Mandenkan Numéro 51

**Printemps 2014** 

# Bulletin d'études linguistiques mandé

ISSN: 0752-5443

# **Grammatical sketch of Beng**

**Denis PAPERNO** 

# Denis Paperno

# Content

1. Introduction	1
2. General information	9
2.1. Beng people and their language	9
2.2. Sociolinguistic situation	11
2.3. Names of the language	12
3. The history of Beng studies	12
3.1. Students of the Beng language and society	12
3.2. Beng dialects according to reports from the early 1900s	13
3.2.1. Delafosse: Beng of Kamélinsou	15
3.2.3. Tauxier: Beng of Groumania neighbourhood	16
4. Beng phonology	18
4.1. Phonological inventory	18
4.1.1. Tones	20
4.1.2. Syllable structure	22
4.1.3. Segmental sandhi	22
4.1.4. Tonal sandhi	22
4.2. Morphonology	23
4.2.1. nC simplification	23
4.2.2. Deletion of /l/	24
4.2.3. High tone in the low tone form of verbs	24
5. Personal Pronoun Morphology	25
5.1. On the allomorphy of the 1SG subject pronoun	27
5.2. Contraction with 3SG object pronoun	28
5.3. Subject series of pronouns	29
5.4. Stative pronouns with verbs $t\acute{a}$ , $n\bar{u}$	29
6. Morphology of content words	30
6.1. Tonal changes in suffixation	31
6.1.1. Mobile tone suffixes	31
6.1.2. Low tone suffixes	31
6.1.3. Other suffixes	31
6.1.4. Stems ending in L tone	31

# Denis Paperno

6.1.5. The verb <i>blö</i> 'to press out'	32
6.2. Nominalization in $l\varepsilon$	32
6.3. Locative nominalization in -ya	33
6.4. Predicative forms of verbs	36
6.5. The goal converb	37
6.6. Agent and means nominalizations	37
6.7. Relics of the participle	38
6.8. Reduplication	39
6.8.1. The formal aspect of reduplication	39
6.8.2. Semantics of reduplication	40
7. Part of speech criteria	42
7.1. Nouns vs. Adverbs vs. Postpositions	42
7.2. Adjectives vs. nouns	45
8. Noun phrase structure	47
8.1. Possessors and nominal modifiers	47
8.2. Adjectives and appositives in noun phrases	47
8.3. Determiners	48
9. Number and agreement	49
9.1. Number expression within a noun phrase	49
9.2. Reduplication as number agreement	50
9.3. Pronominal doubling and the status of pronouns	51
9.4. Constraints on the distribution of personal pronouns	53
9.4.1. Personal pronouns in the subject position	54
9.4.2. Possessor	55
10. Locative phrases	55
10.1. Distribution	55
10.2. Semantics	55
10.3. The grammatical category of deixis	57
11. Coordination	58
12. Clause structure	60
12.1. Tense, Aspect, Modality, Polarity	60
12.1.1. Polarity	60
12.1.2. Tense and mood	61
12.1.3. TAM values and their expression	63
12.1.4. Stative vs. perfect	66
12.1.5. Periphrastic expression of tense and aspect	69

# Grammatical sketch of Beng

12.2. Argument structure of verbal clauses	70
12.2.1. Subject	70
12.2.2. Direct object and lability in Beng	71
12.2.3. Secondary object in Beng in the light of the typology of ditransitive	74
constructions	
12.2.4. Nominal predicate	76
12.2.5. Sentential modifiers and arguments with postpositions	77
12.2.6. NPs in postverbal position	81
12.2.7. Adverbs	82
12.3. Word order in verbal sentences	83
12.4. Types of verbless clauses	85
12.4.1. Identity (presentative) statement	85
12.4.2. Adverbial clause	85
12.4.3. Existential statements	86
12.4.4. Adjectival statements	87
12.4.5. WH question	88
13. Complex sentences	89
13.1. Postverbal embedded clauses	89
13.1.1. Complement clauses	89
13.1.2. Goal clauses	90
13.2. Ways of encoding clausal arguments	91
13.3. Serial construction	92
13.4. Converb constructions	93
13.5. Temporal and conditional clauses	93
13.5.1. Temporal clause: the topic construction	93
13.5.2. Temporal subordinate clause: the focus construction	95
13.5.3. Conditional clause	95
13.6. Relative clause	96
13.6.1. Head-external relative construction	96
13.6.2. Head-internal $f\bar{\varepsilon}$ -construction with $d\dot{\varepsilon}\bar{\varepsilon}$ and other arguments for treating	98
$f\bar{\varepsilon}$ -constructions as originally head-internal	
14. Information structure	101
14.1. Topic	102
14.2. Contrastive topic	103
14.3. Focus construction	103
14.4. Non-syntactic expression of emphasis	104

## Denis Paperno

15. Appendix. Sample texts in Beng	106
15.1. Text in transcription: Two people on a trip	106
15.2. Text in orthography: Chimpanzee's house	108
16. Appendix. Word lists from Tauxier (1921)	111
16.1. Word list	111
16.2. Phrases with MOB equivalent and gloss	122
List of Notation and Glosses	125
References	127
Summaries (in English, French, Russian)	130

### 1. Introduction<sup>1</sup>

Beng is a South Mande language of Côte d'Ivoire. The core Beng population lives in a compact area in the Prefecture of M'Bahiakro at the northern edge of the tropical forest zone in Côte d'Ivoire. Until now, descriptions of only some aspects of the structure of Beng, particularly phonology and, to some degree, morphology, have been available to the general reader. The current work makes the first attempt at a systematic description of Beng grammar, providing a typologically oriented overview of phonology, morphology, and the basic syntactic constructions of Beng. While the content of this sketch is primarily descriptive, it is intended for a broad linguistic audience, written in particular for typologically minded readers.

The research presented here is based on three field trips to Côte d'Ivoire in 2004, 2005, and 2006.2 My main Beng consultant was Kouadio Kouadio Destin (b. 1968), and a significant part of the data comes from Kouadio Kouadio Patrice (b. 1980). Both speakers represent the variety of Ouassadougou (Beng: Aságbě). In some cases I also used judgments by Augustin Yao Kouakou (b. 1967) from Totodougou (Beng: Tótógbě). Besides the original field data, I relied on previous scholarship on Beng, including unpublished materials (Paesler ms.), kindly provided to me by the Summer Institute of Linguistics, as well as the lexicographic notes of anthropologist Alma Gottlieb published in (Gottlieb, Murphy 1995).

The structure of this work is as follows. After a brief introduction (Section 1), I outline general information on Beng (Section 2), including basic sociolinguistic parameters and dialect divides, and then proceed to the history of the linguistic study of Beng (Section 3). Linguistic decription proper begins with an outline of phonological inventory and phonological processes, both segmental and tonal (Section 4). Sections that follow deal with personal pronoun morphology (Section 5;

<sup>&</sup>lt;sup>1</sup> This work, after numerous revisions and additions, is ultimately based on a thesis defended at Moscow State University Department of Theoretical and Applied Linguistics in 2006, advised by Valentin Vydrin and Aleksandr Kibrik. An earlier version of this work appeared in Russian as (Paperno 2011).

The 2004 and 2005 field trips were supported by the grant (04-04-00262a) "Languages of the world: Mande languages" of the Russian Foundation for Human Studies, and the 2006 trip by the grant SUBJ 062156.00 "Exploring an African terra incognita: Lexicology and reconstruction in South Mande languages" of the Swiss National Science Foundation.

see also (Paperno 2005)), and the morphology of other parts of speech (Section 6); the discussion of inflection and productive derivation of verbs, adjectives and location nouns is interspersed, grouped by morphological expression rather than by part of speech, as the same morphological means (an affix or reduplication) can combine with different parts of speech with similar semantic effects. Section 7 discusses empirical tests for (syntactic) parts of speech, as morphological criteria have limited applicability in Beng. I argue for distinguishing not only nouns, adjectives, postpositions, and adverbs, but also intermediate and finer classes: locative nouns, temporal nouns, locative postpositions, and pure postpositions. Section 8 describes NP (DP) structure, covering various noun modifiers: possessors, locative modifiers, appositions, adjectives, and determiners. Section 9 is dedicated to nominal number, a 'hidden' grammatical category, which can be expressed analytically, via verb of adjective agreement, or pronoun doubling, but almost never in the noun itself, and to the related issue of agreement in Beng; I describe two kinds of agreement marking, plural reduplication and pronoun doubling. Section 10 discusses the syntax and the semantics of locative constituents. Section 11 briefly introduces Beng equivalents of 'or' (à  $l \not\in \ell n \bar{l}$ ) and 'and', ( $n \not a ... l \bar{o}$ , which is only applicable to certain constituent types; due to the absense of verb/VP conjunction and restrictions on converb use the expression of predicate conjunction falls upon clause compounding, in particular sentence juxtaposition and temporal subordination). Section 12 describes simple clause structure, including the encoding of sentential grammatical categories: tense, aspect, modality, and polarity. In the following sections I characterize clausal arguments and adjuncts, and overview the main syntactic relations (arguments): subject, direct object, secondary object, and indirect object. While Beng subjects do possess a number of salient features, some syntactic phenomena are "ergative", uniting the direct object with the intransitive subject as opposed to transitive subject (these include control of secondary predicate, quantified NP float, and reduplicative plural agreement on the verb). Section 13 gives an overview of multiple predication in Beng, with a particular focus on temporal clause marking that is identical to information structure marking; I describe two positional classes of complementizers (such as the preposed complementizer  $k\bar{e}$  'that' and the postposed  $d\hat{\epsilon}\bar{\epsilon}$  'if'), which turn out to be motivated by the typical linear position of the subordinate clause relative to the main clause. Section 14 discusses information structure marking: topic, contrastive topic, and focus, which are, as is typical in African languages, expressed by dedicated morphemes. Section 15 contains two sample texts in Beng, and Section 16 reproduces Beng words and phrases originally published by Louis Tauxier (1921) along with corresponding modern data.

### 2. General information

### 2.1. Beng people and their language

The South Mande language Beng is a minority language of Côte d'Ivore, spoken by the ethnic group of the same name. The Beng people is isolated in space from all other South Mande speaking groups. The closest of them, Wan, is spoken about 200 kilometers west of the Beng territory. In historic times, another closely related linguistic community, the Gbin, populated a territory to the East of the Beng (Delafosse 1904). The Gbin were heavily assimilated by the neighboring Gur ethnic groups of the Northern Côte d'Ivoire, and their language reportedly went extinct in the early 20th century (Tauxier 1921). Culturally, modern Beng language and culture show a considerable influence from the neighboring Baule, a major ethnic group dominant in central Côte d'Ivore. Among other things, the Beng borrowed Baule personal names given to the person according to the day of the week when one is born, the corresponding names for days of the week, as well as the seven-day week itself, which coexists in the core Beng area with the traditional six-day week.<sup>3</sup> The Baule influence goes so far that the Beng share the belief that their ancestors had arrived to their current area from the East, implausible on geographical grounds since the Beng are by far the eastmost among the whole South Mande group. This legend might have been directly borrowed from the Baule who have indeed arrived from the east just a few centuries ago; cf. (Gottlieb, Murphy 1995; Gottlieb 1992).

The Beng language belongs to the Southern-Eastern branch of the Mande language (Niger-Congo phylum), as confirmed by the lexicostatistic method (Vydrin 2009) that uses (Swadesh-based) 100 word lists of basic vocabulary. At any rate, separation of Beng within South Mande occurred quite early, right after the South Mande linguistic unity dissolved.

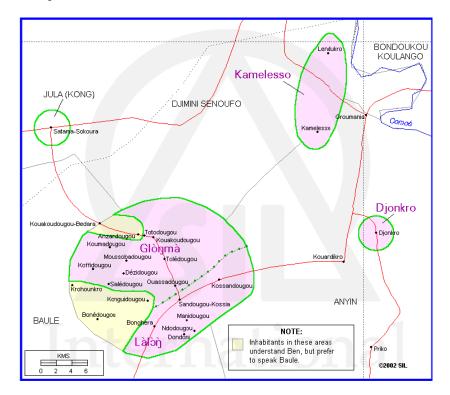
The main Beng area is within the Prefecture of M'Bahiakro of Côte d'Ivoire. Before the Ivorian civil war started in 2002, Beng was the main language of everyday communication in eighteen villages<sup>4</sup>: Bonguera, Dézidougou, Djonkro, Dondoni, Koumadougou, Kofidougou, Kossandougou, Kouakoudoudou, Kamelesso, Mousobadougou, N'Dodougou, Manidougou, Lendoukro, Sandougou-Kosia, Sialédougou, Toledougou, Totodougou, and Ouasadougou. In addition, five villages maintain Beng identity but are almost completely assimilated linguistically by the Baule; inhabitants of those villages (Anzandougou, Bonédougou, Kongidougou, Krohounkro, and Kouakou-Bédara) know Beng at best passively.

<sup>&</sup>lt;sup>3</sup> Still, the six day cycle is deeply entrenched in the traditional Beng habits, determining market days and Earth adoration schedule.

<sup>&</sup>lt;sup>4</sup> The main source for sociolinguistic information is (Paesler 1992).

Beng dialects have never been subject to linguistic study, although students of Beng note the existence of some, primarily lexical, differences among varieties of individual villages. Paesler (1992) lists four dialects of Beng, selected primarily by self-identification of territorial groups of the Beng rather than by linguistic criteria:

- The Savanna dialect (Dézidougou, Kofidougou, Kouakoudougou, Kounmandougou, Moussobadougou, Sialédougou, Toledougou, Totodougou, and Ouassadougou).
- The Forest dialect (Bonguera, Dondoni, Ndodougou, Sandougou-Kosia, and Kossandougou).
- The dialect of Kamelesso and Lendoukro.
- The dialect of Djonkro.



Map 1. Dialects of Beng. By Valentin Vydrin, digitized by Matt Shafer. Source: http://www-01.sil.org/silesr/2000/2000-003/Ben\_map.htm

The Savanna and the Forest dialects are reported to be fully mutually intelligible, with slight lexical differences. The distinction between those two dialects, whose names only approximately correspond to natural zones referred to in their names, is based exclusively on the group identities of two previously rival groups of the Beng, each of which used to have its own 'king' in the pre-colonization times. Members of both groups call Beng their native language.

The dialect of Kamelesso and Lendoukro, on the one hand, and the central dialects (Savanna and Forest), are reported to be mutually intelligible to some degree. The dialect of Djonkro is not mutually intelligible with any others. We have no

credible information on the linguistic distinctions underlying the dialectal segmentation. Gottlieb (1995: xiii) largely agrees with Paesler (1992: 2) when it comes to Beng dialects, with two differences. First, she does not mention the villages of Kamelesso, Lendoukro and Djonkro. Second, she considers the variety of Sandougou-Kossia 'independent' from the Forest-Savanna divide. Neither a synchronic description nor a historical analysis of the Beng dialects exists to date.

During the Ivorian civil war of 2002-2011 the Beng country was crossed by the armistice line («ligne de confiance»). Most of the Savanna and the Forest zones were under control of the "New Forces" (i.e. the rebels), with the Forest zone right on the armstice line, partially controlled by peacekeepers. Some villages closer to the line, including Ouassadougou, were almost completely abandoned; the inhabitants moved either north to other Beng villages or south to the part of the country loyal to president Laurent Gbagbo. A few thousand of the Beng found refuge in the nearby Prikro, a sous-préfecture center.

### 2.2. Sociolinguistic situation

Beng is spoken by about 14 thousand people (based on the 1988 census). The total Beng population was about 16 thousand according to Paesler (1992). Some Beng are spread out in bigger cities of Côte d'Ivoire, particularly Abidjan, but it's hard to provide quantitative estimates on this part of Beng population.

The Beng are generally bi- or multilingual. The Beng's second languages are most often Baule (Akan), Jula (Mande), and French (Indo-European); older people also speak Jimini (Gur) and Ando (Akan). Second languages are used in inter-ethnic contacts, French is the official language of Côte d'Ivoire and is taught in school.

Beng, like other languages of similar speaker base, is potentially endangered. Projecting the assimilation trends into the future, in particular taking into account the Baule influence, it is possible that Beng will get extinct through assimilation. However, its present state of conservation is quite satisfactory.

Beng has no official status and is used orally, mostly in everyday communication. No literary standard exists, even though there is a folklore tradition, represented by folktales, historical legends, proverbs, as well as songs. The Beng themselves consider the Beng song genre to be a recent innovation: songs used to be sung only in other languages such as Baule.

In the mid-1980s a Summer Institute of Linguistics scholar W. Paesler, the first linguist to do a systematic study of Beng, developed a Latin-based writing system, with the addition of letters  $\eta$ ,  $\sigma$ ,  $\varepsilon$ ; and acute and grave diacritic marks for tone levels. In 2006 the Beng literacy enthusiast Kouadio Destin and I proposed a new variant of this orthographic system, with new features primarily in tone notation, which to my knowledge has never been used.

Beng has no function in education. From 1980 till 1986 the Summer Institute of Linguistics published calendars in Beng. Later, adopting the orthography by W. Paesler, SIL published the first Beng primer (Kouadio, Kouakou 1997). The authors of the primer are Kouadio Kouadio Destin and Augustin Yao Kouakou, the first linguist of Beng provenance, who defended in the 1996/1997 academic year a D. E. A. degree thesis on his native language (Kouakou 1997). But despite the support from SIL and the enthusiastic efforts by Kouadio Kouadio Destin, massive literacy training in Beng was never organized.

## 2.3. Names of the language

Beng, a name of a people and its language, reproduces the native ethnic name bèń; this name has been used in most recent works on Beng (Paesler 1989; 1991; 1992; Gottlieb, Murphy 1995). Beng, however, has been mentioned in the literature under other, similar or unrelated, names: be, Ben, Gbëingn, Gan, Ga, Gan-né, Ganra, Nga, Ngain, N'Gain, Ngen, Ngan, N'Guin, Ngin. These names are derived from words for 'Beng' in the neighboring peoples' languages: ngê (Baule), gǎ (Jula), gbɔmlɔ (Jimini). The -né element in Gan-né is probably a plural marker from some Beng dialects, see 3.2.

### 3. The history of Beng studies

### 3.1. Students of the Beng language and society

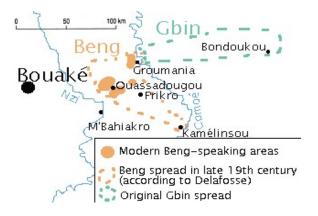
The first publications to report on Beng language and people were motivated by the urge to systematize the languages and peoples of West Africa. Like many other varieties of Côte d'Ivoire, the Beng and the neighboring South Mande Gbin languages were first described by the French colonial administrative officer Maurice Delafosse (1904). His account of the Beng language included just a list of the first ten numerals. Twenty years later, another scholar and colonial administrator Louis Tauxier studied the area of Bondoukou more deeply, both as a linguist and as an ethnographer. Among other things, Tauxier published an extensive list of Beng words and phrases (Tauxier 1921: 658-683), along with a very detailed ethnographic and sociological study of the Beng people. Now, 100 years after these first publications, we are in the position to look back at their data and interpret it building on the progress in African linguistics made over the last decades. In section 3.2, I describe Delafosse and Tauxier's Beng data and remark on what they are telling us about Beng dialects.

Beng's position within the genetic classification was further scrutinized in the second half of the 20<sup>th</sup> century with the development of wider comparative studies (Prost 1953; Welmers 1958; Greenberg 1966). The last work mistakenly attributes Beng (referred to as Gan) to Voltaic languages.

Systematic study of Beng did not resume until the late 1970-es, when SIL-associated scholars produced preliminary grammatical notes (Bearth 1979), description of the tonal system (Flick 1979) and a phonological sketch (Ory 1981).

In 1979-1980 the then-PhD-student Alma Gottlieb spent fourteen months in Côte d'Ivoire doing anthropological fieldwork among the Beng. After another field trip to the Beng land in 1985, Gottlieb eventually published a monograph on Beng anthropology (Gottlieb 1992) and a Beng-English dictionary (Gottlieb, Murphy 1995). After her dissertation work, Gottlieb conducted further research among the Beng, focusing on the anthropology of childhood, which resulted in the monograph *The Afterlife Is Where We Come From: The Culture of Infancy in West Africa* (Gottlieb 2004). Gottlieb's collaboration with her husband, writer Phillip Graham, produced two well-written popular accounts of their encounters with the Beng (Gottlieb and Graham 1994, 2012).

An SIL member Wolfgang Paesler started studying Beng in 1981. Within a few years he gained a deep understanding of many aspects of the structure of Beng language. Paesler published the first morphological description of some aspects of verb morphology of Beng (Paesler 1989), which covered the properties of the base form, the low tone form, nominalization, and the progressive. Paesler gave the first account of personal pronouns and TAM expression in his orthographic manual (Paesler 1991), was the first to publish a phonological description of Beng (Paesler 1992), and, last but not least, collected a vast amount of unpublished texts and lexicographic data (Paesler ms.).



Map 2. Beng and closely related Gbin, now extinct, according to Delafosse (1904).

### 3.2. Beng dialects according to reports from the early 1900s

This section reproduces the content of (Paperno 2008a). I focus on the aspects of historical phonetics that Beng data from (Delafosse 1904) and (Tauxier 1921) seem to reflect and, for the dialect documented by Tauxier, on morphological features they exhibit. Tauxier's data also contains some information for a deeper grammatical analysis, but that would require more research on modern Beng dialects.

The present work, as well as the research of Wolfgang Paesler and of Alma Gottlieb and M. Lynne Murphy, represent a different dialect than those described by Tauxier and Delafosse, spoken in the prefecture of M'Bahiakro, in the area centered around the village of Ouassadougou. As mentioned above, this area is divided into two socio-geographic units, «Forest» and «Savanna», and the literature (e.g. Paesler 1992) even speaks of two dialects, dialect of the forest and dialect of the savanna, but this distinction has never been justified by linguistic data. All the varieties of the area of Ouassadougou are mutually understandable; the only certain isogloss I know of does not strictly divide the two regions: the subject pronoun of 3<sup>rd</sup> person singular has the form /e/ in varieties of some «Savanna» villages, e.g. Totodougou, and /o/ in some «Forest» villages, but also in the variety of Ouassadougou, which is generally attributed to the «Savanna» zone. Unfortunately, more precise information about dialectal distribution of these pronoun forms is not available. Therefore, I am not going to distinguish here the varieties of Ouassadougou area (the «Forest» and the «Savanna» dialects). Since a uniform term for this dialect does not exist, I will write « Modern Ouassadougou Beng », abbreviating it as MOB.<sup>5</sup>

Now that MOB is relatively well studied, we are in the position to interpret the data Tauxier and Delafosse had published in their relation to MOB facts. It turns out that the dialects described by Delafosse and Tauxier are substantially different from MOB. Delafosse documented the variety of Beng spoken in the 1890-s in the village of Kamélinsou near the Comoé river (see Maps 1, 2), which one might tentatively identify with the present-day Kamelesso. L. Tauxier, on the other hand, left a rather extensive record of the data that he had gathered "dans le village gan de Pattakoro, situé sur la route de Bouaké à Bondoukou, entre Kongodian et Groumania," and also later from "des Gans des villages environnants [de Groumania]" (Tauxier 1921: 372). It follows that data from more than one Beng dialect could make a way into Tauxier's book, and it is impossible to reliably separate them without external evidence on modern varieties of these dialects (those have never been studied to date). Presumably, though, most of Tauxier's data rely on the variety of the neighbourhood of Groumania (he qualifies his records from Pattakoro as "notes succintes"). If this is correct, Tauxier's data may represent a variety of modern Lendoukro or Bénidougou, villages situated in the proximity of Groumania, west from the Comoé river, where Beng is still spoken. To the best of my knowledge, there is no scholarship of these dialects, and Tauxier's notes remain the only source. I will make reference to the

<sup>&</sup>lt;sup>5</sup> This is intended as a purely geographical label (Ouassadougou is the center of the area) distinguishing this variety of Beng from the dialects of Djonkro, Kamalesso, and Lendoukro.

varieties documented by Delafosse and Tauxier by abbreviations BK (Beng of Kamélinsou) and BG (Beng of Groumania neighbourhood), correspondingly.

**3.2.1. Delafosse: Beng of Kamélinsou.** Delafosse was the first to publish any Beng data; his records, however, are very scarce. They consist of a list on numerals from one through ten provided to him by Dr. Maclaud, "qui l'a recuillie sur place durant son voyage de 1893-1894" (Delafosse 1904: 149). The list is not very informative other than that it reliably identifies the variety as being close to MOB.

Table 1.1. Numerals from 1 through 10 in Beng dialects and Gbin

BK	BG	MOB	Gbin (Delafosse)	
do [do]	dô [do]	dō	do	one
pla [pla]	para [pala]	plāŋ	paa	two
ya [ya]	n'gan [ŋa̯]	ŋāৣŋ	ñga, ña	three
syî [sieŋ]	syé [sie]	síéń	sye	four
sõ [sɔŋ]	sôn [soŋ]	sóń	sōo	five
so-do [sodo]	so-do [sodo]	sódō	sōrŭ-do	six
so-pla [sopla]	so-fala [sofala] <sup>6</sup>	sóplā	sosowa	seven
so-ya [sɔya]	sowoua [sowa]	sówà, kēŋēsíéń	kyenze	eight
sisi [sisi]	sisi [sisi]	sīsí	sisi	nine
ebu [ebu]	bou [bu]	bū, èbū	bu	ten

Two peculiarities of BK deserve a comment. First, the Beng of Kamélinsou maintained the Proto-South-Mande form /ya/ for 'three' in ya 'three' and so-ya 'eight' (< '5 + 3'), as opposed to the innovative form /wa/, /ŋa/ in MOB  $y\bar{a}-\bar{y}$ , BG n'gan [ŋa] 'three', MOB  $s\acute{o}-w\grave{a}$ , BG sowoua [so-wa] 'eight'.

Second, BK added the final -N in the numerals  $sy\tilde{\imath}$  [sie- $\mathfrak{g}$ ] 'quatre' and  $s\tilde{o}$  [so- $\mathfrak{g}$ ] 'cinq', like in MOB ( $si\acute{e}\acute{\eta}$ ,  $s\acute{o}\acute{\eta}$ ), cf.  $sy\acute{e}$  [sie], so [so] in a closely related language Gbin

<sup>&</sup>lt;sup>6</sup> [f] in this numeral is the result of lenition of intervocalic /p/; unfortunately there are no other examples that would support such a phonological process in BG, except for the similar but non-identical development in *bouala* 'twenty', cf. MOB  $b\bar{u}wl\bar{a}$  'twenty' ( $< b\bar{u}$  'ten' + \*pl\bar{a} 'two').

(Delafosse 1904: 149). The -N, however, has not expanded to the numerals pla 'deux' and ya 'trois', cf. MOB  $pl\bar{a}$ - $\bar{\eta}$  'two',  $\eta\bar{a}$ - $\bar{\eta}$  'three'.

**3.2.3. Tauxier: Beng of Groumania neighbourhood.** Tauxier performed a far more profound study of Beng than Delafosse did, publishing a list of around 800 words and phrases. I will now highlight some features of BG that distinguish it from other dialects.

Minimal phonetic differences can be established between BG and MOB. First, the syncope of a vowel before /l/ had hardly ever happened in BG; etymological CVLV feet are consistently transcribed with two vowels. Examples include BG *pala* 'deux', cf. BK *pla*, MOB *plāŋ̄;* BG *iri* 'arbre', cf. MOB *yri*; BG *sara* 'tabac à priser', cf. MOB *sra* 'poudre de tabac;' BG *zini* [zili] 'maïs', cf. MOB *zrin̄;* BG *diawafila* 'oignon', cf. MOB *jàflá*; BG *balanda* [balana] 'banane', cf. MOB *bláná*; NG *poro-iri* 'baobab', cf. MOB *plð yri*; BG *méné* 'poulet', cf. MOB *mlɛ̃;* BG *kélennzô* 'buffle', cf. MOB *kléŋ́ zð* 'boeuf de la brousse'; BG *béré* 'biche-cochon', cf. MOB *blɛ̃* 'duiker', and many more.

Final nasal sonant /N/ tended to reduce phonetically in BG, often escaping from fixation, cf. the varying transcription of leg 'enfant' in BG  $n'z\hat{o}$ - $l\hat{e}$  'veau', banngo- $l\hat{e}$  'cheval, poulain',  $babal\acute{e}$  // babalegnn 'mouton, agneau',  $ouol\acute{e}$  // ouoleignn 'doigt', ninn,  $n\acute{e}$  'enfant' (MOB  $\bar{g}$   $l\acute{e}g$  [nég] 'mon enfant'), or variation in BG  $dowou\acute{e}gnn$  'gombo'. This variation may or may not reflect real dialectal differences.

Vowels before the final /N/ tended to change in quality, usually heightening or developing a heightening diphthong; these effects persisted even when the final /N/ was reduced, e.g. in BG n'zaon, n'zamm 'rônier', n'zaommbéï 'fruit du rônier' (MOB zàń bēŋ), ouolé, ouoleignn 'doigt' (MOB wōléŋ); BG bahoum 'épaule' (MOB bàŋ); BG beïgnn 'menton' (MOB gbèŋ); BG youm 'visage' (MOB yōŋ); BG lignn, li 'femme' (MOB lēŋ); n'zoulé 'grande soeur' (MOB zúlēŋ); BG pégnn // pain 'mortier' (MOB péŋ), BG sarapoum 'tabatière', cf. MOB sra kpōŋ 'calebasse à tabac', BG pèlou 'voler (dans l'air)' (MOB pèlōŋ). Not all of Tauxier's transcriptions show the diphthongization/heightening of the vowel, so it was likely not regular, cf. the absense of diphthongization in BG lignn'gala 'pagne de femme', MOB lēŋ glāŋ; BG galanké 'tisser', MOB glāŋ cí (?) 'créer le pagne'; BG zini 'maïs', cf. MOB zrஹ; BG irikôm 'écorce', MOB yrí kóŋ; BG irinni 'racine', MOB yrí nŋŋ; BG béhian 'chèvre', MOB béyàŋ; BG béha-sia 'bouc', MOB béyàŋ síá; BG sômm [soŋ] 'animal sauvage', MOB sōŋ; etc.

One consonantal phenomenon present in BG could have been prenasalization of [z] after a pause, compare BG *n'zaon*, *n'zamm'* rônier' (MOB zàŋ), *n'zoulé* 'grande soeur' (MOB zúlēŋ), BG n'zié 'funérailles' (MOB zīē), although Tauxier's

transcriptions don't show it consistently, cf. BG zonzon 'moustique', MOB zɔ́zɔ́, zoumounou 'magnan', MOB zw̄mlw̄n̄, BG zazalè 'disputer (se)', MOB zázà.

Few morphological characteristics differentiate the Beng dialect described by Tauxier from MOB. We note in particular that personal pronouns are in some respects more archaic in BG than in MOB. BG maintained at least traces of inclusivity distinction in 1<sup>st</sup> person plural<sup>7</sup>, as testified by alternate BG translations *kasisi* and *asisi* for the French 'nous' (cf. Mwan 1<sup>st</sup> person plural inclusive pronoun  $k \dot{\sigma} \dot{\sigma}$ , exclusive  $\dot{\sigma}$ ; the final element *sisi* can be tentatively related to MOB  $s \bar{e} s \bar{e}$  'all'). The 3<sup>rd</sup> person plural pronoun, which features an innovative initial nasal in MOB (see 9.1 on the spread of plural g in Beng), in BG preserves the original /w/<sup>8</sup>, compare BG *Ouomisipo?* 'Comment t'appelles-tu?' and BG *ouonion go parana* 'leur chien' with their MOB counterparts:

(1a) BG Ouo mi si po?

MOB 
$$\eta \hat{o}$$
 m $\bar{i}$  sì  $p\hat{o}$ ?

3PL:Hab+ 2SG call:L what

'What is your name?' (literally 'What do they call you?')

3PL EMPH 3PL flea-ATR

'their dog' (literally 'their possessor of fleas').

BG is also relatively conservative in introducing the numeral formative -N only in  $s\hat{o}n$  [son] 'five'; see discussion of BK and examples in 3.2.1.

One morphological innovation of BG is the plural marker. The original marker ny (MOB  $n\dot{y}$ , see 9.1 for the discussion of number marking in MOB) is only preserved after the final /N/; after a vowel a novel plural marker ye is used:

<sup>&</sup>lt;sup>7</sup> MOB, unlike most South Mande languages, uses a uniform 1<sup>st</sup> person plural pronoun *aŋ* regardless of clusivity. Besides Beng, clusivity distinction has also been lost in Gban (Vydrin 2006) and in the newly recognized South Mande language Goo (Vydrine 2013).

<sup>&</sup>lt;sup>8</sup> Compare  $3^{rd}$  person plural pronouns in three related languages: Mwan  $w\delta\bar{o}$ , Gouro  $w\delta$ , Gban  $\delta$  (with loss of /w/); Vydrin (2006) reconstructs 3PL stem \*wo for Proto-South Mande.

<sup>&</sup>lt;sup>9</sup> In MOB like in GB the second (non-subject) pronoun accompanies the noun phrase expressed by the 3<sup>rd</sup> person plural emphatic pronoun.

Table 1.2. Plural forms of nouns in Beng of Groumania neighborhood

BG	MOB	French	BG plural form
Stems end	ding in a v	owel	
pilana	kpláń ná	chien	<i>pilanangué</i> = /pilana + ŋe/
soro	sớớ	musulman	soronngué = /sɔlɔ + ŋe/
méné	$mlar{arepsilon}$	serpent	$m\acute{e}nenngu\acute{e} = /m \widetilde{e} \widetilde{l} \widetilde{e} + \eta e/$
méné	ml <u>ě</u>	poulet	$m\acute{e}nenngu\acute{e} = /m \widetilde{e} \widetilde{l} \widetilde{e} + \eta e/$
iri	yrí	arbre	irigué = /yili + ŋe/
Agni		Agni	$Agnign\acute{e} = /ani + ne/$
Baoulé		Baoulé	Baoulenngué, baoulégné = /baule + ŋe/
Soron	sớớ	Dyoula	$Sorongu\acute{e} = /solo + \eta e/$
Stems end	ling in –N		
n'zi	$z \grave{l} \acute{\eta}$	poisson	$n'zinoungu\acute{e} = /^{n}zi\mathfrak{g} + n\mathfrak{u} + \mathfrak{g}e/$
G'Beïgnn	bèń	Gan	$G'Be\"ignnou$ // gbénou = /bɛŋ + nu/

To summarize, this section establishes several features that characterize the Beng dialects documented in the earliest literature in comparison to the well-studied Modern Ouassadougou Beng. The dialect of Kamélinsou has an archaic form of numeral 'three', and shares two innovations with MOB, syncope and wider spread of *-N* in numerals. The dialect of Groumania neighbourhood has several archaic features such as the absense of syncope, moderate use of *-N* in numerals, and the structure of the pronominal system. Tauxier's data also allow us to establish some innovations unique to BG, both phonological and grammatical. MOB in turn shows more structural innovations than BG, corresponding to its central geographical position.

# 4. Beng phonology

### 4.1. Phonological inventory

Beng has a typical triangular vocalic system of seven oral and five nasal vowels.

oral nasal front back front back high high i u 1 ų mid upper-mid mid e 3 0 Ç lower-mid low 3 Э a low a

*Table 2.1.* Vocalic phonemes

MINIMAL PAIRS. Height:  $y\acute{e}$  'mouth'  $-y\acute{i}$  'water',  $b\acute{e}\acute{\eta}$  'horn'  $-b\acute{e}\acute{\eta}$  'black monkey',  $b\bar{e}\bar{\eta}$  'fruit'  $-b\bar{a}\bar{\eta}$  'rope',  $b\bar{a}$  'earth'  $-b\bar{\sigma}$  'to leave'  $-b\bar{\sigma}$  'to remove',  $f\bar{\sigma}$  'to

multiply' –  $f\bar{u}$  'to take by surprise',  $m\bar{\underline{t}}$  'to drink' –  $m\bar{\underline{e}}$  'to beat' –  $m\bar{\underline{a}}$  'to hear',  $d\bar{\underline{a}}$  'to cough' –  $d\bar{\underline{b}}$  'to know' –  $d\bar{\underline{u}}$  'to enter'.

Backness:  $bl\bar{\imath}$  'place'  $-bl\bar{\imath}$  'sorcery',  $bl\bar{e}$  'to eat'  $-bl\bar{\imath}$  'to clear',  $b\grave{\varepsilon}\acute{\eta}$  'Beng'  $-b\grave{\delta}\acute{\eta}$  'lizard type',  $(\eta\acute{o})$   $\eta\grave{o}$   $d\acute{\underline{\jmath}}$   $w\bar{e}$   $\acute{\varepsilon}$  '(I) am not **near** them'  $-\eta\grave{o}$   $d\acute{\underline{\jmath}}$   $w\bar{e}$   $\acute{\varepsilon}$  'they did not **enter** there',  $dr\bar{\xi}$  'work'  $-dr\bar{\xi}$  'cough'.

Nasalization:  $c\underline{i}$  'to vomit'  $-c\overline{i}$  'skin',  $s\underline{\varepsilon}$  'pain'  $-s\overline{e}$  'all',  $kl\underline{\varepsilon}$  'land'  $-kl\underline{\varepsilon}$  'bag',  $b\underline{a}\underline{n}$  'scarification'  $-b\bar{a}\underline{n}$  'rope',  $d\underline{\delta}$  'to know'  $-d\overline{\delta}$  'to cease'  $-d\overline{\delta}$  'one',  $b\underline{u}$  'carry'  $-b\overline{u}$  'ten'.

In addition to oral and nasal vowels there is a syllabic nasal g, realized as [n] before a pause, a vowel, or a w. In other cases n undergoes place assimilation to the following consonant (but it is realized as dental [n] before a palatal consonant), compare:  $[\bar{m} \ p\bar{b}]$  'my field',  $[\bar{n} \ d\bar{a}]$  'my pot',  $[\bar{n} \ j\bar{a}]$  'my water tank',  $[\bar{n} \ k\bar{a}]$  'my coffee',  $[\bar{n}]$  'my locust tree fruit'.

Vowel +  $\eta$  combinations can be considered diphthongoids (combinations of two segments capable of bearing tone into one mora). Other diphthongs of Beng consist of /i/, /i/, /u/ or /u/ followed by a different vowel of matching nasality: /ia/, /ua/, /ia/, /ua/, /ia/, /ua/, /ia/, /ue/, /ie/, /ue/, /ie/, /ue/, /io/, /uo/, /uo/, /io/, /ui/. In diphthongs, /i/ and /u/ tend not to combine with each other: combinations /iu/, /iu/, /ui/ are unattested, /ui/ occurs in one word only. Vowel /ɔ/ is only marginally attested in diphthongs: /iɔ/, /iɔ/, and /uɔ/ are unattested in underived forms, and /uɔ/ is found only in three words: può 'soft' (by assimilation from \*/puè/?), Suò 'female name' and Tuò 'male name'. Combinations [uɔ] and [uɔ], however, do arise in complex forms as a result of /l/ deletion and accompanying vowel quality assimilation (see 4.2.2): [pluò] < /plù lè/ 'the stomach', [nūòló] < /nūlèló/ 'coming' (progressive). Examples of words with diphthongs: blùa 'to tire', fia 'better', klua 'to steal', gbia 'smoke', folia 'sacrificial package',  $gu\bar{e}$  'friend',  $gu\dot{e}$  'fetish', gua 'found', gua 'hunt', gua 'personality', gua 'to uproot', gua 'fointed', gua 'fointed', gua 'soft, mobile', gua 'always'.

		labial	dental	palatal	velar	labiovelar
stops	vd	b	d	j	g	gb
	VS	p	t	c	k	kp
frica-tives	vd	V	Z			
	VS	f	S			
nasals		m	n	ŋ	ŋ	ŋm
liquids and g	glides		1/r	y	(h)	W

Table 2.2. Consonantal system

The consonantal system distinguishes five places of articulation: labial, dental, palatal, velar and labiovelar. Labiovelar consonants are produced with double stop articulation, with air blockage created by lips, on the one hand, and tongue and soft palate, on the other hand.

Lateral [l] and vibrant [r] represent the same phoneme. In the speech of most speakers, they are distributed as follows:

- [r] after dental and palatal consonants;
- [1] otherwise.
- [l] and [r] are written as r and l in Beng orthography according to the said distribution.

In fast, relaxed pronunciation the allophones [l]/[r] are not in complementary distribution. In fact both the [l] and the [r] variants are attested after any consonant, but only [l] is pronounced in the syllable onset position.

Consonant h is attested only in interjections:  $h\underline{\hat{a}}\underline{\hat{a}}$  'huh?',  $h\underline{\hat{a}}\underline{\hat{i}}$  'oh!',  $h\underline{\hat{e}}\underline{\bar{e}}$  'take this!',  $h\hat{o}$  'wow!',  $h\bar{o}h\bar{o}h\bar{o}h\bar{o}h\bar{o}$  'ayayay!',  $h\underline{\hat{u}}\underline{\bar{n}}$  'take this!'. Only the first of those can be part of complex utterances, e.g.  $\underline{\hat{a}}$   $d\bar{e}$   $h\underline{\hat{a}}\underline{\hat{a}}$  'play it (e.g. drum), huh?',  $\underline{\hat{n}}$   $ml\underline{\bar{e}}$   $b\underline{\hat{a}}m\underline{\hat{a}}$   $d\bar{o}$   $\underline{\hat{v}}$   $\underline{\hat{e}}$   $\underline{\hat{e}}$  'I saw a huge snake yesterday, huh!'. Although Paesler (1992) and Murphy (1995) characterize h as a voiceless fricative, it can in fact be pronounced both voiced and voiceless, usually without significant acoustic noise.

**4.1.1. Tones.** Beng has three tone levels, including low (marked L or with the grave diacritic:  $\dot{v}$ ), mid (marked M or with the macron sign:  $\bar{v}$ ), and high (H or the acute sign:  $\dot{v}$ ).

There are minimal triples distinguished just by tone levels, e.g.  $b\acute{a}\acute{\eta}$  'trap'  $-b\bar{a}\bar{\eta}$  'rope'  $-b\grave{a}\grave{\eta}$  'shoulder';  $p\acute{e}\acute{\eta}$  'mortar'  $-p\bar{e}\bar{\eta}$  'tale'  $-p\grave{e}\grave{\eta}$  'debt'. In accordance with their names, realization of the tones is manifested primarily in the pitch of the syllable. Pitch, however, also shows some contextual effects, including those of phrasal position. For instance, vocal cords do not immediately achieve the desirable vibration rate at the onset of an utterance, so level tones can be realized after a pause as raising to the corresponding level. The reverse effect of falling pitch can sometimes be observed before a pause, but is often obfuscated by a glottal stop optionally epenthesized before a pause. Consonantal context also plays a role in tone realization, so that pitch lowers automatically on voiced obstruents. In addition, transitions between tones tend to be smooth. Transitional effects particularly affect the low tone, which is normally realized after a non-low tone as a falling contour from the level of the preceding syllable to the low level:

(2a) 
$$/kli$$
  $l\grave{\epsilon}/$   $\Rightarrow$   $[kli \exists l\epsilon \lor]$  king DEF 'the king'

(2b) 
$$\dot{a}$$
 de  $\dot{a}$   $\Rightarrow$  [adelev] 3sG father DEF 'his father'

The tendency for the low tone  $(L, \dot{v})$  to be realized in falling pitch is also observed in sequences of several low tone units. In this case all the low  $(L, \dot{v})$  tonemes except the last one are pronounced as low-mid tone, and the last L syllable is produced with pitch falling from the low to the utra-low level, compare example (3):

A sequence of phonologically low tones after a high or mid tone is realized as very smoothly lowering pitch from the level of the preceding syllable. One could treat this effect as a phonological rule  $\dot{v}\dot{v}\dot{v}\Rightarrow\dot{v}\dot{v}\dot{v}$ ,  $\bar{v}\dot{v}\dot{v}\Rightarrow\bar{v}\bar{v}\dot{v}$ , for example:  $/g\bar{5}\bar{\eta}$  bìlè/ $\Rightarrow$  [g $\bar{5}\bar{m}$  bīlè] 'this man', / $\acute{\eta}$  gòlù d $\bar{o}$  c $\acute{l}$ / $\Rightarrow$  [ $\acute{\eta}$  gólù d $\bar{o}$  c $\acute{l}$ ] 'I carved out a walking stick'.

However, a phonetic sequence of [H H L] (</H L L/) or [M M L] (</M L L/) of this nature does not cause downstep (see below) in the following syllable, so the [H H L] and [M M L] derived by tone spread behave differently from the underlying /H H L/ and /M M L/.

In addition to level tones, Beng possesses four countour tones: HL ( $\hat{v}$ ), ML ( $\hat{v}$ ), LH ( $\check{v}$ ), MH ( $\check{v}$ ). The last one is very rare and occurs only in several units, historically bisyllabic but synchronically light (monomoraic), of the form ClV (<\*CVLV):  $bl\ddot{a}$  'to settle',  $yr\ddot{a}$  'to stay',  $zr\ddot{a}$  'to lose',  $gl\ddot{e}$  'difficult',  $zr\ddot{e}$  'road',  $bl\ddot{o}$  'to drain, to press',  $zr\ddot{o}$  'to wash',  $b\acute{u}ml\ddot{o}$  'immediately'. Besides, a contour tone can appear as a result of vowel contraction, cf. stative pronominal series:  $3SG\ \partial\acute{o} > \check{o}$ ,  $2SG\ m\bar{u}\acute{o} > m\ddot{u}$ , 'this'  $p\bar{u}\acute{a} > p\ddot{u}$ .

The falling tone HL  $(\hat{\mathbf{v}})$  is phonetically characterized by pitch lowering from the high level; despite the notation, this lowering usually does not reach the low pitch level phonetically. This is one phonetic feature distinguishing the realization of HL from the realization of L after H, which is also realized with pitch fall:

(5) 
$$/kli$$
  $z3/ \Rightarrow [kli7 z3]$  king mat 'king's mat'

We consider contour tones as phonologically decomposable into a sequence of two level tones. This interpretation simplifies the description of both tonal sandhi and morphologically conditioned tonal alternations, see below.

- **4.1.2. Syllable structure.** Beng's main prosodic unit is the syllable, which sometimes corresponds historically to a disyllabic foot of other South Mande languages as a result of a syncope CVLV>CLV. The maximum syllable structure is /ClUV $\eta$ /, where C stands for any consonant except /l/, l is the consonant /l/, U is any high vowel, V is any non-high vowel, and  $\eta$  is a syllable-final nasal. Any of those components can be absent, as long as the syllable has one tone bearing element, i.e. at least one vowel, or consists of a syllabic nasal. A syllable usually carries one tonal unit, which the orthography (and the transcription system accepted here) marks on all potentially tone-bearing units. Thus [túà] 'to stay' consists of one syllable with a falling tone, and [ $\bar{a}\bar{\eta}$ ]'us' consists of one syllable with a mid tone.
- **4.1.3. Segmental sandhi.** After /ŋ/, the syllable-initial /l/ becomes [n]. The resulting long [nn] can then shorten to [n]. This process is regular word-internally, in suffixes - $l\varepsilon$  and -li, and optional at word boundaries. Nasalization does not spread to vowels after the [n] resulting from such progressive nasal assimilation, contra the tendency for syllable-internal nasal harmony. Examples: /ŋ lá/  $\Rightarrow$  [n ná] 'my medicine', /n½ŋ-lé/  $\Rightarrow$  [n²né] 'propping up',  $|g\overline{\varepsilon}\eta$ -lè|  $\Rightarrow$  [gēnè] 'beauty' (the last two examples involve the nominalizing suffix - $l\varepsilon$ ), /ŋ lé bèý/  $\Rightarrow$  [ń né bèý] 'I am Beng'.

The glide /w/ is optionally deleted at morpheme boundaries, especially in function words, e.g. /klé $\hat{\eta}$  wó wē/  $\Rightarrow$  [klé $\hat{\eta}$  ó ē] 'in the forest' ('forest IN there'). Droping /w/ is regular after / $\eta$ /, less regular after vowels.

After a morpheme boundary, all vowels except high-mid /e/ and /o/ undergo progressive nasal assimilation following /ŋ/ or a nasal vowel, cf.  $b\bar{a}$   $\hat{\epsilon}$  'this is earth' vs.  $/b\bar{a}\bar{\eta}$   $\hat{\epsilon}/\Rightarrow$  [bāŋ $\hat{\epsilon}$ ] 'this is a cord', /ml $\hat{a}$   $\hat{\epsilon}/\Rightarrow$  [ml $\hat{a}$  $\hat{\epsilon}$ ] 'this is a drum'. The nasal assimilation does not occur in the "nasal consonant+oral vowel" combinations that result from the abovementioned processes of /w/ deletion and /l/ nasalization.

Two adjacent vowels of the same quality optionally fuse into one. The tones of both underlying segments get realized on the resulting short vowel. Examples:  $d\hat{a}\hat{a}l\hat{o} \Rightarrow d\tilde{a}l\hat{o}$  'seeding' (progressive),  $wl\hat{a}l\hat{o} \Rightarrow wl\hat{a}l\hat{o}$  'laughing' (progressive),  $b\hat{a}\hat{a} \Rightarrow b\tilde{a}$  'the earth' (with the definite article).

**4.1.4. Tonal sandhi.** In Beng orthography, as well as in the transcription system accepted here, tone is marked on all segments that have the potential to bear tone, i.e. on all vowels and syllable-final  $/\eta$ . Phonologically however the tone bearing units are not segments but morae, which contain a short vowel, a diphthong of the form "high vowel+a different short vowel" (*ie, ua* etc.) or "vowel+ $\eta$ ". Of course, tone is realized phonetically on all the voiced segments of a mora. Tone alternations,

discussed below, show that those segment conbinations indeed function as single tone bearing units.

$$\check{\mathbf{v}} \Rightarrow \dot{\mathbf{v}} | \neg \underline{\{\dot{\mathbf{v}}; \, \check{\mathbf{v}}\}} \; (\neg \underline{L})$$

Rising tone (LH) becomes low [l] before the following tonal values: H, M, MH, ML, HL. The contexts can be generalized as "before a non-low", assuming that low tone (L) constitutes part of the rising contour LH. Examples:  $d\check{u}$  'knife' –  $/d\check{u}$  LH  $d\bar{o}$  M/  $\Rightarrow$  [ $d\check{u}$  L  $d\bar{o}$  M] 'one knife';  $\partial \acute{o}$  wlá wǎ 'he will destroy the house' –  $/\acute{o}$  wlá wǎ LH  $n\bar{a}$  M/  $\Rightarrow$  [ $\acute{o}$  wlá wà L  $n\bar{a}$  M] 'he has destroyed the house',  $m\grave{a}n\acute{u}\acute{\eta}$   $n\grave{i}$   $\acute{o}$   $\bar{\eta}$   $fl\grave{u}\acute{a}$  'I will get bored of rice' –  $/m\grave{a}n\acute{u}\acute{\eta}$   $n\grave{i}$   $\acute{o}$   $\bar{\eta}$   $fl\grave{u}\acute{a}$  LH  $n\bar{a}$  M/  $\Rightarrow$  [ $m\grave{a}n\acute{u}n\grave{\eta}$   $\acute{o}$   $\bar{n}$   $fl\grave{u}\acute{a}$  L  $n\bar{a}$  M] 'I have got bored of rice'. The last example shows that the rising tone on a mora with two vocalic segments undergoes the change just like in a mora with one vocalic segment, as is the case in the examples above.

$$\hat{\mathbf{v}} \Rightarrow \dot{\mathbf{v}}, \, \dot{\mathbf{v}} \Rightarrow \bar{\mathbf{v}} \mid_{-} \{\dot{\mathbf{v}}; \, \dot{\mathbf{v}}\} \; (\_L)$$

Falling tones lose the descending part before a low tone element (i.e. before L and LH tones). Thanks to the assumption that contour tones can be decomposed into level units, this rule generalizes four distinct cases (HL and ML before L and LH). Examples:  $z\hat{\sigma}$  'mat'  $-/z\hat{\sigma}$  HL  $\hat{\epsilon}$  L/  $\Rightarrow$  [ $z\hat{\sigma}$  H  $\hat{\epsilon}$  L] 'this is a mat',  $s\vec{\imath}$  'oil palm'-/ $s\vec{\imath}$  ML  $\hat{\epsilon}$  L/  $\Rightarrow$  [ $s\vec{\imath}$  M  $\hat{\epsilon}$  L] 'this is an oil palm'.

Beng has downstep. Non-low level tones H and M are realized lower that usual after a falling tonal sequence  $\langle \hat{\mathbf{v}} \hat{\mathbf{v}} \rangle$ ,  $\langle \hat{\mathbf{v}} \hat{\mathbf{v}} \rangle$ , or  $\langle \hat{\mathbf{v}} \rangle$ .

(6) 
$$/\Pi$$
-ó  $n\bar{y}$ - $\partial$ ló/  $\Rightarrow$  [nol ny- $\partial$ lol]   
  $1$ SG-ST+ come-PROG   
 'I am coming'.

As noted already by Paesler (ms.), the cases of downstep triggered by the underlying falling tone of the preceding syllable are phonetically opaque, in the sense that the lowering of pitch on the syllable with underlying falling tone is small, undistinguishable from the phonetically automatic transition to the lower (downstepped) pitch level, e.g.  $/z\hat{3}$  ló/ HL H  $\Rightarrow$  [ $z\acute{3}$  ló] H'H 'over the mat'.

Sequences of two vowels that are not diphthongs are bimoraic, whether the two vowels have identical (e.g.  $b\hat{a}\hat{a}$  'snake venom',  $p\hat{n}$  'wee') or different quality  $(d\hat{a}\hat{a})$  'first'). Tone combinations on them are not subject to sandhi rules for contour tones.

The verb  $g\bar{u}\hat{a}$  'to remain' is bimoraic (even though  $/\bar{u}\hat{a}$ / can be a diphthong in other words), so  $/\bar{u}$ / and  $/\bar{a}$ / in it behave as separate tone bearing units. For example,  $g\bar{u}\hat{a}$  does not lose the low tone before another low tone element.

# 4.2. Morphonology

**4.2.1. n**C **simplification.** Combinations of the phoneme /n/ with the following syllable-initial non-fricative consonant sometimes simplify into a nasal consonant

homorganic with the second underlying consonant. This rule is regular word-internally with nasals, /l/ and /w/, while with stops and /y/ its application has to be specified lexically. Examples of the change within a compound:  $l\bar{e}nr\bar{e}$  'bride' <  $l\bar{e}\bar{\eta}$  'woman' +  $dr\bar{e}$  'new',  $banl\bar{u}$  'shoulder joint' < ban 'shoulder' +  $nl\bar{u}$  'head'; example within a reduplicated form:  $nl\bar{u}$  'two each' <  $nl\bar{u}$  |  $nl\bar{$ 

All examples of  $\eta C$  simplification on word boundaries include combinations with a personal pronoun and could be interpreted as indications of pronoun cliticization – however, even in this context the rule is still irregular, applying only to some frequent object pronoun+verb or possessive pronoun+noun combinations. Some examples include:  $n\bar{a}$  'my mother, Mommy' (form of address)  $<\bar{\eta}$  '1sG' +  $d\bar{a}$  'mother';  $n\bar{e}$  'my father, Daddy' (form of address)  $<\bar{\eta}$  '1sG' +  $d\bar{e}$  'father',  $\eta m\bar{a}$  'give me'  $<\bar{\eta}$  '1sG' +  $gb\bar{a}$  'to give', cf. combinations that do not undergo any phonological rules:  $m\bar{l}$   $gb\bar{a}$  'give you', a  $gb\bar{a}$  'give him'; compare also the form  $\bar{l}$  '1et's go'  $<\bar{l}$   $\bar{l}$  '1PL' and  $t\bar{l}$  'to go' (with a unique but phonologically sensible tonal change from  $\bar{l}$   $\bar{l}$ 

- **4.2.2. Deletion of /l/.** Before  $/\epsilon$ /, phoneme /l/ optionally drops in two kinds of morphological contexts:
- In the article  $l\hat{\epsilon}$ , including its usage within the contrastive topic marker  $p\bar{\sigma} l\hat{\epsilon}$ .
- In the progressive verb form ending in  $-l\varepsilon l\delta$  (but not in the deverbal noun in  $-l\varepsilon l$ ).

The deletion of /l/ is accompanied by the assimilation of the vowel /ɛ/ after the /l/ to the preceding vowel in rounding, labialization, and nasalization. Examples:  $b\bar{a}$   $l\hat{e}$   $\Rightarrow$  [b\bar{a}\bar{a}\bar{e}' the earth',  $dr\bar{e}$   $l\hat{e}$   $\Rightarrow$  [dr\bar{e}\bar{e}\bar{e}\bar{e}' the work',  $z\bar{u}$   $l\hat{e}$   $\Rightarrow$  [z\bar{u}\bar{e}\bar{e}\bar{e}' the breast',  $m\bar{l}l\hat{e}l\delta$   $\Rightarrow$  [m\bar{l}\bar{e}\bar{e}\bar{e}' drinking' (progressive),  $p\bar{e}l\hat{e}l\delta$   $\Rightarrow$  [b\bar{e}

**4.2.3. High tone in the low tone form of verbs.** Beng has a tonal rule that applies in a specific morphosyntactic context and cannot be reduced to regular tonal sandhi. This rule applies to the low tone form of verbs that immediately follow a subject pronoun with a high or rising tone – or, in other words, that end in a high tone element. In those cases, if the first mora of the verb bears the grammatical low tone, it changes its tone to high or falling tone:

 $L \Rightarrow HL$  in verbs after a H or LH pronoun and before a suffix.

 $L \Rightarrow HL$  in verbs after a H or LH pronoun and before a pause.

 $L \Rightarrow H$  in verbs after a H or LH pronoun otherwise.

Examples:

(7a) 
$$|\acute{O}$$
  $n\grave{u}|$   $\Rightarrow$   $\acute{o}$   $n\^{u}$  3SG:PST+ come:L

'He came'. (before a pause)

(7b) 
$$|\text{W}\ \text{a} \quad \text{n}\ \text{u} \quad \text{\'e}| \quad \Rightarrow /\text{w}\ \text{a} \ \text{n}\ \text{\'e}/ \Rightarrow \quad [\text{w}\ \text{a} \ \text{n}\ \text{\'e}\ \text{\'e}]$$

$$3\text{SG:PST-} \quad \text{come:} L \quad \text{NEG}$$

'He didn't come'. (No pause; regular sandhi LH>H in the pronoun)

(7c) 
$$|\acute{O}$$
  $n\grave{u}$   $n\bar{\jmath}|$   $\Rightarrow$   $\acute{O}$   $n\acute{u}$   $n\bar{\jmath}$ .  $3$ SG:PST+ come:L here 'He came here'. (no pause)

(8) 
$$|\acute{O}$$
 mề.lá $|$   $\Rightarrow$  /ó mề.lá/[o]mellat]  $3sG:Pst+$  fall:L

'He fell down' (where -lá is a verbal suffixoid<sup>10</sup>).

Note that the L>H, HL change in verbs is not related to regular sandhi. Most similar are examples of the regular rule of high tone spread over low tone sequences, HLL⇒HHL, which can be triggered, among other things, by high tone pronouns followed by low tone nouns and verbs. However, the HLL⇒HHL change is restricted to its structural description; unlike the low tone form of the verb, lexical low tone won't undergo any change before a non-low tone, cf. (9) vs. (10):

(10) 
$$\acute{O}$$
 mlà dō wà 3sG:PsT+ drum one break:L 'He broke a drum'.

Compare (10) with  $\acute{o}$   $n \not u$   $n \not z$ , example (7), where the underlying HLM tone sequence is identical but the L>H change does happen.

# 5. Personal Pronoun Morphology

The structure of personal pronouns in Beng was thoroughly described in (Paperno 2005). Here we reproduce pronoun paradigms with minimal comments on the usage of pronoun series.

<sup>&</sup>lt;sup>10</sup> By 'suffixoid' I mean here the part of verbal stem that does not change its tone in the low tone form of the verb (see 6.4). Although historically such tonally inert parts of verb stems are indeed suffixes, there are no synchronic reasons to separate them into a separate morpheme.

#### Denis Paperno

*Table 3.* Paradigms of personal pronouns

		Singular		Plural			Pre sin	
Series		1	2	3	1	2	3	edic. gula
non-subject		$ar{\eta}$	mį	à	<u>ā</u> ŋ	kā	ŋò	ativ ar sı
possessive		тō	т <u>ї</u> рэ	àpō	ājīpā // ājmā	kāpō	ŋòpō	Predicative marker with a singular subject NP
reflexive		ŋ̄ dràౖ	m <u>ī</u> drà	à drà	āŋ drā̄	kā dr <u>à</u>	ŋò dràౖ	ær v NP
focus (indepe	endent)	māৣŋ	m <u>ī</u> ā	àṇā // àṇĒ	ត្វញូវាគ្នាញ់ // ត្វញូវត្វញ់	kāṇāṇ // kāyāṇ	ŋòṇāౖŋ̀ // ŋòyāౖŋ̀	vith a
existential		mājī	mį	ò	<u>ā</u> ŋ	kā	ŋò	Ø
preterite	+	ή , má*	mį́	ó, é	<u>á</u> ń	ká	ŋó	
	-, -3	m <u>ặ</u>	m <u>į</u>	wă	àń	kǎ	ŋǎ	
	+3	m <u>a</u>	m <u>i</u> ⁻	ā	<u>ā</u> ŋà	kã	ŋã	
conditional	+	ŋ̂, mậ*	mĵ	ô, ê	<u>á</u> ŋ̀	kâ	ŋô	
	+3	mậ		wâ, â			ŋâ	
	-, -3	(= hab	itual)					
habitual	+	ὴ, màۣ*	mį̀	ò, è	<i>àੁn, āੁn</i>	Kà	ŋò	
	-, +3,-3	m <u>à</u>		wà, à			ŋà	
stative	+	ŋó	m <u>ī</u> ó// m <u>j</u>	òó//ŏ	<u>ā</u> ŋó	kāó// kä	ŋòó// ŋŏ	ó
	-	ŋā	m <u>ī</u> ā //	wàā	āౖŋā //	kāā //	ŋàā //	wā
			mįwā		<u>ā</u> ŋ̄wā	kāwā	ŋòwā	
	+3	ŋâ	m <u>ī</u> â	àâ	āŋâ	kāâ	ŋàâ	â
	-3	ŋã	m <u>ī</u> ā	wàā	<u>ā</u> ŋā	kāā	ŋàā	wā

Notes on the table: + marks «affirmative non-contracted forms»; - marks «negative non-contracted forms»; +3 marks «affirmative forms contracted with a 3sG object pronoun»; -3 marks «negative forms contracted with a 3sG object pronoun». More on contraction with a 3sG personal pronoun see below.

The non-subject series has the widest range of usages, including the direct object position, the object of postposition, and the prenominal possessor. The possessive series is used as an adnominal possessor or headlessly and puts additional emphasis on the possessor ('as for MY ...', 'it is HIS ...', 'our thing'). The focus series is used

#### Grammatical sketch of Beng

practically in all contexts where a noun phrase can be used, marking, in contrast to the regular subject or non-subject series, certain contrastive emphasis on the pronominal referent. I also recognize a distinct reflexive series, despite the fact that reflexive pronouns transparently consist of the non-subject pronouns followed by marker  $dr\hat{a}$ , which the consultants perceive as a separate word. The reason for such an interpretation is that  $dr\hat{a}$  shows no morphosyntactic autonomy. It cannot change its position, be separated from its pronominal element, or attach to anything other than personal pronouns. Reflexive pronouns of Beng are exact functional counterparts of reflexive pronouns in European languages.

The remaining series are used in the subject position, distributed according to tense, aspect, modality, and polarity values (see Chapter 12 and especially section 12.1.3). Besides this, pronouns of the existential series have a special usage as the first conjunct in a coordinate NP with  $A \ n\hat{a} \ B \ l\bar{o}$  marking.

### 5.1. On the allomorphy of the 1SG subject pronoun

The table above contains  $1^{st}$  person singular forms marked with an asterisk (\*). These special 1sG forms have the stem mg (instead of g), and are used whenever the subject pronoun is followed by another personal pronoun (of non-subject or reflexive series) of 1sG, 2sG, 3sG, or 3pL:

- (11) Má jī drà yè. 1SG:PST+ 1SG RFL see:L 'I saw myself'.
- (12) *Má mī yè*.

  1sG:PsT+ 2sG see:L

  'I saw you'.
- (13) *Má* à yè.

  1sG:PsT+ 3sG see:L

  'I saw him'.
- (14)  $\hat{H}$   $\bar{g}\bar{n}$   $y\hat{e}$ . 1SG:PST+ 1PL see:L 'I saw us'.
- (15)  $\cancel{D}$   $k\bar{a}$   $y\hat{e}$ . 1SG:PST+ 2PL see:L 'I saw you (plural)'.
- (16) Má ŋò yè.

  1SG:PST+ 3PL see:L

  'I saw them'.

In those kinds of contexts the regular form with the stem g is also marginally possible ( $\hat{\eta} \, \bar{\eta} dr \hat{a} \, y \hat{e}$  etc.); acceptability judgments vary.

Note that the pronoun that triggers the selection of the 1sG stem *ma* is not always a direct object. It can also be in the possessor position of a direct object:

The distribution of  $\eta$  vs. ma can be considered to be a manifestation of the contrastive strategy for coding core participants (along with the doubtlessly dominant accusative strategy of Beng), see (Vydrin 2006). However, there are more serious reasons for such an analysis in the case of Guro than in the case of Beng, because in Beng the choice of the 1sG form is fully determined by the morphological context and can be described as allomorphy<sup>11</sup>.

## 5.2. Contraction with 3sG object pronoun

The 3sG object pronoun can contract with the preceding subject pronouns forming portemanteaus, e.g.:

(18) 
$$M\grave{a}$$
  $p\bar{e}!$  (<  $m\grave{a}$   $a$   $p\bar{e}$ )

1SG:HAB+3 say 1SG:HAB+ 3SG say

'Let me say it!'

(19) 
$$M\hat{j}$$
  $p\bar{e}!$  (<  $m\hat{j}$  à  $p\bar{e}$ )  
2SG:HAB+3 say 2SG:HAB+ 3SG say  
'Let you say it!'

(20) 
$$\mathfrak{J}$$
- $\hat{a}$   $p\bar{e}$ . (<  $\mathfrak{g}$ - $\acute{o}$   $\grave{a}$   $p\bar{e}$ ) 1SG-ST+3 say 1SG-ST+ 3SG say 'I will say it'.

The portemanteau forms are not obligatory. Non-contracted alternatives are also acceptable, although infrequent.

Since contracted forms are not fully transparent, Table 3 lists them as distinct pronoun series (PST+3, PST-3, HAB+3 etc., where «3» stands for «contracted with a 3SG pronoun»).

<sup>&</sup>lt;sup>11</sup> The «ergative» pronouns in Guro are triggered not just by morphological but also by semantic factors, including the referential status of the direct object, an independently known ergativity/accusativity factor. See (Vydrin 2006) for more detail.

### 5.3. Subject series of pronouns

Information on the usage of subject pronoun series depending on clause type, tense, aspect, modality, and polarity (TAMP), is for reasons of brevity given in Tables 4 and 5 below. For sentential examples for each clause type, as well as for the full TAMP paradigm of a sentence, see Chapter 12.

construction polarity: affirmative negative Ps<sub>T</sub>+ preterite Pstperfect imperative/optative H<sub>AB</sub>+ habitual Hab- = CNDconditional C<sub>ND</sub>+ future, progressive, stative S<sub>T</sub>+ ST-

Table 4. Subject pronoun usage in verbal sentences

Table 5. Subject Pronouns in Non-Verbal Clauses

clause type   polarity:	affirmative	negative
adverbial	S <sub>T</sub> +	ST-
adjectival	HAB+ or ST+ <sup>12</sup>	
existential	Ex+	Ex-

### 5.4. Stative pronouns with verbs tá, nū

Beng exhibits relics of an affirmative stative predicative marker alternative to  $\acute{o}$ . It is used instead of  $\acute{o}$  with just two verbs. Before the verb  $n\bar{y}$  'to come', the stative marker can have the form  $y\acute{e}$ , as in  $m\bar{y}$  yé $n\bar{y}$  'you (singular) will come',  $m\bar{y}$  yé $n\bar{y}$ òló 'you (singular) are coming', etc. The verb  $n\bar{y}$  'to come' is also compatible with the

Sentences with predicative adjectives show both stative and habitual subject pronouns. The choice of the pronoun series depends on the adjective in question. Some adjectives require the stative series, others require the habitual series, several (e.g. jali 'stupid') show variation. The choice of series might be related to the semantic distinction of temporary vs. permanent property denoted by the adjective; one could identify this distinction with the individual vs. stage-level classification of predicates by (Carlson 1977). This hypothesis has not been thoroughly tested but some examples are suggestive (individual-level  $g\bar{e}\bar{\eta}$  'beautiful' requires a habitual pronoun, stage-level  $f\partial\hat{\eta}v\partial\hat{\eta}$  'shaded',  $gbl\hat{u}\hat{\eta}$  'cloudy', a stative one). If the distinction were driven by a semantic contrast of this kind, this could motivate the neutralization of the distinction under negation – indeed, when absence of a property is asserted, the temporary vs. permanent status of the absent property is irrelevant.

regular stative marker  $\acute{o}$ , as in  $m\bar{\jmath}\acute{o}$   $n\bar{y}$ ,  $m\bar{\jmath}\acute{o}$   $n\bar{y}\grave{o}l\acute{o}$ . The verb  $t\acute{a}$  'to go' fuses with the preceding stative marker into  $yr\acute{a}$  (<\* $y\acute{e}$   $t\acute{a}$  instead of \* $\acute{o}$   $t\acute{a}$ ). Compare:  $m\bar{\jmath}$   $yr\acute{a}$  'you (singular) will go',  $m\bar{\jmath}$   $yr\acute{a}\acute{a}l\acute{o}$  'you (singular) are going'. Before the verbs  $t\acute{a}$  'to go' and  $n\bar{y}$  'to come', the final  $\eta$  of first person pronouns fuses with the initial /y/ of the stative marker:  $pr\acute{a}$  (<  $\bar{\eta}$   $yr\acute{a}$ ) 'I will go',  $\bar{g}p\acute{e}n\bar{y}$  (<  $\bar{g}\bar{\eta}$   $y\acute{e}n\bar{y}$ ) 'we will come'.

### 6. Morphology of content words

Much of Beng's inflexional and derivational morphology is suffixal. Beng suffixes include the inflexional  $-n\bar{a}$  (affirmative perfect),  $-l\hat{e}$  (stative),  $-lel\acute{o}$  (progressive),  $-s\grave{a}$  (negative perfect), and the derivational -le (nominalization), -ya (location nominalization), -pa (means nominalization),  $-y\grave{a}$  (goal converb),  $-l\acute{e}$  (agent nominalization),  $-l\bar{e}$  (participle),  $-d\bar{e}\bar{\eta}$  (profession suffix),  $-l\grave{e}i$  (suffix that forms temporal adverbs from nouns that refer to parts of day cycle, e.g.  $dr\acute{u}l\grave{e}i$  'in the morning' from  $dr\acute{u}$  'morning').

Beng also has elements that could be labeled as 'verbal prefixes', which precede the verb stem and form a semantic unit with it, e.g.  $w\acute{o}$  'in' within  $w\acute{o}l\bar{a}$  'to ask about,' literally 'to ask in,'  $y\acute{e}$  'mouth' on  $y\acute{e}b\bar{y}$  'to feed,' literally 'to carry mouth'. Such 'prefixes' do not change their tone in the low tone form. However, structurally such elements are not true prefixes but (part of) a direct object of the verb since they can be separated from the verb stem under passivization. The semantic object of predicates like  $w\acute{o}l\bar{a}$  'to ask about' can therefore be seen structurally as the possessor of the dummy noun rather than a full direct object.

The morphemes discussed here as suffixes are defined on distributional basis, with the main criterion being separability: unlike free standing morphemes from closed classes, e.g. personal pronouns, determiners, postpositions, etc., suffixes cannot be separated from the heads they combine with. For instance the negation marker follows the main verb of a sentence but can be separated from it by adverbs, indirect objects, etc.; on the other hand, verbal suffixes of positive or negative perfect, stative, or nominalization suffixes, always attach at the end of the verb stem and cannot be separated from it by any material. Similarly, while determiners and postpositions can be separated from the noun they combine with by adjectives, suffixes  $-d\bar{e}\bar{\eta}$  and  $-l\hat{e}i$  always attach to the noun stem and don't allow for interveners.

I also discuss below one element,  $n\acute{a}$ , that fails to show unseparability from the head it combines with, but has tonal behavior typical for suffixes. So  $n\acute{a}$  cannot be characterized as a suffix but rather as a phrasal suffix, since it combines with phrases rather than stems; see examples below.

### 6.1. Tonal changes in suffixation

**6.1.1. Mobile tone suffixes.** Some suffixes bear a high or a low tone depending on context. Those suffixes, which I call mobile tone suffixes, have a high tone after H, LH, MH, i.e. after a high tone element, and a low tone otherwise.

Another unit that exhibits the same tonal behavior is the attributive marker  $n\underline{a}$ . This phrasal suffix attaches to noun phrases (which can consist of a single noun), forming adjective phrases with the meaning 'having X', 'characterized by X', for example:  $jr\check{a}$  'poverty'  $-jr\grave{a}$   $n\check{a}$  'poor',  $bl\bar{u}$  'sorcery'  $-bl\bar{u}$   $n\grave{a}$  'sorcerer',  $l\acute{e}\acute{\eta}$   $pl\bar{a}\bar{\eta}$  'two children'  $-l\acute{e}\acute{\eta}$   $pl\bar{a}\bar{\eta}$  'having two children'. These constituents exhibit the behavior of adjective phrases: they typically modify a noun (although, as with other adjectives one also finds them substantivized), and when modifying a noun they are always postposed rather than preposed; as discussed in 7.2, fixed position with respect to the modified noun is a feature distinguishing nouns from adjectives in Beng. When attaching to placenames, the attributive marker  $n\underline{a}$  produces the meaning 'resident of', e.g.,  $As\acute{a}gb\check{e}$  'Ouassadougou'  $-As\acute{a}gb\grave{e}$   $n\acute{a}$  'resident of Ouassadougou',  $b\bar{a}$  wó 'savanna'  $-b\bar{a}$  wó  $n\acute{a}$  'savanna dweller'. The attributivizer can also attach to full noun phrases with determiners:

- (21) Ŋ (gbě béē bìlè) nà dō yè gblē.

  1SG:PST+ village big this ATR one see:L yesterday 'I saw one resident of this big village yesterday'.
- **6.1.2. Low tone suffixes.** One syllable suffixes with a low tone undergo a shift of a H tone element of a preceding contour tone, so that LH.L>L.HL and MH.L>M.HL. Examples:  $\{dr\check{u}(LH) + s\grave{a}[l]\} \Rightarrow /dr\grave{u}[l] s\^{a}(HL)/$  (negative perfect form of the verb 'to walk'),  $\{zr\ddot{a}(MH) + y\grave{a}[l]\} \Rightarrow /zr\bar{a}(M) y\^{a}(HL)/$  (goal converb of the verb 'to lose'). In verbal reduplication, the right reduplicant also shows tonal behavior of a low tone suffix, cf. the reduplicated form of the same verb 'to walk'  $\{dr\check{u}(LH) + dr\grave{u}[l]\} = /dr\grave{u}[l] dr\^{u}(HL)/$  'to walk back and forth'.
- **6.1.3. Other suffixes.** Suffixes with lexical high (-11, agent nominalization) or mid tone (- $n\bar{a}$ , perfect), show no tone alternations.
- **6.1.4. Stems ending in L tone.** The final L tone element of a verb stem is deleted before the attachment of suffixes. If the L is part of a contour tone, L simplifies, and the contour tone becomes level, e.g.  $t\hat{u}\hat{a}$  'to leave'  $-t\hat{u}\hat{a}-l\hat{\epsilon}$  (nominalization). If the low tone characterizes a whole syllable, the tone of the preceding syllable spreads to replace L. The latter situation is typical for reduplicated verbs, cf. examples of nominalization of such verbs:  $wl\hat{a}wl\hat{a}$  'to smile'  $-wl\hat{a}wl\hat{a}-l\hat{\epsilon}$ ,  $m\bar{l}m\hat{l}$  'to suck'  $-m\bar{l}m\bar{l}-l\hat{\epsilon}$ .

**6.1.5.** The verb *blö* 'to press out'. The verb *blö* 'to press out' changes its lexical tone from MH to H when combining with suffixes, cf. the progressive form *blóśló* instead of the regular \**blōśló*, nominalization *blólé* instead of the regular \**blōlé* etc.

#### 6.2. Nominalization in $-l\varepsilon$

The suffix  $-l\varepsilon$  forms action (or event) nominalization of verbs:

- (22) [Drē wō-lè] ò gēŋ.
  work do-NMLZ 3SG:HAB+ good
  'To work is good'.
- (23) À gbě tá-lé zá fù ā̄ŋ wó.

  3SG village leave-NMLZ matter suprise:L 1PL in 'His departure from the village took us by surprise'.
- (24) Kòfí ó [báń klá-lé] lā-àló Kùàjó nì.

  Kofi ST+ trap set-NMLZ show-PROG Kouadio BENEF

  'Kofi teaches Kouadio to set traps'.
- (25) Bè-lé kā ó mī mà? run-NMLZ need ST+ 2sG CONT 'Do you want to run?'

The suffix  $-l\varepsilon$  nominalizes various predicates. It can attach to verbs  $(n\bar{y}$  'to come'  $-n\bar{y}l\hat{\varepsilon}$  '(the) coming'), adjectives  $(g\bar{\varepsilon}\bar{\eta}$  'beautiful'  $-g\bar{\varepsilon}n\hat{\varepsilon}$  'beauty'), and a few nouns  $(l\check{z}$  'slave'  $-l\grave{z}l\hat{\varepsilon}$  'slavery').

In some usages, verbal stems with the suffix  $-l\varepsilon$  function like participles, relativizing the semantic object:

- (26)  $g\bar{g}$   $w\bar{\imath}-l\hat{\epsilon}$  foot swell-NMLZ 'swollen foot' (can also be interpreted as 'swelling of feet')
- (27) Ŋ-ó zrìn kásíé-lé lú. 1SG-ST corn roast-NMLZ buy 'I'll buy roasted corn'.
- (28) Ŋ-ó ŋ̄ gā̄ yrð-lέ búénéló.

  1SG-ST+ 1SG foot wrench-NMLZ steam.PROG

  'I am steaming my wrenched foot'.

Interestingly, there are examples where the definite article  $l\hat{\epsilon}$  and the demonstrative element  $b\hat{\imath}$ , which normally follow all adjectives in a noun phrase,

#### Grammatical sketch of Beng

precede the "participial" nominalization in  $-l\varepsilon$ , and the semantic head can even be doubled by an object pronoun, as is regular for direct objects:

(29) 
$$\eta_{-\acute{o}} = [[zr\underline{\grave{\imath}}\grave{\jmath}] \quad b\grave{\imath}-l\grave{\varepsilon}]_{NP} \quad \grave{a} \quad k\acute{a}s\acute{i}\acute{e}-l\acute{\varepsilon}]_{NP} \quad l\acute{u}.$$
1SG-ST+ corn this-DEF 3SG roast-NMLZ buy 'I will buy this roasted corn'.

The determiners can also follow the "participial" deverbal noun:

Native speakers report a subtle contrast betweeen (29) and (30), whereby (29) can be interpreted as 'I will buy this corn roasted'. The exact syntactic structure of (29) is not entirely clear. We might be dealing with some kind of partitive or possessive construction ('the roast of this corn'), as indicated by the tentative syntactic bracketing in (29). On the other hand, the translation of (29) suggests that *kásíélé* might be a secondary predicate, although the preverbal position of *kásíélé* contrasts with all well-established instances of secondary predicates in Beng (see 12.2.4), which follow the main verb of the sentence rather than precede it as does *kásíélé* in (29). I leave the question of whether the preverbal position of secondary predicates, as attested in cognate languages, is also available in Beng, for further study. Whatever the exact syntactic structure of (29), it is clear that the semantic contrast is based on the relative syntactic scope of the determiner and the "participle": in one case, one talks about the *(this corn) roasted*, while in the other case we hear about *this (roasted corn)*, reflecting the ordering of the two attributes of corn.

### 6.3. Locative nominalization in -ya

The mobile tone suffix -ya combines with verbs, adjectives, all locative nouns including locative postpositions, and a few nouns denoting social relations. From the distributional viewpoint derivatives in -ya are locative nouns, i.e. nouns that can be used in adverbial positions without a postposition:

(31) 
$$\cancel{\hat{H}}$$
  $\cancel{n}\cancel{\hat{y}}$   $\cancel{p}\cancel{\bar{y}}$   $\cancel{b}l\bar{e}$ - $\cancel{y}\grave{a}$ .  
1SG:PST+ come:L thing eat-PLC 'I came to the eating place'.

When derived from a verb, the -ya form refers to the place or time of an event. There's a systematic ambiguity between the temporal and the spacial readings, although context often helps to differentiate the two:

- (32) Ŋ-ó zrō-yá dō-òló. 1SG-ST+ wash-PLC build-PROG 'I build a bathing place'.
- (33)  $M_{\tilde{q}}$   $zr\bar{o}$ - $y\acute{a}$   $y\grave{e}$   $\acute{\varepsilon}$ . 1SG:PST- wash-PLC have:L NEG 'I had no time (or no place) to wash'.

A derived form in *-ya* referring to the time of an action and used in an adverbial position indicates simultaneity of two events:

(34) Ŋò trí-yá ná ŋò-ó dǎ ŋ̄ ló nā.

3PL return-PLC TOP 3PL-ST find 1SG on here
'On the way back (literally 'returning') they will find me here'.

When the derived form in -ya is used in this function of a simultaneity converb, and the subject of action referred to in the ya-form is not overtly mentioned in a pronoun or a full NP, the said subject has to be coreferential with the subject of the main clause, cf.:

(35)  $\mathcal{O}_{i/*_{i}}$   $Dr\bar{\mathcal{E}}$   $w\bar{o}$ - $y\hat{a}$   $n\hat{g}$   $m\hat{g}_{i}$   $n\hat{o}_{i}$   $y\hat{e}$ . work do-PLC TOP 1SG:PST+ 3PL see:L 'I saw them when I (\*they) worked'.

In case the subject of the *ya*-converb is overt, it does not have to be coreferential with the main clause subject, cf. (35) and (36):

(36)  $\eta \partial_i dr \bar{\epsilon} = w \bar{o} - y \hat{a} = n \hat{a} = m \hat{a}_i = n \hat{o}_i = y \hat{e}$ . 3PL work do-PLC TOP 1SG:PST+ 3PL see:L 'I saw them when they worked'.

The form in -ya derived from adjectives refers to the place in which the property denoted by the adjective is localized, e.g.:

(37) Bànê yā gēη-yà ná à ŊĒ TOP 3sg beautiful-PLC Foc Bane EMPH lέ lòklē à Ιè  $\bar{arepsilon}$ 3sg:Pst+ Cop:L 3SGneck DEF Foc

'Bane's neck makes him beautiful' (literally: As for Bane, it is the place of his beauty, his neck).

With locative nouns, -ya has the meaning of 'extended localization' and is an exact semantic equivalent of the suffix -da:-/-dar- in Bezhta (Daghestanian; Kibrik, Testelec 2004) which is added to suffixes of localization like 'in', 'on top of', etc.,

#### Grammatical sketch of Beng

and means 'in (the direction of) the area of whatever is specified by localization proper', compare *märäL'ä* 'on top of the mouintain' vs. *märäL'ädä*: '(somewhere) in the area on top of the mountain' (Kibrik 2003: 44). Compare:

- (38a) Kósá tá-nā wlá.

  Kosan 3SG:PST+:go-PRF house 'Kosan has gone home'.
- (38b) Kósá tá-nā wlá-yá.

  Kosan 3SG:PST+:go-PRF house-PLC 'Kosan has gone towards home'.
- (39a) Kósá tá-nā zīē lù. Kosan 3SG:PST+:go-PRF kapok under 'Kosan has gone under the kapok tree'.
- (39b) Kósá tá-nā zīē lù-yà.

  Kosan 3sG:PsT+:go-Pres kapok under-Plc

  'Kosan has gone towards the area under the kapok tree'.
- (40a)  $\acute{O}$   $\acute{j}\acute{\varepsilon}$   $\acute{w}\acute{l}\acute{a}$   $\acute{w}\bar{e}$ . 3SG:PST+ pass house there 'He passed through the house'.
- (40b) O  $j\acute{\epsilon}$   $wl\acute{a}$ - $y\acute{a}$   $w\bar{e}$ . 3SG:PST+ pass house-PLC there 'He passed by the house'.

Finally,—ya derived forms from some nouns denoting social relations adverbs with the meaning 'according to the social relation X':

(41) Ŋó ŋò gbà blĕ lè sīā-yà.

3PL:PST+ 3PL give:L wine DEF in.law-PLC

'They gave them wine according to in-lawhood' (e.g. everyone gave wine to his mother-in-law).

(42)  $D\bar{a}\bar{n}$   $n\hat{j}$   $yrám\hat{a}$   $n\acute{a}$   $n\acute{o}$   $l\acute{e}\acute{n}$   $n\hat{u}\grave{n}$   $b\grave{o}$   $s\grave{o}l\acute{a}s\acute{a}$   $l\grave{o}-y\acute{a}$ .

war DEF time TOP 3PL:HAB+ child PL extract soldier slave-PLC 'During war, one selected children for military service by slave status' (in other words: One chose slave kids to become soldiers).

#### 6.4. Predicative forms of verbs

Beng uses six different verb forms in the predicate position, distinguished on the basis of tense, aspect, modality, and polarity. For more information on their usage, see 12.1.

Two of the predicative forms do not bear affixes and are distinguished by tone. In one of those affix-free forms, the tone is lexically specified. I call this form the **base form**. The other form bears a low grammatical tone; I call it the low tone form. Here are some examples of the two affix-less forms of several verbs:  $m\bar{z}$ ,  $m\hat{z}$  'to drink';  $t\hat{a}$ ,  $t\hat{a}$  'to go';  $d\tilde{a}$ ,  $d\hat{a}$  'to drop';  $zr\ddot{o}$ ,  $zr\dot{o}$  'to wash';  $j\hat{a}t\hat{e}$ ,  $j\hat{a}t\hat{e}$  'to respect'. Several verb stems keep a high tone on the last syllable constant in the low tone form, compare  $y\bar{a}l\acute{o}$ ,  $y\hat{a}l\acute{o}$  'to stand up',  $m\bar{e}l\acute{a}$ ,  $m\hat{e}l\acute{a}$  'to fall on the ground'. Paesler (1989) calls such syllables 'suffixes', although it might be more precise to characterize them as 'suffixoids' as there aren't sufficient reasons to consider them distinct morphemes from the synchronical viewpoint: they are not productive and it is hard to to differentiate their exact semantic contribution. All verbs with suffixoids share the semantics of movement; compare the status of an etymologically identical element in Tura (Idiatov 2009).

Four predicative forms bear suffixes, and can be given more functional labels: stative; affirmative perfect; negative perfect; and progressive.

The stative suffix  $-l\hat{e}$  and the negative perfect suffix  $-s\hat{a}$  are low tone suffixes. The suffix of affirmative perfect  $n\bar{g}$  (or sometimes  $\bar{a}$ ) bears a constant mid tone. The suffix  $n\bar{g}$  also differs from all other suffixes in that the stem-final low tone of the verb is not elided before it, contra the general rule (cf. 6.1.4):  $m\bar{g}m\hat{g}$  'to suck'  $-m\bar{g}m\hat{g}$   $n\bar{g}$ ,  $dr\hat{u}dr\hat{u}$  'to walk a lot'  $-dr\hat{u}dr\hat{u}$   $n\bar{g}$ ,  $t\hat{u}\hat{a}$  'to leave'  $-t\hat{u}\hat{a}$   $n\bar{g}$ . An idiosyncratic exception is the verb  $g\bar{u}\hat{g}$  'to remain', perfect form  $g\bar{u}\bar{g}$   $n\bar{g}$ ).

The progressive marker -leló consists of two elements: -ló, grammaticalized from the postposition 'on', and  $-l\varepsilon$ , derived from the nominalization marker, which bears a mobile tone and has surface variants  $-l\varepsilon$  and  $-\varepsilon$  (the latter can be seen as the result of [1] deletion). The vowel in the  $-\varepsilon$  variant normally assimilates to the immediately preceding vowel in nasality and quality. It becomes a after a and o after rounded vowels, and remains  $\varepsilon$  after front vowels.

Along with mobile tone, the progressive form is also attested with low tone on the  $-l\varepsilon$  /  $-\varepsilon$  component. So along with the more frequent progressive form  $t\acute{a}\acute{a}l\acute{o}$ , the verb  $t\acute{a}$  'to go' has a rare form  $t\acute{a}\grave{a}l\acute{o}$ , the progressive  $dr\grave{u}\acute{o}l\acute{o}$  of  $dr\breve{u}$  'to walk' has a rare variant  $dr\grave{u}\acute{o}l\acute{o}$ , etc.

Verbs with a low tone on the last syllable and a mid tone on the penultimate syllable (mostly reduplicated verbs), have a special tonal behavior in the progressive. Unlike in other suffixed forms, the final low tone of those verbs is not deleted, cf. the

progressive  $m\bar{l}m\hat{l}\hat{e}$  of  $m\bar{l}m\hat{l}$  'to suck' vs. L deletion in the nomilarization  $m\bar{l}m\bar{l}\hat{e}$ , location nominalization  $m\bar{l}m\bar{l}\hat{l}\hat{e}$  etc.

The progressive marker is clearly segmentable into the nominalization suffix  $-l\varepsilon$  and the locative postposition  $l\delta$ . However, the [l] deletion and the abovementioned tonal idiosyncrasies (the  $m\bar{l}m\dot{l}\hat{c}l\delta$  and  $dru\delta l\delta$  types) formally distinguish the progressive from nominalization.

### 6.5. The goal converb

The goal of motion converb is derived with the low tone suffix  $-y\hat{a}$ , distinct from the location nominalization suffix -ya that bears a mobile tone. For the verbal stems ending in a non-high tone element the two forms are identical. E.g.  $m\bar{y}\hat{a}$ , the location nominalization, is at the same time the goal converb of  $m\bar{z}$  'to drink'. For stems ending in a high tone, the two forms differ, cf.  $j\acute{o}y\acute{a}$  'time or place of talking' (locative nominalization) vs.  $j\acute{o}y\grave{a}$  'in order to talk' (goal converb) from  $j\acute{o}$  'to talk'. The goal converb's distribution is limited to combinations with only three motion verbs. With the verbs  $t\acute{a}$  'to go' and  $n\bar{y}$  'to come' the converb indicates the goal of motion. The combination of these two verbs with the goal converb can also be used as a periphrastic future construction similar to the English to be going to, see 12.1.5. With the verb  $b\bar{z}$  'to come (from)' the goal converb indicates the subject's actions at the point of departure:

(43a) 
$$\not$$
  $\not$   $\not$   $\not$   $n\acute{y}$   $dr\grave{u}$ - $y\^{a}$ .  
1SG:PST+ come:L walk-GL  
'I came for a walk'.

(44) 
$$\not$$
  $\not$   $\not$   $\not$   $\not$   $\not$   $dr$   $\dot{v}$ - $y\hat{a}$ .

1SG:PST+ come.form:L walk-GL

'I came from a walk'.

### 6.6. Agent and means nominalizations

In addition to the event nominalization in  $-l\varepsilon$  and the location/time nominalization in -ya, which we have already discussed, Beng also has suffixes for the agent and the means nominalizations.

The means nominalization, formed with the mobile tone suffix  $-p\mathfrak{d}$  (derived from the noun  $p\bar{\mathfrak{d}}$  'thing'), can refer to the instrument, the means, or the cause of an event:

#### Denis Paperno

- (45) Bèyā à lēŋ túá-pó lé blě lè.

  Beyan 3sG woman leave-MEN 3sG:PsT+Cop:L wine DEF

  'Alcohol was the reason of Beyan's divorce'.
- (46)  $\not$   $\not$   $y\bar{a}$ - $p\dot{o}$   $d\bar{o}$   $l\dot{u}$ . 1SG:PST move-MEN one buy:L

'I bought an instrument for moving around' (this could be shoes, a car, a bicycle etc.).

The agent nominalization in -li relativizes the subject and can have arbitrary aspectual or temporal interpretation:

But usually, the agent nominalization refers to the habitual rather than episodic agent:

- (48)  $p\bar{s}$   $b\acute{\varepsilon}\bar{\varepsilon}$   $bl\bar{e}$ - $l\acute{l}$ ,  $dr\bar{\varepsilon}$   $w\bar{o}$ - $l\acute{l}$ ,  $s\grave{g}\grave{\eta}$   $d\bar{\varepsilon}$ - $l\acute{l}$ ,  $j\acute{o}$ - $l\acute{l}$  thing big eat-AG work do-AG human kill-AG talk-AG 'glutton, worker, murderer, talker'
- (49) Dēlà ό lé vlòỳvló-lí béē dō.
   Dela 3SG:PST+ COP:L worry-AG big one
   'Dela (male name) is easy to disturb'. (literally: 'Dela is a great worryer'.)

## 6.7. Relics of the participle

The suffix  $-l\bar{e}$  forms adjectives with resulting state meanings from several verbs. The verb's stem changes its tone from M to L when combining with  $-l\bar{e}$ . Here are all the attested examples:

```
gā 'to die, to dry out' – gàlē 'dead, dry'
mā 'to boil' – màlē 'boiled'
māmà 'to ripen' – màmàlē 'ripe'
ŋūā 'to burn' – ŋùàlē 'burned'
pā 'to fill' – pàlē 'filled'
tā 'to close' – tàlē 'closed'
trā 'to redden, to ripen' – tràlē 'red, ripe'
vō 'to rot' – vòlē 'rotten'
```

Suffix  $-l\bar{e}$  combined with the verb  $b\bar{a}$  'to bear fruit' produces a somewhat irregular meaning:  $b\hat{a}l\bar{e}$ ,  $p\bar{b}b\hat{a}l\bar{e}$  'seeds, plants'

## 6.8. Reduplication

**6.8.1.** The formal aspect of reduplication. In Beng, reduplication is generally full, applying to stems of adjectives, verbs, numerals, and some adverbs and nouns. The major exception to the full reduplication pattern is the fact that in verb reduplication, only the segmental base is repeated. The tonal pattern of the original stem stays on the first part of the reduplicated verb, while the second part gets a low tone:  $m\bar{t}$  'to drink'  $-m\bar{t}$  'to suck',  $g\bar{a}$  'to dry out'  $-g\bar{a}g\dot{a}$  'to dry out (referring to multiple objects)',  $s\dot{o}$  'to chew'  $-s\dot{o}s\dot{o}$  'to thin down',  $y\bar{a}l\dot{o}$  'to stand up'  $-y\bar{a}l\dot{o}y\dot{a}l\dot{o}$  'to stand up (referring to multiple people)'. If the last syllable of the original verb stem has a contour tone, the latter component of the contour tone spreads to the following syllable, by general rule (see 6.1.2):  $t\tilde{t}$  'to strip'  $-t\tilde{t}$  'to strip repeatedly',  $d\tilde{a}$  'to drop'  $-d\tilde{a}d\dot{a} - d\dot{a}d\dot{a}$  'to put in (multiple objects)',  $bl\ddot{a}$  'to stick in'  $-bl\ddot{a}bl\dot{a}$  'to stick in (multiple objects)'. Reduplicated verb stems form all predicative and derivational verb forms by general rules.

Adjective reduplication is usually complete with respect to both segmental and tonal patterns, compare:  $g\bar{\epsilon}\bar{\eta}$  'beautiful' –  $g\bar{\epsilon}\bar{\eta}g\bar{\epsilon}\bar{\eta}$  'beautiful (plural)',  $c\check{a}$  'short' – căcă (plural), blúá 'blue' - blúáblúá (plural). However, long vowels at the end of adjectives can shorten in reduplicated forms. The conditions of this shortening are not clear. Sometimes reduplicated adjectives do not exhibit any shortening, cf. fééféé 'very narrow' (in reference to a hole) from féé 'narrow' (in reference to a hole), piìpii 'very tiny' from piì 'tiny', fóófóó 'very deep' from fóó 'deep', pòòpòòpòòpòò 'very malleable' from pòòpòò 'malleable'. Sometimes shortening occurs only in the first part of the reduplicated form, cf. tétéé 'very red' from téé 'red', fifii 'very narrow' from fií 'narrow', kótíkótíí 'very little' from kótíí 'little', títíí 'very black' from tíí 'black', y5y55 'very cool' from y55 'cool'. The third group of adjectives shorten the final vowel in both parts of the reduplicated form: bètèbètè 'very slow' from bètèè 'slow', kpòsòkpòsò 'very grainy' from kpòsòò 'grainy (texture)', mòtòmòtò 'very soft' from mòtòò 'soft', nòfònòfò 'very elastic' from nòfòò 'elastic'. For púú 'white', two reduplicated forms are attested in my notes, púpúú in the sense of 'very white' and púpú in the sense of 'white (plural)'. It is not clear if there is a regular relation between the shortening pattern and the intensive vs. plural interpretation that this pair of examples seems to point at.

Stem-final /ŋ/ can cause a change in the first consonant of the second half of a reduplicated form. Some of those forms exhibit  $\eta C$  simplification (see 4.2.1), e.g.  $pl\bar{a}ml\bar{a}\bar{\eta}$  'two each' <  $/pl\bar{a}\bar{\eta}$   $pl\bar{a}\bar{\eta}$ / (reduplication of  $pl\bar{a}\bar{\eta}$  'two'),  $b\bar{u}\bar{g}m\bar{u}\bar{g}\bar{\eta}$  'thirty each' <  $/b\bar{u}\bar{g}\bar{\eta}$   $b\bar{u}\bar{g}\bar{\eta}$ / (reduplication of  $b\bar{u}\bar{g}\bar{\eta}$  'thirty'); such simplification is not regular, cf.  $b\bar{u}k\bar{e}\eta\bar{e}si\acute{e}\acute{\eta}b\bar{u}k\bar{e}\eta\bar{e}si\acute{e}\acute{\eta}$  'eighty each' (reduplication of  $b\bar{u}k\bar{e}\eta\bar{e}si\acute{e}\acute{\eta}$  'eighty') without simplification. Fricatives are not subject to  $\eta C$  simplification but undergo voicing

after /ŋ/ in a reduplicated form, e.g.  $f \partial \hat{\eta} v \partial \hat{\eta}$  'cloudy' < / $f \partial \hat{\eta} f \partial \hat{\eta}$ / (reduplication of  $f \partial \hat{\eta}$  'having shade');  $s \partial \hat{\eta} z \partial \hat{\eta}$  'five each' <  $s \partial \hat{\eta} s \partial \hat{\eta}$ / (reduplication of  $s \partial \hat{\eta}$  'five').

Two adjectives,  $gl\ddot{e}$  'difficult' and  $b\acute{e}\bar{e}$  'big', are exceptions to full reduplication at the tone level. Their reduplicated forms are  $gl\acute{e}gl\ddot{e}$  and  $b\acute{e}b\bar{e}$  respectively.

- **6.8.2. Semantics of reduplication.** The semantic effect of reduplication is similar across parts of speech, always adding a quantitative component to the meaning. In adjectives, reduplication may indicate plurality ('more than one object'), cf. (50a) and (51), or property intensity (52b):
- (50a) sỳỳ gēŋ~gēŋ (nỳỳ)

  person beautiful~PL PL

  'handsome people'
- (50b)  $s\hat{g}\hat{\eta}$   $g\bar{e}\bar{\eta}$   $n\hat{g}\hat{\eta}$  person beautiful PL 'handsome people'
- (51) sỳỳ gblēng-gblēng // gblēng nùỳ person tall-PL tall PL 'tall people'
- (52a)  $g\bar{\sigma}\bar{\eta}$   $d\hat{\sigma}i$  man first 'the first man'
- (52b) gōŋ̄ dòí~dòí man first~very 'the very first man'

For some adjectives, the reduplicated form is used only in the function of plural, cf. the ungrammatical NP  $*s\hat{\jmath}\hat{\eta}$   $gbl\bar{\varrho}\bar{\eta}gbl\bar{\varrho}\bar{\eta}$  do 'one (very) tall person'.

The adjective  $b\acute{e}\bar{e}$  'big' is unique in restricting the non-reduplicated form to the singular and allowing only the reduplicated one in the plural ( $kl\acute{o}$  'little' shows a similar number distinction but produces the plural form by suppletion, not reduplication). Unlike  $gbl\bar{e}\bar{\eta}$ , which shows variation in the plural,  $b\acute{e}\bar{e}$  has complementary distribution of the two forms:

(53a) 
$$g\bar{o}\bar{\eta}$$
  $b\acute{e}\bar{e}$  (/ \* $b\acute{e}\sim b\bar{e}$ )  $d\bar{o}$  man big / \*big~PL one 'one big man'

(53b) 
$$g\bar{\sigma}\bar{\eta}$$
  $b\hat{\epsilon}\sim b\bar{\epsilon}$  (/\* $b\hat{\epsilon}\bar{\epsilon}$ )  $n\hat{\mu}\hat{\eta}$  man big $\sim$ PL/\*big PL 'big men'

Apart from irregular idiomatic meaning, **verb reduplication** can add iterativity, as in (54b), or plurality of a participant, as in (55b,d):

- (54a) *Ŋ-ó* drù-śló. 1SG-ST+ walk-PROG 'I am walking'.
- (54b) Ŋ-ó drù~drú-óló.

  1SG-ST+ walk~ITER-PROG

  'I am walking (repeatedly back and forth)'.
- (55a)  $\check{O}$   $b\grave{e}-\acute{\epsilon}l\acute{o}.$ 3SG:ST+ run-PROG
  'He is running'.
- (55b)  $\check{O}$   $b\grave{e}\sim b\acute{e}-\acute{e}l\acute{o}.$ 3SG:ST+ run~ITER-PROG

  'He is running (repeatedly back and forth)' (event plurality).
- (55c) Ŋŏ bè-éló.
  3SG:ST+ run-PROG
  'They are running'.
- (55d) Ŋŏ bè~bé-éló.

  3SG:ST+ run~PL /~ITER-PROG

'They are running' (partricipant plurality) *or* 'They are running (back and forth)' (event plurality).

Verb reduplication indicating participant plurality can be seen as ergative number agreement, i.e. the participant that controls the agreement is the direct object or the intransitive subject. This agreement is semantic rather than syntactic in nature.

Reduplication of cardinal numerals produces distributive ones:

(56) Nà gōŋ blèpà ŋò nā plāmlāŋ ŋāŋāŋ.

DT man rich 3PL:HAB+ wife two~DISTR three~DISTR 'Rich people used to have two or three wives each'.

(Note two instances of  $\eta C$  simplification in reduplicated forms in example 56; see 4.2.1.)

Finally, the reduplicated form of temporal nouns (see 7.1 for a brief discussion of this class) also has a distributive interpretation ('on Fridays', 'nightly', etc.). This reduplication pattern is productive for the following classes of words: a) names of days in the traditional six-day week; b) names of days in the seven-day week borrowed from the Baule; and c) names of parts of the day cycle *pàló* 'daytime', *yēnð* 'evening', *drú* 'morning', *yrú* 'night'. Example of usage:

(57) Yrú~yrú ná nà yì.

night~DISTR TOP 1SG:HAB+ sleep

'At night I (generally) sleep'.

## 7. Part of speech criteria

Inflectional criteria differentiate only three classes of words in Beng: personal pronouns, verbs, and inflectionally invariable words (I'm setting aside the problematic inflectional status of reduplication for the moment). Let me now turn to the distributional criteria that allow us to distinguish parts of speech within the inflectionally invariable class.

I avoid here any discussion of ideophones in Beng which may constitute one or several additional grammatical classes. Let me note only the existence of onomatopoetic words that imitate various noises, e.g.  $c\acute{o}c\acute{o}$  'gnash',  $k\acute{u}k\grave{u}$  'cry of wild pigeon',  $b\grave{a}$  'sound of machete' and that seem to be able to be included in larger syntactic structures, and of interjections like  $b\acute{o}c\acute{e}$  and  $cr\acute{o}l\acute{o}$  'exactly!', or  $\grave{e}\acute{e}$  'oh really!'. There is also a pattern, probably of Baule origin, of apparently onomatopoetic adjectives CVCIVCV where all consonants (stops), vowels and tones have to match, e.g.  $k\grave{a}kl\grave{a}k\grave{a}$  'enormous,'  $gb\grave{e}gbl\grave{e}gb\grave{e}$  'big and flat',  $j\grave{a}jr\grave{a}j\grave{a}$  'huge' (of a person),  $k\acute{e}kl\acute{e}k\acute{e}$  'thin',  $k\grave{e}kl\grave{e}k\acute{e}$  'hard on the inside',  $p\grave{a}pl\grave{a}p\grave{a}$  'wide and flat',  $p\acute{p}pl\acute{p}p\acute{p}pl\grave{p}p\acute{p}$  'fat and short'.

## 7.1. Nouns vs. Adverbs vs. Postpositions

Beng lacks dedicated nominal morphology that would mark case, number, definiteness, or agreement, even if some of those notions are not entirely alien to Beng grammar (see 8.3, 9 below). Therefore part of speech criteria have to be purely distributional. Let me now proceed to the description of distributional classes of Beng nominals and adverbials.

I take the direct object position as the distinctively nominal position in Beng. One could also rely on other nominal positions such as the subject position; however, the subject slot is less appropriate to use in an operational definition of nominal status

#### Grammatical sketch of Beng

because, being leftmost in the clause, it is not always superficially distinct from the topic slot.

The postverbal modifier position is characteristic for adverbs, and for postpositions the core context is combination with a noun phrase into a postverbal sentential modifier. All postverbal modifiers can also function as predicates in locative sentences, see 12.4. (We count as postverbal modifiers all phrases that occur after the sentence's main verb, with the exception of several special cases discussed in 12.2 below where noun phrases without a postposition can occur postverbally in a number of functions: secondary object, nominal predicate, floating quantifiers, and arguments of  $g\bar{u}a$  'to stay, to be left'. Indeed none of those are sentential modifiers semantically but rather arguments or predicates, so we ignore them here).

However, the distinctions between the three a priori classes (nouns, adverbs, and postpositions) are not as straightforward empirically. Some words that typically occur in adverbial contexts are also found in nominal ones, compare:

(58a) 
$$\cancel{\cancel{D}}$$
  $\cancel{n\cancel{y}}$   $\cancel{we}$ .  
1SG:PST+ come:L there 'I came there'.

(58b) 
$$\cancel{\eta}$$
  $w\bar{e}$   $y\hat{e}$ .  
1SG:PST+ there see:L  
'I saw that place'.

Several postpositions exhibit similar position variability:

(59a) 
$$\cancel{\textit{I}}$$
  $\cancel{\textit{n}}$   $\cancel{\textit{n}}$   $\cancel{\textit{w}}$   $\cancel{\textit{klétj}}$   $\cancel{\textit{n}}$   $\cancel{\textit{v}}$   $\cancel{\textit{w}}$   $\cancel{\textit{o}}$ .

1SG:PST+ come forest DEF in 'I came to the forest'.

(59b) 
$$\mathring{\eta}$$
 klé $\mathring{\eta}$  wó yè.

1SG:PST+ forest DEF in see:L

'I saw the space of the forest'.

Lastly, some words occur in all three kinds of context – both as direct objects and as sentential modifiers, and furthermore, either with a dependent noun phrase or without one:

(60b) 
$$\not D$$
  $\not n\not u$   $\not p \bar{\jmath} u$ .  
1SG:PST+ come:L field 'I came to a field'.

adverbial only:

**ADVERBS AND** 

POSTPOSI-

**TIONS** 

(60c) 
$$\cancel{\hat{H}}$$
  $\cancel{n}\cancel{\hat{y}}$   $\cancel{m}\cancel{\bar{y}}$   $\cancel{p}\cancel{\bar{y}}$   $\cancel{u}$ .

1SG:PST+ come:L 2SG field 'I came to your field'.

So there are two criteria for distinguishing nouns from adverbs and postpositions: position in the sentence (object, modifier, or both) and dependent NP (none, obligatory, or optional). The two three-valued criteria give rise to three potential classes shown in Table 6 below. For each class, Table 6 lists examples and an estimate of class size.

		dependent NP			
		impossible	optional	obligatory	
syntactic position	only nominal:	1. deictic noun	2. absolute noun	3. (relational	
	NOUNS	<i>ɲrĕূ</i> 'this'	<i>bábá</i> 'sheep', <i>Kòlā</i>	noun)	
		(< 5)	'Kola' (name)		
			(>1000)		
	nominal or	4. adverbial	5. absolute adverbial	6. locative	
	adverbial:	deictic noun wē	noun <i>Bùàkê</i>	postposition <i>ló</i>	
	ADVERBIAL	'there', <i>gblē</i>	'Bouake', wlá	'on', <i>wó</i> 'in'	
	NOUNS	'yesterday'	'house', fɛ́ 'day'	(<20)	
		(<20)	(>100)		

8. adverb /

postposition

9. PURE

POSTPOSITION nì

'for', *lō* 'with'

(<10)

7. PURE ADVERB

bàtú 'soon', dīnīŋ

'nearby' (<50)

Table 6. Logically possible classes of nominal and adverbial elements

As indicated in the table, Beng has only seven out of the nine potential classes. There are no relational nouns with an obligatory possessor, and no items that have only sentence modifier uses and oscilate between pure adverbs and postpositions. This observation is non-trivial as both of the classes absent in Beng are attested in other languages; absence of relational nouns is unexpected for a Mande language.

Among absolute adverbial nouns there are two groups with distinct syntactic properties: temporal nouns and locative nouns. Temporal nouns are found in the adverbial position with dependants such as adjectives, determiners, and quantifiers:

- (61) Ú nú kùć gēŋ bì-lè.

  1SG:PST+ come:L year good this-DEF
  'I arrived in this good year'.
- (62)  $\cancel{\eta}$   $\cancel{n}\cancel{y}$   $\cancel{k}\cancel{u}\acute{e}$   $\cancel{s}\vec{e}kp\acute{a}$ .

  1SG:PST+ come:L year every 'I came every year'.

In contrast, whenever locative nouns combine with an adjective, a determiner, or a quantifier, they cannot be used in an adverbial position unless accompanied with a postposition:

- (63a) O  $p\bar{y}$   $b\hat{i}$   $b\hat{i}$  \*(w $\hat{o}$ ).

  3SG:ST+ field this-DEF IN

  'He is in this field'.
- (63b) *Ŏ* pōú sēkpá \*(wó).

  3SG:ST+ field every IN

  'He is in every field'.
- (64)  $\acute{\eta}$  tá Àságbě.

  1SG:PST+ go Ouassadougou 'I went to Ouassadougou'.
- (65)  $\not$  tá Àságbě bàmâ lè \*(wó). 1SG:PST+ go:L Ouassadougou great DEF IN 'I went to the great Ouassadougou'.

The incompatibility of postmodification with adverbial modifier position (without a supplemental postposition) also characterizes locative postpositions:

(66) Zźzź lè ŏ tàbàlí ló tīī lè \*(ló) mosquito DEF 3SG:ST+ table SUPER black DEF SUPER 'The mosquito is on the black surface of the table'.

# 7.2. Adjectives vs. nouns

In many languages of the world the distinction between nouns and adjectives is based on rather subtle criteria. In some languages morphology comes to help, for instance, adjectives can have gender agreement markers absent in nouns in gender. However, in Beng morphology does not reliably differentiate nouns from adjectives.

Syntactic criteria are also often unsatisfactory. Prototypical adjectives modify head nouns while a prototypical noun is a head of its own noun phrase. But then

adjectives can more or less routinely undergo substantivation, thereby functioning and NP heads, while nouns can be appositive modifiers of other nouns.

For Beng, two criteria are found differentiating nouns from adjectives. First, in the predicative position nouns (except for locative ones) require a copula verb, while adjectives can be predicated without a verbal copula, cf. (67) vs. (68a,b):

- (67)  $\hat{O}$   $g\bar{e}\bar{\eta}$ .

  3SG:HAB+ beautiful 'He is handsome'.
- (68a)  $\acute{O}$   $l\acute{\varepsilon}$   $\bar{\eta}$   $d\bar{e}$ - $gb\acute{o}$ . 3SG:PST+ COP:L 1SG father-old 'He is my father's elder brother'.
- (68b)  $\acute{O}$   $\acute{l}\acute{e}$   $\acute{b}\acute{e}\acute{\eta}$ . 3SG:PST+ COP:L Beng 'He is Beng'.

Predicative adjectives contrast with verbs in that they lack typical verbal morphology. For example, if there were a verb meaning 'to be handsome', it would have to bear a low grammatical tone in examples like (67), to mark habitual aspect. Also, sentences with predicative adjectives are always indicative and have default time reference to the present. To express e.g. future tense or imperative, a copula verb has to be injected into a sentence with a predicative adjective, see 12.1.

Another contrast between nouns and adjectives is that in the modifier function, adjectives always follow the head noun while nouns can precede or follow the noun they modify:

- (69a) klýálí gēŋ // \*gēŋ klýálí thief beautiful beautiful thief 'handsome thief'
- (69b) *Dēlà klúálí // klúálí Dēlà*Dela thief thief Dela

  'Dela the thief'

According to these criteria, as well as in other aspects, cardinal numerals are a special case of adjectives, compare the fixed order of the numeral  $pl\bar{a}g$  'two' and the head noun  $s\hat{\jmath}\hat{\eta}$  'person':  $s\hat{\jmath}\hat{\eta}$   $pl\bar{a}g$  vs. \* $pl\bar{a}g$   $s\hat{\jmath}\hat{\eta}$ . Like adjectives, numerals occur in the predicative position without a copula verb, and participate in the partitive construction (8.2). What distinguishes cardinal numerals from adjectives is special

behavior with respect to number (9.1), the ability to form complex numerals and to trigger the float of quantified NPs (12.2.6).

## 8. Noun phrase structure.

The order of constituents in the (maximal) noun phrase structure is as follows: possessor + nominal modifiers + head noun and appositive modifiers + adjectives + determiners + relative clause.

#### 8.1. Possessors and nominal modifiers

Possessor is expressed with a noun phrase and / or a personal pronoun. There is no special possession or alienability marking, so possessor NPs are distinguished from e.g. direct object NPs only in syntactic position.

Nominal modifiers can:

- refer to matter, as in *pēnín srē* 'iron needle', or
- be adverbial noun phrases, pointing to the relation of an object to a particular time or place, e.g. *gblē zùnálí* 'yesterday's newspaper', or (70a):
- (70a) kléý nì wó sōŋ forest DEF IN animal 'forest animal' (literally: 'animal in the forest').
- (70b) Bíè lòmlê lè à kléý wó pō wé. elephant lemon Def 3sG forest IN thing exist

'There's a wild variety of grapefruit' (lit.: 'Grapefruit, its thing in the forest exists').

(70c)  $\bar{g}$   $d\bar{e}$   $p\bar{o}$   $dr\acute{o}g\bar{g}$ 1SG father thing older brother 'my father's elder brother' (*literally*: 'My father's thing older brother').

All preposed modifiers, including possessors, locative modifiers, etc., can be accompanied with the semantically empty noun  $p\bar{s}$  'thing', which nominalizes premodifiers (70b) and can turn them structurally into appositive modifiers (70c). Combination of non-subject pronouns with  $p\bar{s}$  'thing' gives rise to the possessive pronoun series.

# 8.2. Adjectives and appositives in noun phrases

Adjectives can not only modify nouns but can also function as the head of a noun phrase in the absence of a noun. Adjectival modifiers – as well as adjectives in other positions – can have degree modifiers, for example:

A special usage of adjectives (or numerals, as a subclass of adjectives) as effective NP heads is the partitive construction, whereby an adjective or a numeral is accompanied by a definite NP with the postposition  $w\phi$ , compare:

- (72a)  $\bar{\eta}$  bábá  $\eta \bar{a} \bar{\eta}$  ( $n \hat{i}$ )

  1SG sheep three DEF

  'my three sheep'
- (72b)  $\bar{\eta}$  bábá  $\eta \delta$  wó  $\eta \bar{q} \bar{\eta}$ 1SG sheep 3PL IN three 'three of my sheep'

The partitive construction with an adjective head and a definite article is the way to express **superlative degree** in Beng:

(73) Sớŋ nùŋ ŋò wó sòklò lê person PL 3PL IN inert DEF 'the most inert person' (literally 'the inert among the people').

An appositive modifier can be any NP without determiners. The order of appositive modifiers and the head is free, but for nouns indicating the gender of a person or an animal postposition is preferable:

(74) sỳỳ púú gōŋ dō person white man one 'a white man'.

#### 8.3. Determiners

NP-final determiners follow the linear sequence

$$bi > t\dot{e} > DEF > n\dot{u}\dot{\eta} > d\bar{o}$$

The determiners in this sequence have the following functions. *bì* is a deictic marker 'this / that'; *tè* is an intensifier 'even, one/him/her/itself'. Both require the presence of a definite article, which can then be absent only under the influence of overriding factors: before a relative clause or in a plural NP. Both cases block the definite article *lè*.

DEF stands for the definite article. Overt definite article is generally optional, unless preceded by  $b\hat{\imath}$  or  $t\hat{e}$ . There are two overt allomorphs of the definite article in Beng:  $n\hat{\jmath}$  is used after  $\jmath$  (in singular or plural NPs), and  $l\hat{e}$  is used after vowels, but only in singular NPs. In plural NPs after a vowel no overt article is used.

 $n\hat{y}\hat{\eta}$  is a plural marker. In most cases it is also optional, see more on the expression of number below.

 $d\bar{o}$  is the numeral 'one', which doubles as an indefinite article. It can also accompany a plural NP:

(75) 
$$\acute{\eta}$$
  $l\bar{e}\bar{\eta}$   $(n\underline{\hat{v}}\underline{\hat{\eta}})$   $d\bar{o}$   $\eta\hat{o}$   $y\hat{e}$ .

1SG:PST+ woman PL one 3PL see

'I saw (some) women' (plural interpretation even in the absence of nùn).

The article  $d\bar{o}$  is incompatible with determiners other than the plural marker.

In the absence of any determiners a noun phrase can receive the 'non-arithmetic' interpretation (Polivanova 1983), i.e. the number of objects in question can only be inferred from the context.

Names of substances usually occur without determiners, but can also be used with determiners, including articles and the plural marker:  $yi l \hat{e}$  'the water',  $yi n \hat{u} \hat{n}$  'water in several containers'. Some of these cases are clearly instances of productive conversion 'substance X' > 'mass of substance X' or 'object made of X'. This conversion is quite regular. For example,  $g \hat{j}$  'plastic' can also be a name for a plastic bucket, a plastic pin, etc., functioning as a count noun.

# 9. Number and agreement

# 9.1. Number expression within a noun phrase

Generally, the number of a noun phrase is not manifested in the head noun. The single exception is the suppletive pair:

It is clear however that historically even this pair contains an invariable noun and a number-marked adjective  $kl\delta$  (singular) /  $pl\delta$  (plural) 'little'. The plural form also incorporates two copies of  $\hat{\eta}$ , probably a reduced version of the plural marker  $n\hat{u}\hat{\eta}$ , so the plural form  $l\delta ml\delta\hat{\eta}$  is derived from \* $l\delta$ - $\hat{\eta}$ - $pl\delta$ - $\hat{\eta}$ . The same  $\eta$ , although not a productive plural marker synchronically, might be responsible for the final consonant in Beng numerals such as  $pl\bar{a}\bar{\eta}$  'two', the initial consonant of the 3PL pronoun  $\eta\delta$ , and the final consonant of the 1PL pronoun  $\bar{a}\bar{\eta}$ . Other South Mande languages have no nasal sonorant in cognate forms, compare for instance Mwan forms  $pl\bar{\epsilon}$  'two', 3PL pronoun  $\delta$ , 1PL exclusive  $\delta$ , Dan-Gwetaa  $pl\hat{\epsilon}$  'two', 3PL pronoun  $k\delta$ , 1PL exclusive  $k\hat{\tau}$ , etc. (Vydrin 2006, 2009), (Perexval'skaja ms.). The only South Mande language that seems to consistently share the "nasal plural" element with Beng is Wan, with  $p\bar{\imath}l\bar{\imath}\bar{\jmath}$  'two',  $\hat{\imath}$  'three', 3PL pronoun  $\hat{\imath}$ , 1PL exclusive  $k\hat{\imath}$  (Nikitina ms.); Gban has an odd nasality in  $t\hat{\imath}$  'two' but not in  $t\hat{\imath}$  'three,' 3PL  $t\hat{\imath}$  or 1PL  $t\hat{\imath}$ .

The most universal marker of plurality is nùn.

(77) glāŋ̄ púú nỳŋ̀ loincloth white PL 'white loincloths'

The plural marker is optional when followed by an NP-doubling plural pronoun (see (Paperno 2005) for more detail):

(78) Ŋ-ó mlà (nùỳ) ŋò yē-lè.

1SG-ST+ drum PL 3PL see-RES

'I see drums'.

Here's another striking example showing optionality of the plural marker nùn.

(79) Bíè gò nà cīyà gò lō gó nŷ.
elephant 3PL and bushbuck 3PL with 3PL:PST come:L
'Elephants and bushbucks came',

with three instances of the 3PL pronoun: one doubling the NP 'elephants', another one doubling the NP 'bushbucks', and the third one doubling the coordinate NP 'elephants and bushbucks'. The sentence does not contain a single instance of the plural marker  $n\hat{y}\hat{y}$ .

Noun phrases with numerals behave as singular when semantically indefinite and as plural when definite. This includes numerals used both as attributes within a noun phrase and a predicates.

# 9.2. Reduplication as number agreement

Plural number of a noun phrase can be manifested through the reduplication of adjectives in that NP. Plural-marking reduplication is also observed in predicative adjectives and verbs, where reduplication marks the plurality of a direct object or an intransitive subject:

- (80) Bléń nỳn nò-ó drà~drá-lè. chair PL 3PL-ST+ fall~PL-RES 'Chairs are fallen'.
- (81) \*Bléń dō ò-ó drà~drá-lè. chair one 3SG-ST+ fall~PL-RES ('A chair is fallen').

So adjective and verb reduplication functions as number agreement. At least in the case of verbs such agreement seems to be semantic in nature; the NP whose plurality is signalled by reduplication can have no other indication of plurality: (82) Ŋò-ó kóń blā~blâ.

3SG-ST+ peg stick~PL/ITER

'They will stick in pegs'.

(multiple pegs; another possible reading is event plurality whereby the sentence may refer to multiple acts of sticking in the same peg).

(83) Ŋò-ó kớŋ dō blä.

3SG-ST+ peg one stick
'They will stick in a peg'.

In most cases, while the reduplicated form may indicate participant plurality, the corresponding stem without reduplication does not imply singular number of the participant. A handful of verbs, however, strictly associate presence or absence of reduplication with plural vs. singular participant, compare:

- (84) Ú blànâ dè yrí-drǎ lè ló.

  1sG:PsT+ banana put:L tree-fall DEF SUPER
  'I put a banana/\*bananas on the fallen tree'.
- (85) Ď blànâ dè~dè yrí-drǎ lè ló.

  1SG:PST+ banana put~PL:L tree-fall DEF SUPER

  'I put bananas/\*a banana on the fallen tree'.

In a similar vein, while many adjectives use reduplication as a form of plural agreement marking, only two have a specialized form restricted to singular NPs:  $b\acute{\epsilon}\bar{\epsilon}$  'big', plural  $b\acute{\epsilon}b\bar{\epsilon}$ , and  $kl\acute{o}$  'little', plural  $pl\acute{\epsilon}$ .

# 9.3. Pronominal doubling and the status of pronouns

Pronominal doubling is widespread in Beng. Personal pronouns are often used after a full NP, as if backing it up. Literal translation of some sentences with pronominal doubling is something like "David he is a pagan", "I see horses them", "Kola she goes to her uncle him".

So Beng personal pronouns are functionally analogous to agreement affixes of other languages. Can Beng pronouns themselves be analyzed as affixes? The idea has certain appeal; indeed, personal pronouns largely immediately precede their syntactic host: direct object pronouns precede the verb, possessor pronouns precede the head noun, other ones precede postpositions; subject pronouns can be treated as TAMP particles with personal agreement affixes, and similarly for other pronominal series. Unavailability of pronominal doubling (e.g. in the secondary object position – see 12.2 below) can be explained by the lack of syntactic head in those positions that could host agreement markers.

## Denis Paperno

However, some syntactic facts speak in favor of their autonomous status. First, direct object pronouns can be separated from the verb by certain particles, including gbà 'also' and kló 'a bit' (86a,b,c). Second, possessor pronouns are separated from the head noun by temporal and locative modifiers that can be syntactically complex, so we are sure that we are dealing with phrasal modification and not compounding (86d). Third, in nominalization the subject is expressed as a possessor; in particular, it can be instantiated as a non-subject pronoun. Then in nominalization direct object is expressed immediately before the verb stem, just like in a finite clause, so the Subject - Object - Verb order is maintained in nominalization. In addition, in nominalization clausal modifiers can precede the nominalized verb and its direct object (86e), separating them from the pronominal subject. An indirect object with a postposition can also intervene between the subject and the verb stem in nominalization (86f). Since direct and indirect objects, as well as clausal modifiers, can be arbitrarily complex, and can also combine with each other, it turns out that the non-subject pronoun that corresponds to the subject of a nominalized verb can be separated from the head by indefinitely long chunks of syntactic structure (in practice, many of the longer interveners would probably be hard to process because of the centerembedding structures they introduce, but that does not diminish the argument).

- (86a)  $\hat{A}$  gb $\hat{\partial}$  bl $\bar{e}$ .

  3SG also eat 'Eat that too'.
- (86b)  $M\hat{a}$   $\hat{a}$  kló  $y\hat{e}$ .

  1SG:HAB+ 3SG little see:L

  'I see that a bit'.
- (86c) À kló lē kpèsè.

  3SG little make big

  'Increase it a bit'.
- (86d)  $m\bar{\jmath}$   $kù\acute{e}n\bar{\jmath}$   $p\bar{\jmath}$   $s\acute{\jmath}$   $l\grave{e}$  2SG this.year POS field DEF 'your field of this year'
- (86e)  $M\bar{\jmath}$   $p\bar{\jmath}\acute{u}$   $K\acute{o}f\acute{i}$   $y\bar{e}-l\grave{e}$   $\grave{o}$   $g\bar{e}\bar{\eta}$ .

  2SG field Kofi see-NMLZ 3SG:HAB+ beautiful 'It's good that I saw Kofi in the field'.

(86f) à blā nì vī-lè
3SG fight BENEF love-NMLZ
'his fondness of fights'

# 9.4. Constraints on the distribution of personal pronouns

Factors of overt expression of personal pronouns include:

- syntactic position;
- presence of a noun phrase doubled by the pronoun (if a syntactic position is obligatory to fill by overt material but no full NP is present, a pronoun is unavoidable);
- number and definiteness of the NP to be doubled by a pronoun. Indefinite singular NPs usually aren't doubled by pronouns. Doubling of definite singular NPs is optional, and doubling of plural NPs is almost always obligatory:
- (87a)  $\mathcal{N}$ - $\delta$   $ml\hat{a}$   $l\hat{\epsilon}$  ( $\hat{a}$ )  $y\bar{e}$ - $l\hat{\epsilon}$ .

  1SG-ST+ drum DEF (3SG) see-RES 'I see the drum'.

As already mentioned, a 3PL pronoun can be the only formal exponent of NP plurality, and the plural marker  $n\hat{u}\hat{\eta}$  is optional in the presence of a pronoun.

Information on pronoun usage in different context are summarized in Table 7. Additional remarks are provided below the table.

	NP doubled			
	none	SG	SG	PL
Syntactic positions		indefinite	definite	
possessor	OK (11.6.5)	ОК	ОК	!!
direct object, object of postposition,	!!	*	ОК	!!
conjunct, contrastive topic				
subject (except presentative clauses)	!!	OK (see	OK (see	!!
		9.4.1)	9.4.1)	
focus, non-contrastive topic, subject in	!! (focus	*	*	*
presentative clauses, nominal predicate	series only)			
postpositionless secondary object	*	*	*	*

*Table 7.* Pronoun usage

*Notes.* \* – personal pronoun is ungrammatical; OK – personal pronoun is optional; !! – personal pronoun is obligatory.

- **9.4.1. Personal pronouns in the subject position.** Subject position must always be filled, so a 3sg pronoun can be omitted only if it doubles a full NP, as in the following example:
- (88) [A]  $l\acute{e}\acute{\eta}]_{NP}$  ( $\acute{o}$ )  $g\bar{a}$ - $n\bar{g}$ .

  3SG child 3SG:PST+ die-PRF

  'His child has died'.

Note however that although the subject pronoun is absent at segmental level, it still leaves a trace: a tonal change in the low tone form of the verb in (89b) (see 4.2.3). It might be preferable to analyze those examples as pronoun elision rather than pronoun optionality.

- (89a)  $|\grave{A}|$  lén ó gà $|\rightarrow \grave{A}|$  lén ó gâ. 3SG child 3SG:PST+ die:L 'His child died'.
- (89b) À léŋ gâ.

  3sG child die:L

  'His child died'.

Recall however that subject pronouns serve in part to express TAMP value of the clause. If they were to be omitted freely, certain TAMP constructions would end up being indistinguishable. The need to differentiate TAMP motivates additional constraints:

- conditional pronouns are always overt; otherwise conditional mood would merge with the optative;
  - negative series are always present (except for the stative series);
- 3sG stative pronouns can be freely omitted, but a stative predicative marker is always present:
- (90) À léŋ ó gā-àló.

  3SG child ST+ die-PROG

  'His child is dying'.
- (affirmative) preterite and habitual pronouns are omitted only in intransitive clauses, where TAMP value can be inferred from the tone change of the verb stem.

Imperative is a special case: the 2sG pronoun  $m_i$  is usually absent in affirmative clauses expressing imperative; the pronoun is obligatory under negation and in embedded uses of the optative/imperative mood.

**9.4.2. Possessor.** The possessor position in Beng does not have to be overtly filled even in the case of semantically relational nouns such as kinship terms and body parts, for which the possessor can be inferred. This optionality is the only feature that distinguishes the possessor position from other positions listed in the second row of Table 7, such as the direct object position:

(91) 
$$\cancel{D}\acute{o}$$
  $(m\underline{i})$   $d\bar{e}$   $l\grave{e}$   $\grave{a}$   $y\bar{e}$ - $l\grave{e}$ .

1SG:ST+ 2SG father DEF 3SG see-RES

'I see (your) father'.

(92a) \*
$$\eta$$
ó Ø  $y\bar{e}$ - $l\hat{e}$ .  
1SG:ST+ see-RES  
('I see').

(92b) 
$$\eta \delta$$
  $d\bar{e}$   $l\hat{e}$  ( $\hat{a}$ )  $y\bar{e}$ - $l\hat{e}$ .

1SG:ST+ father DEF (3SG) see-RES 'I see the father'.

## 10. Locative phrases

#### 10.1. Distribution

A locative phrase consists of either a locative noun, which may or may not have syntactic dependents on the left, or a noun phrase with a locative postposition. On top of that, locative phrases also usually have a deictic marker on the right edge, see 10.3. Locative phrases occur in a variety of contexts: as postverbal modifiers, as predicates in clauses of adverbial type (see 12.4), as prenominal modifiers, or referentially in all NP positions.

#### 10.2. Semantics.

Locative phrases refer to a localization only. The semantic role of the localization, also known as its orientation (e.g. as the goal or the source of motion), is not marked in the locative phrase and has to be inferred from the verb modified by the locative phrase. With the verb  $j\check{e}$  'to pass' locative phrases refer to a location which the trajectory of motion crosses. With the verbs  $b\bar{o}$  'to come from, to leave', and  $wl\bar{o}$  'to move out', locative phrases refer to the source of motion. When combining with  $n\bar{u}$  'to come',  $t\acute{a}$  'to go',  $sr\check{o}$  'to arrive',  $dr\check{a}$  'to fall', locative phrases define the goal, or the final point, of motion. With all other verbs, including manner

### Denis Paperno

of motion verbs like  $b\check{e}$  'to run',  $d\bar{o}\hat{\eta}$  'to swim', locative phrases describe the location of the event ('swim near the village'). Compare:

- (93) Ó ný lớó wó wē. 3SG:PST+ come marker IN there 'He came to the market'.
- (94) Ó bó lóó wó wē. 3sG:PsT+ come.from market IN there 'He came from the market'.
- (95) Ó jé lóó wó wē.

  3SG:PST+ pass market IN there 'He passed through the market'.
- (96)  $\acute{O}$   $d\acute{o}$   $l\acute{o}\acute{o}$   $w\acute{o}$   $w\bar{e}$ . 3SG:PST+ stop market IN there 'He stopped at the market'.

So each Beng verb has exactly one semantic slot for a location (contrasting with verbs of European languages that can have multiple locative modifiers that correspond e.g. to the source and the goal of motion, as in the English *The Liszt family left Vienna for Paris*). In Beng, if a verb is modified with more than one locative phrase, they always describe the same location:

(97) Ó ný Àbìjâ whá wē. 3SG:PST+ come Abidjan house there 'He came home to Abidjan'.

The semantic rigidity of the combinations of verbs with locative phrases obviously places limitations on what can be expressed in a single verbal clause. For example, it is not possible to specify in one clause both the source and the goal of motion (*Antonio Canova came from Rome to Paris*), or the goal and the manner of motion (*The child ran to the village*). If it is necessary to express such complex meanings, one has to revert to complex syntactic structures, and juxtapose two or more clauses ('The child ran, it came to the village'). In this respect Beng represents a pattern typical for languages of Sub-Saharan Africa, cf. Cresseils (2006), especially his examples 8 and 9 from Tswana and Baule.

Locative phrases used as predicates or when modifying nouns, again, only denote location ('a field in the forest', 'the sheep are near the river'). Secondary uses of adpositions primarily used to describe movement events, as in the English *the man* from Amsterdam, are absent in Beng and the corresponding meanings have to be

expressed by other means (e.g. with the attributive marker  $n\underline{a}$ , see 6.1). Interestingly, I managed to find one case in which the distinction encoded by source of motion vs. location oriented preposition in English (and similar European languages) can be expressed by different Beng postpositions:  $\bar{a}\bar{n}$   $gb\check{e}$   $l\grave{e}$   $w\acute{o}$   $zr\ddot{e}$  (with an IN postposution) translates as "road **in** our village", while  $\bar{a}\bar{n}$   $gb\check{e}$   $l\grave{e}$   $m\grave{a}$   $zr\ddot{e}$  (with a CONT postposition) translates as "road **to** our village". It is obvious, however, that the distinction between the adpositions has distinct semantic grounding in Beng as opposed to English: Beng postpositions encode the actual physical location of the road ('inside the village' vs. 'in physical contact with the village'), while the English usage is based on the common PATH – MOTION metonymy.

The meanings of locative postpositions, and glosses for them, are as follows. Postposition  $w\acute{o}$  IN can be translated as 'in, inside',  $m\grave{a}$  CONT means 'on', in the sense of contact with a surface of the reference object,  $l\acute{o}$  SUPER means 'over, above' or 'on TOP of',  $d\acute{j}$  APUD is 'near, around',  $l\grave{u}$  SUB is 'under',  $kl\bar{e}$  POST means 'behind', but also 'with (someone)' as in 'the knife is with me', and  $w\bar{o}l\grave{u}$  POSS means 'in (someone's) possession'. Finally, the locative postposition  $y\acute{e}$ , which is identical to the noun 'mouth', when combining with a container type of object, indicates a location of the edge of the object, e.g. 'on the edge of (a bowl)', 'on the bank of (the river)', 'at the entrance to (a tree hollow)'. Besides the productive 'edge' sense,  $y\acute{e}$  is also idiosyncratically required by several nouns of locative meaning ( $zr\ddot{e}$   $y\acute{e}$  'on the road',  $gb\check{e}$   $y\acute{e}$  'in the village', etc.).

## 10.3. The grammatical category of deixis

In Beng, the category of deixis characterizes only locative phrases. Regular NPs don't mark proximity, unless they contain a relative clause with a locative statement 'which is here'. The most common demonstrative element *bì* 'this, that' is unmarked for proximity.

Locative phrases (except for toponyms and deictic locative nouns themselves) are often accompanied by deictic locative nouns  $w\bar{e}$  'there',  $n\bar{\jmath}$  'here' u  $bl\bar{\jmath}$  'right here, right there'. The deictic element is usually not obligatory, but speakers tend to judge examples with a deictic as more natural than ones without it. For example, (98) is judged superior to (99), and (100) considerably superior to (101):

(98) Ó tá kléń n<u>i</u> wó wē. 3SG:PST+ go:L forest DEF IN there 'He went to the forest'.

<sup>&</sup>lt;sup>13</sup> As an anonymous reviewer suggests, deictic doubling of locative phrases is probably induced by contact with Baule.

- (99) Ó tá kléń nì wó. 3SG:PST+ go:L forest DEF IN 'He went to the forest'.
- (100)  $N\bar{y}$  which  $n\bar{2}!$  come house here 'Come home!'

The degree to which the deictic element is obligatory varies depending on the locative noun involved. The factors behind the usage of the deictics are yet to be explored; one of them could be the frequency of the locative noun: the more frequent the locative noun, the more freely it can occur without a deictic element. For example, a very frequent locative postposition  $w\delta$  'in' freely occurs without a deictic, while with relatively rare locative postpositions like  $d\underline{i}$  'near', deictics are more preferable. In a similar vein, deictic  $w\bar{e}$  'there',  $n\bar{g}$  'here', and  $bl\bar{g}$  'right here, right there' are just preferable with the frequent locative noun  $wl\delta$  'house', but obligatory with the rare  $t\hat{u}w\hat{a}$  'quarter'.

#### 11. Coordination

The default way to conjoin constituents A and B in Beng is the construction A  $n\hat{a}$  B  $I\bar{o}$ , literally 'A together with B'. This construction conjoins noun phrases (102b), adjective phrases, as well as adverbial constituents. Verbs and verb phrases never conjoin in Beng, so that the meaning of corresponding constructions of European languages has to be expressed via clause combination of one kind or another (102c). Clause-level conjunction in its turn has to be expressed via juxtaposition of sentences, or, alternatively, as temporal subordination (see 13.5). Such differentiation of conjunction patterns by the syntactic category of the conjunction is common in languages of Sub-Saharan Africa (Haspelmath 2005b), which is the biggest area with a systematic contrast between nominal and verbal coordination.

The first conjunct in a coordinate NP is doubled by pronouns of the existential series, the second by the non-subject series.

Disjunction, in contrast to conjunction, does not distinguish sharply between nominal and sentential domains; NPs, postpositional phrases, and full sentences are disjoined with the same marker (102b,c). The disjunctive coordinator is structurally a conditional clause  $\hat{a}$   $l\acute{e}$   $\acute{e}$   $n\bar{z}$ , literally 'if it is not', which can undergo shortening to

### Grammatical sketch of Beng

àlén<u>ī</u>. So Beng has a remarkably compositional semantics of its disjunction, as indeed, Boolean disjunction in logic (A or B) is equivalent to a combination of a negation and an implication (not A => B). Sometimes one uses the alternate disjunction  $n\underline{\bar{\imath}} n\underline{\bar{\varepsilon}} \bar{\varepsilon}$  (104e). Extraposition of the second disjunct with the disjunction marker (104e) is common (though never found with overt *con* junction), and perhaps could be analyzed as sentential disjunction under ellipsis; more inquiry into the structure of such sentences is needed.

Examples in (102) illustrate uses of conjunction and disjunction. (102a) presents a coordinate structure with a wh-element:

'Who did you stay with at home today?' (literally 'You and who that you stayed at your house today?').

(102b) 
$$\bar{\mathcal{I}}$$
 tó  $l\hat{\epsilon}$   $\bar{\mathcal{I}}$   $d\bar{\epsilon}$   $n\hat{a}$   $\bar{\mathcal{I}}$ 
1SG name DEF 1SG father and 1SG
$$d\bar{a} \qquad l\bar{o} \qquad p\bar{\epsilon} \qquad p\bar{a} \qquad k\hat{a} \qquad \bar{\epsilon}.$$
mother with FOC 3PL:PST+3 put:L FOC

'My name, it was my father and my mother who gave it to me' (literally: 'it was my father and my mother who put it').

bèsé  $\grave{arepsilon}$ (102c)Wà véwò lὲ [glē *ló]* 2sg:Hab+3 machete Def sharpen:L rock DEF on à lé-nī [klàwá à lō]. 3sg:Pst-COP:L:NEG-if.not whetstone Def

'She sharpens her machete on the rock or with the whetstone'.

(102d) 
$$\eta \acute{o}$$
 sròbèí à  $l\acute{\varepsilon}$   $\acute{\varepsilon}$   $n\bar{\jmath}$  1SG:ST+ leave 3SG:PST- COP:L NEG if.not

 $\iint \int g\bar{u}\hat{a} \quad wl\hat{a} \quad n\bar{g}.$ 1SG:ST+ stay house here

'I will either leave or I will stay at home'.

(102e) mị-ó wápló klē nịŋēē mànúń?

2SG-ST+ fufu Post or rice

'Would you like fufu or rice?' (lit. 'Are you after fufu or rice?')

#### 12. Clause structure

## 12.1. Tense, Aspect, Modality, Polarity

**12.1.1. Polarity.** The clause-final particle  $\dot{\varepsilon}$  is the default negation marker in Beng. The only sentence type that doesn't use it is the identity statement, marked by clause-final particle  $\dot{\varepsilon}$  in the affirmative polarity and by  $n\dot{\zeta}$  in the negative polarity.

In a sequence of two or more negative particles  $\acute{\epsilon}$ , which happens when both a matrix clause and its embedded clause are negative, the last one is replaced by an allomorph  $n\ddot{i}(103c)$ .

Apart from the negation marker, polarity is also marked within subject pronouns, where it is expressed cumulatively with TAM. Tables 4 and 5 (section 5.3) indicate which pronoun series is used in what type of sentence, depending on polarity.

Finally, sometimes the verb form itself signals the presence of negation, thereby adding the third marker of polarity in addition to the negative particle and the pronoun series. Example (103a) exhibits all three exponents of polarity at once:

- (103a)  $M\underline{\check{a}}$   $n\underline{\bar{y}}$ -s $\grave{a}$   $\acute{\varepsilon}$ 1SG:PST- come-PrfNeg NEG
  'I have not come'.
- (103b)  $\hat{I}$   $n\bar{y}$ - $n\bar{g}$ 1SG:PST+ come-PRF 'I have come'.
- (103c) Mà pé [kē mà ný é] nï 1sG:PsT+3 say:L that 1sG:PsT- come:L NEG NEG 'I did not say that I did not come'.

Out of the sixteen logically possible verb forms (8 TAM values  $\times$  2 polarity values), there are only six distinct finite forms. Just the four affixal ones invite some substantive labels. The remaining two are called the 'base form' and the 'low tone form', based on their formal properties. The usage of the six verb forms is summarized in Table 8.

TAM value	affirmative		negative	
preterite	low tone	Ù	low tone	Ù
habitual	low tone	Ù	low tone	Ù
conditional	base	V	low tone	Ù
optative	base	V	low tone	Ù
future	base	V	base	V
progressive	progressive			V <i>-lɛló</i>
perfect	affirmative perfect	V <i>-n</i> ā̄	negative perfect	V-sà
stative	stative			V <i>-Iὲ</i>

Table 8. Usage of finite verb forms

Beng has the so-called negative concord whereby words translating negative indefinites require negative polarity marking of the clause. In Beng, all such negative elements contain a reduplicated element. They include:  $p\bar{s}p\bar{s}$  'nothing' (reduplication of  $p\bar{s}$  'thing');  $k\hat{\epsilon}k\hat{\epsilon}$  'no' (reduplicated form that does not have a non-reduplicated counterpart), and finally a construction that involves reduplicating a noun with the word  $t\hat{s}$  'the rest' between the two copies:  $s\hat{s}\hat{\eta}$  to  $s\hat{s}\hat{\eta}$  'nobody' (from  $s\hat{s}\hat{\eta}$  'person'),  $p\hat{\eta}$  to  $p\hat{\eta}$  'not a weed' (from  $p\hat{\eta}$  'weed'). Examples:

- (104a)  $\eta \bar{a}$   $s \hat{g} \hat{\eta}$   $t \hat{o}$   $s \hat{g} \hat{\eta}$   $y \bar{e} l \hat{e}$   $\hat{e}$ .

  1SG:ST- person rest person see-RES NEG 'I see nobody'.
- (104b) Mà pùń tó pùń sò έ.

  1SG:HAB- weed rest weed chew:L NEG
  'I don't eat anything' (literally I don't eat a weed.)
- (105) Mặ dr

  wò yrám

  kèk

  wó é.

  1SG:PST- work do:L time no IN NEG

  'I never worked'.
- 12.1.2. Tense and mood. Mood in independent sentences encodes modality, i.e. the relation of the situation described in the sentence to the actual world. Beng has a relatively limited modality spectrum, distinguishing the indicative (for situations that hold in the actual world) and the optative (for situations that the speaker considers necessary or desirable). Imperative in Beng is minimally formally distinguishable from the optative (see 12.1.3). In addition to indicative and optative, Beng also has conditional mood, which is used only in embedded clauses.

#### Denis Paperno

Each statement has a time reference point, call it T. Depending on T's position on the time scale relative to the utterance time, we can talk about the past, the present, or the future time reference.

Only verb clauses express the full spectrum of TAM values. Adjective, adverbial, existential, and presentative types of clauses express only indicative, and, along with certain aspectual values in verbed clauses, are interpreted with present time reference by default.

When it is necessary to indicate past tense, one can use the clause-initial temporal shift marker  $n\hat{a}$  which replaces default present time reference with past time reference; one consultant also accepted the future interpretation of temporal shift:

(107) 
$$N\hat{a}$$
  $\hat{\eta}$   $p\bar{o}$   $c\hat{i}$ .

DT 1SG:HAB+ thing cut:L 'I used to mow'.

(108) 
$$N\hat{a}$$
  $m\bar{a}\bar{n}$   $\hat{\xi}$ .

DT 1SG:EMPH 9TO 'It was me'.

(109) 
$$N\hat{a}$$
  $\hat{\eta}$   $g\bar{\epsilon}\bar{\eta}$ .

DT 1SG:HAB+ beautiful 'I was handsome'.

However, the temporal shift marker is not obligatory for changing the time reference of sentences with default present interpretation. If the context explicitly refers to the time, this can suffice to shift the time reference of a statement, cf.:

'Chimpanzee used to live in the village' (literally 'Lomg ago, chimpanzee is in the village').

<sup>&#</sup>x27;When I was little my mother would pound manioc every day'.

#### Grammatical sketch of Beng

In order to express various temporal and aspectual meanings in sentences that are normally expressed verblessly, they have to be paraphrased using copular verbs  $yr\ddot{a}$  'to be located, to take place' (corresponding to existential and adverbial clauses) and  $l\bar{\epsilon}$  'to be, to make', corresponding to adjectival and identification clauses:

- (112a)  $M\bar{a}\bar{\eta}$   $\hat{\xi}$ . 1SG:EMPH this.is 'This is me' (presentative).
- (112b)  $\grave{O}$ - $\acute{o}$   $l\bar{\epsilon}$   $m\bar{q}\bar{\eta}$  3SG-ST+ COP 1SG:EMPH 'This will be me'. (copula verb)
- (113a)  $\vec{D}$   $g\bar{e}\bar{\eta}$ .

  1SG:HAB+ beautiful

  'I am handsome' (adjectival).
- (113b)  $\dot{\mathcal{H}}$   $l\bar{\varepsilon}$   $g\bar{\varepsilon}\bar{\eta}$ . 1SG:HAB+ COP beautiful 'Let me be handsome!' (copula verb).
- (113c) a. Ŋó pōú. 1SG:ST+ field 'I am in the field' (adverbial).
- (113d) Ŋó yrä pōú. 1SG:ST+ take.place field 'I will be in the field' (copula verb).

The copula verb  $l\bar{\varepsilon}$  'to be' has an idiosyncratic peculiarity of tense interpretation, shared by no other verb, using the preterite form to express present tense:

- (114) Ú lé bèý.

  1SG:PST+ COP:L Beng
  'I am Beng'. (note the past tense form with present meaning)
- **12.1.3. TAM values and their expression.** Verbal sentences formally distinguish eight TAM values, briefly characterized below. Table 9 gives a TAMP paradigm of a sentence along with structural formulae of TAMP constructions.

**Notes**. PST - preterite series, ST - stative series, HAB - habitual series, CND - conditional series; '+' - affirmative polarity series, '-' - negative polarity series; V - verb stem, V:L - low tone form of the verb (lexical tone changes to low).

affirmative scheme negative scheme mí mlà dè Pst+, V:L mį mlà dè έ PST-, V:L preterite Pst+, V nā perfect mí mlà dē nā mị mlà dē sà é PST-, V sà stative (mīó mlà yē.lè) ST+, V.*I*€ (m̄gā mlà yē.lè έ) ST-, V.*I*€ Sτ+, V.[1]εΙό progressive mīó mlà dēèlo mīā mlà dēèló é Sτ-, V./1/εΙό ST+, V future mīó mlà dē m̄jā mlà dē έ ST-, V (mì) mlà dē Hab+, V mį mlà dè έ optative = preterite conditional m<u>î</u> ml<u>à</u> d<del>e</del> CND+, V mì mlà dè έ = habitual habitual mì mlà dè HAB+, V:L mì mlà dè έ HAB-, V:L

Table 9. TAMP paradigm of the sentence 'you play drum' ('you see drum' in stative)

**Preterite** has past time reference, with perfective or habitual aspectual meaning. Beng does not mark telicity.

(115) 
$$\acute{\eta}$$
 zá pè. 1sG:PsT+ matter say:L

'I said something / I used to say something'.

**Progressive** refers to an ongoing activity and has default present time reference:

A progressive statement accompanied by a clause-initial marker  $\acute{\eta}g\check{\delta}$  produces the aspectual value of **cancelled result**, an unexpected derivative of progressive:

'When it was raining the worms almost appeared' ('they started to appear but they can't be seen anymore').

The same element  $\eta g \delta$  marks the main clause of counterfactual conditional statements. For example, (119) contains no irrealis marker besides  $\eta g \delta$ :

(119) 
$$L\bar{a}$$
 ó  $b\bar{g}$   $d\epsilon\bar{e}$   $ng\delta$   $nl\bar{g}$   $nl\bar{g}$ 

### Grammatical sketch of Beng

Expression of cancelled result, or 'antiresultative', by means of progressive (even in combination with an additional marker  $\eta g \delta$ ) is typologically unique and deserves explanation, which shall likely involve the fact that progressive, unlike other aspectual meanings, has no implications about the result of an action, e.g. "John crossed the street" implies "John has been on the other side of the street" but "John was crossing the street" does not have such an implication (John might have changed his mind and never finished crossing). Usually, antiresultative include past, perfect, or perfective forms, cf. especially examples in Šošitajšvili (1998: 92-105).

**Habitual** marks regularly repeated events or stable states, and has default time reference to the present.

(120) 
$$\vec{l}$$
  $p\hat{j}\hat{n}$   $c\hat{j}$ .  
1SG:HAB+ weed cut:L  
'I (usually) mow'.

Future has future time reference and is compatible with any aspectual meaning.

**Stative**, or **resultative**, has default time reference to the present and refers to a state. For most verbs this is the resulting state of the event named by the verb; see more on the stative below.

(122) 
$$Jr\check{a}$$
  $\grave{o}$ - $\acute{o}$   $d\bar{\varepsilon}$ - $l\grave{e}$ .  
lion 3sG-ST+ kill-RES 'The lion is killed'.

**Conditional** is used in certain cases in temporal and conditional subordinate clauses, see 13.5 for more detail.

**Optative** expresses a wish when used in an independent clause:

**Imperative** is largely formally identical to the optative:

'Go for a walk!' (to more than one addressee or to an elderly person)

There are however minor differences in subject pronoun realization between the imperative and the optative. Indeed, imperatives are peculiar compared to all other TAM values. First, in the imperative the 2sG subject pronoun is omitted. Second, 1PL imperatives distinguish the number of the addressee. When addressing a single person urging her to do something together with the speaker, one uses the regular 1PL pronoun  $\bar{a}\hat{p}$  (which one could also call 1st person dual). When the speaker addresses more than one person, or one elderly person in a polite way, Beng uses a combination of 1PL and 2PL pronouns  $\bar{a}\hat{p}$   $k\hat{a}$  instead of a single subject pronoun to mark a request to something together with the speaker:

- (126)  $\bar{A}\hat{\eta}$  dr $\check{u}$ .

  1PL:HAB+ walk:L

  'Let's go for a walk!' (to one person)

'Let's go for a walk together!' (to more than one addressee or to an elderly person).

**Perfect** has default time reference to the present and expresses perfect aspect (similar to the English Present Perfect).

- (128)  $\hat{H}$   $n\bar{y}$ - $n\bar{g}$ 1SG:PST+ come-PRF 'I have come'.
- **12.1.4. Stative vs. perfect.** Stative, or resultative, refers to a state; usually but not always this state results from an event denoted by the verb. Perfect refers to a recent event that hasn't yet lost its relevance to the speaker; usually the resulting state of that event is still present. So stative and perfect are applicable to similar classes of situations, and are interchangeable in many contexts without affecting truth conditions. Still, the two constructions have different semantics, and therefore also have some contrasting properties.

First, the perfect aspect refers to an event leading to the result state and combines with modifiers that describe that event (129); stative/resultative cannot (130):

(130) Yrí lè ò-ó drà-lê (\*gblē). tree DEF 3SG-ST+ fall-RES yesterday 'The tree is fallen' (\*yesterday).

Second, perfect and stative have pragmatic differences. Perfect is not used if the event of entering the resulting state is not relevant. For example, the verb 'to know' is usually used in the stative, since the event of getting to know something is comparatively rarely at issue. In an evidential scenario where the occurrence of an event is inferred from the resulting state ('the tree obviously fell as evidenced by the fact that it's lying on the ground'), again stative is used since the resulting state is more salient than the event itself. Similarly, stative/resultative is used to describe present results of distant events that are no longer relevant themselves. However, if the result of an event is the very fact of its occurrence ('Yes I have been to Paris'), the event can be relevant for an indefinitely long time, an in this case perfect (the so called experiential perfect), not stative, is used.

Third, while every verb can be used in the perfect, not all verbs occur in the stative. Verbs that enter the causative-inchoative alternation (see 12.2.2) are used in the stative intransitively but not transitively. Perfect is formed regardless of transitivity, compare:

- (131a) Ŋ ŋlū trī-nā.

  1SG:PST+ head blacken-PRF
  'I have colored my hair black'.
- (131b)  $I\bar{J}$   $dr \partial n \underline{i}$   $\delta$   $tr \bar{i} n \bar{g}$ .

  1SG shirt 3SG:PST+ blacken-PRF

  'My shirt has gotten black (dirty)'.
- (132a) \*I)-ó ŋlū trī-lè.

  1SG-ST+ head blacken-RES

  ('I have a black head'.)
- (132b) OK D̄ dròní ò-ó trī-lè.

  1SG shirt 3SG-ST+ blacken-RES
  'My shirt is black (dirty)'.
- (133)  $\acute{\eta}$  klé drà-nā.

  1SG:PST+ bag drop-PRF

  'I have dropped a bag'.

(134) 
$$\bar{\mathcal{H}}$$
  $kl\acute{\epsilon}$   $\acute{o}$   $dr\grave{a}$ - $n\bar{a}$ .

1SG bag 3SG:PST+ drop-PRF

'My bag has dropped'.

(135b) 
$${}^{OK}\bar{D}$$
  $kl\acute{e}$   $\grave{o}$ - $\acute{o}$   $dr\grave{a}$ - $l\^{e}$ .  
1SG bag 3SG-ST+ drop-RES 'My bag is lying dropped'.

These restrictions have a simple semantic explanation if we assume that a clause describing an eventuality can't include among its syntactic arguments one that is not a semantic participant of the eventuality. Stative/resultative, as already mentioned, denotes a state. States that the causative-inchoative verbs introduce have only one semantic participant, the patient, expressed by the subject of the inchoative use of the verb and the object of the causative use. The event leading to that state can have either one participant, the patient, in the intransitive use or two, the patient and the causer, in the transitive use. In other words, in causative-inchoative verbs there is an asymmetry between the event and its resulting state: while the event can include the causer among the semantic participants, the result state normally won't. This lines up perfectly with the facts in (131-135): the stative, denoting a state, can only combine with the patient but not the causer that is not a participant of the state, so only intransitive usages are allowed. The perfect, which refers to an event, can combine with both participants of the event, so it is compatible with transitive uses.

As I just argued, admissibility of stative has semantic explanation; transitivity of the verb is a factor only as long as it correlates with the event structure. Indeed, stative construction is perfectly legitimate if both the subject and the object of the verb correspond to participants of the resulting state:

(136a) 
$$\mathcal{D}$$
- $\acute{o}$   $m\bar{\jmath}$   $d\bar{\jmath}$ - $l\grave{e}$ .  
1SG-ST+ 2SG know-RES  
'I know you'.

(136b) 
$$\eta$$
- $\acute{o}$   $m\bar{\jmath}$   $y\bar{e}$ - $l\grave{e}$ .  
1SG-ST+ 2SG see-RES  
'I see you'.

(137a) 
$$\grave{O}$$
- $\acute{o}$   $\bar{\eta}$   $d\bar{\jmath}$ - $n\grave{e}$ .

3SG-ST+ 1SG send.courier-RES

'I am his courier'.

Conversely, if a verb is intransitive but atelic, i.e. does not come with a natural resulting state, it does not form the stative:

One more class of cases where the stative of a transitive verb is acceptable includes resulting states that are not simply caused by an agent's action but are maintained with the agent's involvement, cf. :

(139a) 
$$\dot{O}$$
- $\dot{o}$   $\dot{a}$   $m\bar{e}l\acute{a}$ - $l\grave{e}$ .

3SG-ST+ 3SG fall-RES

'He is keeping him on the ground' ('he is keeping him fallen'),

compare the simple preterite construction of the same verb:

(139b) 
$$\acute{O}$$
 à mệlá.  
3SG:PST+ 3SG fall  
'He felled him on the ground'.

12.1.5. Periphrastic expression of tense and aspect. In addition to the fully grammaticalized constructions for TAM values described earlier, Beng also has periphrastic ways of expressing progressive and future tense. The alternative progressive construction consists of the stative series of pronouns followed by a verb phrase where the verb bears the event nominalization suffix and is accompanied by the postposition  $m\hat{a}$ . This "progressive II" is structurally similar to the "progressive I" construction, with the difference that it employs postposition  $m\hat{a}$ , not  $l\hat{o}$  as the standard progressive I does. Another difference is that progressive I has phonological peculiarities (see 6.4) that no longer allow to clearly separate it into a combination of a nominalized verb form with a postposition; indeed, speakers do not perceive the  $m\hat{a}$  progressive form as one word but as two ( $p\bar{e}l\hat{e}$   $m\hat{a}$  'saying'), the way they perceive the  $l\hat{o}$  progressive form ( $p\bar{e}\hat{e}l\hat{o}$ ). There is a subtle semantic difference between progressive I and progressive II: the latter tends to imply that the eventuality has been going on for a while, so it could be labelled 'continual progressive', for example:

(140) *Ò-ó* dr<u>ē</u> wō-lè m<u>à</u>. 3SG-ST+ work do-NMLZ CONT

'He is working/ he has been working'.

Periphrastic future with intentional flavor, similar to the English *to be going to* construction, is expressed by combinations of verbs  $t\acute{a}$  'to go' or  $n\bar{y}$  'to come' and the goal converb:

(141)  $Nr\acute{a}$ -l\acute{o}  $d\vec{\epsilon}$   $c\acute{z}$ -y $\grave{a}$ . 1SG:ST+:go-PROG (kind of a tree) cut-Gl

'I am going to cut down the  $d\vec{\varepsilon}$  tree'.

The auxiliary verb in the periphrastic future construction varies, producing slightly different semantics.

- The verb  $n\bar{y}$  'to come' in periphrastic future implies that the action will take place where the subject is now; the verb  $t\hat{a}$  'to go' implies that the action will take place elsewhere.
- The auxiliary can be in the progressive form or in the future. Progressive indicates the intention to start the action immediately, while the future form signals that the action would be started in the future.

## 12.2. Argument structure of verbal clauses

- **12.2.1. Subject.** The syntactic subject in Beng has several features that distinguish it from other NP positions.
  - The subject NP is doubled by subject series of pronouns.
  - The subject binds reflexive pronouns in direct or indirect object positions:
- (142)  $\grave{O}$   $\grave{a}$ - $dr\grave{a}$   $\grave{b}\grave{o}$   $fi\grave{a}$   $s\grave{g}\grave{\eta}$   $s\bar{e}$   $m\grave{a}$ .

  3SG:HAB+ 3SG-Refl raise:L better person all SUPER 'He believes himself to be better than all the people'.
- (143)  $M\hat{i}$   $v\hat{j}$   $m\bar{i}$ - $dr\hat{a}$   $n\hat{j}$ . 2SG:HAB+ love:L 2SG:Refl BENEF 'You love yourself'.
  - The sentential subject binds the subject of the goal converb (used only with a few motion verbs, see 6.5):
- (144a)  $\not$   $\not$   $\not$   $\not$   $n\acute{y}$   $dr\grave{u}$ - $y\^{a}$ .

  1SG:PST+ come:L walk-GL

  'I came for a walk'.

- (144b) \*Í) drē wò drù-yâ. 1SG:PST+ work do:L walk-GL (\*I worked for a walk.)
  - The sentential subject controls the null subject participant of verb nominalization with certain matrix predicates:
- (145)  $M\underline{i}$   $p\bar{o}$   $d\hat{e}$ - $l\hat{e}$   $\eta l\bar{u}b\hat{i}$ .

  2sgPst+ thing cook-NMLZ begin:L

  'You began to cook'.
  - The sentential subject controls the null subject of the locative nominalization used as a converb of simultaneous action:
- (146)  $\mathcal{O}_{i/*_{j}}$   $Dr\bar{\mathcal{E}}$   $w\bar{o}$ - $y\hat{a}$   $n\acute{g}$  n- $\acute{o}_{i}$   $n\grave{o}_{j}$   $y\grave{e}$ . work do-PLC TOP 1SG-ST+ 3PL see:L

'I saw them while working' (I, not them, was working).

When the subject of the converb is not null, it does not have to be coreferent to the sentential subject:

- (147)  $\eta \partial_i dr \bar{\epsilon} = w \bar{o} y \hat{a} = n \hat{a} = m \hat{a}_i = n \hat{o}_i = y \hat{e}$ . 3PL work do-PLC TOP 1SG:PST+ 3PL see:L 'I saw them while they were working'.
- (148)  $\eta \hat{\partial}_i$  trí-yá ná  $\eta \hat{o}$  dǎ  $\eta \hat{\partial}_i$  ló  $n\bar{g}$ .

  3PL return-PLC TOP 1SG-ST+ find[BSQ] 3PL SUPER here 'When they will be going back I will find them here'.
- 12.2.2. Direct object and lability in Beng. Direct object in Beng always precedes the verb and can never be omitted. A transitive verb requires a direct object in the form of an overt NP, an object pronoun, or both. Direct object is equally obligatory with all derivatives of transitive verbs (goal converb, agent nominalization, nominalizations in -ya and  $-l\varepsilon$ ). If the object is semantically underspecified or irrelevant (as in *The thief cometh not, but for to steal, and to kill, and to destroy*), one has to employ in the direct object position semantically empoverished nouns  $s\partial \hat{p}$  'person' (for animate objects, including people and animals),  $p\bar{\sigma}$  'thing' (for inanimate objects),  $z\acute{a}$  'matter' (for abstract objects). These nouns function essentially as indefinite pronouns. Examples:
  - (149)  $\eta$ - $\delta$   $p\bar{\sigma}$   $bl\bar{e}$ . 1SG-ST+ thing eat 'I will eat'.

- (150)  $\eta \hat{o}$   $s \hat{g} \hat{\eta}$   $d \hat{\epsilon}$ .

  3PL:HAB person kill:L

  'They kill'.
- (151) Ó zá pè.

  3SG:PST+ matter say:L

  'He said (something)'.
- (152)  $D\acute{e}$   $f\bar{\xi}$   $\acute{o}$   $p\bar{o}$   $c\grave{i}$   $\bar{\eta}$   $b\grave{e}s\acute{e}$   $\grave{e}$   $l\bar{o}$   $n\acute{a}$ ? who Rel 3sG:PsT+ thing cut:L 1sG machete Def with Top 'Who has been cutting with my machete?'

With verbs  $c\acute{a}$  'to watch',  $y\bar{e}$  'to see',  $kl\bar{u}$  'to dig',  $kl\bar{u}kl\grave{u}$  'to dig, to clean up',  $t\acute{u}\grave{a}$  'to leave', and  $wl\bar{a}$  'to sweep', the semantically impoverished object can be expressed not only with the generic  $p\bar{o}$  'thing' but also with  $bl\bar{i}$  'place' ( $p\bar{o}$  /  $bl\bar{i}$   $y\bar{e}$  'to see (something)',  $p\bar{o}$  /  $bl\bar{i}$   $c\acute{a}$  'to watch (something)',  $p\bar{o}$  /  $bl\bar{i}$   $wl\bar{a}$  'to sweep (someplace)'); native speakers find no semantic contrast between the variants with  $p\bar{o}$  and  $bl\bar{i}$  used as an underspecified object with these verbs.

Beng has a handful of A-labile verbs, i.e. verbs that occur both transitively and intransitively without any change in the semantic role of the subject. Here is a list of such verbs with examples of optional objects in parentheses:  $(dr\bar{\xi})$   $bl\ddot{a}$  'to stop (work)'; a recent Baule borrowing  $(p\bar{\jmath})$   $f\partial t\dot{u}$  'to give advice';  $(s\partial n)$   $k\dot{a}k\dot{a}$  'to cause itching (in someone)';  $(p\bar{\jmath})$   $l\dot{a}m\bar{\jmath}$  'to step over (something)',  $(z\dot{a})$   $z\dot{a}z\dot{a}$  'to argue (on something)'. All of these verbs except for the borrowing  $f\partial t\dot{u}$ , show A-lability in only one word sense out of several. Two other lexically A-labile verbs of Beng are  $(p\bar{\jmath})$   $kl\dot{u}\dot{a}$  'to steal (something)' and  $(s\partial n)$   $p\bar{\jmath}$   $p\bar{\jmath}$  'to ask (somebody)'.

Verbs wlá 'to laugh' and wláwlà 'to smile' are also A-labile, with the added direct object expressing the semantic role of stimulus ('to laugh at someone', 'to smile at someone').

A-lability is a regular property of manner of motion verbs in Beng. In their transitive use, the direct object takes the semantic role of path, as in the following example:

(153) Ó pōú drù.

3SG:PST+ field walk

'He walked through a field',

where  $p\bar{\partial}\hat{u}$  is a direct object; compare

(154) O drú pōú. 3sg:Pst+ walk field 'He walked in a field',

where  $p\bar{\jmath}\dot{u}$  is a sentential modifier.

The verb *gbā* 'to give' is A-labile in passive usages, see below.

There is another group of predicates, in addition to the verbs mentioned above, that exhibit a superficially A-labile pattern but differ in internal structure. Predicates of this group are idiomatic phrases that consist of a verb and noun in the direct object position, with an optional object filling essentially the noun's possessor slot. Such complex verbs include: (X)  $gbl\acute{o}\acute{\eta}$  dǎ 'to pay a fine (optional object: with X)' (the word  $gbl\acute{o}\acute{\eta}$  is never used outside of this expression; dǎ is a polysemous verb which participates in many idiomatic expressions), (X)  $k\grave{o}\grave{\eta}$  bō 'to revenge (for X)' ( $k\grave{o}\grave{\eta}$  'revenge',  $b\bar{o}$  'to take out'), (X)  $y\acute{e}$  suá 'to pray (for someone)' ( $y\acute{e}$  'mouth', suá 'splash'). In all of those the semantic object is optional, for instance:

(155) 
$$O$$
 ( $\hat{a}$  d $\bar{e}$  l $\hat{e}$ ) k $\hat{o}\hat{\eta}$  b $\hat{o}$ .

3SG:PST+ 3SG father DEF revenge V:L

'He took revenge (for his father)'.

In contrast to the limited scope of A-lability in Beng, P-lability, i.e. the alternation between the subject of an intransitive verb and the direct object of a transitive usage of the same verb expressing the same semantic role, is widespread. Most verbs that can have transitive uses (457 out of 553<sup>14</sup>) can also have intransitive uses characterized by P-lability. Semantically, there are three types of relation between the transitive and the intransitive usages:

- reflexive: Ó léŋ ng zrò. 'He washed the child'. Ó zrô. 'He washed';
- (de)causative: Ó kpìń nì tà. 'He opened the door'. Kpìń nì ó tâ. 'The door opened';
- passive:  $\acute{O}$  jră lè dè. 'He killed the lion'. Jră lè  $\acute{o}$  dê. 'The lion was killed'. 15

The disctinction between passive and decausative can be hard to draw in practice: passive ( $Jr\check{a}$   $l\hat{e}$   $\acute{o}$   $d\hat{e}$ . 'The lion was killed') implies involvement of an agentive

<sup>15</sup> Agent cannot be expressed in the 'passive' usages of P-labile verbs in Beng, so according to Xolodovič (1970) this passive type should be called 'object quasipassive' ('passive' proper in Xolodovič's system is reserved to passives with an overt agent).

<sup>&</sup>lt;sup>14</sup> Units counted here and below are word senses, since different senses of the same verb often differ in the argument structures they admit.

However, this agentless type of passive is known to be typologically more common than the 'proper' passive with an oblique agent phrase, to the extent that Keenan and Dryer (2007) even call agentless passives 'basic' and generalize that if a language has any passives it has

participant<sup>16</sup>, while decausative ('the door opened') does not imply the presence of an agent or even the fact of causation. But whether a statement logically implies a cause or an underlying agent's activity can be a hard judgment.

The boundary between decausative and reflexive is also somewhat blurry (Letučij 2006: 25). And indeed, under closer consideration reflexive usages of P-labile verbs reveal the availability of decausative or passive interpretation; for example, the paradigmatic case of reflexive interpretation, sentence  $\delta zr\hat{o}$ , normally interpreted as 'S/he washed (himself/herself)', can also mean 'She was washed (by someone)', and is used with this meaning when referring to ritual bathing of girls during initiation.

To summarize, the *a priori* distinction between the semantic types of P-lability turns out to be quite blurry in reality. It would be desirable to treat the three variants semantically in a uniform way as the alternation between 'S does V to O' and 'V occurs to O', and to leave to pragmatics the subtle questions on whether 'V occurs to O' impies an S that does V (passive), and whether that S is identical to O (reflexive).

12.2.3. Secondary object in Beng in the light of the typology of ditransitive constructions. Ditransitive constructions, i.e. clauses that realize a predicate with its agent, recipient, and theme (object of transfer), have not been subject to typologuical scrutiny until recently. I rely here on the terminology introduced in (Haspelmath 2006a). Haspelmath distinguishes three strategies of ditransitive marking: indirective (theme is marked as a direct object, recipient as an indirect object), secundative (recipient is marked like a direct object, theme as a 'secondary' object), and neutral (recipient and theme have the same marking). The main ditransitive strategy in Beng is secundative: the recipient takes the direct object position, and the theme (object of transfer) occupies a special postverbal secondary object position. The secondary object is a noun phrase, never followed by a postposition or a doubling pronoun, which immediately follows the verb. Unlike the secondary object of the ditransitive construction, other indirect objects are marked with postpositions. Most often the secondary object is a dependent of the verb  $gb\bar{a}$  'to give', but at least two other verbs,  $bl\bar{\iota} \times p\bar{o}p\dot{o}$ , are also attested in the secundative ditransitive construction, compare:

(156a) 
$$O$$
  $m\bar{t}$   $gba$   $yi$ .  
3SG:PST+ 2SG give:L water  
'He gave you water'.

(156b) 
$$\acute{O}$$
  $\bar{\jmath}$   $p\grave{o}p\grave{o}$   $w\acute{a}l\acute{l}$  3sG:PsT+ 1sG ask:L money

<sup>&</sup>lt;sup>16</sup> More precisely, the participant whose semantic role equals that of the subject of the verb in the transitive usage.

'He asked me for money'.

'You sacrificed a chicken for his funeral' (literally 'You buried him with a chicken').

From the viewpoint of case and adposition marking (so-called 'flagging'), the ditransitive construction in Beng is neutral: both the recipient and the theme are zero-marked. This is a strong areal trait of languages of sub-Saharan Africa (Haspelmath 2005a).

From the viewpoint of word order and pronominal agreement ('indexing') this construction is secundative: the preverbal recipient is doubled by object pronouns like preverbal direct objects of transitive verbs, while the ditransitive theme is never doubled with a pronoun:

Beng, like the 22 languages from Haspelmath's sample with secundative indexing (Haspelmath 2006a: 12), has no agreement with the theme, not distinctive agreement marking that would contrast with that of the recipient.

Besides, the recipient, like the object of a typical transitive verb, has to be overtly expressed, while the object of transfer can be omitted. Moreover, personal pronouns, even emphatic ones, are banned from the secondary object postion:

(158) 
$$O$$
  $\bar{g}\bar{\eta}$   $gba$  (\* $a$ - $y\bar{g}$ ).

3SG:PST+ 1PL give 3SG-EMPH

'He gave it to us' (pronoun after the verb is degraded).

Compare the superficially similar postverbal position of nominal predicate with the copular verb  $l\bar{\varepsilon}$  'to be, to make' where emphatic pronouns can be used:

(159) 
$$O$$
  $I\acute{\epsilon}$   $\grave{a}$ - $y\bar{a}$ .  
3SG:PST+ COP:L 3SG-FOC

'It was him' (postverbal pronoun can't be omitted).

In case it is necessary to name the object of transfer with a pronoun, it can only be done periphrastically, in a structure that closely resembles one found in Baule (Creissels, Kouadio 1977):

(160) 
$$\acute{O}$$
  $k\bar{a}$   $sr\grave{a}$   $\acute{o}$   $\bar{\eta}$   $d\bar{a}$   $gb\grave{a}$ .

3SG:PST 2PL take:L 3SG:PST 1SG mother give:L

'He gave you (plural) to my mother' (literally: 'He took you, he gave to my mother').

The fact that personal pronouns can't be secondary objects contrasts them with non-pronominal NPs. In a sense, Beng shows "split ditransitivity". As in the other cases of split ditransitivity, as well as in many cases of split transitivity, it is the definiteness scale that determines the split, personal pronouns being an extreme point on the scale.

Typologically, the combination of secundative strategy for pronominal elements (ban on pronouns in the secondary object position contrasts with the direct object position in transitive and ditransitive clauses) and a neutral strategy (in terms of adposition marking) for full NPs is in accordance with the universal tendency: higher ranked elements from the definiteness scale tend towards more secundative marking and lower ranked elements gravitate towards more indirective marking (Haspelmath 2006b: 15). For instance, Maltese uses the neutral strategy for personal pronouns, and the indirective strategy for other NPs (Comrie 2004). Another example is French that employs the neutral strategy for locutor pronouns (*me, te, nous, vous*) and indirective marking for all other elements (*le:lui, les:leur*, NP:à + NP).

The ditransitive construction alternates in a way that closely resembles P-lability. However, it is the secondary object, not the direct object, that gets promoted into the subject position. The direct object under such a 'passive' transformation is optional:

**12.2.4. Nominal predicate.** Immediately following the main verb, one can also find the secondary predicate, expressed by an NP, an emphatic (focus) pronoun, an adjective phrase, or a stative verb form. Semantically, a nominal predicate can either depend on the copula verb  $l\bar{\varepsilon}$  'to be, to make' or be a secondary predicate:

(162) 
$$O$$
  $I\acute{e}$   $\bar{g}$   $d\bar{e}$ .  
3SG:PST+ COP 1SG father 'This is my father'.

(163) 
$$O$$
  $l\hat{\epsilon}$   $m\bar{q}\bar{\eta}$ .  
3SG:PST+ COP 1SG:EMPH 'It was me'.

(164) 
$$\acute{O}$$
  $\grave{a}$   $l\grave{\epsilon}$   $kl\acute{o}$ . 3SG:PST+ 3SG COP little

'He made it little'.

(165) 
$$\acute{O}$$
 à yè yātró-lè.

3SG:PST+ 3SG see sit-RES

'He saw him sitting'.

(166) 
$$\acute{O}$$
  $\grave{a}$   $\grave{l}\grave{u}$   $kl\bar{u}$ - $p\grave{o}$ .

3SG:PST+ 3SG buy dig-MEN

'He bought this to dig' (literally 'as a digging tool').

The subject of the nominal predicate is always coreferent to the direct object or to the intransitive subject of the main verb.

12.2.5. Sentential modifiers and arguments with postpositions. Many verbs (also adjectives in the comparative construction, see the section on adjectival clauses in 12.4) govern indirect objects with a postposition. Almost any postposition can be selected for, with the exception of  $k \psi m \dot{a}$  'because of'. Psotposition choice can be idiosyncratic and lack semantic motivation. For instance,  $gb \dot{\epsilon}$  'to exceed' selects for the postposition  $m \dot{a}$  (used only with this verb), the verb  $d \dot{a}$  'to fall' when used in the sense 'to help' selects the postposition  $d \dot{a}$  which usually expresses APUD localization 'near'), the verb  $k \dot{a} f l \hat{\epsilon}$  'to ask for protection' selects postposition  $m \dot{a}$  (regular meaning CONT 'on'). Examples:

```
(167) \eta \hat{o} - \hat{o} gb\hat{\epsilon} b\bar{u} m\bar{l}.

3PL-ST+ exceed ten P

'There will be more than ten of them'.
```

- (168)  $\dot{O}$ - $\acute{o}$   $d\check{a}$   $m\bar{t}$   $d\acute{t}$ .

  3SG-ST+ fall 2SG APUD

  'He will help you'.
- (169) Ŋò-ó kàflê ŋ̄ mà.

  3PL-ST+ trust 1SG CONT

  'They will ask me for protection'.

Emotion predicates tend to require not a direct object but an indirect object with the benefactive postposition  $n\underline{\hat{y}}$  (X in the examples below stands for the NP argument of the verb):  $f\hat{\epsilon}\hat{\epsilon}$   $s\hat{i}$  X  $n\underline{\hat{j}}$  'to be beware of X',  $k\delta k\delta$  X  $n\underline{\hat{j}}$  'to worry for X',  $kp\bar{\delta}$  X  $n\underline{\hat{j}}$  'to hate X',  $pr\underline{\delta}$  X  $n\underline{\hat{j}}$  'to be disgusted with X',  $v\bar{i}$  X  $n\underline{\hat{j}}$  'to love X',  $y\bar{\epsilon}n\bar{j}$  X  $n\underline{\hat{j}}$  'to be afraid of X',  $y\bar{\epsilon}pr\acute{\epsilon}$  X  $n\underline{\hat{j}}$  'to be ashamed for X'.

This is somewhat unexpected typologically, since crosslinguitically the argument of an experiential predicate marked like a benefactive is the experiencer, cf. literature

on dative subjects (Bhaskararao, Subbarao 2004), (Verma, Mohanan 1990), etc. On the other hand, the intransitive status of emotion verbs in Beng fits well into Tsunoda's transitivity hierarchy (Tsunoda 1985): Direct effect > Perception > Pursuit > Knowledge > Feeling > Relationship > Ability. In Beng, the line between transitive and intransitive verbs is drawn to the left of Feeling verbs, while in European languages this line is on the right of the Feeling class.

The emotion verbs listed above are just one semantically motivated class of Beng verbs that select for postpositions but translate as transitive verbs in European languages. In fact, Beng verbs that govern an indirect object which corresponds to a direct object in European languages are numerous. Examples (170-173) provide several illustrations:

(170) 
$$O$$
  $Z\acute{u}$   $\bar{\eta}$   $l\grave{u}$ .  
3SG:PST+ offend:L 1SG SUB  
'He offended me'.

(171) Ó lîlá 
$$\bar{n}$$
 mà.

3SG:PST+ beat.up:L 1SG CONT

'He beated me up'.

(172) 
$$O$$
  $ml \circ \bar{g}$   $l\bar{o}$ .  
3SG:PST+ meet:L 1SG c 'He met me'.

(173) 
$$O$$
 dá  $\bar{\eta}$  ló.  
3SG:PST+ find 1SG SUPER  
'He found me'.

Of course, in some of those cases one can find metaphorical motivation for the particular postposition used, some of which even find analogs in better-known languages. For example, postposition *ló* selected by the verb *dǎ* 'to fall' when used in the sense of 'to find' has an exact equivalent in the Russian prefix *na*- in *najti* 'to find;' both *ló* and *na*- can be translated into English as *on*, and the Beng and the Russian expressions of 'to find' have similar literal meanings ('to fall on something' and 'to come/step on something'). In both cases the SUPER localization is motivated by the prototypical situation of finding a object on the ground, at the finder's feet. Postposition *lō* 'with' of the verb *mlɔ̃* 'to meet' is motivated by the symmetry of the roles of two participants of the meeting event, etc.

At least 30 Beng verbs select an indirect object that corresponds to a direct object in English, French, and Russian (4% among the 705 verb senses in my database).

There are also converse cases, where a direct object in Beng corresponds to an indirect object in European languages, compare:

(174) 
$$O$$
  $p\bar{s}$   $b\hat{g}$   $\bar{g}$   $m\hat{g}$ .  
3SG:PST+ thing touch:L 1SG CONT

'He touched me **with something**' (literally 'He touched some thing on me'), compare transitive French *toucher*, Russian *trogat*' etc.

(175) 
$$\bar{\mathcal{H}}$$
  $l\grave{o}$   $\acute{o}$   $\bar{\mathbf{y}}$   $s\grave{\varepsilon}$ .

1SG neck 3SG:PST+ 1SG ache:L

'My neck ached' (literally 'My neck ached me').

In contrast to the direct/indirect object, subjects of Beng verbs are almost always translated into English, French, or Russian as syntactic subjects. We observe that subjects are more cross-linguistically stable as compared to direct objects. This fact can be seen as an argument for greater semantic grounding of the notion of subject. In Aleksandr Kibrik's terminology (Kibrik 2004), the Principal hyperrole expressed by the subject is no less semantically motivated than the Patientive hyperrole marked as the direct object, despite the greater semantic abstractness of the former that raises understandable doubts in its existence (Testelec 2003: 33).

Non-locative postpositions  $n\hat{j}$ ,  $m\hat{a}$ ,  $l\bar{o}$ ,  $k\acute{u}m\grave{a}$ , and  $w\acute{o}$  ( $m\grave{a}$  and  $w\acute{o}$  also admit locative usages) are used in semantically transparent ways to form modifiers of sentences or indirect objects.

The postposition  $n_i$  has a general benefactive meaning:

- (177) *Tá* bā kló dō klū ŋ̄ nỵ̄.

  go earth little one dig 1sG BENEF
  'Go dig a bit of earth for me'.
- (178) Nrá báý nì klá-yà nò nì flɔɔ̄̄̄.

  1SG:ST+:go trap DEF set-GL 3PL BENEF tomorrow 'I am going to set traps for them tomorrow'.

As a spinoff of the benefactive meaning,  $n\hat{j}$  can mark the role of addressee:

(179) 
$$O$$
 zá bì lè pè mị nị.  
3SG:PST+ matter this DEF say 2SG BENEF  
'He told me about this matter'.

#### Denis Paperno

The addressee is encoded with the postposition  $n\underline{\hat{\imath}}$  with the following predicates (X in the examples strands for the NP variable):  $k\underline{\bar{\jmath}}l\hat{\imath}$   $d\check{\imath}$  X  $n\underline{\hat{\jmath}}$  'to express condolences to X',  $fl\acute{\imath}$  X  $n\underline{\hat{\jmath}}$  'to tell the truth to X',  $fb\hat{\imath}$  X  $n\underline{\hat{\jmath}}$  'to give advice to X',  $klb\bar{\imath}$   $b\hat{\imath}$  X  $n\underline{\hat{\jmath}}$  'to tell a secret to X' (literally 'to stick a nail to X'),  $l\bar{\imath}$  X  $n\underline{\hat{\jmath}}$  'to show X (something), to teach X (something), to introduce (someone) to X' etc. The only verb of speech that is not compatible with a  $n\underline{\hat{\jmath}}$ -marked addressee is the intransitive  $j\acute{o}$  'to talk' which requires postposition  $l\bar{o}$  'with' to mark the addressee.

The postposition  $l\bar{o}$  expresses the semantic role of instrument (132, 137), means (133, 135), comitative (134, 136) or manner (157):

- (180) Ŋ-ó drē wō-òló kpálé lō.

  1SG-ST+ work do-PROG hoe with 'I am working with a hoe'.
- (181) Ó  $\bar{\eta}$  bòyà mlě dō lō. 3SG:PST 1SG gift:L chicken one with 'He gave me a chicken'.
- (182) Dé ó yrā-lê mī lō? who ST+ be.located-RES 2SG with 'Who lives with you?'
- (183) Ŋ-ó nȳ ŋ̄ bèń nừ zô dǎ à lō.

  1SG:HAB+ come 1SG barn DEF mat fall 3SG with 'I will make **of it** a mat for my barn'.
- (184) Ŋó nự léý dùténéý pé lō.

  3PL:PST+ come:L child only just with 'They came with only one child'.
- (185)  $\eta \hat{a}$ tònòbí lō kā рŌÚ Ιè vé έ. ΖÌ jĚ ΖΙË 3PL:HAB- can pass car with 2PL field road **DEF** mouth NEG 'One can't drive a car on your field road'.

The postposition  $m\hat{a}$  competes with the benefactive  $n\hat{j}$  in addressee marking with several predicates:  $y\acute{e}$   $s\acute{u}\acute{a}$  'to pray',  $kl\bar{b}\bar{\eta}$   $b\acute{i}$  'to tell a secret',  $p\hat{j}m\acute{p}$  'to insist' etc. For example,  $m\hat{a}$  is interchangeable with  $n\hat{j}$  in the following sentence:

(186) O à  $kl\bar{j}\bar{\eta}$   $bi-n\bar{q}$   $\bar{\eta}$   $m\hat{g}$ .

3SG:PST+ 3SG nail stick-PRF 1SG CONT

'He told me about this as a secret'.

The postpositions  $w\acute{o}$  'in' and  $kl\bar{e}$  'behind, after' have temporal meanings besides the locative ones:

 $b a \bar{a} \dot{p} \ w o$  'during the dry season',  $k p \bar{a} n \bar{a} \ w o$  'in the third month of the traditional calendar',  $y i m \bar{j} \ l \dot{e} \ w o$  'in Ramadan' etc. Postposition w o can also mark the stimulus of the following reaction predicates:  $g b l \dot{e} \ X \ w o$  'to complain (to someone) about his action X',  $d \bar{o} \ X \ w o$  'to accept X',  $y \dot{e} \ k \dot{a} \ X \ w o$  'to discuss X',  $k \dot{o} \dot{n} \ b \bar{o} \ X \ w o$  'to take revenge for X',  $w \bar{e} \ X \ w o$  'to agree with X',  $y \bar{e} \ d \dot{a} \ X \ w o$  'to reply to (person) X'.

Lastly, the postposition kýmà marks the cause of a situation:

**12.2.6. NPs in postverbal position.** There are a few classes of non-locative NPs that can occur postverbally. One case is temporal nouns:

Another case is NPs with numerals (or sometimes bare numerals) which exhibit a special case of quantifier float where the whole quantified NP (QNP) is floated:

(190) 
$$\cancel{A}\cancel{\eta}$$
  $\cancel{n}\cancel{y}$   $\cancel{s}\cancel{\partial}\cancel{\eta}$   $\cancel{p}l\bar{a}\eta$ .  
1PL:PST+ come:L person two 'We came, the two of us'.

Often a floated quantified NP is accompanied by a personal pronoun of the non-subject series. The pronoun marks the person and number of the referent that the quantified NP describes:

(191) 
$$\cancel{A}\cancel{\eta}$$
  $\overrightarrow{a}$   $\overrightarrow{wo}$   $\overline{a}\cancel{\eta}$   $s\cancel{2}\cancel{\eta}$   $pl\overline{a}\cancel{\eta}$ .

1PL:PST+ 3SG do:L 1PL person two 'We did it, the two of us'.

In the absence of a pronoun the floated QNP is coreferent with the subject of a one-place predicate or the direct or indirect object of a transitive verb. (Speakers do not have an intuition on the interpretation of floated QNPs with the ditransitive verb 'to give': such examples do not seem to occur naturally and when presented with a constructed example, the speakers find it difficult to grasp its exact meaning.)

(192) 
$$\eta \dot{\phi}$$
  $z \dot{u}$   $k \bar{a}$   $l \dot{u}$   $p l \bar{a} \bar{\eta}$ .

3PL:PST+ offend 2PL SUB two

'They offended the two of you' (\*the two of them offended you).

Practically any NP with a numeral can be found in the floated QNP context, effectively binding one of the pronoun arguments of the verb. The grammatical number of the QNP is determined by the semantic definiteness of its referent (not by the formal marking as articles are typically absent from NPs with numerals): indefinite QNP are singular and require a singular pronoun, while definite QNPs are plural:

- (193)  $M\underline{i}$   $\dot{a}$   $y\dot{e}$   $l\acute{e}\acute{\eta}$   $\eta\bar{a}\bar{\eta}$ .

  2SG:PST+ 3SG have:L child three 'You had three children'.
- (194) Mí ŋò yè léŋ ŋāŋ.

  2SG:PST+ 3PL have:L child three

  'Your children were three in number'.

Besides the temporal NPs and QNP float, postverbal NPs include subjects of the verb  $g\bar{u}\hat{a}$  'to remain', which allows almost any NP to be used postverbally as the semantic subject, while the surface subject position is filled by the "expletive" 3sG pronoun:<sup>17</sup>

- (195) Ó ḡūà-nā̄ Kòlā̄. 3SG:PST+ remain-PRF Кола 'Kola remains'.
- **12.2.7.** Adverbs. Finally, the postverbal position hosts adverbs such as  $kp\hat{a}$  'a lot' or  $dr\hat{u}l\hat{\epsilon}i$  'in the morning':
- (196) Àbá wálé lè ó tó kpà. father yam DEF 3sG:PsT+ yield:L much 'My father's yam produced a great yield'.
- (197)  $\acute{\eta}$   $n\acute{y}$   $dr\acute{u}$ -lè $\acute{i}$ .

  1SG:PST+ come:L morning-TEMP

  'I came in the morning'.

<sup>&</sup>lt;sup>17</sup> An anonymous reviewer notes that in many West African languages, 'remain' is the only intransitive verb allowing for a construction with an inverted subject and an expletive 3rd person pronoun in the canonical subject position. So the construction with postverbal subjects of 'remain' seems to be an areal syntactic feature.

#### 12.3. Word order in verbal sentences

Beng has a strict Subject Object Verb order. Other constituents follow the verb. Their relative order is in turn subject to constraints.

The secondary object (theme in the ditransitive construction) cannot be separated from the verb by any constituent:

'He gave me fufu yesterday'. (198b) is acceptable only in the reading 'He gave me yesterday's fufu' where *gblē* 'yesterday' modifies *wápló* 'fufu').

Other elements that can't be separated from the verb include nominal predicates and indirect objects with a postposition selected by the verb, for example:

(199a) 
$$\grave{O}$$
  $\grave{v}$   $\grave{v}$   $\grave{w}$   $\acute{a}$   $p$   $\acute{b}$   $\acute{b}$ 

Indirect objects that are not idiosyncratically selected by the verb can be separated. Separability correlates with the traditional argument vs. adjunct distinction but the real factor seems to be not the semantic obligatoriness of the participant, compare examples (201-202), but whether the postposition has its own sematic contribution or is syntactically selected by the verb.

(201a) Ó à pè gblē 
$$\bar{\eta}$$
 nì.

3SG:PST+ 3SG say:L yesterday 1SG BENEF
'He told this to me yesterday'.

- (201b) O à  $p\hat{e}$   $\bar{n}$   $n\hat{l}$   $gbl\bar{e}$ .

  3SG:PST+ 3SG say:L 1SG BENEF yesterday

  'He told this to me yesterday'.
- (202a)  $\acute{O}$   $k\grave{\partial}\mathring{\eta}$   $b\grave{\partial}$   $[\bar{\eta}$   $l\bar{o}]$   $[\grave{a}$   $w\acute{o}]$ . 3SG:PST+ nail take.out:L 1SG with 3SG IN 'He took revenge **for this** with me'.
- (202b)  $\acute{O}$   $k\grave{\partial}\mathring{\eta}$   $b\grave{\partial}$   $[\grave{a}$   $w\acute{o}]$   $[\bar{\eta}$   $l\bar{o}]$ . 3SG:PST+ nail take.out:L 3SG IN 1SG with 'He took revenge **for this** with me'.

Another restriction on modifier ordering is that temporal modifiers never precede locative ones:

- (203a) Ó zrá nō gblē.

  3SG:PST+ get.lost:L here yesterday
  'He got lost here yesterday'.
- (203b) \*Ó zrá gblē nō. 3SG:PST+ get.lost:L yesterday here

The relative order of both temporal and locative modifiers with respect to other sentential adjuncts is free:

- (204a) Ó zrá mī kýmà nō.

  3SG:PST+ get.lost:L 2SG because.of here 'He got lost here because of you'.
- (204b) Ó zrá nō mī kýmà.

  3SG:PST+ get.lost:L here 2SG because.of 'He got lost here because of you'.
- (205a) Ó zrá mī kýmà gblē.

  3SG:PST+ get.lost:L 2SG because.of yesterday
  'He got lost here yesterday because of you'.
- (205b) Ó zrá gblē mī kýmà.

  3SG:PST+ get.lost:L yesterday 2SG because.of 'He got lost here yesterday because of you'.

Complement and goal clauses (see 13.1) are always clause-final, although I was able to elicit marginally acceptable examples with a sentential modifier after such an embedded clause:

However, embedded clauses always precede the negative particle  $\acute{\epsilon}$  that occupies the ultimate rightmost position in the clause, as in (207):

(207) 
$$W\hat{a}$$
  $p\hat{e}$   $[k\bar{e}$   $m\hat{\jmath}$   $n\hat{\jmath}]$   $\hat{\xi}$ .  
3SG:PST-3 say:L that 2SG:PST+ come:L NEG  
'He didn't say that you had come'.

To summarize, the constituent order in simple clause is as follows:

Subject + direct object + verb + secondary object / nominal predicate / strongly selected postpositional phrase + modifiers + embedded clauses + negation.

# 12.4. Types of verbless clauses

- 12.4.1. Identity (presentative) statement. Identity statement has the structure NP + particle  $\hat{\varepsilon}$  ( $n\underline{\hat{\iota}}$  in negative sentences) 'this is',  $k\acute{a}$   $\hat{\varepsilon}$  'here is',  $p\underline{\bar{\varepsilon}}\hat{\varepsilon}$  'now that's'. Examples:
- (208)  $\bar{\mathcal{D}}$   $d\bar{e}$   $\hat{\epsilon}$ .

  1SG father this is "This is my father".
- (209)  $M\bar{a}\bar{\eta}$   $\hat{\xi}$ . 1SG:EMPH this.is 'This is me'.

With the addition of a second NP, such clauses become statements of reference identity or express nominal predication, compare:

- (210) [Léŋ gōŋ yāá] [sòŋ jàté-lí béē dō] è.

  child man this person respect-AG big one this.is

  'This boy is very polite' (literally: 'This boy is a big respecter of people').
- **12.4.2. Adverbial clause.** Aderbial clauses employ NP subjects doubled with stative pronouns or stative markers, followed by an adverbial predicate: a locative phrase, an adverb phrase, a postpositional phrase, or an NP headed by an adverbial noun. Examples:

- (211)  $M\bar{\jmath}$ - $\acute{o}$   $gb\grave{o}y\bar{o}$   $l\grave{\epsilon}$   $w\acute{o}$ . 2SG-ST+ garden DEF IN 'You (singular) are in the garden'.
- (212) Kā-ā nō £.

  2PL-ST- here NEG
  'You (plural) are not here'.
- (213)  $\bar{A}\eta$ - $\delta$  which will write with  $\bar{A}\eta$ - $\delta$  which will write  $\bar{A}\eta$ - $\delta$  which will  $\bar{A}\eta$ - $\delta$  which will write  $\bar{A}\eta$ - $\delta$  which will  $\bar{A}\eta$ - $\delta$  which will
- (214)  $\mathcal{D}$ - $\acute{o}$   $\grave{a}$   $l\bar{o}$ .

  1SG-ST+ 3SG with 'I am with him'.
- **12.4.3. Existential statements.** Existential statements consist of the subject NP or a pronoun of the existential series, followed by particle  $w\acute{e}$  ( $w\bar{a}$  under negation):
- (215a) Whù wé heat exist 'It is hot'.
- (215b)  $Wl\dot{u}$   $w\bar{a}$   $\acute{\varepsilon}$  heat exist.NEG NEG 'It is not hot'.

A distinctive series of subject pronouns is used in existential statements, compare:

- (216) *Mā̄ŋ̄ wé.* 1SG:EX exist 'I exist'.
- (217)  $M\bar{t}$  wé. 2SG:Ex exist 'You exist'.
- (218)  $\dot{O}$  wé. 3SG:EX exist 'S/he exists'.

When it is necessary to use an adverbial constituent restricting the domain of existential quanification in a statement of existence, an adverbial clause is used, e.g.

(219)  $P\bar{5}$   $v\bar{g}$ - $l\hat{\epsilon}$   $d\bar{o}$   $\delta$   $n\bar{g}$ . thing rot-NMLZ one ST+ here 'There is something rotten here'.

Notably, the same pronouns are used under negation:

- (220)  $M\bar{q}\bar{\eta}$   $w\bar{a}$   $\acute{\varepsilon}$ . 1SG:EX exist.NEG NEG 'I do not exist'.
- (221)  $M\bar{l}$   $w\bar{a}$   $\acute{\varepsilon}$ . 2SG:EX exist.NEG NEG 'You do not exist'.
- (222)  $\grave{O}$   $w\bar{a}$   $\acute{\varepsilon}$ .

  3SG:EX exist.NEG NEG 'S/he does not exist'.
- **12.4.4. Adjectival statements.** Adjectives can be used predicatively, combining with subject NPs or subject pronouns; an optional modifier specific to this clause type is comparison reference, discussed below. Examples:
- (223a)  $\dot{O}$   $g\bar{e}\bar{\eta}$ . 3SG:HAB+ beautiful 'It is good'.
- (223b)  $W\hat{a}$ - $\bar{a}$   $g\bar{e}\bar{\eta}$   $\not{e}$ . 3SG-ST- beautiful NEG 'It is not good'.

Some words can be predicates in structures of this type but are not admitted to modify nouns. I call such words predicative adjectives:

- (224a) Mì jàà!
  2SG crazy
  'You are crazy!'
- (224b) \*gōŋ̄ jàà dō man crazy one (intended: 'a crazy man')

Indirect object with predicative adjectives introduces the reference of comparison. It is marked with postposition *mà*.

(225) Àságbě béē Gbágbě mà.

Ouassadougou big Moussobadougou CONT
'Ouassadougou is bigger than Moussobadougou'.

With the adjective  $gbl\bar{\varrho}\bar{\eta}$  'tall' the reference of comparison can also take postposition *ló*:

- (226) Làŋzè, mì gblēn Bēyā ló.

  Lanze 2SG:HAB+ tall Beyan SUPER

  'Lanze, you are taller than Beyan'.
- 12.4.5. WH question. Beng interrogative words usually occur *in situ*, but there is also a sentence type that provides an analog of wh fronting in the sense that the interrogative constituent takes the first position. Such wh clauses consist of a wh constituent accompanied by an optional relative clause. One could interpret such examples as instances of wh movement outside of the relative clause, but then for uniformity one should also accept that head nouns are always extracted from relative clauses that modify them. The head-internal analysis for all relative clauses has indeed been proposed on independent grounds (Kayne 1994), but has yet to earn wide acceptance. Here are two examples of wh-questions:
- (227) Pś [fɛ̄ ó sró dóbǎ lō āŋ̄ klɛ̄ wó nō̄ náj]? what Rel 3SG:PST+ exit:L monkey with 1PL land IN here TOP 'What happened to the monkey in this land?'

The exact same meaning can be expressed with wh-words *in situ*, in ordinary nominal or adverbial positions:

- (229) Dé ó ŋ wálé klùà?
  who 3sG:Pst+ 1sG yam steal:L
  'Who stole my yam?'
- (230) Kà yí yè má?

  2PL:HAB+ water see:L where

  'Where do you find water?' (literally. 'you find water where?')

The special type of wh sentence must have originated in Beng as a result of interference with other languages. Compare the structure of wh questions in Baule, a language that many Beng actively use (quoted from (Creissels, Kouadio 1977: 227)):

(231) Wān yé ớ bā-lī ò?
who CNS 3SG come-PRF CNS
'Who came?'

# 13. Complex sentences

### 13.1. Postverbal embedded clauses

This chapter describes various types of complex sentences attested in Beng. Two types of subordinate clauses, complement and goal clauses, can be properly embedded inside another clause in a postverbal position inside the main clause, while temporal and conditional clauses occupy a position before the main clause.

**13.1.1. Complement clauses.** Complement clauses are marked by comlementizers  $k\bar{e}$ ,  $k\bar{e}s\acute{g}$ ,  $s\acute{g}$  and  $s\^{g}$ , which appear to be mutually interchangeable. Often, the complement clause is coreferent with a 3SG pronoun in an argument position in the same clause:

(232)  $\acute{\mathcal{H}}$   $\grave{a}$   $p\grave{e}$   $k\bar{e}$   $m\acute{g}$   $n\hat{g}$ .

1SG:PST+ 3SG say:L that 2SG:PST+ come:L

'I said that you had come' (literally 'I said **it** that you came').

(233)  $\partial - \delta$   $\bar{\eta}$   $n\hat{\chi}$   $k\bar{e}$   $m\hat{\chi}$   $n\bar{\chi}$ .

3SG-ST+ 1SG BENEF that 2SG:HAB+ come

'I want you to come' (literally 'It's for me that you come').

Such Beng sentences with complement clauses are reminiscent of the English sentences with embedded clause extraposition, and the 3sG pronoun seems analogous to the dummy *it* in English. The pronoun is not always present in sentences with complement clauses, but only when required by the argument structure of the main predicate. For instance, the verb 'to say' as in (232) is transitive, and requires the direct object position to be filled in, and the subject position is obligatory in the volitive construction in (233). In contrast, the intransitive verb *wé* 'to reply' does not select for a direct or indirect object with the semantic role of content of response, and it combines with a complement clause without any 'dummy' pronoun present:

(234)  $\acute{O}$   $w\acute{e}$   $k\bar{e}$   $\grave{a}$   $n\acute{y}$   $\acute{e}$ .

3SG:PST+ reply that 3SG:PST- come:L NEG

'He replies that he wasn't coming'.

### Denis Paperno

Furthermore, complement clauses can combine with arbitrary verbs, adding the speech component to the sentence meaning regardless of whether the main verb has anything to do with speech:

(235)  $\acute{O}$   $\acute{b}\acute{e}$   $\acute{k}\bar{e}$   $\acute{o}$   $ml\bar{\varrho}$   $y\bar{e}$ - $n\bar{a}$ . 3SG:PST+ run:L that 3SG:PST+ snake see-PRF

'He was running saying that he had just seen a snake' (literally: 'He ran that he has seen a snake').

- 13.1.2. Goal clauses. The main strategy of marking goal clauses uses complementizer  $n\hat{a}$  followed by a clause in optative mood:
- (236)  $Zr\bar{y}\acute{a}$   $n\grave{a}$   $m\grave{y}$   $gb\bar{o}$   $p\acute{i}$ .

  hunker for to 2sG:HAB+ feces excrete 'Hunker down in order to defecate'.

'I am looking for someone to read me this letter'.

(238) Ŋ-ó ŋùệ dǎ nà sòn bì-lè ò gā.

1SG-ST+ fetish fall for.to person this-DEF 3SG:HAB+ die
'I will pray the fetish for this person to die'.

Complementizer  $n\hat{a}$  can be omitted if the subject or the direct object of the matrix clause is coreferent to one of the participants of the goal situation:

- (239)  $\hat{D}_{i}$ kpè-pś 1ù Ιέή ḡj̄ŋ̄ 1s<sub>G</sub> 1sg:Pst+ play-Mns buy:L child man nì (nà)  $dr\bar{\varepsilon}$ wō mīdàlέ lō.  $\hat{\eta}_i$ **BENEF** 1sg:Hab+ work do for.to calmness with 'I bought my son toys in order to work undisturbed'.
- $(240) \hat{\eta}$ 1ù  $k \acute{o} p \acute{\varepsilon}_{i}$ ŋ lέή gŌŊ 1sg:Pst+ hoe buy:L 1s<sub>G</sub> child man (nà) ò  $dr\bar{arepsilon}$ nì WŌ  $\hat{a}_i$ lō. **BENEF** for to 3SG:HAB+ work do 3sg with 'I bought my son a hoe to work with'.

When such coreference does not hold, the complementizer is obligatory, compare (241) where the subject of the goal clause is not coreferent to the subject or the direct object of the matrix clause but to the indirect object:

(241) 
$$\not \hat{I}$$
  $k \acute{o} p \acute{e}$   $l \grave{u}$   $\bar{\eta}$   $l \acute{e} \acute{\eta}$   $g \bar{o} \bar{\eta}$ 

1SG:PST+ hoe buy:L 1SG child man

 $n \grave{l}$   $n \grave{a} / * \emptyset \ \grave{o}$   $d r \bar{e}$   $w \bar{o}$ 

BENEF for to 3SG:HAB+ work do

Sometimes, the goal semantics is expressed with the complementizer  $k\bar{e}$  followed by a sentence in optative mood, but it has an additional semantic component in addition to the goal.  $k\bar{e}$  is only compatible with a verbalized goal:

(242) 
$$\not$$
  $\not$   $j$   $k \acute{o} p \acute{e}$   $l \grave{u}$   $\bar{n}$   $l \acute{e} \acute{n}$   $g \bar{o} \bar{n}$ 

1SG:PST+ hoe buy:L 1SG child man

 $n \grave{u}$   $k \bar{e}$   $\grave{o}$   $d r \bar{e}$   $w \bar{o}$   $\grave{a}$   $l \bar{o}$ .

BENEF that 3SG:HAB+ work do 3SG with

Essentially, this goal usage of  $k\bar{e}$  is a special case of its function, described in 13.1.1, of adding the speech component to the meaning of the sentence. The goal semantics in this case is just a pragmatic consequence of the optative.

# 13.2. Ways of encoding clausal arguments

Strategies of encoding clausal arguments include:

- complement clause with  $k\bar{e}/s\hat{a}/k\bar{e}s\hat{a}$ , with various matrix predicates:
- (243)  $\hat{O}$ - $\hat{o}$ рò kē mì пū. 3sg-St+ necessary that 2sg:Hab+ come[Bsq]

'You have to come'. (literally 'It is necessary that you come'.)

- nominalization is used in NP positions:
- (245)  $M\bar{\varepsilon}$ [mī vōŋ dō-lè] mà begin 2sG hole build-NMLZ CONT 'Start to dig your yam field!'

<sup>&#</sup>x27;I bought my son a hoe in order for him to work'.

<sup>&#</sup>x27;I bought my son a hoe (saying) that he should work with it'.

- subordinate clauses with the goal complementizer  $n\hat{g}$  or often asyndetical are used with predicates of causation:
- (247) À túà [ŋò drē wō].

  3SG leave 3PL:HAB+ work do

  'Make them work!'
- (248) O  $m\bar{l}$   $gbl\dot{e}$   $[n\dot{g}$   $\dot{\eta}$   $t\acute{a}$   $m\bar{l}$   $l\bar{o}]$ .

  3SG:PST+ 2SG force:L for to 1SG:HAB+ go 2SG with 'He forced you to go with me'.
  - verb phrases with verbs in the base form are used with the verb zī 'can':
- (249) Mà zì yātró flóō é.

  1SG:HAB- can:L sit[BSQ] today NEG
  'I cannot sit today'.

#### 13.3. Serial construction

Beng has a very limited instantiation of the serial construction in the form of " $n\bar{y}$  or  $t\acute{a}$  + verb phrase". The verb  $n\bar{y}$  'to come' or  $t\acute{a}$  'to go' has the same morphological form as the second verb:

(250) 
$$\acute{O}$$
 tá à wò.  
3SG:PST+ go:L 3SG do:L  
'He went and did it'.

Another constraint on the serial construction is that it is used only in those TAM values where the verbs are not marked by suffixes: in the preterite, the habitual, the optative, and the conditional; so the two verbs not only have identical form but the form is suffixless. In other TAM constructions (perfect, progressive, stative, and future) a goal converb (see 13.4) of the second verb is used instead of the serial construction with identical verb forms:

(251) 
$$\acute{O}$$
  $t\acute{a}$ - $n\bar{g}$   $dr\bar{e}$  \* $w\bar{o}$ - $n\bar{g}$  /\* $w\bar{o}$  /  $o^{K}w\bar{o}$ - $y\grave{a}$ .

3SG:PST+ go-PRF work do-PRF do[BSQ] do-GL

'He went and worked / He went to work'.

#### 13.4. Converb constructions

A goal converb can depend on three verbs: with  $t\acute{a}$  'to go' and  $n\bar{y}$  'to come' it describes the goal of movement; with  $b\bar{z}$  'to come from' it depicts the subject's activity at the point of departure:

(252a) 
$$\not$$
  $\not$   $n\acute{y}$   $dr\grave{u}$ - $y\^{a}$ .

1SG:PST+ come:L walk-GL

'I came to walk'.

The goal converb cannot be separated from the motion verb by any constituent, behaving as a typical argument, rather than a modifier (see 12.2; compare (Gusev 2004)).

As mentioned in 6.2, the locative nominalization in *-ya* can be used to express action simultaneity, although this usage is rare:

# 13.5. Temporal and conditional clauses

This section describes subordinate clauses that precede the main clause and are structurally outside of it. Goal and complement clauses that are embedded inside the main clause have aleady been characterized; interestingly, the preposed vs. embedded subordinate clauses are marked with two distinct positional classes of complementizers. Embedded clauses (such as goal clauses) have a complementizer on the left edge; preposed subordinate clauses have a complementizer on the right edge. The distinction follows the predictions of J. Hawkins' theory of word order whereby the head of a subordinate constituent should gravitate towards linear proximity to the head of the superordinate phrase (Hawkins 1990).

13.5.1. Temporal clause: the topic construction. It is noteworthy that two common constructions (not counting juxtaposition) that express temporal relations between clauses are marked exacly like information structure relations of topic and focus. The main temporal complementizer is  $n\acute{a}$ , identical to the topic marker:

(255) Gbờŋ ó tá pōú ná ó zrá kléń nì wó. Gbong 3sg:Pst+ go field Top 3sg:Pst+ get.lost forest Def IN

'Gbong went to the field and got lost in the forest' (literally: 'When Gbong went to the field, he got lost in the forest'. Beng's fields are often located quite far from their villages, and there are even special temporary settlements for people working in those remote fields.)

(256)  $\acute{\eta}$   $n\acute{y}$   $n\acute{g}$   $\acute{\eta}$   $zr\^{o}$ .

1SG:PST+ come:L TOP 1SG:PST+ wash:L

'I came and washed' (literally: 'When I came, I washed').

The selection of TAM values in the main clause (after  $n\underline{a}$ ) follows general TAM semantics. TAM marking in the embedded clause adheres to special rules. If the situation of the subordinate clause precedes that of the main clause, as in (256), the preterite construction is used in the subordinate clause. Simultaneity of the two situations is marked in the subordinate clause by the future (sic!) construction, which has in this case progressive interpretation, or with a semantically appropriate construction with default present time reference (stative, adverbial clause, etc.). Clearly, this usage of the future construction reflects the fact that the future construction historically had a progressive meaning, even though it was replaced in the core progressive contexts by a newly grammaticized form in *-leló*, and was only retained in subordinate contexts and as a future form. Compare (255) and (257a):

(257a) Gbờỳ ò-ó tá pōú ná ó zrá kléý nì wó. Gbong 3SG-ST+ go field Top 3SG:PST+ get.lost forest DEF IN 'Gbong got lost when he was going to the field'.

(257b) 
$$\eta$$
- $\delta$  klóó ná,  $\eta$  dā  $\delta$ 
1SG-ST+ little TOP 1SG mother 3SG:HAB+

gbéné lè  $z$  fé  $d$  dōdō.

manioc DEF pound day some

'When I was little my mother would pound manioc sometimes'.

Finally, conditional mood is used in the sense of habitual aspect:

(258) Gbởỳ ô tá pōú ná ò zrà kléý nì wó.

Gbong 3sG:CND+ go field Top 3sG:HAB+ get.lost:L forest DEF IN

'When Gbong goes to the field he usually gets lost in the forest'.

Particle  $f_{\overline{\xi}}$  when added to a temporal clause gives it a conditional flavor, which can be expressed in English with the complementizer *since*:

(259) 
$$[F\bar{\xi} \ \bar{a} \ p\hat{e} \ w\hat{a}-\bar{a} \ t\acute{a} \ \acute{\epsilon} \ n\acute{a}], \ d\acute{e}$$
Rel 3SG:PST+3 say:L 3SG-ST- go NEG TOP who

 $\acute{o} \ bl\bar{b}$   $n\grave{a} \ \grave{o} \ \hat{a} \ b\bar{\epsilon} \ sr\acute{a} \ \bar{\epsilon}?$ 
ST+ here for to 3SG:HAB+ 3SG trace take FOC

'Since he said he's not going, who's here to replace him?'

13.5.2. Temporal subordinate clause: the focus construction. Temporal sequence of two clauses can also be marked by a special construction marked in the same way as the focus contruction: clause  $A + p\bar{\xi} + \text{clause } C + \bar{\epsilon}$ , meaning 'A, then C'. Example:

(260) [Ŋó kpậń nỳỳ ŋò srà] 
$$n\bar{\varepsilon}$$
3PL:PST whip PL 3PL take:L FOC

[ŋó ný ậŋmô mè kpậ]  $\bar{\varepsilon}$ .
3PL:PST+ come:L hyena beat:L much FOC

'They took whips and then came and beat the hyena hard'.

13.5.3. Conditional clause. The structure of conditional clauses is protasis + conditional complementizer + apodosis. There are two conditional complementizers,  $d\hat{\epsilon}\bar{\epsilon}$ , used with protasis in affirmative polarity and  $n\bar{t}$ , used with negated protasis. Before the protasis one can also find an optional marker  $f\bar{\epsilon}$  or  $\partial d\bar{b} k\bar{e}$ , literally 'let it be set that...'

TAM marking in the apodosis follows the general semantics of TAM. Protasis exhibits some special rules of TAM marking:

• in case of a condition in the past or present that the speaker believes can be true ('real conditional'), the same TAM constructions are used as in independent clauses:

(261) 
$$F\bar{\xi}$$
  $w\check{a}$   $ml\acute{g}$   $\grave{a}$   $l\bar{o}$   $\acute{\epsilon}$   $n\bar{\jmath}$ 
Rel 3SG:PST- meet:L 3SG with NEG if.NEG

 $w\grave{a}$ - $\bar{a}$   $\grave{a}$   $jr\acute{\epsilon}\acute{\eta}$   $d\bar{\jmath}$ - $l\grave{\epsilon}$   $\acute{\epsilon}$ .

3SG-ST- 3SG enough know-RES NEG

'If he didn't meet her he doesn't know much' (the protasis exhibits regular preterite construction);

• in case of a condition in the future or a habitual condition without concrete time reference ('potential conditional'), protasis is marked with conditional mood (or more rarely with the appropriate indicative TAM constructions, future or habitual):

(262a) 
$$F\bar{\xi}$$
  $\hat{o}$  srŏ  $d\epsilon\bar{\epsilon}$   $\eta\delta$   $n\bar{\mu}$   $gb\hat{o}$ .  
Rel 3sG:CND arrive if 1sG-ST+ come also

'If he comes I am coming too'.

(262b) 
$$M\hat{j}$$
  $g\bar{o}$   $s\hat{j}\hat{\eta}$   $m\hat{g}$   $d\hat{e}\bar{e}$   $\hat{E}c\hat{i}$   $\hat{e}$   $\hat{o}$   $m\bar{j}$   $y\bar{e}-l\hat{e}$ .

2SG:CND hide person CONT if sky DEF ST+ 2SG see-RES 'If you hide from people, God still sees you;'

• in case of a condition that the speaker believes to be false (counterfactual condition), protasis is marked with optative mood when referring to past events, or appropriate indicative forms when referring to the present. Besides TAM, counterfactual conditionals are obligatorily marked with particle  $\eta g \delta$  after the conditional complementizer (this particle can also optionally appear with potential future conditions that only possibly can be false). Example:

'If I had bought cold water, I wouldn't have money anymore'.

(protasis is marked with optative mood expressed by a combination of a habitual subject pronoun with the base form of the verb).

### 13.6. Relative clause

Discussion in this section follows (Paperno 2008b), omitting the relativizing function of nominalizations that have been briefly characterized in sections 6.2, 6.3, 6.6, and 6.7.

13.6.1. Head-external relative construction. Relative clauses are marked with the combination of a preposed particle  $f_{\overline{e}}$  (which can also be thought of as a relative determiner, see 13.6.2 for arguments to this effect) and a postposed marker  $n_{\underline{a}}$  that equals the topic marker. The  $n_{\underline{a}}$  element can be omitted before a pause, and is always omitted before another  $n_{\underline{a}}$  marker in the topic-marking function. The relativized position in the relative clause is filled by a resumptive pronoun that agrees in person and number with the head NP if a pronoun is possible in the given position or left empty otherwise. Rarely, when the noun phrase is topicalized and separated by a pause, the complementizer can, but does not have to, be omitted (264b).

As mentioned above, the most common complementizer in relative clauses is  $n\acute{a}$ . Relative clauses can also employ a conditional complementizer  $d\acute{e}\vec{\epsilon}/n\bar{\jmath}$  ( $d\acute{e}\vec{\epsilon}$  occurs after affirmative conditional clauses and  $n\bar{\jmath}$  after negative conditional clauses). Relative clauses with the conditional ( $d\acute{e}\vec{\epsilon}$ ) differ in meaning from the main type of relative clauses (with  $n\acute{a}$ ) and include a conditional element in their semantics (246d). Unlike in relative clauses with  $n\acute{a}$ , the statement expressed by a relative clause with a

conditional is not presupposed to be true. Relative clauses with  $d\hat{\epsilon}\bar{\epsilon}$  (examples 264d,e) can be roughly rendered in English using words whenever, whichever, etc. All of the following examples come from real texts; all of them feature topicalization of the whole relative construction.

The conditional construction can be used to modify a noun with reference to a future event (264e), even when there is no sense of uncertainty as to whether this event will happen (uncertainty as to whether condition would hold seems to be a common meaning element of English conditionals). Compare (264e) to an analogous example but with a past event in the relative clause (264f), and no conditionality involved (the relative clause is presupposed true);  $n\acute{a}$  is used in this case. Examples:

- (264a) Ó blànâ [fɛ̄ ŋó à klà Kùàsí dí ná] klùà.

  3SG:PST+ banana Rel 3SG:PST+ 3SG put Kouassi APUD TOP steal:L

  'He stole the banana that had been put next to Kouassi'.
- (264b)  $Zr\ddot{\varepsilon}$   $[f\bar{\xi}$   $m\bar{g}$ - $\acute{o}$   $\grave{a}$   $y\acute{e}]_i$   $m\grave{g}$   $m\bar{g}$   $[zr\ddot{\varepsilon}$   $b\grave{i}$ - $\grave{\varepsilon}]_i$   $y\bar{a}$ . way Rel 2SG-ST+ 3SG on 2SG:HAB+ 2SG way this-DEF walk 'Walk on the way you're standing on'.
- (264c)  $\bar{D}$  bábá nỳ  $\hat{D}$  [tế mị nò dè ná], nmã nò yò.

  1SG sheep PL Rel 2SG:PST+ 3PL kill:L TOP 1SG:give 3PL other 'Give me the replacement for the sheep you killed'.
- (264d)  $P\bar{5}b\bar{\epsilon}$  [ $f\bar{\xi}$  ŏ  $y\bar{o}n\acute{o}$   $d\acute{\epsilon}\bar{\epsilon}$ ]  $w\grave{a}$   $z\grave{i}n$   $g\bar{o}$   $\acute{\epsilon}$ . scar Rel 3sG:ST+ forehead if 3sG:HAB- can:L hide NEG 'You can't hide a scar on your forehead' (literally: 'Whichever scar is on a forehead, it can't be hidden').
- bàāŋáníńyé (264e) Yrámà [fɛ̃ Ιè ô рź Rel end.of.rain.season DEF time 3sg:CND come dέĒ], wálé lè wà mì gá. if 3sg:Hab- 2sg:Hab+ yam DEF pick

'When the rain season ends, gather yams' (literally: 'whenever there's end of the rain season, gather yams').

(264f) *Gblē*  $/far{arepsilon}$ zīē cà yä ló wē vesterday Rel 1sg:Pst+ kapok this there look on dóbà SÍŊ ná] ń dō vè wē. 1sg:Pst+ monkey one see:L there closely TOP

- 13.6.2. Head-internal  $f\bar{\epsilon}$ -construction with  $d\epsilon\bar{\epsilon}$  and other arguments for treating  $f\bar{\epsilon}$ -constructions as originally head-internal. Some properties of  $f\bar{\epsilon}$  suggest that it is not simply a relative clause marker but a relative determiner. For instance, before  $f\bar{\epsilon}$ , the definite article  $l\hat{\epsilon}$  is blocked. After a demonstrative,  $l\hat{\epsilon}$  is generally required, but  $l\hat{\epsilon}$  is absent in the presence of a relative clause, cf. (265a) vs. (265b).
- (265a)  $[P\bar{5} \quad b\hat{i} \quad f\bar{\xi} \quad m\underline{i} \quad \hat{a} \quad l\hat{u} \quad n\underline{a}]_{NP}$ ,  $w\hat{a}-\bar{a} \quad g\bar{e}\bar{\eta} \quad \acute{\epsilon}$ . thing this Rel 2sG:PsT+ 3sG buy:L ToP 3sG-ST- good NeG 'This thing that you bought, it is not pretty'.
- (265b)  $P\bar{5}$   $b\hat{i}$  \*( $l\hat{\epsilon}$ )  $w\hat{a}$ - $\bar{a}$   $g\bar{\epsilon}\bar{\eta}$   $\hat{\epsilon}$ . thing this DEF 3SG-ST- good NEG 'This thing is not pretty'.

The interaction of  $f_{\overline{e}}$ -relativization with the expression of the definite article can be explained if  $f_{\overline{e}}$  is, at least historically, a determiner occupying the same position as the article  $l\hat{e}$ . And  $f_{\overline{e}}$  does occupy the position of a determiner (after the head noun) in a rare variant of the relativization construction with  $d\hat{e}_{\overline{e}}$ , in which a head NP with  $f_{\overline{e}}$  is found within the relative clause (such constructions are head internal):

- (265c)  $[\hat{O} \quad [p\bar{5} \quad f\bar{\xi}]_{NP} \quad sr\acute{a} \quad d\acute{\epsilon}\bar{\epsilon}] \quad w\grave{a} \quad kl\grave{a} \quad \grave{a} \quad b\bar{\epsilon}l\acute{o} \quad \acute{\epsilon}.$  3SG:CND thing Rel take if 3SG:HAB- put:L 3SG place NEG 'He doesn't put things where they belong' (literally: 'whatever thing he takes, he doesn't put it in its place').
- (265d)  $[T\bar{\jmath} \quad w\bar{a} \quad [s\hat{\jmath}\hat{\eta} \quad f\bar{\xi}]_{NP} \quad m\hat{a} \quad \acute{\xi} \quad n\bar{\jmath}]$  curse ST- person Rel on NEG if  $yr\hat{o}b\acute{t}t\grave{a} \quad w\grave{a} \quad s\hat{o}b\grave{i} \quad \acute{\epsilon}$ . water.snake 3sG:HAB-3 bite:L NEG

'If there's no curse on a person, a water snake won't bite him' (literally: 'If a curse is not on whichever person...').

'One doesn't defecate in the village one is moving from' (literally: 'whatever village you are moving from ...').

These examples suggest that even when the head noun is outside the relative clause,  $f\bar{\varepsilon}$  might still be a determiner of the head NP.

Another instance of head internal relativization can be seen in relative clauses with presentative markers like  $\hat{\epsilon}$  'this is':

(265f)  $[[p\bar{5} \ f\bar{\xi}]_{NP} \ \hat{\epsilon} \ n\underline{\acute{a}}]_{Reh}$ ,  $w\hat{a}$ - $\bar{a}$   $p\bar{5}$   $b\hat{\imath}$ - $l\hat{\epsilon}$   $d\bar{\jmath}$ - $l\hat{\epsilon}$   $\hat{\epsilon}$  thing Rel this is Top 3sG-ST- thing this-Def know-Res NeG 'This thing (lit. the thing that this is), he doesn't know this thing'.

Since  $\hat{\epsilon}$  cannot function as a full sentence on its own, we have to assign this relative clause a structure where the head noun is its subject. This construction is essentially idiomatic, functioning as a complex demonstrative. Such demonstrative relativizations form a closed class, so they could be treated as lexicalized relics of head-internal  $f\bar{\epsilon}$ -relativization.

An additional piece of evidence comes from topicalization of phrases modified by relative clauses. Such topicalized phrases are never accompanied by an additional topic marker  $(n \underline{\acute{a}})$ , to which the complementizer  $n \underline{\acute{a}}$  at the end of relative clauses is phonologically identical. The topic marker  $n \underline{\acute{a}}$  can often be omitted, but it is usually present in topicalization of adverbial elements (265h). However, such a topic marker is not introduced if the topicalized adverbial is modified by a relative clause, compare (265g) vs. (265h). Topic markers are not used after relative clauses with the complementizer  $d \epsilon \bar{\epsilon}$ , either, compare (265i) vs. (265j).

(265h)  $[Fl \not 5 j]_{NP}$   $n \not a$ ,  $\bar{n}$   $v \bar{l} = 1$   $\hat{\epsilon}$ . today Top 1sg love-Ag this.is

'Today when I have her daughter she is my friend'.

'Today she is my friend'.

- (265i)  $[F\not\in d\bar{o}]_{NP}$   $n\not\in m\bar{g}$   $n\not\in a$   $i\bar{o}$   $k\grave{a}$   $bl\grave{e}$   $m\hat{g}\acute{\eta}$ . day one ToP 2sG and 3sG with 2sG:HAB+ agree:L again 'Some day you and she agree again'.
- à tètè ó à à vúó (265i) /F\varepsilon  $f\bar{\varepsilon}$ bō Rel 3sg self 3sg:CND+ 3sg mouth day take 3sg kē mã SÍ пā  $d\hat{\varepsilon}\bar{\varepsilon}|_{Rel}|_{NP}$ that 1sg:Pst+3 take Perf if

#### Denis Paperno

'The day she (mother-in-law) says "I took her (your wife) away", will you and she agree again?'

The facts outlined above can be given a straightforward interpretation: the relativization marker  $f_{\overline{\xi}}$  is, at least historically, a determiner; the most widespread relativization strategy features an extraction of the NP with  $f_{\overline{\xi}}$  from the relative clause.

The original syntax of relative clauses could have been correlative which is still found in the cases discussed above, examples (265c-265f):

$$[\dots[N \ f\overline{\epsilon}]_{NP} \dots Comp]_S S_2$$

with the option of topicalizing the  $f\bar{\varepsilon}$  noun phrase:

$$[[N f \overline{\xi}]_{NP} \dots Comp]_S S_2, cf.$$
 example (265j).

These types of sentences could have been reanalyzed as involving a topicalized noun phrase with a relative clause, extracted from the main clause  $S_2$ :

$$[N [f\bar{\epsilon} ... Comp]_S]_{NP} S_2$$

Undoing such topicalization gives the basic relativization pattern:

$$[...[N [f\bar{\xi} ... Comp]_S]_{NP}...]_{S2}$$
, see example (264a).

The development proposed here is reminiscent of the scenario proposed by Nikitina (2012) for what she labels as 'the rise of clause-internal correlatives' in Southeastern Mande languages.

To summarize the argument of this section, relative clauses in Beng are originally head-internal, at least in the historical sense. The argument can also be interpreted in favor of analyzing relative clauses as originally head-internal in syntactic derivation (Kayne 1994). Historical and derivational interpretations of head-internal syntax of relative clauses are compatible but not isomorphic, reminiscent of the relation between historical and derivational processes in phonology.

There is one argument in favor of the historical rather than synchronic interpretation of the head-internal status of Beng relative clauses. One important piece of evidence used in the argument above was that the determiner  $l\hat{\epsilon}$  is not used in the presence of a relative clause marker  $f\bar{\epsilon}$ . However, the definite article  $n\hat{j}$  (variant of  $l\hat{\epsilon}$  after /n, see 8.3), is attested before  $f\bar{\epsilon}$ .

(265k) 
$$\bar{\mathcal{I}}$$
 baba lè à sán $\bar{\mathcal{I}}\bar{\mathcal{I}}$  lé [à 1SG sheep Def 3SG mark 3SG:PST+:COP:L 3SG

blè
$$\hat{n}$$
  $tr\bar{o}\bar{\eta}$   $n\hat{j}$   $[f\bar{\xi}$   $\hat{o}$   $c\hat{j}$ -lè  $n\hat{g}]]_{NP}$   $\bar{\epsilon}$ .  
left ear Def Rel 3sg:St+ cut-Res Top Foc

'The mark of my sheep is its left ear which is cut'.

Examples like this suggest that the incompatibility of  $f_{\overline{\xi}}$  and determiners is not strict, and the determiner status of  $f_{\overline{\xi}}$  might not be synchronically valid but could rather be a historical relic.

#### 14. Information structure

This section gives a preliminary overview of the ways to express information structure in Beng. I do not attempt to undertake a proper semantic analysis of the constructions in question, only providing their rough equivalents in English.

Usually, a constituent F marked for its information structure status is located before the rest of the sentence S. If F is a verb phrase, which has to take the form of nominalization when topicalized or focalized, compare (266), F is replaced in the main clause S by the verb  $w\bar{o}$  'to do' in the appropriate form with a 3sG pronoun as a direct object. If F is a nominal or an adverbial constituent, the position that the constituent F would have occupied in a communicatively neutral sentence S' is left filled by a coreferent personal pronoun, except for the secondary object position from which personal pronouns are banned. Examples:

(266a)  $_{Top}[S\hat{a}\bar{a}\hat{p}]$  yri  $l\hat{\epsilon}]_i$   $_{Foc}[b\hat{a}\bar{a}\hat{p}]$   $w\acute{o}]_k$   $n\bar{\epsilon}$   $[\grave{o}_i]$   $b\grave{a}$   $\emptyset_k]$   $\bar{\epsilon}$ . saang tree DEF dry.season IN FOC 3SG:HAB+ yield:L FOC 'It's during the dry season that the  $s\grave{a}\bar{a}\hat{p}$  tree yields fruit'.

(266b) 
$$[P]_{ij}$$
  $c\underline{i}$ - $l\underline{\epsilon}]_{i}$   $n\underline{\epsilon}$   $[\delta$   $a_{i}$   $w\delta$   $\bar{\epsilon}$ . grass cut-NMLZ FOC 3SG:PST+ 3SG do:L FOC 'It's mow that he did'.

The case described above, where the pragmatically marked constituent F can be inserted into a vacant position in the sentence S, is typical but far from universal. In reality many examples would not support such insertion. Sometimes the position in S is filled by a full-fledged syntactic constituent coreferent to F<sup>18</sup>:

.

<sup>&</sup>lt;sup>18</sup> An anonymous reviewer notes that example 267 might not illustrate topicalization but a special correlative construction. Indeed, as discussed in 13.6 above, fronted relative constructions in Beng can have special properties, such as availability of complementizer  $d\epsilon\bar{\epsilon}$  'if' and possibility of head-internal structure. These properties can be seen as manifesting an independent correlative construction. On the other hand, in most cases correlatives are indistinguishable from the topicalization of an NP with a relative clause, and

(267) 
$$[Zr\ddot{\varepsilon} \ f\bar{\xi} \ m\bar{\iota}-\acute{o} \ \grave{a} \ y\acute{e}]_{i} \ m\hat{\iota} \ m\bar{\iota} \ [zr\ddot{\varepsilon} \ b\grave{\iota}-\grave{\varepsilon}]_{i} \ y\bar{a}.$$
 road Rel 2SG-ST+ 3SG mouth 2SG:HAB+ 2SG road this-DEF walk 'The road you stand on, walk this road'.

Second, the position F can host a whole clause that cannot be substituted for any constituent in S, compare a typical folktale ending:

(268) 
$$[N\grave{a}] g\bar{a}ml\grave{a}$$
  $\grave{o}$   $n\bar{u}$   $g\bar{u}\grave{a}$   $kl\acute{e}\acute{n}$   $w\acute{o}$   $n\acute{a}]_{TOP}$  for to chimpanzee 3sG:HAB+ come stay forest IN TOP  $[\grave{a}] d\acute{u}$ - $[\acute{a}] d\acute{u}$ 

'So Chimpanzee stayed in the forest because of the story with the door' (literally: topic 'For Chimpanzee to come and stay in the forest', focus 'the reason for this comes from the door', main clause '(that) Chimpanzee stayed in the forest').

Example (268) is quite typical: the content of a sentence can be divided entirely into the topic and the focus; the topic and the focus (expressed here as full clauses) are marked appropriately, followed by a syntactically obligatory but semantically redundant main clause that basically repeats the topic.

# 14.1. **Topic**

Let us now turn to specific information structure marking constructions of Beng. The first one, topic, is expressed by particle  $n \underline{\acute{a}}$  placed after the topicalized phrase F that precedes the main clause S.

Information structure notions are notoriously hard to characterize precisely. The topicalized phrase F in Beng signals the theme of utterance, its 'aboutness'. In English, one analog of the Beng topic is the sentence-initial position of sentential modifiers as in *At the lab we conducted a few experiments* (as opposed to the more neutral *We conducted a few experiments at the lab*). Examples of topics:

even, as argued in 13.6, the main relativization strategy probably arose in Beng through a reinterpretation of the correlative construction as a topicalized NP with a relative clause.

As (270) shows, the topic marker  $n\acute{a}$  is sometimes omitted. Conditioning factors for its omission are yet to be studied. I observe preliminarily that topicalized noun phrases tend to be unmarked, while other types of constituents, in particular adverbial phrases (including temporal and locative) tend to have an overt topic marker.

# 14.2. Contrastive topic

(271) 
$$M\bar{5}$$
  $l\hat{\epsilon}$   $\acute{\eta}$   $n\bar{y}$ - $n\bar{a}$ .  
1SG:POS DEF 1SG:PST+ come-PRF  
'As for me, I have come'.

{in a discussion of animals that steal corn} 'Monkeys tear it apart and squirrels eat it on trees'.

#### 14.3. Focus construction

The focused constituent F is marked by a postposed particle  $n\bar{\xi}$  and the main sentence S is followed by particle  $\bar{\epsilon}$  or  $n\hat{a}$ , so the two markers of focus embrace the main sentence. Analogs of focus construction in English are sentence-level pitch accent and it-clefts. Example of a focus structure:

(273) 
$$[Gb\grave{e} \quad b\acute{e} \sim b\bar{e} \quad n\grave{o} \quad y\acute{e}]_i \quad n\acute{a} \quad [s\acute{e}n\acute{a}\acute{a}\acute{n}t\bar{\imath}\bar{\imath}]$$
 village big~PL 3PL mouth TOP coal  $l\bar{o}J_i \quad n\bar{e} \quad [n\grave{o} \quad s\acute{i}\acute{e} \quad t\grave{u} \, \mathcal{O}_i \, \mathcal{O}_i] \quad \bar{e},$  with FOC 3PL:HAB+ fire plant:L FOC

#### Denis Paperno

[gbè	plé~plé	$\grave{\mathcal{E}}$	ŋò	$y\acute{e}]_i$	ná	[wlàŋ̀
village	small~PL	Def	3PL	mouth	Тор	wood
lō];	лĒ	[ŋò	síé	$t\hat{u} \mathcal{O}_{j} \mathcal{O}_{i}$	$ar{\mathcal{E}}.$	
with	Foc	3PL:HAB+	fire	plant:L	Foc	

'In towns, they make fire with coal; in villages, they make fire with wood'.

The focused construction accompanied by preposed  $s \neq p \bar{e}$  'except' expresses the meaning of 'only' in Beng:

(274)  $S \underline{\hat{q}} p \bar{e}$   $w \underline{\hat{a}} l \hat{e}$   $p \bar{e}$   $p \bar{e}$  p

# 14.4. Non-syntactic expression of emphasis

The semantic effect comparable to that of topicalization and focalization can also be achieved by other means, in particular, by independent personal pronouns (pronouns of the focus series) *in situ*, i.e. in a regular NP position rather than in a topicalized or focalized position. Independent pronouns in NP positions are accompanied in NP positions by pronoun doubling, compare:

- (275)  $S\bar{e}s\bar{e}$   $\hat{o}$   $m\bar{g}$   $m\bar{g}$   $s\hat{o}$ .

  every 3SG:HAB+ 2SG:EMPH 2SG chew:L

  'You, everyone bites'. or 'It's you that everyone bites'.
- (276)  $M\bar{q}\bar{g}$   $m\acute{g}$   $n\bar{w}$ - $n\bar{g}$ . 2SG:EMPH 2SG:PST+ come-PRF 'You, you came'.
- (277) Ànā ó nū-nā.

  3SG:EMPH 3SG:PST+ come-PRF
  'Him, he came' or 'It is him who came'.

Exceptions to overt pronoun doubling are 1sG and 3sG pronouns that are not doubled by overt non-subject series of pronouns, apparently for phonological reasons.

The dectic marker  $bl\bar{b}$  'right here', 'right there' used after a locative phrase has a similar effect to focusing the locative phrase:

(278) Lómlén nùn nó kpế némán blō gblē. children PL 3PL:PST+ play:L 1SG:before there.Foc yesterday 'Children played right in front of my door yesterday'.

- (279) Ŋò klá mī dí blō.

  3PL put 2SG APUD here.Foc 'Put them right in front of you'.
- (280) Kàlà béē lè ò-ó blō.

  old big DEF 3SG-ST+ there.Foc

  'The elder is right there', compare
- (281) *Kàlà béē lè ò-ó wē.*old big DEF 3SG-ST+ there 'The elder is there'.

#### Denis Paperno

# 15. Appendix. Sample texts in Beng

# 15.1. Text in transcription: Two people on a trip

The humorous story was recorded by Wolfgang Paesler in November 1981 from Kouassi Jean Clement, transcribed by Kouadio Kouadio Destin, and translated by Kouadio Kouadio Patrice into French.

1. Sòù plāŋ ŋó tá blī-mà.

person two 3PL:PST+ go:L place-CONT

'Two people went somewhere'.

Commentary. *tá blīmà* is an idiomatic expression 'to take a trip', literally 'to go someplace', related to the usage of *blī* 'place' as an indefinite pronoun.

2. Ŋó sró wē ná ŋó ŋò gbà pō-blē-lê.

3PL:PST+ arrive:L there Top 3PL:PST+ 3PL give:L thing-eat-NMLZ 'When they got there they were given food'.

Commentary.  $p\bar{b}l\bar{e}l\hat{e}$  is structurally relativization of the direct object using event nominalization, literally 'thing eaten', or 'eating something', compare 6.2.

3.  $D\bar{o}$   $\bar{a}$   $p\hat{e}$   $s\hat{a}$   $\delta$   $k\hat{a}$ - $n\bar{a}$ .

one 3sG:PsT+3 say:L that 3sG:PsT+ get.satiated-PrF

'One of them said he was full'.

Commentary. The portemanteau pronoun  $\vec{a}$  contains the obligatory 3<sup>rd</sup> person direct object of the speech verb, literally 'He said it that he was full'.

4.  $D\bar{o}$ -lè  $dr\bar{e}$   $\bar{a}$   $w\bar{o}$   $p\hat{o}$   $\delta$   $p\bar{o}$ -lè  $bl\hat{e}$ . one-Def Emph 3sg:Pst+3 hand wash:L 3sg:Pst+ thing-Def eat:L 'The other one washed his hands and ate'.

Commentary. Here, the portemanteau pronoun  $\vec{a}$  contains a possessive pronoun, literally '**He** washed **his** hand'. Note juxtapotion of two clauses as the translation equivalent of verb phrase conjunction. Aslo notable is the usage of  $dr\bar{\epsilon}$  as a topic switch marker.

5.  $G\bar{e}\bar{\eta}$  kló ná dō lè ó yúó bò. beautiful little TOP do DEF 3SG:PST+ oral.cavity extract:L 'After a little while, the first one yawned'.

Commentary.  $G\bar{e}\bar{\eta}$   $kl\acute{o}$  is an idiomatic expression 'a little later'. It is marked by an overt topic marker, as usual with topicalized adverbial elements.  $y\acute{u}\acute{o}$   $b\bar{o}$  is an idiomatic expression 'to yawn'. The semantic motivation of the expression is transparent: when someone yawns, the oral cavity becomes visible.

6. *P5-blē-lí lè ā là kēsá ó lé lòwā.* thing-eat-AG DEF 3SG:PST+3 ask:L that 3SG:PST+ COP:L how 'The one who had eaten asked him what the matter was'.

Commentary.  $\delta l \in l \partial w \bar{a}$ ? is the idiomatic Beng expression for 'why', literally 'How is it?'. The portemanteau pronoun  $\bar{a}$  includes a direct object: "**He** asked **him**". Note the specific event reference in the interpretation of the agent nominalization in  $-l \hat{l}$ .

7. A pè: pōpō.

3sG:PsT+3 say:L nothing
'He said: «Nothing.»'

Commentary.  $p\bar{s}p\bar{s}$  'nothing' is derived by reduplication from  $p\bar{s}$  'thing'.

- 8. *Ó* yúó bò mŷń.

  3SG:PST+ oral.cavity extract:L again 'He yawned again'.
- 9. *P5-blē-lí lè ā là mŷń*, *ā pè*: *p5p5*. thing-eat-AG DEF 3SG:PST+3 ask:L again 3SG:PST+3 say:L nothing 'The one who had eaten asked him again', 'and he said: «Nothing.»'
- 10.  $\eta \hat{o} \delta = bl\bar{o} = d\hat{e}\bar{e} = \bar{a} = p\hat{e} = y\bar{i} = \delta = \bar{\eta} = d\hat{e}.$ 3PL-ST+ there.Foc if 3SG:PST+3 say:L hunger 3SG:PST+ 1SG kill:L 'They were there, and the other one said he was hungry'.

Commentary. Here complementizer  $d\epsilon\bar{\epsilon}$  'if' is used in the sense of 'when'. The verb  $d\bar{\epsilon}$  (base sense 'to kill') is used in the sense of 'experience' with nouns of feelings and senses like 'hunger', 'fear', 'heat', etc. as subjects, and the experiencer in the direct object position.

- 11. *P5-blē-lí lè ā pè* thing-eat-AG DEF 3SG:PST+3 say:L 'The one who had eaten said:'
- 12.  $s\acute{a}$   $m\grave{a}$   $p\acute{e}$   $m\bar{l}$   $n\grave{l}$   $\acute{e}$ ? that 1sG:PsT-3 say:L 2sG BENEF NeG 'Hadn't I told you?'

Commentary. The structure of the preterite TAM construction is obscured by high tone spread to the verb stem and the tone sandhi, whereby instead of the original  $m \not p \not e$  (LH L) we see  $m \not p \not e$  (L H).

13. Sá yô tá blī mà ná, that 3PL:CND+ go place CONT TOP 'That when one goes somewhere',

Commentary. Conditional mood is used here according to the general rule of marking habitual aspect in temporal and conditional clauses.

ŋà yènrè pō-blē-lè lō é.
 3PL:HAB- be.ashame:L thing-eat-NMLZ with NEG 'one is not shy of eating'.

Commentary. The verb  $y\bar{e}pr\acute{e}$  selects postposition  $l\bar{o}$ . Note the interpretation of  $p\bar{o}bl\bar{e}l\grave{e}$  contrasting with the object nominalization interpretation in sentence 2.

14.  $\eta \acute{o}$   $zr\ddot{e}$   $\acute{e}$   $p\grave{o}p\grave{o}$   $ny\bar{e}$   $y\acute{o}$   $t\acute{a}$   $\bar{e}$   $n\acute{g}$ , 3PL:PST+ road DEF request:L FOC 3PL:PST+ go:L FOC TOP 'When they said goodbye and went away',

Commentary. To "request the road" is a common formula for guests asking permission to leave from their host in West Africa. Here the focus (and the topic) constructions are used to mark temporal sequence of events.

à gōló lè ó bédà zrë lè yé,
 3SG friend DEF 3SG:PST+ lie:L road DEF mouth 'his friend lay down on the road',

Commentary.  $zr\ddot{e}$  is one of the nouns that requires locative postposition  $y\acute{e}$  without the 'on the edge' meaning of the latter.

15.  $n\hat{a}$   $w\hat{a}$   $z\hat{i}$   $y\bar{a}$   $dr\bar{\epsilon}$   $\acute{\epsilon}$ .

DT 3SG:HAB- can:L walk anymore NEG 'he could not walk anymore'.

Commentary. Particle  $dr\bar{\varepsilon}$  is the way to express 'anymore' in Beng in the context of the negative particle  $\dot{\varepsilon}$ .

# 15.2. Text in orthography: Chimpanzee's house

This folktale was recorded by Wolfgang Paesler in November 1981 from Kouassi Jean Clement, transcribed ny Kouadio Kouadio Destin, and translated by Kouadio Kouadio Patrice into French. For comparison with 15.1, this text is reproduced in the orthography (Kouadio, Kouakou 1997) and in phonological transcription, to provide a sample of this orthography.

1. Ganmlàn o gbèe gbə.

Gāmlà ó gbě gbó.

chimpanzee ST+ village old

'Of old, Chimpanzee used to live in the village'.

Commentary. See 12.1.2 for discussion of time reference.

2. *O* suo d3

Ó súó dà

3sG:Pst house build:L

'He built a house',

fen sònỳ nùnỳ go tà à cà nan,

fẽ sòỳ nùỳ nó tà à cà ná,

Rel person PL 3PL:PST+ go:L 3SG watch:L TOP

'and when people came to see it',

Commentary. The sentence features a serial construction where one subject pronoun shares two verbs in the same (low tone) form.

3. ŋo à pè san

ŋó à pè sá

3PL:PST+ 3SG say:L that

'They said:

ganmlàn, min suo lè o lè gen.

gāmlà, mī súó lè ó lè gēñ.

chimpanzee 2sg house Def 3sg:Pst+ Cop:L beautiful

'Chimpanzee, your house is nice'.

4. Dre o guan nan po do.

 $Dr\bar{\epsilon}$   $\acute{o}$   $g\bar{y}\bar{g}$ - $n\bar{g}$   $p\bar{o}$   $d\bar{o}$ .

but 3sg:Pst+ remain-Prf thing one

'But one thing is missing'.

Commentary. Note the postverbal subject NP with a preverbal subject pronoun, peculiarity of the verb  $g\bar{u}\hat{a}$  'to remain'.

Commentary.  $p \grave{\partial} X p \grave{\partial}$  'like X' expresses comparison in Beng, usually occurs in nominal positions.

- 6. Sành nùnh no à pè рò kpìnn pò. san à рэ̀ Sàn nù'n ηó pè sá kpìń рэ̀. person PL 3PL:PST+ 3SG say:L that like door like 'The people said: "Like a door."
- 7. Ganmlàn aà pè san:
  Gāmlà à pè sá:
  chimpanzee 3sG:PsT+3 say:L that
  'Chimpanzee said:'
- 8. po fen  $n\dot{a}$  sì kpìng nan,  $p\bar{b}$  f̄ɛ  $n\dot{a}$  sì kpù́g ná, thing Rel 3PL:HAB+3 call:L door TOP "The thing that they call door,"

```
màn
                    nyreèn to
manŋ
                                   man sà
                                               do
                                                    \mathcal{E}.
                            tś
                                               dō
                                                    έ.
māŋ
          mà
                    ηrε
                                   mā-sà
1sg:Foc 1sg:Pst- this
                            name hear-PRF-
                                               one NEG
   "me, I have never heard this word."
```

Commentary.  $nr\tilde{e}$  is a demonstrative noun, here used as an appositive modifier of  $t\delta$  'name'. Adverbial  $d\bar{o}$ , identical to the numeral 'one', combines with perfect aspect and means 'ever'.

```
9. Aà pè san:

A pè sá:

3sG:PsT+3 say:L that

'He said:'
```

```
nyreèn po
                             bee bì-lè
                                                màn
                    dren
                                                              zin
                                                                     à
                                                                             WO \quad \mathcal{E}.
                                                                             W\bar{O} \acute{\mathcal{E}}.
                    dr\bar{\varepsilon}
                             béē bì-lè
                                                                     à
nrē
           рŌ
                                                 mà
                                                              Z\overline{1}
this
           thing work big this-DEF 1SG:PST- can 3SG
                                                                                 NEG
                                                                            do
     "This big work, I can't do."
```

Commentary. Modal zī 'can' is exceptional as it combines with preterite subject pronouns while itself staying in base form, selecting a verb phrase in a base form, and

having present semantics.  $z\bar{z}$  is also attested in the regular habitual construction, while still selecting a base form verb phrase.

```
10. Nyen ganmlàn
                                         wlo
                             ó
                                         włó
     N\bar{arepsilon}
             gāmlà
             chimpanzee 3sG:Pst move.out:L
     Foc
    'And Chimpanzee left'
             dà
                       klen
                                nìn
0
                                       WO \quad \mathcal{E}.
ó
             dà
                       klέή
                                nì
                                       W\acute{o} \bar{\mathcal{E}}.
3sg:Pst+ reach:L forest Def IN Foc
```

'and reached the forest'.

11. *Nàn* ganmlàn ò guàn klεη nun wo nan gāmlà klέή Nà ò пū gūà wó ná for.to chimpanzee 3sG:HAB+ come remain forest IN TOP 'For Chimpanzee to stay in the forest',

```
\grave{a} din-l\grave{\epsilon} o b\grave{\partial} kp\`{ing} m\grave{a}n \grave{a} d\acute{g}-l\grave{\epsilon} \acute{o} b\grave{\partial} kp\`{g}\acute{g} m\grave{g} 3SG cause-Def 3SG:PST+ come.from:L door CONT 'the reason came from the door'
```

```
nyen ganmlàn o gùàn klen wo \varepsilon.

n\bar{\varepsilon} g\bar{g}ml\grave{g} ó g\grave{u}\grave{g} kl\acute{e}\acute{\eta} wó \bar{\varepsilon}.

FOC chimpanzee 3SG:PST+ remain:L forest IN FOC 'that Chimpanzee stayed in the forest'.
```

Commentary. The last sentence of this text was reproduced and discussed earlier as example (268).

# 16. Appendix. Word lists from Tauxier (1921)

This Appendix reproduces Beng data originally published by Louis Tauxier, as discussed in 3.2.3 above. The data come from a dialect which I label "Beng of Groumania neighborhood" (BG), different from the Modern Ouassadougou Beng (MOB) studied throughout the current work. The novelty of this publication is that all data from Tauxier (1921) are accompanied by MOB equivalents. This is intended to facilitate the use of Tauxier's old but unique data on the BG dialect for modern comparative studies.

### 16.1. Word list

I list here expressions from Tauxier (1921) in bold in comparison with identical elements from Modern Ouassadougou Beng in italics. In case MOB equivalents are

not related to those reported by Tauxier, they are given in parentheses. I generally retain Tauxier's original French translations, but when the meaning of the MOB equivalent does not exactly correspond to Tauxier's translation, I also provide an English equivalent of the MOB word in single quotes. When the MOB equivalent is unknown, I put a --- mark.

The list also includes information about the borrowing source of Beng words, both where noted by Tauxier and where it was possible to identify otherwise. I acknowledge Valentin Vydrin's help in identifying borrowings from Jula.

aba père àbá Agni Agni --**agniabiri** enterrement àpā blī 'that.Emph bury' agoba (ou agogba) poursuivre --alenngué iguane (d'eau) --anion lui ànā (Emph) apa lit àkpâ 'apatame' avoninnlè sage --**ba** cuisse *gbá* **ba** terre *bā* **baba** mouton *bábá* **baba-da** mouton, brebis *bábá dā* **babalé**, **babalegnn** mouton, agneau bábá léń baba-sia mouton, bélier bábá síá babélé silure --**bahoum** épaule *bàn* 'bras' **bakaouté** singe rouge (káá) **bala** flûte --**balanda** banane *bláná* < Jula balanda-ouaporo tô (à la banane) bláná wápló bama, bamon chef de canton bā mà 'earth chief' **bân** corde *bāŋ* **ban** tambour gros --**ban, baon** société secrète --- BG < Jula

bandara non musulman bànrà 'Senoufo, Djimini, Tagbano' banga-ouélé grêle bàŋā wlé banguiénn barbe gbèn cén **bani** indigotier (liane) *bānέή* 'liane' **banngo** cheval *kpànô* < Baoulé banngo-da cheval, jument kpànô dā banngo-lè cheval, poulain kpànô léń **banngo-nou** cheval, pouliche --banngo-sia cheval, étalon kpànô síá banon-bani caoutchouc (liane à) bānéń 'liana' **batara** biche-cochon *bātrā* MOB 'oryx' batoubatou vite bàtúbàtú **bè** danser  $b\check{\varepsilon}$  '(a) dance' **bé** famille totale *gbě* 'village' **bè** fuir, s'enfuir *bě* **bè** tam-tam (danses, etc.) (mlà) **bégnn** singe noir *béή* **béda** coucher (se) *bèdă* **bégnn** enfant *bē* $\bar{\eta}$  'fruit' **bégnn** trompe *bèn* béhann-da chèvre béyàn dā **béha-nnlè** chèvre, chevreaux *béyàn lén* béha-nou chèvre, chevrette --**béha-sia** chèvre, bouc *béyàn siá* **béhian** chèvre *béyàn* **beignn** menton *gbèn* 

**bélé** chaise *blén* 

**bélé** hier *gblē* 

**béléfédou** rasoir ---

**bélenngo** nord *blèn wó* 'on the left'

**béléwa** van ---

**béma, béman** chef de famille totale *gbě*  $m\hat{g}$  'village chief'

**abembousâ** pas longtemps à  $b\bar{\epsilon}m\bar{o}$  sá  $(\dot{\epsilon})$  'it has not been a while'

benndé manioc gbéné

**béré** biche-cochon *blē* 'duiker'

béré boisson blě 'wine'

Bérébéré doucement, lentement blèblè

**bérémilli** ivrogne *blě m<u>ī</u>lí* 

béréna ivre blè ná

**bétè** faible *bètèè* 'soft'

**bi** case (à toit plat en terre) *biè* 'fetish house'

bia lourd gbíá

biéso ivoire bié só

bihé éléphant bíè

bilarigon hôte (qui reçoit) blālí gōŋ

**biliyé** voir *blī yē* 

bimbiribéré cidre (de mil) ---

bimbiri-ousi farine de mil --- (nž wisi)

bimmbiri mil (gros) (nš)

**binnzammbé** minngo (fruit de) ?*gb̄፱π̄ zàŋ́ b̄ε̄ŋ̄* 'odor ronier fruit'

binnzaon minngo ---

birané cadeau (sàmâ)

**biri** porc-épic *blí* 

**bô** singe cynocéphale ---

**bobéléri** vautour (charognard) àpètè kùàsí, gbó blē-lí 'old eat-Ag'

**bo-bona** jadis, autrefois *gbźgbź ná* (topic marked)

**bolo** mosquée (enclos de prière) *blòń* 'covered space'

**bomboroso** variole --- BG < Jula

**bôn** rocher *gb*<sub>2</sub>

**bôni** mauvais, méchant, laid *vōnì* 

**boro** crapaud (*lòtrò*)

Borofoué Blanc blàfūé

**boso** pêcheur (dúwléń-dēŋ̄) BG < Jula

**boti** termite *bóté* 

boulounégnn coeur blòniń

**boumm** derrière (kpèmà)

**boungaïnn** corbeille (de porteur) ?gbɔ́ 'dish to carry on the head'

**bouo** bambou --- BG < Jula

**bouroféré** papaye *bòflê* 

**bouroféré-iri** papayer *bòflê yrí* 

**bourouna** sorcier (mangeur d'âmes) *blū nà* 

**bourouniè** heureux *blòni* (verb in MOB)

**da** oseille --- BG < Jula

dabodabo canard dàbòdábò

dada filet (p. la pêche) ---

dadignn' iguane (de terre) dàdùù 'crocodile'

dakouè koba --- < Jula

dalo arc-en-ciel dàló 'rooftop'

**damisa** tomate-cerise *dímísá* 'aubergine amer' < Jula

danalla venger (se) (kòṅ̄bō)

dango toge dànó

danien cuivre rouge (sùà gbō) BG < Jula

daon guerre dāŋ

**dasana** vaincu ( $z\bar{\varepsilon}$  'to win')

**dénéouo** travailler *dr*<u>e</u> wō

dénéouoli travailleur drē wolí

**dénévouori** cultivateur *dr\vec{\varepsilon} w\vec{\varepsilon}li* 'worker'

denndé escargot dèné

dennguélé natte (zô)

**déou** plomb ---

**déré** neuf, nouveau  $dr\bar{\varepsilon}$ 

dia bête jàà

```
diangouma chat jặnmà (compare Jula
                                                egbana vieux é gbó nā 's/he has gotten
  jakuma)
diara lion jră
                                                égeïnn bon \hat{e} g \bar{e} \bar{\eta} 'it is good'
diasa cimetière (blīyà) < Jula jása 'fence'
                                                égeïnn lâche ---
                                                éguéré fort è glë 'it is strong'
diawafila oignon jàflá
                                                épodôn intelligent \hat{e} p\bar{s} d\bar{s} 's/he knows
diè pintade j<u>ĕ</u>
diégnn calebasse (à cailloux) j \not\in \eta \epsilon \sim e
                                                  things'
  MOB 'rattle'
                                                fain-ho moitié ---
diénnétouga pigeon (domestique) --- <
                                                fainkinnguisié
                                                                  semaine fɛ̃ kēŋēsíéń
                                                  'eight days'
diéri griot --- BG < Jula
                                                faon fourreau, gaîne fāŋ̄
diérifoué héritier ---
                                                fèmmbe fête fé béē
dignn' javelot ---
                                                finnalolo lampe (fîtrâ) MOB < Jula
dini demain drín
                                                  fitinán, BG < Jula fitinán + lòlō 'pot'
dinnguéré caverne dèn yrë mountain
                                                finnsésé toujours fe sese
  hole'
                                                fômm oeuf fō\bar{\eta}
diobélilé (ou diobiliré) parler jó
                                                fôni fonio ---
diobiliré dire (jó)
                                                fono aujourd'hui flóō
diommbolo xylophone jómló < Baoule
                                                foué samedi fûê
                                                fouroufou soufflet ---
do arreter (s') d\bar{z}
do masque (religieux) (ŋmlŏ) < Jula dó
                                                fouroulé marier (se) (l\bar{e}\bar{\eta} \ w\bar{e})
  'secret society' (generic name)
                                                g'bé pays gbě
dô serpent cracheur dòò 'cobra'
                                                ga mourir gā
doba singe dóbă
                                                ga tuer gā 'die'
dômm nager dòń
                                                gâfâ pied gāfã
                                                gafankokoli cordonnier, peaussier gāfāŋ
dorongui boubou dròní
doû, douhou couteau dǔ
                                                  kòkólí 'sandal turn-Ag'
                                                gakina rat (aulacode) gācíná 'cane rat'
douniao jamais drúpá wó (dō) 'on earth'
                                                galanké tisser glāŋ̄ cí 'cut/make loincloth'
douninien monde drúpá < Jula
dourou matin drú
                                                gamana nain (de la brousse) gāmlà
dourou promener (se) drú
                                                  'chimpanzee'
dowoué, dowouégnn gombo dòwēὴ
                                                gamana singe chimpanzée gāmlà
dyabérina noyer (se) yí à blē nā 'it has
                                                gan jambe gā
  gotten drowned'
                                                ganfaon sandale gā fāŋ
édien loin w \hat{a} \hat{a} \hat{d} \hat{g} 'that's not close to
                                                gankélé raconter gāklē 'news'
                                                ganndi anneau de cheville gā dí nă
édiné obeir (à drà māmà)
                                                gara indigo --- < Jula gàra
                                                gara-iri indigotier---
```

```
garankéli tisserand glān cílí 'loincloth
                                                  hain jour fé
  cut-Ag'
                                                  hié bouche yé
gari, gali cadavre gàlē
                                                  hoûé jeudi wùê
gbé (ou goué) village gbě
                                                  hyenndi larme yōníŋ
gbé marteau gbìdí
                                                  hyi famine, faim yī
gbé vert gbé
                                                  hya vendredi yáà
                                                  insonkalari groupe des ménages \bar{\eta} sòn
g'bèè gros, large b \dot{\varepsilon} \bar{\varepsilon}
gbéma, gbémon chef de village gbě mà
                                                     klálé '1sg people team'
                                                  iri arbre yrí
g'béné grand blèn 'much'
g'béré milieu gbli
                                                  iribégnn' fruit yrí bēη̄ 'tree fruit'
g'bérignn porte (en bois) (kpìń)
                                                  iri-gôn branche yrí gòń
gbo ancien gbó
                                                  irikiépo hache yrí cí-pō 'tree cut-Men'
geïnn, géeïnn bon, beau g\bar{\varepsilon}\bar{\eta}
                                                  irikôm écorce yrí kóń
agogon imiter à gógò '3sg imitate'
                                                  irinni racine yrí nīŋ
goli guitare (jìtâ) BG < Jula, MOB <
                                                  irivôn fleur yrí vúή 'tree flower'
  French
                                                  ivono-méné serpent d'eau yí vōn ló mlē
golibo lutter gòlí bō
                                                     'water hole SUPER snake'
gon homme (mâle) g\bar{\jmath}\bar{\eta} MOB: 'man'
                                                  kalakalouna vantard ---
agongoué brave \hat{a} g\bar{\sigma}\bar{\eta} g\bar{\epsilon}\bar{\eta} 'he is
                                                  kanien cire --- BG < Jula
  handsome'
                                                  kanion vous kā nā (Emph)
gôngo tourterelle ---
                                                  kanngala perdrix káŋlà
gônngo pigeon (sauvage) gòηò
                                                  kanoubatou souvent (yémáyémá)
gottogotouga sénégali ---
                                                  akara poser à klá '3sg put'
gounouboumban cervelle (kỳmā)
                                                  karagouon vieillard kálá gōŋ
gouro pirogue glô
                                                  karamoro fabricant de gris-gris, marabout
gourofala
             pagaie
                        wlúflà
                                 'ladle
                                          for
  preparing kabato sauce'
                                                  kasisi, asisi nous <u>ā</u>ŋ̄ sēsē 'we all', kā sēsē
agpain, akouin jouer à kpě '3sg play'
                                                     'you all'
guélè enclume gl\bar{\varepsilon} 'rock'
                                                  kélennzô buffle kléý zŏ
guélé pierre gl\bar{\varepsilon}
                                                  kénékénéla circoncis kléklé ná
guéré mardi jólè
                                                  kenndéwa araignée kènèwá < Baoulé
guerrenguélé caillou glēŋlé 'gravel'
                                                  ki cuir, peau séchée cī
guésé coton jèsé
                                                  kia petit că 'short'
guésé-iri cotonnier jèsé yrí
                                                  kié pont (p \hat{\partial} \hat{\eta})
Guimini Guimini (bànrà)
                                                  kiébao célibataire cègbá ná
guini esprit (de la brousse) --- BG < Jula
                                                  kiépala lèvre yépláń
         guité,
                                                  kinampili menteur cīnà pēlí
                    guitein
                                plancochère,
  potamochère jíté
                                                  kinapé mentir c<u>ī</u>nà pē
```

**kirigon** chef de famille totale  $kli g\bar{\jmath}\bar{\eta}$  MOB 'king'

kirilegnn' noble *klí lé*ŋ 'member of the Kli clan'

kissié lundi kìsiè

**ko** dos  $k\bar{o}$ 

kobali sacrificateur pō gbālí

kobâré sacrifice pō gbālê

kohou tortue kòú

koko taro (mànàní) MOB < Jula

akoko gratter (se) à kókô '3sg scratch'

kokorobété rat (du Gambie) kòklòbété 'centipède'

**kolon** puits ( $yi yr\bar{\epsilon}$ ) BG < Jula  $k \hat{z}$ lon

koloninnga millepatte klònínă

kondoro brun ---

kônié chasser kònīè

kônié chasseur kònīè-dēŋ

konien, kognien caïman, crocodile kòyàn

konoli voler (dérober) klúálí 'thief'

**konosogolo** autruche --- < Jula

**kopè** houe (a fer pointu) *kópέ* 

**kôri** laver *(pó)* BG < Jula *kòli* 'washing'

korowè bonnet ---

korro hibou klŭ

**koti** scorpion (noir) *kō tīī* 'black back'

koto poing kòtrò

**kouan** fleuve (yí báή) BG < Jula kờ 'brook, small river'?

**koumbé** tomate (*tòmátì*) MOB < French

**kouroudiara** ceinture de femme *klùjá* 'loincloth with a belt'

kourousi culotte klùsí

koutoukou case (à toit en paille) ---

**kowa** hameçon ---

kyé année kùé

**kyélado** siècle *kùé làà dō* 'one hundred years'

la médicament, gris-gris, gris-gris (contre les sorciers) lá 'medicine'

la pluie, tempête lā

ala demander à lā '3sg ask'

ala interroger à lā '3sg ask'

**labangbana** tonnerre *lā bābā nā* 'it has rained a lot'

lalo sauterelle *làlòn* 

lamain fabricant de gris-gris, médecin (13tr3)

**lamba** vérole --- BG < Jula

lamoro parent (sɔ̀ŋ̀) BG < Jula à lá mɔ̀gɔ 'his/her person' (?)

lana feuille *láná* 

lasié éclair *lā sié* 

**lasiri** coutume --- BG < Manding *lásiri* 'pregnance; origin, reason'

**latirina** nuage *lā trī nā* 'it has gotten cloudy'

leï-allè faire l'amour *lēŋ lē* 

**lékolo** bilakoro (Jula 'uncircumcised boy') *lókló* 'child'

**lélé** chanson *lèlē* 

**lèlè** chanter *lèlē* no 'song'

**lélédali** chanteur *lèlēn dàlí* 

**lélégnn'** épine *lèlē*n

lemmbélé minuit *lēmlē* 

**lémmbélé** tabouret *lén blén* 'child chair'

lengôn fils *léngōn* 

lenndali sorcier (se changeant en bête) ---

**lenndinn** fille *léŋ́ lēŋ̄* 

**lenngué-touroupon** dot *léŋ nùŋ ?trōpò* 'child Pl raise-Men'

lignn, li femme lēņ

lignn'gala pagne (de femme) lēn glān

livuili chapeaux (en paille) (kòwlê)

'2sg

**lo** captif, esclave, captif de traite 13 **ammi** boisson à mī '3sg drink' **1ô** cou *lò* **mien** toi *m<u>ī</u>ā* (Emph) 1ô kola 1ò miman comprendre mį mā **lô-iri** kolatier *lò yrí* understand' **lolé** captif de case *lŏ léŋ* slave child' miman écouter mī mā '2sg hear' **lolo** canari, pot *lòlō* mimiso corps mīsoīj loloba argile --mini herbe *mlín* 'straw' lommba fronde --**misiri** mosquée *misrî* < Jula mivoua uréthrite mièwá **louangarapo** maintenant (klēmà) malo riz mànúń < Jula **mokégnn** poil *cέή* mama, manman grand'mère màmá **molè** étoile *mō lé*ή mana tambour mlà **môn** lune *m* $\bar{g}$ manain mercredi mlàâ **môn** moi *mā̄ŋ* (Emph) manangbo tambour en forme de sablier **môn** mois *mō* mlà gbó 'drum old' monanvi nègre --manapô mulot mlépó **môné** dimanche *mōlè* manapo souris mlépó mougousawala chausson (gāfāŋ shoes') mandiga arachide (kálè) mouin tombeau mùà manyon rêver, avoir un rêve nó **mounou-ouele.** crâne  $\eta l \bar{u} w l \hat{\epsilon}$ massakou patate (àlènà) BG < Jula, MOB **m'véli** ami *ŋ̄ v<u>ī</u>lí* '1sg love-Ag' < Baule na épouse nā **m'ba** canton, province  $\bar{\eta}$   $b\bar{a}$  '1sg earth' **n'ain** mariage ( $l\bar{e}\bar{\eta} dr\bar{e}$ ) m'bésé, bésé matchette bèsé nanamm langue nànáń m'bié sel *ŋ̄ bīē* '1sg salt' **n'da** mère  $\bar{\eta}$  d $\bar{a}$  '1sg mother'  ${\bf n'd\acute{e}koro}$  oncle (frère du père)  $\bar{\eta}$   $d\bar{e}$ -kló **m'bo** mère (nâ) m'bôn encore mûń '1sg father-little' **n'dérélinn** soeur (grande) *η̄ drélēŋ̄* '1sg **amè** frapper  $\hat{a}$   $m\bar{\varepsilon}$  '3sg hit' **mémbouna** longtemps ó bēmō nā 'it has older.sister' been a while ago' **n'dié** père  $\bar{\eta}$  d $\bar{e}$  '1sg father' **n'do** sauce  $\bar{\eta} d\check{\sigma}$  '1sg sauce' méné poulet mlě méné serpent *ml* $\bar{\varepsilon}$ **n'dôn** oncle (frère de mère)  $\bar{\eta}$   $d\bar{\varrho}\bar{\eta}$  '1sg méné-da poulet, poule mlě dā maternal.uncle' méné-da serpent python mlē dā n'dorongo frère (grand)  $\bar{\eta}$  dróŋō $\bar{\eta}$  '1sg ménéfômm oeuf de poule mlě foñ elder.brother' méné-lé poulet, poussin mlě lén **ndé** neveu (fils de frère) *η̄ dē léη̇* 'paternal méné-sia poulet, coq mlě síá parallel cousin' ménésuo pouluiller mlě súó n'deï, n'deïnggn colline, montagne dèn ami boire à mī '3sg drink' n'deï'nggn camarade (gɔ̄lō)

**n'dèré** grimper *drē* $\bar{\eta}$ nionon karité (beurre du, fruit du) pró **n'di** franc (srê) n'dioté argent jétè < Baoulé nio-ousi farine de maïs nă wisi 'millet **né-a-louinn** fille --flour' **niopinn** cheveux (cέή) **néné** froid *nénè* **nokia** regarder *nŏ cá* 'to look inside' n'gani arc (núè) **n'go** corbeille  $\bar{\eta} g \hat{o}$  '1sg fish.trap' non ici nō **n'gô** huile de palme (prź) **nôn** ventre *n*ỷ **n'gogaléda** jurer *nó gàlē dă* 'I swear by nono lait nónó the dead' nonon-lè maigre nònólé n'goligana oublier *ŋ̄ wɔléń gā nā̄* 'I **nou** venir *nū* noualou acheter lú forgot' n'gon-noléïnn ver (de terre) ηlū̄ξlέή **nouin** incendier η<u>u</u><u>a</u> 'to burn' **n'gouéna** répondre (*yēdǎ*) **nowa** boyaux *nòwān* 'intestine' nyobéré cidre (de maïs) nž blě 'millet n'gouon fétiche nùè n'gouon-bali féticheur nùè gbālí wine' ni souffle nín 'soul' n'zanalignn jeune fille zānnànỳ lēņ niaguialé réfléchir (jàtê) n'zanango jeune bomme zānnànỳ gōŋ niamakéré sable pônmóntré **n'zanangomm** jeune *zānàn gōn* 'young niamantérililali, devin (se servant de man' sable) pònmóntré līlálí o 'sand thrown'zaommbéï rônier (fruit du) zàń bēŋ n'zaon, n'zamm rônier zàń Ag' **nié** aigle  $(m\grave{\varepsilon}\grave{\varepsilon})$ **n'zélo** papillon (bàmàlímă) **n'zéli** vaincre  $z\bar{\varepsilon}$ **nié** nez *né* **n'zéré** sentier *zrë* 'road' niénina pauvre (jrà ná) niépè moucher (se) --**n'zérébè** route *zrë béē* 'big road' **ninaba** malheureux --- BG < Jula **n'zéri, n'zéli** puissant, vainqueur *zɛɛ̃lí* **nini** ombre (d'un être vivant) *n<u>ī</u>n<u>ī</u>n* 'win-Ag' ninn, né fils *η̄ lέη* '1sg child' n'zi poisson, poisson dit capitaine zìń **ninon, ninaon** ombre (d'un être inanimé) n'zian, n'sien mari  $\bar{\eta}$  zíá '1sg husband' n'zie fromager zīē (níŋ) niolé rêve nólέ **n'zié** funérailles *zīē* **niomihi** salive *nimi* **n'zieï** commémoration *zīē* 'funeral' niomoûti mouche pínmítīī **n'ziri** grand-père  $\bar{\eta}$  zrī '1sg grandfather' n'zo arbre (à fou) zô 'kind of tree' nion sein ná niono-iri karité pró yrí **n'zô** boeuf *zŏ* nionon graisse pró **n'zô-da** vache zŏ dā n'zô-lè vache zŏ léń

```
n'zomana savon zàmlâ
                                               ouatana colporteur ---
n'zoro laver (se) zrö
                                               ouégnn mot, parole wēņ
n'zosié pique-boeuf ---
                                               ouéré os wl\acute{\varepsilon}
n'zô-tola boeuf, taureau zŏ síá BG < Jula
                                               ouéré parc (à boeufs) wlěè 'corral' <
                                                 Manding wère
n'zou poitrine zū
n'zou
                                      '1sg
                                               ouo bras wā
          frère
                  (petit)
                           \bar{\eta}
                                ZÚ
                                               ouodakon ongle wōdākóń
  younger.sibling'
                                               ouodaonou pouce wō dā ŋlū̯
n'zoulé soeur (petite) \bar{\eta} zú-lē\bar{\eta} '1sg
  younger.sibling-woman'
                                               ouodinn bracelet wō dí ŋǎ
oua-bè étroit wa\bar{a} b \epsilon \bar{\epsilon} 'it is not big'
                                               ouofo main wāfã
ouabia léger wàā gbíá \varepsilon 'it is not heavy'
                                               ouolé, ouoleignn. doigt wōléń
ouaguingo sud wō gēŋ̄ wó 'on the right'
                                               ouongué reposer (se) wūēŋùè
ouakénékénékaré
                        incirconcis
                                               ouonion ils, eux \eta \hat{o} p\bar{a} (Emph)
                                      wàā
  kléklé kálè é 'she is not circumcised'
                                               ouonou (ou mounou) tête ηlū
oualé igname wálé
                                               ouousi farine wisi
oualé-gon ignamier wálé gā 'yam stem'
                                               oupè pleurer bú pé
oualémanga bague (en fer) wōléń mà nă
                                               ourou ancêtre wlú MOB 'fantom'
  'finger CONT ring'
                                               ourou chaud, sueur wlú 'heat'
oualémanguiété bague (en argent) wōléή
                                               ourouso captif de case wlósó 'slave clan'
  mà jétè 'finger CONT silver'
                                               pa manche pá
oualémansua bague (en or) wōléń mà
                                               paa, pâ néré kpā
  sùà 'finger CONT gold'
                                               paa-ousi néré (farine du) kpā wìsí
oualè-ousi farine d'igname wálé wisí
                                               paapoloum néré (gousse du)---
ouamm sang wàn
                                               palé houe (à fer large) kpálé
ouansébao collier (en verroterie) ---
                                               palépa manche de daba kpálé pá
ouanzivouélé cauri wánínlé
                                               palo jour pàló
ouanzouguélélilali devin (se servant de
                                               pangoloma poteau (tùtùwá)
  cauris) wánínlé līlálí 'cowry throw-Ag'
                                               parana-n'zi poisson-chien ---
ouaporo tô (à l'igname) wápló
                                               parébéri, parébri vendre pléblē
ouara (ou ouala) maison wlá
                                               parko pork kplàkô
ouara groupe des ménages wlá
                                               pégnalo débiteur pèn ó à ló 'he is in debt'
ouara rire wlá
                                               pégnn (ou pain) mortier péή
ouarakaara chef de groupe familial wlá
                                               pégnn dette pèn
  kálá 'elder of a matriclan'
                                               peignn bâton pēŋ 'bud'
ouarama, ouaraman chef de groupe
                                               peïnggn conte, fable p\bar{\epsilon}\bar{\eta}
  familial wlá mà 'head of a matriclan'
                                               pélé soumbara kplě
                                               pélégnn calebasse plēń 'goblet'
ouara-ouara bleu (clair) blúá
                                              pèlou voler (dans l'air) pèloŋ
ouata voyager tá blī mà
```

**péné** pilon *péné* sapobélé hydromel sómó blě **péni** fer *pēniń* sara tabac (à priser) srâ 'tobacco powder' **péninndo** forgeron *pēnín*š < Jula or Baule **pénitè** cuivre jaune *pēniń téé* 'red iron' **asara** prendre à srá '3sg take' pénna créancier pèn nà **sarali** fou *srálí* pénon neveu (fils de soeur) pènà 'crossasaramika habiller (s') à srá mì ká 'take cousin' it and put it on!' (imperative) péré métier à tisser ?pālī 'piece of tissue **sarandani** devin, devin (se servant d'eau) to put on one's head to carry things' srāŋ̄ dàlí 'diviner consult-Ag' pilana, parana chien (só-ná) sarapoum tabatière (sra) kpōŋ̄ 'tobacco pilana-da chienne (só)-ná dā calabash' **pirimmbiri** bien portant *kplēnmlēn* sei jaune (dálé) BG < Manding sáyi **piti** oreiller *piti* 'jaundice' pôba sacrifier pōgbā **sépé** gris-gris *sèpē* 'kaolin' pobéléré nourriture pōblēlê asésé insulter, injurier à sésè '3sg insult' **pobiri, pobili** gourmand pō blēlí **sî** palme à huile sī apobiri manger pā blē asi appeler à sí '3sg call' po-dâ semer pō dă asi attraper à sí '3sg take' asi donner à sí '3sg take' **pohio** caoutchouc *póyó* si-bélé vin de palme sīblě **poho** brousse *pɔu* 'champ' **poho, poo** brousse *p̄σú* 'field' sié feu síé pomana tambour calebasse --si-ouéré palmier (fruit de) si wlé **ponon** nombril *plòή* η~0 **sirina** gris-gris (pour attacher) --**poro** peau *kpló* siya race sīyà poro tô wápló so dent só poro-bégnn baobab (fruit du) plš bēņ so-déré porte (ouverture) --**sofalé** âne --- BG < Jula *sò-fali* 'mule' **poro-iri** baobab *plŏ yrí* poro-ouisi baobab (farine du) plš wisí sombana-ousi poudre (à fusil) sámláń porotolo? pourquoi? (ó lé lòwā) wisi potoroupo animal domestique pō trōpò **sômm** animal sauvage *sō* $\bar{\eta}$ 'thing breed-Men' **sômm** viande *sō* $\bar{\eta}$ **pouou** blanc *púú* sôn champ số 'yam patch' poviè-iri caoutchouc (arbre à) --- BG < son homme (mâle) sộŋ MOB: 'person' Jula songbana fusil sámláń **sain** malade  $s\bar{\varepsilon}$ songolo-ouélé léopard, panthère (jàtá) sambasé tamarinier --sopo miel sómó sambé poison (volatil) --**sopoda** abeille  $s \acute{o} m \acute{o} d\bar{a}$  'mother of sanndé lièvre sáné honey', MOB: sómó wlé

soron Dyoula, musulman sɔ́ɔ́ ya marcher yā **soso** haricot *s*ŏ < Jula *s*òsɔ yalo lever (se) yāló soua bananier bláná súá yamm joue yáń **soua** or *sùà* 'non-iron metal' yamm scorpion (jaune) yāŋ̄ 'tarantula' soualignn' veuve súálēņ yara asseoir (s') *yrä* souhana riche sùà nà yéramadoma quelquefois plus tard, souo (ou sio) case súó yrámà dō mà yéré trou yrē **souoba** mur *súó bā* yéta taire (se) yé tā **syé** oiseau *sìèŋ* yéti (ou yéki) ciel ècí ta aller, partir tá tâ tabac tàà < French yétigboulé foudre, foudre (pierre de la) takara allumette *taklaŋ* < Jula *tákala* ècí glē talo pipe tàà lō 'with tobacco' **yi** dormir *yī* yibédona midi yīgbíé dō nā 'sun has tazimmbo pêcher tá zìń bō 'to go fishing' téé (ou tééin) rouge téé arrived' **téni** hôte (qui est reçu) *téniŋ* 'foreigner' yi-bihé hippopotame yí bíè tennde pigeon (vert) --yigbéboya est yīgbíé bōyà **tienngono** poison *(bíá)* BG < Jula yigbénzouya ouest yīgbíé zūyà timmbana tambour de village ?? mlà yii (ou yî) eau yí tiômm, tiohon flèche (núè wlé) yii, n'zan marigot yi water'; záń tokobi sabre --yiigbé soleil yīgbíé tominé vagin tòmlē yiômm front yōή 'face' tôn termitière *tō* $\bar{\eta}$ yiômm grenouille tona notable tó ná 'name ATR' yonodi soir yénòdí yoroum pois souterrain yròn tonina paresseux tónín ná topé moquer (se) tó pē 'to call names' **youm** visage *yōή* **toro** oreille *tróń* yourou nuit yrú toro verge trš 'penis' yourouyali hyène yrúyālí 'nocturnal being' torommbou champignon tróń púú 'white **yovouéré** oeil *yōwlé* mushroom' azara jeter à zrä '3sg throw' torovi testicules tròfi zazalè disputer (se) zázálé (nominalizatorowa hotte --tion) tya biche rayée cīyà 'bushbock' zini maïs zrìn tyi bleu (fonce) tīī='noir' azon piler à zō '3sg pound' **tyi** noir *tīī* **zonzon** moustique zózó viaon, viamm carquois --**zoû, zouhou** margouillat (tènmlèsià) viendanani orgueilleux, insolent --azou lancer à zū '3sg throw' **zoumounou** magnan *zūmlūī*ŋ **avouè** cueillir  $\hat{a}$   $w\bar{\varepsilon}$  '3sg gather'

### 16.2. Phrases with MOB equivalent and gloss

BG mon parana 'mon chien', 'my dog'

MOB mājī só-ná

gloss 1sg.Emph tooth-ATR

BG miem parana 'ton chien', 'your (sg.) dog'

MOB mīā mī só-ná

gloss 2sg.Emph 2sg tooth-ATR

BG anion parana 'son chien', 'his/her dog'

MOB àṇā số-ná

gloss 3sg.Emph tooth-ATR

BG asisi parana 'notre chien', 'our dog'

MOB ān sēsē ān só-ná

gloss 1PL ALL 1PL tooth-ATR

BG kanion ka parana 'votre chien', 'your (pl.) dog'

MOB kā-nā kā só-ná

gloss 2PL-EMPH 2PL tooth-ATR

BG ouo nion go parana 'leur chien', 'their dog'

MOB ŋò nāŋ ŋò só-nág

gloss 3PL EMPH 3PL tooth-ATR

Note: GB word for *dog* corresponds to MOB *kpláń-ná* 'possessor of fleas'. A common word for dog in MOB is *só-ná*, literally 'possessor of teeth'.

**Ouomisipo ?** 'Comment t'appelles-tu?' 'What is your name?'

ŋò m̄ৄ sì pó?

3PL:HAB+ 2SG call:L what

literally: 'what do they call you?'

Mibobikao? 'De quel village es-tu?' 'What village do you come from?'

mí bó gbě kāpô wó?

2sg:Pst+ come.from:L village which IN

literally: 'which village do you come from?'

Miboma? 'D'où viens-tu?' 'Where do you come from?' hś mí má 2sg:Pst+ come.from:L where **Mi yarama?** 'Où vas-tu?' 'Where are you going?' m<u>ī</u> yrá má 2sg St+.go where Note the presence of *yrá* as a contraction of a stative aspect marker and *tá* 'to go'. **Manalémian ?** 'De quelle race es-tu?' 'What is your ethnicity?' má ná lέ mīā? where ATR PST+:COP:L 2SG.EMPH In this and following five examples, note the reversal of predicate and subject. **Soron dé mien ?** 'Es-tu musulman?' 'Are you Muslim?' SŚŚ lέ mīā? Muslim PST+:COP:L 2SG.EMPH **Kafiri lé mien?** 'Es-tu fétichiste?L 'Are you pagan?' (kafiri) lé mīā? pagan PST+:COP:L 2SG.EMPH Benn'dé mien? 'Es-tu Gan?' 'Are you Beng?' bèń lé mīā? Beng PST+:COP:L 2SG.EMPH Hon-hon, Benn'dé mahi. 'Oui, je suis un Gan'. 'Yes I'm Beng'. ηπ bèή lé māŋ yes Beng PST+:COP:L 1SG.EMPH **Benndé lé mahi.** 'Non, je ne suis pas Gan'. 'No I'm not Beng'. lέ έ bèń à māŋ Beng 3SG.PST- COP:L 1SG.EMPH NEG **Mé vinani?** 'Es-tu content?' 'Are you satisfied?' mí vī nā à nì? 2sg:Pst+ love Perf 3sg BENEF literally: 'Did you like it?' Mi bourama? 'Es-tu fatigué?' 'Are you tired?' blùà nā? mį

2sg:Pst+ tire Perf

**N'bourana.** 'Je suis fatigué'. 'I am tired'.

ή blùà nā

1sg:Pst+ tire Perf

Mamboura sâ. 'Je ne suis pas fatigué'. 'I am not tired'.

mă l

blùá sà

έ

1sg:Pst- tire Perf.Neg Neg

N'démi hi guén? 'Comment vas-tu?' (à un homme) 'How are you doing Sir?'

ñ dē

dē mì

gēŋ?

1sG father 2sG:HAB+ beautiful

literally: 'My father, are you good?'

Ndami hi guén ? 'Comment vas-tu ?' (à une femme) 'How are you doing Ma'am?'

 $\bar{\eta}$   $d\bar{a}$ 

dā mì

gēŋ?

1sg mother 2sg:Hab+ beautiful

literally: 'My mother, are you good?'

Niguénn. 'Je vais bien'. 'I'm doing well'.

Ŋ

gēῆ.

1sg:Hab+ beautiful

literally: 'I am good'.

**Aniasâ.** 'Ce n'est pas fini'. 'It is not over'.

à

nā- sà

É.

3sg:Pst- finish-Perf.Neg Neg

**Eniana.** 'C'est fini'. 'It is over'.

пā

é

рā

3sg:Pst+ finish Perf

# **List of Notation and Glosses**

List of Notation and Glosses	
,	high tone
	low tone
-	mid tone
^	falling (high to low) tone
~	rising (low to high) tone
	mid-high rising tone
~	mid-low falling tone
!	downstep of the following tone
(X)	X is optional
*(X)	X is obligatory
X//Y	X and Y are free variants
+	affirmative polarity series
-	negative polarity series
1	1 <sup>st</sup> person
2	2 <sup>nd</sup> person
3	3 <sup>rd</sup> person or portemanteau series contracted with a 3sg non-subject
<b>A</b> C	pronoun  agent nominalization
AG APUD	agent nominalization localization APUD 'around'
ATR	attributive marker
BENEF	benefactive postposition
BSQ	base form of the verb (often omitted from the gloss)
L	low tone form of the verb
CND	conditional series
CNS	syntactic marker of a construction
CONT	localization CONT 'in contact with'
COP	copula verb
DEF	definite article
DISTR	distributive interpretation
DT	temporal shift
Емрн	emphatic particle
Ex	existential series
FOC	focus pronoun series or focus construction marker
Hab ini	habitual series localization IN 'in'
IN	IOCAIIZAUOII IIV III

iterativity

**ITER** 

MEN means nominalization

NEG negation

NGO cancelled result or irreal conditional marker

NMLZ (event) nominalization

P postposition

Pos substantivized possessive series, also used as a contrastive topic marker

POST localization POST 'behind'

POSS localization POSS 'in the possession'

PST preterite series

PRF perfect verb aspect

PL plural

PLC locative nominalization

PROG progressive form

RES resultative/stative form

RFL reflexive series

sG singular

ST stative series

SUB localization SUB 'under'

SUPER localization SUPER 'on, over'

TOP topic marker

V verb stem *or* verb within an idiomatic expression

### References

- Bearth, T. Observations préliminaires sur la langue ngen ou gan. Ms., 1979.
- Bhaskararao P., K. V. Subbarao (eds.). *Non-nominative subjects*. 2 vols. Amsterdam Philadelphia: John Benjamins, 2004.
- Carlson, G. Reference to kinds in English. PhD thesis, University of Massachusets Amherst, 1977.
- Comrie, B. Some Argument-structure properties of 'give' in the languages of Europe and Northern and Central Asia. In: *LENCA-2. The Typology of Argument Structure and Grammatical Relations*. Kazan, 2004, pp. 13.
- Creissels D. Encoding the distinction between location, source and direction: a typological study. In: Hickmann, M. & S. Robert (eds.). *Space in languages*, 19-28. Amsterdam / Philadelphia: John Benjamins, 2006.
- Creissels D., Nguessan Kouadio. *Description phonologique et grammaticale d'un parler baoule*. Abidjan : Institut de Linguistique Appliquée, 1977.
- Delafosse M. Vocabulaires comparatifs de plus de 60 langues et dialects parlés à la Côte d'Ivoire et dans les régions limitrophes, avec des notes linguistiques et ethnologiques. Paris : E. Leroux, 1904.
- Flick E. Rapport préliminaire sur l'étude du système des tons en langue N'Guin. ms. Abidjan: SIL, 1979.
- Gottlieb A. *Under the kapok tree: identity and difference in beng thought*. University of Chicago Press, 1992.
- Gottlieb A., M. Lynne Murphy. *Beng English Dictionary*. Bloomington: Indiana University Linguistics Club Publications, 1995.
- Gottlieb A. The afterlife is where we come from: The culture of infancy in West Africa. University of Chicago Press, 2004.
- Gottlieb, A., Phillip Graham. *Parallel worlds: An anthropologist and a writer encounter Africa*. Chicago: University of Chicago Press, 1994.
- Gottlieb, A., Phillip Graham. *Braided Worlds*. Chicago: University of Chicago Press, 2012.
- Greenberg, J. The languages of Africa. Bloomington: Indiana University Press, 1966.
- Gusev V. Ju. Celevye konstrukcii pri glagolax dviženija: aktanty ili sirkonstanty? In: *Meždunarodnyj simpozium «Tipologija argumentnoj struktury I sintaksičeskix otnošenij». Conference abstracts.* Kazan', 2004, pp. 142-144.
- Haspelmath M. Ditransitive constructions: The verb 'Give'. In: Martin Haspelmath, Matthew S. Dryer, David Gil and Bernard Comrie (eds.). *The world atlas of language structures*. Oxford: Oxford University Press, 2005a, pp. 426-9.

- Haspelmath, M. Nominal and verbal conjunctions. In: Martin Haspelmath, Matthew S. Dryer, David Gil and Bernard Comrie (eds.). *The world atlas of language structures*. Oxford: Oxford University Press, 2005b.
- Haspelmath, M. Argument marking in ditransitive alignment types. *Linguistic discovery*, 3:1, 2006a, pp. 1-21.
- Haspelmath, M. *Ditransitive Constructions in the World's Languages*. Course handout for Leipzig Spring School on Linguistic Diversity. Leipzig, 2006b.
- Hawkins J. A. A parsing theory of word order universals. *Linguistic Inquiry*, 21, pp. 223–261.
- Kayne R. S. The Antisymmetry of Syntax. Cambridge: MIT Press, 1994.
- Keenan, E. L. and M. S. Dryer. Passive in the world's languages. In: Timothy Shopen (ed.). *Clause structure, language typology and syntactic description*. Vol. 1. Second Edition. Cambridge University Press, 2007, pp. 325-361.
- Kibrik A. E. Kognitivnoe raznoobrazie predikatno-argumentnyx struktur i jazykovye strategii ix unifikacii. In: *Meždunarodnyj simpozium «Tipologija argumentnoj struktury I sintaksičeskix otnošenij»*. *Conference abstracts*. Kazan', 2004, pp. 16-18.
- Kibrik, A. E. Nominal inflection galore: Daghestanian, with side grances at Europe and the world. In: Frans Plank (ed.). *Noun phrase structure in the languages of Europe*. De Gruiter, 2003, pp. 37-112.
- Kibrik A. E., Ja. G. Testelec. Bezhta. In: M. Job (ed.). *The indigenous languages of the Caucasus*, Vol. 3. North East Caucasian languages, Part 1. Ann Arbor, MI: Caravan Books, 2004, pp. 217-295.
- Kouadio, K. D., Kouakou Y. *Syllabaire Βεη: Edition préliminaire*. Abidjan: SIL, 1997.
- Kouakou, Y. *Le syntagme nominal en bè*ý. Rapport de D.E.A. Université de Cocody, Abidjan, 1997.
- Letučij A. B. *Tipologija labil'nyx glagolov: semantičeskie i morfosintaksičeskie aspekty*. PhD dissertation. Moscow, 2006.
- Murphy M. L. The Structure of Beng. In: Alma Gottlieb, M. Lynne Murphy. *Beng English Dictionary*. Bloomington: Indiana University Linguistics Club Publications, 1995, pp. xii-xxiii.
- Nikitina, T. Clause-internal correlatives in Southeastern Mande: A case for the propagation of typological rara. *Lingua* 122:4, 2012, pp. 319–334.
- Nikitina, T. Wan-French-Russian-English dictionary. Ms.
- Ory, M. Esquisse phonologique du Beŋ (Côte d'Ivoire). Mémoire de D.E.A, Université Paris III, 1981.

- Paesler W. How to distinguish statement and question in Beng. *Journal of West African Languages*, XIX, 1, 1989.
- Paesler W. Principes de l'orthographe beng. Ms: SIL, RCI, 1991.
- Paesler W. Esquisse phonologique de beng parler de Ouassadougou (Sous-Préfecture de M'Bahiakro, Côte d'Ivoire). In: Inge Egner (ed.). *Esquisses phonologiques de trois langues ivoiriennes: beng, dida, yaouré* (Esquisses linguistiques ivoiriennes 1). Institut de Linguistique Appliquée ACCT. Abidjan, 1992.
- Paesler W. Field materials on the Beng languages. Ms.
- Paperno, D. Parlers décrits par Tauxier et Delafosse et le Beng moderne de Ouassadougou. In : Valentin Vydrin (éd.). Langues et linguistique mandé: 2e Colloque international, ST Petersbourg (Russie), 15-17 septembre 2008. Communications et résumés. Saint Petersburg, 2008a, pp. 113-120.
- Paperno, D. Otnositel'nye konstrukcii jazyka ben. In: V. F. Vydrin (ed.). *Afrikanskij sbornik* 2007. Saint Petersburg: Nauka, 2008b, pp. 306-319.
- Paperno, D. Grammatičeskij očerk ben. In: V. F. Vydrin (ed.). *Mandeica Petropolitana II* (ACTA LINGUISTICA PETROPOLITANA. Trudy Instituta Lingvističeskix issledovanij RAN. N. N. Kazanskij (ed.), vol. VII. no. 2). St. Petersburg: Nauka, 2011, pp. 14-117.
- Perexhval'skaya, E. V. Dictionnaire mwan-français. Ms.
- Polivanova A. K. Vybor čislovux form suščestvitel'nyx v russkom jazyke. In: *Problemy strukturnoj lingvistiki 1981*. Moscow: Nauka, 1983.
- Prost A. Les langues mandé-sud du groupe mana-busa. Mémoires de l'Institut français d'Afrique Noire. Dakar : IFAN, 1953.
- Šošitajšvili I. A. *Funkcii i status pljuskvamperfekta v glagol'noj sisteme*. PhD thesis. Russian State University of Humanities, Moscow, 1998.
- Tauxier L. Le Noir de Bondoukou. Paris : Editions Leroux, 1921.
- Testelec Ja. G. *Grammatičeskie ierarxii i tipologija predloženija*. Doctoral paper. Moscow, 2003.
- Tsunoda T. Remarks on Transitivity. Journal of Linguistics 21, 385-96.
- Verma M. K., T. Mohanan (eds.). *Experiencer subjects in South Asian languages*. Stanford: CSLI Publications, 1990.
- Vydrin V. F. Ličnye mestoimenija v južnyx jazykax mande. In: *Mandeica Petropolitana* (Acta linguistica petropolitana. Trudy instituta lingvističeskix issledovanij, II:2). Saint Petersburg: Nauka, 2006, pp. 327-413.
- Vydrin V. On the problem of the Proto-Mande homeland. *Voprosy jazykovogo rodstva Journal of Language Relationship* 1, 2009, pp. 107-142.
- Vydrine V. Goo: présentation d'une langue. Mandenkan 50, 2013, pp. 171-194.

- Welmers W. E. The Mande Languages. In: *Monograph Series of Language and Linguistics*. Washington: Georgetown University, Institute of Languages and Linguistics 11, 1958, pp. 9-24.
- Xolodovič A. A. Zalog. Opredelenie. Isčislenie. In: *Kategorija zaloga*. Leningrad: Nauka, 1970, pp. 1-26.

## Denis Paperno. Grammatical sketch of Beng

The sketch provides a description of the Beng language on all levels of grammar. Individual sections are dedicated to phonology, morphology, and key aspects of syntax of the language, including simple and complex clauses. The paper is based on field work.

*Keywords:* Beng language, Mande languages, syntax, morphology, phonology, field description, pronominal series, reduplication, aspect, argument structure, information structure

## Денис Аронович Паперно. Грамматический очерк бен

Данный очерк, написанный на основе полевой работы, содержит описание языка бен на всех грамматических уровнях. Отдельные разделы посвящены фонологии, морфологии и базовым аспектам синтаксиса, включая структуру простого и сложного предложения.

*Ключевые слова:* язык бен, языки манде, синтаксис, морфология, фонология, полевая лингвистика, местоименные серии, редупликация, аспект, информационная структура

# Denis Paperno. L'esquisse grammaticale du beng

Cet esquisse est basée sur les données de terrain et représente une description du beng à tous les niveaux de grammaire. Il comporte des chapitres sur la phonologie, morphologie, les fondements du syntaxe, y compris la structuire de l'énoncé simple et complexe.

*Mots clé* : langue beng, langues mandé, syntaxe, morphologie, phonologie, linguistique de terrain, séries pronominales, aspect, structure informationnelle