa)	<i>o-</i>	<i>o-bòngó</i>	'clothes'	Boone (1994)	
	28 Bangba (Tora)	<i>o-</i>	<i>o-bòngó</i>	'clothes'	Boone (1994)	
	29 Mundu (Dungu)	<i>wo-</i>	<i>wo-bòngó</i>	'clothes'	Boone (1994)	
	31 Mundu (Faradje)	<i>(b)o-/(w)o-</i>	<i>wo-bòngó</i>	'clothes'	Vallaey (1991)	

Table 2: The plural marker in the Baka-Mundu languages

- + In the eastern branch reduplication is also used for plural formation.

(58) Mayogo (25-28)

o-kpá-’kpá
P-RED-leaf
'leaves' (Sawka 2001: 56)

(59) Mundu (Faradje) (33)

le-le
RED-foot
'feet' (Vallaey 1991:18)

- + In the Mayogo example the plural prefix is redundant and probably optional (Sawka 2001: 56).
- + The plural marker is based on the third person plural pronoun. (Kilian-Hatz1995: 92ff, Thomas 1963: 77ff).
- + This strategy is found in many African languages e.g. Ewe (Kwa<Volta Congo<Niger Congo) and Yoruba (Benue-Congo<Volta Congo<Niger Congo) according to Westermann (1945/46: 6ff)¹⁰.

⁸ **(b)o** is restricted to Mundu and might be an exceptional development here.

⁹ In Baka the tone of the plural affix changes according to the tone of the noun stem. These rules are not treated further here.

- + Westermann further states that this strategy of plural marking is ultimately a genitive construction and that the position of the marker relative to the head noun follows the position of the genitive in a specific language.
- + In Baka-Mundu, this is only true for the western branch. The eastern branch behaves differently.
- Possible explanation: A change of position due to analogy following the prefix *E-* that only occurs with singular forms. This cannot explain the case of Mundu. Mundu possibly had the prefix *E-*, too, and lost it?

5.2 Derivation

5.2.1 The Human Agent/Patient Prefix *wa-*

- The prefix *wa-* is found in all varieties of the western branch.
- > *wa-* attaches to verbs and nouns and forms and human agent or patient noun based on the lexical meaning of its host.

(60) Baka 3, 4 (3, 4)

a.	<i>boko</i>	b.	<i>wà-boko</i>
	prison		HUM.DERIV-prison
	‘prison’		‘prisoner’ (Djoupee 2002: 33)

(61) Monzombo 1 (15)

<i>wà-yeè</i>
HUM.DERIV-visit
‘visitor’ (Boyi 1983: 220)

(62) Ngbaka-Bokanga 1 (19)

a.	<i>ngàlà</i>	b.	<i>wà-ngàlà</i>
	hunt		HUM.DERIV-hunt
	‘to hunt’		‘hunter’ (Thomas 1963: 121)

¹⁰ Cf. also Heine & Kuteva (2002: 237); similar furthermore in Mupun (<Chadic, Nigeria) and Krio (English based creol, Sierra Leone).

(63) Gbanziri 1 (23)

wà-kòà

HUM.DERIV-paddling

‘logboat-paddler’ (piroguier) (Rombi & Thomas 2006: 45)

6 Summary and Conclusion

- Table 3 shows all treated features and their distribution across the varieties of Baka-Mundu.

#Section	Feature	I				II	
		a	b	c	d	a	b
3.1	Reduplication						
3.1.1	Reduplicated complex form	+	+	+	+	+	+
3.1.2a	Nominalisation by reduplication	+	+	+	+	+	-
3.1.2b	Infinitive formed by means of reduplication	-	+	+	?	-	-
3.2.1	Affixed complex forms						
3.2.1.1	Plural affix	+	+	+	+	+	+
3.2.1.2	Prefix <i>E-</i>	-	-	-	-	+	-
3.2.1.3	Suffix <i>-bo</i>	+	-	-	-	-	-
3.2.2	Infinitive formed by means of affixation						
a	Affix <i>na</i>	+	-	-	-	+	-
b	Affix <i>ma</i>	-	-	-	-	+	-
c	Affix <i>a</i>	-	-	-	-	-	+
3.3	Compounds as complex forms						
4	Attributive constructions						
4.1	Juxtaposition	+	+	+	+	+	+
4.2.1	[N + ?a + Attribute]	+	+	+	-	-	-
4.2.2	[N + <i>na</i> + Attribute]	+	+	+	+	+	-
4.2.3	[N + <i>ka</i> + Attribute]	-	-	+	-	-	+
4.2.4	[N + <i>gba</i> + Attribute]	-	-	-	-	+	-
5.1	Number marker						
a	Prefix	-	-	-	-	+	+
b	Suffix	+	+	+	+	-	-
c	Reduplication	-	-	-	-	+	+
5.2	Derivational morpheme <i>wa-</i>						

Table 3: Features and their distribution across Baka-Mundu

- Table 3 shows the joint preservations of different stages. A weaker but also relevant factor is the joint loss of features. Thus the following arguments:

> Features 3.1.2a, 3.2.1.2, 3.2.2a, b, and c, as well as 4.2.2 and 4.2.3 are arguments for the split between Mayogo-Bangba and Mundu.

> 3.1.2b (?), 3.2.1.3, and 3.2.2a are argument for the split between Baka-Gundi and River.

- The distribution of the analysed features leads to the following diachronic conclusion.

Proto- Baka-Mundu			
+ Reduplicated complex form + Nominalisation by reduplication + Affixed complex forms + Infinitive affix na		+ Compounds as complex forms + Juxtaposition + [N + na + Attribute] < preposition na + [N + ka + Attribute] < preposition ka	
Western Baka-Mundu (I)		Eastern Baka-Mundu (II)	
+ Plural suffix + [N + ?a + Attribute] < preposition ?a + Derivational prefix wa-		+ Plural prefix + Reduplicated plural	
Baka-Gundi (a)	River (b/c/d)	Mayogo-Bangba (a)	Mundu (b)
+ Suffix -bo	+ Infinitive marked by reduplication	+ Prefix E- + Infinitive affix ma + [N + gba + Attribute]	+ Infinitive affix a

Figure 2: Overview of reconstructed elements

7 Abbreviations

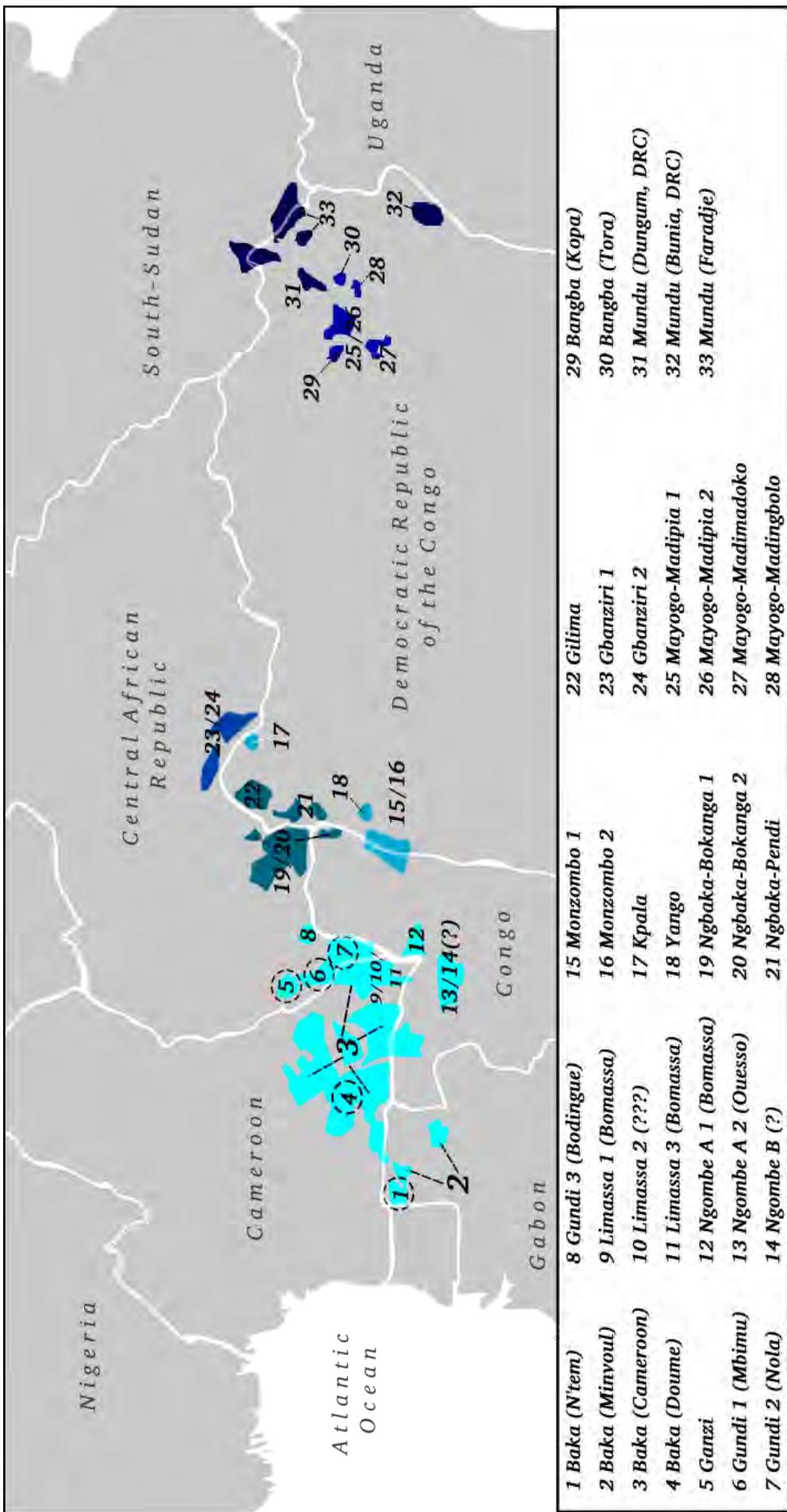
ATTR	attributive	P	plural
DEM	demonstrative	POSS	possessive
DERIV	derivational morpheme	PROG	progressive
E	prefix E-	PROX	proximal
EX	exclusive	PRS	present
H	human	PST	past
HUM	human agent/patient	RED	reduplication
INF	infinitive	S	singular
IPFV	imperfective		

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Map 1: The doculects of Baka-Mundu¹

¹ The grey shading in the map represents the 6 subgroups of the current classification (cf. Figure 1).

Language	ISO	No. of speakers	Dialect	No.	Source: Lexicon	Source: Grammar
Baka	blk	43,200	1 (N'tem, Gabon)	1	Poutrin (1911)	Paulin (2010)
			2 (Minvoul, Gabon)	2	Paulin (2010)	
			3 (Cameroon)	3	Brisson, Monino (1988) < Brisson/Brisson & Boursier (1979)	Kilian-Hatz (1995)/Djoupee (2002)
			4 (Doume, Cameroon)	4	Bertaut (1943)	
Ganzi	gnz	1,400 (1996)	Ganzi	5	Ouzilleau (1911) (List II) ²	-
			1 (Mbimbu)	6	Ouzilleau (1911) (List I)	-
Gundi	gdi	9,000 (1988)	2 (Nola)	7	Ouzilleau (1911) (List III)	-
			3 (Bodingue)	8	Ouzilleau (1911) (List VII)	-
			1 (Bomassa)	9	Ouzilleau (1911) (List VIII)	-
			2 ???	10	Bruel (1910-1)	-
Limassa	bme	few	3 (Bomassa)	11	Klieman (1997)	-
			1 (Ouesso; Bomassa)	12	Klieman (1997)	-
Ngombe A	-	-	2 (Ouesso)	13	Verhille (1948-9), Pepper (1955)	-
			???	14	Boydieu & Cloaric-Heiss (1986) < Boyi,	-
Ngombe B ³	-	-	1 Monzombo 1	15	Boydieu & Cloaric-Heiss (1986)/Monino (1988) < Thomas/Bouquiaux.	Boyi (1983)/Thomas (1971)
			2 Monzombo 2	16	Calloch (1911)	
Kpala	kpl	3,000 (1986)	Kpala	17	Boydieu & Cloaric-Heiss (1986) < Thomas/Mortier (1941)	Edanda (1991)
			Yango	18	Donzo (2007)	-
Ng'baka-Mabo	nbn	189,600	1 Bolanga 1	19	Boydieu & Cloaric-Heiss (1986)/Monino (1988) < Thomas	Thomas (1963a/b, 1981)
			1 Bolanga 2	20	Calloch (1911)	
Giliima	gix	12,000 (1984)	2 Perdi	21	Boydieu & Cloaric-Heiss (1986) < Thomas	-
			Giliima	22	Boydieu & Cloaric-Heiss (1986) < Thomas	-
Gbanziri	gbg	17,500	1 Gbanziri 1	23	Boydieu & Cloaric-Heiss (1986)/Monino (1988) < Thomas/Bouquiaux	Rombi & Thomas (2006)
			2 Gbanziri 2	24	Calloch (1911)	
Boraka	bkg	3,800	Boraka	-	-	-
			1 Madipia 1	25	Monino (1988) < Pasch	Sawila (2001)/Tercafs (1942)
Mayogo	mmd	100,000 (1991)	2 Madipia 2	26	Boone (1994)	Sawila/Tercafs/Boone (1994)
			3 Madimadoko	27	Boone (1994)	Sawila/Boone
			4 Madingbolo	28	Boone (1994)	Sawila/Boone
			1 (Kopa)	29	Boone (1994)	Boone
Bangba	bbe	11,000 (1993)	2 (Tora)	30	Boone (1994)	Boone
			1 (Dungu,DRC)	31	Boone (1994)	Boone
Mundu	muh	25,800	2 (Bunia,DRC)	32	Monino (1988) < Pasch	-
			3 (Paradje)	33	Valleys (1991)/Jeffrey & Polley (1981)	Valleys (1991)/Jeffrey & Polley (1981)

Table 1: Overview of the dialects of Baka-Mundu

² The source Ouzilleau (1911) features 11 short lexicon lists. The lists that are not considered here refer to Bantu languages.

³ Lexical data suggests that this variety is identical to Ngombe A, but no clarifying evidence is given by the authors.