

# A Grammar of Gyeli

by

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*Púù yá bámbámbó bíṣì bà vú mò bî —  
yá báléè mápè'è máwò*

*For our ancestors who have left us —  
may we keep their wisdom*



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# Abbreviations

For notation conventions, I use the Leipzig Glossing Rules. These may differ from abbreviations typically used in the lexicon. Abbreviations in the lexicon are generally in small characters ending in a dot while most abbreviations in glosses (except for noun class labels) are represented in capital letters.

*	ungrammatical form	ba	<i>ba-</i> noun class
°	reconstructed form	be	<i>be-</i> noun class
( )	element in brackets is optional	C	consonant
-	morpheme boundary	caus.	causative
<	derived from	CF	citation form
Ø	prefixless noun class	cl.	agreement class
1-9	agreement class 1-9	COM	comitative marker
1P	first person plural	COMP	complement clause
2P	second person plural	COMPL	absolute compleative
1S	first person singular	COND	conditional clause
2S	second person singular	CONTR	contrastive marker
ADJ	adjective	COP	SCOP copula
ADV	adverbial clause	DEM	demonstrative
adv.	adverb	DIST	distal
AGR	agreement	DO	direct object
ANA	anaphoric marker	EMPH	emphatic pronoun
AP	associative plural	EXCL	exclamation
appl.	applicative	EXP	expansion
ATT	attributive marker	EXT	extension
autoc.	autocausative	FUT	future
AUX	auxiliary	H	high tone

HAB		habitual	posit.	positional
HL	falling contour tone	POSS		possessive
HORT		hortative	PRES	present
HTS	high tone spreading	PRF		perfect
ID	identificational marker	PRED		predicate
IDEO		ideophone	PRIOR	priorative
IMP		imperative	PROG	progressive
INCH		inchoative	PROSP	prospective
INF	infinitival clause	PROX		proximal
intr.	intransitive	PST1		recent past
inv.	invariable	PST2		remote past
IO	indirect object	Q		question particle
L	low tone	QI		quotative index
le	<i>le-</i> noun class	Q(tag)		question tag
LH	raising contour tone	R		realis mood
LOC		locative		
ma	<i>ma-</i> noun class	RD		reported discourse
mi	<i>mi-</i> noun class	recip.		reciprocal
N	nasal; <i>N-</i> noun class	REL		relative clause
n.	noun	RETRO		retrospective
NC	nasal + consonant	S		singular
NCA	non-complete accomplishment	SBJ		subject
NEG		negation	SBJV	subjunctive
NOM		nominalization	SEQU	sequential marker
NP		noun phrase	sg.	singular
npp.	nominalized past participle	stat.		stative
num.		numeral	SUB	subordinate
O		onset	TBU	tone bearing unit
OBJ		object	TM	tense-mood
OBJLINK		object linker	tr.	transitive
pass.		passive	V	vowel
PL		plural marker	v.	verb
pl.		plural	VOT	voice onset time
PN		proper name	X	oblique
POS		part of speech		

# Acknowledgments

This grammar would not have been possible without the many Gyeli speakers I have worked with over the years and who patiently taught me about their language. I am especially grateful to the people of Ngolo, in particular to Mama David, Ada Joseph, Mambi, Nandtoungou, Nze, Tsimbo, Nkolo Dorothée, Segyua, ‘Délégué’ Bikoun, Tata, and Aminu.

Thanks also to my Kwasio assistants and friends Bimbvoung Emmanuel Calvin, Djiedjhie François, and Nouangama Severin who did not only help with interpreting, translations, and annotations, but who made my life in the field so much easier and enjoyable. Thanks for always being around and taking care of me when I was sick with malaria and chikungunya. I am also particularly grateful to my fellow team members Daniel Duke and Emmanuel Ngue Um and our cameraman Christopher Lorenz.

My fieldwork was funded by the VolkswagenFoundation grant ‘84976’ and a generous extension phase ‘87014’ within the DoBeS (Documentation of Endangered Languages) Initiative. I am grateful for the opportunity the grants gave me and for all the assistance, especially by Mrs. Szöllosi-Brenig.

I would like to thank my advisors Tom Güldemann and Maarten Mous for their helpful feedback throughout the course of writing my dissertation and beyond when revising it for publication. I have discussed many aspects of this grammar with various people over the last years. I particularly thank Viktoria Apel, Pierpaolo Di Carlo, Ines Fiedler, Hana Filip, Jeff Good, Larry Hyman, Lutz Marten, Joyce McDonough, and Murray Schellenberg.

Last, but not least, I am very grateful to my family and friends who supported me in the field and took active interest in all the news I brought from Cameroon. Special thanks to my wonderful husband Scott for his patience with the long absences that fieldwork makes necessary, for sharing my excitement and worries, and for proof-reading this grammar.

# Chapter 1

## Introduction

Gyeli is a Bantu A80 language spoken in southern Cameroon and northern Equatorial Guinea. The Gyeli speakers, who are called *Bagyeli*, are hunter-gatherers constituting the western-most ‘Pygmy’ group in Central Africa. Their forest foraging lifestyle distinguishes them from agriculturalist Bantu groups in the area, opposing ‘Bagyeli’ and ‘Bantu’ ethnically, even though linguistically, they are all Bantu speakers.

This chapter provides extra-linguistic and methodological context to the grammatical description. The introduction contains three parts. I will provide a general discussion of Gyeli’s language situation including information on the name, linguistic classification, speaker numbers, language contact, and dialects. I will pay special attention to the village *Ngolo* on whose speakers I base this description. In the second part, I introduce the Gyeli speakers, the environment they live in, and give a rough outline of their culture and subsistence. Finally, I will address various aspects of the methodology I used in compiling this grammatical description of Gyeli. This includes information on the data, but also information on what I consider the ‘speech community’ that provided data for the linguistic description.

The introduction also highlights two distinctive features of this grammar. First, the grammatical description is based on a multimodal language documentation corpus. This corpus includes an extensive amount of natural texts of diverse genres as well as approximately 170 hours of elicitations, developed over the course of 4 years, 19 months of which were spent in the field. Following the ‘Boasian trilogy’ (Evans & Dench 2006), the Gyeli grammar includes grammar, text, and dictionary. In contrast to Boas, however,

my text corpus does not only contain narratives, but other text genres that reflect language use in everyday face-to-face communication. While the grammar is largely based on actual language use, elicitations supplement the range of constructions I was able to uncover. As such, this grammar is the product of an effort to synthesize language description and language documentation traditions. With advances in technology and archiving, text and elicitation data are not only available in a transcribed print version, but the primary video and audio data are available in the DoBeS Archive, ensuring accountability and reproducibility of my claims.

In order to ‘let the language speak for itself, this grammar is organized according to the form-to-function principle, rather than by semantic categories. Chapter 6 on the verbal complex, for instance, is structured according to predicate types rather than by functional domains, such as tense, aspect, mood, and negation. In order to facilitate finding functional categories, e.g. for typologists, I provide a summary of functional categories and their location in the grammar in the introduction of the chapter. Similarly, I summarize the semantic category of numerals at the end of Chapter 5.

## 1.1 The Gyeli language

The Gyeli language situation is characterized by a relatively small number of speakers scattered in a vast area that is shared with a multitude of other languages and ethnic groups. Estimations of the population of Gyeli speakers vary from 2,200, following Renaud (1976: 27), to around 5,000 as proposed by Ngima Mawoung (2001: 215). In the *Ethnologue*, Lewis (2009) gives figures of 4,250 Gyeli speakers in Cameroon and 29 in Equatorial Guinea. Based on a sociolinguistic survey conducted with my colleague Emmanuel Ngue Um in 2010, we estimate 4,000 to 5,000 speakers.<sup>1</sup>

The region in which Gyeli is spoken is about 12,500km<sup>2</sup> (which corresponds to about 4,800m<sup>2</sup>). Unlike many other languages in the world,

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<sup>1</sup>The difficulty in establishing a more precise estimate arises for various reasons. Gyeli speakers often live in remote villages and settlements which are not easily accessible. They often do not possess identity cards, so that they are not officially registered with the authorities. Another difficulty in estimating population numbers is due to mobility patterns. Gyeli speakers, though becoming more sedentary in terms of permanent villages, are highly mobile and regularly switch villages. Therefore, it is hard to say how many people exactly live in a village.

especially in the Indo-European context with its national languages, Gyeli is neither the only (or predominant) language in the region nor restricted to one contiguous geographic area. Instead, Gyeli is one out of nine languages in the area as shown below in Map 1.4. Naturally, there is intensive language contact between the languages of the region. Gyeli speakers are shifting to the languages of their farmer neighbors, a trend which both fragments Gyeli into different dialects and contributes to the language's endangerment. I will discuss each of these aspects in turn in more detail below.

### 1.1.1 The Language's name

Gyeli is known under a variety of names, sometimes depending on who is talking about the language. In the *Ethnologue*, for instance, Lewis (2009) calls the language *Gyele* with the code ISO 639-3: *gyi*. It also lists the following alternate names that are also used to designate the same language (however, not specifying who uses which name): Babinga, Bagiele, Bagyele, Ba-jele, Bajeli, Bako, Bakola, Bakuele, Bekoe, Bogyel, Bogyeli, Bondjiel, Giele, Gieli, Gyeli, Likoya.

There are two patterns observable within the various names. First, some names have a prefix of the general form *Ba-* and some are prefixless. The *Ba-* prefix, or the corresponding prefixes *Bo-* and *Be-* used in other languages, are typical Bantu prefixes of the plural noun class 2 of the human gender designating groups of people. Thus, the language names with a prefix derive from a group of people rather than their language.

Even though this might be unusual for the anglophone Bantu tradition, I refer to the speaker group as *Bagyeli*, using the *Ba-* prefix instead of the bare stem. The reason for this is that both the Gyeli speakers and neighboring Bantu groups use this term (rather than *Gyeli*), both in local languages and in French. In contrast, most ethnic groups of the area, for instance the Kwasio, Mabi, Bulu, and Yassa, do not receive the *Ba-* prefix. Since the prefix is then not used consistently for all ethnic groups, it seems that it is really part of the name for Gyeli speakers. When talking about the language, however, I use the bare stem *Gyeli*.<sup>2</sup>

Another pattern, apart from a name with or without a prefix, is the sim-

---

<sup>2</sup>In contrast to the *Ethnologue*, I use the spelling of Gyeli with an 'i' in the end instead of Gyele with an 'e' at the end since my language consultants prefer this variant.

ilarities of forms to either ‘Gyeli’ or ‘Kola’. There are variants such as *-jele*, *-giele*, *-jeli*, *-gyel* or *Gieli* which can be subsumed under variants of ‘Gyeli’. Other variants such as *-kola*, *-ko* or *-koya* can be subsumed under variants of ‘Kola’. These two different names correlate with geographic areas. Speakers in the northern part of the Gyeli language zone call their language *Kola*, speakers in the central and southern part call it *Gyeli*, but it is nevertheless considered the same language. Accordingly, the speakers are called *Bagyeli* in the center and south, and *Bakola* in the north. Since the speech community on which I base this grammar is located in the southern-central part of the Gyeli/Kola language zone (see Map 1.4), I use the name *Gyeli* rather than *Kola*.

*Bagyeli* and *Bakola* are terms used both as endonym (the way a group calls itself) and exonym (the name used for a group by outsiders).<sup>3</sup> There is, however, an alternate exonym used by all local Bantu neighbors, namely the French word *pygmées*, ‘Pygmies’. It seems to be a convenient cover term for short-sized hunter-gatherers in Central Africa, especially since people not familiar with the ethnic and linguistic situation in Central Africa usually associate more with the term ‘Pygmy’ than with ‘Bagyeli’ or ‘Bakola’. I will, however, not use this term for several reasons. First, the term ‘Pygmy’ generally has a pejorative connotation (though this is certainly not always implied by the Bantu farmer neighbors who use it). Second, it implies a certain homogeneity among such Central African forest foragers which is, in all reality, not existent. So-called ‘Pygmy’ groups differ considerably in terms of language, type of contact with their farming neighbors, settlement patterns, and hunting techniques, just to mention a few differences.

### 1.1.2 Classification

With about 2000 languages out of the about 7000 languages world-wide, the African continent is linguistically very rich and diverse. For Cameroon alone, the *Ethnologue* lists 278 living languages. Figure 1.1 shows the geographic location of the Gyeli language within Africa.

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<sup>3</sup>Groups such as the Mabi and Ngumba, both dialects of Kwasio, as well as the Bulu, seem to use these terms. Exonyms used by other groups such as the Yassa or Bakoko, as represented in Map 1.4, require further investigation since I was not in direct contact with them during my fieldwork. Renaud (1976: 29-30) discusses exonyms as used by the Basaa, Bulu, Fang, Mabi, and Ngumba. They are all related to the terms ‘Gyeli’ and ‘Kola’.



Figure 1.1: Location of Gyeli and Cameroon in Africa

**Classification within Niger-Congo** Languages of Cameroon mostly belong to the Niger-Congo languages, as does Gyeli. With roughly 1,500 languages, Niger-Congo constitutes the biggest language family in Africa, as classified by, for instance, Williamson & Blench (2000). Figure 1.2 visualizes the classification of Gyeli within the Niger-Congo family. The figure is a simplified adaptation from Williamson & Blench (2000) and Lewis (2009).

A more detailed classification of the Makaa-Njem Group (A80) is given below, after explaining the organizational system of Bantu languages.

**Classification within Bantu** With about 500 members, the Bantu languages form the biggest subfamily of the Niger-Congo languages and, at the same time, cover a vast territory stretching from the borders of Nigeria and Cameroon all the way to east and south Africa. Probably the most famous member of the Bantu languages is Swahili, a language spoken in Tanzania, Kenya and in parts of other surrounding countries such as Mozambique, Uganda, Burundi, DRC and Somalia. Even though Swahili is spoken thousands of kilometers away, many linguistic similarities to the Bantu lan-

## Niger-Congo

- Atlantic-Congo
- Benue-Congo
- Southern Bantoid
- Narrow Bantu
- Makaa-Njem Group (A80)
- Gyeli (A801)

Figure 1.2: The classification of Gyeli within the Niger-Congo family

guages in Cameroon can still be observed.

Guthrie (1971) classifies the Bantu languages areal-typologically. As a referential classification, his model is, with slight modifications, still the most widely accepted one, even though the classification is based on geography, and not on linguistic-genetic criteria, as Maho (2001: 46) points out. Guthrie divides the Bantu-speaking area into sixteen zones and names each zone with a capital letter (A, B, C, D, E, F, G, H, K, L, M, N, P, R, S), as explained in Nurse & Philippson (2003: 3) and shown in Figure 1.3.<sup>4</sup> He then further subdivides each zone into smaller parts which he labels by decimals. For instance, the Bantu zone A is divided into the sub-zones A10, A20, A30, A40, A50, A60, A70, A80, and A90.

Bantuists often distinguish between northwestern Bantu languages, also called ‘Forest’ languages, and non-northwestern languages, referred to as ‘Savannah’ languages. Northwestern Bantu includes Guthrie’s zones A and B at its core and, to a lesser extent, also (parts of) zones C, D, and H, depending on the author (Nurse 2008: 10). Gyeli, as a Bantu A language, is a northwestern Bantu language. Nurse & Philippson (2003: 5) state that northwestern Bantu languages “form exceptions to many possible generalizations for Bantu” and show lots of ‘non-Bantu’ features. This is also true for Gyeli which is, for instance, a much more isolating language than its Savannah relatives.

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<sup>4</sup>The figure is taken from [https://en.wikipedia.org/wiki/Guthrie\\_classification\\_of\\_Bantu\\_languages](https://en.wikipedia.org/wiki/Guthrie_classification_of_Bantu_languages), accessed on July 15th, 2015.

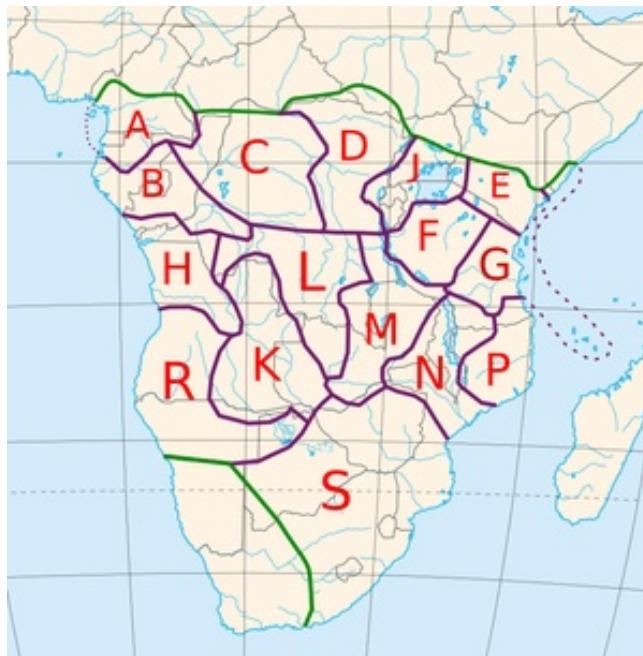


Figure 1.3: Bantu zones

**Classification within the Makaa-Njem group (A80)** The languages of each sub-zone are specified by adding further digits to the sub-zone code. For instance, Gyeli as part of the sub-zone A80 is referenced by A801. The internal classification of A80, also called Makaa-Njem Group, is adapted from Maho (2009: 15) and shown in Table 1.1. The table is sorted by the Guthrie code as updated by Maho (2009).<sup>5</sup> The second column lists the ISO code, if existing, as used in the *Ethnologue*. The third column gives the name and possibly alternate names used for the language.<sup>6</sup>

Gyeli receives the Guthrie code A801 and the ISO code ISO 639-3: gyi. The three-digit Guthrie code indicates that the language was not represented in the original classification, but added later by Maho, since a third digit is added to the code if the language's affiliation is not clear or it is closely related to several other languages of the group (Maho 2001: 46).

One reason for Gyeli's unclear status may be more ethnic or historical than reflecting a synchronic linguistic reality. The Bagyeli have a special status in that they are not ethnically Bantu. They are forest foragers who

<sup>5</sup>Maho (2009) added some coding features to Guthrie's system. Dialects are marked by a letter following the digits. A lower-case letter is used in Guthrie's original classification, an upper-case letter for newly added dialects.

<sup>6</sup>A valuable discussion of the geographic distribution of Bantu A80 languages, including maps, is given in Cheucle (2014).

Guthrie code	ISO code	Name(s)
A801	gyi	<b>Gyele, Bagyeli, Bakola</b>
A802	ukh	Ukwadjo, Ukhwejo
A803		Shiwe, Oshieba, Ossyeba, ‘Fang Makina’
A81	nmg	Mvumbo, Kwasio, Ngumba, Magbea, Bujeba
A82	sox	So
A83	mcp	Makaa, South Makaa
A83A		Bebend
A83B		Mbwaanz
A83C		Shikunda, Sekunda
A831	mkk	Byep, North Makaa
A832	biw	Bekol, Kol, Bikele
A84	njy	Njem, Nyem, Zimu
A841		Bajue, Badwee
A842	ozm	Koonzime, Nzime
A85a		Nkonabeeb, Konabem
A85b	bkw	Bekwel, Bakwele
A86a		Mezime, Medjime
A86b	mgg	Mpompon, Mpongmpong, Bombo
A86c	mcx	Mpiemo, Mbimu
A87	bmw	Bomwali, Sanghasangha

Table 1.1: Internal classification of the Makaa-Njem Group (A80)

have lived in symbiosis with sedentary Bantu farmer communities over a long period of time. Ruhlen (1994: 154) expresses a widely held view: “It is assumed that Pygmies once spoke their own language(s), but that, through living in symbiosis with other Africans, in prehistorical times, they adopted languages belonging to these two families [Niger-Kordofanian and Nilo-Saharan].” As with many other examples in the history of language classification, ethnic affiliation and/or historic assumptions may have influenced linguistic classification. In the Gyeli case, this may have lead to confusion as to how to integrate a hunter-gatherer language (with a supposedly distinctive linguistic history) into a farmer language group since the other languages of the Makaa-Njem group are all spoken by farming communities. In synchronic linguistic description, however, neither the ethnic background of the speakers nor an unknown linguistic history should play a role in classifying a language.

Another reason for Gyeli’s unclear status within the A80 group in Maho’s (2009) classification may be due to the problematic differentiation between ‘language’ and ‘dialect’. The Gyeli language as it is spoken today is indeed closely related to Kwasio (A81). As previous literature by Renaud (1976) suggests, Gyeli is so similar to Kwasio that Bahuchet (2006) considers it a dialect of the latter. This view may, however, be biased since Renaud bases his description on a Gyeli variety that is closest to Kwasio. There are other Gyeli varieties which are less related to Kwasio, but more influenced by other neighboring farmer languages as I will explain in Sections 1.1.3 and 1.1.4 on language contact and dialects of Gyeli.

I consider, just like the *Ethnologue* and Maho (2009), that Gyeli is a language on its own, containing several dialects. Whether Gyeli is a language or a dialect (of Kwasio) is not entirely uncontroversial, for indeed, the Bagyeli in close vicinity to Kribi and along the road between Kribi and Lolodorf are in close contact with Kwasio speakers and their variety is very similar to Kwasio. There are, however, two main reasons why I treat Gyeli as a language on its own. First, there are still significant differences in linguistic features. For instance, the Gyeli tense system is highly reduced segmentally in comparison to the farmer languages of the area. While all related and neighboring Bantu farmer languages use inflectional morphemes to express tense, tense-mood in Gyeli is only marked by tonal contrasts. Second, mutual intelligibility between Kwasio and Gyeli is limited. All Bagyeli speak,

or at least understand, Kwasio for socio-economic reasons since they have learned the language of higher prestige in a multilingual setting. My Kwasio language assistants state, however, that when the Bagyeli speak their own ‘real’ or ‘deep’ language, i.e. when they do not make efforts to be understood by their farming neighbors, Kwasio speakers do not understand them.

### 1.1.3 Language contact

The Gyeli language is part of a highly complex language contact situation. There are several groups and several directions of borrowing which altogether make for an intricate language contact scenario. The Gyeli speakers are in contact with eight Bantu farmer languages which, in turn, are influenced by the colonial language French.

Figure 1.4 provides a map of the Gyeli speaking area and its contact languages. Gyeli, marked by a purple line and shade, is roughly spoken from the river Nyong in the north to just across the river Ntem in the south into Equatorial Guinea. To the west, the area is delimited by the Atlantic Ocean while it stretches almost to Ebolowa in the east. Bantu farmer contact languages are represented by capital letters in different colors. The colors correspond to different language subgroups within the Bantu A group. For instance, the languages in green, Batanga and Yassa, are part of the A30 group. Some languages receive additional graphical marking by a shaded area. Basaa is marked by a grey shade, Bulu by red, and Kwasio with its two dialects Mabi and Ngumba in different blue shades. These languages are specifically marked since they constitute the contact languages of Gyeli varieties studied within the DoBeS project, as further explained in Section 1.3.1. The variety I describe in this grammar is located in the red-shaded Bulu region. Two locations are marked in the Bulu area, one with a blue dot and one with a red dot. Officially, they belong to the same village ‘Nko’olong’. The blue dot represents the Bulu village Nko’olong. About 1-2km to the southeast of it is the Gyeli village Ngolo (which outsiders also call Nko’olong) where I collected the data for my description. Other locations with a blue dot (Nziou as a Bantu farmer village) and with a red dot (Bibira as another Gyeli village) are marked in the Mabi speaking area. Data from these locations serve as comparative material to the Ngolo Gyeli variety spoken in the Bulu region.

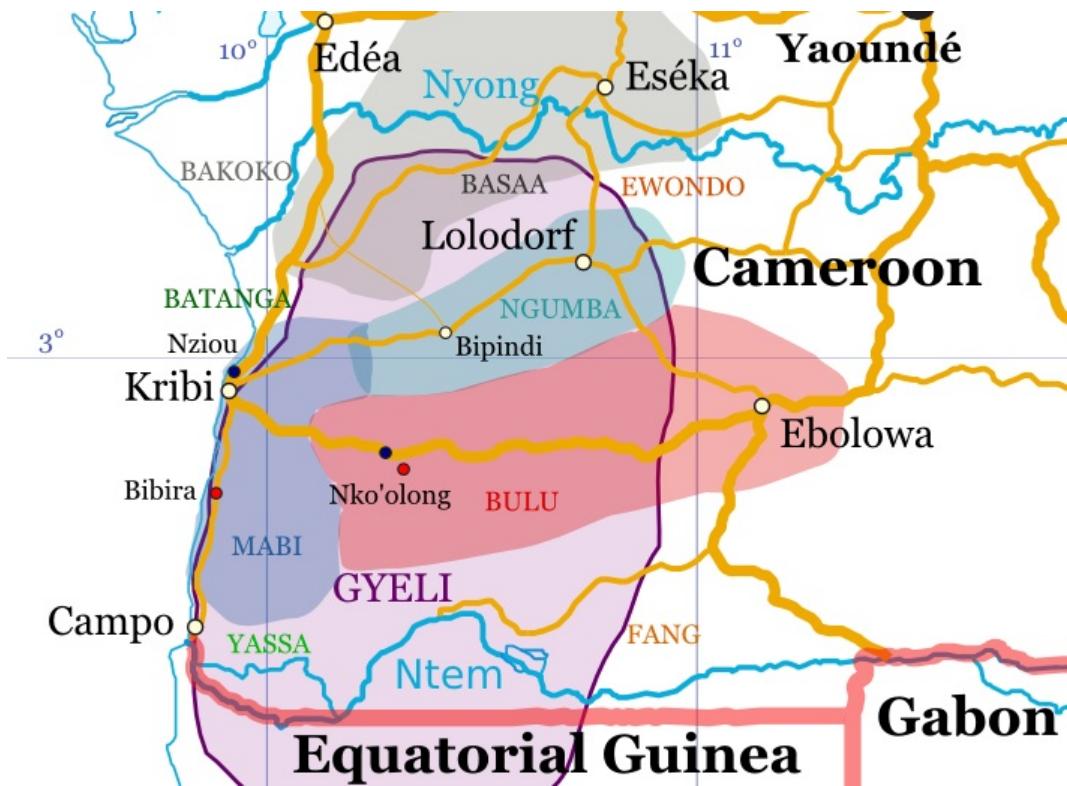


Figure 1.4: Map of the Gyeli language area and its neighboring languages

It is characteristic for this part of Cameroon that languages are geographically quite interspersed. Usually, there is no clear-cut area that only contains one language. Taking a road in the northern part of the Gyeli speaking area, for instance, one might pass a Basaa village. The next village is Ewondo and then the next one is Basaa again. This is, of course, quite difficult to visualize in a map showing a surface larger than 12.500 km<sup>2</sup>. Therefore, the map in Figure 1.4 is best understood as an approximation rather than the representation of a linguistic reality.

**Contact with Bantu farmer groups** Bantu farmer languages in contact with Gyeli include (read clockwise starting in the northwest in the map of Figure 1.4): Batanga, Bakoko, Basaa, Ewondo, Bulu, Fang, Yasa, and Kwasio with its two dialects Mabi and Ngumba. All of these languages also belong to the Bantu A zone, though to different subgroups, as illustrated in Table 1.2.<sup>7</sup>

The nature of contact and thus the linguistic closeness between the Bagyeli

<sup>7</sup>Each language name is accompanied by the ISO code as used in the *Ethnologue*.

Group	Languages	Color in Fig. 1.4
A30	Batanga (bnm), Yassa (yko)	green
A40	Basaa (bas), Bakoko (bkh)	grey
A70	Bulu (bum), Fang (fan), Ewondo (ewo)	red
A80	Kwasio (nmg) with two dialects Mabi and Ngumba	blue

Table 1.2: Classification of Gyeli's contact languages

and speakers of these eight different farmer groups differs depending on the socio-economic relations in play. The Bagyeli have closer relations to some farming groups than to others. Contact to the Yassa, for instance, who are traditionally fishermen, is less intense than with the Kwasio who are, at least partially, agriculturalists: the Bagyeli seem to be more interested in agricultural products than in seafood. There may also be historic reasons why relations to some farming Bantu groups are closer than to others depending on whom the Bagyeli had first contact with and which Bantu farmer groups arrived later in the area. Further, on an individual rather than a group level, the type of contact may be different between individual Gyeli and farmer families. Some Gyeli families have closer ties to certain farmer families than others.

The picture is thus quite heterogeneous and would require a thorough socio-economic survey supplemented by historical information in order to provide a more informed account of the nature of different types of contact. Since such a survey for the whole Gyeli speaking area would exceed the frame of this work, information presented here is based on statements by my informants, both Bagyeli and farmers, on sociolinguistic information gathered in the Gyeli village Ngolo, and on my observations of contact behavior between some Gyeli and farmer groups.

It is important to keep in mind that the status of Gyeli and the surrounding farmer languages are not the same concerning the prestige of the languages. Gyeli is associated with backwardness, a lack of education and even civilization. The Bantu farmer languages, in contrast, are the languages of the Bagyeli's patrons, associated with power and prestige. Thus, in inter-ethnic communication between Bagyeli and Bantu farmers, it is the farmers' languages that are being used. In fact, the farmers do not speak Gyeli. If some farmers understand snippets of a conversation among the Bagyeli this

is only due to a certain amount of linguistic similarity between Gyeli and Kwasio.

**Multilingualism** Speakers of all different languages in the area are in contact with some other languages; it is not only the Bagyeli being in contact with Bantu farmers. As a consequence of this close contact as well as intermarriage and trading relations, just to mention the most important factors, members of all ethnic groups are multilingual. This also holds for the Bagyeli who are multilingual with at least the three languages they speak, but usually even more. How many and which languages a Gyeli speaker masters depends on the location of his or her village within the Gyeli speaking area. Given the geographic size of the Gyeli speaking area, it is obvious that a single Gyeli speaker is not in contact with all of the eight contact languages. Rather, Gyeli speakers are in close contact with usually one main contact language. Further, all Bagyeli seem to speak or at least understand Kwasio, Gyeli's closest linguistic relative. If a Gyeli speaker speaks other languages than Kwasio and potentially another language of close contact depends then highly on individual ties to other Gyeli groups and individual mobility. For instance, if a Gyeli speaker from a village in the Bulu contact area has relatives in another Gyeli village closer to the Fang contact area where he or she spends a certain amount of time, he or she will likely pick up some of the Fang language.

Of course, it is difficult to measure the degree of fluency in several languages of even a restricted number of Gyeli speakers given the number of languages the Bagyeli speak and the various factors for acquiring contact languages. Since it was not possible to test fluency of all the various languages my consultants claim to 'speak', information provided here relies to a large degree on the speakers' self-assessment, at least for those languages I have not witnessed interactions with. In the case of Kwasio and Bulu, I was able to observe communications with the respective farmers and I am sure that the Bagyeli indeed speak these languages they claim to speak. For other languages, however, I do not have any data based on observation. In any case, the Bagyeli I have worked with have a good intuition of the languages of the area, even of those they do not speak: playing Gyeli texts from other contact regions to them, they were able with a high degree of accuracy to detect loan words from other contact languages within the text and, even

though they did not understand the meaning, they were able to indicate the source language.

While Gyeli is in contact with several Bantu farmer languages, there is also contact between different Gyeli varieties which I will describe in Section 1.1.4. Bagyeli of the Bulu contact area also have strong ties with other Bagyeli in the Mabi contact region who speak a different dialect. Contact among Bagyeli of different contact languages may be the primary reason that speakers have such a good intuition about languages of the area, even if they do not speak them.

**The role of French** The last element in Gyeli's language contact situation is the colonial language French. Gyeli is not (yet) directly influenced by French. Many Bagyeli do not go to school and thus do not speak French. This situation, however, may change rapidly since more schools are being built and the government, as well as some NGOs, make an effort to facilitate schooling for Bagyeli children. Nonetheless, Gyeli speakers already use a few French words that regularly show up in texts. These words include mostly particles and filling words such as *donc* 'so', *alors* 'well' or *allez* 'let's go' and seem to have the emblematic function of showing a certain education. They are borrowed from Bantu farmers who use the same expressions in code-switching in their languages for exactly the same purpose.

**Language contact situation in Ngolo** Ngolo is situated in the Bulu (A70) contact area, so Bulu is the primary farmer language of influence. The Bagyeli in Ngolo are all multilingual. Besides Gyeli and the main contact language Bulu, they also speak Kwasio (A80) (mostly its dialect Mabi, but some speakers rather speak the other dialect Ngumba). Further, most consultants in Ngolo speak Fang (A70). A few speakers in Ngolo have traveled far and state that they speak even Makaa, Eton and Bamenda.

Concerning the command of French, the Bagyeli in Ngolo have a comparatively good school education. In contrast to many other Gyeli villages, their children have attended school more or less regularly for a couple of years. Further, some of them have worked in the nearby rubber plantations where they had to interact in French. Thus, they all speak French on a basic level. Their command is, however, not enough to have a whole conversation or even do elicitations in French. There is a general tendency that

Gyeli speakers in Ngolo rather underestimate their level of French by claiming that they do not speak French at all, while it turns out that they actually do speak some and they definitely understand more than they claim.

In terms of contact with other Gyeli varieties, the main contact dialects include Gyeli as it is spoken in contact with Mabi and Ngumba. Further, inhabitants of Ngolo are in contact with Gyeli villages in the Fang region. Since our project did not gather data in this region, however, it is not clear whether the Gyeli variety of the Fang region constitutes a different dialect than the one in the Bulu region. On an individual level, family ties may reach further than these regions.

As a consequence of all these factors, there is a high degree of linguistic variation even within just one village, depending on a speaker's individual linguistic background. In intra-ethnic communication, every Gyeli speaker just speaks their idiolect and everybody understands without attempting to correct each other concerning, for example, phonetic realizations or lexical choices. One reason for this non-prescriptive language behavior is likely due to the fact that there is no standard variety which could serve as the norm. Other factors may include a low level of education and a relatively egalitarian social system. An extreme example in Ngolo concerns a Gyeli woman who grew up with Kwasio farmers and thus speaks Kwasio even after having returned to the Gyeli village. This does not seem to bother the other Bagyeli who speak Gyeli with her while she keeps speaking Kwasio.

#### 1.1.4 Dialects

Gyeli speakers are currently shifting to the languages they are most closely in contact with, due to massive changes in their environment, as outlined in Section 1.1.5. In the course of this language shift, different Gyeli dialects are emerging, as previous work and results of the current DoBeS project (Section 1.3.1) show.

Already in the 1970s, Renaud (1976: 29) noticed two varieties, based on phonological, morphological, and lexical differences. He refers to one variety as 'Bajele' which he views as more innovative, while the 'Bakola' variety is said to be more conservative, being more closely related to Proto-Bantu than to the Makaa-Njem Group.<sup>8</sup> He further states that both varieties are

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<sup>8</sup>This generalization is based on only 221 lexical items. It is also not quite clear what

mutually intelligible and not bound to any specific geographic distribution.

While it is true that Gyeli varieties are mutually intelligible, there seems to be some geographic distribution which is linked to Gyeli's contact languages. Renaud's 'Bakola' variety seems to roughly correspond with Gyeli as spoken in the Basaa contact area, while his 'Bajele' variety refers to the dialect spoken in the Ngumba contact area.<sup>9</sup> It seems, however, be misleading to assume two varieties based on the two different names for the Gyeli language. Rather, there are more varieties than just two, but none of them have a specific name, neither given by the Bagyeli nor by outsiders. The terms 'Bakola' and 'Bajele' are originally exonyms from Basaa and Kwasio, respectively, which have become endonyms in the different Gyeli varieties and other Gyeli varieties.

The data from the DoBeS project on Bakola/Bagyeli suggests that there are at least three dialects: one that is influenced by Basaa, one by Kwasio, and the third by Bulu. There may be more dialects corresponding to other contact languages, such as Fang or Bakoko. Given the vast geographical area and number of contact languages, it was, however, beyond the frame of the project to investigate potential dialects in the entire Gyeli speaking area. Additionally, linguistic variation within the language is not classified by speakers by different dialect names. Thus, speakers would acknowledge that other Gyeli speakers speak 'differently', being more influenced by a certain contact language, but there is no systematic classification nor labelling of varieties. As such, it is difficult to artificially label different varieties. Further, the geographic extent of a certain dialect is not known exactly at this point and must be taken as preliminary.

Therefore, we do not suggest any specific names for different Gyeli varieties, but rather refer to roughly where a dialect is spoken (not specifying the exact geographical extent). Within the three different contact regions that we investigated, namely Kwasio, Basaa, and Bulu, we collected data

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the innovative versus conservative features are specifically.

<sup>9</sup>A reason why Renaud does not notice any particular geographic distribution of the two varieties may be due to his fieldwork location around Bipindi (see Figure 1.4). Bipindi lies at the intersection of two roads: Along the east-west road, there are mainly Ngumba villages, while the road to the north houses many Basaa villages. Nevertheless, villages of different ethnic groups are generally interspersed and there is lots of contact between all groups. In addition to that, the Bagyeli are highly mobile and frequently stay in other Gyeli villages. Therefore, it is not surprising that both names seem to be used interchangeably within the same area.

from several locations. This way, we made sure that the language variety is not only spoken in a particular village, but in a broader region.

Dialectal differences as observed within the DoBeS project are based on phonological and lexical differences. For instance, while the Gyeli variety that is primarily in contact with Bulu uses alveolar fricatives /s/ and /z/, these are systematically realized as postalveolar fricatives /ʃ/ and /ʒ/ in the Kwasio contact region. Another example concerns voiced bilabial and dental implosives which occur in the dialect that is in closest contact with Basaa, but which are lacking in the varieties of the Kwasio and Bulu contact region. Lexically speaking, each variety has a number of loan words from its closest contact language that lack in different varieties.

Since the goal of this work is a grammatical description of one of the Gyeli varieties, an exact dialect comparison with a more extensive list of distinguishing features has to wait for future research, as well as determining more precisely how many Gyeli varieties there are. Another question that cannot be answered at this point concerns the historical development of Gyeli dialects. Thus, it is currently not clear when different varieties started to emerge and whether this ties in with sedentarization patterns or whether dialectal differentiation started already before the Bagyeli became sedentary as of the 1960s.<sup>10</sup>

### 1.1.5 Language endangerment

Gyeli is considered an endangered language. Symptoms of Gyeli's status as an endangered language include a high level of bilingualism and on-going adaptation of the native languages of neighboring Bantu farmers. Other factors that are usually taken as signs of language endangerment such as low speaker numbers and a low level of transmission to the young generation seem to be less indicative. Currently, there are about 4,000 to 5,000 Gyeli speakers. While this is not a high number in comparison to larger languages in the world, the number is not alarming *per se*, given that all members of the ethnic group speak the language. In addition, the language is still passed on to Gyeli children and it seems that the current young generation is still fully fluent in Gyeli.

All Bagyeli are, however, at least bilingual with an increasing amount

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<sup>10</sup>This date is given by Renaud (1976: 25).

of situations where they use the non-native language. As a result, the non-native language has an impact on the way Gyeli is spoken, as outlined in Section 1.1.4. Investigating the causes for the increased use of other languages than Gyeli reveals the level of endangerment, even though this is not (yet) reflected in speaker numbers and language transmission to the next generation.

The two major causes for Gyeli to be viewed as endangered concern massive changes in the Bagyeli's environment, as discussed in Section 1.2.1, and the low social status of the Bagyeli. While the Bagyeli are traditionally hunter-gatherers depending on the forest for food resources, they are increasingly forced to change their subsistence strategy towards more sedentary farming activities. Together with this economic change, they are also linguistically adapting to their farming neighbors.

Another factor that reinforces language endangerment is the low prestige of Gyeli which ties in with the low social status of the Bagyeli as an ethnic group within the Cameroonian society. The Bagyeli are discriminated against by other Bantu farmer groups for their perceived backwardness, "primitive" lifestyle, low level of education, and lack of political organization and thus power. While not all Bantu farmers have a negative attitude towards the Bagyeli, the general sense is that the Bagyeli need to change their lifestyle, become sedentary and modern, educated and part of the general Cameroonian society.

Such expectations as well as discrimination have an impact on the Bagyeli's linguistic behavior. As Ngima Mawoung (2001: 218) notes, Bagyeli reportedly prefer to speak Kwasio when addressing outsiders. Since language also has an emblematic function, many Bagyeli prefer not to speak Gyeli to outsiders since they perceive their language as a sign of their putative backwardness. Instead, speaking a Bantu farmer language shows a higher level of education and distances the speaker less from the other Cameroonian. This was confirmed in my fieldwork experience, speakers had an initial tendency to switch to Bulu or Kwasio when speaking with the interpreters until they got used to speaking their language with outsiders.

Given the massive environmental changes in the area as well as the enormous social pressure to adapt to the Bantu farmers' lifestyle, it seems just a natural consequence to also adopt linguistic practices. Therefore, the future of the Gyeli language is far from being safe, despite current fluency amongst

Gyeli children.

### 1.1.6 Special features of Gyeli

In terms of its linguistic structure, Gyeli yields features that are of interest to both Bantuists and to general typologists. In the following, I will list a few examples. Phonologically, for instance, Gyeli has more complex consonants and consonant clusters than other Bantu languages. These include, for example, homorganic affricates /pf/ and /bv/ and the prenasalized labio-velar /mgb/. Sounds that are usually analyzed as implosives in neighboring languages are realized as pre-glottalized and prevoiced stops in Gyeli.

Gyeli has a very complex tone system since tone plays a central role in this language, both for lexical distinctions and grammatical functions. Tense-mood distinctions are achieved without segmental morphemes, but only by tonal manipulation of the subject-clause-operator (SCOP) and the tonal pattern of the verb. In addition to tense-mood marking, tone also has a syntactic function of linking the closest argument to the verb. Tonal processes differ between the nominal domain, where high tone spreading goes from left to right, and the verbal domain where high tones spread from right to left.

In terms of nominal morphology, Gyeli has a remarkable system of genitive constructions when linking two nouns via an attributive marker. While the marker generally agrees in gender with the head noun, it receives a special form when the head noun is a proper name. Besides, Gyeli has intricate rules under which the attributive marker can be omitted in contrast to contexts when it has to occur.

Another typologically rare property of Gyeli concerns its postpositions. As Dryer (2013b) shows, languages with a basic V O word order usually have prepositions. While Gyeli has a basic V O word order, it nevertheless has both pre- and postpositions.

While Bantu languages are generally known for their productive verb extensions, part of the Gyeli verbal derivation system is in decay, merging applicative and causative suffixes. In contrast, the language has an elaborate system of lesser studied extensions, distinguishing for example auto-causatives and positionals.

Gyeli also has a rich system in terms of negation strategies. The expres-

sion of negation depends on the tense-mood category and clause type. While in the PRESENT negation is marked by a suffix on the verb and a special tonal pattern of the SCOP, negation in PAST and FUTURE is encoded by distinct negation words. The PRESENT as well as subordinate clauses further use a negation adverb which requires an infinitival verb in dependent clauses.

### 1.1.7 Previous literature

Languages of the Makaa-Njem Group generally constitute under-studied languages. While there are a few accounts by SIL missionaries and local students, these works are often difficult to access. Probably the best known and widely available description of an A80 language is the sketch grammar on Makaa by Heath (2003). Cheucle (2014) provides a thorough comparative study of the A80 languages, comparing phoneme and tonal inventories as well as noun class systems. She also gives a valuable review of the linguistic literature of the Makaa-Njem languages so that I will not go into further detail here in this respect. Instead, I will review the existent literature on Gyeli, both linguistic and non-linguistic.

Previous linguistic literature on the Gyeli language is quite limited. It includes a description of ‘Bajele’ by Renaud (1976) from the 1970s. This work is quite valuable and detailed in many respects. It is, however, restricted to the phonology and nominal morphology of the Gyeli variety that is spoken around Bipindi in the Kwasio contact region (with some influence by Basaa). Therefore, the description of the Gyeli variety spoken in Ngolo extends Renaud’s work in terms of a more in-depth grammatical description, covering, for instance, also verb morphology and clause types. It further adds to our knowledge about Gyeli varieties, given that the variety spoken in Ngolo constitutes a different dialect in comparison to the variety that Renaud studied. An additional resource is Letouzey (1995) which provides an ethnobotanic perspective on the language by comparing Gyeli tree names with other languages of the region.

Early publications on the Bagyeli come mostly from missionary and traveller reports. This is, for example, the case with Seiwert (1926) who gives an anecdotal account of his encounters with the Bagyeli in ‘Anthropos’. Other reports had been published even before the turn of the 20th century in German colonial reports and ethnographic journals. A list of these very early

publications on Gyeli, which are generally difficult to get access to, is provided in Renaud (1976: 357-360). Newer ethnographic publications on the Bagyeli include papers by, for example, Joiris (1994) and Ngima Mawoung (2001) which both focus on the relationship between the Bakola and their neighbors. While this list is certainly not exhaustive, it covers the seemingly most important ethnographic studies, supplementing Renaud's list.

Recent years have also seen a flourishing literature involving research on the Bagyeli in other scientific areas. One domain of publications involves ethnopharmacological and medical literature. Fomogne-Fodjo et al. (2014), for instance, investigate the Bagyeli's plant use for treating respiratory problems. Mauclère et al. (2011) study viral infections in the Bagyeli population as compared to the Bantu farmer population.

Another area of great attention in the recent literature concerns the Bagyeli's changing environment and their (lack of) protection as an ethnic minority group. For instance, Pelican (2009) discusses the impact (or lack thereof) of the Declaration on the Rights of Indigenous Peoples by the United Nations General Assembly in 2007 on ethnic minority groups such as the Bagyeli in *American Ethnologist Journal*. Germond-Duret (2012) explores discourse dynamics in the construction of indigenous peoples by different actors of conflicting interests in the *International Journal on Minority and Group Rights*. The impacts of the developing oil industry in the Gyeli speaking area are investigated in *Cultural Survival Quarterly* by Nelson & Tchouomba (2004) and in the *Journal of Developing Societies* by Swing et al. (2012).

In addition to traditionally published resources, more information on the Bagyeli is also found in other media, for example online. The DoBeS language documentation project that constitutes the framework of this description (see Section 1.3.1) provides information along with pictures and links to audio and video recordings in the DoBeS archive. Another online source is provided by the anthropologist Devin (2015) who has a website on different Central African 'Pygmy' groups online, including information on the Bagyeli/Bakola. Further, there are various documentaries. Lorenz (2014) produced a documentary series in three episodes as part of our documentation project. Another documentary was done by Thomopoulos (2012).

## 1.2 The Gyeli speakers

In this section, I provide more information on the Gyeli speakers, including their environment and lifestyle in terms of culture and subsistence.

### 1.2.1 Environment

**Geographic extent** Gyeli (or Kola) speakers live roughly in the area between the Nyong river in the north and the Ntem river at the border to Equatorial Guinea, as shown in the map of Figure 1.4. Lewis (2009) reports in the *Ethnologue* that a few Gyeli speakers also live in Equatorial Guinea, but the majority of speakers are found on the Cameroonian side. On a west-east axis, the Gyeli speaking area stretches from the coastline of the Atlantic Ocean to about 150km inland, not quite reaching the town Ebolowa.

**Vegetation and climate** The Bagyeli are forest foragers of the tropical rainforest in southwestern Cameroon. Woodlands usually consist of primary rainforest, but also more and more of secondary forest, i.e. forest areas which have regrown after logging. Primary rainforest is also increasingly replaced by private gardens and manioc farms and industrial plantations for rubber, cocoa, and palm oil.

Generally, forest areas are still large, however, and often difficult to access since roads are few and often so bad that they cannot be used by cars. Also, the rainforest is interspersed by a multitude of waterways, rivers, streams, and creeks. These could potentially be used as infrastructure through the forest, but the Bagyeli usually walk by foot rather than building canoes to use these waterways for moving in the forest. The same is true for the Bagyeli who live close to the coastline: canoes are not part of their transportation system.

The climate in this part of the world is tropical with an alternation of dry and rainy seasons. There is a dry season from November through February with temperatures reaching 32 degrees Celsius. March through June is a so-called ‘small’ rainy season with drizzly rain while July is relatively drier again, but generally cooler than the big dry season. June and July are usually the busiest times of the year for the Bagyeli since this is the season for intensely collecting honey, fruit and nuts. The time from August through

October receives most of the precipitation in a year with almost daily strong rains and heavy storms.

**Changing landscape** While the Bagyeli live traditionally as mobile hunter-gatherers in the rainforest, the changing landscape of the last decades is one cause for changes in their lifestyle. A lot of Gyeli villages are now also found alongside roads in close vicinity to Bantu farmer villages. Those who do not live close to the roads usually stay in more remote areas. These remote areas are typically regions that are less valued by the Bantu neighbors for their farming activities, such as hill sides, wetlands or the immediate area around protected forest such as the Campo Ma'an Reserve.

As a general tendency, there are fewer and fewer places the Bagyeli can live in the forest because of rapid deforestation. Industrial development of the region has the biggest impact on forest destruction. Forest area is significantly decimated by the construction of the deep-sea port south of Kribi, the largest port for central Africa which was inaugurated in 2015. The Kribi port complex spreads over 26,000ha and a coastline of 20km, according to Ntaryike (2015). Related infrastructure development projects further cause forest loss, such as the oil pipeline that runs from the border of Chad to the new port. The port also requires an extension of the existing road and railroad net for inland transportation. Figure 1.5 shows some of the landscape changes, including protected forests, the new deep-sea port, and the oil pipeline.

Other manners of land exploitation also deprive the Bagyeli of rainforest areas they formerly had access to. There have been increased logging activities for tropical woods. Industrial plantations such as SOCAPALM (palm oil) and HEVECAM (rubber) take over and expand on former primary rainforest.<sup>11</sup> Even projects that are intended to protect the environment, such as the Campo Ma'an Reserve, displace the Bagyeli from former areas they inhabited since they are not allowed to live within the Reserve.

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<sup>11</sup>Both plantations are roughly located to the southwest of Ngolo, but it was impossible to find any maps of their extent. Information on their total surface is also difficult to find. In a project approved in 1980, the Worldbank (2015) specifies that the HEVECAM rubber plantation has a surface of 40,000ha. These figures are, however, most likely outdated, while exact figures for SOCAPALM do not seem to be publicly accessible. For a general overview, the World Resources Institute (2015) provides more systematic information on the kinds of land use in the Forest Atlas of Cameroon. It is, however, not always clear who has the land rights.

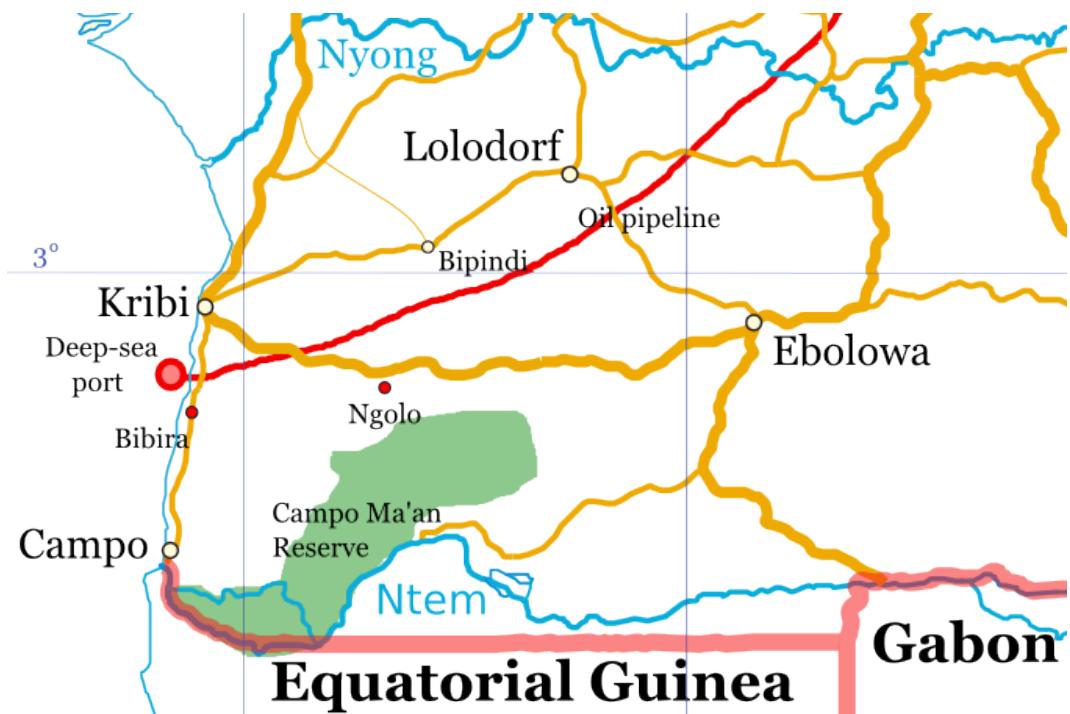


Figure 1.5: Map of landscape changes in the Gyeli area

### 1.2.2 Subsistence and culture

**Subsistence** The Bagyeli are traditionally forest foragers who live off hunting animals in the rainforest and gathering plants, fruit, nuts, and honey. Hunting techniques involve killing animals with spears and machetes as well as net hunts with a larger group of individuals. Every Gyeli village has a number of dogs that help with hunting. The Bagyeli also build different types of traps, depending on the animal they are looking for. Animals that the Bagyeli eat include all sorts of monkeys, wild cats, different types of antelopes ranging from small duikers to larger water bucks, mongooses, bush rats, porcupines, but also non-vertebrates such as snails and snakes.

Fish is also on the dietary plan, but is less valued than meat. Fishing is regarded as a pastime, especially for children, but not as a serious activity. Bagyeli catch fish in creeks in the forest by building dams or, in deeper rivers and the sea, by using fish lines, standing on rocks. All of them are usually good swimmers, but they do not venture out into the sea.

Honey is highly valued for it is often dangerous to reach. Bee hives are usually high up in trees so that the Bagyeli have to climb a tree and smoke the bees out—without any security line holding them. Vegetarian

food resources involve different types of tubers, fruit that grow in the forest, such as the so-called wild mango that is used to make a sauce, and nuts.

Since primary forest is becoming increasingly scarce, so are the animals and plants the Bagyeli depend on. Therefore, the Bagyeli get more and more engaged in other activities as well in order to make a living. This concerns foremost low-scale farming such as growing fruit trees (e.g. bananas and plantains, bread fruit, *canarium schweinfurthii*, known as purple canary trees, citrus and avocado) which require little maintenance. They also grow other plants which need more care in small fields, such as manioc and yams. Keeping chickens is another innovation in many Gyeli camps.

Besides farming activities, some Bagyeli may earn a little bit of money through day labor in the industrial plantations or with the Bantu farmer neighbors and through selling wild meat and baskets they make. A few villages have also discovered tourism as a source of income where they take gifts (money, food, drinks) in return for pictures the tourists take.

**Sedentarization and mobility patterns** While the Bagyeli were traditionally nomads, changing their camp sites frequently, they have become more and more sedentary over the past decades<sup>12</sup> as a result of environmental changes as well as government efforts. As a consequence, Gyeli villages are generally as permanent now as those of the Bantu farmers in the sense that the material village does not change location.

The Bagyeli do keep, however, certain mobility patterns on both a group and an individual level. Groups of Bagyeli still leave their permanent village for hunting trips that can take up several days and even weeks. On such hunting trips, the Bagyeli construct traditional huts or use seasonal camps in the forest to sleep. Additionally, mobility is kept on an individual basis where single people move between different villages to visit relatives, partners, and friends. Such visits can also be extended to several days and weeks.

**Settlement patterns** Traditionally, the Bagyeli lived in temporary camps in the forest. The huts they used for shelter were made out of sticks and

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<sup>12</sup>Renaud (1976: 25) assumes progressive sedentarization since the 1960s, while Joiris (1994: 86) proposes that the Bagyeli have become increasingly sedentary already since the early 1900s.

leafage. These huts are easy to assemble, requiring about 3 hours of work load. Nowadays, many Gyeli villages are comparable to those of the Bantu farmer neighbors, with the exception that they are usually smaller in size. An average Gyeli village, of which there are more than 100 in the whole Gyeli speaking area, has 20-30 inhabitants. There are, however, also smaller settlements with just a core family of 4-5 people, or exceptionally large villages with up to 150 inhabitants. Houses in permanent Gyeli villages are either made from wooden planks or clay, so-called *poto-poto* houses, which are highly valued by the Bagyeli since they are in the same style as the Bantu farmers' houses. Gyeli villages are either along the roads that cross-cut the rainforest, being built in close vicinity to Bantu farmer villages, or remotely located in the forest.

Due to environmental changes, there have been recent cases of resettlement. For example, Gyeli villages that were formerly located in the Campo Ma'an Reserve were moved outside the Reserve. Now, they line the border to the Park. There are also villages that needed to make way for the deep-sea port south of Kribi, as for example the village Bibira in Figure 1.5. While Bantu farmer villages, which were moved as well, got monetary compensation, the affected Gyeli villages have not yet received their promised compensation. Instead, wooden houses were built for them outside the forest with the prospect that they may be resettled again.

**Relations with Bantu farmers** Relations between Bagyeli and their farming Bantu neighbors are complex. Generally, the Bantu farmers have a higher prestige and marriages between Bagyeli and farming neighbor communities are unilateral—Bantu farmer men occasionally marry Gyeli women, but Bantu farmer women do not marry Gyeli men. Apart from these tendencies, the relationship between Bagyeli and Bantu farmers takes a range of forms. On the extreme ends of this spectrum, the relationship may be described as one between masters and slaves, patrons and clients, or, on the other hand, as family relations. During the project, we have witnessed Bantu farmers who stated that they owned a certain Gyeli group and that we would have to pay them money in order to see the Bagyeli. In contrast, we have also seen Bantu farmer women who referred to elderly Gyeli women as their mother whom they treated with respect.

We interviewed Bagyeli in various villages of different language contact

regions about the perceived relation to their Bantu neighbors. Many of the interviewees stated that they felt discriminated against in several ways. Discrimination, according to them, ranges from unequal treatment in business transactions to verbal and physical violence. For instance when selling bush meat, the Bagyeli would be paid much lower prices than Bantu vendors. In general, they state that they are poorly paid for day labor. Verbal discrimination involves either mockery, e.g. comparing bad habits such as getting very drunk to typical “Pygmy” behavior, or insults. In a few cases, Bagyeli also reported of physical violence and being beaten by Bantu farmers (the exact circumstances were not described). In contrast, some speakers also talked about their ‘Bulu father’ who would lend them his gun in order to help young men out. This way, the young men could kill and sell more animals to save money for the required brideprice of the women they intended to marry.

In order to obtain a more holistic picture of the heterogeneous relations between Bagyeli and farmers, we also interviewed several villagers from various Bantu farmer groups. Also in these interviews, different attitudes were reflected. Some interviewees saw the Bagyeli as backward, dirty, dishonest, and ‘primitive’. Many requested that the government needed to help them so that they would reach an equal development state as the farmers by building schools and hospitals. Others called the Bagyeli their ‘brothers’ who were basically of equal rank. In some cases, Bantu farmers expressed great admiration for the Bagyeli’s skills as dancers and healers. For example, Bagyeli are frequently invited to the farmers for weddings and funerals in order to make music and dance. Bantu farmers also consult Gyeli healers for health issues. As such, they are admired for their magical powers, but also feared. No matter whether the attitude was more on the friendly or discriminatory side, the overall view was that the Bagyeli needed to stop living in the forest, but become modern people, more like the farmers themselves.

## 1.3 Methodology

In this section, I describe the methodology involved in producing this grammatical description. I first outline the project that served as the framework for the grammar. I then define the ‘speech community’ whose language

variety I describe before I detail the data on which this grammar is based.

### 1.3.1 The project

The basis for this grammar stems from 19 months of field research that I conducted within the framework of the DoBeS (Documentation of Endangered Languages) project on the Bakola/Bagyeli language from March 2010 until February 2012 and during an extended project phase from March 2013 until August 2014. The overall goal of the project was to document aspects of the Gyeli language, concentrating on the collection and archiving of primary data. Primary data include both audio and video recordings, covering various text genres, e.g. conversations, interviews, traditional story telling, songs, and descriptive texts accompanying everyday activities such as hunting and hut building. A more detailed description of the data is provided in Section 1.3.3.

The project was carried out by the project director Prof. Maarten Mous and three linguists: Dr. Emmanuel Ngue Um, Daniel Duke and myself. In addition to the linguists, the project also included a professional cameraman, Christopher Lorenz. In terms of task distribution, the three linguists worked in different regions of the Gyeli speaking area, as represented by the shaded areas in Figure 1.4. Ngue Um worked on describing the Kola variety spoken in the Basaa contact area, Duke mainly worked in the Kwasio contact region around Lolodorf, but also in the Gyeli village Bibira, while the variety of my description is located in the Bulu contact region. The cameraman Lorenz joined the linguists' team each year for several weeks and made high-quality video recordings in all dialectal areas.

### 1.3.2 The construction of a speech community

A grammar is usually the description of some variety of a language spoken by a group of speakers that, in an idealized way, constitutes the speech community. In reality, however, there is no such thing as a ‘pure’ or homogeneous speech community. A speech community that serves as the basis for a grammatical description is rather an abstraction made by the linguist. Various factors interfere with a clear-cut concept of ‘speech community’, the most important ones being language contact and multilingualism in the

Gyeli case.

As outlined in Section 1.1.3, the Gyeli language situation is complex with a high degree of language contact and multilingualism. As such, idiolects may differ quite a lot from speaker to speaker, even within the same village, depending on their individual language exposure to various contact languages and personal family ties to other Gyeli villages in other language contact regions.

I consider the village Ngolo as the speech community that provides the empirical basis for this grammar. Ngolo is located in the Bulu contact region and constitutes a different dialect from Gyeli villages in the Basaa or Kwasio speaking area. I do not, however, view the Gyeli variety as spoken in Ngolo necessarily representative for all Gyeli villages in the Bulu contact region since such a generalization would require a larger data coverage of all Gyeli villages in this region.<sup>13</sup>

A further complication with this ‘speech community’ is to delimit who exactly is a member of Ngolo and thus to pinpoint how many speakers the community has. As explained in Section 1.2.2, the Bagyeli are still highly mobile between permanent villages. Therefore, there is always fluctuation in terms of presence and absence of individuals. While the number of houses remains stable, at any given time, I would never get the exact same set and number of speakers. The village has six houses that belong to different core families. The number of inhabitants is around thirty, including children. Core families or individuals may, however, be away for some time, visiting relatives in other villages are staying in the forest on extended hunting trips. At the same time, other relatives may be visiting and staying in the Ngolo houses. In order to come to grips with these dynamics, as a working definition for Gyeli speakers of Ngolo, I consider those a member of the ‘speech community’ who state that they were either born in the village or come from another village within the Bulu contact region.

### 1.3.3 Data

Findings presented in this grammar are based both on elicitations and an extensive amount of natural texts which are accessible in *The Language Archive*

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<sup>13</sup>Data gathered in another Gyeli village within the Bulu contact region, called *Bomnapenda*, suggests, however, that the variety in Ngolo and Bomnapenda constitute one dialect as opposed to other varieties in the Kwasio and Basaa regions.

(<http://dobel mpi.nl/projects/bakola/>). As part of a language documentation project, the documentary team collected a variety of text genres such as narratives, procedural, hortative, and descriptive texts, dialogues, conversations, and interviews, among others. These also include a wide range of everyday activities such as hunting with different techniques such as spears or nets, building traps and huts, collecting honey, building musical instruments, preparing hunted animals, dancing, healing sessions, and telling traditional and autobiographical stories.<sup>14</sup>

The text corpus that specifically serves as the empirical basis for the description of the Ngolo variety in terms of distribution and frequency of forms is comprised of 3,304 words (540 intonation phrases) of high-quality annotation, distributed over three text genres, namely a folktale, a conversation between multiple speakers, and an autobiographical narrative. I annotated the texts in coordinated discussion with the Gyeli speakers. (As Gyeli speakers are not literate, they were not able to carry out annotation tasks themselves.) Discussions with speakers were also indispensable since the tonal system of Gyeli is so complex that additional double-checking and elicitations were necessary to uncover its rules. The annotated texts can be found in Appendix II. In addition to these thorough annotations, more natural texts have been roughly annotated and/or translated. These supplementary annotations and translations include 15 different texts and snippets of texts of about 2 hours and 10 minutes in total. In addition to annotations, I use lexical databases, one for nouns and one for verbs. The noun database includes 875 entries and the verb database 377.

I also gathered experimental data based on the language of perception field manual designed at the Max-Planck Institute for Psycholinguistics. These experiments included color naming tasks<sup>15</sup> developed by Majid & Levinson (2007), the olfactory test by Majid et al. (2007), the taste test by Senft & Levinson (2007) and tests on spatial orientation by Levinson & Schmitt (1993) and topological relations by Bowerman & Pederson (1992).

The third kind of data I collected contains elicitations and questionnaires. They are comprised of approximately 1,000 audio recording sessions with an average of 10 minutes each, and in total about 167 hours. The question-

<sup>14</sup>A selection of audio and video material and their annotations can be found in the DoBeS archive. At present, 133 audio and 90 video recordings from different dialect areas are uploaded into the archive, 69 of which are annotated.

<sup>15</sup>The results of this experiment are published in Grimm (2014).

naires I used include, for instance, questionnaires on tense-aspect-mood, question types, relative clauses, and information structure. Each questionnaire that served as a basis for my analysis is cited in the chapter where the data occurs. While the collection of natural text and experimental tasks took place in the village of Ngolo, I supplemented these data with elicitations and questionnaires with language consultants in Kribi.

Elicitations were carried out with one or two consultants at a time, varying between five different speakers during my fieldwork. Natural text and experimental data stem from a larger pool of speakers. The number of speakers that provided natural text from Ngolo include at least 15 adult speakers. Given that the approximate size of the village is 30 inhabitants, including children, this seems to cover the entire adult population. In group conversations, children were also present and so their speech was also recorded. Some speakers were recorded more often than others, depending on their availability. While the ratio of male and female speakers is equal, men received slightly more recording time since women seemed to be generally busier with cooking while men had more time. Since basically all speakers of Ngolo were recorded, also all age groups are represented in the recordings. Adult speakers' ages range from teenagers<sup>16</sup> to elders of about 60 years.

## 1.4 Structure of the grammar

This grammar is generally organized from form-to-function and divided into eight chapters. After this introductory part, I describe the phonology of Gyeli in Chapter 2. This chapter contains a discussion of the phoneme inventory, the syllable structure as well as a description of the tonology.

Chapter 3 provides a discussion of Gyeli's parts of speech. This not only includes major word classes such as nouns and verbs and other lexical word classes (adjectives, adverbs, and ideophones), but also grammatical word classes, such as pro-forms, modifiers, adpositions, conjunctions, or extra-sentential elements.

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<sup>16</sup>In the Gyeli society, adulthood starts earlier than in western societies. Thus, teenagers of around 15 years are considered as young adults. Age is generally subject to estimation since the Bagyeli usually do not know their exact age.

In Chapter 4, I outline word formation processes by describing the various morpheme types found in Gyeli as well as derivation and compounding.

In Chapter 5, I explore grammatical phenomena in the noun phrase. This includes the gender and agreement system as well as different types of noun phrases, for instance noun + noun attributive constructions.

Chapter 6 describes the verbal complex according to predicate construction types. My basic distinction is between simple predicates, which largely encode tense-mood categories, and complex predicates, which encode aspect, mood, and modality.

The last two chapters are reserved for clause types. In Chapter 7, I investigate simple clauses, including both verbal and non-verbal predicates. I lay out the grammatical relations found in Gyeli and discuss basic word order as well as special word order constructions, for instance within the domain of information structure and questions. Chapter 8 deals with complex clauses including different types of both coordination and subordination, e.g. relative and adverbial clauses.

The eight chapters are supplemented by three appendices. In Appendix I, I list the specific verb extensions for each verb in my verb database. Appendix II contains a collection of annotated natural text. Appendix III provides a Gyeli — English dictionary with about 1500 lexical entries.

# Chapter 2

## Phonology

In this chapter, I outline the sound patterns of Gyeli including segmental and tonological phonology. The phonological description is complemented by some basic phonetic information. My account of Gyeli phonology is largely theory-neutral. In the tonology section, I use autosegmental phonology for convenience of explaining tonal rules.

**Note on notational conventions** Gyeli does not have an official orthography. For phonological and phonetic transcription in this chapter, I use IPA symbols. Phonetic representations are marked by square brackets [] while phonemic transcription is marked by slashes //. Throughout the other chapters of this grammar as well as in glossed examples I use an orthography that combines typical Bantu notation with local orthographic conventions of the languages of the area which are, to a certain degree, influenced by French. Even though most of the Gyeli speakers are illiterate at the time of writing this grammar, their literacy will certainly increase over the next decades. At the same time, more literate Bantu neighbors such as the Mabi, prefer a local Bantu orthography which will facilitate the use of this grammar for Gyeli speakers at a later point given that the Bagyeli are mostly taught by teachers of surrounding Bantu groups.

The main differences between phonological transcription and local Bantu orthography concerns IPA symbols that are not easily produced on electronic devices such as computer keyboards and smartphones. This includes the palatal nasal /ɲ/ which is represented as *ny* in the orthography. The palatal glide /j/ is marked as *y* in the orthography while the affricate /dʒ/

is represented as *j* in the orthography. Its voiceless counterpart /tʃ/ is represented as *ts* in the orthographic version. The glottal stop /ʔ/ is represented as an apostrophe '. Further, in the orthography, I do not distinguish alveolar and velar nasals [n] and [ŋ]. In the orthography, I write them both as *n* because they are allophones and their realization is predictable from their phonetic environment.

As described in Section 2.4 of this chapter, Gyeli is a tonal language. I indicate tone according to the Africanist tradition with accent marks, an acute accent ['] representing a high (H) tone and a grave accent [ ] representing a low (L) tone. If a syllable is not represented with any tonal marking, this indicates that it is toneless. In glossed examples, the first line represents the surface form, showing phonetic tone. Thus, even toneless syllables will be marked for their surface tone here. The second line represents the underlying phonological form where toneless syllables are represented without tonal marking.

**Outline of the chapter** I first describe Gyeli's segmental phonology including the consonant and vowel inventory which are both complemented by realization rules and phonotactics. In a third part, I describe the syllable structures of Gyeli nouns and verbs before I finally turn to tonology. This last section contains the tone inventory as well as tonal distribution and rules. I conclude the chapter with a discussion of the place of Gyeli phonology within Bantu A80 languages.

## 2.1 Consonants

Gyeli segmental phonology features many typical characteristics that one would expect for a Bantu languages, but there is also a certain degree of variation, as will become clear in this chapter. Gyeli has, in relation to Proto Bantu (PB), retained a fairly simple vowel system with the same number of distinctions, namely seven, however with some featural changes (see Section 2.2).

Concerning the consonant system, the Gyeli system seems to be more complex than the PB one. According to Hyman (2003: 42) who cites Meeussen (1967), PB only had 11 consonantal phonemes including a series of voice-

less stops \*p, \*t, \*k and voiced stops \*b, \*d, \*g.<sup>1</sup> \*c and \*j can, as Hyman (2003) points out, be interpreted as either affricates or palatal stops. Finally, PB had a series of nasals \*m, \*n, \*ŋ. Gyeli has developed in addition to these PB sounds, a series of fricatives and semi-vowels, as I will describe in detail in the following.

In this section, I will first outline the phonemic inventory of Gyeli by providing minimal pairs. In Section 2.1.2, I present realization rules, including allophonic variation. Consonant clusters are discussed in Section 2.1.3. Section 2.1.4 gives information on the phonotactics of sounds, comparing their distribution in noun and verb stems.

### 2.1.1 Phonemic inventory

Gyeli has 22 phonemic consonants, as illustrated in Table 2.1. These comprise (series of) stops, fricatives, affricates, nasals, lateral approximants, glides, and prenasalized stops.

	Bilabial	Labiodental	Alveolar	Palatal	Velar	Glottal
Plosive	p, b		t, d		k, g	?
Fricatives		f, v	s, z			
Affricates				tʃ, dʒ		
Nasal	m		n		ŋ	
Lateral approx.			l			
Glides	w			j		
Pren. stops	mb		nd		ŋg	

Table 2.1: Phonemic inventory

In the following, I will demonstrate the phonemic status of each proposed phoneme by contrast of (near-)minimal pairs. Information on the phonetic realization of certain consonants is given in Section 2.1.2.2.

/p/ Gyeli has a series of plosives including bilabial, alveolar, velar, and glottal stops. Except for the glottal stop, all plosives have a functional opposition of voicing. /p/ contrasts in stem initial position with a range of

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<sup>1</sup>There is discussion whether the latter should be viewed as voiced stops or rather as continuants \*β, \*l, \*ɣ as which they occur in many Bantu languages today (Hyman 2003: 42).

other phonemes, some of which are listed in (1), including for instance its voiced counterpart /b/.

- (1) **pó** ‘news, message’ vs. **bò** ‘rot’  
**pémbó** ‘clay, bread’ vs. **vémbó** ‘blow nose’  
**pélè** ‘moment’ vs. **téle** ‘place sth. upright’  
**púù** ‘reason’ vs. **dúù** ‘must not’  
**pê** ‘choose’ vs. **kè** ‘walk (v.)’

/p/ in stem medial position is rather rare and I only found one near minimal pair:

- (2) **pépé** ‘clay, bread’ vs. **pélè** ‘side’

**/b/** Bilabial plosives have a voicing contrast, functionally opposing /p/ and /b/ as shown in (3).

- (3) **búù** ‘mortar’ vs. **pùú** ‘pay’  
**bè** ‘sow, cultivate’ vs. **pê** ‘choose’  
**bàwe** ‘carry’ vs. **wàwe** ‘spread out’  
**bíwò** ‘bad luck’ vs. **víwó** ‘suck’  
**bíle** ‘being beat’ vs. **síle** ‘finish’

In contrast to its voiceless counterpart, /b/ is more frequent in stem medial position. (Near-)minimal pairs are provided in (4).

- (4) **kfúbó** ‘chicken’ vs. **kfùmó** ‘stump’  
**tsíbó** ‘grind, trample’ vs. **tʃíló** ‘write’  
**dvùbó** ‘soak, dip’ vs. **dvùdó** ‘drive’

**/t/** Alveolar plosives also have a voicing contrast distinguishing /t/ and /d/, as shown in (5).

- (5) **túmbó** ‘country’ vs. **dúmbó** ‘package’  
**tándó** ‘womb’ vs. **jándó** ‘trace’  
**-tánè** ‘five’ vs. **sánè** ‘decide’  
**tòndò** ‘nail’ vs. **lòndó** ‘ring’  
**tàme** ‘spit’ vs. **wáme** ‘hurry’

(Near-)minimal pairs in stem medial position are rare since most occurrences of stem medial /t/ seem to be found in loan words or words that are really widespread.

- (6) pòtò ‘clay’ vs. pòpó ‘papaya’  
sótì ‘trousers’ vs. sónì ‘shame’  
tàtò ‘squeak’ vs. tàwò ‘goat’

Further, I have not found any opposition of /t/ and /d/ intervocally within a stem.

**/d/** The phoneme /d/ occurs both stem initially and stem medially as shown in (7) and (8), respectively.

- (7) dò ‘negotiate’ vs. tò ‘any’  
dìlè ‘bury’ vs. sílè ‘finish’  
dè ‘eat’ vs. lè ‘tree’  
dà ‘draw water’ vs. mâ ‘sea’  
díjè ‘expensive’ vs. jíjè ‘dodge’
- (8) bédò ‘ferment’ vs. bénó ‘buttock’  
kúdé ‘skin’ vs. kùlè ‘borrow’  
vòdà ‘rest’ vs. vòwa ‘wake up’

**/k/** (9) shows (near-)minimal pairs of /k/ in stem initial position.

- (9) kòlè ‘stumble’ vs. gòlè ‘gold’  
kìja ‘give’ vs. sìja ‘wash’  
kù ‘rat’ vs. dù ‘oven’  
kèlè ‘hang’ vs. jélè ‘whistle’  
kámbo ‘chew’ vs. lámbò ‘trap’

Unlike other pairs of plosives (/p/ and /b/ and /t/ and /d/), the velar plosives also contrast in terms of voicing stem medially, as shown in (10).

- (10) búkè ‘smoke (tr. v.)’ vs. búgè ‘put down lengthwise’  
fúkè ‘driver ant’ vs. fúgè ‘end (v.)’  
bvúkè ‘break (tr.)’ vs. bvùlè ‘night’

/g/ As Van de Velde (2008: 10) points out for Eton (A71), “The opposition between /k/ and /g/ carries a very low functional load.” The same is true in Gyeli, at least for stem initial syllable onsets. /g/ in Gyeli, just as in Eton, is usually prenasalized in nouns. In contrast to Eton, however, there are examples in Gyeli where /g/ occurs in initial stem positions without prenasalization, these occurrences are just extremely rare, representing only 0.4% of both noun and verb stem onsets (see Section 2.1.4 on phonotactics for more information).

- (11) **gâ** ‘gown’ vs. **kâ** ‘wrap’  
**gìjɔ** ‘cry (v.)’ vs. **bìjɔ** ‘hit (v.)’

/g/ is more frequent intervocally within a stem. Therefore, there are more (near-)minimal pairs listed in (12).

- (12) **kàgá** ‘defect giving birth’ vs. **káká** ‘shiver’  
**le-kàgà** ‘bewitched woman’ vs. **le-kà?á** ‘clan’  
**le-kàgà** ‘bewitched woman’ vs. **le-kàlà** ‘doughnut’  
**nkágá** ‘side of animal’ vs. **nkázá** ‘whip (n.)’

/?/ The glottal stop /?/ only occurs in stem medial positions, but never stem initially. Since /?/ contrasts with other stops and its occurrence is not predictable from its morpho-phonological environment, I treat it as a phoneme. (13) gives (near-)minimal pairs.

- (13) **sé?è** ‘liver’ vs. **sékè** ‘termite’  
**nká?à** ‘colobus monkey’ vs. **nkágá** ‘side of animal’  
**nké?é** ‘jaw’ vs. **nkédé** ‘courage’

/f/ Gyeli has a series of fricatives, including labiodentals and alveolars which both show a contrast in voicing. (14) shows functional distinctions with other phonemes of the same or close place and manner of articulation.

- (14) **fû** ‘fish’ vs. **vû** ‘leave’  
**fúkè** ‘driver ant’ vs. **búké** ‘crazy person’  
**fúlɛ** ‘escape (v.)’ vs. **dùlɛ** ‘be bitter’  
**fúlɔ** ‘descend’ vs. **búlɔ** ‘fish (v.)’  
**-fúsì** ‘different’ vs. **púsí** ‘bottle’

There are no minimal pairs for /f/ in stem medial position.

/v/ (15) gives (near-)minimal pairs for /v/.

- (15) vúlc ‘slice (v.)’ vs. fúlc ‘descend’
- vínó ‘finger’ vs. bínó ‘louse’
- vísó ‘sun’ vs. sisó ‘be happy’
- víjó ‘fire’ vs. píjó ‘small’
- vàà vs. ‘praise’ wàà ‘chimpanzee’

Just like for its voiceless counterpart, there are no minimal pairs for /v/ in stem medial position.

/s/ The phoneme /s/ occurs frequently in stem initial positions. Examples of contrasts are presented in (16).

- (16) síjò ‘dry season’ vs. píjò ‘small’
- sóndò ‘week’ vs. tóndò ‘nail’
- sâ ‘do’ vs. bâ ‘marry’
- súmelè ‘greet’ vs. lúmelè ‘send’
- só ‘friend’ vs. dò ‘negotiate’

/s/ also occurs intervocally within a stem, as in (17). While both voiced and voiceless alveolar fricatives appear stem medially, I have not found any minimal pair contrasting the two within a stem.

- (17) vísó ‘bone’ vs. víjó ‘fire’
- kásà ‘bridge’ vs. kálà ‘strawmat’
- kóse ‘cough’ vs. kóbè ‘cup’

/z/ The voiced alveolar fricative /z/ is quite rare stem initially and the examples in (18) are the only near-minimal pairs that I found. It is possible that a stem initial /z/ only occurs in loan words or words that are possibly widespread in the area, such as zìbí ‘tse tse fly.’ It seems thus that voicing carries a low functional load in stem initial alveolar fricatives, just like the opposition of /k/ and /g/ in this position.

- (18) zímbà ‘soldier’ vs. jímbá ‘age’
- zíngó ‘short dress’ vs. nsíngó ‘fast speed’

In contrast, /z/ and /s/ contrast stem medially, as shown in (19).

- (19) nkázá ‘whip (n.)’ vs. nkwásá ‘fishing pole’  
 nkùzó ‘widow/er’ vs. nkúló “dead’ season (May-Aug)’  
 kfúzá ‘fist’ vs. kfúmá ‘chief’

**/tʃ/** Both affricates, /tʃ/ and /dʒ/, are highly restricted in their distribution, unlike most other phonemes. They only occur as onsets of first syllables, comparable to labiodental fricatives, and they can only be followed by the vowel /i/. As the examples in (20) show, this restriction does not impose a realization rule, since also plain consonants occur in the same environment. The occurrence of the affricate is thus not predictable. Arguments for affricates as phonemic units rather than consonant clusters are given in Section 2.1.3.3.

- (20) tʃìì ‘live’ vs. tìì ‘get going’  
 tʃìì ‘life’ vs. dʒìì ‘forest’

**/dʒ/** Just as its voiceless counterpart, also the affricate /dʒ/ is restricted in its distribution and rather rare, as shown in Section 2.1.4 on phonotactics. There are still a few (near-)minimal pairs, as illustrated in (21).

- (21) dʒíye ‘burn (intr.)’ vs. díyè ‘expensive’  
 dʒíwò ‘river’ vs. bíwò ‘bad luck’

**/m/** Gyeli has a series of three nasal consonants: /m/, /n/, and /ŋ/. (22) provides examples of functional oppositions of /m/ in stem initial position while (23) lists oppositions within the stem.

- (22) mâ ‘accuse’ vs. nâ ‘that (COMP)’  
 mò ‘stomach’ vs. bò ‘rot’  
 mâ ‘sea’ vs. lâ ‘read, count’  
 míjù ‘brother, cousin’ vs. pìjù (pìjù) ‘drizzle rain’
- (23) pámo ‘appear’ vs. pàno ‘shine’  
 kwámó ‘bag’ vs. kwádó ‘village’  
 djúmò ‘spouse’ vs. djúwò ‘hear’

/n/ Also /n/ occurs frequently in both stem initial and stem medial position, as shown in (24) and (25), respectively.

- (24) nòò ‘take’ vs. dòò ‘puddle’  
 níndja ‘urinate’ vs. síndja ‘exchange’  
 níí ‘vagina’ vs. tñi ‘get going’  
 níjè ‘how many’ vs. jíjé ‘dodge’  
 nâ ‘that(COMP)’ vs. mâ ‘accuse’
- (25) dʒínò ‘name’ vs. dʒímò ‘be deep’  
 vìnò ‘finger’ vs. vísò ‘bone’  
 kwàñe ‘sell’ vs. kwàlè ‘love (v.)’

/ɲ/ The palatal nasal /ɲ/ occurs mainly in stem initial position. (Near-) minimal pairs are listed in (26). While I use the IPA symbol for this phoneme in this section, I will stick to Bantu tradition in terms of orthography in the following and represent the palatal nasal as *ny*.

- (26) júlè ‘body’ vs. júlè ‘decedent’  
 jâ ‘finger/toe nail’ vs. lâ ‘harvest’  
 jàgà ‘cow’ vs. sàga ‘be surprised’  
 já ‘really’ vs. ná ‘still’  
 jú ‘bee’ vs. ndžú ‘gap between incisor teeth’

In stem medial position, /ɲ/ occurs so rarely that I didn’t find any minimal pairs.

/l/ Gyeli has one lateral approximant, namely /l/. It occurs both stem initially (27) and stem medially (28).

- (27) lé ‘tree’ vs. té ‘posture, position’  
 lâ ‘read, count’ vs. dâ ‘draw water’  
 lúmélè ‘send’ vs. súmélè ‘greet’  
 lâ ‘harvest’ vs. nâ ‘that (COMP)’  
 lùndá “bosquet” (bush area between villages)’ vs. kùndá ‘shoe’
- (28) nkèlè (já dísì) ‘eyebrow’ vs. nkédé ‘courage’  
 kwàlè ‘love (v.)’ vs. kwàñe ‘sell’  
 jílè ‘viper’ vs. jíjé ‘dodge’

**/w/** The bilabial glide /w/ is relatively frequent in stem initial position and contrasts with other phonemes of the same or close place of articulation, as shown in (29).

- (29) wàà ‘chimpanzee’ vs. vàà ‘praise’
- wàwε ‘spread’ vs. bàwε ‘carry’
- wùndè ‘groundnut’ vs. tÙnde ‘fail’
- wólè ‘hawk’ vs. lólè ‘weaver’
- wúsè ‘drought’ vs. pùsε ‘push’

Further, /w/ is found intervocally within a stem where it contrasts with other phonemes such as /b/ or /m/, as shown in (30).

- (30) dʒíwɔ ‘steal’ vs. dʒìbɔ ‘close’
- djúwɔ ‘hear’ vs. djúmɔ ‘spouse’
- tàwɔ ‘goat’ vs. tàtɔ ‘squeak’

**/j/** The second of the two glides in Gyeli is the palatal glide /j/. Again, while I use the IPA symbol in this section, I will represent the palatal glide according to Bantu tradition as *y* in the following chapters. (31) provides (near-)minimal pairs for /j/ in stem initial and (32) for stem medial position.

- (31) jí ‘wood’ vs. jî ‘enter’
  - jílè ‘viper’ vs. sílε ‘finish’
  - jándɔ ‘trace’ vs. tándɔ ‘womb’
  - jíjε ‘dodge’ vs. kíjε ‘try’
  - júlè ‘descendent’ vs. fúlε ‘escape’
- (32) vìjó ‘fire’ vs. vìnó ‘finger’
  - kòjà ‘rope’ vs. kòla ‘add’
  - síjè ‘saw’ vs. símε ‘respect (v.)’

**/mb/** Gyeli has three voiced prenasalized stops which I consider as phonemic units: /mb/, /nd/, and /ŋg/. In contrast to other NC sequences which I treat as consonant clusters, these prenasalized stops occur both word initially and medially. A more thorough discussion of the segmental status of prenasalized stops as units versus sequences of consonants is given in Section 2.1.3.1. (33) provides minimal pairs for /mb/ in stem initial position.

- (33) **mbámbé** ‘ancestor’ vs. **ŋgámbé** ‘vision, oracle’  
**mbè** ‘drum’ vs. **ndè** ‘bait’  
**mbê** ‘door’ vs. **mê** ‘1S (OBJ)’  
**mbàŋgá** ‘nut’ vs. **kàŋgá** ‘proverb’  
**mbòò** ‘fatness’ vs. **dòò** ‘puddle’

/mb/ is also found in onsets of second syllables, i.e. word medially, as the minimal pairs in (34) show.

- (34) **jámbá** ‘armpit’ vs. **jàmá** ‘broken thing’  
**pémbó** ‘bread’ vs. **péwó** ‘scar’  
**ŋkùmbó** ‘porcupine’ vs. **ŋkùzó** ‘widow/er’

**/nd/** The same is true for /nd/. (35) gives some examples of (near-)minimal pairs for this phoneme in stem initial position.

- (35) **ndáwò** ‘house’ vs. **tàwò** ‘goat, sheep’  
**ndà** ‘cross (v.)’ vs. **nà** ‘and, with’  
**ndísi** ‘rice’ vs. **dísi** ‘bowl’  
**ndè** ‘bait’ vs. **wè** ‘die’

Likewise, /nd/ is also contrastive in stem medial position, as shown in (36).

- (36) **pánde** ‘arrive’ vs. **pane** ‘hang up’  
**sóndò** ‘week’ vs. **só?ò** ‘continue’  
**wùndè** ‘ground nut’ vs. **wùme** ‘pluck’  
**búndò** ‘bride price’ vs. **búlò** ‘fish (v.)’

**/ŋg/** The third voiced prenasalized stop that I count as a phonemic unit is the velar /ŋg/. (37) provides minimal pairs for /ŋg/ in stem initial position, while (38) shows minimal pairs for stem medial occurrences.

- (37) **ŋgò** ‘grinding stone plate’ vs. **dò** ‘negotiate, discuss’  
**ŋgèè** ‘eyebrow’ vs. **bèè** ‘shoulder’  
**ŋgàmbàlà** ‘difficulty’ vs. **kàmbala** ‘defend’  
**ŋgálè** ‘thunder, lightning’ vs. **bálè** ‘surpass’  
**ŋgùŋgù** ‘log’ vs. **sùŋgù** ‘war’

- (38) mpìngá ‘sweet cassava’ vs. mpìmbá ‘pancreas’  
lùŋga ‘grow’ vs. lùndá “it bosquet” (bush area between villages)  
ŋkóŋgó ‘frog’ vs. ŋkólò ‘clock, watch’

### 2.1.2 Realization rules

Beside the 22 consonantal phonemes, Gyeli has a multitude of other sounds. They are represented in Table 2.2.<sup>2</sup> The phonemes are in bold contrasting the other sounds of non-phonemic status which are either allophones (Section 2.1.2.2) or consonant clusters (Section 2.1.3). The sounds in brackets, namely the labial velars /kp/ and its voiced counterpart /mgb/, which only occurs as a prenasalized form, are neither allophones nor clusters. They are so rare, however, that they seem to be borrowed rather than genuine Gyeli phonemes.

	BL	LD	AL	PL	VL	GL	LV
<b>Phonemes and Allophones</b>							
Plos.	<b>p, b</b>		<b>t, d</b>		<b>k, g</b>	<b>?</b>	(kp*)
Fric.	<b>β</b>	<b>f, v</b>	<b>s, z</b>		<b>γ</b>		
Affr.			<b>ts, dz</b>	<b>tʃ, dʒ</b>			
N	<b>m</b>		<b>n</b>	<b>ɲ</b>	<b>ŋ</b>		
Lat. approx.			<b>l</b>				
Glides	<b>w</b>			<b>j</b>			
Pren. stops	<b>mb</b>		<b>nd</b>		<b>ŋg</b>		(mgb)
<b>Consonant Clusters</b>							
Lab. obst.	<i>pw, bw</i>		<i>sw</i>		<i>kw, gw</i>		
Pal. obstr.	<i>pj</i>		<i>dj</i>		<i>kj, gj</i>		
Stop-fric. cl.	<i>pf, bv</i>		<i>tf, dv</i>		<i>kf*</i>		
Pren. stops	<i>mp</i>		<i>nt</i>		<i>ŋk</i>		
Pren. fric.		<i>mf, mv</i>	<i>ns, nz</i>				
Pren. aff.	<i>mbv</i>		<i>ndv</i>		<i>nkf, ngv</i>		
Pren. lab.	<i>mpw, mbw</i>				<i>nkw, ngw</i>		
Pren. pal.			<i>ndj</i>		<i>nkj, njg</i>		

Table 2.2: Phonetic inventory - major consonants

<sup>2</sup>Abbreviations: Plos.: Plosives, Fric.: Fricatives, N: Nasals, Lat. approx.: Lateral approximants, Pren.: Prenasalized, Hom.: Homorganic, Het.: Heterorganic, aff.: Affricates, Lab.: Labialized, Pal.: Palatalized, BL: Bilabial, LD: Labiodental, AL: Alveolar, PL: Palatal, VL: Velar, GL: Glottal, LV: Labial velar, \*: voiced counterpart only if preceded by nasal, (): only in loan words

### 2.1.2.1 Labial velars

Labial velars are rare and restricted in Gyeli, but they do occur. Interestingly, the voiceless labial velar /kp/ is found only in one lexeme, namely in *kpèmè* ‘manioc leaves’, which is either a loan word or at least areally widespread. The voiced counterpart [gb] only occurs prenasalized, never on its own. It is more frequent though with six occurrences which are listed in (39).

- (39) **mgbèŋmgbèmè** ‘lion’  
**mgbásá** ‘hunting with spears and dogs’  
**mgbà** ‘crow’  
**mbgísì** ‘rawness, freshness’  
**mgbámàlà** ‘be sour’  
**ma-mgbámàlà** ‘acidity’

Cheucle (2014: 148) points out that labial velars in other Bantu A80 languages such as Bekwel often occur in variation with labialized velar stops [kw] and [gw]. This does not seem to be the case in Gyeli. These sounds seem, however, very much in line with other Bantu A80 languages. For instance, Cheucle (2014: 503) reconstructs the lexeme for ‘crow’ as \**gwàŋ* which surfaces synchronically as *ngbàn* in Bekol, Kwasio, and Njem. Further, according to the judgment of Mabi speakers, the Gyeli word *mgbèŋmgbèmè* ‘lion’ is very typical Gyeli (which most likely means that it is no innovation, but rather older), while the Mabi would rather use *màbùnzò* for ‘lion’.

### 2.1.2.2 Allophones

Allophones in Gyeli mostly concern variation of voiced stops. The voiced plosives /b/ and /g/ often undergo lenition in intervocalic position. This rule does not apply to the alveolar voiced plosive /d/. This phoneme, in contrast, can be realized as a tap intervocally, which I analyze as an instance of code-switching. Realizations of /b/, /d/, and /g/ are discussed below in turn.

**Realization of /b/** Being subject to a general lenition rule of intervocalic voiced stops, /b/ is weakened to [β]. This rule is, however, not absolute, but rather subject to speaker variation and speed of speech. The same speaker

may pronounce the same lexeme with an intervocalic /b/ one time with [b], and another time with [β]. Therefore, there is no strict complementary distribution of [b] and [β], but rather a tendency. Further, this rule only concerns stem medial positions. If the phoneme /b/ occurs stem initially in between vowels, it does not change to [β].

Figures 2.1 and 2.2 show the contrast of the two allophones. The realization of the intervocalic /b/ as a plosive is clearly seen in Figure 2.1 while in Figure 2.2 no closure appears.<sup>3</sup>

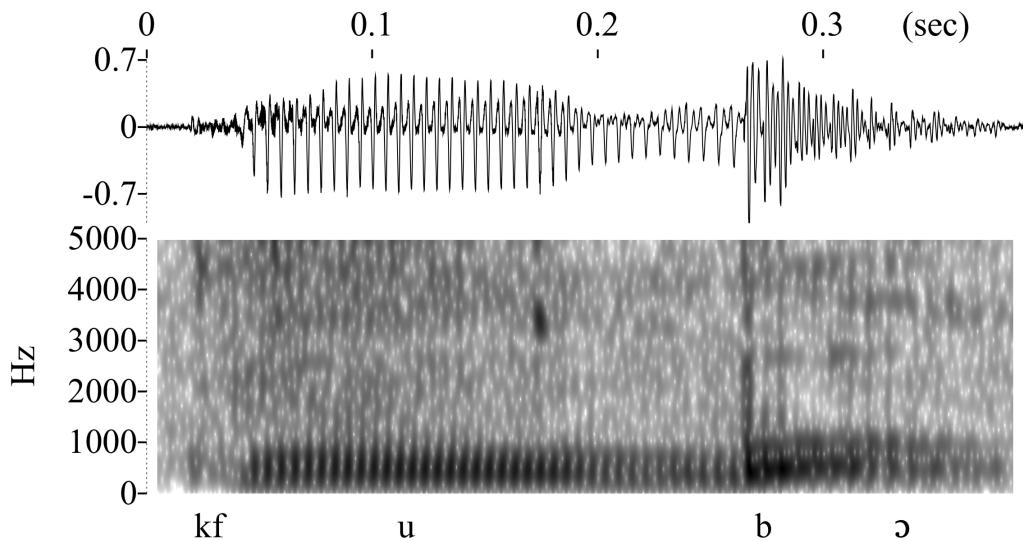


Figure 2.1: Intervocalic [b] in /kfúbɔ/ ‘chicken’

**Realizations of /d/** The phoneme /d/ does not undergo lenition, in contrast to other voiced stops. It is sometimes pronounced as a tap [ɾ] in stem medial, intervocalic position. This variation may, however, be considered as an instance of code-switching rather than allophonic variation. Speakers who are in closer contact with Mabi tend to pronounce the lexeme for ‘woman’ as *mùrâ* while those who are less influenced by Mabi pronounce it *mùdâ*. Again, it is definitely a matter of speaker variation instead of complementary distribution and correlates with language contact factors.

It seems that there is a regular sound correspondence with Mabi. The Mabi [ɾ] is mostly pronounced as [d] in Gyeli. I also found one example where a Mabi [ɾ] is pronounced as [l] in Gyeli: *mà-tárá* ‘beginning’ in Mabi

<sup>3</sup>In stem or word initial position, /b/ is pre-glottalized (see Section 2.1.2.4).

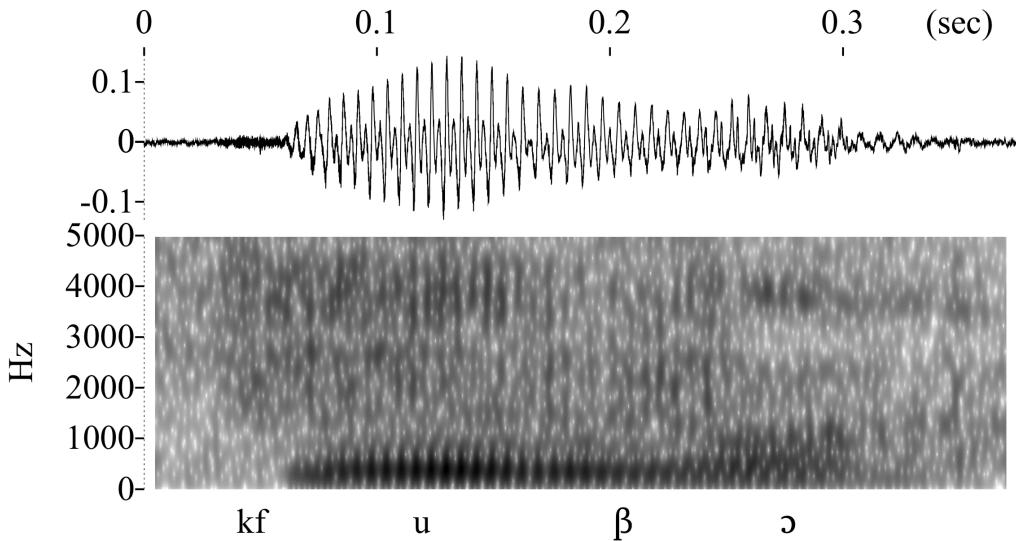


Figure 2.2: Intervocalic [β] in /kfúbɔ/ ‘chicken’

which is *mà-tálá* in Gyeli. Due to lack of data, the exact correspondence is not yet clear. Cheucle (2014: 432) reconstructs Proto-A80 as not having possessed [r̪] as a phoneme,<sup>4</sup> so it seems that [r̪] might be rather an innovation in Mabi. In sum, Gyeli /d/ is only realized as [d], while words with a tap [r̪] are instances of Mabi in Gyeli speech.

Further, just like word initial /b/, initial /d/ is pre-glottalized and pronounced with a relatively long prevoicing time (see Section 2.1.2.4 on pre-glottalized stops).

**Realizations of /g/** The phoneme /g/ is, just like /b/, subject to lenition in stem medial, intervocalic position, having as allophone [ɣ]. Again, the same holds as for /b/: There is no strict complementary distribution, but it is rather speaker dependent whether the stop undergoes lenition or not.

/g/ in stem initial position is rare, as shown in Section 2.1.4 on phono-tactics. Velar stops in this position are either voiceless or stem initial /g/ is palatalized and surfaces as [gj] (or gy in the orthographic representation). This, however, does not seem to be conditioned by any realization rule since the plain stop and the palatalized one can be both followed by any vowel. In the rare cases where /g/ occurs stem initially, /g/ is subject to prevoicing

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<sup>4</sup>It is not clear, however, whether [r̪] occurred as an allophone since allophony is not discussed by Cheucle (2014).

which is discussed in Section 2.1.2.4.

**Realizations of /tʃ/ and /dʒ/** The affricates /tʃ/ and /dʒ/ are sometimes realized as /ts/ and /dz/, respectively, depending on speaker variation rather than a realization rule. While there is variation across speakers, also the speaker may use both variants in free variation.

**The allophone [ŋ]** The velar nasal [ŋ] is an allophone of nasal consonants in general. Its occurrence is conditioned by the nasal place assimilation rule, as explained in Section 2.1.2.3. In contrast to other nasal consonants /m/ and /n/, [ŋ] has no phonemic status in Gyeli because its occurrence is always predictable from a following velar obstruent. /m/ and /n/, however, also occur as plain nasals with a functional distinction, as shown in Section 2.1.1.

There is one exception, namely with the noun *ŋwándó* ‘cassava stick’ that contrasts with *ŋgwàndó* ‘melon seed’. While the latter noun takes a velar nasal as expected from the following velar stop, there is no velar stop in *ŋwándó* ‘cassava stick’. Actually, a labial nasal [m] would be expected before [w]. Since this is the only occurrence of a contrastive [ŋ] and since [ŋ] only occurs in sequences of nasal + velar consonants, but never on its own, I do not consider [ŋ] a phoneme.

### 2.1.2.3 Nasal place assimilation

A nasal that precedes another consonant, forming a nasal-consonant cluster, assimilates to the place of articulation of the following consonant, as shown for all nasal consonants in (40). Nasal place assimilation particularly plays a role in prefixation such as deverbal agentive nouns (sec:NOM12).

- (40)    /N + bâ/       → [mbâ] ‘arm’
- /N + túmbà/ → [ntúmbà] ‘older brother’
- /N + gjê/      → [ŋgjê] ‘stranger’

Interestingly, nasalization of labial velars is done with a bilabial nasal: /N + kp/ → [mgb].

### 2.1.2.4 Pre-voicing of labial and alveolar stops and the issue of implosives

In this section, I expand on the issue of the phonetic realization of voiced stops and show in some detail that these are not implosive. Implosives have been reported before in other varieties of Gyeli and in neighboring languages, but in the Ngolo variety of Gyeli, voiced stops that could be perceived as implosives should rather be analyzed as pre-glottalized stops with a relatively long prevoicing time. During prevoicing time, speakers expand their cheeks, increasing both the vocal tract size and amplitude before release of the voiced plosives /b, d/. An in-depth discussion is given in Grimm (2019).

In stem initial position, labial and alveolar stops /b/ and /d/ are realized with pre-glottalization and a relatively long prevoicing time. This combination sounds very different from Indo-European [b] and [d] and can perceptually easily be mistaken for implosives [ɓ] and [ɗ], especially since the occurrence of implosives is expected in the area. On closer inspection, claims for implosives in neighboring languages may have to be reconsidered in the light of this analysis for Gyeli. Ngue Um (2012), for instance, lists all stem initial occurrences of /b/ in the Gyeli variety spoken in the contact region with Basaa as either implosives or bilabial fricatives while, according to him, there are no stem initial realizations as [b]. This is typologically rather unexpected, especially if there is no opposition of stem initial egressive [b] versus the implosive [ɓ].

In comparison, Thornell & Nagano-Madsen (2004: 173) state in their phonetic description of the closely related language Mpiemo (A86c) that implosives [ɓ] and [ɗ] occur frequently in stem initial and intervocalic position. The authors treat implosives as allophones of their egressive counterparts which generally occur anywhere but before high close vowels [i] and [u], and before nasals. They also point out, however, that there may be free variation of implosive or egressive stop use before [a] and that the distribution is not completely clear yet. They show an instance of a bilabial implosive in their Figure 6, replicated here in Figure 2.3.<sup>5</sup>

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<sup>5</sup>Cheucle (2014: 461) assumes in her comparative study and reconstruction of proto A80 that voiced plosives have been realized as implosives, but given the scarce data, this may need to be reconsidered since she even points out herself that “Seul le mpiemo comporte une distribution complémentaire entre les implosives et les occlusives voisées. Pour le

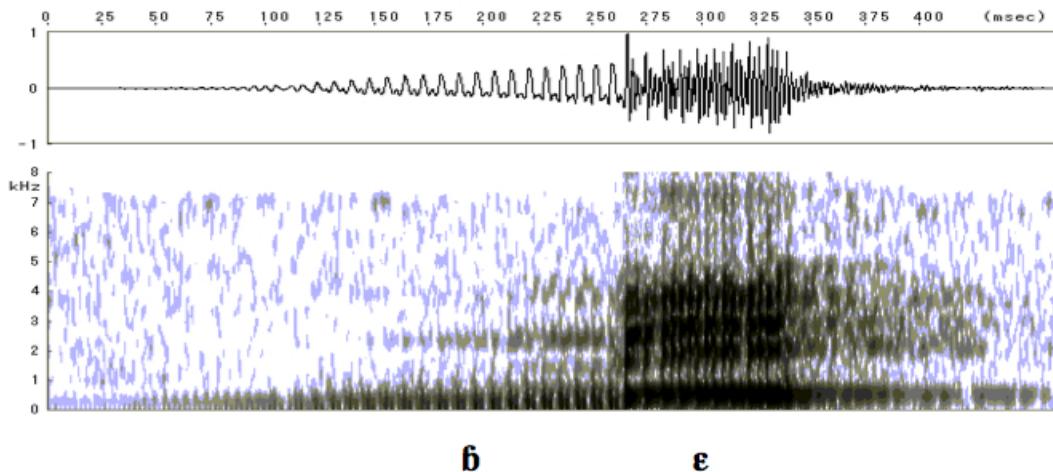


Figure 2.3: Implosive [b] in Mpiemo (Thornell & Nagano-Madsen (2004: 172))

Clements & Osu (2002: 312) describe the most salient features of implosives as being

“the absence of turbulence noise (in the form of burst or aspiration) at their release and the steady or rising amplitude of vocal fold vibration during the production of the constriction.”

In Figure 2.3, the rising amplitude before the release is clearly seen in a typical cone shape, with voicing starting a good 150ms before the release. In contrast, Gyeli does not necessarily have the same type of amplitude increase, as shown in Figure 2.4. One could argue that instead the amplitude is steady, but then the release has more turbulence which is an indication for an egressive [b].

Further, the voicing onset starts with a glottal closure, marked by the circle in Figure 2.4. In fact, the manner of production of the word/stem initial egressive voiced stops in Gyeli involves the same places of articulation as implosives with a closure at the glottis, an increase of pressure in the oral cavity and finally a labial or alveolar release. The only difference is the

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bekwel et le shiwa, il a été précisé plus haut que les occlusives sont généralement réalisées implosives. Dans les autres langues, nous ne disposons pas d'informations à ce sujet. On peut toutefois supposer que les occlusives voisées du P-A80 aient plutôt été des implosives.” [Only Mpiemo has a complementary distribution of implosives and voiced plosives. For Bekwel and Shiwa, it has been stated above that stops are generally realized as implosives. For the other languages, we do not have any information concerning this matter. One can still assume that voiced stops in P-A80 have rather been implosives.]

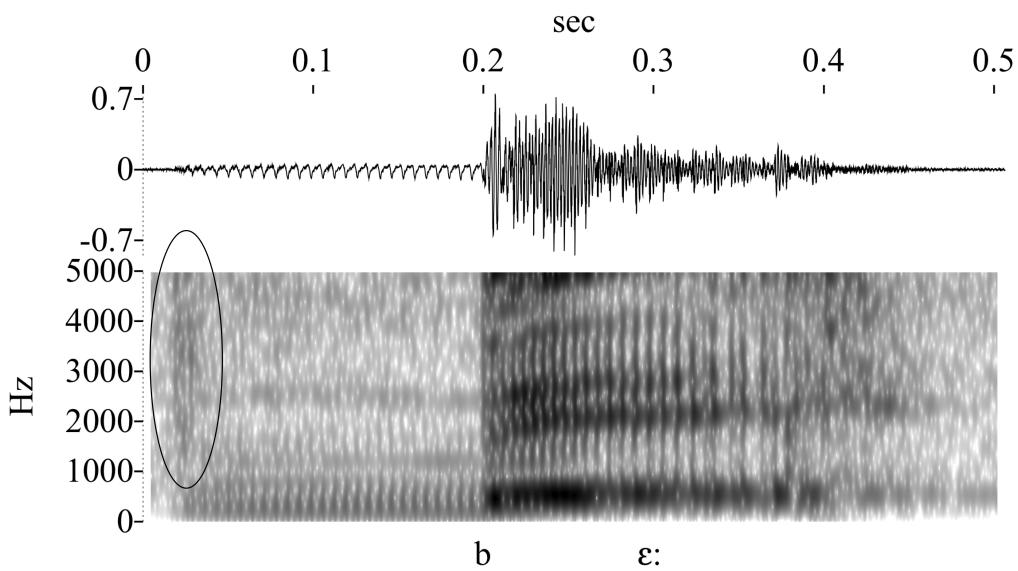


Figure 2.4: Preglottalized and prevoiced [b] in Gyeli, speaker 1

movement of the glottis producing different kinds of airstreams. While in implosives the glottis usually moves downwards which causes an ingressive airstream, the airstream in Gyeli is always egressive with the glottis moving upwards. Evidence for this comes from the observation that speakers tend to expand their cheeks during prevoicing time/before release. This has also been noted by Renaud (1976) for the Gyeli variety spoken in Bipindi. In order to expand the cheeks, the airflow has to be egressive.

The increase of airstream pressure in the oral cavity varies among speakers, as shown in Figure 2.5. Here, the prevoicing before the release is not steady, but rising, however not in a regular way. And again, there is a good deal of turbulence noise during the release.

In summary, the perceived particularity in the production of stem initial [b] and [d] is related to pre-glottalization followed by a long prevoicing time. Speaker 1, for instance, has a prevoicing of 182ms in *bɛɛ* ‘shoulder’ in Figure 2.4, speaker 2 has a prevoicing of 190ms in Figure 2.5. During voicing, airstream pressure increases in the oral cavity which, in turn, leads to a more intense burst at the release. The longer the voicing time, the potentially stronger is the burst at release.

Closure duration of the voiced plosive does not depend on the quality of the following vowel, as explained in detail in Grimm (2019). Instead, the duration depends on the speaking rate, the lexical or grammatical function

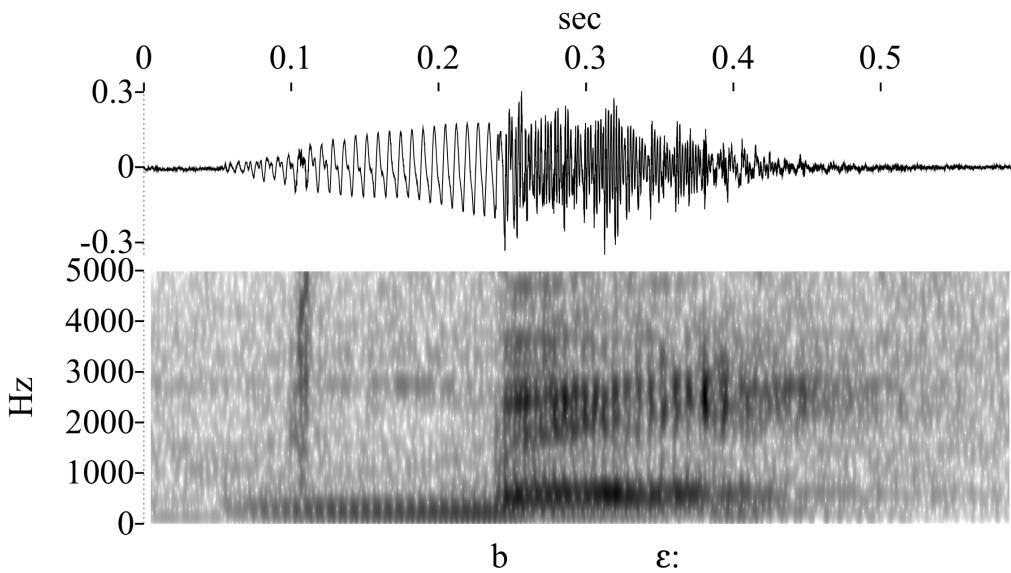


Figure 2.5: Preglottalized and prevoiced [b] in Gyeli, speaker 2

of a morpheme or stem, and the position in the intonation phrase. Thus, closure duration is generally longer in careful speech, in initial position of lexical stems, and at the beginning of an intonation phrase. Vice versa, closure duration is shorter in fast speech, in grammatical morphemes, and at the end of intonation phrases.

Also /g/ is prevoiced in word initial position, but lacks pre-glottalization in comparison to /b/ and /d/. There are, however, not that many instances of a word initial /g/ which would allow for a more systematic investigation. In the lexeme *gółè* ‘gold’, for instance, the prevoicing time amounts to 120ms.

There are several ways to interpret these findings in relation to other Bantu A80 languages. Either, pre-glottalization followed by prevoicing of [b] and [d] could be areally more widespread, but it has not been recognized as such. Or, it is a special feature in Gyeli. It is even possible that these pre-glyottalized stops are an imitation of sounds that are possibly implosives in neighboring languages. Duke (2014) observed in the Gyeli variety spoken around Bipindi, which is in contact with Kwasio and Basaa, that speakers mimick in a playful way sounds of neighboring languages. This happens, according to Duke, both in contact situations with non-Bagyeli, but also within the speech community in order to emphasize personal relations with other Gyeli community members with whom the individual may have spent

some time with e.g. the Basaa.

### 2.1.2.5 Voicing of intervocalic stops

In intervocalic position, voiceless stops such as [p, t, k] are slightly voiced in fast speech. For instance, the noun /ŋàtà/ ‘tied bundle’ may surface as [ŋàdà] just as /fíkè/ ‘driver ant’ may be pronounced as [fígè] (which then becomes a homonym with /fígè/ ‘end’).

## 2.1.3 Consonant clusters

Gyeli has a wide range of consonant sequences such as prenasalized consonants, labialized and palatalized stops, and consonant-fricative clusters. In many Bantu languages, these sounds are treated as single phonemic units. In Gyeli, I consider some of them as units, but some as clusters, i.e. sequences of phonemes. Following Güldemann (2001: 8), I view clusters as “a sequence of two consonantal constituents having phoneme status as independent segments which join together in one, more elaborate segment.” In the following, I will present the various consonant clusters and explain how I delimit them from unit segments.

### 2.1.3.1 Prenasalization

Gyeli has a variety of prenasals, mostly prenasalized obstruents, but also a few prenasalized glides and laterals. Table 2.3 lists all nasal + consonant (NC) sequences. Every oral consonant in Gyeli that occurs stem initially can be prenasalized.

	BL	LD	AL	PL	VL	LV
Stops	<i>mp, mb</i>		<i>nt, nd</i>		<i>ŋk, ŋg</i>	<i>mgb</i>
Fricatives			<i>ns, nz</i>			
Affricates				<i>ntʃ, ndʒ</i>		
Lateral approximant			<i>nl</i>			
Glides	<i>mw</i>			<i>nj</i>		

Table 2.3: Prenasalized consonants

There are different ways to analyze the status of these prenasals which can either be treated as a single segment or as a sequence of segments, i.e. consonant clusters. I argue that some NC occurrences form a segment unit,

namely the ones in bold, while the others constitute clusters in Gyeli. The status distinction of NC segments into units versus sequences is primarily based on distributional properties, as I will explain in the following, while other diagnostics that are often used in Bantu studies to determine NC status can be ruled out as decisive criteria. (The prenasalized labial velar is a marginal phenomenon and further discussed in Section 2.1.2.1.)

Chacha Mwita (2007) summarizes arguments that have been put forth in Bantu studies for and against treating prenasals as single segments. The main points of evidence concern homorganicity, duration, and syllabification. The author points out that “similar gestural sequences in some languages should be treated as unitary segments, particularly if they occur in syllable-initial position”. As Table 2.3 shows, all NC segments are homorganic and, as I will show below, all occur in syllable-initial position. Therefore, homorganicity is not a criterion in Gyeli to distinguish NC units from NC sequences.

Another putative diagnostic for NC segments as phonemic units concerns duration. It has been claimed that, if NC segments are units, “at the phonetic level, the prenasalized consonants have the same length as other consonantal segments” (Chacha Mwita 2007: 61). According to Downing (2005: 183), however, one cannot simply correlate the phonetic duration of prenasalized consonants with their segmental status. Both are language specific. In Gyeli, NC sequences seem to be longer than singleton segments, as (41) and (42) show.<sup>6</sup>

	mɛ ‘1S’	→ [m] = 133ms
(41)	bɛɛ ‘shoulder’	→ [b] = 184ms
	mbɛ ‘door’	→ [mb] = 255ms

Longer duration of prenasalized in comparison to plain obstruents is more evident in prenasalized voiceless stops, as shown in (42) since they lack the relatively long prevoicing time of voiced stops, as discussed in Section 2.1.2.2.

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<sup>6</sup>Both (41) and (42) constitute single tokens and rather serve at giving an impression. For generalizations, a larger sample is needed. Since I do not consider duration as a decisive criterion in determining NC segment status, however, I do not investigate duration systematically at this point.

- (42)      ná ‘still (adv)’ → [n] = 181ms  
               kà ‘catch’ → [k] = 21ms  
               ɳká ‘line’ → [ɳk] = 200ms

Another argument that is used in the discussion on the status of prenasals is syllabification. If the NC sequence belongs to the same syllable, it is usually viewed as a unit:

“The fact that the units making up the prenasals usually find themselves in one syllable has been taken as proof that the consecutive consonants in a prenasal form a unit segment or one sound.” (Chacha Mwita 2007: 62)

This is true for all NC sequences in Gyeli since nasals are never syllabic, as shown in Section 2.3. Gyeli has, synchronically, almost no nasal prefixes as would be common for Bantu languages. Instead, the nasal that most likely used to be a syllabic prefix has become frozen to the noun stem which becomes obvious in the plural classes which retain the nasal that occurs in the singular: *mbáálá* ‘jaw’ retains the /m/ in the plural class 4 *mimbáálá* ‘jaws’. This suggests a closer liaison between nasal and obstruent.

This syllabification pattern is, however, not only the case for NC sequences such as /mb/, but also for those that are less typically viewed as single phonemic units, for example a nasal plus a lateral approximant [nl] as in *nlémò* ‘heart’, *minlémò* ‘hearts’. While it is quite common for Bantu languages to have prenasalized obstruents as phonemic units, it is rather uncommon to have phonemic units of prenasalized lateral approximants.

As an interim summary, the diagnostics of homorganicity, duration, and syllabification are either inconclusive (as far as duration is concerned) or seem to indicate a unit status of all NC sequences. The unit status is then based on homorganicity of all NC sequences and their occurrence within the same syllable. Considering the distribution of NC sequences, however, shows that there are differences between nasal + voiced stop sequences in contrast to other NC sequences, as illustrated in Table 2.4.

The table shows the distribution of NC sequences in nouns and verbs. For both nouns and verbs, different consonant positions in stems are represented. O1 stands for the onset of the first syllable in a stem, O2 for the second, and O3 for the third, irrespective of whether the onset is one single consonant or a cluster.

The numbers under O1, O2 and so on give total numbers of all NC sequences in this position. For instance, for O1 in nouns, 188 out of 855 nouns stems that have a consonantal onset in O1 start with an NC sequence. In contrast, 377 verb stems start with a consonant, but only 7 of them are pre-nasalized stops. The number of consonantal slots in O2 and O3 are decreasing because obviously they cannot be filled in mono- or bisyllabic stems.

NC	Nouns			Verbs		
	O1 188/855	O2 169/650	O3 4/88	O1 7/377	O2 54/274	O3 -/76
mp	30	1	-	-	-	-
mb	30	69	-	-	25	-
nt	26	1	-	3	-	-
nd	7	55	2	1	23	-
ŋk	47	3	-	-	-	-
ŋg	24	39	2	1	6	-
mgb	5	1	-	1	-	-
ns	20	-	-	-	-	-
nz	10	-	-	-	-	-
ntʃ	2	-	-	-	-	-
ndʒ	8	1	-	1	-	-
nl	9	-	-	-	-	-
mw	5	-	-	-	-	-

Table 2.4: Distribution of NC sequences

The distribution shows that all possible NC sequences occur in O1 of nouns while they are exceptions in O1 of verbs. This distribution can be explained by the noun class morphology, as already stated above: diachronically, the nasal was most likely a syllabic nasal prefix as it is common for many Bantu languages. Synchronously, the former nasal prefix has become frozen to the stem.

Assuming this historic scenario, it is not surprising that NC sequences are almost absent in O1 position in verbs, with a few exceptions only. There are only a few instances where a verb starts with a prenasalized stop as in *ndà* ‘cross’ or *ntéglè* ‘disturb’. They are, however, restricted, not allowing prenasalized labials, and they are rather rare with only 6 occurrences in a database of 377 verbs, as shown in Table 2.4.

There are, however, also NC sequences that occur in O2 of nouns and verbs (and exceptionally in O3 of nouns). They are restricted to voiced pre-

nasalized stops.<sup>7</sup> These occurrences cannot be explained by diachronic noun class morphology, but suggest a different phonological status. Given the distributional differences, I propose a unit analysis for voiced prenasalized stops /mb/, /nd/, and /ŋg/ in Gyeli while I treat all other NC sequences as clusters. This holds the advantage of not artificially inflating the phoneme inventory while acknowledging the language's properties in terms of homogeneity and syllabification.

### 2.1.3.2 Labialization and palatalization

Obstruents can occur in a labialized and/or palatalized form, i.e. the obstruent is followed by a labial or palatal glide. Both phenomena are specified in the lexicon rather than being phonological processes in Gyeli since their occurrence is not predictable from the (morpho-)phonological environment. According to Hyman (2003: 55), “The post-consonant glides [y] and [w] are typically derived from underlying vowels.” Therefore, one would expect that certain vowels following a labialized or palatalized obstruent are disallowed.

It turns out, however, that in Gyeli this is not the case. (43) lists noun stems that start with /bw/, providing examples of different vowel heights. These examples contrast with (44) where /b/ is not labialized and followed by the same vowels. Therefore, labialization cannot be a phonological process that is determined by the consonant's phonological environment. Just like most NC sequences, I consider labialized and palatalized obstruents as consonant clusters rather than phonemic single units. This analysis is based on the fact that both consonants in the sequence can occur as independent phonemes on their own as well as distributional restrictions to first syllables.<sup>8</sup>

- (43) /bw/ noun stem initial
  - a. bwímò ‘net hunting’
  - b. bwújà ‘hundred’

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<sup>7</sup>Instances of voiceless nasal stops in O2 of nouns can be explained by reduplications.

<sup>8</sup>Another possible analysis would be to assume a third category of complex consonants, in contrast to simple consonants and consonant clusters, as Güldemann (2001) proposes for !Xõo. While this is an elegant solution for !Xõo, it does not apply neatly to Gyeli. Introducing a third category rather moves the decision between unit and cluster analysis to another level.

- c. bwèdòwò ‘taste’
  - d. bwò ‘brain’
  - e. bwàndjá ‘disdain, adultery’
- (44) /b/ noun stem initial
- a. bíá ‘beer’
  - b. búgé ‘tse tse fly (*Glossina*)’
  - c. bé ‘well’
  - d. bòndí ‘black colobus monkey’
  - e. bàlándè ‘larva’

The same is true for other obstruents and palatalization (for the sake of space, I will not give examples for all of them). Another putative analysis would be that the glide is part of a diphthong. Gyeli has four diphthongs: /uɔ/, /ua/, /ɔa/, /ie/ (see also Section 2.2.2). For instance, it would be possible that the diphthong /ua/ surface as [wa]. This, however, does not work out for two reasons. First, in that case we should only find labialization/palatalization with certain vowels—/w/ preceding /ɔ/ and /a/ and /j/ preceding /e/. This is clearly not the case since these coarticulated consonants occur in front of any vowel, as shown above. Second, speakers pronounce diphthongs and labialized stops distinctly. This can be nicely illustrated with the minimal pair *bwò* ‘brain’ vs. *búd* ‘mortar’.

The fact that labialization and palatalization are not predictable realization rules in Gyeli is also seen in (near-)minimal pairs contrasting plain obstruents and obstruents + glide, as shown in (45) for labial glides and in (46) for palatal glides.

- (45) **bwà** ‘give birth’ vs. **bâ** ‘marry’  
**kwà** ‘grind’ vs. **kà** ‘catch’  
**swáálè** ‘bone marrow’ vs. **sáálè** ‘work (n.)’
- (46) **djò** ‘laugh’ vs. **dò** ‘negotiate’  
**kjàlɛ** ‘start an engine’ vs. **kálɛ** ‘sister’  
**lè-gjólé** ‘bushbaby (*galago senegalensis*)’ vs. **gólé** ‘gold’

Labialized and palatalized obstruents basically only occur stem initially, as shown in Table 2.5. Exceptions in second syllable onsets of noun stems

are due to reduplication of the first syllable and loan words. Also, these sounds occur more frequently in nouns than in verbs. The most frequent ones are /bw/, /kw/, /dj/, /gj/.

	Nouns			Verbs		
	O1	O2	O3	O1	O2	O3
	59/855	2/650	-/94	53/377	-/274	-/76
<b>labialized obstr.</b>						
pw	2	1	-	1	-	-
bw	12	-	-	10	-	-
kw	10	-	-	9	-	-
gw	2	-	-	-	-	-
sw	3	-	-	2	-	-
<b>palatalized stops</b>						
pj	1	-	-	-	-	-
dj	11	1	-	12	-	-
kj	1	-	-	2	-	-
gj	17	-	-	17	-	-

Table 2.5: Labialized/palatalized consonants

Finally, labialized and palatalized obstruents can enter an even more complex consonant cluster by being preceded by a nasal. These complex sounds are, however, restricted to nouns. Table 2.6 shows the distribution. Mostly, these complex sounds occur in O1 position, with the exception of /ndj/ which is more frequent in O2 than in O1.

pren. lab. stops	O1	O2	O3
mpw	1		
mbw	5	1	
nkw	6		
ngw	7		
<b>pren. palat. stops</b>			
ndj	2	13	
nkj	3		
ngj	8	1	

Table 2.6: Prenasalized and labialized/palatalized consonants in noun stems

(47) opposes prenasal stops to prenasal stops + glide.

- (47) **mpá** ‘island’ vs. **mpwá** ‘bouillon’  
**ndáwò** ‘house’ vs. **ndjàwò** ‘chisel’  
**nkâ** ‘guinea fowl’ vs. **nkjâ** ‘scabies’

### 2.1.3.3 Consonant-fricative clusters

Consonant-fricative sequences are another series of consonant cluster in Gyeli. I propose to consider consonant-fricative sequences as clusters because i) their occurrence is highly restricted in terms of their distribution, unlike most other phonemic units, and ii) a unit analysis would be typologically uncommon for these sequences. Treating all of them as phonemic units would again artificially expand the phoneme inventory. Further, a cluster analysis is in line with the treatment of prenasal and labialized/palatalized consonant clusters.

Most of the consonant-fricative clusters consist of a stop + fricative, but there are also lateral + fricative sequences, as Table 2.7 shows. All of them are restricted to the onset of the first syllable, both in noun and verb stems. The only exception of an occurrence of /bv/ in O2 in the table is a reduplication of the first syllable.

Consonant-fricative sequence	Nouns			Verbs		
	O1 40/855	O2 1/650	O3 -/94	O1 27/377	O2 -/275	O3 -/76
pf	6	-	-	5	-	-
bv	6	1	-	6	-	-
tf	6	-	-	5	-	-
dv	4	-	-	5	-	-
kf	16	-	-	4	-	-
lv	2	-	-	2	-	-
<b>pren. stop-fric.</b>	<b>24</b>					
mbv	8	-	-	-	-	-
ndv	2	-	-	-	-	-
nkf	5	-	-	-	-	-
ngv	9	-	-	-	-	-

Table 2.7: Distribution of consonant-fricative clusters

All consonant-fricative clusters are relatively rare, [kf] being the most

frequent sequence type, at least in noun stems.<sup>9</sup> In contrast, /lv/ sequences are the least frequent.

Some of the stop-fricative clusters appear also prenasalized, as shown in Table 2.7. Prenasalization is, however, restricted to a subset of consonant-fricative clusters in noun stems, including prenasalization of /bv/, /dv/, /kf/, and /gv/. /gv/ as voiced counterpart to /kf/ only occurs if a nasal precedes it. Prenasalized consonant-fricative clusters do not occur in verbs.

Consonant-fricative clusters are further restricted in their distribution in that they only occur before the high vowel /u/. This makes it likely to assume a realization rule of affrication, as for instance Van de Velde (2008: 26) describes for Eton. There is, however, no complementary distribution or conditioning of the fricative cluster occurrence with respect to plain consonants. Their occurrence is not predictable from any rules, as the (near-)minimal pairs in (48) show.

- (48) **bvúlè** ‘Bulu person’ vs. **búlè** ‘burst’
- tfúdè** ‘bump’ vs. **túdè** ‘tumor’
- kfúdè** ‘cover’ vs. **kúdè** ‘skin’
- lvúmá** ‘maggot’ vs. **lùmá** ‘yellow fever mosquito’

All initial consonants are followed by the same high back vowel [u]. Speakers are aware of the difference and correct me if I pronounce it wrong either way.

While ruling out a realization rule of affrication, one could still assume that stop-fricative clusters should be viewed as either homorganic or heterorganic affricates. An argument in favor of this hypothesis is that the affricates /tʃ/ and /dʒ/ are equally restricted in their distribution: they only occur in first syllables of noun and verb stems and they precede only the vowel /i/.

There are several reasons, however, why I treat affricates /tʃ/ and /dʒ/ as phonemic units which are distinct from consonant-fricative clusters. First, clusters are *per definitionem* comprised of two consonantal constituents which have independent phonemic status. While this is true for the consonant-fricative clusters, it does not hold for the affricates: /ʃ/ and /ʒ/ are not

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<sup>9</sup>An observation with respect to the closest related language Mabi: Mabi does not have the phoneme [kf], but rather uses [pf] as in Mabi *pfúmá* ‘chief’ where the Bagyeli say *kfúmá*. It is not clear, however, if this is a regular sound correspondence since Gyeli uses both (non-allophonic) sequences [pf] and [kf].

independent phonemes in Gyeli. Second, the affricates are better explained within the system as filling a slot in the palatal series, as also suggested by Cheucle (2014: 335) for other A80 languages. She further points out that affricates are viewed as phonemic units in other A80 languages. It also seems to be more systematic to group the clusters as distinct from the affricates since they differ in the type of fricative. While consonant-fricative clusters always involve a labiodental fricative, the affricates /tʃ/ and /dʒ/ involve a palatal fricative.

### 2.1.4 Phonotactics

In this section, I lay out the phonotactics, i.e. distribution and frequency, of consonants comparing noun and verb stems. The basis for my analysis is a database of 875 noun and 377 verb stems.<sup>10</sup>

Consonants only occur in syllable onset positions, and almost never as codas (with the exception of a few nasals). Noun stems can have up to four syllables, verb stems up to three. (For more detailed information on syllable structure, see Section 2.3.) Tables 2.8 and 2.9 reflect the syllable structure for the potential occurrence of consonants in nouns and verbs, respectively. Thus, O1 (onset 1), for instance, stands for the stem initial consonant slot, O2 (onset 2) for the consonant slot in the second syllable and so on. I prefer to refer to onsets rather than to C (consonant) because these slots can be filled by multiple consonant, i.e. consonant clusters as discussed in Section 2.1.3.

The number following O1, O2, and so on refers to the number of onsets. For example, out of 875 noun stems, 855 have an onset in their first syllable, while there are only 650 onsets in the slot O2, and only 94 in O3. There are two reasons why the number does not match the total number of noun/verb stems. First, there are a few loan words which do not have a consonantal onset, for instance *èsâs* ‘fuel’. Second, the numbers are decreasing for slots O2, O3 (and O4) because noun and verb stems have different syllable lengths. Monosyllabic stems obviously do not have an O2 slot, so

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<sup>10</sup>Note that there is a much higher number of verb forms, namely derived verbs that take verb extensions. I consider, however, only synchronically non-derived verb stems. If, on the other hand, a verb stem has an applicative extension *-ele*, but synchronically there is no basic verb stem (anymore), I consider this applicative form in my analysis. For more information on verbs and verb extensions, see Section 3.2.

the potential number of O2 occurrences is smaller than for O1.

	O1 (855)	O2 (650)	O3 (88)	O4 (6)
<b>Stops</b>	<b>205 (24%)</b>	<b>138 (21.2%)</b>	<b>14 (15.9%)</b>	<b>1 (16.6%)</b>
p	36	4	-	-
b	54	28	2	-
t	31	10	1	-
d	19	43	7	-
k	63	15	3	-
g	2	25	6	1
,	-	13	-	-
<b>Affricates</b>	<b>25 (2.9%)</b>	-	-	-
tʃ	16	-	-	-
dʒ	9	-	-	-
<b>Fricatives</b>	<b>97 (11.3%)</b>	<b>48 (7.4%)</b>	<b>9 (10.2%)</b>	<b>1 (16.6%)</b>
f	11	2	1	-
v	25	5	-	-
s	58	36	7	-
z	3	5	1	1
<b>Nasals</b>	<b>56 (6.5%)</b>	<b>92 (14.2%)</b>	<b>17 (19.3%)</b>	<b>1 (16.6%)</b>
m	24	60	5	-
n	7	28	12	1
jŋ	25	4	-	-
<b>Glides</b>	<b>67 (7.8%)</b>	<b>176 (27.1%)</b>	<b>40 (45.5%)</b>	<b>3 (50%)</b>
l	29	125	30	2
w	22	30	9	-
j	16	21	1	1
<b>Pren. stops</b>	<b>61 (7.1%)</b>	<b>163 (25.1%)</b>	<b>4 (4.5%)</b>	-
mb	30	69	-	-
nd	7	55	2	-
ŋg	24	39	2	-
<b>Total</b>	<b>59.6%</b>	<b>95%</b>	<b>89.7%</b>	<b>100%</b>

Table 2.8: Phonotactics of Phonemic Consonants in Noun Stems

Tables 2.8 and 2.9 show the frequency and distribution of all 22 phonemic consonants in Gyeli noun and verb stems. Allophones are included with their respective phoneme. For instance, occurrences of intervocalic [β] are subsumed under the phoneme /b/. The bold numbers in the rows of ‘stops’, ‘affricates’, ‘fricatives’, ‘nasals’, ‘glides’, and ‘prenasalized stops’ show the sums of their respective single phonemes. For example, 56 is the number of all occurrences of /m/, /n/, /jŋ/ taken together in O1 noun stem position. This is 6.5% of all noun stem onsets which means that nasals are relatively

rare in noun stem initial position. The percentages at the bottom under ‘Total’ sum up all phonemic unit instances in a particular slot. For O1 in noun stems, for instance, only 59.6% have a phonemic unit onset. The other 40% constitute consonant clusters.

	O1 (377)	O2 (274)	O3 (76)
<b>Stops</b>	<b>129 (32.6%)</b>	<b>66 (24.1%)</b>	<b>9 (11.8%)</b>
p	20	-	-
b	34	17	1
t	22	4	1
d	7	19	3
k	39	7	-
g	1	16	4
,	-	3	-
<b>Affricates</b>	<b>22 (5.8%)</b>	-	-
tʃ	9	-	-
dʒ	13	-	-
<b>Fricatives</b>	<b>65 (17.2%)</b>	<b>20 (7.3%)</b>	<b>10 (13.2%)</b>
f	4	-	-
v	24	-	-
s	37	20	10
z	-	-	-
<b>Nasals</b>	<b>26 (6.9%)</b>	<b>51 (18.6%)</b>	<b>5 (6.6%)</b>
m	8	37	-
n	4	14	5
jŋ	14	-	-
<b>Glides</b>	<b>45 (11.9%)</b>	<b>82 (29.9%)</b>	<b>51 (67.1%)</b>
l	31	48	44
w	10	17	7
j	4	17	-
<b>Pren. stops</b>	<b>2 (.5%)</b>	<b>54 (19.7%)</b>	-
mb	-	25	-
nd	1	23	-
ŋg	1	6	-
<b>Total</b>	<b>74.9%</b>	<b>99.6%</b>	<b>98.7%</b>

Table 2.9: Phonotactics of Phonemic Consonants in Verb Stems

In both noun and verb stems, stops and fricatives generally occur stem initially, but their occurrences decrease in O2 and O3. The contrary is the case for nasals and glides: their occurrences are more numerous in O2 and O3 while they are rather rare stem initially.<sup>11</sup>

<sup>11</sup>O4 in noun stems should not be counted in these generalizations since there are only

In terms of voicing, some plosives are more frequent in stem initial position, such as /t/ and /k/ which are more frequent in O1 than their counterparts /d/ and /g/, whereas in O2 the inverse is the case. This holds for both noun and verb stems. The situation is different for bilabial stops where the voiced /b/ is more frequent in any position; in verb stems, /p/ only occurs in O1.

This voicing distribution is not true for fricatives in general. /v/ is more frequent than /f/ in O1 and O2 in both noun and verb stems. For the alveolar fricatives, though, the voiceless /s/ is always more frequent than voiced /z/. Interestingly, /z/ does not occur in verbs at all. Further, /s/ is the only fricative in verb stems that occurs in other positions than O1.

As to nasals, /m/ is more frequent than /n/ in both nouns and verbs. These two phonemes mostly occur in O2. In contrast, /n/ is only found in O1 in verb stems which is also generally true for nouns. The four occurrences of /n/ in O2 of nouns can be explained by reduplication and loan words.

Similar to nasals, glides are also more frequent in O2 than in O1. /l/ is the most frequently used phoneme in this position. As to the semi-vowels, /w/ is generally more frequent than /j/ in O1 and for noun stems also in O2, while the distribution of /w/ and /j/ is equal for O2 in verbs.

Comparable to the voiced alveolar stop /d/ and the nasals /m/ and /n/, prenasalized stops are more frequent in O2 than in O1 position. This is true for both noun and verb stems. Another exceptional distribution concerns affricates which only occur in O1 position, but never stem medially.

The tables also show that verb stems generally have a higher percentage of plain consonants which, in turn means, that consonant clusters are more common in noun stems. About 40% of noun stem initial onsets consist of clusters, while for verbs only about a quarter of the stems begin with a sequence of consonants. The trend also holds in onsets of second and third syllables. For O2, about 95% have phonemic units in nouns while it is 99.6% in verbs.

As already discussed in Section 2.1.3, most consonant clusters occur stem initially, with the exception of a few prenasalized stops which also occur in O2. Table 2.10 summarizes the distribution of consonant clusters in O1

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<sup>6</sup> occurrences anyway so that their numbers are not representative. The same may be true for O3 in verb stems.

and O2<sup>12</sup>, contrasting noun and verb stems. Since detailed information was already given in the respective discussions of single consonant cluster types, I only list types of sequences here.<sup>13</sup>

	<b>Nouns</b> (855 total)		<b>Verbs</b> (377 total)	
Cluster type	O1	O2	O1	O2
Pren. obstr.	208 (24.3%)	5 (.8%)	4 (1.1%)	-
Lab. obstr.	29 (3.4%)	1 (.2%)	22 (5.8%)	-
Pal. obstr.	30 (3.5%)	1 (.2%)	31 (8.2%)	-
Stop-fric. cl.	40 (4.7%)	-	27 (7.2%)	-
<b>Total</b>	<b>35.9%</b>	<b>1.2%</b>	<b>22.3%</b>	-

Table 2.10: Phonotactics of Consonants Clusters in Noun and Verb Stems

It is remarkable that prenasalized obstruents mostly occur stem initially in nouns while they rarely occur in O1 in verb stems. They do occur in O2 in verbs, but they are still more frequent in the same position in nouns. Prenasalized stops are basically the only consonant clusters that occur stem medially. The exceptional couple of labialized and palatalized obstruents in noun O2 can be explained by reduplication of the stem's first syllable or by loan words.

While prenasalized clusters are more frequent in noun stems, labialized/palatalized obstruents as well as affricates are more frequent in verb stems. Summing up all consonant clusters, almost 40% of noun stems start with a consonant sequence while only 28% of verb stems do so. This trend also holds for O2 with about 26% in nouns and 18% in verbs. These figures reflect what has already been stated for the distribution of plain phonemes which are more often found in verb than in noun stems.

## 2.2 Vowels

Gyeli has seven contrastive vowels. In addition, the language has a range of diphthongs, as well as contrastive vowel length and nasalized vowels. I

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<sup>12</sup>Consonant clusters do not generally occur in O3 or O4.

<sup>13</sup>The various types of sequences include the following consonant clusters: prenasalized obstruents: [mp, nt, ŋk, mgb, ns, nz, nl, mw]; Labialized onstruents: [pw, bw, kw, gw, sw]; Palatalized onstruents: [pj, dj, kj, gj]; Stop-fricative cluster: [pf, bv, tf, dv, kf]. Further, labial velars are subsumed under prenasalized obstruents since their only occurrence is in a cluster [mgb].

will discuss each of these in turn, starting with presenting ‘plain’, i.e. short, oral vowels.

### 2.2.1 Plain vowels

Figure 2.6 shows the seven plain vowels /i/, /u/, /e/, /o/, /ɛ/, /ɔ/, /a/.

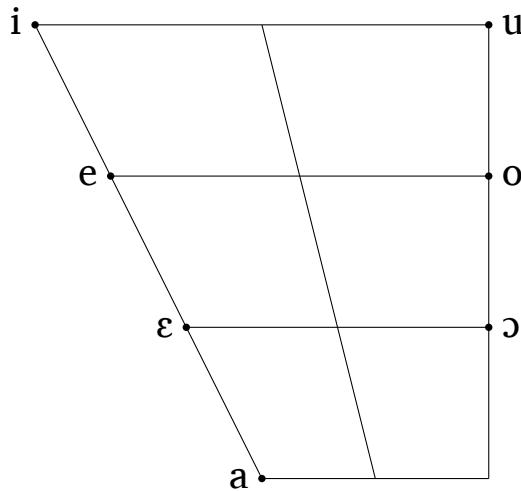


Figure 2.6: Plain vowels in Gyeli

(49) provides (near-)minimal pairs of all seven vowels, demonstrating their functional contrast.

	/i/ vs. /u/	/kìndá/ ‘sugar ant’	vs.	/kùndá/ ‘shoe’
	/u/ vs. /o/	/kùlε/ ‘borrow’	vs.	/kòlε/ ‘help’
	/e/ vs. /ɛ/	/lé/ ‘tree’	vs.	/lɛ/ ‘glass’
	/o/ vs. /ɛ/	/kòlε/ ‘help’	vs.	/kèlε/ ‘hang’
(49)	/ɛ/ vs. /i/	/lèbelε/ ‘follow’	vs.	/líbelε/ ‘show’
	/ɔ/ vs. /ɛ/	/kámbɔ/ ‘chew’	vs.	/kámbè/ ‘weaver ant’
	/a/ vs. /ɛ/	/kìja/ ‘give’	vs.	/kìjɛ/ ‘try’
	/o/ vs. /ɔ/	/bédø/ ‘ferment’	vs.	/bédɔ/ ‘go up’
	/i/ vs. /a/	/wùsi/ ‘sprout’	vs.	/wùsa/ ‘forget’

#### 2.2.1.1 Vowel space

The Gyeli vowel system is the same as what Cheucle (2014: 389) reconstructs for Proto-A80. Synchronously, Bantu A80 languages differ in the number of phonemic vowels and vowel quality as described by Cheucle

(2014: 324). According to her summary of the literature, most of these languages have six phonemic vowels /i, e, ε, a, o, u/, while Shiwa and Kwasio only have a five-vowel-system /i, e, a, o, u/ where /e/ and /o/ are variants of /ε/ and /ɔ/, respectively. This special status of /e/ and /o/ is also seen in Gyeli. Even though these two vowels have a contrastive function as shown in (49) and therefore must be considered phonemes, /e/ and /o/ differ from the other vowels in two respects. First, they are significantly less frequent than other vowels, as will be shown in, for instance, Tables 2.12 and 2.14 in the discussion of vowel phonotactics. Second, the plotting of the Gyeli vowel space in Figure 2.7 shows that both /e/ and /o/ are cramped between /i/ and /ε/ and /u/ and /ɔ/, respectively.<sup>14</sup>

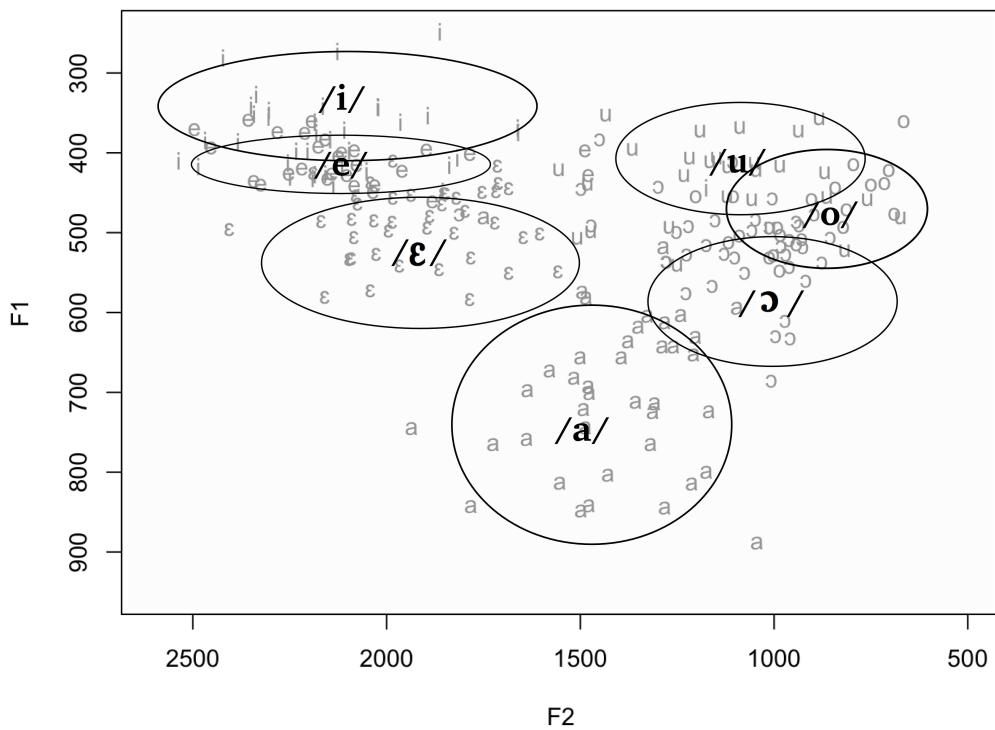


Figure 2.7: Vowel plot

While a 7-vowel system is the norm in Bantu languages, the Gyeli vowel

<sup>14</sup>The vowel chart was plotted from 233 vowel tokens taken from two male speakers. I used a Praat script to measure F1 and F2. For extreme outliers I corrected the fundamental frequencies manually. These cases all concerned word final vowels. Many thanks to Joyce McDonough and Murray Schellenberg for their help with this.

space differs from what is generally expected for Bantu languages. Maddieson (2003: 18) notes that

“Bantu vowel inventories, both five- and seven-vowel-systems, are split between those which are similar to global norms in their spacing [i.e. evenly distributed] and those in which the vowels are atypically crowded in the higher part of the vowel space.”

Vowels are neither evenly distributed in the vowel space in Gyeli, nor are the vowels atypically cramped in the higher part. Maddieson’s example of a 7-vowel system, with atypical crowding in the higher part, still differs from Gyeli in that the high and mid vowels are relatively evenly spaced with respect to one another while there is a relatively large space between the mid vowels and /a/. What seems to be atypical in Gyeli is that /e/ and /o/ are tightly wedged between /i/ and /ɛ/ and /u/ and /ɔ/, respectively. With the exceptions of /e/ and /o/, the other five vowels are fairly evenly distributed.

The Gyeli system is very similar to the one of Mpiemo that Thornell & Nagano-Madsen (2004: 167) describe. Also in Mpiemo, /i/ and /e/, and /u/ and /o/ are very close together. Further, both languages have a common relation of the spacing between the lower mid vowels /ɛ/ and /ɔ/ to /a/, the mid vowels ranging at on average around 500 Hz in F1 and /a/ at a mean of about 730 Hz. There are, however, differences concerning mostly F2 for the high vowels which range at under 1000 Hz in Gyeli, but slightly under 700 Hz in Mpiemo.

### 2.2.1.2 Vowel phonotactics

In terms of frequency and distribution of vowels, a general observation is that high vowels /i, u/ occur more in first syllables of both verb and noun stems while lower mid vowels /ɛ, ɔ/ and low vowel /a/ are more frequent in second syllables. This becomes obvious when comparing plain vowels in noun and verb stems of different syllable length which are summarized in Table 2.11. This concerns only plain vowels and does not represent general syllable distribution, as discussed in Section 2.3.

Bisyllabic stems are most frequent for both noun and verb stems, as Table 2.11 shows. In contrast, it is more frequent for nouns to have plain vowels

	Noun stems	Verb stems
$\sigma$	108	39
$\sigma \sigma$	508	205
$\sigma \sigma \sigma$	93	76

Table 2.11: Frequency of plain vowels in noun and verb stems

with monosyllabic than with trisyllabic stems, while the inverse is the case for verbs.

Vowel	Noun stems	Verb stems
i	14 (13%)	4 (10.3%)
u	18 (16.6%)	4 (10.3%)
e	3 (2.7%)	2 (5.1%)
o	3 (2.7%)	-
$\varepsilon$	18 (16.6%)	11 (28.2%)
$\circ$	18 (16.6%)	6 (15.4%)
a	34 (31.5%)	12 (30.8%)

Table 2.12: Distribution of plain vowels in monosyllabic stems

Table 2.12 shows the frequency of the various plain vowels in monosyllabic noun stems, contrasting them with verb stems. While the high back vowel /u/ occurs slightly more often than its front counterpart /i/ in noun stems, the distribution of these two high vowels is more equal in verbs. Mid vowels /e, o/ are rare in both nouns and verbs. /o/ is even completely absent in monosyllabic verb stems.<sup>15</sup> Also, in both noun and verb stems, the most frequent plain vowel is /a/ with over 30%.

Comparing plain vowel distribution in bisyllabic noun and verb stems shows that the occurrence of vowels is more restricted in verb than in noun stems, as shown in Tables 2.13 and 2.14. For both, there is a tendency that high vowels occur more frequently in the first than in the second syllable. In verb stems, though, high vowels systematically do not occur at all in the second syllable.<sup>16</sup>

Mid vowels /e, o/ are, just like in monosyllabic stems, rare in both first and second syllables. In noun stems, only 2.4% of first syllables contain /e/, and only 2% contain /o/. In verb stems, /e/ occurs with a frequency of 4.4%

<sup>15</sup>Despite this low frequency of mid vowels, they can still not be subsumed under either higher or lower vowels since there are minimal pairs that prove their contrastive function.

<sup>16</sup>The two instances of /i/ in the second verb stem syllable shown in Table 2.14 are most likely loan words.

## Section 2.2

## Vowels

$\sigma_1 \downarrow$	$\sigma_2 \rightarrow$	i	u	e	o	$\varepsilon$	$\circ$	a	Total $\sigma_1$	%
i		23	11	-	3	7	29	15	88	(17.3)
u		11	15	5	6	43	37	29	146	(28.7)
e		1	-	1	4	3	2	1	12	(2.4)
o		2	1	1	3	2	-	1	10	(2.0)
$\varepsilon$		6	-	-	1	30	12	7	56	(11.0)
$\circ$		7	-	-	-	19	26	6	58	(11.4)
a		9	3	6	12	27	32	49	138	(27.2)
Total $\sigma_2$		59	30	13	29	131	138	108	508	(100)
%		(11.6)	(5.9)	(2.6)	(5.7)	(25.8)	(27.2)	(21.3)		(100)

Table 2.13: Phonotactics of vowels in bisyllabic noun stems

while /o/ has the same frequency as in nouns. As to the second syllable, /e/ does not occur at all in verb stems and is rare in noun stems (2.6%).

In contrast, the lower mid vowels / $\varepsilon$ ,  $\circ$ / occur in the first and second syllable, but are significantly more frequent in second syllables. This holds for both noun and verb stems, while, again, this tendency is even stronger in verb stems. Here, 10.2% of first syllables contain / $\varepsilon$ / and 6.8% / $\circ$ /, but / $\varepsilon$ / occurs in 35.6% of verb stem second syllables and / $\circ$ / in even 43.4%. In noun stems, lower mid vowels occur around 11% of the time in first syllables and are more frequent in second syllables with 25.8% for / $\varepsilon$ / and 27.2% for / $\circ$ /.

$\sigma_1 \downarrow$	$\sigma_2 \rightarrow$	i	u	e	o	$\varepsilon$	$\circ$	a	Total $\sigma_1$	%
i		1	-	-	2	15	23	7	48	(23.4)
u		1	-	-	1	18	20	9	49	(23.9)
e		-	-	-	2	1	5	1	9	(4.4)
o		-	-	-	-	1	-	3	4	(2.0)
$\varepsilon$		-	-	-	-	9	12	-	21	(10.2)
$\circ$		-	-	-	-	11	1	2	14	(6.8)
a		-	-	-	5	18	28	9	60	(29.3)
Total $\sigma_2$		2	-	-	10	73	89	31	205	(100)
%		(1.0)	-	-	(4.9)	(35.6)	(43.4)	(15.1)		(100)

Table 2.14: Phonotactics of vowels in bisyllabic verb stems

The vowel /a/ is, just like high vowels, more frequent in first syllables for both noun and verb stems. This difference is more significant in verbs than in nouns with 29.3% occurrence in first and 15.1% in second syllables, whereas 27.2% of first noun stem syllables include /a/, but only 21.3% of

second syllables.

Stems with three syllables are the most restricted as to the vowel that occurs in the third syllable. The vowel quality of these final vowels is further restricted by its preceding vowel of the second syllable while the first syllable vowel does not seem to influence the last's syllable vowel at all. Table 2.15 shows the frequency of the different plain vowels in a third syllable of trisyllabic stems, contrasting nouns and verbs. The table further provides information on the vowel that precedes the final vowel in the second syllable. For instance, /ɛ/ is used as a final vowel in a trisyllabic verb stems in 61.8% of all third syllable vowel occurrences. In 85% of these cases, the final /ɛ/ is preceded by the same vowel in the stem's second syllable.

V	Noun stems		Verb stems	
	Frequency	Preceding syllable vowel	Frequency	Preceding syllable vowel
i	15 (16.1%)	/i/ (> 50%)	-	-
u	6 (6.5%)	high and mid vowels	-	-
e	3 (3.2%)	/e/ and /a/	-	-
o	3 (3.2%)	/o/ and /u/	-	-
ɛ	32 (34.4%)	/ɛ/ (40.6%), /a/ (21.9%)	47 (61.8%)	/ɛ/ (85%), /a/ (12.8%)
ɔ	12 (12.9%)	/ɔ/ (66.7%)	6 (7.9%)	/ɔ/ (all)
a	22 (23.7%)	/a/ (50%), /i/ (27.3%)	23 (30.3%)	/a/ (78.3%), /ɛ/ (21.7%)

Table 2.15: Frequency of σ<sub>3</sub> plain vowels in trisyllabic stems

In the third syllable of a trisyllabic noun stem, any vowel can show up. Most frequently, this is /ɛ/, followed by /a/. Also lower mid vowels /e, o/ do show up in this position, but they are rare, as in other positions as well. It is further remarkable that the front high vowel /i/ occurs significantly more often than its back counterpart /u/. Despite a tendency of specific vowels occurring in the preceding second syllable of a noun stem, there do not seem to be strict rules that prohibit the occurrence of some vowels before a certain third syllable vowel. The final vowel /a/, for example, is mostly preceded by a vowel of the same quality (50%) or the high front vowel /i/ (27.3%). The remaining 12.7%, however, are filled by vowels of different qualities.

This is different with third syllable vowels in verb stems. First, unlike in noun stems, only three vowels are permitted in this position: /ɛ, ɔ, a/. Like with nouns, the most frequent one of them is /ɛ/, with a much higher percentage though. Second, the vowel in the preceding second syllable is more restricted than it is the case in noun stems. Every occurrence of /ɔ/

in a final trisyllabic verb syllable, for instance, is always preceded by a syllable whose vowel is also /ɔ/. Also for the other two possible vowels, there is a tendency that the last vowel is preceded by an identical vowel. Thus, trisyllabic verb stems ending in /ɛ/ have in 85% of the cases /ɛ/ also as a second syllable, while endings in /a/ have 78.3% of the second syllable filled with /a/ as well. The few cases where second and third syllable vowels are not identical are covered by /a/ for endings in /ɛ/ and, vice versa, by /ɛ/ for endings in /a/.

### 2.2.2 Diphthongs

Gyeli has four diphthongs: /ua/, /uɔ/, /iɛ/, /ɔa/. They all occur in monosyllabic stems of nouns and verbs (and in reduplicated second syllables of noun stems). Examples are given in (50); the dot represents the syllabic unit.<sup>17</sup>

- (50) djúà. ‘swim’
- ŋgùó. ‘sugar (cane)’
- tsíè. ‘blood’
- tòà. ‘boil (intr.)’

Diphthongs in Gyeli do not constitute mere vowel sequences, i.e. vowels of two syllables without hiatus, but are part of one syllable which speakers clearly recognize when humming syllables. Thus, monosyllabic diphthongs can be contrasted to bisyllabic vowel sequences which are always subject to hiatus resolution by means of glides, as shown in (51).

- (51) djù.wá ‘thorn’
- nkfù.wó ‘torso’
- kí.yé ‘iron’
- tó.wá ‘all’

Diphthongs are rather rare, as Table 2.16 shows. Out of a total of 223 monosyllabic noun stems, 8.0% contain a diphthong. The percentage for

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<sup>17</sup>In terms of tonal representation, tonal marking on each vowel in a diphthong does not indicate two tones, but only one tone on the syllable. In *djúà* ‘swim’, for instance, the syllable does not have one L and one H tone, but one falling HL tone. In *tòà* ‘boil’, the syllable has one long L tone comparable to syllables with long vowels, as discussed in Section 2.2.3.

verbs is slightly higher with 12.5% of diphthongs in a total of 88 monosyllabic verb stems. The most frequently found diphthong in noun stems is /uɔ/ while for verb stems it is /ie/. The diphthong /ɔa/ is the least frequent in both noun and verb stems.

Diphthong	Noun stems (total 223)	Verb stems (total 88)
ua	4 (1.8%)	3 (3.4%)
uɔ	9 (4.0%)	2 (2.3%)
iɛ	4 (1.8%)	5 (5.7%)
ɔa	1 (0.4%)	1 (1.1%)
Total	18 (8.0%)	11 (12.5%)

Table 2.16: Diphthongs in monosyllabic noun and verb stems

Historically, these diphthongs most likely were two distinct vowels belonging to different syllables. The likely scenario would be that an intervocalic consonant, the onset of the second syllable, first underwent lenition, then elision, and in a third step, as hiatus resolution, the two adjacent vowels were contracted to a diphthong in one syllable. This assumption is supported by Cheucle (2014: 330-331) who comes to the same conclusion by showing that some cognates in different Bantu A80 languages contain either a bisyllabic stem where the intervocalic consonant is either /b/ or /w/, or where the consonant has been lost, resulting in a vowel sequence or diphthong. Her example (47), for instance, includes the lexeme ‘shield’ which is *nkùbò* in Njem, *nkùwò* in Makaa, and *nkùò* in Konzime. This scenario would also explain why diphthongs are only found in monosyllabic stems.

Nevertheless, Gyeli cannot be simply categorized as a language that synchronically displays only one stage in this development, for example only using diphthongs in contrast to bisyllabic stems with intervocalic consonants. Rather, Gyeli has all three types: bisyllabic stems with an intervocalic /b/ as in Njem, e.g. *kfúbò* ‘chicken’, bisyllabic stems with an intervocalic glide /w/ as in Makaa, e.g. *djúwò* ‘sky’, and diphthongs, e.g. *bíùò* ‘mortar’. As shown in Figure 2.2 of Section 2.1.2.2, Gyeli has a tendency to weaken intervocalic voiced plosives such as /b/ which then surface as /β/. They may then easily undergo further lenition to /w/ up to a complete omission resulting in diphthongs. Rather than a phonological rule, it seems to be lexically specified to which of these three stages a noun or verb stem belongs. The same is true for high vowels and diphthongs; is it lexically specified that

certain stems are monosyllabic with a diphthong such as *tʃiè* ‘blood’ while others are bisyllabic with an intervocalic glide such as *nsìjè* ‘string’.

### 2.2.3 Vowel length

Gyeli uses vowel length as a distinctive feature. This is quite expected, according to Cheucle (2014: 327):

“La longueur vocalique semble avoir une fonction distinctive dans la plupart des langues A80. La longueur est considérée comme phonémique, par les auteurs, en bekol, en makaa, en njem, en konzime et en bekwel.” [Vocalic length seems to have a distinctive function in the majority of A80 languages. Length is considered as phonemic by the authors in Bekol, Makaa, Njem, Konzime, and Bekwel.]<sup>18</sup>

For Gyeli, there are numerous (near-)minimal pairs showing the contrastive function of vowel length. Some examples are given in (52). All plain (oral, short) vowels have a long counterpart except for /o/.

- (52)    *tʃì* ‘life’ vs *tʃî* ‘interdiction’
- nkùù* ‘evil spirit’ vs. *nkù* ‘animal den’
- mbéé* ‘metal oven’ vs. *mbê* ‘door’
- dòò* ‘puddle’ vs. *dò* ‘negotiate’
- mpàà* ‘fog, vapor’ vs. *mpà* ‘bushbaby (*galago thomasi*)’

/e/ does occur sometimes as a long vowel, as shown in (53), but the frequency is so low that I did not find any minimal pairs with potential plain vowel oppositions.

- (53)    *pèè* ‘conscience’
- téè* ‘start walking’

Long vowels are clearly longer than short vowels and as such perceivable. Also speakers are aware of vowel lengthening and reliably indicate whether a vowel is short or lengthened (*tiré*). (54) contrasts two minimal pairs measuring their vowel length. In the first case, the long vowel

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<sup>18</sup>Cheucle (2014: 327) assumes that vowel length is currently developing phonemic status in Kwasio and Mpiemo.

[aa] in *nzáàlè* ‘beggar’ is about 100ms longer than the short [a] in *nyàlé* ‘son/brother-in-law’. In the second example, the long vowel [uu] in *nkùù* ‘evil spirit’ is even 180ms longer than [u] in *nkù* ‘animal den’ which is more than double as long. Of course, these two examples only provide an impressionistic picture and require a more systematic investigation of a larger quantity of vowels in future work.

	<i>ñáàlè</i> ‘beggar’	→ [aa] = 235ms
(54)	<i>ñàlé</i> ‘son/brother-in-law’	→ [a] = 135ms
	<i>nkùù</i> ‘evil spirit’	→ [uu] = 430ms
	<i>nkù</i> ‘animal den’	→ [u] = 150ms

Contrastive long vowels are most often found in monosyllabic stems. Table 2.17 shows the frequency and distribution of long vowels in mono-syllabic stems, contrasting nouns and verbs. In general, long vowels are more frequent than diphthongs. 26.5% of monosyllabic noun stems contain a long vowel, but only 8.0% of diphthongs. The same is true for verb stems, of which 19.3% have a long vowel, but only 12.5% have a diphthong (see Table 2.16 in Section 2.2.2.)

Long vowel	Noun stems (total 223)	Verb stems (total 88)
ii	7 (3.1%)	1 (1.1%)
uu	13 (5.8%)	-
ee	2 (0.9%)	1 (1.1%)
oo	-	-
ɛɛ	8 (3.6%)	3 (3.4%)
ɔɔ	7 (3.1%)	1 (1.1%)
aa	22 (9.9%)	11 (12.5%)
Total	59 (26.5%)	17 (19.3%)

Table 2.17: Long vowels in monosyllabic noun and verb stems

As with other phonological features, long vowels differ in frequency and distribution in noun and verb stems, but also show some similarities. For both noun and verb stems, /aa/ is the most frequent long vowel. In contrast, while /uu/ is relatively often found in noun stems, it is completely absent in verb stems. Generally, long high and higher mid vowels /ii/, /uu/, and /ee/ are rather rare in verb stems, while /oo/ is absent altogether.

Even though long vowels are most frequently found in monosyllabic stems, they are not restricted to this environment, but can also occur in

stems of more syllables, as (55) shows, and in syllables other than the first. As such, long vowels differ from diphthongs. Long vowels in second syllables only occur in noun stems and are so rare that I did not find any minimal pairs. Nevertheless, (56) shows a few examples.<sup>19</sup>

- (55) *jùùlè* ‘mosquito’ vs. *jùlè* ‘flame’  
*káàsa* ‘imitate’ vs. *kàsà* ‘bridge’  
*jáàlè* ‘beggar’ vs. *jàlē* ‘son/brother-in-law’
- (56) *sìsùù* ‘apparition’  
*ŋòmbáà* ‘lemon’  
*nákúlúú* ‘forest tortoise (*Kinixys homeana*)’

Table 2.18 shows the distribution of long vowels other than in monosyllabic stems.

Position	Noun stems	Verb stems
bisyllabic, VV in $\sigma_1$	20 (3.6%)	4 (1.9%)
bisyllabic, VV in $\sigma_2$	10 (1.8%)	-
bisyllabic, VV in $\sigma_1$ and $\sigma_2$	2 (0.4%)	-
trisyllabic, VV in $\sigma_3$	1 (1.0%)	-

Table 2.18: Long vowels in di- and trisyllabic noun and verb stems

In comparison to noun stems, verb stems are rather restricted in the occurrence of long vowels. Apart from monosyllabic stems, they only allow long vowels in the first syllable of bisyllabic stems. All cases include exclusively /aa/ as the long vowel in this position. Noun stems, in contrast, are more flexible as to where long vowels are permitted as well as to which vowel quality can occur in bisyllabic stems. In bisyllabic noun stems where the first syllable has a long vowel, the majority (60%) of these long vowels is /aa/, but the remaining 40% are distributed over other vowel qualities including /uu/, /ɛɛ/, and /ɔɔ/. Long vowels in the second syllable of a bisyllabic noun stem are evenly distributed over /aa/ and /uu/. Long vowels in the last syllable of trisyllabic stems are negligible since I only came across one occurrence in the lexeme *le-délémjj* ‘mud wasp’.

As to the origin and development of long vowels, it is possible that (some) long vowels developed, just like diphthongs, from bisyllabic stems where an

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<sup>19</sup>I analyze *nákúlúú* ‘forest tortoise (*Kinixys homeana*)’ as a bisyllabic stem which is preceded by a simulative prefix, as discussed in Chapter 4.1.1.1.

intervocalic /b/ or glide got lost, contracting two adjacent vowels into one syllable. Either these two vowels were of the same vowel quality or they assimilated to be so. Cheucle (2014: 328) shows in her example (41) that long vowels in one language correspond to bisyllabic stems with intervocalic or syllable final /b/ or glide in other languages. These correspondences are, however, by no means regular. Also, this scenario does not account for all instances of long vowels because if long vowels originated solely from intervocalic loss, that would not explain long vowels in bisyllabic stems, especially not in second syllables.

#### 2.2.4 Nasal vowels

Gyeli has six distinctive nasal vowels. Just like with long vowels, all vowels can be nasalized except for /o/. (57) provides examples of (near-)minimal pairs.

- (57) ndzí ‘jealousy’ vs. ndzí ‘path’
- kû ‘leopard’ vs. kù ‘rat’
- p   ‘injury’ vs. p     ‘avocado’
- t   ‘limp’ vs. t   ‘create, invent’
- l   ‘read, count’ vs. l   ‘harvest’

Comparable to diphthongs and long vowels, nasalized vowels are also most often found in monosyllabic stems, as Table 2.19 shows. Nasal vowels are slightly more frequent in noun stems than in verb stems. For both, /ã/ is the most frequent nasal vowel, followed by / / in noun stems. / / is completely absent in verb stems while other mid and also high vowels are generally rare.

There are a few cases where nasal vowels show up in bisyllabic noun and trisyllabic verb stems, as shown in Table 2.20.

In contrast to noun stems, nasal vowels never occur in stem final syllables in verbs. They are either found in the first syllable or in the second if there is a third syllable. Again, /ã/ is the most frequent nasal vowel also in these positions.

Since nasal vowels in other than monosyllabic stems are rare, it is difficult to find minimal pairs. (58) provides some examples of noun and verb

Nasal vowel	Noun stems (total 223)	Verb stems (total 88)
ĩ	5 (2.2%)	1 (1.1%)
ū	10 (4.5%)	2 (2.3%)
ẽ	3 (1.3%)	1 (1.1%)
õ	-	-
ɛ̄	4 (1.8%)	2 (2.3%)
ɔ̄	6 (2.7%)	-
ã̄	21 (9.4%)	9 (10.2%)
Total	49 (22.0%)	15 (17.0%)

Table 2.19: Nasalized vowels (short, oral) in monosyllabic noun and verb stems

Position	Noun stems	Verb stems
bisyllabic, VV in $\sigma_1$	2 (0.4%)	5 (5.2%)
bisyllabic, VV in $\sigma_2$	9 (1.6%)	-
bisyllabic, VV in $\sigma_1$ and $\sigma_2$	2 (0.4%)	-
trisyllabic, VV in $\sigma_1$ and $\sigma_2$	-	1 (1.0%)
trisyllabic, VV in $\sigma_2$ only	-	1 (1.0%)

Table 2.20: Long vowels in di- and trisyllabic noun and verb stems

stems where nasal vowels occur in the first and/or second syllable of di- or trisyllabic stems.

- (58) ma-bwāsà ‘thoughts’  
 m-ùdâ ‘woman’  
 le-ts̄jé ‘knot’  
 ŋgāngâ ‘healer’  
 gjâlɛ ‘roast’  
 sâasa ‘mix’  
 víjâsa ‘be bright’

Also long vowels and diphthongs can be nasalized, as shown in (59) for long vowels and in (60) for diphthongs.<sup>20</sup>

- (59) s̄î ‘approach sth.’  
 t̄ū ‘axe’  
 be-b̄ɛ̄ ‘beauty’  
 t̄ɛ̄ ‘abandon’  
 djâa ‘chase, drive away’

<sup>20</sup>It is remarkable that most nasalized long vowels and diphthongs carry a HL tone, even though there are also exceptions.

Nasalized long vowels and diphthongs are quite rare. There are two instances of nasalized long vowels in noun stems and eight in verb stems, including /ii/, /ɛɛ/, and /aa/. For diphthongs, the inverse distribution is the case with seven cases of nasalized diphthongs (/ua/ and /uɔ/) in noun stems and two in verb stems. Thus, there is no overall tendency as to which one is more frequent. Examples of nasalized diphthongs are given in (60).

- (60) *ŋkūɔ̄* ‘treason, treachery’  
*jūà̄* ‘snake’  
*lūɔ̄* ‘build’  
*lūà̄* ‘whistle’

Nasal vowels in Gyeli stem from diachronic closed syllables with a velar nasal as their coda. This becomes obvious when comparing Gyeli to other A80 languages. Cheucle (2014: 329) proposes a floating underlying nasal segment to explain nasal vowels in Bantu A80. She points out that all A80 languages she is comparing have closed syllables ending in a velar nasal coda. Vowels preceding these velar nasals are usually nasalized which suggests that nasalized vowels in these languages are contextual with nasality spreading from a following nasal consonant. As Cheucle (2014: 329) states, only Makaa uses stem final nasal vowels—with the correspondence of velar nasal codas in the other languages. Nasal vowels with phonemic status in Makaa are, however, restricted to /ɛ/ and /ɔ/. Further, Makaa has instances of closed syllables using a velar nasal as a coda.

In that sense, Gyeli seems to be the only known A80 language which does not have closed syllables (see also Section 2.3), not even with velar nasal codas. In contrast, the inventory of contrastive nasal vowels is then larger than in Makaa, also including phonemic /i/, /u/, /ɛ/, /ɔ/, and /ə/ (but not /o/, unlike Makaa).

## 2.3 Syllable structure

### 2.3.1 Introduction

Despite syllables being an integral part of phonological description, they are intuitively less tangible than other phonological units such as vowels or consonants. Therefore, I will first provide a definition of syllables and

then present arguments why syllables should be viewed as phonological constituents. Before introducing my general approach to the internal structure of syllables, I will also discuss the role of sonority in syllable research.

According to Blevins (1995: 207), “syllables can be viewed as structural units providing melodic organization to such [phonological] strings” with segments being “organized into rising and falling sonority sequences, with each sonority peak defining a unique syllable.”

**The syllable as a phonological constituent** Blevins (1995: 207-10) posits several arguments for the syllable to be considered as a phonological constituent. Some of these arguments clearly apply to Gyeli, and I outline them in turn.

First, tone takes the syllable as its tone bearing unit (TBU) in Gyeli, distinguishing heavy and light syllables in tonal mapping (see Section 2.4 for more detail). Second, syllables serve as targets for morphological processes such as reduplication. Color terms, for instances, are quite susceptible to reduplication of their second syllable as with *ná.vjû* ‘black’ which may also occur as *ná.vjû.vjû*. Other instances of syllable reduplication are often lexical rather than morphological, for example in the nouns *sà.sà.mbé* ‘miscarriage’ or *nkú.nkú.mbé* ‘bow’. It is likely that these nouns are historically derived from nominalized verbs and an object, but synchronically this cannot be parsed anymore. In any case, it is rather unusual to find the first and second syllable of stems to be identical in Gyeli which suggests that they are the product of reduplication. Finally, Blevins (1995: 209) mentions native intuitions as a diagnostic for the syllable as a phonological unit. Indeed, the Bagyeli are very reliable and consistent in recognizing syllables and syllable breaks which they easily hum.

**Sonority** As stated above, syllables are defined by sonority sequences organized around sonority peaks. While many issues concerning sonority are controversial in phonological theory,<sup>21</sup> most phonologists agree that there is some sort of sonority scale governing the sequences of phonological units that form syllables. This is often referred to as the ‘Sonority Sequencing

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<sup>21</sup>These issues comprise fundamental questions such as “How should sonority be defined?” or “Is there a single universal sonority scale or is there cross-linguistic variation?” See Clements (1990: 287) for an in-depth discussion.

Principle', a term used for more than a century by, for instance, Jespersen (1904) and Selkirk (1984). Blevins (1995: 210-211) prefers to call it the Sonority Sequencing Generalization, pointing out that cross-linguistically many exceptions can be found. She states the following version of the Sonority Sequencing Generalization:

“Between any member of a syllable and the syllable peak, a sonority rise or plateau must occur.” (idem.)

Gyeli mostly follows this generalization, sticking to a typical sonority hierarchy such as *vowels > glides > liquids > nasals > fricatives > stops*, which is an adopted version from Clements (1990) and Blevins (1995). There is one exception, however. Gyeli violates the Sonority Sequencing Principle in that nasals may occur before stops and fricatives in syllable onsets, as will be shown in detail in Section 2.3.2 on the internal structure of Gyeli syllables. Clements (1990: 321) explains, however, that these instances have a special status. He argues that sequences of the same place of articulation are simpler than sequences with different places of articulation, which takes precedence over the sonority principle (idem.).

**Syllable internal structure** The theoretical literature proposes several models concerning the internal structure of syllables. I use a binary branching model with onset and rhyme as illustrated in Figure 2.8 for the German word *Traum* ‘dream’, adopted from Blevins (1995: 213).<sup>22</sup>

Many phonological phenomena can be described in terms of this model, for instance language specific differences in terms of syllable weight, distinguishing *heavy* and *light* syllables. Hyman (1985) defines heavy syllables as those that have a branching nucleus or a branching rhyme.

In the remainder of this section, I give an outline of Gyeli’s internal syllable structure presenting the various syllable types. I then show their distribution as well as syllable numbers in the domain of prefixes and subject-tense-aspect-mood-polarity (STAMP) markers and noun and verb stems.

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<sup>22</sup>See Blevins (1995: 212-14) for a discussion of models on the internal structure of syllables and arguments for the binary branching model with rhyme.

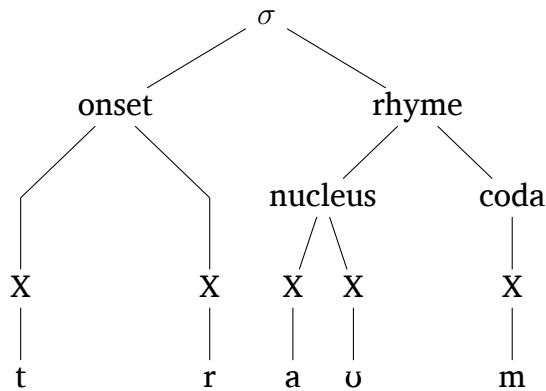


Figure 2.8: Binary branching model with rhyme

### 2.3.2 Syllable internal structure

Gyeli features light and heavy syllables. Heavy syllables are characterized by a branching nucleus, never by a branching rhyme since the language only has open syllables, i.e. there are no codas (with the exceptions of a few loan words). In this, Gyeli has retained a typical feature of Proto-Bantu, according to Hyman (2003: 43), who also states that many other Northwestern Bantu languages of zones A and B have developed closed syllables (p. 58). Branching nuclei consist of both long vowels (V:) and diphthongs (VV). Another characteristic of Gyeli is complex onsets with up to three consonantal phonemes. At the same time, V-initial syllables are generally prohibited, with the only exceptions occurring in loan words such as *ániònè* ‘onion’ and subject-tense-aspect-mood-polarity markers (Chapter 3.9.1).

Gyeli allows the following syllable types:

V, CV, CV:, CVV, CCV, CCV:, CCVV, CCCV, CCCV:, CCCVV

Since there are restrictions on the combination of onset consonants, I further subdivide the class of consonants using the following symbols that are also employed by Van de Velde (2008: 41):<sup>23</sup>

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<sup>23</sup>In contrast to Van de Velde (2008: 41), I do not distinguish sonorants and voiced stops since this does not play a role in Gyeli.

- C any consonant
- G glide (subclass of C)
- N nasal (subclass of C)
- P plosive (subclass of C)
- F fricative (subclass of C)
- V vowel

Syllables in Gyeli range from the most simple structure, consisting only of a vocalic nucleus—which is generally rare in Gyeli—to more complex syllable structures. Syllable complexity concerns both the consonantal onset and the vocalic nucleus. In terms of onsets, complexity varies, allowing either a simple consonant or a consonant cluster. Clusters may include up to three consonantal phonemes. Consonant clusters are restricted to those discussed in Section 2.1.3: prenasalized obstruents, consonants (mostly obstruents, but also a few lateral approximants) followed by glides, and affricates. Both affricates and clusters of obstruents plus glides can further be prenasalized, forming a cluster of three phonemes. Thus, possible phoneme combinations in syllable onsets are:

C	simple consonant
NC	prenasalized consonant
CG	consonant + glide
PF	plosive + fricative (affricate)
NCG	nasal + consonant + glide
NPF	nasal + plosive + fricative

Complexity in the syllable nucleus concerns vowels. These can either occur as simple (short) vowels or as long vowels or as diphthongs (sequences of vowels). In my notation, I mark long vowels with a colon while diphthongs are represented as VV:

- V simple (short) vowel
- V: long vowel
- VV diphthong

The different types of nuclei combine with any of the onset structures, even though their frequency varies. For example, diphthongs following a consonant + glide onset are so extremely rare that I only found one instance.

Also, syllables may consist of only a nucleus of a short or long vowel, but there are no syllables that consist of only a diphthong. In contrast to many languages of the area, for instance Eton or Abo, Gyeli does not have syllabic nasals, as further explained in Section 2.3.3.1. For each of the possible syllable types, I provide examples below:

V		
	<b>á</b>	‘s/he, it (1 PRES)’
V:		
	<b>àá</b>	‘s/he, it (1 INCH)’
CV		
	<b>vì.lè</b>	‘ginger species (aframomum)’
	<b>té.gε</b>	‘make tired’
CV:		
	<b>kòò</b>	‘plant species (gnetum africanum)’
	<b>dùù</b>	‘nose’
CVV		
	<b>túà</b>	‘move places’
	<b>pùó</b>	‘pay’
PFV		
	<b>pfù.dé</b>	‘mold’
	<b>tʃí.dí</b>	‘animal’
PFV:		
	<b>tʃìì</b>	‘be well, live’
	<b>le-bvúú</b>	‘anger’
PFVV		
	<b>bvúò</b>	‘break (intr.)’
	<b>tʃíè</b>	‘blood’
NCV		
	<b>le-nké.dé</b>	‘hip’
	<b>mbì.mbó</b>	‘corps’
NCV:		
	<b>mbáá.ló</b>	‘jaw’
	<b>ŋgèè</b>	‘eyebrow’

## NCVV

<b>nkùá</b>	‘tree trunk’
<b>ntù́</b>	‘six’

## CGV

<b>gwà.wó</b>	‘civet’
<b>gjí.mù</b>	‘tongue’

## CGV:

<b>djùù</b>	‘kill’
<b>bwàà</b>	‘become’

## CGVV

<b>djúà</b>	‘swim’
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## NCGV

<b>ŋgjà</b>	‘intestines’
<b>mbwɛ</b>	‘dog’

## NCGV:

<b>ŋgjéè</b>	‘block sth.’
<b>ná.nkjàá.lé</b>	‘termite mound’

## NCGVV

<b>ndjúà</b>	‘swimming’
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## NPfv

<b>nkfù.wó</b>	‘torso’
<b>mbvû</b>	‘year’

## NPfv:

<b>ndzàà.lé</b>	‘tree pangolin ( <i>Manis tricuspidis</i> )’
<b>nkfúù</b>	‘ghost’

## NPfvV

<b>ndvù́</b>	‘suffering, difficulty’
<b>mpfù́</b>	‘last meal in healing ceremony’

### 2.3.3 Syllable distribution

In this section, I present how the different syllable types are distributed in various environments. These different environments include noun class prefixes, subject-tense-aspect-mood-polarity markers (Chapter 3.9.1), and noun and verb stems. I start out with the more restricted environments.

### 2.3.3.1 Syllables in nominal prefixes

Noun class prefixes come in two forms, either as a nasal consonant or as a syllabic prefix of CV shape (see also Chapters 4.1.1.2 and 5.2.2). Nasal prefixes such as in (61) are, however, not syllabic.

- (61) **n**-sùn<sup>é</sup> ‘flesh’ → mi-sùn<sup>é</sup> ‘types of flesh’
- n**-túmbà ‘older brother’ → ba-túmbà ‘older brothers’
- n**-gjèlì ‘Gyeli person’ → ba-gjèlì ‘Gyeli people’

There are two arguments that support this claim. First, they do not serve as tone bearing units (see Section 2.4) and second, speakers do not recognize them as syllables when they are humming.<sup>24</sup>

### 2.3.3.2 Syllables in STAMP markers

Subject-tense-aspect-mood-polarity markers are portmanteau morphemes that encode subject agreement as well as tense, aspect, mood, and polarity, as discussed in Section 3.9.1. Nearly all of the STAMP forms have a CV shape just like plural noun class prefixes. There is one exception though for agreement class 1 which lacks an onset and thus is V-initial *a*. In the present tense, this STAMP marker comes as a short vowel while for future and remote past, the vowel is lengthened.

### 2.3.3.3 Syllables in noun stems

Noun and verb stems are more complex in their syllable structure because they vary in syllable length (i.e. the number of syllables per stem) while syllabic nominal prefixes and STAMP markers are restricted to one syllable. In this and the next section, I will first outline syllable lengths of stems before turning to the distribution of syllable types within stems.

Noun stems are most frequently bisyllabic. Out of 869 nominal lexemes, 555 stems have two syllables. As shown in Table 2.21, monosyllabic noun stems are, in contrast, only about half as frequent while stems with three syllables are the rarest.<sup>25</sup>

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<sup>24</sup>Renaud (1976: 109) treats nasal prefixes as syllabic, carrying a L tone in the Gyeli variety spoken around Bipindi in the contact region with Kwasio. I see, however, no evidence for such an analysis, at least not in the Gyeli variety spoken in Ngolo.

<sup>25</sup>There are a few noun stems comprising four syllables, but their number is negligible.

Syllable length	Number of occurrences/Frequency
$\sigma$	224 (25.8%)
$\sigma\sigma$	555 (63.9%)
$\sigma\sigma\sigma$	90 (10.3%)
Total	869 (100%)

Table 2.21: Frequency of syllable length in noun stems

Most syllable types are found in stems of the various syllable lengths with more restrictions the more syllables a stems has. Also, restrictions on syllable occurrence applies with respect to the syllable's position within the stem. This does not hold for monosyllabic stems. Table 2.22 shows the frequency of different syllable types in monosyllabic noun stems. For convenience, I do not subdivide different consonant types in consonant clusters, but subsume them under C.<sup>26</sup> In contrast, vowels are represented as either short or long vowels or diphthongs. Nasal vowels are treated just like oral vowels since, in terms of syllable structure, they do not behave differently from their oral counterparts. They are thus categorized as either short or long vowels and rarely as nasalized diphthongs.

As Table 2.22 shows, the most common syllable type is CV,<sup>27</sup> followed by CCV. Generally, frequency decreases with increasing complexity of the onset, just as simple, i.e. short, vowels are preferred over heavy syllables. Monosyllabic noun stems, however, include a fair amount with a long vowel as their nucleus while diphthongs are generally rarer.

In bisyllabic noun stems, as represented in Table 2.23, the preference for light syllables including short vowels becomes even more obvious. Diphthongs in both first and second syllables occur either not at all, for instance as CCVV, or at frequencies under 1%. The latter is the case for CVV and CCCVV. Parallel to monosyllabic stems, CV syllable types are the most frequent ones in bisyllabic stems. CV.CV is the most common combination, followed by CCV.CV. The inverse order, i.e. CV.CCV, is another commonly found pattern, as well as CCV.CCV. More complex onset types including

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They also show some morphological particularities including either syllable reduplications or derivation from compounds.

<sup>26</sup>For more information on occurrence and frequency of various consonant clusters, see Section 2.1.3.

<sup>27</sup>In a few cases, a C onset may stem from a non-syllabic noun class prefix as, for instance, in *d-á* 'crab' which is *m-á* 'crabs' in the plural. In most cases, however, a stem genuinely comes with its own consonantal onset.

Syllable type	Frequency	
CV	78	(34.8%)
CV:	27	(12.1%)
CVV	6	(2.7%)
CCV	63	(28.1%)
CCV:	12	(5.4%)
CCVV	12	(5.4%)
CCCV	18	(8.0%)
CCCV:	3	(1.3%)
CCCVV	5	(2.2%)
Total	224	(100%)

Table 2.22: Distribution of syllable types in monosyllabic noun stems

three consonantal phonemes are quite rare, in second syllables even more than in first syllables.

$\sigma_1 \downarrow$	$\sigma_2 \rightarrow$	CV	CV:	CVV	CCV	CCV:	CCVV	CCCV	Total $\sigma_1$	%
CV	197	5		71				6	279	(50.3)
CV:	9	2							11	(2.0)
CVV		2							2	(0.4)
CCV	132	1	1	64	3			6	207	(37.3)
CCV:		6							6	(1.1)
CCVV									-	-
CCCV		31		12			3		46	(8.3)
CCCV:		3							3	(0.5)
CCCVV		1							1	(0.2)
Total $\sigma_2$	377	10	1	147	3	-		15	555	(100)
%	(68.3)	(1.8)	(0.2)	(26.5)	(0.5)	-		(2.7)	(100)	

Table 2.23: Distribution of syllable types in bisyllabic noun stems

Turning to trisyllabic noun stems, the most frequently found syllable type combinations are CV.CV.CV (33%), CCV.CV.CV (21.6%), CV.CCV.CV (16%), and CCV.CCV.CV (13.6%), as shown in Table 2.24. Both long vowels and diphthongs are almost absent in trisyllabic noun stems and only occur as rare exceptions, represented at the bottom of the table. Generally speaking, but especially for the last syllable in a trisyllabic stem, a CV type is preferred. If a stem includes syllables with a complex onset, this onset will most likely have only two consonants and occur towards the left side of the stem, or in the middle.

Syllable type	Frequency
CV CV CV	29 (33.0%)
CV CCV CV	14 (16.0%)
CV CV CCV	4 (4.5%)
CCV CV CV	19 (21.6%)
CCV CCV CV	12 (13.6%)
CCV CCV CCV	1 (1.1%)
CCV CV CCV	1 (1.1%)
CCCV CV CV	3 (3.4%)
CCCV CCCV CV	2 (2.3%)
CCVV CV CV	1 (1.1%)
CV CV CV:	1 (1.1%)
V CCV CV	1 (1.1%)
Total	88 (100%)

Table 2.24: Distribution of syllable types in trisyllabic noun stems

### 2.3.3.4 Syllables in verb stems

Verb stems show the same distribution of syllable lengths as compared to noun stems. Here also the most common stem length is bisyllabic with more than half of the verbs in the database. In contrast to noun stems, however, the frequency difference between mono- and trisyllabic is not as sharp, as shown in Table 2.25. Both kinds occur at above 20%.

Syllable length	Number of occurrences/Frequency
$\sigma$	88 (23.3%)
$\sigma\sigma$	213 (56.5%)
$\sigma\sigma\sigma$	76 (20.2%)
Total	377 (100%)

Table 2.25: Frequency of syllable length in verb stems

Verb stems are much more restricted in the syllable types that they allow, in comparison to noun stems. While in monosyllabic noun stems complex onsets with three consonantal phonemes are found, these are completely absent in verb stems. Verb stems, however, also display heavy syllables with a nucleus consisting either of a long vowel or a diphthong, as shown in Table 2.26. Again, CV syllables are the most frequent ones, followed by CCV types, just as is the case with noun stems.

Bisyllabic verb stems have even more restrictions with respect to which syllable types they permit. In contrast to noun stems, they only allow three

Syllable type	Frequency
CV	34 (38.6%)
CV:	14 (15.9%)
CVV	9 (10.2%)
CCV	20 (22.7%)
CCV:	5 (5.7%)
CCVV	8 (9.1%)
Total	88 (100%)

Table 2.26: Distribution of syllable types in monosyllabic verb stems

types in the second syllable–CV, CCV, CCCV– but not heavy syllables. Also, bisyllabic verb stems do not feature diphthongs in any position, which is another difference from noun stems.

$\sigma_1 \downarrow$	$\sigma_2 \rightarrow$	CV	CCV	CCCV	Total $\sigma_1$	%
CV	CV	111	29	3	143	(67.1)
CV:	CV:	5			5	(2.3)
CCV	CCV	49	12	2	63	(29.5)
CCV:	CCV:	1			1	(0.5)
CCCV	CCCV	1			1	(0.5)
Total $\sigma_2$		167	41	5	213	(100)
%		(78.4)	(19.2)	(2.3)	(100)	

Table 2.27: Distribution of syllable types in bisyllabic verb stems

Table 2.27 shows that CV type syllables are most frequent with 62.9% in first and even 78.4% in second syllables. The most common syllable type combination is CV.CV, followed by CCV.CV. Also CCV syllables are found in second position, while complex onsets with three phonemes in this position are very rare. All of the latter are of the type NPG, either /ndj/ or /ngj/, as for instance in *bwàndjà* ‘despise’ or *gjáŋgjà* ‘work’.

Also trisyllabic verb stems allow fewer syllable types than their nominal counterparts. With the exception of CV:.CV.CV, trisyllabic verb stems do not generally allow heavy syllables. More than half of trisyllabic verb stems are of a CV.CV.CV combination while the other likely combination is CCV.CV.CV.

As the presented distribution and frequency of syllable lengths and types are based on basic verb forms, the observations made in this section do not account for any exceptions in syllable structure that occur in some derived

Syllable type	Frequency
<b>CV CV CV</b>	<b>4 (56.7%)</b>
CV CCV CV	9 (11.8%)
CV CV CCV	1 (1.3%)
CV: CV CV	1 (1.3%)
<b>CCV CV CV</b>	<b>20 (26.3%)</b>
CCV CCV CV	1 (1.3%)
CCCV CV CV	1 (1.3%)
Total	76 (100%)

Table 2.28: Distribution of syllable types in trisyllabic verb stems

verb forms.<sup>28</sup> These are discussed in detail in Chapter 3.2.1. The most notable exception to the described pattern concerns a medial onset-less syllable in a few rare cases where the verb root lacks an underlying final consonant. For instance, the derived reciprocal form of *djâ* ‘lie down’ is *djá.a.la* ‘lie down together’ with the exceptional syllable pattern CCV.V.CV (Chapter 3.2.1.3).

As a summary, Gyeli features open syllables with both complex onsets and complex nuclei. Simple syllable structures are, however, preferred in all environments and stem positions. Also, in terms of complexity, minimally complex onsets, i.e. two consonantal phonemes in an onset, are generally preferred over nucleus complexity while heavy syllables contain more often a long vowel rather than a diphthong.

## 2.4 Tonology

Gyeli is a tonal language. It uses pitch differences for both lexical and grammatical distinctions. Yip (2002: 4) gives the following definition of a tone language:

“A language with tone is one in which an indication of pitch enters into the lexical realization of at least some morphemes.”<sup>29</sup>

Maddieson (2013) also includes distinctions of grammatical functions in his definition of tone languages, pointing out that tone languages use

<sup>28</sup>Both basic and derived verb forms are listed in Appendix I.

<sup>29</sup>This definition also subsumes accentual or “pitch-accent languages” under tone languages. Yip (2002: 258) describes these languages as “impoverished” tone languages with a lexical contrast between a phonological tone and no tone.

“pitch patterns to distinguish individual words or the grammatical forms of words.”

Tone attaches to segmental units which are called “tone bearing units” (TBUs). Whether the TBU is the segment (e.g. vowel or nasal consonant), mora, or syllable, is language specific and may vary across even closely related languages. In Gyeli, the TBU is the syllable. As discussed in Section 2.3.2, Gyeli has heavy and light syllables, differing in their number or weight units which are called ‘moras’. Heavy syllables have two moras, light syllables only one. The reason why in Gyeli the syllable must be the TBU is that heavy and light syllables bear the same number of tones (see Yip 2002: 73).

Both heavy and light syllables can host level and contour tones, as further discussed in the following section and illustrated here in (62).

- (62)    a. tʃì ‘interdiction’  
              tʃìì ‘live, be well’
- b. dʒí ‘bench’  
              dʒíí ‘forest’
- c. fû ‘fish’  
              fûú ‘rainy season’

The occurrence of contour tones on both heavy and light syllables reveals that the syllable is the TBU in Gyeli. In contrast, the vowel or mora can be dismissed as possible TBUs, based on the occurrence of contour tones: If the TBU was the vowel or the mora, one would expect that contour tones are not allowed in mono-moraic syllables. The light syllable examples in (62) show, however, that mono-moraic syllables in Gyeli do allow contour tones. Or, one would expect that bi-moraic syllables allow for two contour tones, allowing a contour tone on each mora. Two contour tones in one syllable, however, are not permitted.

In the following, I will first describe the tonal inventory of the language as well as the tonal distribution in noun and verb stems. Then, I will lay out tonal rules that apply.

### 2.4.1 Tonal inventory

Gyeli possesses level tones, contour tones, as well as underlyingly toneless TBU's which surface phonetically as L or are assigned a H tone by their environment. I will address each of them in this order.

#### 2.4.1.1 Level tones

Gyeli has two level tones: H and L as contrasted in (63).

- (63) a. síŋgí 'squirrel'
- b. sìŋgì 'spirit'
- c. síŋgì 'cat'

The L tones in these examples are lexically specified as such, rather than being underlyingly toneless. Toneless syllables are restricted to noun class prefixes in the nominal domain and to (diachronic) extension morphemes in the verbal domain. Both are described in Section 2.4.1.3 which also provides an in-depth discussion of distinguishing L and toneless TBUs. I distinguish phonological L from toneless TBUs in my notation by marking L with a grave accent, while toneless TBUs are not marked for tone in glosses of underlying forms.

In terms of their distribution, level tones are significantly more frequent than contour tones in nouns. Table 2.29 shows the distribution of tone patterns with level tones only in noun stems of different syllable lengths. In monosyllabic stems, for instance, 119 out of a total of 224 stems have level tones which is a bit more than half (53.1%) of all monosyllabic noun stems. (The remaining 46.9% carry contour tones which are discussed in Section 2.4.1.2.) The rows below indicate the frequency of the different level tones, L and H, within the set of level tone carrying monosyllabic noun stems. Thus, 57 (47.9%) monosyllabic noun stems are L, while 62 (52.1%) are H.<sup>30</sup>

Generally, level tones occur in more than 90% of bi- and trisyllabic noun stems, while only about half of the monosyllabic stems have level tones. Gyeli exploits all possible combinations of level tones in noun stems that the

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<sup>30</sup>Bimoraic syllables with the same level tone are treated the same as monomoraic syllables. For example, a monosyllabic noun stem such as *nlàà* 'antenna, horn' with a long vowel would be categorized as a L tone monosyllabic stem in the table.

Tonal pattern	Frequency		Example	
$\sigma$	(119/224)	(53.1%)		
L	57	(47.9%)	<i>ndè</i>	'bait'
H	62	(52.1%)	<i>nká</i>	'line, row'
$\sigma\sigma$	(518/555) (93.3%)			
L L	115	(22.2%)	<i>ntɔŋgè</i>	'hornet, wasp'
H H	148	(28.6%)	<i>ndzímí</i>	'blind person'
L H	106	(20.5%)	<i>vìnó</i>	'finger'
H L	150	(29%)	<i>džínò</i>	'name'
$\sigma\sigma\sigma$	(86/90) (95.6%)			
L L L	26	(29.1%)	<i>bèŋgvìdè</i>	'golden angwantibo'
H H H	14	(17.4%)	<i>títímó</i>	'middle'
L H H	6	(7.0%)	<i>ndzímózó</i>	'guard'
H L L	13	(15.1%)	<i>mpí'ídí</i>	'heat (from fire)'
L H L	10	(11.6%)	<i>sísímù</i>	'shadow (of person)'
H L H	3	(3.5%)	<i>nkúmbòló</i>	'diarrhea'
L L H	5	(5.8%)	<i>míntùlí</i>	'mouse'
H H L	9	(10.5%)	<i>djúŋgúlè</i>	'chameleon'

Table 2.29: Distribution of level tones in noun stems

binary distribution of H and L allows, with two possibilities in monosyllabic stem (L and H), four patterns in bisyllabic stems (L L, H H, L H, H L), and eight in trisyllabic stems (see Table 2.29). L and H tones are relatively evenly distributed over mono- and bisyllabic noun stems. Both range around 50% in monosyllabic stems with a slight preference for H tones. In bisyllabic stems, nouns also have a slight preference for H tones where both H L and H H are more common than L L or L H. This preference is different in trisyllabic noun stems where the most frequently found pattern is L L L with almost a third of all level tone stems. Generally, almost half of all trisyllabic noun stems show the same tone on all syllables, either L L L or H H H.

In contrast to noun stems, verb stems only allow level tones, but no contour tones, as Table 2.30 shows. Also, different tonal patterns within a verb stem are significantly more limited than nouns. This is due to the fact that only monosyllabic stems and the first syllable of stems with more than one syllable are specified for tone. Any second and/or third syllable in a verb stem is underlyingly toneless (see Section 2.4.1.3).

While H tones in bi- and trisyllabic verb stems are realized as such, H tones in monosyllabic stems surface phonetically as HL, as further discussed in Section 2.4.2.4. Phonologically, I treat them as H tones. Just like with

Tonal pattern	Frequency	Example	
$\sigma$	(88)		
L	39 (44.3%)	<i>kè</i>	'go'
H [HL]	49 (55.7%)	<i>nyɛ</i>	'see'
$\sigma\sigma$	(213)		
L $\emptyset$	92 (45.2%)	<i>sèŋge</i>	'lower'
H $\emptyset$	121 (56.8%)	<i>gíbɔ</i>	'call'
$\sigma\sigma\sigma$	(76)		
L $\emptyset \emptyset$	26 (34.2%)	<i>kàselə</i>	'light'
H $\emptyset \emptyset$	50 (65.8%)	<i>dʒímese</i>	'extinguish'

Table 2.30: Tonal distribution in verb stems

nouns, also verb stems have a slight preference for H tones which constitute just over 55% of all monosyllabic verb stems. This is also true for bi- and trisyllabic stems in terms of a H in the first syllable. Especially in trisyllabic stems, the difference is significant with about 65% stems starting with a H in contrast to about 35% starting with a L tone.

#### 2.4.1.2 Contour tones

Gyeli has two contour tones: falling HL and rising LH. Contrastive examples are given in (64) and (65) for falling and rising contour tones, respectively.

- (64) a. sâ 'thing' vs. sá 'hut'
  - b. le-lâ 'antenna, horn' vs. le-lá fish 'trap'
  - c. le-báà 'stumbling' vs. le-bàà 'view'
  - d. mbê 'door' vs. mbè 'drum'
- (65) a. dʒí 'bench' vs. dʒí 'place'
  - b. bwă 'swell' vs. bwà 'give birth'
  - c. be-dʒíí 'forests' vs. be-dʒíí 'anger'

The occurrence of contour tones is restricted to noun stems; contour tones do not occur in verb stems. In noun stems, both HL and LH contour tones are found, as Table 2.31 shows.

Falling HL contour tones are significantly more frequent than rising LH. LH occurs in mono- and bisyllabic noun stems, but not in trisyllabic noun stems. Table 2.31 shows that almost 80% of all monosyllabic noun stems with contour tones carry a HL, while only about 20% are covered by LH.

Tonal pattern	Frequency		Example	
$\sigma$	(105/224)	(46.9%)		
HL	82	(78.1%)	<i>sâ</i>	‘thing’
LH	23	(21.9%)	<i>mbwě</i>	‘dog’
$\sigma\sigma$	(36/555)	(6.5%)		
Contour Level	12	(33.3%)		
HL H	4	(33.3%)	<i>kândá</i>	‘proverb’
HL L	6	(50%)	<i>nkângà</i>	‘weaver bird’
LH H	1	(8.3%)	<i>ná-nkjâdâlé</i>	‘termite mound’
LH L	1	(8.3%)	<i>pùúlì</i>	‘hat’
Contour Contour	5	(13.9%)		
HL HL	4	(80%)	<i>pûpû</i>	‘butterfly’
LH LH	1	(20%)	<i>bùábùá</i>	‘non-dry meat/fish’
Level Contour	19	(52.8%)		
L HL	13	(68.4%)	<i>mèvâ</i>	‘pride’
H HL	6	(31.6%)	<i>nkândâ</i>	‘crack’
$\sigma\sigma\sigma$	(4/90)	(4.4%)		
Contour Level Level	1	(25%)		
HL H L	1	(25%)	<i>tsîèsámè</i>	‘circumcision’
Level Level Contour	3	(75%)		
H H HL	1	(25%)	<i>le-jímbálî</i>	‘entrance’
L H HL	1	(25%)	<i>le-délémóò</i>	‘mud wasp’
H L HL	1	(25%)	<i>mwâdèkâ</i>	‘other side’

Table 2.31: Distribution of contour tones in noun stems

Further, LH is more restricted in terms of its occurrence position. While HL is found in initial and final syllables of bi- and trisyllabic noun stems, LH is limited to the first syllable (unless the second syllable is a reduplication of the first as it is the case when two contours occur in a bisyllabic stem).

While contour tones are pervasive in monosyllabic noun stems, they constitute exceptions in bi- and trisyllabic stems: only 40 examples of contours are found in bi- and trisyllabic noun stems, equalling to 4.6% of all nouns in the database. In many instances, this exceptional tone pattern can be explained on a morpho-phonological basis. For instance, bisyllabic stems which have a contour in both syllables are always instances of reduplications. A final HL tone in bi- and trisyllabic nouns (in conjunction with an initial nasal) is found in many deverbal nouns where the final HL is part of the derivation rule for those lexemes that have a H tone on the first TBU, as described in Chapter 4.2.1.6. This is the case, for example, with the noun *nkândâ* ‘crack’ which is derived from the transitive verb *kânda* ‘crack’. Other examples can be explained by compounding. *tsîèsámè* ‘circumcision’, for ex-

ample, includes the verb *tʃè* ‘cut’. (*sámè* does not seem to be a Gyeli lexeme, but may either be a loan word from Mabi or a contracted form of *nsámbò* ‘penis’.)<sup>31</sup>

#### 2.4.1.3 Toneless syllables

In addition to level and contour tones, Gyeli has morphemes that are unspecified for tone, i.e. which are underlyingly toneless.<sup>32</sup> Toneless TBUs are restricted to noun class prefixes in the nominal domain and to (diachronic) extension morphemes—second and third syllables in verb stems—in the verbal domain. These TBUs surface phonetically as L in isolation or they take a H tone through High Tone Spreading from their tonal environment, as discussed in Section 2.4.2. Further, some grammatical words are underlyingly toneless as well. This is the case for the verbal plural particle *yga* (Chapter 3.9.2.2). Also subject-tense-aspect-mood-polarity (STAMP) markers, i.e. portmanteau morphemes that encode subject marking and tense-mood information, are toneless and take different tonal patterns depending on the category they encode. Their various tonal patterns are described in Chapter 6.2.1.

There are many Bantu languages that have a two-way distinction of primitive H tones and toneless TBUs. Hyman (2001: 239) lists, for instance, Shona, Haya, and Digo as examples for such tonal systems where a possible L tone assignment is only phonetic. In contrast, Gyeli has a three-way tonal opposition in level tones, namely H, L, and Ø. This claim raises at least two questions: How can we tell that there is really a distinction between L and toneless TBUs rather than treating both as one category, either L or Ø? And, if we accept that there is a distinction, how can we tell them apart within the language?

Hyman (2001) proposes a range of arguments and characteristics in order to determine whether tones in a language should be analyzed as ‘marked’

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<sup>31</sup>Another explanation for unusual contour tone patterns is most likely borrowing. Examples such as *le-jímbálí* ‘entrance’ do not look like Gyeli words, but their source is not known.

<sup>32</sup>Renaud (1976) is rather unspecific on this issue for the Gyeli variety spoken around Bipindi in the contact area with Kwasio. He gives a definition for ‘neutral syllables’, but in his subsequent discussion, he seems to only talk about surface tones which makes it difficult to distinguish whether a toneme is phonologically marked, for instance, L or whether this is only the phonetic realization.

or ‘unmarked.’ Based on his criteria, L is a marked tone in Gyeli because in languages with privative H as opposed to  $\emptyset$ , one would not expect to find contour tones. The reason for this, according to Hyman (2001: 240), is that “the combination of [H] and [ $\emptyset$ ] could only be pronounced [H].” Since Gyeli has contour tones, as shown in Section 2.4.1.2, L must be phonologically marked.

Having established that there must be marked L tones in Gyeli, I now turn to explaining why I propose additional toneless TBUs. The two arguments I put forth involve on the one hand tonal distribution and on the other the nature of tone realization rules. These arguments elucidate at the same time the distribution of L and toneless TBUs in Gyeli.

Looking at tonal distribution, it is quite striking that while noun stems can take all kinds of tonal combinations including H on penultimate and final syllables, this is not the case for verb stems. As shown in Section 2.4.1.1, Table 2.30, second and third syllables always surface as L in isolation. Since tonal distribution in noun stems is unpredictable, I suggest that all tones in noun stems are lexically specified and L tones are therefore marked as such rather than being underlyingly toneless. In contrast, only first syllables in verb stems are specified for tone, including L tones, while any second or third syllables are predicted to be (phonetically) L in isolation.

Further evidence for this claim comes from the realization of tonal rules. Toneless morphemes are subject to high tone spreading (HTS) under certain conditions, for instance in past tenses or with the realis marking H tone (see Chapter 6 for tonal patterns in verb inflection and Chapter 6.2.2 for mood inflection via tone). In leftward HTS in the verbal domain, it is the final syllable in bisyllabic and the mid and final syllable of trisyllabic stems that will host the spreading H tone while first syllable L tones are not affected by the spread (see Section 2.4.2.2). This suggests that L in first syllables are marked as such while the following morphemes are toneless and thus ‘free’ to host spreading H tones.

Monosyllabic verb stems behave a bit differently. They are specified for tone and never toneless, even though their L tone gets detached and replaced by a H tone in, for instance, past tense formation. I explain this in more detail in Section 2.4.2.2.

Turning to the nominal domain, toneless TBUs occur in CV noun class prefixes while noun stems are specified for H and L tones. This is not surpris-

ing, since Kisseberth & Odden (2003: 60) point out that “Class prefixes [in Bantu languages] are typically toneless.” Evidence for this in Gyeli comes, again, from tonal realization in certain environments. Just like verbal extension morphemes, noun class prefixes are subject to HTS, for instance when preceded by a H tone attributive (ATT) marker in a  $N_1 + N_2$  construction (Section 2.4.2.1) or with an object linking H tone (Chapter 4.1.1.4). If class prefixes were underlyingly marked L rather than just surfacing phonetically L in isolation, one would expect a H stem in  $N_2$  to be downstepped, as Hyman & Lionnet (2011: 175) discuss for Abo.<sup>33</sup> This is, however, not the case. Rather than suggesting a rule of featural change of a marked L prefix or L deletion followed by HTS in such contexts, suggesting toneless class prefixes provides the simpler and more elegant analysis for Gyeli.

## 2.4.2 Tone rules

Gyeli possesses few tonal rules, the most important of which is high tone spreading (HTS). HTS differs in the nominal domain in comparison with the verbal domain in that HTS goes to the right in the nominal, but to the left in the verbal domain. I will discuss both in turn.

### 2.4.2.1 High tone spreading to the right

High Tone Spreading (HTS) targets the toneless morphemes of CV noun class prefixes and the verbal plural marker *ŋga*. HTS onto CV noun class prefixes is restricted to specific grammatical environments including i) H tone attributive markers and ii) a floating H tone that marks objecthood; H tones from preceding lexical items do not spread.

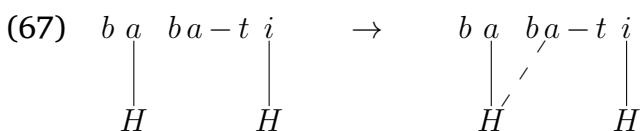
In the first case, a H tone spreads from an attributive marker of a  $N + N$  attributive construction to the noun class prefix of the second noun, as in (66a). In contrast, the attributive marker in (66b) has a L tone. Thus, the following underlyingly toneless noun class prefix of the second nominal constituent surfaces L as well since it is underlyingly toneless and there is no H that could attach to it.

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<sup>33</sup>Abo shows the same tonal surface in these environments in that the H stem is not lowered. Hyman & Lionnet (2011: 175) propose a different analysis, suggesting that the L of a prefix is deleted in these contexts, and then followed by HTS.

- (66) a. bá-só      **bá**      **bá-tí**  
           ba-só      bá      ba-tí  
           ba2-friend 2:ATT ba2-in.law  
           ‘the friends of the in-laws’
- b. só      **wà**      **bá-tí**  
           só      wà      ba-tí  
           Ø1.friend 1:ATT ba2-in.law  
           ‘the friend of the in-laws’

(67) gives an autosegmental representation of (66a). It shows how the H from the attributive marker spreads to the right onto the toneless noun class prefix which then surfaces as H as well.



As discussed in Section 2.4.1.3, the noun class prefix is underlyingly toneless and only surfaces phonetically as L in isolation. If it was marked L, one would have to assume a more complicated rule of featural change or L deletion. Or, one would expect an underlying L to affect a H stem by lowering the L in downstep. This is, however, not the case, as shown in Figure 2.9. Just as in (66a), *mà-fwálá má bé-túmbó* ‘borders (lit. ends of the countries)’ surfaces with a H on the prefix *be-* which has spread from the preceding attributive marker *má*. The pitch track in Figure 2.9 shows that there is neither downstep nor downdrift, but the pitch stays at the same level throughout the utterance.<sup>34</sup>

H tone lowering may occur towards stem final positions if a H is preceded by a L, as shown in Figure 2.10. The final H in the N + N construction *bà-bwálè bá bá-ntèmbó* ‘the parents of the younger siblings’ is lower than the H tones on all other H syllables. This, however, seems to be a phonetic realization phenomenon rather than a phonological rule. The final H is affected both by the preceding L and its utterance final position, lacking the energy to be produced with the same pitch as the preceding H tones.

The second grammatical environment where HTS onto CV noun class prefixes occurs is with the floating object linking H tone, as discussed in detail in Chapters 4.1.1.4 and 7.2.1.2. The fact that the object linking H

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<sup>34</sup>This also shows that the Obligatory Contour Principle (OCP) “which disallows sequences of identical tones” as described by Yip (2002: 52), is not relevant in Gyeli.

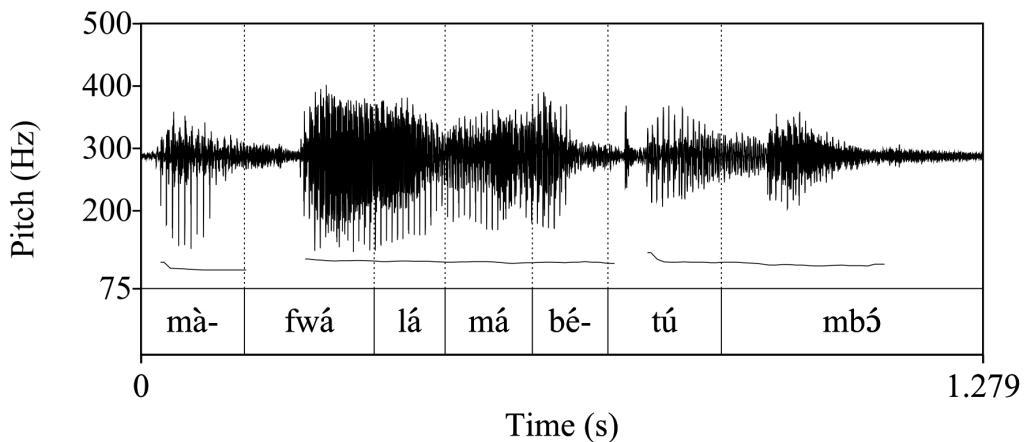


Figure 2.9: Pitch in HTS within the nominal domain

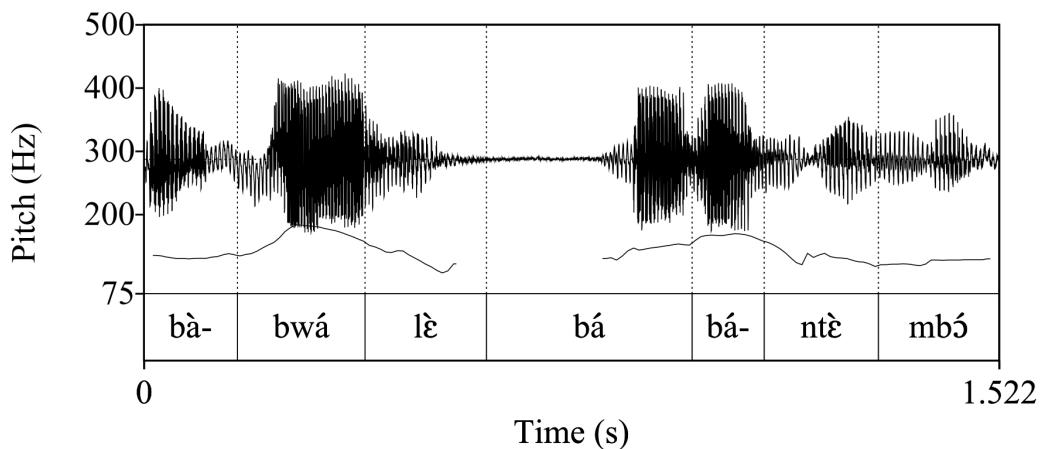


Figure 2.10: Phonetic pitch lowering of final H after L

tone is indeed only realized on toneless TBUs, is shown in (68). The nominal object *ntúà* ‘mango’ in (68a) lacks an overt noun class prefix and thus the object linking H tone does not attach. Also phonetically, there is no change in the tonal pattern of the noun stem that could indicate the presence of the H tone.

- (68) a. mé wúmbé dè ntúà  
     mε-H wúmbε-H dè ntúà  
     1S-PRES want-R eat Ø7.mango  
     ‘I want to eat a/the mango.’
- b. mé wúmbé dè má-ntúà  
     mε-H wúmbε-H dè H-ma-ntúà  
     1S-PRES want-R eat OBJLINK-ma6-mango

‘I want to eat (the) mangos.’

In contrast, the nominal object *mantúà* ‘mangos’ in (68b) has a CV noun class prefix which takes the object linking H tone.

Not every H tone preceding a toneless CV noun class prefix licences HTS. H tones that are part of a preceding lexical stem, as the H verb in (69), do not spread onto the toneless TBU, which surfaces L. The object linking H tone is absent in this example because the noun phrase following the verb is not an argument, but an adjunct.

- (69) a. mè kwé **màfû** mábáà  
       mε kwê-H ma-fû má-báà  
       1S.PST1 fall-PST ma6-day 6-two  
       ‘I fell two days ago.’
- b. \*mè kwé **máfû** mábáà  
       mε kwê-H ma-fû má-báà  
       1S.PST1 fall-PST ma6-day 6-two  
       ‘I fell two days ago.’

The same is true for a second object whose toneless CV noun class prefix follows a H nominal stem, as in (70). The object linking H tone only occurs after the (lexical) verb and only attaches to the object that directly follows it. A second object surfaces with a L CV noun class prefix, even if the preceding nominal stem ends in a H tone.

- (70) a. á dílésé bésíŋgí **màbélē**  
       a-H dílésé-H H-be-síŋgí ma-bélē  
       1-PRES feed-R OBJ.LINK-be8-squirrel ma6-kola.nut  
       ‘S/he feeds the squirrels kola nuts.’
- b. \*á dílésé bésíŋgí **mábélē**  
       a-H dílésé-H H-be-síŋgí ma-bélē  
       1-PRES feed-R OBJ.LINK-be8-squirrel ma6-kola.nut  
       ‘S/he feeds the squirrels kola nuts.’

The object linking H tone can also attach to a verbal plural marker *ŋga*, as it constitutes another morpheme that is underlyingly toneless and thus capable of hosting the H tone. HTS onto the verbal plural marker is generally restricted to specific grammatical environments for the reason that this marker only occurs in a few positions. Testing grounds for HTS are limited to a preceding HL pattern with imperative verbs and the preceding H tone

of the negative auxiliary *tí*. These are described with examples in Chapter 3.9.2.2. To summarize the overall findings, *ŋga* follows an imperative verb form that characteristically carries a final HL pattern. If *ŋga* is intonation phrase final, it surfaces L, as in (71a). If *ŋga* is not phrase final, the verbal marker hosts a potential object linking H tone which it ‘steals’ from a nominal object, as in (71b). This example also shows that the H tone cannot spread further onto other toneless TBUs. The underlyingly toneless CV noun class prefix of *mantúà* ‘mangos’ has to surface L.

- (71) a. gyàgâ **ŋgà**  
           gyàgâ   ŋga  
           buy.IMP PL  
           ‘Buy (pl.)!’
- b. gyàgâ **ŋgá**                 màntúà  
           gyàgâ   H-ŋga             ma-ntúà  
           buy.IMP OBJ.LINK-PL ma6-mango  
           ‘Buy (pl.) mangos!’

The verbal marker also follows the negative auxiliary *tí*, which is then followed by a lexical non-finite verb. In this case, *ŋga* always takes the H tone from the preceding auxiliary, as illustrated in (72).

- (72) **tí**      **ŋgá** gyàgà mántúà  
       tí      ŋga gyàga H-ma-ntúà  
       NEG.R PL   buy   OBJ.LINK-ma6-mango  
       ‘Don’t (pl.) buy mangos!’

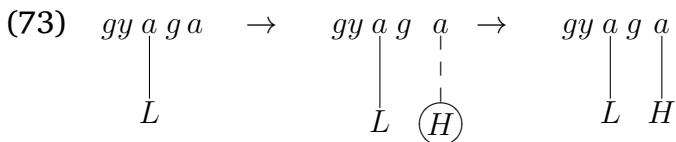
Given these positional restrictions, investigating the tonal behavior of *ŋga* following, for instance, a lexical H tone, is therefore impossible.

#### 2.4.2.2 High tone spreading to the left

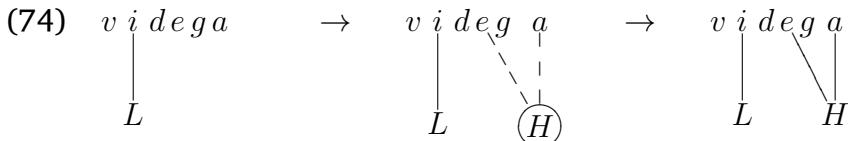
HTS in verbs differs from other instances of HTS in that the spreading goes to the left rather than to the right. The tone that attaches to the right of a verb can be viewed as a melodic tone in the sense of Odden & Bickmore (2014) and Marlo & Odden (2018) and is either a H or a HL, depending on the inflectional category it marks. A grammatical floating H tone encodes past tenses (Chapter 6.2.1) and/or realis mood (Chapter 6.2.2). A verb final HL tone, which spreads H to the left in case there is a second toneless TBU,

marks imperative and subjunctive categories (Chapters 6.2.1.6 and 6.2.1.7). The origin of HTS in verbs thus differs from the sources of HTS in nouns and verbal plural markers.

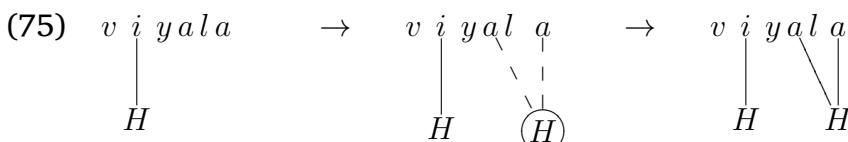
Regardless of the function of the attaching tones, phonologically tones can only spread across underlyingly toneless TBUs in verbs. These include second and third syllables, while first syllables are always specified for H or L. This is illustrated in the autosegmental representation in (73) where a floating H tone (either past tense or realis mood marking) attaches to the second, toneless syllable of the verb *gyàga* ‘buy’, while the first syllable keeps its lexical L tone.



If a H attaches to a trisyllabic verb stem, as with the verb *vìdega* ‘turn’ in (74), the H attaches to the rightmost toneless TBU and the spreads to the left to the second verb syllable. Again, the first syllable keeps its lexical tone.



If the first verb syllable is H, the surface tonal pattern ends up with a sequence of H tones, as illustrated in (75) for the verb *víyala* ‘touch’.



Just as in HTS to the right, there is no OCP rule prohibiting such sequences of H tones. In (76), for instance, a realis marking H attaches to the finite verb and spreads across its toneless TBUs, while an object linking H attaches to the following noun class prefix, resulting in a sequence of five H tones.

- (76) à swásélé bápándyè  
 a swáselé-H H-ba-pándyè  
 1.PST1 dry-R OBJLINK-ba2-plate  
 ‘S/he dried the plates.’

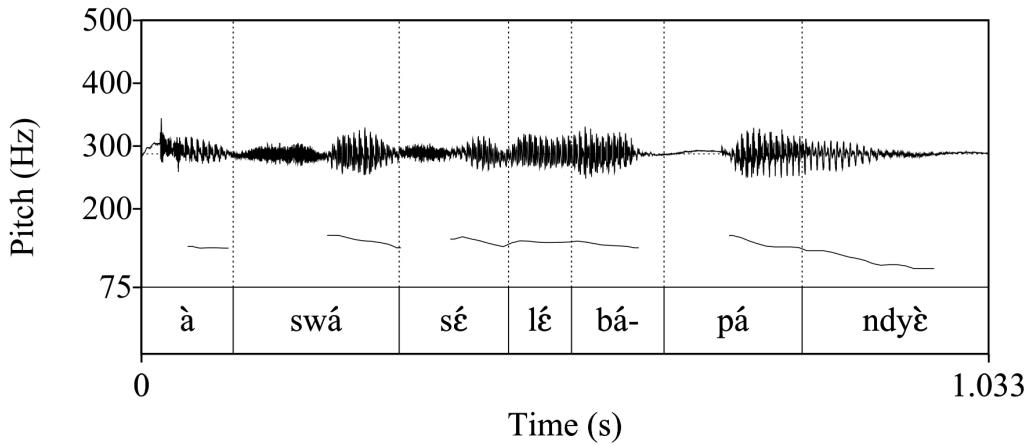
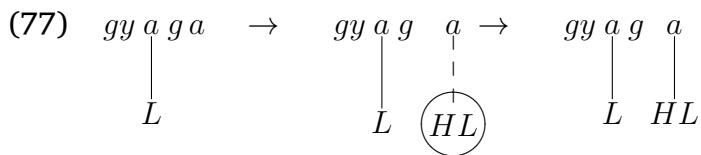


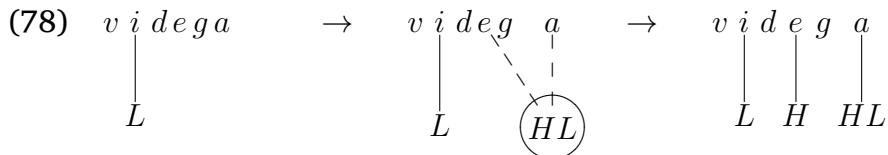
Figure 2.11: Pitch level of H sequence

As Figure 2.11 shows, all five H tones are at the same pitch level throughout the utterance so that potential downstep phenomena can be ruled out.

In addition to floating H tones that attach to the right side of verbs, also HL melodies attach to verb stems, marking categories such as imperative and subjunctive. In bisyllabic verb stems, the HL melody is realized on the final toneless TBU, as shown in (77).



In case there is a second toneless TBU, as in (78), only the H of the HL melody spreads to the left, while the final TBU remains HL.



I take this tonal behavior as an argument to posit tonal attachment to the right with leftwards spreading rather than assuming a tonal attachment to the first toneless TBU with spread to the right. This way, the processes for both attaching tonal melodies, H and HL, are the same: the melody attaches to the right and H spreads leftwards. If rightwards spreading was the case, I would need an additional rule that specifies when a H tone lowers to HL on the final toneless syllable or when it remains H. This view is further in line with analyses of other languages of the area. Marlo & Odden (2014), for

instance, assume the attachment of one of six inflectional melodies to the right of Bakweri (Bantu A22) verbs, stating that melody initial H spreads leftwards.

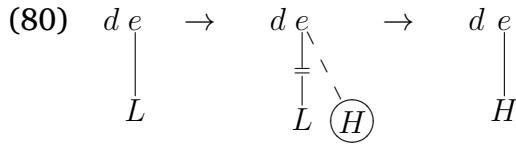
#### 2.4.2.3 L detachment in monosyllabic L verb stems

In tonal inflection of verbs for various tense, aspect, mood, and polarity categories, the processes of tonal attachment and spreading as described for bi- and trisyllabic verb stems above do not work for monosyllabic verb stems since these are already specified for tone and there are no toneless TBUs to which a tonal melody could attach and/or spread. Nevertheless, the same inflectional melodies surface on monosyllabic stems as on stems that have toneless TBUs. For monosyllabic L verb stems, I assume tonal detachment of the lexical tone which is then replaced by the inflectional tone melody, either H or HL.

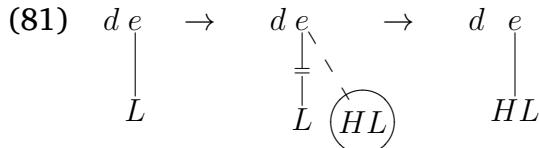
Monosyllabic L verb stems take a H in past tenses (79b) and in the realis mood (79c).

- (79) a. mé dè  
mε-H dè  
1S-PRES eat  
'I eat.'
- b. mè dé  
mε dè-H  
1S.PST1 eat-PST  
'I ate.'
- c. mé dé téè  
mε-H dè-H téè  
1S-PRES eat-R now  
'I eat now.'

In order to explain how a H in monosyllabic L verb stems surfaces, simple H attachment and/or spreading is not enough. A specified L must either be deleted before the H can attach or be featurally changed. For the sake of consistency with HTS of bi- and trisyllabic verb stems, I propose that a L in monosyllabic verb stems gets detached, as shown in (80), and then replaced by the inflectional H.



The same is true for a HL melody attaching to a monosyllabic L verb, as illustrated in (81).



#### 2.4.2.4 H lowering in monosyllabic H verb stems

While all other verb stems (monosyllabic L as well as bi- and trisyllabic stems) show the same tonal surface patterns on the final syllable, monosyllabic H stems deviate from this pattern, as shown in Table 2.32.<sup>35</sup>

Environment	General pattern	Monosyllabic H
Citation form	L	HL
Inflectional melody 1	H	H
Inflectional melody 2	HL	HL

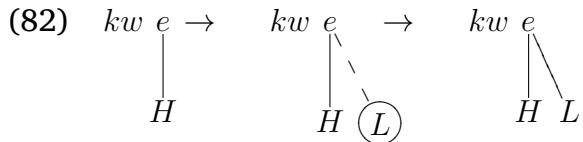
Table 2.32: Surface patterns of verb stem final syllables

As explained in Sections 2.4.2.2 and 2.4.2.3, the tonal processes that are involved in arriving at the surface tonal melodies of final verb syllables differ between monosyllabic L verb stems and verb stems with more than one syllable which include toneless TBUs as well. Monosyllabic H stems, however, already pose an exception to the general surface pattern as there is a syncretism between forms in isolation and the HL inflectional melody.

The question how the HL surface tone of monosyllabic verb citation forms is derived presents different analytic possibilities which I evaluate in terms of likelihood. I propose to view these verbs underlyingly as mono-syllabic H verbs which get lowered to a falling HL tone in the citation form

<sup>35</sup>The three environment categories in Table 2.32 each subsume different grammatical categories in which this surface form is used. The citation form comprises a verb uttered in isolation as well as the non-finite form, and present, future, and inchoative tense-mood verb forms. The inflectional melody 1, a final H, is used in past tenses and for marking realis mood. The inflectional melody 2, a final HL, marks imperative and subjunctive. The grammatical functions of verb tones and their interaction with tonal melodies of subject-tense-aspect-mood-polarity markers are discussed in Chapter 6.

categories. (82) shows the autosegmental representation of the final lowering in citation form categories (non-finite, present, future, and inchoative) of monosyllabic H verb stems. A lowering L attaches to an underlying monosyllabic H verb stem, resulting in a HL surface form.



This is the reason why there are, on the surface, no monosyllabic H non-finite verb forms, they all surface as HL.<sup>36</sup> Renaud (1976: 230) addresses this phenomenon, subsuming it under a general rule of / ' / → / ^ / at the end of a syntagm. This rule, however, is not context sensitive, neglecting cases of syntagm final melodic H, for instance for past tense forms.

The representation that follows for glossing is exemplified in (83) for all tonal melodies that attach. For citation form categories such as the present in (83a), the underlying monosyllabic H stem is lowered to HL by a L. For the inflectional melody 1 with a H in (83b), the verb just surfaces with its underlying H form. In (83c), the HL inflectional melody 2 overrides the underlying H, resulting in a surface pattern that is identical to citation form categories.

- (83)
- a. mé        kwé  
mε-H        kwé-L  
1S-PRES fall-CF  
'I fall.'
  - b. mè        kwé  
mε        kwé-H  
1S.PST1 fall-PST  
'I fell.'
  - c. kwé  
kwé-HL  
fall-IMP  
'Fall!'

Since the final lowering of citation form categories in monosyllabic H verb stems is purely phonological and does not seem to carry any grammatical function, unlike the inflectional tonal melodies, I do not represent

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<sup>36</sup>See the distribution of level and contour tones in Sections 2.4.1.1 and 2.4.1.2.

the phonological lowering rule in my glossing in the following chapters and appendices. In order to be consistent with the other verb patterns and to transparently track the attachment of inflectional melodies, I use the glosses as in (84). The HL citation form will appear in the underlying form line (the second line) and possibly take inflectional melodies as in (84b). It should be kept in mind though that, phonologically, the underlying form of HL monosyllabic verb stems is in fact H.

- (84) a. mé kwé  
          mε-H   kwê  
          1S-PRES fall  
          'I fall.'
- b. mè kwé  
       mε    kwê-H  
       1S.PST1 fall-PST  
       'I fell.'

There are two other possibilities how to analyze the surface HL form on monosyllabic verb stems. First, HL could be the underlying form, just as monosyllabic L verbs are underlyingly specified for L. This would mean, however, that there is a contrast between L and HL verb roots for monosyllabic stems, while polysyllabic stems have a lexical contrast of H and L. Another argument against this analysis comes from the distribution of contour tones in Gyeli which are generally only found in nouns, but not in verb stems. Monosyllabic stems would be the only exception, but a H tone contrast is more likely.

Second, one may also posit a H vs. toneless distinction for monosyllabic verb stems. Under this analysis, the citation form categories would all carry a final L tone which surfaces L for toneless monosyllabic as well as for polysyllabic verb stems and HL for underlying monosyllabic H stems. While a H vs. toneless analysis generally makes sense in many Bantu languages, it does not quite fit the patterns of bi- and trisyllabic verb stems in Gyeli whose first syllables are clearly specified for either H or L, but not toneless. I therefore do not assume any lexical toneless roots (first syllables) for Gyeli.

## 2.5 Discussion: Gyeli phonology within Bantu A80

Having described consonants, vowels, syllables and tones in Gyeli, I conclude this chapter by comparing Gyeli phonology to other Bantu A80 languages and thus locating Gyeli within this language family. For comparative data, I refer to Cheucle (2014) whose valuable thesis is based on her own fieldwork on Bekwel as well as an assemblage of data by various authors. Her comparison includes Bekwel, Bekol, Konzime, Makaa, Mpiemo, Kwasio, Njyem, and Shiwa which she uses to reconstruct Proto-A80.<sup>37</sup> The data show that Gyeli possesses many properties that are found in the A80 group. At the same time, it is most closely related to Kwasio and to Shiwa and possibly Mpiemo, as can be seen from many characteristics these languages have in common and which are absent in the other languages.

**Consonants** Gyeli's consonant inventory is quite close to the Proto-A80 one as reconstructed by Cheucle (2014: 432). Its main difference concerns the series of fricatives for which the author proposes /s/ as the only fricative in the Proto language, while Gyeli's fricative inventory has expanded, synchronically comprising /f/, /v/, /s/, and /z/.

According to Cheucle (2014: 335), all compared A80 languages have a series of bilabial, alveolar, palatal and velar stops, both voiced and voiceless.<sup>38</sup> Gyeli clusters more closely with Kwasio and Shiwa though in three respects. First, also in Kwasio the use of /g/ is highly restricted. Second, Kwasio and Shiwa are the only two other A80 languages that feature fricative clusters as in Gyeli such as /pf/, /bv/, /kf/, and /gv/. Third, Shiwa is the only other language, with Gyeli, that allows for voiceless stops in C<sub>2</sub> while all other A80 languages exclusively allow voiced plosives in this position (Cheucle 2014: 340).

The distribution of fricatives among A80 languages is synchronically more varied. Cheucle (2014: 342) lists six possible fricatives that may occur: /f/, /v/, /s/, /z/, /ʃ/, and /ʒ/. Gyeli features the first four of them,

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<sup>37</sup>These are the languages that are sufficiently described to allow for systematic comparison. A few A90 languages may arguably be considered as more closely related to A80 and should thus be included in such a comparison, but this exceeds the frame of this work.

<sup>38</sup>Cheucle (2014: 335) classifies /tʃ/ or /ts/ as well as /dj/ or /dʒ/ in the literature as palatal /c/ and /ɟ/. In Gyeli, they correspond to the affricates /tʃ/ and /dʒ/.

but lacks the latter two. No other language displays the same distribution. The most similar distribution is found in Konzime which has /s/ and /z/, but only a restricted occurrence of /f/ and /v/, and Kwasio with the same phonemes, just that /f/, /v/, and /z/ are rather limited.

Other consonants are less varied across A80, all featuring nasals /m/, /n/, and /ŋ/. Also /l/, /w/, and /j/ are found in all languages. They all feature NC clusters, but for many languages (Konzime, Njyem, Kwasio, and Shiwa), their phonological status is not clear, according to Cheucle (2014: 348). Nevertheless, all languages, including Gyeli, have both pre-nasalized voiced and voiceless obstruents, except for Kwasio and Shiwa which are otherwise most similar to Gyeli in other characteristics.

**Vowels** Cheucle (2014: 324) states that A80 languages differ significantly in their number of vowels, ranging between 5 and 11, as well as in their vowel quality. The vowels that all languages under investigation have in common are /i/, /u/, /ɛ/, and /a/. Differences concern thus mostly the mid vowels. Gyeli displays the same 7-vowel system as Bekwel and Mpiemo, comprising /i/, /u/, /e/, /o/, /ɛ/, /ɔ/, and /a/. Cheucle (2014: 389) reconstructs this same vowel system for Proto-A80 which means that Gyeli, Bekwel and Mpiemo are the most conservative languages within the A80 group, at least with respect to their vowels.

It is possible that languages such as Gyeli and potentially Mpiemo are currently losing /e/ and /o/ as contrastive phonemes. This hypothesis is supported by the special status of these vowels in Gyeli concerning the small space in the vowel plot and the low frequency, as discussed in Section 2.2.1. Other A80 languages, according to Cheucle (2014: 324-325), support this assumption further since most of them have lost a phonemic vowel in comparison with the seven vowel system of Proto-A80. In Shiwa and Kwasio, /e/ and /o/ are variants of /ɛ/ and /ɔ/, so there seems to be a tendency to dispense with the higher rather than the lower mid vowels. Also, the trend is to lose vowels rather than expanding the vowel inventory to a nine vowel system, which would be a possible route of innovation.

Contrastive vowel length is found in most A80 languages, as it is in Gyeli. In Gyeli's closest related languages Mpiemo, Kwasio, and Shiwa, however, vowel length has not been analyzed as being phonemic by the authors, as Cheucle (2014: 327) points out. In Proto-A80, vowel length is not distinc-

tive. Cheucle (2014: 395-396) reconstructs the origin of synchronic distinctive vowel length as final nasal consonants or syllables with /b/ as their onset, which have been lost in some languages and replaced by long vowels.

Gyeli seems to have a special status as to nasal vowels within A80. Only Makaa has two nasal vowels /õ/ and /ɛ/ while nasal vowels are regarded as contextual in the other languages under investigation, being conditioned by following velar nasals (Cheucle 2014: 329, 397).

Vowel sequences or diphthongs are attested in Konzime, Njyem, Mpiemo, Kwasio, and Shiwa, as summarized by Cheucle (2014: 330). Just as in Gyeli, they occur canonically in monosyllabic stems, but differ in their number and vowel quality. The sequence/diphthong /uo/ (or /uɔ/), for instance, is only attested in Gyeli, Konzime, Kwasio, and Shiwa.

A feature that is absent in Gyeli, but widespread in other A80 languages is an epenthetic vowel. Cheucle (2014: 332) specifies that this is most often a schwa, at least for the languages Bekol, Makaa, Konzime, and Bekwel.

**Syllables** Cheucle (2014: 319) states that A80 languages are generally characterized by open syllables and a canonical CV type, allowing, however, also other types of syllables, including closed ones. In this, Gyeli differs from the majority of A80 languages in that it has exclusively open syllables. The only other language with this restriction is Shiwa.

All studied A80 languages allow for complex onsets, including Gyeli. Even though an onset is most frequently occupied by a simple consonant, more complex clusters are allowed. Cheucle (2014: 319) distinguishes consonant clusters that include a consonant and a glide, but treats nasal + consonant clusters as well as affricates as phonemic units. Therefore, a comparison of onset complexity and frequency is not possible at this point.

As to syllable structures in prefixes, all languages under investigation allow CV prefixes, according to Cheucle (2014: 322). In terms of other prefix structures, however, they differ. Gyeli shares with Shiwa and Kwasio the feature of not allowing V type nominal prefixes while all other studied A80 languages do. Shiwa and Kwasio, however, feature syllabic nasal prefixes, Gyeli does not. In that, it behaves like Konzime and Njyem which have nasal prefixes which are not syllabic.

**Tone** A tonal comparison across A80 languages is limited to lexical tones and even then rather tentative since tone is treated to varying degrees in the literature. Nevertheless, according to Cheucle (2014: 350)'s summary of A80 lexical tone, Gyeli behaves as expected, displaying a H and a L level tone as well as HL and LH contour tones, the latter of which may be realized as a mid tone in some languages. The literature does not, however, discuss potentially toneless TBUs. It would be worthwhile to investigate tonal rules and grammatical tone across A80 languages in the future especially since Kissoberth & Odden (2003: 59) point out that despite a widespread two level tone opposition in Bantu languages, there is considerable variation between Bantu languages and dialects in terms of their tonal systems.

# Chapter 3

## Parts of speech

In this chapter, I describe the parts of speech in Gyeli, also referred to as word classes. The presentation of Gyeli's parts of speech system relies on a grammatical rather than semantic classification into categories. Following Schachter & Shopen (2007: 1-2), I consider grammatical properties such as "the word's distribution, its range of syntactic functions, and the morphological or syntactic categories for which it is specifiable" as determining criteria for parts of speech classification.

I generally distinguish lexical and grammatical word classes as well as open and closed classes. Gyeli has only two open word classes, namely the lexical classes of nouns and verbs. The lexical parts of speech of adjectives and adverbs, which are open classes in many other languages, are closed classes in Gyeli given their limited number of members. The semantic functions that they carry in languages with large adjective and adverb classes are taken over by nouns. In addition to these typical lexical word classes, Gyeli also has a lexical, closed class of ideophones.

The frequency of lexical word classes' occurrence in the Gyeli corpus is displayed in Table 3.1. Lexical words constitute 46.9% of the words in the corpus.<sup>1</sup> Out of these lexical words, 87.8% constitute open class words, namely nouns and verbs. Among the closed lexical word classes, adverbs are the most frequent ones in the corpus, followed by ideophones and finally adjectives.

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<sup>1</sup>As described in Chapter 1.3.3, comprises 3304 words in total. For the distribution of word class frequencies, only 3133 word were taken into account, omitting e.g. code-switching and repetitions.

Word class	Frequency	
<b>Open</b>	<b>1289</b>	<b>(87.8%)</b>
Nouns	630	(48.9%)
Verbs	659	(51.1%)
<b>Closed</b>	<b>179</b>	<b>(12.2%)</b>
Adjectives	9	(5%)
Adverbs	150	(83.8%)
Ideophones	20	(11.2%)
Total	1468	(100%)

Table 3.1: Frequency of lexical word classes

In comparison, grammatical words constitute more than half of the corpus with 53.1%. Their various sub-categories are summarized in Table 3.2.<sup>2</sup> Following Schachter & Shopen (2007) with slight modifications,<sup>3</sup> I distinguish pronouns, other pro-forms, elements of the noun phrase, elements of the verb phrase, adpositions, conjunctions, and other minor word classes in Gyeli, each of which has some subclasses. Elements of the verb phrase constitute the most frequent grammatical word category with 33.3%. Within this category, the subject-tense-aspect-mood-polarity (STAMP) marker is the most common with 430 occurrences.

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<sup>2</sup>Anaphoric markers can occur both as free morphemes and suffixes that attach to demonstratives. The anaphoric markers in Table 3.2 under ‘Noun adjuncts’ only count the free morphemes; bound anaphoric markers are discussed in Chapter 4.1.2.4.

<sup>3</sup>Differences between Schachter & Shopen (2007) and my parts of speech classification concern the subclasses of major categories. While the authors (p. 35) only subsume role markers, quantifiers, classifiers, and articles under noun adjuncts, I basically treat every grammatical word class as an element of the noun phrase that can appear in the noun phrase.

## Section

Word class	Frequency	
<b>Pronouns</b>	<b>240</b>	<b>(14.4%)</b>
Subject pronouns	61	(25.4%)
Non-subject pronouns	103	(42.9%)
Interrogative pronouns	10	(4.2%)
Possessor pronouns	59	(24.6%)
Reflexive pronoun <i>méde</i>	7	(2.9%)
<b>Other pro-forms</b>	<b>63</b>	<b>(3.8%)</b>
Interrogative pro-forms	19	(30.2%)
Pro-adverb	33	(52.4%)
Pro-clause	5	(7.9%)
Pro-sentence	6	(9.5%)
<b>Elements of the noun phrase</b>	<b>233</b>	<b>(14%)</b>
with agreement prefix	43	(18.5%)
with plural agreement only	5	(2.1%)
with agreeing free morpheme	178	(76.4%)
prenominal invariable modifiers	0	
postnominal invariable modifiers	7	(3%)
<b>Elements of verbal complex</b>	<b>555</b>	<b>(33.3%)</b>
STAMP marker	430	(77.5%)
Auxiliaries	75	(13.5%)
Verbal particles	50	(9%)
<b>Adpositions</b>	<b>156</b>	<b>(9.4%)</b>
Prepositions	120	(76.9%)
Postpositions	36	(23.1%)
<b>Conjunctions</b>	<b>180</b>	<b>(10.8%)</b>
Coordinators	56	(31.1%)
Subordinators	124	(68.9%)
<b>Other minor classes</b>	<b>238</b>	<b>(14.3%)</b>
Copulas	55	(23.1%)
Identificational marker	13	(5.5%)
Discourse structuring <i>yɔj</i>	39	(16.4%)
Question markers	1	(.4%)
Sentential modifiers	57	(23.9%)
Extrasentential modifiers	73	(30.7%)
<b>Total</b>	<b>1665</b>	<b>(100%)</b>

Table 3.2: Frequency of grammatical word classes

With regard to open versus closed word classes, the latter are significantly more frequent in Gyeli. All grammatical parts of speech categories presented in Table 3.2 are closed classes. In addition, also the lexical classes of adjectives, adverbs, and ideophones belong to the closed word classes, as explained above. Thus, closed classes constitute 58.9% (1844 in total numbers) of the 3133 word corpus. The relative dominance of closed word classes in Gyeli is remarkable since it correlates with a morphological type of language that is closer to the analytic end of the analytic—synthetic scale. As Schachter & Shopen (2007: 23) point out,

“closed word classes tend to play a more prominent role in analytic languages than they do in synthetic languages. This is because much of the semantic and syntactic work done by the members of closed word classes in analytic languages is done instead by affixes in synthetic languages.”

Gyeli words maximally contain three segmental morphemes with the possibility to host additional tonal morphemes. This is discussed in detail in Chapter 4. The restriction on word length is, however, not morphological in nature, but phonological, as outlined in Chapter 2.3.3, generally permitting only up to three syllables in a word.

I will describe each part of speech in the remainder of this chapter, providing defining properties for each category. I start with the open word classes of nouns and verbs, giving information on selected subclasses, for instance the mass/count distinction in nouns. I then proceed with the other lexical classes of adjectives, adverbs, and ideophones before discussing grammatical classes.

### 3.1 Nouns

There has been much discussion in the literature as to what a *noun* is, a linguistic term that is often used intuitively. Rijkhoff (2002: 10) maintains that “there is still no general consensus among typologists on what constitutes a noun”. There is not even an unanimous agreement as to whether every language has a noun category. Gil (2013) claims, for instance, that Riau Indonesian does not have a noun (nor a verb) word class. Rijkhoff (2002: 12) distinguishes between i) languages without a major word class

of nouns, ii) languages where nouns cannot be distinguished from other word classes, and iii) those languages that do have a distinct noun word class. Schachter & Shopen (2007: 5), on the other hand, hold that “[t]he distinction between nouns and verbs is one of the few apparently universal parts-of-speech distinctions.” They further explain that alleged examples of languages which would fall in category i) or ii) according to Rijkhoff had been based on incomplete data and therefore cannot be considered as counter-examples against this universal word class distinction. In any case, scholars seem to agree that at least most languages of the world have nouns as a distinct word class (Koptjevskaja-Tamm 2006: 720).

According to Evans (2000: 708), linguists usually define nouns by three different types of criteria, namely semantic, morphological, and syntactic. In terms of semantics, a common definition is given by Schachter & Shopen (2007: 5) who consider nouns a “class of words in which occur the names of most persons, places, and things”. (Similar definitions are provided by other authors, for example by Koptjevskaja-Tamm (2006: 720) and Evans (2000: 710).) All these scholars emphasize, however, that this is a traditional definition of convenience, but that membership of a word in a certain part of speech has to be established on other grounds. There may be nouns that refer to other entities than persons, places or things, while, on the other hand, there may be persons, places or things that belong to some other word class than nouns.

Another way of viewing nouns is to distinguish them from other open word classes such as verbs, adverbs, and adjectives on the basis of different morphosyntactic properties (see, for instance, Bhat (2000) and Baker (2003)). The advantage of this approach is that it emphasizes the specific structures within a parts-of-speech system of a given language rather than over-generalizing across languages. Nouns may be inflected for categories such as number, case, possession, and definiteness (Koptjevskaja-Tamm 2006: 722). They may trigger agreement of these categories as heads of a noun phrase. Syntactically, they may take a certain position within a noun phrase that serves as an argument or adjunct, while dependent word classes are arranged in specific ways around them.

As Lehmann & Moravcsik (2000: 733) put it concisely, “Like any other grammatical category, the word class ‘noun’ has no universal status *a priori*; rather, it is a language-specific category.” I will discuss noun properties in

Gyeli in detail in the following section. This will help to distinguish nouns from other parts of speech as well as to establish subcategories of nouns that share some nominal features, but not all of them.

### 3.1.1 Noun properties

I define Gyeli nouns most broadly by their structure, function, and distribution in a phrase, distinguishing them from other word classes. Structurally, nouns consist minimally of a stem and, depending on the noun type, can take noun class prefixes as well as similitive and object linking H tone prefixes, as outlined in Chapter 4.1.1. This sets them apart from verbs which cannot take prefixes. While agreement targets of nouns also consist of a stem plus prefix, agreement targets can only take one prefix and that prefix generally differs in its form from noun class prefixes.

On the clause level, most nouns in Gyeli serve as subjects, objects, and adjuncts, as discussed in detail in Chapter 7.2, as well as copular complements, as outlined in Chapter 7.1.1. Nominalized past participles are an exception to this and can only occur as nominal predicates in copula constructions. All nouns can generally occur as bare nouns in their positions.

On the phrase level, nouns function as the head of the construction where they appear in initial position, followed by both agreeing and invariable modifiers, as outlined in Chapter 5. In more complex noun phrases such as attributive constructions, the first constituent is always a noun, followed by an attributive or genitive marker and then containing another word, e.g. a noun or verb (see Chapter 5.5 for more information on attributive constructions). With respect to their morphosyntactic behavior, nouns have a grammatical gender and trigger agreement at their agreement targets (see Chapter 5.2).<sup>4</sup>

Phonologically, nouns allow syllabic and tonological patterns that are disallowed in verbs. For instance, noun root onsets may be complex with clusters of up to three consonants while this pattern is not found in verbs. Also, diphthongs can be found in monosyllabic noun stems and rarely in first and second syllables of bisyllabic nouns. In contrast, they are always

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<sup>4</sup>I view agreement phenomena as a major reason to posit the noun as the lexical head of the phrase rather than assuming a (covert) functional head. The noun as the agreement trigger determines the morphological shape of all agreement targets, including demonstratives that could serve as potential determiner heads.

restricted to monosyllabic stems in verbs. For more information, see Chapter 2.3.3. Tonologically, nouns show a greater variety of patterns, allowing, for instance, H tones on second and third TBUs. Verbs, however, have underlyingly toneless TBUs in second and third syllables which surface as L tones in isolation, as explained in Chapter 2.4.1.

### 3.1.2 Noun types

Gyeli nouns do not constitute a unified class. Instead, they have further subclasses which show different morphosyntactic behavior. This is nothing unusual from a typological perspective; as Schachter & Shopen (2007: 8) point out:

“In most languages some grammatical distinction is made between common nouns, which are used to refer to any member of a class of persons, etc. (e.g. girl, city, novel), and proper nouns, which are used to refer to specific persons, etc. (e.g. Mary, Boston, Ivanhoe).”

Gyeli has three types of nouns: common nouns, proper nouns, and nominalized past participles. I discuss them one by one in the following sections.

#### 3.1.2.1 Common nouns

Common nouns differ from other noun types in their morpho-phonological structure as well as their morphosyntactic behavior. Structurally, common nouns in Gyeli consist minimally of a nominal stem and add maximally up to three prefixes, the first of which is tonal, as shown in the template in (85). The different prefix types are described in Chapter 4.1.1.<sup>5</sup>

(85) object linking H tone - noun class - similative marker - stem

Common nouns can thus take a larger variety and number of prefixes compared with other noun types: proper nouns can only take a similative prefix, as described in Section 3.1.2.2 and nominalized past participles can only take a nasal noun class prefix, as described in Section 3.1.2.3.

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<sup>5</sup>Further information as well as an explanation of terminological distinctions of ‘noun class’, ‘agreement class’ and ‘gender’ are provided in Chapter 5.2.

Another difference between common and other nouns is the former's potential for number inflection. While most common nouns (with the exception of uncountable nouns) have a singular and plural counterpart, as reflected by their pairing of different agreement and noun classes, proper nouns and nominalized past participles do not inflect for number.

On a phrasal level, common and proper nouns differ as well. In nominal possessive constructions, common possessor nouns require an attributive marker, as discussed in Chapter 5.5. In contrast, proper nouns take a distinct genitive marker instead, as described in Section 3.8.2.1. Nominalized past participles do not occur in possessive constructions.

In summary, a set of tests help to reliably identify whether a word is a common noun or not. A Gyeli common noun can:

1. serve as the subject of a clause
2. serve as the first constituent of a N + N construction
3. be modified by an agreeing demonstrative or possessive pronoun
4. possibly make a number distinction (even though not all nouns do so)

I discuss the number distinction in more detail in Section 3.1.3.

### 3.1.2.2 Proper nouns

Proper nouns, also called 'proper names', appear to be often viewed as one category and refer to names of people and places. In Gyeli, however, proper names of persons and proper names of places form two distinct subcategories of one noun type that I broadly call 'proper nouns'. While the two subcategories share some features in which they differ from common nouns, they also differ in a range of aspects. Table 3.3 lists the features that distinguish all proper names from common nouns as well as those in which person and place names differ from one another.

Feature	Person names	Place names
No noun class marker	✓	✓
No plural formation	✓	✓
No object linking H tone	✓	✓
Restriction to a few agreement classes	✓	✓
Similative prefix	✓	
Vocative suffix	✓	
Special genitive marking	✓	

Table 3.3: Features of proper names

I will elaborate on each of these aspects in the following.

In contrast to common nouns, proper names of persons and places never take noun class prefixes nor do they have singular/plural pairings. Names of people can, however, take the associative plural (AP) marker *bà* which precedes the proper name, as in *bà Àdà*, referring to Ada and his family or relatives or, depending on the context, to people that share character traits with Ada (i.e. people like Ada). The associative plural marker *bà* is not restricted to proper nouns, but is also used with common nouns and pronouns, as discussed in Section 3.10.1.4. As proper nouns do not take noun class prefixes, they do not provide any TBU to take an object linking H tone, as discussed in Chapter 4.1.1.4.

All proper names trigger agreement just like common nouns. In comparison to common nouns, they are very restricted in the agreement classes to which they are affiliated. All proper names of persons are a subcategory of class 1. In contrast, all proper names of places such as settlements, villages, towns, rivers, and countries are generally in class 7, with the exception of *kàmèrún* ‘Cameroon’ which is also in class 1. Since many of the place names are derived from common nouns,<sup>6</sup> place names can also agree in gender with the noun they are derived from. For instance, the village name *Ngòló* is derived from the Bulu word *nkôl* ‘hill’.<sup>7</sup> Since the cognate *nkùlé* ‘hill’ in Gyeli belongs to gender 3/4, the village name can trigger agreement pat-

<sup>6</sup>The source noun of place names does not necessarily have to come from Gyeli, but could come from another language in the area. Still, the original meaning is recognized and allows for other agreement classes than class 7. Also, even though there are some lexical differences, cognates across languages of the area are often recognizable to speakers and are found in the same gender.

<sup>7</sup>The Bulu name for the village is *Nko’olong*.

terns both in class 7 and class 3.

Person names feature a range of characteristics that place names do not exhibit. Names of persons productively take the similative prefix *ná* in the derivation of female names, as discussed in Chapter 4.1.1.1. In contrast, I did not find any place name with this prefix. Person names can further take the vocative suffix *-o*. The vocative suffix never attaches to a place name, but to a few common nouns of relation that can be used as an address, such as *nyá-ò* ‘mother’ and *tá-ò* ‘father’. The use of the vocative is generally, however, not restricted to nouns, but the morpheme can also attach to other parts of speech, as discussed in Chapter 4.1.2.6.

Finally, person and place names differ in their marking of N + N genitive constructions when the possessor is a proper name. As shown in (86), place names behave like common nouns and take an attributive marker while person names take a special genitive marker.

- (86) a. person name

j-íñò      **ngá** Nampoundi  
le5-name GEN Ø1.PN

‘the name of [the woman] Nampoundi’

- b. place name

j-íñò      **lé**      Ngòló<sup>8</sup>  
le5-name 5:ATT Ø7.PN

‘the name of [the village] Ngolo’

- c. common noun

j-íñò      **lé**      síngì<sup>8</sup>  
le5-name 5:ATT Ø7.cat

‘the name of the cat’

More information on attributive and genitive markers is provided in Sections 3.8.3.2 and 3.8.2.1.

**Ethnographic note on naming strategies** The Bagyeli have bipartite names, consisting of a vernacular name that is followed by a Christian French name.<sup>8</sup>

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<sup>8</sup>The sample of proper names comprises 111 female and male names and covers all proper names from three Gyeli villages, namely Ngolo, Bomnapenda, and Bibira. It also includes some of the names from yet other villages such as Lebdjom (in the Basaa speaking area) and Ebobissé (within Kribi town).

Taking a Christian name seems to imitate the naming strategy of the Bantu farmers since Christianity does not play a big role in most Gyeli villages. Unless a Gyeli village is in very close contact and on good terms with their farming neighbors, the Bagyeli tend not to go to church and I do not know of any Gyeli village that has their own church at the time of writing. Since the Christian religion is very strong among the Bantu farmers, however, claiming to be Christian in front of outsiders and having a Christian name seem to serve at reducing stigmatization and creating common ground between the Bagyeli and Bantu farmers. Also, the Bagyeli who attend school are more likely to use their Christian name, at least officially, since it is required for enrollment. In practical terms, however, I have met a few Bagyeli who had forgotten their Christian name. This is not implausible given that the Bagyeli do not call each other by their Christian, but by their vernacular name, and that there is often no official documentation such as birth certificates or ID cards that would remind people of their names.

The vernacular name is either considered typical Gyeli or a name that is found in other languages of the area as well. If a name occurs in other languages as well, it is most often shared with the Kwasio dialects Mabi and Ngumba, even if the person was born in, for instance, the Bulu contact region. If a name is shared by other languages than Mabi and Ngumba, such as Basaa, Bulu or Fang, it is almost certainly predictable that the person comes from that specific contact region.

Many of the vernacular names have a (derived) meaning, often from the plant world or animal kingdom. Also, many of them are not gender-specific, but can be used for men and women alike. For others, female names can be derived from some male names. The derivations of a female from a male name are numerous and seem largely unpredictable. Differences between a male and a female form of the same name encompass tone differences as in *Mimbe* (male: *Mimbɛ*, female: *Mimbɛ̄*), different prefixation (*Mgbâ* (M) > *Mímgbâ* (F) and *Sàmè* > *Màsámè* (F)), as well as denasalization of a final vowel (*Mbò* (F) > *Mbɔ̄* (M)). The most productive derivation strategy is through the similitative prefix *Na-* as in *Nenze* with its male counterpart *Nze* or *Nandtoungou* which is derived from *Ntoungou*. Table 3.4 provides examples of vernacular names as found amongst my consultants and Bagyeli from other Gyeli villages. The table<sup>9</sup> specifies whether a name is used for

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<sup>9</sup>A blank cell in the table means that no certain information is available. In contrast,

men and/or women,<sup>10</sup> its potential use in other languages of the area, and its meaning (if known).

The orthography of names<sup>11</sup> is a mix between Bantu and French notation strategies which, in some parts, seem to lack a strict convention. For instance, the sound /u/ can be represented by either the French style *ou* or the Bantu notation *u*. A word-final /e/, as in *Mamende* or *Mabalé*, can either be written with plain *e* or with the French style *é*; accents in local orthography do not mark tone. Other versions seem to be admissible as well, for example varying between *Mabale*, *Mabalé*, *Mabali*, and potentially *Mabally*. This variation can be explained both by idiosyncratic preferences as well as dialectal variation in pronunciation.

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a hyphen (in the Meaning column) means that speakers state that there is no associated meaning with a name. Languages are abbreviated with their ISO code: gyi - Gyeli, nmg - Kwasio (mostly Mabi in this case), fan - Fang, bum - Bulu, bas - Basaa.

<sup>10</sup>The superscripted <sup>D</sup> after the gender means that the name has a counterpart in the opposite sex: Mandzoué (F) > Mandzong (M), Mba (M) < Mimba (F), Mimbê (F) > Mimbê (M), Nanze (F) > Nze (M), Nandtoungou (F) > Toungou (M), Tsimbo (F) > Batsimbo (M).

<sup>11</sup>The orthography is provided by different Mabi speakers since the Gyeli speakers are mostly illiterate.

Name	Gender	Languages	Meaning
Ada	M, F	gyi, nmg, fan, bum	—
Bibanga	F	gyi, nmg, fan	—
Bikanda	M, F		
Biyang	M	gyi, nmg	remedy
Bouolpuma	M	gyi	rotten breadfruit
Bwedila	M	gyi, nmg	—
Kimpile	F		
Luonga	F	gyi, nmg	group
Mabalé	M	gyi, nmg	
Mambi	M	gyi	behavior
Mandzoué	F <sup>D</sup>		
Manligui	F		
Mba	M <sup>D</sup>	gyi	rank
Mbiambo	F	gyi	plenty
Mimbanji	M	gyi	arbalest, crossbow
Mímbê	F <sup>D</sup>	gyi, bas, bum	—
Minlar	M	gyi	union
Nalingui	F	gyi, nmg	—
Nanze	F <sup>D</sup>	gyi, nmg, bum, bas	panther
Nandtoungou	F <sup>D</sup>	gyi, nmg	—
Nashuong	F	gyi	young palm heart?
Ngolo	F	gyi, nmg	—
Ngo Minsem	F	gyi, bas	daughter of Minsem
Nguiamba	M		
Ngusa	M	gyi, bas	—
Nziwu	M	gyi, nmg	Great antelope
Sedyua	M	gyi, nmg	derived from civet?
Tsimbo	F <sup>D</sup>	gyi, nmg	outcast

Table 3.4: Gyeli proper names (in local orthography)

In addition to the vernacular and Christian name, many of my consultants, both men and women, have nicknames by which they are consistently called in everyday life. They acquire their nicknames either through their parents or peers or even sometimes come up with a nickname on their own. Usually, nicknames refer to something that a person has achieved or say

something about the person's character. Nicknames also come from Western languages (French, English). Examples of nicknames used in Ngolo include *Bataillon* or *Délégué*. Also outsiders might receive a nickname; the project's cameraman was thus called *Freeboy*, presumably due to his nonchalant attitude towards kneeling in the mud while filming. There seems to be a tendency to pick nicknames originating from other languages, as is particularly obvious with Western words. Local languages also provide nicknames, for instance *àválà tíd* 'red animal' from Bulu which was given to a woman for her bright color of skin.

### 3.1.2.3 Nominalized past participles

Nominalized past participles are defective nouns that are of the most deviant noun type. Their category label does not imply that there are non-nominalized participles. All nouns of this category are derived from verbs and function like a past participle, as illustrated in (87). More information on the derivation process is provided in Chapter 4.2.1.6.

- (87) yî nkèlá  
 yî n-kèl-a  
 7.ID N-hang-NOM  
 ‘It is hung up [lit.: a hung-up one].’

Unlike full nouns, nominalized past participles never allow a plural form. Thus, while the nominal predicate in (88a) takes the plural noun class marker *ba-*, agreeing in number with the subject, this is not the case for the nominalized past participle in (88b).

- (88) a. Àdà nà Mambì báà bàngèlénè  
 Àdà nà Mambì báà ba-ngèlénè  
 Ø1.PN COM Ø1.PN 2.COP ba2-teacher  
 ‘Ada and Mambi are teachers.’
- b. Àdà nà Mambì báà mbánâ  
 Àdà nà Mambì báà m-bán-a  
 Ø1.PN COM Ø1.PN 2.COP N-marry-NOM  
 ‘Ada and Mambi are married [lit.: are married ones].’

The occurrence of nominalized past participles is restricted to the predicate position of a STAMP copula construction (Chapter 3.9.1), as shown in

(87) and (88). Consequently, they do not serve as an argument or adjunct, unlike common and proper nouns. Given their distributional restriction, they never occur in a position where they would trigger agreement, for instance through the addition of agreement targets in the predicate NP. Likewise, speakers would not replace the nominalized past participle through a pronoun that could indicate the affiliation to an agreement class.

Another hypothesis would be to consider these forms as verbs, given their verbal stem and translation. I am ruling this option out: despite significant differences from common and proper nouns, I classify nominalized past participles as a defective noun type. Evidence for this comes from their prefixation and tonal behavior, and their distribution in sentences which distinguishes them from verbs. Morphologically, verbs do not take prefixes, but only suffixes. The nominalized past participle, however, consistently takes a nasal prefix. Verbs only have tonal specifications for the first syllable while the potential second and third syllables are underlyingly toneless and thus surface as L in isolation, as explained in Chapter 2.4. In contrast, nominalized past participles never surface L on the last syllables, but either H or HL. Also in terms of their distribution in sentences, nominalized past participle forms cannot be verbs since verbs follow the subject-tense-aspect-mood-polarity (STAMP) marker, as described in Chapter 3.9.1. These participles cannot combine with the STAMP marker. They only occur in STAMP copula constructions, as exemplified in (89) and discussed in more detail in Chapter 7.1.1. There are several predication types for copula constructions, including nominal and adjectival copulas, but never verbs.

- (89) a. ndáwò nyíî mbúyâ (nà viyó)  
          ndáwò nyíî m-búy-a (nà viyó)  
          9Ø.house 9.COP N-destroy-NOM COM 8Ø.fire  
          ‘The house is destroyed (by fire).’
- b. ndáwò nyí búyá nà viyó  
          ndáwò nyi-H búy-a-H nà viyó  
          9Ø.house 9-PRES destroy-PASS-R COM 8Ø.fire  
          ‘The house is being destroyed by fire.’

The translation might also suggest a passive reading. There is a distinct passive form, which is discussed in Section 4.2.3.2 and exemplified in (89b). While the passive and the nominalized past participle are two distinct categories, both categories are, however, linked semantically and formally. In

terms of semantics, their subjects are the undergoer of an action while the agent would appear in an adjunct or not at all. This is true for both categories, but since the nominalized past participle is more about the result, the agent is mentioned very rarely.

Formally, both categories take a suffix *-a*. There are two possibilities to analyze *-a* with respect to the different categories. Either, one could posit that it is the same suffix which just takes different tonal patterns in different categories. Or one could assume two different suffixes *-a* which each come with their own tonal patterns for the passive and the nominalized past participle. I choose the second option, as reflected in the glosses. The reason for this is not only the different tone patterns associated with the different suffixes, but also a (synchronously) insufficient link between the two categories. Thus, glossing both suffixes *-a* as passive (and assuming that nominalization is primarily encoded through the nasal prefix in the nominalized past participle) presupposes a derivation chain with passivization as a necessary step. This assumption is, however, not justified since many verbs which have a nominalized past participle form lack a passive form: only 105 (27%) verbs take a passive form, but 325 (86%) have a nominalized past participle form.

### 3.1.3 Mass nouns and countability

Gyeli has a mass/count distinction like many languages in the world. Formally, one can distinguish nouns that occur both in a singular and a plural form, those that only come in a singular noun class, and those which only have a plural form. Nouns with a singular and a plural form are mostly countable. Typically, they describe material entities such as humans, animals, plants, tools and the like that come as individualizable objects.

Mass nouns are most frequently and regularly found in the transnumeral gender 6. (More information on the gender and agreement system is provided in Chapter 5.2.) Semantically, they include liquids, as in (90).

- (90) Liquid mass nouns
  - a. ma-jíwó ‘water’
  - b. ma-vúdó ‘oil’
  - c. ma-tàngò ‘palm wine’

- d. ma-vínó ‘pus’
- e. ma-nzálè ‘urine’
- f. ma-dyúmù ‘sperm’

Also deverbal event nouns of gender 6, as in (91), are uncountable. More information on their derivation process is provided in Chapter 4.2.1.4.

(91) Deverbal event nouns

- a. ma-nyû ‘drink (n.)’ > nyùlè ‘drink (v.)’
- b. ma-bwâsà ‘thoughts’ > bwâsa ‘think’
- c. ma-bwàlè ‘birth’ > bwàlè ‘be born’
- d. ma-sâ ‘game (playing)’ > sâ ‘do’
- e. ma-tálá ‘beginning’ > tálè ‘begin’
- f. ma-dìlá ‘funeral’ > dìlè ‘bury’

There are other mass nouns with only a plural form in other agreement classes, but they seem to be less frequent. They mostly belong to class 8 and comprise entities that usually occur as many, for instance *bè-sìngì* ‘spirits’. They also include deverbal nouns such as *bè-déwò* ‘food’ which is derived from *dè* ‘eat’.

Then there are nouns that only have a singular form. Most often, they are abstract nouns of class 7, as illustrated in (92).

(92) Abstract nouns

- a. dù ‘lie’
- b. sòmònè ‘complaint’
- c. ngòngòlé ‘sadness, compassion’
- d. pónè ‘truth’
- e. sónè ‘shame’
- f. mèvâ ‘pride’

There are a few other singular nouns without a plural form in other classes. Semantically, they describe mass entities which have a rather unspecified shape and lack clear-cut boundaries such as *pfùdé* ‘mold’ (cl. 9) or *dùwò* ‘sky’ (cl. 5). *bíwò* ‘bad luck’ (cl. 3) is another example of an abstract noun. Also a few nouns in agreement class 8 lack a plural form. This is

remarkable since class 8 is generally a plural class. As explained in Chapter 5.2.2, however, there are also singular nouns that trigger class 8 agreement, namely those that lack the CV- noun class prefix *be-*. Examples of singular-only class 8 nouns include *vísó* ‘sun’ and *vìyó* ‘fire’. More examples of uncountable nouns are given in Chapter 5.2.4 on inquorate genders.

Finally, there are nouns which display characteristics of both mass and count nouns. They have a singular and a plural form, and semantically designate granular aggregates such as *nsé/mì-nsé* ‘sand’ or *ndísì/mì-ndísì* ‘rice’. In their singular form, they behave like other uncountable nouns, for instance liquids, except that they occur in the singular. This becomes especially obvious when modified by quantifiers (see Section 5.5.1.4). If used in the plural form, these nouns get a reading of ‘different types of’ or ‘different units of’. In these cases, they grammatically behave more like countable nouns.

## 3.2 Verbs

Nouns and verbs constitute the two major word classes in possibly all languages in the world, as Viberg (2006: 408) points out. But what are verbs and how are they distinguished from nouns? Schachter & Shopen (2007: 9) provide a general, semantically based definition, stating that

“*Verb* is the name given to the parts-of-speech class in which occur most of the words that express actions, processes, and the like.”

Other properties that the authors highlight include, for instance, the verbs’ foregrounding of temporal relations as well as their function as predicates. After all, characteristics of verbs (as any other word class) are language specific and therefore, it makes sense to distinguish them based on a given language’s properties. In Gyeli, nouns and verbs are distinct in many ways. As shown in Chapter 2, they differ on phonological grounds, for example in their distribution of phonemes and tones, nouns allowing a larger degree of freedom while verbs restrict occurrences of consonants, vowels, and tones more. On a morphological level, nouns take prefixes which Gyeli verbs do not. In contrast, verbs take (extension) suffixes which is not the case for nouns. In terms of syntactic function, verbs serve canonically as predicates

while nouns (or noun phrases) constitute arguments to a given predicate. These various formal differences show clearly that nouns and verbs in Gyeli belong to different word classes.

In the following, I will first describe the structure of the verb. I then discuss different verb types, including main verbs and auxiliary verbs.

### 3.2.1 Verb structure

The Gyeli verb consists of a root that can take a valence-changing suffix, as shown in Table 3.5.

Slot	<b>Radical</b>	Prefinal
Function	<b>Root</b>	valence change

Table 3.5: The Gyeli verb structure

Table 3.5 indicates the “slot” in which the root and valence changing suffix occur and is based on the morphological Bantu verb schema by Gölde-mann (2003: 184). While the general Bantu verb schema has eight slots, four before the root and three after the root, Gyeli has a more reduced verbal structure. For instance, subject concord and TAM information are not encoded on the verb, but in a subject-tense-aspect-mood-polarity (STAMP) portmanteau morpheme (Chapter 3.9.1).

I follow the Bantuist tradition (e.g. Guthrie 1971, Hyman 1993, and Schadeberg 2003) in my terminological distinction between *radical* and *stem*. The radical, also called *root*, is the “irreducible core” (Guthrie 1971: 14) of the verb that cannot be parsed into further morphemes. In Gyeli, its phono-logical structure is typically C(C)VC-, but there are exceptions in surface forms pertaining to an additional vowel in some bisyllabic underived verbs (Section 3.2.1.1) and the deletion of the root final consonant in monosyl-labic verb forms (Section 3.2.1.3).

The root in Gyeli can function as an independent word without any fur-ther bound morphemes attached, as exemplified in (93) for monosyllabic verb roots. All monosyllabic verbs consist of a root only. Under derivation, a root final consonant (or variants thereof) will surface, as described in Sec-tion 3.2.1.3. This root final consonant is deleted in monosyllabic roots in order to adhere to an open syllable structure.

## (93) Monosyllabic roots

- a. dè ‘eat’
- b. kwê ‘fall’
- c. bvúj ‘break (tr.)’

Also some bisyllabic verb roots satisfy the criterion of an irreducible core, as in (94).

## (94) Bisyllabic roots

- a. bámɔ ‘scold’
- b. púndi ‘polish’
- c. gyàga ‘buy’

The root can take an extension or expansion derivation suffix that brings about a valence change. A list of all verbs in the database and their extension morphemes is given in Appendix I. The root and the potential suffix constitute the stem.<sup>12</sup> There are also bisyllabic verbs that consist of a root plus extension suffix, as shown in (95). Derivation with extension and expansion suffixes is described in Chapter 4.2.3.

## (95) Bisyllabic stems

- a. bè.n-a ‘be refused’ (passive extension -a)
- b. jì-bɔ ‘close sth.’ (-bɔ expansion)
- c. vú-lɛ ‘get rid of sth.’ (-lɛ expansion)

Thus, whether a bisyllabic verb consists of a root only, as in (94), or constitutes a stem with a root plus suffix, as in (95), depends on the synchronic function of the second syllable. In synchronic bisyllabic verb roots, the vowel of the second syllable is part of the lexeme since its shape is not predictable on morphophonological or morphosyntactic grounds. In contrast, in a bisyllabic stem, the second syllable functions as a valence changing suffix. A root vs. stem contrast can be found even with the same lexeme, as for instance with the root *bédɔ* ‘mount (tr.)’ whose passive form *béd-a* ‘be

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<sup>12</sup>Traditionally, the stem additionally includes the *final vowel* that encodes tense-aspect-mood information in more agglutinative Bantu languages. In these languages, Bantuids use the term *base* to designate the root and potential derivation suffixes without the final vowel. In Gyeli, however, there is no final vowel. Therefore, this distinction is not necessary.

mounted' is analyzed as a stem. A more detailed discussion on the status of the final vowel as part of the root is given in Section 3.2.1.1.

The number of transparent derivational suffixes a root can take is restricted to one.<sup>13</sup> Derivational extensions can, however, come as mono- or bisyllabic suffixes, allowing a maximum of three syllables in a stem, as shown in (96). As indicated by the dot for syllable boundaries, syllable and morpheme boundaries do not always coincide. In fact, if the derivation suffix starts with a vowel, the root final consonant gets resyllabified as the onset of the extension vowel.

(96) Trisyllabic stems

- a. gyá.mb-ε.lε ‘cook for sb.’ (applicative extension *-ele*)
- b. lè.b-a.la ‘follow each other’ (reciprocal extension *-ala*)
- c. dyé.g-ɔ.wɔ ‘get in a leaning position’ (positional extension *--cwɔ*)

In the following, I will discuss the shape of the verb root in more detail, focusing on two issues. First, I explore the status of the Gyeli stem final vowel, arguing that it does not occupy the “final” slot of Güldemann’s (2003) morphological Bantu verb structure. I then describe root final consonants and their variants.

### 3.2.1.1 Stem final vowel

Though the Gyeli verb structure is significantly different from Güldemann’s (2003) morphological verb schema, one might wonder whether Gyeli does have a vowel in the “final” slot which is typically related to tense-aspect-mood. Due to a canonical CV syllable structure, Gyeli verbs always end in a vowel, but they are by no means comparable to the “final vowel” in the “final” slot found in eastern and southern Bantu languages where the final vowel has a grammatical function. In contrast, Gyeli root and stem final vowels are lexically specified. As discussed in Chapter 2.2.1, vowel quality is restricted by the stem’s syllable length. In monosyllabic verbs, any of the seven vowels, except for /o/, can occur in final position, while bisyllabic verbs only allow five vowels in this position, /i/, /o/, /ɛ/, /ɔ/, /a/. Trisyllabic verb stems only allow /ɛ/, /a/, and /ɔ/ as a final vowel.

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<sup>13</sup>As discussed in Chapter 4.2.3, two categories, e.g. applicative and passive, can be merged into one morpheme through vowel change of the applicative suffix in trisyllabic verbs.

Another argument not to consider Gyeli stem final vowels as occupying the final slot of Güldemann's (2003) Bantu verb structure comes from verb extensions. When Bantu languages such as Swahili add an extension morpheme in the prefinal slot, the final vowel is not necessarily affected by this. The Swahili stem *chek-a* 'laugh', for instance, keeps the final vowel *-a* even if the stem is extended by a causative morpheme *-Ish-*: *chek-esh-a* 'make laugh'. Extension morphemes in Gyeli, however, come with their own final vowels and override a bisyllabic root final vowel as in *jílɔ* 'be satisfied' → *jíl-ɛsɛ* 'make satisfied'.

While all verb final vowels in Gyeli are lexically specified, they differ with regards to their morpheme affiliation. There are three types of verb final vowels. First, a verb final vowel is the nucleus of the verb root in monosyllabic verb forms. It is tonally specified and does not usually change in derived forms. The root vowel ends up in the final position because the final root consonant is deleted, as illustrated in (97). The deleted root final consonants in parentheses only surface with derived forms of the verb, as with the passive forms in (97). (More information on root final consonant deletion is provided in the next section.)

- (97) a. *dyà(y)* 'sing' < *dyày-a* 'be sung'
- b. *kwà(g)* 'grind' < *kwàg-a* 'be ground'
- c. *ndà(ng)* 'cross' < *ndàng-a* 'be crossed'

Second, in bisyllabic verb roots, the final consonant is followed by a lexicalized (underlyingly toneless) vowel. This vowel is synchronically part of the root since its quality is not predictable and does not have any grammatical function. In derived forms, this vowel is deleted, as shown in (98). The fact that these additional root vowels are not specified for tone, a property they share with verb extension and expansion suffixes, suggests that diachronically they were derivation suffixes as well.

- (98) a. *fùlɔ* 'descend' < *fùl-a* 'be descended'
- b. *dyòdɛ* 'deceive' < *dyòd-a* 'be deceived'
- c. *gyánga* 'work' < *gyáng-ɛsɛ* 'make sb. work'

Final vowels of monosyllabic verb forms with a diphthong or long vowel as nucleus are treated the same way. As shown in (99), the second vowel of the diphthong gets deleted in derived forms.

- (99) a.  *bvúj* ‘break (tr.)’ <  *bvú.g-ε* ‘make break’  
       b.  *dyùù* ‘kill’ <  *dyù.w-a.la* ‘kill each other’  
       c.  *níè* ‘be beautiful’ <  *ní.ng-ε.se* ‘make beautiful’

Historically, these verbs were likely bisyllabic, as the examples in (98). This would have involved a process in which first the root final consonant got deleted and then the vowel of the second syllable was merged with the first syllable’s nucleus. Synchronously, the second vowel of the diphthong is clearly part of the root vowel since it is specified for tone.

The third type of stem final vowel is specified through the derivation suffix a root can take, as shown in (100).

- (100) a.  *dyúw-εlε* ‘listen to’  
       b.  *ntég-ala* ‘bother each other’  
       c.  *pwàs-ɔwɔ* ‘stretch oneself out’

The segments of derivation suffixes do not change in different tense-aspect-mood categories, but their tonal patterns do (Chapter 6.2.1).

### 3.2.1.2 Suppletive root vowels

Gyeli has a few verbs which change their root vowel in (some) derived forms. I view these as lexically specified exceptions since they do not follow any predictable pattern and are generally rare. All suppletive root vowel forms are given in Table 3.6.

Ten out of the thirteen suppletive root vowels are regular in the sense that all derived forms have the same suppletive vowel. For instance,  *lùà* ‘curse’ takes  *ò* as root vowel in its reciprocal, passive, and causative forms. Also, the suppletive vowels retain the same tonal pattern as in the underived form, namely H for underived verbs which have a HL pattern and L for L underived verbs. There are a few more irregular cases, however, which have different suppletive vowels for different derived forms and/or tonal changes on the suppletive vowel.  *bwè* ‘catch’, for example, retains /e/ in the reciprocal form  *bëyala*, but loses the glide /w/, while it has a suppletive vowel /u/ in the passive form  *bùlε*. All root vowels remain L. In contrast,  *kwê* ‘fall’ has a regular reciprocal form  *kwéyala*, both in terms of the vowel and its tone, but an irregular causative form  *kùɛsε* with both a suppletive vowel

Underived form		Reciprocal	Passive	Causative	Variants
lùà	'curse'	lòg-ala	lòg-a	lòg-εsε	ua/ɔ
lúà	'whistle'	lóng-ala	lóng-a		ua/ɔ
túà	'move places'	tóg-ala		tóg-εsε	ua/ɔ
bwà	'become big'	bòg-ala			wa/ɔ
bwádɔ	'wear'	bód-ala		bód-εsε	wa/ɔ
bwèdɔwɔ	'be tasty'			bód-εsε	we/ɔ
bwè	'catch'	bèy-ala	bùl-ɛ		we/u
kwé	'fall'	kwéy-ala		kù-εsε	we/u
lâ	'harvest'	léy-ala	léy-a		a/e
lága	'contaminate'	lég-ala		lég-εsε	a/e
bô	'lie down'		búg-a		o/u
yíè	'dodge'	yé-ala			iɛ/e
dè	'eat'	dý-ala	díb-a	díl-εsε	e/i

Table 3.6: Root final consonant variants (monosyllabic verbs)

and a tonal change from H to L. Finally, *dè* 'eat' has the same suppletive vowel /i/ for all derived forms, but all derived forms have a H instead of a L tone.

Most verbs with suppletive root vowels have monosyllabic stems containing the diphthong /ua/ or the glide /w/ which is changed to /ɔ/ in derived forms. The verb of the underived form is, however, not predictive of a necessary vowel change in derived forms since verbs generally keep their glides and vowels in derived forms. (101) gives an opposition between a regular and an irregular form.

- (101) a. bwà 'give birth' → bwàl-εsε (CAUS)  
       b. bwà 'become big' → bòd-ala (RECIP)

Other suppletive forms, for instance from /a/ to /e/ in *lâ* 'harvest' or /e/ to /i/ in *dè* 'eat' seem even more exceptional.

### 3.2.1.3 Root final consonant variants

Generally all verb roots (with a few exceptions) have a final consonant which is lexically specified and only surfaces when a vowel initial derivation suffix attaches. In monosyllabic stems (93) and with derivation suffixes that are consonant initial such as *-lɛ* or *-bɔ* in (95), the root final consonant is deleted. In turn, when deriving a monosyllabic verb, the question is which root final consonant will it have.

As shown in Table 3.7, the majority of monosyllabic stems have the same root final consonants in all their derived forms.<sup>14</sup> The types of consonant that can consistently appear root finally are limited to seven: /ŋg/, /g/, and /y/ are the most frequent ones while /l/, /s/, /n/, and /w/ are rare. There are two exceptions to this general pattern. First, eleven monosyllabic verb stems have different root final consonants with different verb extensions, and second, there are six verbs which consistently take no root final consonants in any of their forms.

Root ending	Frequency	Example
<b>Consonant</b>	<b>69 (80.1%)</b>	
/ng/	23	sâ ‘vomit’ → sângala ‘vomit together’
/g/	22	dvùj ‘hurt’ → dvùgese ‘make hurt’
/y/	17	bà ‘smoke’ → bàyaga ‘smoke (by itself)’
/l/	3	vô ‘be calm’ → vôlese ‘make calm’
/s/	2	sôd ‘continue’ → sôsélé ‘continue with sth.’
/n/	1	nyê ‘see’ → nyénala ‘see one another’
/w/	1	dyû ‘kill’ → dyúwala ‘kill one another’
<b>Variants</b>	<b>16 (18.6%)</b>	see Table 3.8
<b>No consonant</b>	<b>1 (1.2%)</b>	dyâ ‘lie down’ → dyáala ‘lie down together’

Table 3.7: Root final consonants in the derivation of monosyllabic verbs

I do not include bisyllabic verb roots in this analysis since there is never a question which root final consonant will surface as there are no forms in which the consonant gets deleted: all bisyllabic verb roots end in a vowel. Comparatively, bisyllabic verb roots allow for a larger variety of root final consonants, including frequently also /m/, /d/, /mb/, /nd/, and /ŋg/.

The diversity of root final consonants surfacing in derived verb forms likely has a historical explanation. Some monosyllabic verb stems may originate from a diachronic extension that got reduced and merged with the monosyllabic root. In the process, the onset consonant of the second syllable—the historical extension suffix—got lost in monosyllabic forms and the suffix vowel got merged with the root vowel. This reduction is synchronically reflected in monosyllabic verb stems with diphthongs and long vowels, as discussed in Chapters 2.2.2 and 2.2.3. The original consonants still surface in some derived forms. This scenario would explain why only a

<sup>14</sup>This is based on 86 monosyllabic verb stems. As discussed in Chapter 2.3.3.4, there are 88 monosyllabic verb stems in my database. Yet, not all of them undergo derivation. *dò* ‘negotiate’ and *kè* ‘go’ do not have any derived forms and therefore the underlying root final consonant never surfaces.

limited number of consonants can now serve as root final consonants: they are related to a limited number of suffixes, some of which do not exist anymore.

The quality of the root final consonant that will surface in the derivation of monosyllabic verbs is not (entirely) predictable on phonological grounds, as the oppositions in (102) to (104) show.

- (102) a. bwà ‘give birth’ → bwàl-ɛsɛ ‘make give birth’
  - b. bwà ‘become big’ → bòg-ala ‘become big together’
- (103) a. bâ ‘marry’ → bán-ala ‘marry each other’
  - b. bà ‘smoke’ → bày-ala ‘smoke together’
- (104) a. nyâ ‘suckle’ → nyáng-ɛsɛ ‘breast-feed’
  - b. nyàà ‘defecate’ → nyàg-ɛsɛ ‘make defecate’

There are, however, some tendencies to predict the underlying root final consonant based on the phonological shape of the monosyllabic verb stem. Monosyllabic stems ending in nasal vowels, for instance, almost exclusively have /ŋg/ as root final consonant, as exemplified in (105). This ties in with the scenario of a historical extension suffix that has been lost: /ŋg/ may have been the onset of the suffix that was lost, while nasality survived on the root vowel.

- |       |  |
|-------|--|
| (105) | lâ ‘pass’ → làngelɛ ‘let pass, spend time’ |
|       | kè ‘shave’ → këngala ‘shave one another’   |
|       | sâ ‘vomit’ → ságese ‘make vomit’           |
|       | dyû ‘be hot’ → dyúngelɛ ‘heat sth.’        |

Another tendency is found with monosyllabic verb stems containing a diphthong. Their final root consonant is almost exclusively /g/, as shown in (106), with a few exceptions concerning the diphthong /ie/ which sometimes may also take /y/ as in *tsíyala* ‘cut each other’, derived from *tsié* ‘cut’.

- |       |  |
|-------|--|
| (106) | dvùò ‘hurt (intr.)’ → dvùgala ‘hurt one another’ |
|       | lùà ‘curse’ → lòga ‘be cursed’                   |
|       | tòà ‘boil (intr.)’ → tògala ‘boil together’      |
|       | líè ‘cede, let’ → lígala ‘let to one another’    |

All other root final consonants seem not to be predictable on phonological grounds.

There are two exceptions to the general pattern described so far. First, in a few cases, the same underived monosyllabic verb stem has different root final consonants with different extension morphemes. Table 3.8 gives an exhaustive list of all final root consonant variants that occur in the database. While there are usually only two variants for the same lexical root, *dè* ‘eat’ shows that there can be even three variants.

Underived form	Reciprocal	Passive	Causative	Applicative	Variants
bâ ‘marry’	bán-ala		bál-ese		n/l
bwè ‘catch’	bèy-ala	bùl-ε			y/l
vû ‘leave’	vúy-ala	vúm-a			y/m
sî̄ ‘approach’	síng-ala			sís-εle	ng/s
níye ‘be beautiful’	níndy-ala		níng-εse		ng/ndy
vè’è ‘try on clothes’	vèg-ala			vè’ele	g/’
dyà ‘sing’	dyà-ala	dyày-a			y/none
kwê ‘fall’	kwéy-ala		kù-εse		y/none
dâ ‘draw water’	dàng-ala	dâ-àla		dâ-àle	ng/none
dyò ‘laugh’	dyò-ala	dyòlas-a	dyòl-εse		l/none
dè ‘eat’	dìy-ala	díb-a	díl-εse		y/b/l

Table 3.8: Root final consonant variants (monosyllabic verbs)

Root final consonant variants likely occur for the same reason that root final consonants take different shapes generally. Gyeli probably had more derivation suffixes diachronically and possibly allowed more suffixes than the synchronic limit of three syllables. Different final root consonants may reflect remnants of former extension suffixes or diachronic stacking of derivation suffixes. For instance, /l/ could be related to the expansion suffix *-lε*, as discussed in Chapter 4.2.3.7. /s/ in *sís-εle* ‘approach sb.’ could be related to the causative suffix *-εse*.

Other variant forms may rather reflect an ongoing reduction of segmental material, as in *vè’è* ‘try on clothes’ which has retained a probably older final consonant /g/ in its reciprocal form *vèg-ala* that got reduced to a glottal stop in the monosyllabic and applicative forms. The next step on the continuum of segmental reduction is the complete loss of the final root consonant.

Final root consonant variants also occur with bisyllabic verb roots, but they are less frequent. Table 3.9 shows all their occurrences found in the

database.

Underived form	Reciprocal	Passive	Causative	Applicative	Variants
dyúwɔ ‘hear’	dyúw-ala		dyúg-εsε	dyúw-εlε	w/g
líyε ‘leave’	líg-ala				y/g
vòwa ‘wake up’	vòw-ala		vòl-εsε		w/l
tìnɔ ‘harvest tubers’	tìn-ala	tìl-ε			n/l
bíyɔ ‘hit’	bín-ala	bíl-a	bíl-εsε	bíy-εlε	y/n/l

Table 3.9: Root final consonant variants (bisyllabic verbs)

The second exception concerns the lack of a root final consonant in which case adjacent vowels are allowed. Only one verb is known that has a derived form with a zero final root consonant, but no variant consonant in another derived form: *bvû* ‘think’ whose reciprocal form is *bvúala*. In all the other cases of zero root final consonants, there is another consonant variant in another derived form. The variants of zero-consonant and root final consonant in derived verb forms are listed in Table 3.8. Other variants of zero-consonants do not show in derived verbs, but in the nominalized past participle (NPP) forms which are discussed in Chapter 4.2.1.6. All instances of variants showing up only in the nominalized past participle are given in Table 3.10.

Underived form	Reciprocal	NPP	Variants
dyâ ‘lie down’	dyá-ala	ndyáy-â	none/y
sâ ‘do’	sá-ala	nsáy-â	none/y
yíè ‘avoid’	yé-ala	nyéy-â	none/y
kâ ‘wrap’	kâ-ala	nkâl-â	none/l
láà ‘tell’	lá-ala	nláw-â	none/w

Table 3.10: Zero root final consonant variants in nominalized past participles

As described in Chapter 2.3.3.4, there is some variation in the production of vowel sequences in verb stems. While synchronically vowel sequences are found in verb stems, these have alternate forms with a glottal stop, as illustrated by the two variants in (107).

- (107) a. múεlε ‘nibble’ → mó-ala (RECIP) → mó-εsε (CAUS)  
       b. mó’εlε ‘nibble’ → mó’-ala (RECIP) → mó’-εsε (CAUS)

The exact distribution of one variant in comparison to the other is not

known. There is variation across speakers as well as within the same speaker. The tendency seems, however, to go towards the loss of segmental material.

### 3.2.2 Verb types

I distinguish three different verb types in Gyeli, based on their morphosyntactic behavior: main verbs, auxiliary verbs, and light verbs. I define and describe each of these and their potential sub-types in turn.

#### 3.2.2.1 Main verbs

I view the main verb as the lexical verb in a phrase which, according to Anderson (2011b: 796), contributes lexical content to an expression. I use both terms, main verb and lexical verb, interchangeably. The main verb in Gyeli always serves as the semantic head of a clause, but is only the syntactic, finite head in simplex predicate constructions. In complex predicate constructions, the syntactic head is an auxiliary or semi-auxiliary (Section 3.2.2.2), while the main verb appears in its non-finite form. In contrast to true auxiliaries, main verbs can occur on their own in a simplex predicate construction.

In the simple predicate construction in (108), the main verb *gyésɔ* ‘look for’ is the syntactic and semantic head of the clause.

- (108) mùdâ á gyésɔ bédéwɔ  
       m-ùdâ a-H gyésɔ-H H-be-déwɔ  
       N1-woman 1-PRES look.for-R OBJ.LINK-be8-food  
       ‘The woman looks for food.’

As the syntactic head, the main verb is inflected for its tense-mood category, as described in Chapter 6.2.1. In this case, *gyésɔ* ‘look for’ is a finite form, carrying a realis marking H tone.

In contrast, in a complex predicate construction, the main verb is the semantic head of the clause. An auxiliary or light verb serves as the syntactic head, as exemplified in (109) with the negative subjunctive auxiliary verb *díúù*. In this example, the auxiliary is the finite verb encoding the tense-mood category it belongs to. The main verb takes its non-finite form, namely with an underlyingly toneless final vowel, as described in Chapter 2.4.1.3.

- (109) mùdâ á dúù gyésò bédéwò  
 m-ùdâ a-H dúù gyésɔ H-be-déwɔ  
 N1-woman 1-PRES NEG.SBJV look.for-R OBJ.LINK-be8-food  
 ‘The woman must not look for food.’

The non-finite form in (109) is, at the same time, the **infinitive** form. Infinitive forms in Gyeli do not receive any special morphological or tonal marking, but are identical to their citation form. As shown in Chapter 2.4.1, second and third syllables are underlyingly toneless, surfacing with a L tone. Infinitive forms are found in complex predicates (109) as well as two types of subordinate clauses. First, they occur in subordinate infinitival clauses (Chapter 8.2.3.4), as in (110).

- (110) [pámɔ tísònì]<sub>INF</sub> á súmélé bùdì  
 pámɔ tísònì a-H súmélε-H b-ùdì  
 arrive Ø7.town 1-PRES greet-R ba2-people  
 ‘Having arrived in town, he greets the people.’

These subordinate infinitival clauses can also be negated with the negative auxiliary *tí*, as in (111).

- (111) à múà nà bábè [tí wúmbè wè]  
 a múà nà bábè tí wúmbε wè  
 1S be COM Ø7.illness NEG want-R die  
 ‘He was sick, without wanting to die.’

And second, the main verb of certain attributive clauses with the complementizer *nâ* appears in its infinitival form, as shown in (112) and explained in more detail in Chapter 8.2.2.4.

- (112) mùdâ à lí sìsèlè nónégá [nâ nyê nà  
 m-ùdâ a lí sìs-εlε n-ónégá nâ nyê nà  
 N1-woman 1.PST RETRO scare-APPL 1-other COMP 1 COM  
 kósɛ]  
 kósɛ  
 cough  
 ‘The woman scared the other by her coughing.’

Infinitives are also found in non-verbal clauses where the infinitive is linked with the STAMP copula *yî* of agreement class 7 to its predicate, as shown in (113). This construction is further described in Chapter 7.1.1

- (113) jíwò yî bíwò  
jíwò yî bíwò  
steal 7.COP bad  
‘To steal is bad.’

Verbal clauses are discussed in Chapter 7.2 and complex predicates are explained in more detail in Chapter 6.3.

In contrast to other types of verbs, lexical verbs take a range of different valencies (intransitive, transitive, ditransitive), as illustrated in (114).

- (114) a. Mâmbì à            kéké                                 intransitive  
Mâmbì a            kéké-H  
Ø1.PN 1.PST1 fall-PST  
‘Mambi fell.’
- b. Mâmbì à            béké            lé                                 transitive  
Mâmbì a            béké-H            lé  
Ø1.PN 1.pst plant-R Ø7.tree  
‘Mambi planted a tree.’
- c. Mâmbì à            véké            Bìyá mántúà                                 ditransitive  
Mâmbì a            véké-H            Bìyá mántúà  
Ø1.PN 1.PST give-R Ø1.PN ma6-mango  
‘Mambi gave Biyang mangoes.’

The valency of a verb is lexically specified, but can also be changed through verb extensions, which are explained in Chapter 4.2.3. Valency change and verb extensions also relate to different voices a main verb can express, such as active, middle voice, and passive voice. Examples of each are shown in (115).

- (115) a. Mâmbì à vîdéké mántúà  
Mâmbì à vîdéké mántúà  
Ø1.PN  
‘Mambi turned the car.’
- b. mâtúà à            vîdégá  
mâtúà a            vîd-ega-H  
ma6-car 1.PST turn-AUTOCAUS-PST  
‘The car turned (around).’
- c. mâtúà mà vîdáké     (nà Mâmbì)  
mâtúà mà vîd-a-H     nà Mâmbì  
ma6-car 6.PST turn-PASS-PST COM Ø1.PN  
‘The car was turned (by Mambi).’

In the following, I will discuss two subtypes of main verbs, namely main verbs that require a preposition with their object and main verbs that require a cognate object.

**Main verbs requiring a preposition with their object** A few main verbs require a preposition with their object argument. This seems to generally be a rare case since this only includes 14 verbs (3.7%) of the 377 verb database. In most cases, the comitative preposition *nà* is required. All twelve cases are listed in Table 3.11.

báàla nà	'repeat sth.'
bágá nà	'stop sth.'
bísi nà	'pay attention to'
bvúda nà	'quarrel'
gyíka nà	'resemble sb./sth.'
kàmbó nà	'defend sth.'
làdo nà	'meet sb.'
náàta nà	'stick to'
njì nà	'bring, come for'
táàla nà	'judge sb.'
túwane nà	'meet with sb.'
vúba nà	'hug sb.'

Table 3.11: Main verbs requiring the comitative *nà*

The other preposition that links an argument is the directional *bà*. It occurs only in two verbs of the database, namely *síi bá* 'approach sth.' and *síso bá* 'approach sth.' Obviously, the prepositions *nà* and *bá* occur more frequently in the text corpus, but they are usually found in adjunct noun phrases.

**Main verbs with cognate objects** Gyeli has a few verbs that take a cognate object as argument, as in (116) where the verb is marked in bold.

- (116) a. **gyá** gyà 'sing (a song)'  
 b. **sá** sálé 'work (a work)'  
 c. **ké** kèndè 'walk (a walk)'

All these verbs can also take a different lexeme as an object, as for instance, in (117a). They cannot appear without an object, as (117b) shows.

- (117) a. m<sup>é</sup>      k<sup>é</sup>      tísɔnì  
           m<sup>ε</sup>-H    k<sup>è</sup>-H tísɔnì  
           1S-PRES go-R Ø7.town  
           'I go to town.'  
       b. \*m<sup>é</sup>      k<sup>è</sup>  
           m<sup>ε</sup>-H    k<sup>è</sup>  
           1S-PRES go  
           'I walk.'

At the same time, the cognate objects can also appear with other verbs, as shown in (118).

- (118) y<sup>ò</sup> bá      téé      k<sup>è</sup>nd<sup>è</sup>  
       y<sup>ò</sup> ba-H    téè-H      k<sup>è</sup>nd<sup>è</sup>  
       so 2-PRES start.walking-R Ø7.walk  
       'So they go on a walk.'

### 3.2.2.2 Auxiliaries and semi-auxiliaries

A set of verbs in Gyeli occur as the finite verbal element in a complex predicate construction without (fully) contributing to its lexical content. (Complex predicate constructions are discussed in Chapter 6.3.) I call these verbs “auxiliaries”, which I subdivide into true auxiliaries and semi-auxiliaries. They both precede the lexical verb. (119) illustrates the contrast between a complex predicate with a semi-auxiliary (the modal *yáné* ‘must’) in (119a) and its simplex predicate counterpart in (119b). In the complex predicate construction, the semi-auxiliary *yáné* is inflected for tense-mood (see Chapter 6.2.1), while the lexical verb *dyâ* ‘lie down’ appears in its non-finite form. In the simplex predicate construction, the lexical verb receives the tense-mood marking H tone.

- (119) a. m<sup>è</sup> **yáné**    dyâ      vâ      kùgúù      d<sup>è</sup>      m<sup>à</sup>fú      mábáà  
           m<sup>ε</sup> yáné-H dyâ      vâ      kùgúù      d<sup>è</sup>      ma-fú      má-báà  
           1S must-R lie.down here Ø7.evening today ma6-day 6-two  
           'I had to sleep here the evening two days ago [= from today].'  
       b. m<sup>è</sup>      **dyá**      vâ      kùgúù      d<sup>è</sup>      m<sup>à</sup>fú      mábáà  
           m<sup>ε</sup>      dyâ-H      vâ      kùgúù      d<sup>è</sup>      ma-fú      má-báà  
           1S.PST lie.down-R here Ø7.evening today ma6-day 6-two

'I slept here the evening two days ago [= from today].'

True auxiliaries and semi-auxiliaries can be distinguished along two parameters, as shown in Table 3.12: i) full conjugation potential across different tense-mood categories vs. restrictions thereof and ii) full lexical meaning vs. no lexical meaning. True auxiliaries are restricted in the tense-mood category they can appear in, as detailed in Chapter 6.3.1, as well as in the verbal predicate type they occur in: true auxiliaries can never appear on their own in a simple predicate construction, but require the addition of a lexical verb. Semi-auxiliaries, in contrast, have full lexical meaning and the potential to serve as the finite element in a simple predicate construction. They have full conjugation potential across all tense-mood categories in both simple and complex predicate constructions.

	Full inflection	Inflectional restrictions
No lexical meaning		<b>True auxiliaries</b> <i>nzíí PROG.PRES, nzí PROG.PST, nzéé PROG.SUBORD, lò RETRO, sàlé NEG.PST, pálé NEG.PST, kálè NEG.FUT, tí NEG.IMP</i>
Lexical meaning	<b>Semi-auxiliaries</b> <i>kè 'go', lâ 'pass' njì 'come', lígë 'stay', sílë 'finish', pâ 'do first', táale 'begin', bàga nà 'stop' lèmbɔ 'know', kwàlk 'like', wúmbe 'want', (yáne 'must')</i>	<i>bwàá 'have', múa 'be almost', dúù 'must not'</i>

Table 3.12: Auxiliary types

Since tense-mood categories are only marked tonally, but true auxiliaries are restricted to specific categories, it cannot be proven that they take tonal inflection instead of having a fixed tonal pattern, as there are no contrastive pairs. There are several reasons, however, to classify true auxiliaries as finite verbal elements. First, their tonal patterns coincide with the tonal patterns of their respective tense-mood category. Second, they occur in the same position as semi-auxiliaries that clearly inflect for tense-mood tonal marking. Third, they are followed by a non-finite lexical verb.

Semi-auxiliaries and true auxiliaries can be thought of as distributed towards opposite ends of a grammaticalization scale. Semi-auxiliaries are

closest to main verbs while true auxiliaries are highly grammaticalized. While most (semi-) auxiliaries fall neatly in either one of the auxiliary types, there are nevertheless some exceptions which behave slightly differently, which reflects their different stages on the grammaticalization path. This is the case for *dúù* ‘must not’ which is restricted to present and subjunctive clauses and cannot appear as the finite verb in a simple predicate but, unlike true auxiliaries, it has a lexical meaning. The same is true for *bwàá* ‘have’ with its restriction to the two past categories, and *múà* ‘be almost’ with its restriction to the future. Another outlier within the semi-auxiliaries is the deontic modal *yáne* ‘must’ which is the only one that cannot appear in a simple predicate construction. In this respect, it patterns with true auxiliaries, but has a lexical meaning like semi-auxiliaries. Since it has no tense-mood category restrictions, I classify it as a semi-auxiliary.

Both true auxiliaries and semi-auxiliaries encode elements of various functional domains, i.e. there is no one-to-one mapping from their form to one specific function. True auxiliaries comprise some aspect markers and all negation auxiliaries. Semi-auxiliaries also encode some aspect markers as well as modality and motion/posture verbs.

### 3.3 Adjectives

Gyeli has a small set of adjectives, as listed in Table 3.13. They constitute a closed class in Gyeli and denote properties of the noun such as value, dimension, and color.

<b>quality</b>	mpà bíwò díyè pówàlà nátî	'good' 'bad' 'expensive' 'calm' 'straight'
<b>size</b>	píyò nénè	'small' 'big'
<b>color</b>	námbàmbàlà návyûvyû nábèbè nápfûpfû náyêyê	'white' 'black' 'red' 'darkened color' 'lightened color'

Table 3.13: Adjectives

Morphosyntactically, adjectives can be clearly delimited from other parts of speech such as nouns and verbs. Adjectives do not exhibit any verbal qualities such as combining with a STAMP marker or an aspect marker. They can also be clearly distinguished from nouns as they do not exhibit (most) typical nominal behavior. First, they do not take a singular and/or plural form. Second, they do not have the possibility of being modified by other elements of a noun phrase such as demonstratives or possessor pronouns. They can, however, serve as the head of an attributive construction, as further explained below.

This word class in Gyeli meets the broad criteria for adjectives given in the typological literature (which often mixes semantic and morphosyntactic criteria), for instance, following Bhat (1994: 16) in terms of “(i) their belonging, prototypically, to the semantic class of properties, and (ii) their having modification (of a noun) as the primary (categorial) function.” Dixon (2004), who postulates that every language has a class of adjectives which is distinct from nouns and verbs, adds to this list predicative use of adjectives, for example as a copula complement.

Besides these broad criteria, however, adjectives form a vastly diverse class cross-linguistically, as for instance pointed out by Segerer (2008) for adjectives in African languages. Gyeli adjectives are unusual from a Bantu perspective in that they do not take any agreement prefixes, but are invari-

able in their form, both in attributive and predicative use.

In attributive use, adjectives modify nouns in two different default constructions: either the adjective directly follows the head noun or it appears as second constituent in an attributive construction where the attributive marker agrees with the head noun.

- 1) [N ADJ]                    2) [N ATT ADJ]

Examples of both construction types are given in (120) and (121), respectively.

- (120) a. nkɔ́lɔ́ mpà  
        ∅3.watch good  
        ‘a/the good watch’
- b. nkɔ́lɔ́ nénè  
        ∅3.watch big  
        ‘a/the big watch’
- c. nkɔ́lɔ́ nábèbè  
        ∅3.watch red  
        ‘a/the red watch’

- (121) a. nkɔ́lɔ́ wá mpà  
        ∅3.watch 3:ATT good  
        ‘good watch’
- b. nkɔ́lɔ́ wá nénè  
        ∅3.watch 3:ATT big  
        ‘big watch’
- c. nkɔ́lɔ́ wá nábèbè  
        ∅3.watch 3:ATT red  
        ‘red watch’

Constructions that either take or optionally omit the attributive marker are discussed in Chapter 5.5.

The order of adjective and noun can also be reversed, as a more marked form. The adjective can either precede the noun directly or can appear as the head of an attributive construction in which case the attributive marker takes the default agreement form of class 7. Choices between construction forms usually entail a change in meaning, as shown in (122).

- (122) a. só        wà        nénè  
           Ø1.friend 1:ATT big  
           'big friend'
- b. só        nénè  
           Ø1.friend big  
           'important friend'
- c. nénè yá        só  
       big 7:ATT friend  
       'big size of the friend'

It is difficult to detect the exact meaning contrast present. It depends on the lexical semantics of the adjective and noun in question and the construction they stand in. Another example of meaning contrast across different construction types is given in (123). While the use of the attributive marker is optional in both constructions, it is preferred in (123a) and dispreferred in (123b)

- (123) a. m-wánò (wà)        bíwò  
           N1-child 1:ATT bad  
           'bad child [bad character traits]'
- b. bíwò (yá)        m-wánò  
           bad 7:ATT N1-child  
           'ugly child'

There are also examples where a switch of constituents does not seem to change the meaning as speakers state that both mean exactly the same, as in (124) and (125), although in these cases both constituents are clearly nouns which have a plural form and which can be modified by demonstratives and possessor pronouns.

- (124) a. nkwě        (wá)        nkpámá  
           Ø3.basket 3:ATT Ø3.newness  
           'new basket'
- b. nkpámá        (wá)        nkwě  
           Ø3.newness 3:ATT Ø3.basket  
           'new basket'
- (125) a. m-ùdì        (wá)        nkángè  
           N1-person 1:ATT Ø3.courage  
           'courageous person'

- b. nkángè (wá) m-ùdì  
 Ø3.courage 3:ATT N1-person  
 ‘courageous person’

In predicative use, the adjective serves as the copula complement as shown in (126).

- (126) m-àmbò máà mpà  
 ma6-thing 6:COP good  
 ‘Things are good.’

The adjective clearly shows no agreement morphology, although this would be expected with all plural classes. The same is true for an adjectival complement in a negative non-verbal construction, as in (127).

- (127) mìnsáyá mí bèyá sâ mí bélé mpà  
 mi-nsáyá mí bëya-H sâ mi-H bë-lé mpà  
 mi4-thing 4:ATT 2P-PRES do 4-PRES be-NEG good  
 ‘The things that you do are not good.’

Adjectives can be used as parameters of comparison in comparison constructions, as described in Chapter 8. They are, however, not marked morphologically in these constructions. Finally, they can also be used adverbially to modify a verb, as discussed in Section 3.4.3.

Some special remarks are in order for color adjectives. As shown in Table 3.13, all color term adjectives (and the quality adjective *nátî* ‘straight’) have in common that they start with the similitative marker *ná-*, as described in Chapter 4.2.2. There is evidence that, historically, color terms in at least some related languages of this area were verbs. These verbs used for color descriptions then developed into other parts of speech. For instance, in Bulu the basic color terms are synchronically nouns: *évìndì* ‘black’, *évelè* ‘red’, and *éfùmùlù* ‘white’.<sup>15</sup> In Gyeli, it is likely that such color verbs were grammaticalized, together with the *ná* similitative marker, into a synchronic uninfllected element of the noun phrase.

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<sup>15</sup>Bates (1904) gives the verbal color forms for Bulu as follows: *vé* ‘be/get red’, *vìn* ‘be/get black’, and *fùm* ‘be white’ without mentioning any nominal color forms. Alexandre (1955: 44) explains that these verbs can take a causative suffix *vìn* ‘be black’ → *vìn-i* ‘make black’. These causative verbs were then nominalized and assigned to noun class 5 with the prefix *é-*. Alexandre (1955: 68) states that this class usually hosts deverbal nouns derived from stative verbs.

Another argument that color adjectives are grammaticalized verbs including a simulative marker comes from the atypical terms *nápfúpfú* ‘darkened color’ and *náyéye* ‘lightened color’ which describe a change of color as opposed to a specific hue. When asked for the meaning of these atypical colors, speakers give a verbal explanation, namely that a more prototypical color such as ‘black’, ‘white’, or ‘red’ has changed by either having become darker (*nápfúpfú*) or lighter, being ‘bleached out’ (*náyéye*). In contrast, other colors are referred to by French adjectives in explanations.

According to traditional color theories, these two special color terms are unusual in that they do not fit into basic color words that have been investigated cross-linguistically (see, for instance, Berlin & Kay 1969). Nevertheless, I classify *nápfúpfú* ‘darkened color’ and *náyéye* ‘lightened color’ as color terms since they only show up in discourse when talking about colors and they were systematically used by speakers in the color booklet task (Majid & Levinson 2007).<sup>16</sup>

### 3.4 Adverbs

Adverbs, along with nouns, verbs, and adjectives, constitute an open part-of-speech class. According to Schachter & Shopen (2007: 20), adverbs may have various subclasses, such as directional adverbs ('down'), degree adverbs ('extremely'), manner adverbs ('quickly'), time adverbs ('today'), or sentence adverbs ('unfortunately'). These subclasses show that adverbs do not necessarily modify verbs, but may also modify adjectives or other adverbs or even whole sentences. Schachter & Shopen (2007: 20) thus provide a broad definition of adverbs as elements which “function as modifiers of constituents other than nouns.”

In general, the class of adverbs in Gyeli is rather restricted in diversity, just as in many other Bantu languages. Thus, in the Gyeli text corpus, as described in Chapter 1.3.3, fewer than 20 different adverbs occurred. One reason for this is that, according to Creissels et al. (2008: 126), in many African languages, “the possibility of deriving manner adverbs from other

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<sup>16</sup>Gyeli has more color terms than the adjectives listed in Table 3.13. Other color terms include, for instance, *mpùlé* ‘yellow’, which is derived from the name of a tree with yellow bark (*Enantia chlorantha*), or *máká* ‘green’ which is a noun which also means ‘leaves’. Those other color terms are, however, recently acquired and differ in their morphosyntactic status in that they are nouns rather than adjectives, as further explained in Grimm (2014).

categories or to use adjectives as verb modifiers, is very limited.” This is also true for Gyeli where the meaning of typical English manner adverbs is instead expressed by ideophones, as will be discussed in Section 3.5, or by nouns in complement position, as in (128).

- (128) màlénđí      máà      vèè kwè mípìndí  
       ma-léndí      máà      vèè kwè H-mi-pìndí  
       ma6-palm.nut 6.DEM.PROX only fall OBJ.LINK-mi4-non.ripe  
       ‘These palm nuts only fall non-ripe.’

Despite this restricted diversity, Gyeli adverbs occur pervasively in all types of text genres (dialogues, folktales, autobiographic narratives). Almost a quarter of all intonation phrases in the Gyeli text corpus (123 (23%) of 540 intonation phrases) include an adverb.

Gyeli adverbs are invariable and do not receive any specific morphological marking, e.g. through suffixes, like the English *-ly* or French *-ment*. Subclasses of adverbs can be distinguished through several morphosyntactic properties and/or a combination of them. I will consider the following three subclasses as described by their most salient characteristics:

- Group 1: adverbs optionally combining with LOC preposition *ε*
- Group 2: adverbs that can occur in noun + attributive constructions
- Group 3: adverbial lexemes that can act as nominal modifiers in NPs

Subclassification of adverbs in the literature is typically done on a semantic basis, such as manner, temporal or locative adverbs. The choice of semantic categories may, however, be arbitrary and may not match the morphosyntactic categories of a language. In Gyeli, morphosyntactic classes map onto semantic categories, as shown in Table 3.14. Group 1 consists entirely of deictic adverbs which include locative and manner deictics. Group 2 hosts temporal adverbs and group 3 contains manner adverbs.

Nevertheless, the defining criteria for adverbial subclasses in Gyeli are four morphosyntactic properties as listed in the column names of Table 3.14: i) the potential combination with the locative *ε*, ii) use of a lexeme as both adverb modifying a verb and adjective/quantifier modifying a noun, iii) occurrence in noun + attributive marker construction, and iv) occurrence in phrase final position only. The last column also provides information on the derivational source of the adverbs. Yet, since this is not a morphosyntactic property, it does not determine adverbial classification.

Group	Semantic core	LOC $\epsilon$	ADJ / QUANT	ATT constr.	final position only	derivational source
1	deictic	x	—	(x)	—	underived
2a	temporal	—	—	x	—	underived
2b	temporal	—	—	x	—	denominal
3	manner	—	x	—	x	ADJ/QUANT

Table 3.14: Criteria for adverb classification

The distinctive characteristic of group 1 adverbs is their potential combination with the locative preposition  $\epsilon$  which no other adverbial subclass allows for. Also, some (but not all) group 1 adverbs can be used in noun + attributive marker constructions. This property is defining for group 2 adverbs. Group 3 adverbs are the only ones to be restricted to a phrase final position only while all other adverbs can also occur at the beginning of a phrase. Lexemes occurring in group 3 can also be used as adjectives or quantifiers to modify nouns.

### 3.4.1 Group 1 adverbs: deictic

Adverbs of group 1 are all deictic in nature, including both locative and manner deixis. They are the most frequent ones occurring in natural text out of all adverb types. Deictic adverbs, as any deictic elements, are often accompanied by showing gestures or assume common knowledge of the specific place under discussion. Table 3.15 provides a summary of deictic adverbs in Gyeli as well as their numeric frequency in the Gyeli text corpus.<sup>17</sup> The deictic elements represented in the table mostly function as adverbs, namely when they occur with verbs, but as the last column shows, almost all of them may also occur in the nominal domain modifying nouns. Chapter 3.10.1.1 provides more information on the locative  $\epsilon$ .

Deictic element	Gloss	Frequency	
		with verb	with noun
( $\epsilon$ ) vâ	'here'	41	2
( $\epsilon$ ) pè	'over there'	21	0
( $\epsilon$ ) wû	'there'	12	3
( $\epsilon$ ) tè	'there'	8	13

Table 3.15: Deictic adverbs

<sup>17</sup>Obviously, this is a very limited corpus, but it shows some tendency as to which adverb gets used more frequently.

**Formal commonalities** I view deictic adverbs as a category, based on formal similarity and their potential co-occurrence with the locative marker *ɛ*, which distinguishes them from other adverb subclasses. All deictic adverbs are monosyllabic. They do not seem to be derived from another part of speech, in contrast to, for instance, group 3 adverbs. Some of them may, however, also be used to modify nouns rather than verbs, namely as the second constituent in noun + attributive marker constructions, as discussed in Chapter 5.5. The distribution of deictic adverbs as modifying verbs as opposed to nouns is illustrated in Table 3.15 under ‘Frequency’. (129) gives an example of a deictic element as nominal modifier while the examples in the remainder of this section show deictic adverbs modifying verbs.

- (129) mègà      mée      dyúwó      nzáà      [dúwò lé      tè]  
       mε-gà      mée      dyúwɔ-H nzáà      d-úwò lé      tè  
       1S-CONTR 1S.PST2 feel-R      Ø7.appetite le5-day 5:ATT there  
       ‘As for me, I felt appetite the day there.’

Contrasting deictics as verbal versus nominal modifiers, there is a tendency that the more frequently a (locative) deictic element occurs as verbal modifier, the less frequently it is found as a nominal modifier. This is the case, for instance, with *vâ* ‘here’. Within the Gyeli text corpus, *vâ* is found 41 times as a verbal, but only twice as a nominal modifier. Conversely, the less frequently a deictic adverb modifies verbs, the more often it occurs as nominal modifier as with *tè* ‘there’ which occurs only 8 times with verbs, but 13 times with nouns.

**Phrase position** Another distinctive morphosyntactic property in adverbial subclasses is the phrase position in which adverbs can occur. As a default position, all adverb classes occur phrase finally. This is also true for group 1 adverbs, as shown in (130) and (131).

- (130) mé      bvú      nâ      nkwlá      wúù      tfündé      mè vâ  
       mε-H      bvû-H      nâ      nkwlá      wúù      tfündε-H mè vâ  
       1S-PRES think-R COMP Ø3.machete 3.PST2 miss-R 1S here  
       ‘I think that the machete missed [= injured] me here.’

- (131) mé      pâ      ná      kë dígè mùdì      wà      nû      é  
       mε-H      pâ-H      ná      kë díge m-ùdì      wà      nû      é  
       1S.PRES try-R again go see N1-person 1:ATT 1.DEM.PROX LOC

**pé**

pé

there

‘I try again and go see that person there.’

In contrast to group 3, group 1 adverbs also pervasively appear in phrase initial positions, as in (132) and (133). This position is clearly correlated with information structure, moving the deictic adverb into a focus position.<sup>18</sup> While also group 2 (temporal) adverbs can occur in this initial focus position, deictic adverbs are significantly more frequently focussed in the Gyeli text corpus.

- (132) é vâ mè dyùwó nâ é vâ yî sîlè  
      é vâ mè dyùwó-H nâ é vâ yî sîlè  
      LOC here 1S.PST1 hear-R COMP LOC here 7.FUT finish.FUT  
      njì búlè  
      njì búlè  
      come destroy  
      ‘Here I heard that here it will all come to be destroyed.’

- (133) é pé-é mèè lwô nyà ndáwò  
      é pé-é mèè lwô nyà ndáwò  
      LOC there-DIST 1S.FUT build real Ø9.house  
      ‘Over there, I will build a real house.’

If a deictic adverb occurs in the initial focus position, it is often repeated again at the end of the phrase in its default position, as shown in (134) and (135).

- (134) é pè bà sîlé bî lwô mândáwò  
      é pè ba sîlé-H bî lwô H-ma-ndáwò  
      LOC there 2.PST1 finish-R 1P.NSBJ build OBJ.LINK-ma6-house  
      é pè  
      é pè  
      LOC there  
      ‘There, they have finished to build us houses there.’

- (135) é wû bèyá lwô kwádó yâ é wû  
      é wû bèyá lwô-H kwádó y-â é wû  
      LOC there 2P[Kwasio] build-R Ø7.village 7-POSS.1S LOC there  
      ‘Over there you (pl) build my village over there.’

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<sup>18</sup>See Chapter 7.3 on information structure for a more detailed discussion.

The use of the locative *ɛ* is more frequent when the adverb occurs phrase initially while post-verbal and phrase final occurrences allow for a higher degree of optionality whether to use the locative or not. The higher degree of locative *ɛ* omission when the deictic adverb occurs phrase finally might be phonologically conditioned. Phrase finally, the locative *ɛ* usually follows a vowel either from a preceding verb or noun and may undergo deletion in fast speech. When asked, speakers state that the use of the locative *ɛ* is possible in both phrase initial and phrase final positions. It is less clear at this point whether the co-occurrence of the locative *ɛ* with a deictic adverb is generally optional, comparable to the optional use or omission of the attributive marker as discussed in Chapter 5.5.1.1 or whether the locative *ɛ* is always underlyingly present with deictic adverbs and its omission in the surface form is purely phonological.

**Distinctions within the locative deictic system** Gyeli uses a range of deictic elements to refer to places or locations in varying distance to the speaker. Since most of these elements would be translated as ‘there’ in English, the system merits a more thorough explanation. In general, distances in Gyeli are relative rather than absolute in that ‘here’, for instance, can denote a place within a hand-reach of the speaker, but could also talk about a whole village. On the other hand, ‘over there’ can then be a distant place or, in other cases, a place even within the village, depending on the discourse topic.

Semantically, the clearest distinction is between *vâ* ‘here’, which refers to the relative immediate surroundings of the speaker, and *pè* ‘over there’, which denotes the place furthest away. In French, *pè* gets translated as *là-bas*. *wû* and *tè* would both be translated as ‘there’, or *là* in French, which makes it more difficult to grasp their semantic distinctions. Differences in their morphosyntactic behavior can help to disentangle their meaning contrast.

In the default case, it seems that *wû* denotes a medial distance between *vâ* ‘here’ and *pè* ‘over there’ and occurs mainly in the verbal domain. In contrast, *tè* is mostly used with nouns rather than with verbs where *tè* seems to be related more to specificity and/or anaphora than to actual location. In that sense, *tè* may be less part of the distance-related deictic system, as (136) illustrates. In this example, *tè* is more existential than about distance.

- (136) bâ̂ yó̂ yî̂ tè  
       bâ̂ y-ô̂ yî̂ tè  
       Ø7.word 7-2S.POSS 7.ID there  
       ‘Your word is there [= you are understood].’

Also in (137), the use of *tè* is not primarily locative, but more anaphoric to the circumstances of earning only 250 Francs CFA.

- (137) ká bá ké wê vè bé-bwúyà békáà nà  
       ká ba-H kè-H wê vè H-be-bwúyà békáà nà  
       if 2-PRES go-R 2S.NSBJ give OBJ.LINK-be8-hundred 8-two COM  
       mà-wú mâtánè wé sá tè ná  
       ma-wú mâtánè wé-H sâ-H tè ná  
       ma6-ten 6-five 2S-PRES do-R there how  
       ‘If they go give you 250 (Francs), how do you manage there? [because it’s very little money]’

In other cases, however, as in (138), *tè* is place-denoting just like the other deictic adverbs. Speakers state that, in this example, *tè* can also be replaced by *pè* or *wû*.

- (138) tè mèè jíbì kè lwô̂ tè  
       tè mèè jíbì kè lwô̂ tè  
       there 1S.FUT start go build there  
       ‘There, I will first go to build there.’

Further, distance cannot be the only distinctive criterion within the locative deictic system: An increased sense of distance can be added phonologically by lengthening the final vowel of the adverb and a H tone, as shown in (139) and in (133) above.

- (139) lèkfúdè à nzí bíyò nlô péē  
       le-kfúdè a nzí bíyò nlô péē-é  
       le5-idiot 1 PROG.PST hit Ø3.head over.there-DIST  
       ‘The idiot was hitting his head far over there.’

This way of expressing further distance by vowel lengthening and H tones is possible with both *pè* and *wû*. An example for the latter is given in (140). In contrast, this does not seem to be possible with *tè* which indicates again that *tè* behaves differently from the other more purely locative deictic elements.<sup>19</sup>

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<sup>19</sup> *yâ* ‘here’ also does not allow for final vowel lengthening and a H tone, but that is clearly a semantic restriction since it denotes a place that is close to the speaker.

- (140) báà tfùbò báà tfùbò mpàgó wá nùmbà wúú  
       báà tfùbò báà tfùbò mpàgó wá nùmbà wú-ú  
       2.FUT pierce 3P.FUT pierce Ø3.road 3:ATT Ø1.logger there-DIST  
       ‘They will cut, they will cut. The road of the loggers there.’

Another difference between *wû* and *tè* concerns the combination with a vocative morpheme *-o* which, at the same time, can further take a H tone to indicate distance between the speaker and the addressee. This vocative morpheme can be used with *wû*, as shown in (141), but not with *tè* nor any other deictic element.

- (141) mùdì kí tátò wúó  
       m-ùdì kí tátò wú-o-H  
       N1-person NEG scream there-VOC-DIST  
       ‘Nobody scream over there!’

In summary, it seems that *vâ* ‘here’, *wû* ‘there’ and *pè* ‘over there’ form the core locative deictic system while *tè* ‘there’ takes over other functions (specificity, anaphora) as a default, but can also act as a deictic element within the locative system. The different properties of the various locative deictics as discussed above are summarized in Table 3.16.

Deictic	Gloss	LOC ε	mostly modifying	DIST marking	Vocative -o
vâ	‘here’	x	verbal	—	—
wû	‘there’	x	verbal	x	x
pè	‘over there’	x	verbal	x	—
tè	‘there’	x	nominal	—	—

Table 3.16: Morphosyntactic properties of locative deictics

### 3.4.2 Group 2 adverbs: temporal

Adverbs of group 2 have four members which are all temporal and listed in Table 3.17. While group 2 adverbs form a unitary morphosyntactic category, they differ in their derivational source. While *téé* ‘now’ and *dé* ‘today’ seem to be underived lexemes, the other two adverbs in the group are clearly derived from nouns: *nákùgúù* ‘yesterday’ is derived from *kùgúù* ‘evening’ and *náménj* ‘tomorrow’ from *ménj* ‘morning’. The *ná-* prefix in these adverbs is a derivational similitive marker, as described in Chapter 4.1.1.1.

Adverb	Gloss	Derivational source
téè	'now'	underived
dê	'today'	underived
nàkùgúù	'yesterday'	denominal
nàménó	'tomorrow'	denominal

Table 3.17: Group 2 adverbs

The defining property of group 2 temporal adverbs is that they can all also occur in nominal modification as second constituent in a noun + attributive marker construction, as in (142).

- (142) a. bèdewò bé dê  
           be-déwò bé dê  
           be8-food 8:ATT today  
           'food of today.'  
       b. nlâ wá nàkùgúù  
           nlâ wá nàkùgúù  
           Ø3.story 3:ATT yesterday  
           'yesterday's story.'

While some group 1 adverbs exhibit the same property, deictic adverbs also combine with the locative *ɛ*, unlike group 2 temporal adverbs.

All group 2 adverbs occur phrase finally as a default position. Examples are given in (143) through (145).

- (143) wé làwó téè  
       wε-H làwɔ-H téè  
       2S-PRES talk-R now  
       'You speak now.'
- (144) nyè náà à múà wê bíyò dê  
       nyε náà à múà wè bíyò dê  
       1 COMP 1 PROSP 2S.NSBJ hit today  
       'He [says] that he is about to beat you today.'
- (145) mè nzí kë jí nàkùgúù  
       mε nzí kë jí nàkùgúù  
       1S PROG.PST go Ø7.forest yesterday  
       'I was going to the forest yesterday.'

They can all also occur phrase initially, as shown in (146). In these cases, they are in focus, as discussed for group 1 adverbs and in Chapter 7.3 on

information structure. In (146), the narrator stresses that the mice will only eat the skulls the next day, as contrastive focus to the possibility that they might eat them right away.

- (146) àà nàménj bwáà dè nàménj  
 àà nàménj bwáà dè nàménj  
 EXCL tomorrow 2P.FUT eat tomorrow  
 ‘Ah, tomorrow you will eat, tomorrow.’

In comparison to group 1 adverbs, which occur frequently in this focus position, group 2 adverbs are rarely found in this position in natural text.

### 3.4.3 Group 3 adverbs: manner

Group 3 adverbs are defined by their lexemes' double affiliation to the part of speech of adjectives (Section 3.3) or nominal modifiers (Section 3.8.1). Semantically, they map onto manner adverbs. Manner adverbs are rare in Gyeli, both in terms of number and occurrence. Table 3.18 gives an exhaustive list of all manner adverbs found in the Gyeli text corpus as well as text stemming from questionnaire elicitation. Each of these manner adverbs occurs only a couple of times in the corpus, thus their natural frequency seems to be generally low. Gyeli seems rather to have a preference to express the manner of an action or event by ideophones, as will be discussed in Section 3.5.

Manner adverb	Gloss	Affiliation to other POS
mpà	good	invariable adjective
bíwò	bad	invariable adjective
ff	different	deictic modifier (→ short form of -fúsì)
bvùbvù	a lot	invariable quantifier

Table 3.18: Manner adverbs and their affiliated parts-of-speech

In terms of their position, manner adverbs exclusively occur (intonation) phrase finally. Thus, the adverb may follow the verb if there is no object, as demonstrated in (147) and (148).

- (147) wè nzíí bállè mpà  
 wè nzíí-H bállè mpà  
 2S PROG.PRES-R keep good  
 ‘You are keeping [the words] well.’

- (148) wé      ná      báàla      nà      nyé      fí      nà      wé  
       wε-H      ná      báàla-H      nà      nyê-H fí      nà      wε-H  
       2S-PRES again repeat-R COM see-R different COM 2S-PRES  
       ndyándyá      ná      sálé      é      pê  
       ndyándya-H ná      sálé-H      é      pê  
       work-R      again Ø7.work LOC there  
       ‘You repeat again and see differently [try something else] and you  
       do again work there.’

If the clause has an object, the manner adverb will follow the object instead of the verb, as shown in (149) and (150).

- (149) á      sìmbó      mätúà **bíwò**  
       a-H      sìmbó-H mätúà bíwò  
       1-PRES drive-R Ø1.car bad  
       ‘He drives the car poorly.’
- (150) mèé      jí-lé      wê  **bvùbvù**  
       mèé      jí-lé      wê bvùbvù  
       1S.PRES.NEG ask-NEG 2S much  
       ‘I don’t ask you [for] much.’

In contrast to adverb groups 1 and 2, manner adverbs cannot be used in a phrase initial focus position.

### 3.4.4 Discussion: multiple adverbs

When discussing the syntactic position of adverbs, I so far referred to phrase initial versus final positions. This, however, only holds if there is only one adverb in the phrase. In phrases with multiple adverbs, adverbs generally still occur after the verb and potentially after an object, but of course not each adverb can occur phrase finally. I therefore suggest that there is a general phrase final slot for adverbs which can be filled with multiple adverbs.

There seem to be some ordering principles within this adverb slot, i.e. some adverbs seem to be closer to the center of the phrase than others. Since multiple adverbs do not occur very frequently in natural speech, it is not possible at this point to give a full account of adverb order in multiple adverb constructions. The present examples, however, suggest that group 1 adverbs are closest to the center, i.e. verb and following object, as shown in (151) and (152).

- (151) pílì bèyá lí nji è vá téè dé  
when 2P RETRO come LOC here now today  
'When you just arrived here now today,'
- (152) mè nzí dyá vâ kùgúù [dè màfú mábáà]  
mè nzí dyá vâ kùgúù dè ma-fú má-báà.  
1S PROG.PST1 lie.down here Ø7.evening today ma6-day 6-two  
'I was here the evening two days ago.'

Other generalizations as to whether any of the other adverb subclasses are closer to the center or the periphery of the clause require more investigation. This is most likely also correlated with information structure factors.

### 3.5 Ideophones

Ideophones are widely attested in the literature on African languages (see, for instance, Doke (1935), who coined the term, Westermann (1907) on Ewe, Dumestre (1998) on Bambara, Alexandre (1966) on Bulu, or Newman (2001) on Hausa) and also found in Gyeli. In defining the term ‘ideophone’, I refer to Dingemanse (2011: 25) who views ideophones as “marked words that depict sensory imagery”, a definition that deserves some further explanation. First, according to the author, ideophones are often marked by phonological peculiarities and/or stand out from other words by means of “special word forms, expressive morphology, relative syntactic independence and foregrounded prosody” (p. 26). Second, the fact that ideophones are words implies that they are “conventionalized minimal free forms with specifiable meanings.” Gyeli speakers use ideophones in a conventionalized way able to describe the meaning of single ideophones consistently.<sup>20</sup> Third, Dingemanse (2011: 27) makes the point that ideophones rather *depict* than describe their referents. This is similarly explained by Güldemann (2008: 280) who notes that “Metaphorically, one can characterize ideophones as a performance or a gesture in disguise of a word.” Finally, Dingemanse restricts ideophones to a semantic domain depicting sensory imagery

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<sup>20</sup>Ideophones that are identical or similar in their form and meaning seem to be consistently used in the languages of the area either through genealogical affiliation or language contact. In any case, they are easily recognized and understood by speakers of neighboring languages such as Mabi and Bulu.

which he views as “perceptual knowledge that derives from sensory perception of the environment and the body” (p. 28). The author argues that this semantic-functional definition makes sense for cross-linguistic comparison while grammatical-structural features of ideophones have to be considered language specifically.

Gyeli ideophones<sup>21</sup> modify verbs in some cases, namely when they behave like adverbs. Even when they are syntactically more independent or occur in complement clauses, they depict the way an event happens. Generally, Gyeli ideophones structurally stand out from other words in terms of their phonological shape and their syntactic integration into a phrase.

### 3.5.1 Phonological shape of ideophones

Ideophones in Gyeli are phonologically marked by various means, including reduplication or a repetitive character, final vowel lengthening, and special syllable structure such as closed syllables or syllables consisting of a consonant only. These three properties usually do not all occur in the same ideophone, but are partially mutually exclusive. For instance, final vowel lengthening excludes the possibility of a closed syllable. Also, reduplication does not usually occur with final vowel lengthening while closed syllable ideophones may also be reduplicated.

**Reduplication/repetitive character** Many Gyeli ideophones involve reduplication or repetition, where a word is minimally reduplicated. In most cases, however, the word gets repeated multiple times, i.e. more than twice, usually three to five or six times, depending on the ideophone and the dramatic effect aimed at in the discourse. For all repetitive ideophones it holds that the number of repeated syllables is not necessarily conventionalized. Each ideophone seems to have a preference for the number of repetitions as represented in the following examples, but the number is not fixed.

Repetitive ideophones can be divided into those that have the same tone on each repeated syllable and those that change their tonal melody across repeated syllables. In (153), for instance, the ideophones involve repeated monosyllabic words each carrying the same tone.

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<sup>21</sup>There are 19 occurrences of ideophones in the corpus, comprising 16 different ideophones.

	ʃẙɛ ʃẙɛ	'depiction of sneaking'
	tʃɔp tʃɔp tʃɔp	'depiction of dripping sound or sound walking in mud'
(153)	mtʃà mtʃà mtʃà	'depiction of picky eating (only taking certain items off a plate)'
	ké ké ké ké	'depiction of placing objects in a row'
	tsùk tsùk tsùk tsùk	'depiction of noise that mice make'

In contrast, the ideophones in (154) show an alternating tonal pattern with repeated monosyllabic words alternating between H and L tones. One could argue that two syllables, a H plus a L, actually constitute one unit that gets repeated rather than the single syllable. The fact that these ideophones are often used with an uneven number of syllables, however, indicates that also for tonally alternating ideophones the repeated unit is usually the monosyllabic word.

	gbí gbí gbí gbí	'depiction of small objects moving in space (e.g. bacteria roaming in a body)'
(154)	wùù wúú wùù wúú	'depiction of sound of bees'

There are a few instances, however, where the word is bisyllabic and again, it is the word that gets reduplicated, as shown in (155). In contrast to monosyllabic ideophone words, bisyllabic ones are only subject to reduplication, but usually do not get repeated more than twice.

	kpúdùm kpúdùm	'depiction of drumming'
(155)	kpàdà kpàdà	'depiction of drumming on bamboo pipes'
	mátsà mátsà	'depiction of eating in little bits'

Semantically, ideophones that involve reduplication or repetition often depict iterative events, for example repeated motion such as drumming or dripping water or recurring sounds such as noise of mice.

**Final lengthening** A large group of Gyeli ideophones systematically employs final vowel lengthening, as shown in (156). All of them occur as monosyllabic words only.

- (156)      ndééééé ‘depiction of staring’  
               wóóóóó ‘depiction of moving by foot or motorbike’  
               bââââââ ‘depiction of walking a long distance fast’  
               wùùùùù ‘depiction of pouring liquids or granulars’  
               pfááááá ‘depiction of flinging a long object or slinging’  
               tèèèè ‘depiction of waiting’

In comparison to iterative, repetitive ideophones, this group depicts events that either persist in time, for instance staring or waiting, or depict distances, as it is the case with flinging an object (into some distance) or moving into distance.

As mentioned above, this group of ideophones that receives its special marking in the sense of Dingemanse’s (2011) definition by vowel lengthening usually does not combine with reduplication. There are a few exceptions, however. For instance, *wùùùùù* ‘depiction of pouring liquids or granulars’ was found to be used in a reduplicated form, depicting the situation when the main character in the Nzambi story (see Appendix II.2) repeatedly pours fuel onto a house.

**Special syllable structure** Some ideophones in Gyeli are further phonologically marked by a closed final syllable structure. As such, ideophones form an exception to a general rule of open syllables in the language (Chapter 2.3). Closed syllables in ideophones frequently end in /m/, but also voiceless obstruents such as /f/ or /k/. Most of them are monosyllabic, as in (157).

- (157)      wòm ‘depiction of (sudden) silence’  
               ùf ‘depiction of sound when something catches fire suddenly’  
               gbìm ‘depiction of putting or falling down of a person or object’  
               bààm ‘depiction of closing or finishing something’

There are also bisyllabic ideophones whose second syllable is closed, ending in the nasal /m/, as shown in (158).

- (158)      pfùtùm ‘depiction of sound when jumping into water’  
               pùdùm ‘depiction of falling into mud or throwing stone into water’  
               ntòndòm ‘depiction of monkeys jumping in trees’

Most of these closed syllable ideophones occur without reduplication. In these cases, they typically depict some sort of suddenness (sudden silence,

suddenly catching fire) or an endpoint of an event (falling, closing, hitting water). There are, however, also a few examples of closed syllable ideophones which involve reduplication such as *wùf wùf* ‘depiction of walking mice’.

The other unusual syllable type found in ideophones is that of a consonantal nucleus. Examples are given in (159). The voiceless bilabial in *p p p p* ‘depiction of smoking pipe’ is produced with an ingressive airstream, imitating the inhaling when smoking.

- (159)      m m m m m    ‘depiction of someone mumbling to himself’  
               p p p p        ‘depiction of smoking pipe’

### 3.5.2 Morphosyntactic properties of ideophones

In terms of word class, ideophones have been assigned to different parts of speech in the literature, depending on the language. Dwyer & Moshi (2003: 173) provide examples from different African languages where ideophones are categorized, for instance, as verbs, adjectives, interjectionals, special classes, but most commonly as adverbs. They further specify that ideophones

“often differ syntactically from the rest of the grammar. 1) usually occur either before or after a sentence; 2) often don’t fit into any of the standard categories for parts of speech.” (p. 174)

These generalizations also apply in Gyeli. Gyeli ideophones constitute a word class on their own as characterized by their syntactic independence, i.e. outside of the syntactic phrase. Possible positions where ideophones are found are i) at the end of an intonation phrase, ii) independently, i.e. outside of an intonation phrase, and iii) as complements in complement clauses.

**Ideophones at the end of intonation phrases** Ideophones in Gyeli frequently occur at the end of an intonation phrase as in (160) and (161). In these cases, ideophones are similar to adverbs in their position and their function, namely depicting the manner in which an action or event happens.

- (160) yóò mùdâ      dígé      mísi      ndééé  
       yóò m-ùdâ      dígé-H    m-ísì      ndééé  
       so 1N-woman watch-R ma6-eye IDEO:staring  
       ‘So the woman looks with her eyes [depiction of staring].’

- (161) bá      ké      ndáà nà      télé      mákùndù      má  
       ba-H      ke-H ndáà nà      téle-H H-ma-kùndù      má  
       2-PRES go-R also COM put-R OBJ.LINK-6ma-clay.house 6:ATT  
       kùrâ      ké-ké-ké-ké-ké  
       kùrâ      ké-ké-ké-ké-ké  
       Ø7.electricity IDEO:repeated.placement  
       ‘They also go and put clay houses with electricity, [depiction of putting the electricity poles along the road].’

In contrast to adverbs, ideophones also occur in constructions with the deictic element *mpù* ‘like this’, as shown in (162).

- (162) yóò nzàmbí njí      mpù      bâââââ      njì      dígè mpù  
       yóò nzàmbí nji-H      mpù      bâââââ      njì      dígè mpù  
       so Ø1.PN come-R like.this IDEO:walking.far come look like.this  
       ‘So Nzambi comes like this [depiction of walking a long distance], comes looking like this.’

The use of deictic elements such as *mpù* ‘like this’ makes perfect sense in that it signals the verbal depiction.

**Ideophones as *nâ* complements** Similarly, the same sort of signaling happens when ideophones are used as complements in *nâ* clauses, as illustrated in (163).

- (163) nzàmbí, màbóò      nkweèè      dé      nâ      vósì  
       nzàmbí ma-bóò      nkweèè      dé      nâ      vósì  
       Ø1.PN ma6-bread.fruit Ø3.basket LOC COMP IDEO:pouring  
       ‘Nzambi pours the bread fruits into the basket.’

This type of construction is parallel to reported speech, as discussed in Guldemann (2008). For more information on Gyeli complement constructions and reported speech, see Chapter 8.2.2.1.

**Syntactic independence of ideophones** Gyeli ideophones occur independently from an intonation phrase, rather forming an intonation phrase on their own. In this, they differ from adverbs which cannot occur as independent intonation phrases. In (164), the ideophone occurs before the intonation phrase it refers to in the discourse. The ideophone is separated from the following intonation by a short pause.

- (164) **gbí**            **gbí**            **gbí**    **gbí**    **gbí**      à    múa  
       gbí-gbí-gbí-gbí-gbí a            múa    nà    bábè      tí    wúmbé-H  
       IDEO:roaming     1S.PST1 PROSP COM Ø7.illness NEG want-R  
       nà    bábè    tí    wúmbé    wè  
       die  
       wè  
       die  
       ‘[depiction of disease roaming in his body] He was about to be sick  
       without wanting to die.’

Intonationally independent ideophones can also follow the intonation phrase they are semantically linked to in the discourse, as shown in (165).

- (165) wé            dyúwó    mpù    bàmintùlè    bógá    bá    tsígè  
       wé-H        dyúwó-H mpù    ba-mintùlè    bó-gá    ba-H    tsígè  
       2S-PRES hear-R    like.this ba2-mouse 2-other 2-PRES take.off  
       **tsùk**            **tsùk tsùk**  
       tsùk-tsùk-tsùk  
       IDEO:rustling  
       ‘You hear like this the other mice take off [depiction of noise made  
       by mice].’

In addition to intonational breaks, the end of an intonation phrase can be indicated by the tonal melody. In (165), it is the L tone on *tsígè* ‘take’ off which shows the end on the intonation phrase. If the ideophone was part of the same intonation phrase, the final tone on *tsígè* would be H.

### 3.6 Pronouns

Gyeli has different types of pronouns, i.e. grammatical free morphemes that can replace a noun. The different pronoun form paradigms arise from the pronouns' differing syntactic functions and distributions. I distinguish subject pronouns from non-subject pronouns. The latter are used in object and adjunct position. Gyeli has further interrogative pronouns, possessor pronouns, and a reflexive pronoun.

Generally, agreement class 2 pronouns are also used for impersonal reference. For instance, active clauses with the impersonal *ba* pronoun are preferred over passive constructions (Chapter 4.2.3.2). This pronoun can also be used in impersonal relative clauses, expressing ‘who’ in the subordi-

nate clause even if the referent of the main clause is expressed by a different agreement/person class (Chapter 8.2.1).

### 3.6.1 Subject pronouns

Subject pronouns are rarely used in Gyeli, with only 17 occurrences in the corpus, since subject noun phrases are mostly expressed by a noun or entirely dropped, leaving only the STAMP marker (Section 3.9.1) as portmanteau morpheme that expresses subject agreement on the predicate. Subject pronouns are used for subject focus of, mostly, speech act participants. Non-speech act participants are focused through other information structure strategies (Chapter 7.3).

Table 3.19 provides the subject pronoun forms for both speech and non-speech act participants. All subject pronouns are specified for tone (unlike the STAMP markers which take their tonal marking from the tense-mood category they encode). Most persons have a H tone pronoun, with the exceptions of the first and second person singular and the pronouns of agreement classes 1 and 9.

	Singular	Plural
Speech Act Participants	1S <i>mè</i> 2S <i>wè</i>	1P <i>bí</i> 2P <i>bé</i>
Non-Speech Act Participants (3 <sup>rd</sup> person)	cl.1 <i>nyè</i> cl.3 <i>wú</i> cl.5 <i>lí</i> cl.7 <i>yí</i> cl.9 <i>nyì</i>	cl.2 <i>bá</i> cl.4 <i>mí</i> cl.6 <i>má</i> cl.8 <i>bé</i>

Table 3.19: Subject pronouns

While many subject pronouns are segmentally identical to the STAMP markers of their person/class, there are a few exceptions which clearly show that subject pronouns form a distinct paradigm. These exceptions include the first and second person plural, and the pronoun of agreement class 1. To indicate this distinction in the glosses, I mark subject pronouns with ‘SBJ’, while the STAMP marker is only marked for its agreement class/person, as in (166) where subject pronoun (in bold) and STAMP marker differ in their form.

- (166) donc      **bí**      yá      táálé      bê yàlànè      àà  
       donc      **bí**      ya-H      táálé-H      bê yàlane      àà  
       so[French] 1P.SBJ 1P-PRES begin-R 2P respond[Bulu] EXCL  
       ‘So we start to respond to you, mhm.’

Other subject pronouns are form identical to their STAMP marker and might only differ tonally, depending on the tense-mood category, as in (167).

- (167) ah      mbúmbù      **wè**      wé      télé      nündè  
       ah      mbúmbù      wε      wε-H      télε-H      nú-ndè  
       EXCL Ø1.namesake 2S.SBJ 2S-PRES stand-R 1.DEM-ANA  
       ‘Ah namesake, is it you who is standing there?’

Thus, although the agreement class 2 subject pronoun *bá* is segmentally identical to its STAMP marker, the two forms differ due to the FUTURE marking on the STAMP marker in (168).

- (168) **bá**      báà      bù      mpàgó  
       bá      báà      bù      mpàgó  
       2.SBJ 2.FUT break Ø3.road  
       ‘They will build a road.’

The subject pronoun always occurs in subject position and always precedes the STAMP marker. If the subject is preceded by a fronted object, as for instance an interrogative pronoun in (169), the object pronoun will precede both the subject pronoun and STAMP marker.

- (169) gyí      bí      yá      tfúgà yá      tfúgá      nà      gyí  
       gyí      bí      ya-H      tfúga ya-H      tfúga-H nà      gyí  
       what 1P.SBJ 1P-PRES suffer 1P-PRES suffer-R COM what  
       ‘What do we suffer, we suffer from what?.’

There are certain words that can enter between the subject pronoun and the STAMP marker. These are, for instance, the contrastive marker -gà (Chapter 4.1.2.5) that attaches to the subject pronoun, as in (170).

- (170) yòò nzàmbí **nyègà**      à      kéé      dígè      mísi  
       yòò nzàmbí nyε-gà      a      kéé      dígε      m-ísì  
       so Ø1.PN 1.SBJ-CONTR 1.PST1 go.COMPL watch ma6-eye  
       ‘So this Nzambi has gone and watched with his eyes [= was thinking].’

Other nominal modifiers, such as *bóò* ‘other’ in (171) or *ndáà* ‘also’ in (172) occur between the subject pronoun and the STAMP marker.

- (171) bí      bóò      yá      bígé      mpá’à      wá      vé  
       bí      b-óò      ya-H      bígé-H      mpá’à      wá      vé  
       1P.SBJ 2-other 1P-PRES develop-R Ø3.side 3:ATT which  
       ‘How will we others develop?’
- (172) èsé      béis      ndáà      bëyá      làwó      fàlà  
       èsé      béis      ndáà      bëyá-H      làwó-H      fàlà  
       is.it[French] 2P.SBJ also 2P[Kwasio]-PRES speak-R Ø1.French  
       ‘Isn’t it, you (pl.), you also speak French.’

### 3.6.2 Non-subject pronouns

Gyeli has a paradigm of non-subject pronouns which are used for object and oblique noun phrases. They are glossed as ‘NSBJ’. They are significantly more frequent in the corpus than subject pronouns, counting 99 occurrences.

As shown in Table 3.20, all speech act participants as well as the agreement class 1 pronoun are segmentally identical to their subject pronoun counterparts. All the other non-subject pronouns, namely agreement classes 2 through 9, differ structurally in that they have a non-subject pronoun root -*â* that takes an agreement prefix. All non-subject pronouns are specified for a HL tone.

	Singular	Plural
Speech Act Participants	1S <i>mê</i> 2S <i>we</i>	1P <i>bî</i> 2P <i>bê</i>
Non-Speech Act Participants	cl.1 <i>nyê</i> cl.3 <i>w-â</i> cl.5 <i>l-â</i> cl.7 <i>y-â</i> cl.9 <i>ny-â</i>	cl.2 <i>b-â</i> cl.4 <i>my-â</i> cl.6 <i>m-â</i> cl.8 <i>by-â</i>

Table 3.20: Non-subject pronouns

Non-subject pronouns that serve as objects occur in all object positions discussed in Chapters 7.2 and 7.3. The basic position is after the verb, as in (173) and (174).

- (173) bwáá lắ bô  
       bwáa-H lă-H b-ô  
       2P-PRES tell-R 2-NSBJ  
       ‘You tell them!’
- (174) byố bé vé bû́ màpè’è  
       byố be-H vè-H bû́ ma-pè’è  
       8.NSBJ 8-PRES give-R 1P.NSBJ ma6-wisdom  
       ‘They give us wisdom.’

Non-subject pronouns serving as objects can also be dislocated to the left edge of the clause, as in (175). In this marked position (174) as well in the in-situ focus position in (175), the pronoun is optionally lengthened for emphasis.

- (175) yốò mé wúmbé wû  
       yốò më-H wúmbë-H wû  
       7.NSBJ 1S-PRES want-R there  
       ‘That is what I want there.’

The first person plural often occurs with the special form *bíyè* in the corpus, as in (176). This seems even more emphatic than the lengthened form *bû*. The data is not sufficient, however, to pinpoint the exact distribution and functional difference between the two emphatic forms. The first person plural is the only person category that has such a suppletive emphatic form.

- (176) bvúlè bá ntégélé ndáà bíyè  
       bvúlè ba-H ntégelë-H ndáà bíyè  
       ba2.Bulu 2-PRES bother-R also 1P.NSBJ  
       ‘The Bulu bother us, too.’

Non-subject pronouns also occur in obliques, as in (177).

- (177) á nyùlényúlé kòfí nà yô  
       a-H nyùlé-nyulë-H kòfí nà y-ô  
       1-PRES drink-HAB-R Ø7.coffee COM 7-NSBJ  
       ‘He usually drinks coffee with it [= *ngùj* ‘sugar’]’

### 3.6.3 Interrogative pronouns

In addition to subject and non-subject pronouns, Gyeli also has two interrogative pronouns: *nzá* ‘who’ for animate/human referents and *gyí* ‘what’

for inanimate referents. *nzá* ‘who/whom’ and *gyí* ‘what’ replace a nominal NP which is shown in (178) and (179), respectively. In (178), the interrogative replaces the subject NP *m-ùdû* ‘man’ while, in (179), the interrogative *gyí* replaces the object NP *má-jíwó* ‘water’. In that sense, they behave like personal pronouns. Both interrogatives are used in all noun phrase environments, namely as subjects, objects, and obliques.

- (178) a. [mùdû] à nyé mùdâ  
           m-ùdû a nyê-H m-ùdâ  
           N1-man 1.PST1 see-R N1-woman  
           ‘The/a man saw the/a woman.’
- b. **nzá** à nyé mùdâ  
     nzá a nyê-H m-ùdâ  
     who 1.PST1 see-R N1-woman  
     ‘Who saw the/a woman?’
- (179) a. mùdû á nyùlé [májíwó]  
       m-ùdû a-H nyùle-H H-ma-jíwó  
       N1-man 1-PRES drink-R OBJ.LINK-ma6-water  
       ‘The/a man drinks water.’
- b. **gyí** mùdû á nyùlè  
     gyí m-ùdû a-H nyùlε  
     what N1-man 1-PRES drink  
     ‘What does the man drink?’

Interrogative pronouns in oblique phrases are shown with the comitative marker *nà* in (180) and (181).

- (180) a. mùdû à kékì mákítì [nà Ádà]  
       m-ùdû a kék-H m-ákítì nà Ádà  
       N1-man 1.PST1 go-R ma6-market COM Ø1.PN  
       ‘The/a man went to the market with Ada.’
- b. **nà** **nzá** mùdû à kékì mákítì  
     nà nzá m-ùdû a kék-H m-ákítì  
     COM who N1-man 1.PST1 go-R ma6-market  
     ‘With whom did the man go to the market?’
- (181) a. mùdû à kékì mákítì [nà tűñ]  
       m-ùdû a kék-H m-ákítì nà tűñ  
       N1-man 1.PST1 go-R ma6-market COM Ø7.axe  
       ‘The/a man went to the market with an axe.’

- b. nà gyí mùdû à kékì mákítì  
 nà gyí m-ùdû a kè-H m-àkítì  
 COM what N1-man 1.PST1 go-R ma6-market  
 ‘With what did the man go to the market?’

*nà nzá* ‘with whom’ is interesting in that *nzá* seems to take a plural marker if the expected answer is more than one person, as shown in (182). Since the prefix *bà-* comes with a L tone, it seems to behave like either a noun class or agreement prefix. Since *nzá* only occurs with humans, the prefix (if it should be analyzed as such) is invariably class 2 *bà-*, therefore it is difficult to test whether the supposed prefix belongs to a noun or a modifier.

- (182) a. mùdû à kékì mákítì [nà Àdà nà Mambì]  
 m-ùdû a kè-H m-àkítì nà Àdà nà Mambì<sup>1</sup>  
 N1-man 1.PST1 go-R ma6-market COM /1.PN COM /1.PN  
 ‘The/a man went to the market with Ada and Mambi.’
- b. nà báñzá mùdû à kékì mákítì  
 nà bà-nzá m-ùdû a kè-H m-àkítì  
 COM 2-who ba1-man 1.PST1 go-R ma6-market  
 ‘With whom did the man go to the market?’

### 3.6.4 Possessor pronouns

Possessor pronouns in Gyeli consist of a root indicating the possessor and a prefix that agrees with the possessee, as shown in (183).

- (183) a. m-ùdì w-ŷ  
 N1-man 1-POSS.2S  
 ‘your (SG) man’
- b. mì-nkwé my-áwó  
 mi4-basket 4-POSS.3P  
 ‘their baskets’

**Possessor roots** Table 3.21 shows the possessor roots. While most possessor roots are used for all agreement classes, there are both segmental and tonal changes depending on the phonological shape of agreement prefixes and the agreement class affiliation respectively.

	Singular	Plural
1	-à	-isi (-usi)
2	-ɔ	-ine (-une)
3	-ɛ	-awɔ

Table 3.21: Basic possessor roots

Some possessor roots are influenced in their segmental form by the shape of the possessee agreement prefix. The first and second person plural are subject to variation if the possessee belongs to class 1 or 3. Then, the first high front vowel used in all other agreement classes turns into a high back vowel as an assimilation to the agreement prefix *w-* in class 1 and 3. The contrast between the two root shapes is illustrated in (184).

- (184) a. gyà y-ísí  
7.music 7-POSS.1P  
'our music'
- b. m-wánò w-ùsí  
N1-child 1-POSS.1P  
'our child'

The agreement class that the possessor root takes also determines the tonal pattern of the root. The tonal pattern of the first and second person singular are the same in every agreement class, as shown in Table 3.22. The vast majority of agreement classes takes a H tone in the third person singular and a H H pattern for the plural possessor roots. Classes 1 and 9, however, are different: the third person singular has a falling HL tone and the plural persons are L H.

Person	Basic tonal pattern		Exceptions: cl. 1 and 9	
	Singular	Plural	Singular	Plural
1	-â	-ísí (-úsí)	-â	-ìsí (-ùsí)
2	-ô	-íné (-úné)	-ô	-ìné (-ùné)
3	-é	-áwó	-ê	-àwó

Table 3.22: Tonal patterns of possessor pronouns

**Possessee agreement prefixes** Agreement of possessor pronouns is marked by agreement prefixes which are listed in Table 3.23 for the various agree-

ment classes.

AGR class	AGR prefix
1	w-
2	b-
3	w-
4	mi-
5	l-
6	m-
7	y-
8	bi-
9	ny-

Table 3.23: Possessee agreement prefixes

Prefixes of classes 4 and 8 ending in a high front vowel are assimilated to the possessor root. If the root starts with a high front vowel /i/ as for the first and second person plural (-íslí and -íné), the vowel of the prefix is deleted:

**class 4:**

- (185) *mi-* + -íslí → *mísí* ‘our’  
*mi-* + -íné → *míne* ‘your (PL)’

**class 8:**

- (186) *bi-* + -íslí → *bísí* ‘our’  
*bi-* + -íné → *bíne* ‘your (PL)’

For the other roots starting in different vowels, the prefix vowel is assimilated and becomes a glide:

**class 4:**

- (187) *mi-* + -â → *myâ* ‘my’  
*mi-* + -â → *myâ* ‘your (SG)’  
*mi-* + -é → *myé* ‘his/her’  
*mi-* + -áwâ → *myáwâ* ‘their’

**class 8:**

- (188) *bi-* + -â → *byâ* ‘my’  
*bi-* + -â → *byâ* ‘your (SG)’  
*bi-* + -é → *byé* ‘his/her’  
*bi-* + -áwâ → *byáwâ* ‘their’

I assume that possessee agreement prefixes are underlyingly toneless just as noun class prefixes. As discussed in the phonology chapter in Section 2.4.1.3, segments may be deleted, but their tones often survive. Possessee agreement prefixes never surface with a vowel because the vowel is deleted in assimilation with the vowel onset of the possessor root. If the deleted vowel was specified for tone, one would assume that the tone survives and affects the root. As possessor roots that are preceded by a deleted vowel (e.g. cl. 4 or 8) show the same tonal pattern as those that are just preceded by a consonant (e.g. cl. 1 or 3), I suggest that the deleted prefix vowel came without any tone in the first place.

### 3.6.5 Reflexive pronoun *médé*

The reflexive pronoun *médé* ‘self’ can be used in all kinds of noun phrases: subject, object, and oblique. Its general function is to emphasize a referent or to express identity between subject and object referent. *médé* ‘self’ can take a range of positions. In subject noun phrases, it can follow the subject pronoun, as in (189) and (190).

- (189) bímbú      lé      mámbòngò mâ                  wè      **médé**  
       bímbú      lé      ma-mbòngò mâ                  wε      médē  
       Ø5.amount 5:ATT ma6-plant 6.DEM.PROX 2S.SBJ self

dígê      **médé**

dígê      médē

look.IMP self

‘The amount of these plants, yourself, look yourself,’

- (190) àà      ndáwò      dé      tù      nyè **médé** támé  
       àà      ndáwò      dé      tù      nyè médē támé  
       1.COP Ø9.house LOC inside 1 self alone

‘He is in his house all by himself.’

The pronoun can also occur just after the finite verb form, as in (191), where it still refers to the subject. Given that other words, such as the finite verb form in this example, can enter between the subject and reflexive pronoun, I analyze *médé* ‘self’ as a free morpheme.

- (191) à      múa      **médé** nyá mùdì  
       a      múa      médē nyá m-ùdì  
       1S be.almost self real N1-person

‘He was himself a real (old) man.’

*médé* ‘self’ also follows nouns (instead of pronouns), as in (192) where it follows the left-dislocated object noun.

- (192)    sá            **médé** mè nzí            sâ yî  
           sá            médé me nzí            sâ yî<sup>22</sup>  
           Ø7.thing self 1S PROG.PST do 7.DEM.PROX  
           ‘The thing itself, I was doing this.’

In object noun phrases, *médé* ‘self’ directly follows the non-subject pronoun, indicating identity between the subject and the object, as in (193) for all animate person categories.<sup>22</sup>

- (193)    a. mé            nyé    **mê**            **médé**  
           me-H        nyê-H    mê            médé  
           1S-PRES see-R 1S.NSBJ self  
           ‘I see myself.’
- b. wé            nyé    **wê**            **médé**  
           wε-H        nyê-H    wê            médé  
           2S-PRES see-R 2S.NSBJ self  
           ‘You (sg.) see yourself.’
- c. á            nyé    **nyê**            **médé**  
           a-H        nyê-H    nyê            médé  
           1-PRES see-R 1S.NSBJ self  
           ‘S/he sees her/himself.’
- d. yá            nyé    **bî**            **médé**  
           ya-H        nyê-H    bî            médé  
           1P-PRES see-R 1P.NSBJ self  
           ‘We see ourselves.’
- e. bwá            nyé    **bê**            **médé**  
           bwa-H        nyê-H    bê            médé  
           2P-PRES see-R 2P.NSBJ self  
           ‘You (pl.) see yourselves.’
- f. bá            nyé    **bô**            **médé**  
           ba-H        nyê-H    bô            médé  
           2-PRES see-R 2-NSBJ self  
           ‘They see themselves.’

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<sup>22</sup>The other non-speech act participant categories, namely agreement classes 3 through 9, all adhere to the same pattern.

## 3.7 Other pro-forms

Other pro-forms substitute other elements than nouns on the phrasal, clausal, or sentential level. In this section, I describe interrogative pro-forms, pro-adverbs, the pro-clausal tag question marker *ngáà*, and pro-sentence forms.

### 3.7.1 Interrogative pro-forms

I treat interrogative pro-forms separately from interrogative pronouns *nzá* ‘who’ and *gyí* ‘what’ (Section 3.6.3) which clearly replace a noun. In contrast, interrogative pro-forms can replace a range of word classes or phrases. For instance, *líní* ‘when’ might stand *in lieu* of an adverb *tê* ‘now’ or a complex oblique noun phrase *mbvû lâ* ‘last year’.

Interrogative pro-forms differ in their structural complexity. Simple forms only include the interrogative word. Complex forms require the interrogative form to occur in a special construction, either with the locative preposition *é* or in a noun + noun attributive construction.

#### 3.7.1.1 Simple interrogative pro-forms

Simple interrogative pro-forms are used in questions to replace either a noun phrase or a temporal adverb. They occur independently as free morphemes. Gyeli has three pro-forms, as listed in (194), that occur in simple interrogative constructions.

- (194) a. *líní* ‘when’
- b. *vé* ‘where’
- c. *ná* ‘how’

The interrogative pro-form *líní* ‘when’ exclusively occurs in simple constructions, no matter if it occurs at the beginning or the end of the question phrase, as shown in (195).

- (195) a. mùdû à            ké    màkítì            [nàkùgúù]  
           m-ùdû a            kè-H ma-kítì            [nà-kùgúù]  
           N1-man 1.PST1 go-R ma6-market SIM-Ø7.evening  
           ‘The/a man went to the market yesterday.’

- b. líní mùdû à kéké màkítì  
           líní m-ùdû a kë-H ma-kítì  
           when N1-man 1.PST1 go-R ma6-market  
           ‘When did the man go to the market?’
- c. mùdû à kéké màkítì líní  
           m-ùdû a kë-H ma-kítì líní  
           N1-man 1.PST1 go-R ma6-market when  
           ‘When did the man go to the market?’

The main use of *líní* ‘when’ is in temporal adverbial clauses (Chapter 8.2.3.1) to express simultaneity. In fact, its use as an interrogative pro-form is rare, even if possible, as shown in (195). When a question asks for a temporal adjunct in the answer, speakers prefer to use complex interrogatives which can be translated as ‘what day’ and ‘what time’, as discussed in the next section.

In contrast to *líní* ‘when’, the other two interrogative pro-forms *vé* ‘where’ and *ná* ‘how’ only appear in simple constructions if they are used in-situ at the end of the phrase, as illustrated in (196) and (197).

- (196) é ná mwánò nùù vé  
       é ná m-wánò nùù vé  
       LOC how N1-child 1.COP where  
       ‘What! Where is the child?’

- (197) kó mbúmbù nyè nzí lèmbò dyùù bô fàmî  
       kó mbúmbù nyè nzí lèmbo dyùù b-â fàmî  
       EXCL Ø1.namesake 1.SBJ PROG.PST know kill 2-NSBJ Ø1.family  
       bá bùdì ná  
       bá b-ùdì ná  
       2:ATT ba2-person how  
       ‘Oh namesake, how could he kill them, the family of people?’

If they are used phrase-initially, however, they obligatorily occur in a complex construction with the preposition *é*, as discussed in the following.

### 3.7.1.2 Complex interrogative pro-forms

Complex interrogative words can be complex in different ways. They can be formed with i) the locative preposition *é* (Section 3.10.1) or ii) a noun + noun attributive construction (Chapter 5.5).

**Interrogatives with the preposition é** Gyeli has two interrogative pro-forms that are constructed with the locative preposition é preceding the interrogative form: é ná ‘how’ and é vé ‘where’. Examples of both interrogatives that require a temporal and a manner adjunct in the answer are given in (198) and (199), respectively.

- (198) a. mÙdÙ à kÉ [màkítì]  
           m-ÙdÙ a kÈ-H ma-kítì  
           N1-man 1.PST1 go-R ma6-market  
           ‘The/a man went to the market.’
- b. É vÉ m-ÙdÙ à kÉ  
       é vÉ m-ÙdÙ a kÈ-H  
       LOC where N1-man 1.PST1 go-PST  
       ‘Where did the man go?’
- c. \*vÉ m-ÙdÙ à kÉ  
       vÉ m-ÙdÙ a kÈ-H  
       where N1-man 1.PST1 go-PST  
       ‘Where did the man go?’
- (199) a. mÙdÙ à kÉ màkítì [nà màtúà]  
           m-ÙdÙ a kÈ-H ma-kítì      nà màtúà  
           N1-man 1.PST1 go-R ma6-market COM Ø1.car  
           ‘The/a man went to the market by car.’
- b. É nÁ mÙdÙ à kÉ màkítì  
       é nÁ m-ÙdÙ a kÈ-H ma-kítì  
       LOC how N1-man 1.PRES go-R ma6-market  
       ‘How did the man go to the market?’
- c. \*nÁ mÙdÙ à kÉ màkítì  
       nÁ m-ÙdÙ a kÈ-H ma-kítì  
       how N1-man 1.PRES go-R ma6-market  
       ‘How did the man go to the market?’

The complex form é ná ‘how’ is also used as a greeting in (200)

- (200) mbúmbù    é    nÁ  
       mbúmbù    é    nÁ  
       Ø1.namesake LOC how  
       ‘Namesake, how is it?’

**Interrogatives in noun + noun attributive constructions** The second option for complex interrogatives are interrogative pro-forms such as *vé* ‘which’ and *níyè* ‘how many’ which occur as the second constituent in a attributive construction with a noun and an attributive marker, as in (201) and explained in detail in Chapter 5.5.4.

- (201) a. lèfû      lé      vé  
           le-fû      lé      vé  
           le5-day 5:ATT which  
           ‘Which day?’
- b. màfû      má      níyè  
       ma-fû      má      níyè  
       ma6-day 6:ATT how.may  
       ‘How many days?’

Besides asking for nominal entities or their quantities in the answer, these interrogatives systematically combine with temporal nouns such as *dúwò* ‘day’ or *wùlà* ‘time, hour’ in order to form temporal interrogative constructions.

### 3.7.2 Pro-adverbs *mpù* and *ndènáà*

The pro-adverbs *mpù* and *ndènáà* generally refer to the manner of an event and are translated with ‘like this’. The semantic difference between the two pro-forms is not clear. They seem to have a very similar distribution in the corpus and speakers state that they can be used interchangeably. *mpù* is, however, significantly more frequent in the corpus with 24 occurrences in comparison to six occurrences of *ndènáà*.

Both pro-adverbs signal a non-verbal gesture or part of the communication that is happening simultaneously to speech time. In (202), the speaker is communicating the number of his children by showing two fingers; *mpù* is signaling this non-verbal gesture.

- (202) bwánò      **mpù**      [gesture showing 2].  
           b-wánò      mpù  
           ba2-child like.this  
           ‘that many children [gesture showing 2].’

Similarly, in (203), *ndènáà* indicates that the greeting is ongoing between the speech act participants.

- (203) mé sùmélé bê **ndènáà**  
       mε-H sùmélε-H bê      ndènáà  
       1S-PRES greet-R 2P.NSBJ like.that  
       ‘I greet you like this.’

*mpù* often introduces the use of ideophones, as in (204).

- (204) yóò nzàmbí njí **mpù** bâââââ njì dígè *mpù*  
       yóò nzàmbí njí-H mpù bâââââ njì díge *mpù*  
       so Ø1.PN come-R like.this IDEO:walking far come look like.this  
       ‘So Nzambi comes like this [depiction of walking a long distance],  
       comes looking like this.’

The deictic reference of pro-adverbs can also be anaphoric rather than signaling an ongoing or immediately following non-verbal communicative event. This is the case in (205), for instance, where *ndènáà* summarizes the situation that the speaker has elaborated previously.

- (205) bon pílì yí báàlá nà bë **ndènáà** ndènáà  
       bon pílì yi-H báàla-H nà bë ndènáà ndènáà  
       good[French] when 7-PRES repeat-R COM be like.that like.that  
       ndáà ná  
       ndáà ná  
       also still  
       ‘So, when it continues and is still like this and like that.’

As (205) and (206) show, *mpù* and *ndènáà* ‘like this’ can both occur directly after the finite verb, as expected for an adverb. While *mpù* often is then followed by an object, this is not the case for *ndènáà* in the corpus. Speaker state, however, that it would be perfectly grammatical.

- (206) wé dyúwó **mpù** bàmìntùlè bógá bá tsígè  
       wε-H dyúwɔ-H mpù ba-mìntùlè bó-gá ba-H tsígε  
       2S-PRES hear-R like.this ba2-mouse 2-other 2-PRES take.off  
       tsùk tsùk tsùk  
       tsùk-tsùk-tsùk  
       IDEO:rustling  
       ‘You hear like this the other mice take off [depiction of noise of mice].’

*mpù*, unlike *ndènáà*, is often preceded by the preposition *é*, as in (207).

- (207) yóò nzàmbí dígé mísi é mpù  
      yóò nzàmbí dígé-H m-ísì é mpù  
      so Ø1.PN look-R ma6-eye LOC like.this  
      ‘So Nzambi looks with the eyes like this.’

The specific function of *é* in combination with *mpù* nor its distribution are clear, however.

### 3.7.3 Pro-clausal *ngáà*

The pro-clausal tag question particle *ngáà* is used to verify the truth value of a clause in leading polar questions (Chapter 7.4.1), as in (208).

- (208) **ngáà** wé nyé mpù  
      ngáà wε-H nyê-H mpù  
      Q(tag) 2S-PRES see-R like.this  
      ‘Right, you see that?’

*ngáà* appears both at the beginning of the question, as in (208), or at the end of it, as in (209).

- (209) wé nyé mpù **ngáà**  
      wε-H nyê-H mpù ngáà  
      2S-PRES see-R like.this Q(tag)  
      ‘You see that, don’t you?’

The pro-clausal particle is used in both affirmative and negated questions. An example of the latter is given in (210).

- (210) wèé nyélé mpù **ngáà**  
      wèé nyê-le mpù ngáà  
      2S.NEG.PRES see-NEG like.this Q(tag)  
      ‘You don’t see that, do you?’

*ngáà* is also used independently on its own as a response to a statement, expressing surprise or verifying the truth value of the statement, comparable to English ‘really?’ or ‘is that true?’.

In affirmative questions, Gyeli also uses French loan words or code-switching.<sup>23</sup> In (211), *èsé* taken from French *est-ce* ‘is it’ is used as tag question marker. There seems to be a preference to use it phrase-initially.

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<sup>23</sup>The status of these French words in Gyeli is not clear at the moment.

- (211) èsé                bée                ndáà bèyá                làwó                fàlà  
           èsé                bée                ndáà bèya-H                làwɔ-H                fàlà  
           is.it[French] 2P.SBJ also 2P[Kwasio]-PRES speak-R Ø1.French  
           ‘Isn’t it, you (pl.) also, you speak French.’

In contrast, **nòj** from French *non* ‘no’ is used phrase-finally with the same function, as in (212).

- (212) bée                ndáà bèyá làwó                fàlà                nòj  
           èsé                bée                ndáà bèya-H                làwɔ-H                fàlà  
           is.it[French] 2P.SBJ also 2P[Kwasio]-PRES speak-R Ø1.French  
           nòj  
           no[French]  
           ‘You (pl.)also, you speak French, isn’t it?’

### 3.7.4 Pro-sentence forms

Pro-sentence forms replace an entire sentence. They are typically answers to polar questions (Chapter 7.4.1), making a statement about its truth value. They can, however, also occur as response to a statement that the speaker agrees or disagrees with. Gyeli has several pro-sentence forms for each agreement and disagreement signal. (213) provides a list of pro-forms that signal agreement.

- (213) a. éè ‘yes’  
       b. áà ‘yes’  
       c. èè ‘yes’  
       d. éé ‘yes’  
       e. ññññ ‘yes’  
       f. èhéé ‘yes’

When asked for the translation of ‘yes’, speakers would answer with (213a). In natural speech as in the corpus, however, a range of other agreement signaling pro-forms are used. They all have in common that they only consist of a long vowel or nasal. The tonal melody and vowel length is crucial in distinguishing agreement from disagreement, as the segmentally similar but tonally different pairs in, for instance, (213d) and (214b) show. Agreement signals have long segments with either a falling or L or H tone,

as in (213a) through (213d). (213e) and (213f), which are tonally identical, are used for emphatic agreement, as in English ‘exactly!’. Also *yà*, or its emphatic form *yáà*, has been observed in the corpus. These forms are likely loan words from German.<sup>24</sup>

There are fewer pro-forms for disagreement than for agreement. The default form is *tòsâ* in (214a), which is derived from the negative polarity item *tò* (Section 3.8.4) and the noun *sâ* ‘thing’.

- (214) a. *tòsâ* ‘no’
- b. *é’ê* ‘no’
- c. *m’mâ* ‘no’

The other two forms in (214b) and (214c) are identical in their tonal pattern. They also differ from agreement forms in their relative brevity. Disagreement forms are never lengthened, but rather short. In (214b) and (214c), the medial glottal stop reinforces the impression of short segments.

## 3.8 Elements of the nominal phrase

In this section, I describe all the elements that occur in a noun phrase, apart from the noun, which has been discussed in Section 3.1. As a basic classification criterion, I distinguish nominal modifiers that agree with the head noun and those that do not, i.e. which are invariable.

Agreeing elements in the Gyeli noun phrase differ in the form of agreement encoding. For some parts of speech, agreement is achieved through a prefix. This is the case for all elements discussed in Sections 3.8.1 and 3.8.2. Other elements, such as demonstratives in Section 3.8.3.1 and attributive markers in Section 3.8.3.2, show agreement through an unbound agreeing morpheme that differs across different agreement classes.

Invariable modifiers, i.e. elements that do not agree with the head noun, differ in their position relative to the noun. Some invariable modifiers precede the head noun (Section 3.8.4), some occur post-nominally (Section 3.8.5). The structure of the noun phrase and its various types are presented in Chapter 5 as well as the gender and agreement system.

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<sup>24</sup>Some German loan words from colonial times (until 1918) are still widespread in the area, for instance also in Mabi. These include, for instance, *dunkel* ‘dark’ and *Dummkopf* ‘idiot’, although Cameroonians are not always sure about their meaning.

### 3.8.1 Modifiers with agreement prefix

Gyeli has five patterns of agreement prefixes, as shown in Table 3.24. Agreement prefixes attach to a variety of agreement targets, including numerals and other quantifiers.<sup>25</sup> All modifiers in Table 3.24 follow the head noun.

AGR class	-vúdû 'one'	-fúsì 'different'	-éṣè 'all'	-́(n̄é)gá 'other'	numerals '2' through '5'
1	m-	m-	w-	n-	
2	bà-	bà-	b-	b-	bá-
3	m-	∅-	w-	w-	
4	mì-	mì-	my-	my-	mí-
5	lè-	lè-	l-	l-	
6	mà-	mà-	m-	m-	má-
7	∅-	∅-	y-	y-	
8	bì-	bì-	by-	by-	bí-
9	m-	∅-	ny-	ny-	

Table 3.24: Agreement prefixes of nominal modifiers

While agreement prefixes of specific agreement classes are often similar in their shape, there are differences that define distinct agreement patterns. The agreement patterns for *-vúdû* 'one' and *-fúsì* 'different' are only distinguished in agreement classes 3 and 9. The agreement patterns for *-éṣè* 'all' and *-́(n̄é)gá* 'other' differ in their agreement class 1 prefix. For semantic reasons, agreement prefixes for plural numerals only ever allow plural agreement prefixes. They are different from other agreement patterns in that they are the only ones to take a H tone prefix; agreement prefixes of all other patterns that have a tone bearing unit always have a L tone.

Some differences can be explained on a phonological basis, namely vowel deletion or assimilation in the prefix if the following stem starts with a vowel. This is, for instance the case with class 2 *bà-* before consonants in comparison to class 2 *b-* before vowels. Differences in prefix shape that are conditioned by phonological rules are not taken as evidence for different agreement patterns. In the following, I present each prefix agreement pattern and the lexical stems that take it.

<sup>25</sup>These nominal modifiers could be argued to constitute adjectives on the basis of their agreement prefixes. Adjectives are, however, usually taken to be 'lexical' (or content) words, according to Rijkhoff (2002: 121), and describe properties such as "size, weight, color, age, and value." In Gyeli, they do not take agreement prefixes, as described in Section 3.3.

### 3.8.1.1 *-vúdû* ‘one, same’

*-vúdû* can denote both the cardinal numeral ‘1’ and the deictic modifier meaning ‘same’. It is distinct from the agreement pattern of the other agreeing numerals ‘2’ through ‘5’ in the L tone on CV- prefixes.

As the cardinal numeral ‘1’, *-vúdû* logically only occurs with singular entities it modifies. If it is used in order to express identity of entities, however, *-vúdû* also takes an agreement prefix for plural classes, as shown in Table 3.25.

cl. 1	mùdì	<b>m</b> -vúdû	‘one/same person’
cl. 2	bùdì	<b>b</b> à-vúdû	‘same people’
cl. 3	nk��	<b>m</b> -v��d��	‘one/same basket’
cl. 4	mi-nkw��	<b>m</b> ��-v��d��	‘same baskets’
cl. 5	le-d��nd��	<b>l</b> ��-v��d��	‘one/same sparrow’
cl. 6	ma-d��nd��	<b>m</b> ��-v��d��	‘same sparrows’
cl. 7	s��ng��	��-v��d��	‘one/same cat’
cl. 8	be-s��ng��	<b>b</b> ��-v��d��	‘same cats’
cl. 9	nd��w��	<b>m</b> -v��d��	‘one/same house’

Table 3.25: AGR-*vúdû* ‘one/same’ in various agreement classes

### 3.8.1.2 *-f  s  * ‘different’

*-f  s  * ‘different’ follows the noun it modifies just as the other modifiers that show agreement through a prefix. Examples for *f  s  * ‘different’ in different agreement classes are provided in Table 3.26.

cl. 1	mùdì	<b>m</b> -f��s��	‘a different person’
cl. 2	bùdì	<b>b</b> ��-f��s��	‘different people’
cl. 3	nk��	��-f��s��	‘a different basket’
cl. 4	mi-nkw��	<b>m</b> ��-f��s��	‘different baskets’
cl. 5	le-d��nd��	<b>l</b> ��-f��s��	‘a different sparrow’
cl. 6	ma-d��nd��	<b>m</b> ��-f��s��	‘different sparrows’
cl. 7	s��ng��	��-f��s��	‘a different cat’
cl. 8	be-s��ng��	<b>b</b> ��-f��s��	‘different cats’
cl. 9	nd��w��	��-f��s��	‘a different house’

Table 3.26: AGR-*f  s  * ‘different’ in various agreement classes

### 3.8.1.3 -éṣè ‘all’

éṣè ‘all’ is a universal quantifier that agrees with the head noun through an agreement prefix. Universal quantifiers express totality and contain items such as ‘all’ and ‘every’ (Zerbian & Krifka 2008: 394). Table 3.27 provides examples of the quantifier for all agreement classes showing the agreement prefix in bold. The agreement prefix for ‘all’ is the same as the possessee agreement of possessor roots. As most other modifiers, ‘all’ follows the head noun.

cl. 1	mùdì	w-éṣè	‘all (the parts of) the person’
cl. 2	bùdì	b-éṣè	‘all people’
cl. 3	nkwě	w-éṣè	‘all (the parts of) the basket’
cl. 4	mi-nkwě	my-éṣè	‘all baskets’
cl. 5	le-dündá	l-éṣè	‘all (the parts of) the sparrow’
cl. 6	ma-dündà	m-éṣè	‘all sparrows’
cl. 7	síngì	y-éṣè	‘all (the parts of) the cat’
cl. 8	be-síngì	by-éṣè	‘all cats’
cl. 9	ndáwò	ny-éṣè	‘all the house’

Table 3.27: AGR-éṣè ‘all’ in various agreement classes

In Gyeli, éṣè ‘all’ is typically used with plural nouns. Also singular forms can, however, be modified by -éṣè ‘all’ in a specific context, which is also shown in Table 3.27. This special context requires a situation where a typical singular entity consists of or is cut up into several parts. Taking the example of a cat, síngì yéṣè ‘all the cat’ would mean that a cat is cut up into different parts, but then all the parts are used, which is different from meaning ‘the whole cat’ (Section 3.8.5.3), as shown in (215).

- (215) a. síngì y-éṣè  
           ∅7.cat 7-all  
           ‘all (the parts of) the cat’
- b. síngì mānjímò  
           ∅7.cat whole  
           ‘the whole cat (in its entirety)’

### 3.8.1.4 -́(né)gá ‘(an)other’

The full form ‘other’ in careful speech is -́négá. In fast speech, however, a shortened form AGR-́gá is used where *né* is omitted. The option to omit *né* is indicated by the brackets in Table 3.28.

cl. 1	mùdì	<b>n</b> -́(né)gá	‘another person’
cl. 2	bùdì	<b>b</b> -́(né)gá	‘other people’
cl. 3	nkë	<b>w</b> -́(né)gá	‘another basket’
cl. 4	mi-nkwë	<b>my</b> -́(né)gá	‘other baskets’
cl. 5	le-dùndà	<b>l</b> -́(né)gá	‘another sparrow’
cl. 6	ma-dùndà	<b>m</b> -́(né)gá	‘other sparrows’
cl. 7	síngì	<b>y</b> -́(né)gá	‘another cat’
cl. 8	be-síngì	<b>by</b> -́(né)gá	‘other cats’
cl. 9	ndáwò	<b>ny</b> -́(né)gá	‘another house’

Table 3.28: AGR-́ (*né*) gá ‘other’ in various agreement classes

### 3.8.1.5 Agreeing plural numerals

Numerals may, depending on the language, form various numeral series such as enumeratives, cardinal, ordinal, or distributive numerals. In Gyeli, only a few cardinal numerals agree with the noun. Cardinal numerals are used attributively with nouns when counting items.<sup>26</sup>

**Numerals ‘2’, ‘3’, ‘4’, and ‘5’** The (cardinal) numerals -báà ‘2’, -láálè ‘3’, -nâ ‘4’, and -tánè ‘5’ agree with their head noun. As enumeratives, i.e. in general counting without referring to a specific entity, the class 8 prefix *bí-* is used. The agreement prefixes of agreeing numerals and some examples are listed in Table 3.29.<sup>27</sup>

<sup>26</sup>Gyeli numerals do not belong to one uniform category. There are monomorphemic (simple) and polymorphemic (complex) numerals. Even simple numerals do not belong to one category in terms of parts of speech, but can be classified into three types: i) modifiers, ii) invariable modifiers, and iii) nouns. Complex numerals constitute either a coordination construction or a noun + modifier NP or a combination of the two.

<sup>27</sup>Since all the numerals that take agreement markers are inherently plural, singular class prefixes are never used.

AGR class	AGR prefix	Example	Gloss
2	<b>bá-</b>	<i>b-ùdì bá-báà</i>	‘two people’
4	<b>mí-</b>	<i>mi-nkwê mí-báà</i>	‘two baskets’
6	<b>má-</b>	<i>ma-kí má-báà</i>	‘two eggs’
8	<b>bé-</b>	<i>be-síngì bé-báà</i>	‘two cats’

Table 3.29: Agreement prefixes of modifying numerals

All agreement prefixes on the agreeing numerals come with a H tone, in contrast to noun class prefixes and agreement prefixes of other modifiers (see Section 3.8.1).

One could argue that these agreement prefixes should not be analyzed as such, but may rather constitute attributive markers (Section 3.8.3.2) which have the same shape and tone as these prefixes. This is unlikely, however, because enumeratives always require a default prefix even though they are not modifying any noun. It is thus more likely to assume that numerals take a default prefix rather than a default attributive marker in a headless construction. Further, also the genitive marker takes H tone prefixes (Section 3.8.2.1).

The cardinal numerals from ‘2’ through ‘5’ invariably follow the head noun, as shown in (216).

(216)

- |   |  |
|---|--|
| a. b-ùdâ <b>bá-báà</b><br>ba2-woman 2-two<br>‘two women’  | b. b-ùdâ <b>bá-láálè</b><br>ba2-woman 2-three<br>‘three women’ |
| c. b-ùdâ <b>bá-nâ</b><br>ba2-woman 2-four<br>‘four women’ | d. b-ùdâ <b>bá-tánè</b><br>ba2-woman 2-five<br>‘five women’    |

The same noun phrase structure is used in the formation of complex numerals that involve an underlying arithmetic operation of multiplication. In this case, the agreeing numeral will follow a nominal base numeral, as shown in (217), to form multiples of the base.

(217)

- |  |  |
|--|--|
| a. màwúm̀ mábáà<br>ma-wúm̀ má-báà<br>ma6-ten 6-two<br><br>‘twenty [10 x 2]’              | b. màwúm̀ máláálè<br>ma-wúm̀ má-láálè<br>ma6-ten 6-three<br><br>‘thirty [10 x 3]’                  |
| c. bìbwúyà bí-nâ<br>bi-bwúyà bí-nâ<br>bi8-hundred 2-four<br><br>‘four hundred [100 x 4]’ | d. bátódyínì bátánè<br>ba-tódyínì bá-tánè<br>ba2-thousand 2-five<br><br>‘five thousand [1000 x 5]’ |

Agreeing numerals ‘2’ through ‘5’ can never modify singular nouns for semantic reasons. They therefore lack any singular counterparts. I still distinguish them from modifiers discussed in the next section since those modifiers do occur with singular forms.

### 3.8.2 Modifiers with plural agreement only

#### 3.8.2.1 Genitive marker *ngá*

There are two modifiers in Gyeli, the genitive marker *ngá* and *nyá* ‘big’, which never take an agreement prefix for singular agreement classes, but require them for plural classes. Based in this characteristic, I classify them as one modifier group. They differ, however, in many other properties. First, the genitive marker *ngá* only occurs in noun + noun constructions (Chapter 5.5), following the head noun it modifies. In contrast, *nyá* ‘big’ precedes the head noun and is, together with the invariable negative polarity item *tò* the only element that can precede the head noun. The genitive marker *ngá* and *nyá* ‘big’ also differ in the tonal pattern of their agreement prefixes: *ngá* takes a H tone CV prefix, while agreement prefixes of *nyá* surface with a L tone.

Gyeli has a split genitive/attributive system, using different sets of associativity markers depending on the status of the possessor noun. The genitive marker *ngá* is used instead of an attributive marker (Section 3.8.3.2) if the second constituent in a noun + noun construction is a proper name, as illustrated in (218). This highlights the special status of proper names in contrast to common nouns (Section 3.1.2.2).

- (218) a. ndáwò **ngá** Àdà  
           Ø9.house GEN Ø1.PN  
           ‘Ada’s house’
- b. ndáwò **nyà** m-bvùlè  
           Ø9.house 9:ATT N1-Bulu  
           ‘the Bulu<sup>28</sup> man’s house’

Further, the genitive marker is used in the interrogative pronoun constructions such as *pú’ù ngá nzá* ‘for whom’ when the answer could potentially be a proper name. In question words where something else than a proper name is expected as an answer, as in *pú’ù yá gyí* ‘for what’, the attributive is used.

The genitive marker only takes an agreement marker if the preceding possessee noun occurs in the plural. If *ndáwò* ‘house’ in (218) was in its plural form, the example would change as in (219) with a plural marker on *ngá*.

- (219) a. mà-ndáwò **má-ngá** Àdà  
           ma6-Ø9.house 6-GEN Ø1.PN  
           ‘Ada’s houses’
- b. mà-ndáwò **má** m-bvùlè  
           ma6-house 6:ATT N1-Bulu  
           ‘the Bulu man’s houses’

If it is singular, however, the genitive marker takes a default form *ngá*. Table 3.30 shows the agreement pattern of genitive markers with the non-agreeing singular forms in the left and the agreeing plural forms in the right column.

Singular classes	Plural classes
cl. 1   ngá	cl. 2   bá- <i>ngá</i>
cl. 3   ngá	cl. 4   mí- <i>ngá</i>
cl. 5   ngá	cl. 6   má- <i>ngá</i>
cl. 7   ngá	cl. 8   bé- <i>ngá</i>
cl. 9   ngá	

Table 3.30: Agreement marking of genitive markers

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<sup>28</sup>Bulu describes a neighboring ethnic group to the Bagyeli as well as their language which is classified as Bantu A74.

The agreement prefix, although it seems to be identical with the attributive marker, belongs prosodically to the genitive word *ngá*. In contrast, following speakers' intuitions, the attributive marker is prosodically an independent word. I therefore do not view agreeing plural forms of the genitive linker as constructions containing both attributive and genitive markers. Instead, the H tone agreement prefixes are parallel to those used with agreeing plural numerals.

There is another logical possibility to explain the H tone on the agreement prefix, namely leftwards high tone spreading from the *-ngá* root. I rule this possibility out for two reasons. First, high tone spreading from the right to the left does occur in Gyeli, but it seems to be restricted to the verbal domain (as with underlyingly toneless verb extension morphemes which are discussed in Section 2.4.2.1). Therefore, it seems unlikely that the H tone from the *-ngá* root would spread leftwards onto the prefix.

Second, contrasting cases of L tone CV- agreement prefixes that occur with other modifiers, such as *-vúdû* 'same, one' and *-fúsì* 'different', suggest that the CV- agreement prefixes for the genitive marker (and numerals from '2' through '5') are indeed specified for a H tone. The other modifiers also start with a H tone stem, but they still have CV- agreement prefixes that surface with a L tone. There could be a rule that H tone spreading is restricted to a certain class of agreement targets, but given these two arguments, it seems unlikely. The ultimate proof against H tone spreading, namely checking what happens with the CV- prefixes if the stem starts with a L tone, is not testable because all modifier roots that take a H tone CV-agreement prefix (*-ngá* and the numerals '2' through '5') start with a H or HL mora, but never with a L.

### 3.8.2.2 *nyá* 'big'

*-nyá* meaning 'big', 'important', 'luxurious', 'beautiful' could qualify as an adjective since it denotes a property of a noun. The semantic difference between *nyá* 'big' and the adjective *nénè* 'big' is that the second typically refers to size as in (220a). *nyá*, however, talks more about the value as demonstrated in (220b). In Cameroonian French, value is often translated with size so that a *grand panier* 'big basket' could, besides referring to the size, also talk about its value.

- (220) a. nkwé wá nénè  
           ∅3.basket 3:ATT big  
           ‘a/the big basket’
- b. nyá nkwé  
     big ∅3.basket  
     ‘a/the important/beautiful/luxurious basket’

Agreement of *nyá* is only marked if the head noun comes in a plural form. If the head noun is singular, *nyá* is invariable as shown in Table 3.31. This behavior is similar to the genitive marker discussed in Section 3.8.2.1.

Singular classes			
cl. 1	nyá	m-ùdì	‘important person’
cl. 3	nyá	nkwé	‘great basket’
cl. 5	nyá	le-dündá	‘big sparrow’
cl. 7	nyá	lé	‘great tree’
cl. 8b	nyá	bwálè	‘beautiful canoe’
cl. 9	nyá	ndáwò	‘luxurious house’

Plural classes			
cl. 2	ba-nyá	b-ùdì	‘important people’
cl. 4	mi-nyá	mì-nkwé	‘great baskets’
cl. 6	ma-nyá	mà-dündá	‘big sparrows’
cl. 8a	be-nyá	bè-lé	‘great trees’

Table 3.31: *nyá* in various agreement classes

Another particularity is the syntactic position of *nyá*, preceding the noun whereas basically all other modifiers follow the noun.

### 3.8.3 Modifiers with agreeing free morpheme

There are two nominal modifiers in Gyeli which do not express agreement with the head noun through a prefix that attaches to a root that is consistent across different agreement classes, but that have free agreeing morphemes which differ across agreement classes. This is the case for demonstratives and for the attributive marker.

### 3.8.3.1 Demonstratives

Gyeli has two sets of demonstratives distinguishing different degrees of distance between the speaker and the object or person he or she is talking about. One set of demonstratives, the proximal demonstratives, refers to objects or persons close to the speaker. Distal demonstratives are employed when the object or person in question is further away from the speaker (but not necessarily close to the addressee).

Proximal and distal demonstratives are formally distinguished by different tonal patterns and vowel lengthening of the distal pronouns. Table 3.32 contrasts the two sets of demonstratives. While proximal demonstratives end in a simple vowel with a falling HL tonal pattern, distal demonstratives all have a lengthened vowel with a H tone.

	proximal	distal
1	<i>nû</i>	<i>núú</i>
2	<i>bâ</i>	<i>báá</i>
3	<i>wô</i>	<i>wóó</i>
4	<i>mî</i>	<i>míí</i>
5	<i>lê</i>	<i>léé</i>
6	<i>mâ</i>	<i>máá</i>
7	<i>yî</i>	<i>yíí</i>
8	<i>bî</i>	<i>bíí</i>
9	<i>nyî</i>	<i>nyíí</i>

Table 3.32: Gyeli demonstratives

Both proximal and distal demonstratives follow the noun they modify in a noun phrase as shown in (221).

- (221) a. m-ùdì nû  
           N1-man 1.DEM.PROX  
           ‘this man’
- b. m-ùdì núú  
           N1-man 1.DEM.DIST  
           ‘that man’

These demonstratives are also used as presentational or identificational

markers in non-verbal predicates of the pattern ‘This is a house.’ Such constructions are discussed in Chapter 7.1.

### 3.8.3.2 Attributive markers

Attributive markers constitute another class of function words that agree with their head noun. In Bantu studies, they are also called genitive or associative markers. Gyeli has a split genitive system with two different paradigms of genitive, or associativity, indicating constructions. I label one paradigm as ‘attributive’ and the other as ‘genitive’. The difference is explained in Section 3.8.2.1.

Attributive markers serve as a linking element between a noun and typically another noun, as shown in (222). Attributive markers also link a noun to a verb, an adjective, or an interrogative. The different constructions and their constituents are discussed in Section 3.8.2.1 on attributive constructions. At this point, I will only present the agreement target, namely the attributive marker itself.

- (222) a. sín̄gì yá jíí  
 Ø7.cat 7:ATT Ø7.forest  
 ‘forest cat’
- b. lè-lɔ́ lé sín̄gì  
 le5-ear 5:ATT Ø7.cat  
 ‘the cat’s ear’

Attributive markers are also used in relative clauses, as exemplified in (223) and discussed in detail in Chapter 8.2.1.

- (223) a. sín̄gì yá yí kwè  
 Ø7.cat 7:ATT 7.PRES fall  
 ‘the cat that falls’
- b. sín̄gì yá mé nyɛ  
 Ø7.cat 7:ATT 1S.PRES see  
 ‘the cat that I see’

Meeussen (1967), and later Van de Velde (2013: 219), posit that the canonical form for Bantu attributives is AGR-*a*, a root -*a* which is preceded by an agreement prefix. Many Gyeli attributives follow this canonical form. Exceptions to this tendency are found, however, in classes 4, 5, and 8 which

come with high and mid vowel roots rather than with *-a*, as shown in Table 3.33. Attributive markers in Gyeli typically have a H tone, except for those of classes 1 and 9 which both come with a L tone.

AGR class	ATT marker
1	wà
2	bá
3	wá
4	mí
5	lé
6	má
7	yá
8	bé
9	nyà

Table 3.33: Attributives in the different agreement classes

### 3.8.4 Prenominal invariable modifiers

Elements that can occur prenominally in Gyeli are restricted in number and distribution. In simple noun phrases, only *nyá* ‘big’ (Section 3.8.2.2) and *tò* ‘any’ (Section 3.8.4.1) can precede the noun. *nyá* ‘big’ agrees with the head noun only if the noun is plural, otherwise it is invariable; *tò* ‘any’ is always invariable. Other prenominal elements precede second constituents in noun + noun constructions, serving as connectors. They also differ in their agreement behavior ranging from agreeing elements such as the attributive marker (Section 3.8.3.2) to those that only agree with plural nouns as the genitive marker (Section 3.8.2.1) and the similative marker (Section 3.8.4.2) that is invariable. I discuss the two invariable prenominal elements in the following, namely the negative polarity item *tò* and the similative marker *ná*.

#### 3.8.4.1 Negative polarity item *tò* ‘any’

The negative polarity item *tò* ‘any’ does not agree with the head noun, as shown in (224). *tò* ‘any’ never agrees, no matter if it precedes a singular or plural noun. In that, it differs from the genitive marker *ngà* (Section 3.8.2.1) that agrees with plural nouns.

- (224) a. mèé nyé-lé [tò m-ùdì]  
       1S see-NEG any N1-person  
       'I don't see any person.'
- b. mèé nyé-lé [tò b-ùdì]  
       1S see-NEG any ba2-person  
       'I don't see any people.'

The use of *tò* in negated sentences is grammatically not obligatory, as shown in (225), where the same sentence as in (224a) occurs without *tò* 'any'. Semantically, however, there is a difference in that no person at all is seen in (224a), while (224b) negates a specific, known person.

- (225) mèé nyé-lé m-ùdì  
       1S see-NEG N1-person  
       'I don't see the person.'

### 3.8.4.2 Similative marker *ná*

The similative marker *ná* occurs both as a free morpheme and a prefix. The free morpheme *ná* functions as a connector in a noun + noun construction that is restricted to the use of the noun *jínò* 'name' as the first constituent and a proper name in the second constituent, as shown in (226).

- (226) èè mè jínò      ná Màmà  
       èè mè j-íñò      ná Màmà  
       yes 1S le5-name SIM Ø1.PN  
       'Yes, my name is Mama.'

The free similative marker is invariable, even if the noun + noun construction has plural constituents. As illustrated in (227), number has to be identical in the first and second constituent, but the connecting similative marker *ná* does not change.

- (227) bà míñò      ná Màmà nà      Màmbì  
       bà m-íñò      ná Màmà nà      Màmbì  
       2 ma6-name SIM Ø1.PN CONJ Ø1.PN  
       'Their names are Mama and Mambi.'

The use of the similative marker *na-* as a prefix is more productive than the free connector form and is discussed in Chapter 4.1.1.1.

### 3.8.5 Postnominal invariable modifiers

Most modifiers in Gyeli occur after the noun. This is also true for most non-agreeing modifiers, such as invariable numerals, some quantifiers, and the free anaphoric marker *ndè*.

#### 3.8.5.1 Invariable numerals

Gyeli has monomorphemic cardinal numerals which do not agree with the noun, as shown in (228). As such, they might be thought of belonging to the same category of adjectives (Section 3.3). In contrast to adjectives, however, they never occur in a construction involving an attributive marker.

(228)

- |                                   |                                    |
|-----------------------------------|------------------------------------|
| a. b-ùdâ ntù́j<br>ba2-woman six   | b. b-ùdâ mpúèré<br>ba2-woman seven |
| ‘six women’                       | ‘seven women’                      |
| c. b-ùdâ lòmbì<br>ba2-woman eight | d. b-ùdâ rèbvùá<br>ba2-woman nine  |
| ‘eight women’                     | ‘nine women’                       |

#### 3.8.5.2 Quantifier *bvùbvù* ‘many, much’

*bvùbvù* ‘many, much’ is an intersective quantifier. Zerbian & Krifka (2008: 388) define *intersective* quantifiers as “quantifiers whose truth conditions can be given in terms of the intersection of the noun meaning and the predicate meaning.” Other intersective quantifiers are, for instance, ‘several’, ‘few’, ‘a certain/other’, ‘some’ or ‘no’. The authors state that most intersective quantifiers in Bantu languages agree with their head noun. This is not true for Gyeli which has a range of non-agreeing quantifiers (or uses attributive constructions (Section 5.5.1.4) in order to express quantifiers such as ‘many’ or ‘few’).

*bvùbvù* ‘many, much’ is not sensitive to a mass/count distinction and occurs both with countable and uncountable nouns alike, as shown in (229a) and (229b).

- (229) a. b-ùdì bvùbvù  
ba2-people many

‘many people’

- b. mà-jíw̪ò bvùbvù  
ma6-water much  
‘much water’

This quantifier has a nominal counterpart in agreement class 9 which can be used in a noun + noun attributive construction (Chapter 5.5.1.4). The nominal quantifier has a different tone pattern, however: *bvúbvù nyà*. It seems to be the more marked form which occurs less frequently than the invariable modifier. Possible meaning differences are subtle; speakers claim that both mean the same and can be used in the same contexts.

### 3.8.5.3 Quantifier *mànjìmò* ‘whole, entire’

*mànjìmò* ‘whole, entire’ is another invariable quantifier that follows the head noun, as in (230). Despite the similarity to the nominal modifier *njìmò wá* ‘a certain’ plus something that looks like a class 6 prefix, *mànjìmò* is not a noun since it lacks noun properties such as the possibility to be modified by, for instance, demonstratives or possessive pronouns, or entering a noun + noun attributive construction as the head.

- (230) a. púsí      *mànjìmò*  
Ø7.bottle whole  
‘the whole bottle’
- b. ndáwò      *mànjìmò*  
Ø9.house whole  
‘the entire house’
- c. bè-síngì *mànjìmò*  
be8-cat whole  
‘the entire cats’

*mànjìmò* is sensitive to a mass/count distinction in that it does not appear with uncountable nouns, neither liquids nor granular aggregates, as shown in (231). Using *mànjìmò* with mass nouns requires a specification of the physical entity, for instance a bottle as in (231c).

- (231) a. \*mà-tàngò      *mànjìmò*  
ma6-palm.wine whole  
‘the whole palm wine’

- b. \*ndísì mānjìmɔ  
∅3.rice whole  
'the entire rice'
- c. púsí (yá) má-vúdò mānjìmò  
∅7.bottle (7:CON) ma6-oil whole  
'a whole bottle of oil'

In contrast to the singular form of granular aggregate mass nouns which cannot occur with *mānjìmò*, their plural counterpart allows for its use as in (232). In this case, however, it is understood that the noun comes in packaged entities, for instance in sachets or bag, or that different types of the noun are involved.

- (232) mì-ndísì mānjìmò  
mi4-rice whole  
'the whole rice (= all its types or packages)'

### 3.8.5.4 Free anaphoric marker *ndè*

The anaphoric marker *ndè* occurs as a free morpheme after the identificational marker *wé*, as in (233).

- (233) kàndá wé **ndè**  
kàndá wé ndè  
∅7.proverb ID ANA  
'The story is this.'

It is also a free morpheme after nouns, as in (234).

- (234) àà kfúmá **ndè** wà Nlúnzò  
àà kfúmá ndè wà Nlúnzò  
ECXL ∅1.chief ANA 1:ATT ∅1.PN  
'Ah, that chief from Nlunzo!'

As discussed in Chapter 4.1.2.4, *ndè* occur as a suffix when it attaches to demonstratives.

## 3.9 Elements of the verbal complex

In this section, I describe the elements that occur in a verbal predicate other than the verb, which has been outlined in Section 3.2. These elements in-

clude the subject-tense-aspect-mood-polarity (STAMP) marker and two verbal particles that follow the inflected verb form.

### 3.9.1 The subject-tense-aspect-mood-polarity marker

The subject-tense-aspect-mood-polarity (STAMP) marker, following terminology coined by Anderson (2011a, 2015), is a clitic directly preceding the inflected verb form. As a portmanteau morpheme, it encodes subject agreement as well as tense, mood, aspect, and negation. Table 3.34 shows the segmental shape of the STAMP marker in the different agreement classes, omitting the tonal pattern which changes across tense-mood, aspect, and negation categories. The tonal patterns of the STAMP marker are discussed in Chapter 6.2.1.

TM CAT	1S	2S	1P	2P	1	2	3	4	5	6	7	8	9
PRES	mɛ	wɛ	ya	bwa	a/	ba	wu	mi	le	ma	yi	be	nyi

Table 3.34: Shape of the STAMP marker in different AGR classes

The tonal pattern and sometimes vowel length of the STAMP marker change across different tense-mood categories, as shown in Table 3.35 which lists the STAMP markers' form and surface tones for all agreement classes in all tense-mood categories.

The FUT category has an exceptional tonal pattern for certain agreement classes which are marked in bold. The vowel of the second person plural is either pronounced with a long or a short vowel if the tone is not a contour tone, i.e. if it is either H or L.

Class 1 has *a* as a basic form and an alternate form *nyɛ*<sup>29</sup>. At the same time, *nyɛ* is identical with the non-subject pronoun of agreement class 1. Both forms are equally used and speakers state that both are part of the Gyeli language, although the *a* form is more frequently found in texts. Also, agreement class 1 has a third alternate form, namely *nu* which is identical with the class 1 demonstrative. It can, however, also be used as STAMP marker with the specific tonal pattern for each tense-mood category. In

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<sup>29</sup>This form could originate from Kwasio.

TM CAT	1S	2S	1P	2P	1	2	3	4	5	6	7	8	9
PRES	mé	wé	yá	bwá(á)	á/ nyé/ nú	bá	wú	mí	lé	má	yí	bé	nyí
INCH	mèé	wèé	yàá	bwàá	àá	bàá	wùú	mǐ	lèé	màá	yìí	bèé	nyìí
FUT	mèè	wèè	yáà	bwáà	àà/ nyèè/ nùù	báà	wúù	mî	léè	máà	yîí	béè	nyîí
PST1	mε	wε	ya	bwa(a)	a/ nyε/ nu	ba	wu	mi	le	ma	yi	be	nyi
PST2	méè	wéè	yáà	bwáà	áà/ nyéè/ nùù	báà	wúù	mî	léè	máà	yîí	béè	nyîí
IMP SBJV	—	—	yá	—	—/ nyé/ nú	—	—	—	—	—	—	—	—
	mé	wé	yá	bwá(á)	á/ nyé/ nú	bá	wú	mí	lé	má	yí	bé	nyí

Table 3.35: Patterns of STAMP markers in different AGR classes and TM categories

this, the class 1 STAMP marker is exceptional because demonstratives of other agreement classes cannot function as STAMP marker.

**Toneless PAST 1 category** I suggest that, underlyingly, the L surface form of the PST1 category is tonally not specified and only surfaces phonetically as L. This is comparable to other grammatical morphemes such as noun class prefixes or verbal derivation morphemes as discussed in Chapter 2.4.1.3. I view this phonetically L form as a tonally underspecified default form because it does not only occur in the PAST 1 category, but also serves as general default form in other tense-mood categories when these are combined with true auxiliaries encoding aspect (Section 6.3.1). It further provides the basic form from which the PRESENT category is derived with a H tone. Consequently, in the glossing of examples, the surface L STAMP markers are represented as being toneless in the underlying line. PRES STAMP forms are underlyingly represented as toneless STAMP markers which receive a H tone, characterizing this category.

**Tone pattern in the FUTURE category** As shown in Table 3.35, the general pattern for the FUTURE is a long vowel with a HL tonal melody. While in other tense-mood categories the tonal and vowel length pattern is the same

for each agreement class, in the FUTURE, the first and second person singular as well as the class 1 STAMP marker deviate from this pattern, having a long vowel with a L tonal melody, as in (235).

- (235) a. mèè dè 'I will eat'  
 b. wèè dè 'you will eat'  
 c. àà/nyèè dè 's/he will eat'

The STAMP marker precedes the finite verb, but is not part of the verb as it can, in fast speech, be assimilated or even omitted in certain tense-mood categories. I outline both cases in turn.

**STAMP marker assimilation** Depending on the morphophonological shape of the STAMP marker, this clitic can undergo assimilation with preceding vocalic material in fast speech. This applies mainly to the agreement class 1 STAMP marker whose segmental material consists of the vowel *a*. Given that it is not preceded by a consonant, unlike the STAMP markers of all other agreement classes, it can assimilate with the final vowel of a preceding verb or noun.

An example of STAMP marker assimilation with both preceding verbs and nouns is provided in (236). In the first instance, the STAMP marker assimilates to the verb *njì* 'come' of the preceding phrase. Thus, STAMP marker assimilation in fast speech is not restricted to in-phrase assimilation, but can also cross phrase boundaries.

- (236) à        njâ        dyùmó bùdàà        dyùmó        bùdàà dyùmó  
 a        nji-H    a        dyùmɔ-H b-ùdì        a        dyùmɔ-H  
 1.PST1 come-R 1.PST1 heal-R    ba2-person 1.PST1 heal-R  
 bùdàà        dyùmó bùdì  
 b-ùdì        a        dyùmɔ-H b-ùdì  
 ba2-person 1.PST1 heal-R    ba2-person  
 'He came, he was healing people.'

In the other assimilation instances in (236), the STAMP marker assimilates to the nominal object *bùdì* 'people', also of the previous phrase. In both cases, the final vowel of the noun is elided while the vowel of the STAMP marker surfaces. At the same time, the tone of the omitted vowel survives, as seen with the contour tone on [njí + à] → /njâ/. In the second instance,

while vowel quality is assimilated to the STAMP marker, both tone and vowel length survive, surfacing in a long vowel: [bùdì + à] → /bùdàà/.

**STAMP marker assimilation with proper names** As seen in the previous example, in STAMP marker assimilation it is usually the preceding vocalic material of a noun or verb that is deleted. This is different for STAMP marker assimilation with proper names. Proper names do not change their vowel quality, but assimilate tonally to the class 1 STAMP marker whose vocalic material is being elided, as shown in (237).

- (237) a. Màmbì á kwè → /Màmbí kwè/  
           Màmbì a-H kwè  
           ∅1.PN 1-PRES fall  
           ‘Mambi falls.’
- b. Màmbì àá kwè → /Màmbíí kwè/  
           Màmbì àá kwè  
           ∅1.PN 1.INCH fall  
           ‘Mambi is at the beginning of falling.’

Tonal changes on the proper name do not depend on tonal or phonological patterns of the name, but are controlled by the noun’s feature of being a proper name (Section 3.1.2.2). The fact that proper names receive special morphosyntactic treatment in Gyeli is also seen in the split genitive system (Chapter 3.8.2.1).

If the proper name’s final tone and the STAMP marker’s tone are identical, there is no tonal or vocalic surface change, but the STAMP marker simply is elided, as shown in (238a) for the proper name *Màmbì* ending in a L tone and a following L STAMP marker and, in (238b), the proper name *Biyá* ending in a H tone in combination with a PRES H tone STAMP marker.

- (238) a. Màmbì à kwé → /Màmbì kwé/  
           Màmbì a kwé-H  
           ∅1.PN 1.PST1 fall-PST  
           ‘Mambi fell.’
- b. Biyá á sàgà → /Biyá sàgà/  
           Biyá a-H sàga  
           ∅1.PN 1-PRES frighten  
           ‘Biyang is frightened.’

These cases are thus rather instances of STAMP marker omission than STAMP marker assimilation, which leads to the next section on STAMP marker omission.

**STAMP marker omission** Under certain circumstances, the STAMP marker can be elided rather than assimilated. STAMP marker omission requires some conditions. First, the clause has to be either in the PRESENT or the RECENT PAST, as in (239)<sup>30</sup>, while the other tense-mood categories (Chapter 6.2.1) exclude STAMP marker omission. The parentheses indicate that the use of the STAMP marker is optional while a lack of parentheses indicates that the STAMP marker has to be used obligatorily.

- (239) a. kálé (nú) kwè → /kálé kwè/  
           kálé   nu-H   kwè  
           ∅1.sister 1-PRES fall  
           ‘The sister falls.’
- b. kálé (nù) kwé → /kálé kwé/  
           kálé   nu      kwé  
           ∅1.sister 1.PST1 fall  
           ‘The sister fell (recently).’
- c. kálé núù kwé → \*/kálé kwé/  
           kálé   núù    kwé-H  
           ∅1.sister 1.PST2 fall-PST  
           ‘The sister fell (a long time ago).’
- d. kálé nùù kwè → \*/kálé kwè/  
           kálé   nùù    kwè  
           ∅1.sister 1.FUT fall  
           ‘The sister will fall.’
- e. kálé nùú kwè → \*/kálé kwè/  
           kálé   nùú    kwè  
           ∅1.sister 1.INCH fall  
           ‘The sister starts to fall.’

Second, a nominal subject has to surface, excluding, however, all nouns with a CV noun class prefix, as in (240), and plural subject nominals, as in

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<sup>30</sup>In this example, the class 1 STAMP marker takes the alternate shape of the demonstrative rather than the default shape *a*. The shape of the class 1 STAMP marker does not, however, influence the possibility of its omission.

(241).<sup>31</sup> (This is parallel to the potential omission of the attributive marker discussed in Chapter 5.5.1.1, which has similar conditioning factors.)

- (240) a. lèndzólè lé kwè → \*/lèndzólè kwè/  
           le-ndzólè le-H kwè  
           le5-tear 5-PRES fall  
           ‘The tear falls.’
- b. màndzólè má kwè → \*/màndzólè kwè/  
           ma-ndzólè ma-H kwè  
           ma6-tear 6-PRES fall  
           ‘The tears fall.’

In (240), both examples are excluded from STAMP marker omission, based on the CV noun class prefix. In contrast, in (241) with consonantal noun class prefixes, only the plural noun in (241b) does not allow STAMP marker omission, but its singular counterpart in (241a) does allow it.

- (241) a. jáwè (lé) kwè → / jáwè kwè/  
           j-áwè le-H kwè  
           le5-goliath.frog 5-PRES fall  
           ‘The goliath frog falls.’
- b. mágwè má kwè → \*/mágwè kwè/  
           m-ágwè ma-H kwè  
           ma6-goliath.frog 6-PRES fall  
           ‘The goliath frogs fall.’

At the same time, these two examples also illustrate that animacy does not play a role, neither does general noun class affiliation since both examples belong to gender 5/6.

The STAMP marker can also be elided with more complex noun phrases such as noun + possessive constructions, as in (242). The tense reading comes from the ABSOLUTE COMPLETIVE marker *mò* (Section 3.9.2.1, which is restricted to RECENT PAST.

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<sup>31</sup>Potential STAMP marker omission was checked for a range of nouns, controlling for different tonal and phonological patterns, noun class affiliation, number, animacy, and different verbs. For simplicity, I only contrast two nouns in their singular and plural form, both belonging to gender 5/6. Most nouns in this gender have a CV prefix in both class 5 and class 6, but preceding a vowel initial stem, the prefix only consists of a consonant, providing a good testing ground for different phonological environments.

- (242) nyè nâ [só wó]NP nò́ mò mwánò  
 nyε nâ só w-óò nò́-H mò m-wánò  
 1 COMP Ø1.friend 1-POSS.2S take-R PRF 1-child  
 ‘She [says] ‘Your friend has taken the child.’

There are also examples in the corpus showing that noun + noun attributive constructions may occur without a STAMP marker, as in (243). The tense reading of this utterance is ambiguous. As STAMP marker omission only occurs in PRESENT and RECENT PAST, this narrows possible interpretations down. In (243), formal marking allows both tense interpretations. Through common ground, however, it is clear that it has to be the PRESENT since all participants know that the road has not been built yet.

- (243) mè dyúwó nâ [mpàgó wá pódè]NP lâ vâ  
 mε-H dyúwɔ-H nâ mpàgó wá pódè lâ-H vâ  
 1S-PRES hear-R COMP Ø3.street 3:ATT Ø1.port pass-R here  
 ‘I hear that the road to the port passes [= will pass] here. ’

Third, the STAMP marker can also be elided when the subject noun phrase is expressed by a pronoun, as in (244) with the interrogative pronoun *nzá* ‘who’. The tense reading in this example comes from the shape of the PROGRESSIVE auxiliary which has a different form for the PAST (Chapter 6.3.1.1).

- (244) nzá nzíí m̄ nȳ  
 nzá nzíí m̄ nȳ  
 who PROG.PRES 1S.NSBJ see  
 ‘Who is seeing me?’

In a quotative index, signaling reported discourse, both the nominal subject and the STAMP marker can be elided, as the STAMP marker that would normally precede *kì* ‘say’ in (N1).

- (N1) à k̄̄̄ nȳ p̄ dyúwò à dígéè à  
 a k̄̄̄ nȳ p̄ dyúwò a dígéè a  
 1.PST1 go.PRF enter there on.top 1.PST1 watch.PRF 1.PST1  
 díg-â dígéè. kì nâ nzá nyé m̄  
 dígéè a dígéè kì nâ nzá nȳ-H m̄  
 watch.PRF 1.PST1 watch.PRF say COMP who see-R 1S.NSBJ  
 ‘He went inside there on top and watched and watched and watched.  
 [He] says: ‘Who sees me?’

Following Güldemann (2008: 105), encoding the speaker in a quotative index is permissible in some languages since the speaker “is normally the central character in a given discourse context” so that “such a participant tends to assume the minimum force of reference, and in some languages this is zero expressed”.

### 3.9.2 Verbal particles

There are two other elements that appear in the Gyeli verbal complex, namely particles that follow the finite verb form. This includes the ABSOLUTE COMPLETIVE marker *mò* and the verbal plural marker *nga*.

#### 3.9.2.1 ABSOLUTE COMPLETIVE *mò*

The ABSOLUTE COMPLETIVE marker, glossed as COMPL, has two variants, namely a postverbal particle *mò*, as in (245a), and a long nasalized vowel with a falling HL tone (245b). The latter is said to be more typical Gyeli, but *mò* is also productively used.<sup>32</sup>

- (245) a. bà kwèló mò y᷑  
          ba kwèlɔ-H mò y-᷑  
          2.PST1 cut-R COMPL 7-NSBJ  
          ‘They have (already) cut it.’
- b. bà kwèl᷑᷑᷑ y᷑  
          ba kwèl᷑᷑᷑ y-᷑  
          2.PST1 cut:COMPL.R 7-NSBJ  
          ‘They have (already) cut it.’

The variant with the final lengthened and nasalized vowel is the contracted form of *mò*. The segmental nasal has been deleted, but nasality survived on the lengthened vowel. Also, the tonal pattern of the realis marking H plus the L tone *mò* is maintained.

While there are some verbs, as in (245), which can take both the *mò* form and the contracted form, other verbs can only take one or the other. *lámbo* ‘trap’, for instance, can only take the contracted form as in (246a), while the non-contracted form in (246b) is judged as ungrammatical. It seems to be lexically determined whether a verb takes one or the other or both forms.

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<sup>32</sup>It can be excluded that *mò* is a loan form from Mabi since the cognate form in Mabi is *mà*.

- (246) a. mè lámbō̄̄ kù  
       mɛ lámbō̄̄ kù  
       1S trap.R.COMPL Ø1.rat  
       'I have (already) trapped the rat.'
- b. \*mè lámbó̄ mò̄ kù  
       mè lámbō-H mò̄ kù  
       1S trap-R COMPL Ø1.rat  
       'I have (already) trapped the rat.'

There is a tendency for semi-auxiliaries, such as *kè* 'go' and *sile* 'finish', to only occur with the contracted ABSOLUTE COMPLETIVE form, while *dyúwɔ̄* 'hear' has only been observed to occur with the full form *mò̄*.

I consider *mò̄* a free morpheme rather than a verbal suffix since tonal inflection of past tense and/or realis mood (Chapter 6.2) through the grammatical H tone happens on the preceding verb. If *mò̄* was a suffix, it would be the suffix (and the preceding toneless verbal derivation morphemes) that would take the grammatical H tone in non final position. This, however, is not the case, as (247) shows.

- (247) mè lùngá mò̄ bvùbvù  
       mɛ lùnga-H mò̄ bvùbvù  
       1S grow-R COMPL lots  
       'I have (already) grown lots.'

The is no other element that can occur between the verb and the verbal particle. With verbs that require the comitative marker *nà* (Section 3.2.2.1), for instance, *nà* follows the verbal particle, as in (248).

- (248) nà wè làdó mò̄ nà ngà̄̄  
       nà we làdtɔ̄-H mò̄ nà ngà̄̄  
       Q 2S.PST1 meet-R COMPL COM Ø1.healer  
       'Have you ever/already met the healer?'

### 3.9.2.2 Verbal plural particle (*n*)ga

The verbal plural particle *ga* or its variant *nga* only occurs in the IMPERATIVE with the first and second person plural (Chapter 6.2.1.6). Just like the ABSOLUTE COMPLETIVE marker *mò̄*, the verbal plural particle directly follows the finite verb. The two particles never co-occur since they are restricted to different tense-mood categories. (249) shows examples of the

second person plural with the variant *ga*; (250) includes examples with the variant *nga*.<sup>33</sup>

- (249) a. dê **gà** ‘don’t (pl.) eat’
- b. kê **gà** ‘don’t (pl.) go’
- (250) a. lâ **ngà** ‘don’t (pl.) count’
- b. gyàgâ **ngà** ‘don’t (pl.) buy’
- c. sîlê **ngà** ‘don’t (pl.) finish’

The choice and distribution of *ga* versus *nga* is not yet fully understood. It seems that *ga* is the default case that is used with most verbs. *nga*, in contrast, appears definitely when a monosyllabic verb ends in a nasal vowel as it is the case with *lâ* ‘read, count’, as in (250a). Nasal vowels are, however, not the only factor that triggers the plural particle to surface with a nasal since *nga* is also found with bi- and trisyllabic verbs which do not end in a nasal vowel, as shown in (250b).

There also seems to be a certain degree of free variation since both *ga* and *nga* can occur with the same verb form, as in (251).

- (251) a. dê **gà!** ‘don’t (pl.) eat’
- b. dê **ngá** wámíyè! ‘don’t (pl.) eat fast’

*ga/nga* always follows the finite verb, as can be seen in the contrast between the positive and the negated cohortative forms in (252). In (252a), the finite verb is *gyàgâ* ‘buy’ in a simple predicate. In contrast, (252b) shows a complex predicate where the finite verb is the negation auxiliary *tí*. The verbal plural particle follows the auxiliary, preceding the lexical verb.

- (252) a. yá            **gyàgâ**    **ngá** békálàdè  
           yá            gyàgâ    nga békálàdè  
           1P-PRES buy.IMP PL be8-book  
           ‘Let’s buy book!’
- b. yá            **tí**            **ngá** gyàgà békálàdè  
           ya-H          tí            nga gyàga H-be-kálàdè  
           1P-PRES NEG.R PL buy    OBJ.LINK-be8-book  
           ‘Let’s not buy books!’

<sup>33</sup>The first person plural, which also involves the use of the verbal plural particle, has the same structure as the second person plural, just with the addition of the first person plural STAMP marker *yá*, as outlined in Chapter 6.2.1.6.

I consider *ga/nga* as a particle rather than a suffix that is bound to the finite verb in an imperative construction. If the particle was a suffix, one would expect it to take the HL tone that is characteristic of the IMPERATIVE category. Instead, the particle is underlyingly toneless, behaving like toneless CV- noun class prefixes. Phrase finally, *ga/nga* surfaces L, as shown in (249) and (250). If a nominal object follows, however, *nga* ‘steals’ the object linking H tone which would otherwise surface on the noun class prefix in (252a). In that case, *be-kálàdè* surfaces with a L tone on the prefix. The same is true when the particle is followed by *wámíyè* ‘quickly’, as in (253).

- (253) tí      **ngá**              dè wámíyè  
       tí      nga-H              dè wámíyè  
       NEG PL-OBJLINK eat fast  
       ‘Don’t eat fast.’

If *nga* is preceding a non-finite verb in a complex predicate, however, no H tone attaches, as shown in (254).

- (254) sítê      **ngà** nyî    vâ  
       sítê      nga nyî    vâ  
       finish.IMP PL enter here  
       ‘Enter all here.’

The H tone on *nga* in (252b) is therefore not from the object linking H tone, but spread from the H tone on the preceding auxiliary *tí*. The object linking H tone in this case attaches to the prefix of the nominal object.

## 3.10 Adpositions

Dryer (2007c: 81-82) explains that, “[p]rototypical instances of adpositions are words that combine with noun phrases and that indicate the semantic relationship of that noun phrase to the verb”. In Gyeli, they can be formally distinguished from elements of the noun phrase (Section 3.8) in that the use of adpositions is generally restricted to oblique noun phrases, excluding argument noun phrases from hosting adpositions. Gyeli has both prepositions (Section 3.10.1) and postpositions (Section 3.10.2).

### 3.10.1 Prepositions

Gyeli has a limited set of prepositions, including only one locative preposition *é*. Also the comitative marker *nà*, *tí* ‘without’, and the associative marker *bà* fall into this category.

#### 3.10.1.1 Locative marker *é*

The preposition *é*<sup>34</sup> is most frequently used to accompany a locative adverb as discussed in Section 3.4.1 and listed in (255).

- (255) a. *é vâ* ‘here’
- b. *é wû* ‘there (MID)’
- c. *é pè* ‘there (DIST)’
- d. *é bà* ‘to, at’

Further, the preposition *é* can precede a noun in a locative context as in (256).

- (256) a. *é tísɔnì* ‘in town’
- b. *é nkɔlÉ* ‘on the line’

Semantically, *é* is used as a locative preposition when the described location is about any spatial relation except containment. Spatial containment relations are expressed by the postposition *dé* as discussed in Section 3.10.2.1.

It is possible that *é* is also used as a directional, as in (257), which shows two lexical options of saying ‘I go to town’, differing in the noun used for the landmark. As the final vowel of the verb and the locative preposition are identical, it could be the case that the locative is deleted in its surface form.

- (257) a. mé            ké            mâ  
          mé            kè-H-é?        m-â  
          1S.PRES go-R-LOC? ma6.sea  
‘I go to town<sup>35</sup>.’

<sup>34</sup>The corresponding preposition in Mabi is *z*.

<sup>35</sup>From the perspective of the village Ngolo, the town Kribi is located towards the sea line. Therefore, speakers most frequently refer to the direction of the sea when they talk about the town.

- b. m<sup>é</sup>      k<sup>é</sup>      tísɔnì  
       m<sup>é</sup>      k<sup>é</sup>-H-<sup>é</sup>      tísɔnì  
       1S.PRES go-R-LOC? Ø7.town  
       ‘I go to town.’

In a case such as in (258), it is thus not clear if the H tone on the noun class prefix comes from an underlying locative marker <sup>é</sup> or if the noun is treated as an object receiving an object linking H tone (see Chapter 7.2.1 for a discussion of grammatical relations.)

- (258) m<sup>é</sup>      k<sup>é</sup>      mánk<sup>é</sup>  
       m<sup>é</sup>      k<sup>é</sup>-H-<sup>é</sup>      ma-nk<sup>é</sup>  
       1S.PRES go-R-LOC? ma6-field  
       ‘I go to the fields.’

### 3.10.1.2 Comitative marker *nà*

The comitative marker *nà* broadly expresses association. As such, it is often translated as ‘with’, as in (259).

- (259) mùdâ      k<sup>é</sup>      nà      nyè mánk<sup>é</sup>  
       m-ùdâ      k<sup>é</sup>-H nà      nyè H-ma-nk<sup>é</sup>  
       n1-woman go-R COM 1    OBJ.LINK-ma6-field  
       ‘Woman [his wife], go with her to the fields,’

The comitative marker is used in conjunction with the verb *bè* ‘be’ to express possession, as in (260).

- (260) m<sup>è</sup>      kí      b<sup>é</sup> nà      tsídí  
       m<sup>è</sup>      kí      b<sup>é</sup> nà      tsídí  
       1S.PST1 NEG[Kwasio] be COM Ø1.meat  
       ‘I didn’t have any meat.’

*nà* is used in an instrumental sense, as in (261).

- (261) m<sup>è</sup>      vùló      pémbó      nà      ntfúmò  
       m<sup>è</sup>      vùló-H pémbó      nà      ntfúmò  
       1S.PST1 cut-R Ø7.bread COM Ø3.knife  
       ‘I cut the bread with a knife.’

Extended uses of the instrumental sense are given in (262) through (264).

- (262) nyègà            váà nyègá            tsíyé sâ    nà    máléndí  
       nyε-gà            váà nyε-gá            tsíyé sâ    nà    ma-léndí  
       1.SBJ-CONTR here 1.SBJ-CONTR live-R only COM 6-palm.tree  
       ‘Him here, he lives only from palm trees.’
- (263) mè múà            wè nà    nzà  
       mε múà            wè nà    nzà  
       1S be.almost die COM Ø9.hunger  
       ‘I’m about to die from hunger.’
- (264) à            múà            á            ké    jíí            dé    tù    nà    ndzí  
       a            múà            a-H            kè-H jíí            dé    tù    nà    ndzí  
       1.PST1 be.almost 1-PRES go-R Ø7.forest LOC inside COM Ø9.path  
       gyâ  
       gyâ  
       Ø7.length  
       ‘He was about to go into the forest, on the long path’

Some verbs lexically the use of *nà* (Section 3.2.2.1), as in (265) where the combination of *njì* ‘come’ and the comitative yields the meaning ‘bring’.

- (265) é    pè    nà    á    njíyè            mê            nà    yŷ  
       é    pè    nà    a-H    njíyε            mè            nà    y-ŷ  
       LOC there COMP 1-PRES come.SBJV 1S.NSBJ COM 7-NSBJ  
       ‘so that she bring me that [food].’

The comitative also coordinates noun phrases, as in (266), where *nà* links a subject pronoun and a noun + possessive pronoun construction.

- (266) bá    nà    mùdâ    wê  
       bá    nà    m-ùdâ    w-ê  
       2.SBJ COM 1-woman 1-POSS.3S  
       ‘they and his wife’

Finally, the comitative marker *nà* is frequently used in temporal or spatial adjuncts using the non-finite form *pámɔ* ‘arrive’.<sup>36</sup>

- (267) èhè    báà    bù    mpàgó    nà    pámò pè            Kyíèngè  
       èhè    báà    bù    mpàgó    nà    pámo pè            Kyíèngè  
       EXCL 2.FUT break Ø3.road COM arrive over.there Ø7.PN  
       ‘Yes, they will build a road up to Kienge [= river and name for Kribi].’

<sup>36</sup>Since *pámɔ* is uninflected and does not carry any person marking, and it seems to be used as a fixed expression, I consider *nà* as a comitative rather than a verb phrase coordinating conjunction.

### 3.10.1.3 *tí* ‘without’

The preposition *tí* ‘without’ is the negative counterpart to the comitative *nà*. It is used, for example, in (268).

- (268) mé ké tísònì tí w̄  
       mε-H kè-H tísònì tí w̄  
       1S.PRES go-R Ø7.town without 2.NSBJ  
       ‘I go to town without you.’

The use of *tí* as a preposition is a derived function from its primary status as a negative auxiliary (Chapter 6.3.1.7).

### 3.10.1.4 Associative plural marker *bà*

The associative plural marker *bà*, which is form identical with the agreement class 2 subject pronoun, indicates a collection of related people, when used with a noun, as in (269) and (270).

- (269) mé ké jìyò vé yá bà fámí wā  
       mε-H kè-H jìyɔ vé ya-H bà fámí w-â  
       1S-PRES go-R stay where 1P-PRES AP Ø1.family 1-POSS.1S  
       ‘Where will I live, we with my family?’

(270) is similar to (266), but differs in that no comitative marker is used. The tonal pattern of *ba* also differs: as the associative plural, *bà* has a L tone, as a subject pronoun, it has a H tone.

- (270) bà mùdâ wà nû  
       bà m-ùdâ wà nû  
       AP N1-woman 1:ATT 1.DEM.PROX  
       ‘the people/family of this woman’

When preceding a pronoun, instead of a noun, the associative plural marker *bà* expresses directionality towards human entities, as in (271).<sup>37</sup>

- (271) mé ló njì bàgȳ bá w̄  
       mε-H ló njì ba-gȳ bà w̄  
       1S-PRES RETRO come ba2-stranger AP 2S  
       ‘I just came as a guest to you.’

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<sup>37</sup>This is similar to the French use of *chez* ‘to’ that is used for human goals.

Other directionals that typically require by a preposition in English, such as ‘go up’, ‘go down’, or ‘go around’, are expressed by verbs in Gyeli, as illustrated in (272). Therefore, they do not include further adpositions.

- (272) a. mé bédégá nkùlē  
1S.PRES ascend Ø3.hill  
'I go up the hill.'
- b. mé sìlegá nkùlē  
1S.PRES descend Ø3.hill  
'I go down the hill.'
- c. mé ké vyàmbèlè nkùlē  
1S.PRES go surround Ø3.hill  
'I go aound the hill.'

### 3.10.2 Postpositions

Gyeli has a few postpositions which mostly express location. I distinguish three groups. The first and most frequent category includes *dé* ‘in/on’ and *tù* ‘inside’ which can co-occur. The second category comprises simple locative postpositions that cannot combine with any other postposition and that are clearly derived from location nouns. The third group consists of only one temporal postposition *wê* which cannot combine with other adpositions either, but that differs from group two postpositions in that it is not derived from nouns.

#### 3.10.2.1 combinable postpositions *dé* ‘in/on’ and *tù* ‘inside’

The locative postpositions *dé* ‘in/on’ and *tù* ‘inside’ generally encode a spatial relation of CONTAINMENT. Most commonly, both postpositions co-occur where *dé* directly follows the noun and *tù* follows *dé*, as shown in (273).<sup>38</sup>

- (273) a. ndáwò dé tù  
Ø9.house LOC inside  
'in the house'

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<sup>38</sup>It is possible that *dè* was diachronically a preposition to *tù* ‘inside’, which may have been a noun originally.

- b. mìnkí dé tù  
 Ø1.pot LOC inside  
 ‘in the pot’

Examples of the co-occurrence of both postpositions from natural text are provided in (274) and (275).

- (274) bónégá báà ná jíí dé tù  
 b-ónégá báà ná jíí dé tù  
 2-other 2.COP still Ø7.forest LOC inside  
 ‘The others are still in the forest.’

- (275) àà ndáwò dé tù nyè médé támé  
 àà ndáwò dé tù nyè médé támé  
 1.COP Ø9.house LOC inside 1 self alone  
 ‘He is in the house all by himself.’

Both postpositions can, however, occur without the other one while maintaining their meaning of spatial CONTAINMENT, as in (276) and (277). The exact semantic difference between constructions with both postpositions, only *dé*, or only *tù* is not clear at this point and likely requires a systematic study of postposition combinations with a large set of different nouns as spatial reference points. Generally, it seems, however, that the component of CONTAINMENT is stronger with *tù* ‘inside’.

- |                                     |   |
|-------------------------------------|---|
| (276) a. ndáwò dé<br>‘in the house’ | (277) a. ndáwò tù<br>‘inside the house’ |
| b. mìnkí dé<br>‘in the pot’         | b. mìnkí tù<br>‘inside the pot’         |

In contrast to *tù* ‘inside’, *dé* can also describe spatial relations of CONTACT as in (278).

- (278) nső wúù wè nyúlè dé  
 Ø3.worm 3.COP 2S Ø9.body LOC  
 ‘The worm is on your body.’

I therefore gloss *dé* more generally as LOC while *tù* has the more specific meaning ‘inside’. *dé* as a locative postposition is not only formally but also semantically distinct from the locative preposition *é* which I also gloss as LOC, but which lacks the connotation of CONTAINMENT. Cases of *dé* as

encoding CONTACT rather than CONTAINMENT may have some semantic similarity with the locative preposition  $\epsilon$  in Section 3.10.1.1, although  $\epsilon$  seems to mark close proximity rather than contact.

Examples of the locative postposition *dé* only that come from natural text are given in (279) through (281).

- (279) mbúmbù      lèbvúú      léè      nlémò      dé  
       mbúmbù      le-bvúú      léè      nlémò      dé  
       1n.namesake le5-anger 5.COP /3.heart LOC  
       'The namesake has anger in his heart (he is angry).'

As (280) shows, *dé* can also be used to indicate directionality rather than location.

- (280) nzàmbí màbóò nkwegé dé ná vósì  
       nzàmbí ma-bóò nkwegé dé ná vósì<sup>1</sup>  
       ∅1.PN ma6-bread.fruit ∅3.basket LOC COMP IDEO:pouring  
       ‘Nzambi pours the bread fruits into the basket.’

The same is true for figurative directionality with the verb *vìdëga dé* ‘turn into’ in (281).

- (281) mìntángáné mí múà vìdègà dé  
       mi-ntángáné mi-H múà vìdèga dé  
       mi4-white.person 4-PRES be.almost turn LOC  
       ‘They are about to turn into white people.’

Examples of the sole use of *tù* ‘inside’ as postposition in natural text is less frequent, but attested as in (282).

- (282) bùdì        bà        sílē̄c        m̄e        w̄è ndáwò    tù  
       b-ùdì        ba        sílē̄c        m̄e        w̄è ndáwò    tù  
       ba2-person 2.PST1 finish.COMPL 1S.NSBJ die Ø9.house inside  
       vâ  
       vâ  
       here  
       'The people have all died here inside the house.'

### 3.10.2.2 Simple locative postpositions

Some of the locative nouns described in Chapter 5.5.1.5 can also be used as locative postpositions. They behave like the postposition *dé* as explained

in Section 3.10.2.1, but differ in their degree of grammaticalization. In contrast to the locative postposition *dè*, these other locative postpositions are clearly used as nouns and as such their meaning is obvious. (283) lists the various nouns that can be also used as postpositions.

- (283) a. ndáwò **dyúwò** ‘on top/over the house’ < dyúwò ‘top’  
          b. ndáwò **sí** ‘under the house’ < sí ‘ground’  
          c. ndáwò **písè** ‘behind the basket’ < písè ‘back’  
          d. ndáwò **sò** ‘in front of the house’ < só ‘front’  
          e. ma-ndáwò **témó** ‘between the houses’ < témó ‘middle’

### 3.10.2.3 Temporal postposition *wê*

Gyeli has one temporal postposition *wê* that follows time denoting nouns as in (284).

- (284) a. ménó *wê* ‘in the morning’  
          b. dùwò *wê* ‘in the day’  
          c. kùgúù *wê* ‘in the evening’  
          d. bvùlé *wê* ‘at night’

A natural text example is given in (285).

- (285)   yá           sàgà           ménó           *wê* nyéè  
       ya-H          sàga          ménó          *wê* nyéè  
       1P-PRES be.surprised 7Ø.morning in see.SBJV  
       mápà           má      njìbù           má      bwámó  
       H-ma-pà       má      njìbù           ma-H    bwámɔ-H  
       OBJ.LINK-ma6-paw 6:ATT Ø1.antelope 6-PRES come.out-R  
       ndáwò      dé      tù  
       ndáwò      dé      tù  
       Ø9.house LOC inside  
       ‘We are surprised in the morning to see traces of an antelope which  
       come out of the house.’

## 3.11 Conjunctions

Conjunctions are used in complex clauses (Chapter 8) and link phrases and clauses, resulting in coordination (Chapter 8.1) or subordination (Chapter

8.2). Conjunctions that link the same type of clause or phrase are referred to as ‘coordinators’. Subordinating conjunctions include complementizers and adverbializers.

### 3.11.1 Coordinators

Gyeli has three coordinators, as shown in (286c).

- (286) a. nà ‘and’ (Chapter 8.1.1)
- b. kânà/nânà ‘or’ (Chapter 8.1.3)
- c. ndí ‘but’ (Chapter 8.1.4)

More details and examples are given in the respective chapters.

### 3.11.2 Subordinators

The most frequent subordinator in Gyeli is the complementizer *nâ* that links a complement clause to the main clause, as discussed in Chapter 8.2.2.1. The subordinator *ká* ‘if’ introduces conditional clauses, which are more free with respect to their position before or after the main clause, as discussed in Chapter 8.2.3.2.

## 3.12 Minor word classes

This last section includes all minor parts of speech, ranging from connectors in non-verbal sentences–copulas and the identificational marker *wé*–to question markers, and extrasentential elements.

### 3.12.1 Copulas

A copula links two elements, namely the subject and the predicate, in a non-verbal clause (Chapter 7.1.1). In Gyeli, the copula agrees with the head noun. The agreeing copula is form identical to the STAMP marker (Section 3.9.1) and takes a long vowel with a HL default tonal pattern. Exceptional person categories, including the first and second person singular and the agreement class 1 copula, have a long vowel with a L tone.

	Singular	Plural
Speech Act Participants	1S <i>mèè</i> 2S <i>wèè</i>	1P <i>yáà</i> 2P <i>bwáà</i>
Non-Speech Act Participants (3 <sup>rd</sup> person)	cl.1 <i>àà/nùù</i> cl.3 <i>wúù</i> cl.5 <i>léè</i> cl.7 <i>yû</i> cl.9 <i>nyì</i>	cl.2 <i>báà</i> cl.4 <i>mû</i> cl.6 <i>máà</i> cl.8 <i>béè</i>

Table 3.36: Copula forms across agreement classes

### 3.12.2 Identificational marker *wé*

Another element used in non-verbal clauses is the identificational marker *wé* which links a subject to a demonstrative or deictic adverb. Unlike the copula, however, a non-verbal clause with *wé* can also just consist of a subject and the identificational marker. Both constructions are described with examples in Chapter 7.1.2.

### 3.12.3 Question markers

Gyeli has two question markers: *nà* and *nànâ*. The first generally signals a question, the second is emphatic and is thus pragmatically marked. Examples and a more detailed discussion are provided in Chapter 7.4.1.

### 3.12.4 Sentential modifiers

Sentential modifiers include *ná* ‘again, still’, *líi* ‘not yet’, and *ndáà* ‘also’. They are distinguished from adverbs (Section 3.4) in that sentential modifiers usually occur immediately after the finite verb form, which is not possible for adverbs in complex predicate constructions, as adverbs rather appear at both the left and the right edge of a sentence. Chapter 7.2.3 gives more information about the function of sentential modifiers within a clause.

### 3.12.5 Extrasentential elements

The Gyeli corpus contains a number of extrasentential elements. I roughly distinguish interjections from exclamations. Interjections are words that do not relate to the rest of the sentence in a grammatical way. They are, however, lexical words. Exclamations, in contrast, are not considered as lexical words, but rather sounds that convey attitudes and emotions.

#### 3.12.5.1 Interjections

Most (recognizable) interjections used in Gyeli are actually loan words from French.<sup>39</sup> Interjections have a discourse structuring function and often appear at the beginning of an intonation phrase, as in (287).

- (287) **donc**      sí      nyâ      nyî      búùlè      yá      Ngòló  
 donc      sí      ny-â      nyî      búùlè      yá      Ngòló  
 so[French] Ø9.ground 9-POSS.1S 9:COP Ø7.old.camp 7:ATT Ø3.PN  
 ‘So, my land is the old settlement of Ngolo.’

Pragmatically, interjections are also used to reinforce common ground, as in (288) where the speaker acknowledges that he and the addressee are on the same page.

- (288) **voilà**      wèè      njí      nà      njí      wèè      njí      nà  
 voilà      wèè      njí      nà      njí      wèè      njí      nà  
 ok[French] 2S.COP Ø9.path CONJ Ø9.path 2S.COP Ø9.path CONJ  
 njí  
 njí  
 Ø9.path  
 ‘Exactly, you are on the right track.’

Even though the Bagyeli of Ngolo report that their French is, if at all, very limited, they are all be able to use these French interjections, as well as *allez* ‘come on’ and *alors* ‘so, then’.

#### 3.12.5.2 Exclamations

Exclamations reveal the speaker’s attitude and emotion towards a situation, usually encoding agreement, disagreement, surprise, or getting the

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<sup>39</sup>It is possible that I classify some local interjections with exclamations since their meaning is generally hard to describe for speakers and the difference between a lexical word and an emotion encoding sound is possibly not always very clear.

addressee's attention. All exclamations can be manipulated in terms of their length. A longer sound (and often increased volume) correlates with higher emotional intensity.

A widely used exclamation in the area (not only in Gyeli) is *éékè* which signals general surprise about either a positive or negative event. In (289), *éékè* is a reaction to a character in a story who wants to eat a child. The exclamation refers potentially to both the narrator's attitude the reaction of the woman in the story whose child will be eaten.

- (289) éékè mùdâ à gyéé  
       éékè m-ùdâ a gyéé  
       EXCL N1-woman 1.PST1 cry.COMPL  
       ‘Oh, the woman cried’

Exclamations are also frequently used in reported discourse, as in (290).

- (290) yóò bá kí nâ éékè  
       yóò ba-H ki-H nâ éékè  
       so 2-PRES say-R COMP EXCL  
       ‘So they say that [EXCL of surprise]!’

Another frequent exclamation is *áá* or *áà* or *àà*. The tonal pattern seems to depend, at least partially, on the distance between speaker and addressee, with a H tone indicating distance and a L tone proximity. *áá* has been observed to occur often to introduce a question, as in (291) and (292). It seems comparable to the English exclamation ‘oh!’ expressing surprise or desire.

- (291) áá gyí wé ló njì gyéssò  
       áá gyí wé-H ló njì gyéssò  
       EXCL what 2S-PRES RETRO come look.for  
       ‘Ah, what have you just come to look for?’

- (292) áá bîi mändáwò má zì yáà mô  
       áá bîi ma-ndáwò má zì yáà m-ó  
       EXCL 1P.NSBJ ma6-house 6:ATT Ø7.tin[Bulu] 1P.FUT 6-NSBJ  
       fúàlà bwê lèwùlà lé vé  
       fúala bwê le-wùlà lé vé  
       end receive le5-hour 5:ATT which  
       ‘Ah, us, tin houses, when will we receive them?’

àà is also used in addressing someone and getting the addressee's attention.

- (293) mè bìyé làwò nâ àà bwánò bâ  
       mè biye-H làwɔ nâ àà b-wánò b-â  
       1S in.vain? speak COMP EXCL ba2-child 2-POSS.1S  
       'I say in vain: 'ah, my children..."

The H tone on áá in (294) indicates that mother and father are far away from the speaker.

- (294) áá nyáò                    áá tâò  
       áá nyá-ò                    áá tâ-ò  
       EXCL N1-mother-VOC EXCL N1-father-VOC  
       'Oh mother, oh father!'

A similar function of attention seeking and address is found with ɔɔɔ in (295) and é in (296), comparable to English 'hey!'.

- (295) nyè nâ ɔɔɔ mùdâ  
       nye nâ ɔɔɔ m-ùdâ  
       1 COMP EXCL N1-woman  
       'He: 'Oh, wife,"
- (296) é mwánò wâ              dyúwò  
       é m-wánò w-â              dyúwò  
       EXCL N1-child 1-POSS.1S on  
       'Hey, about my child!'

Exclamations with a clear negative connotation are yééé as a sound of disappreciation and kééé (with varying length). The latter expresses outrage and strong disapproval, as in (297) where the speaker expresses his indignation after learning that his child had been eaten by his friend.

- (297) nyè nâ kéééé  
       nye nâ kéééé  
       1 COMP EXCL  
       'He [says]: What!'

This exclamation can also be used less strongly in a pejorative way, as in (298). Here, kééé shows the belittling attitude of the speaker towards his children.

- (298) nyè nâ      kééé bwánò      bâ,      mè sílëë      bô  
nyε nâ      kékè b-wánò b-å      mε sílëë      b-ô  
1 COMP EXCL ba2-child 2-POSS.1S 1S finish.COMPL 2-NSBJ  
dyùù  
dyùù  
kill

‘He [says]: Ha, my children, I have already killed them all.’

# **Chapter 4**

## **Morphology**

This chapter covers two broad aspects of Gyeli morphology. In the first part, I outline the forms and types of bound morphemes. These serve as ingredients to form words either through inflection, derivation, or composition. I follow Haspelmath & Sims's (2010) textbook definitions of these terms. Inflection is the morphological process of producing word forms of a lexeme. Inflectional morphemes in Gyeli express grammatical categories such as agreement, tense, mood, negation, and objecthood. As such, the lexeme remains in the same part of speech. Many of the inflectional morphemes are syntactically required and thus appear obligatorily. Additionally, their attachment is fully productive and predictable. In contrast, derivational affixes create new lexemes that belong to the same word family by adding grammatical morphemes. A derived lexeme can belong either to the same or a different word class than its source lexeme. Derivational morphemes are syntactically optional. Also, it is lexically specified which lexeme can take which derivation affix. As such, attachment of derivational affixes is less predictable. Finally, composition is a type of word formation that combines lexemes from different word families. In Gyeli, compounds typically include two lexical morphemes. Inflection is discussed along with the morpheme types in part one of this chapter. Derivation and composition processes are discussed in the second part.

## 4.1 Morpheme types

In this section, I give an overview of the types of affixation morphemes found in the Gyeli language. I limit the discussion to overt non-root morphemes. That is, all morphemes discussed in this section are overt,<sup>1</sup> bound,<sup>2</sup> and grammatical. Thus, lexical roots are not discussed here, but in Chapter 3. Similarly for non-overt morphemes, such as portmanteau morphemes like, for instance, the subject-tense-aspect-mood-polarity (STAMP) marker or certain copulas: These portmanteau morphemes are free and occur as words in their own right, as also presented in Chapter 3.

I organize the presentation through the opposition between morphemes that precede the lexical root, prefixes, and those that follow the root, suffixes. Table 4.1 lists all prefix and suffix forms in the language.<sup>3</sup> The table also presents the basic functional distinction between derivation and inflection morphemes. Note that the suffix *-lɛ* is both a derivational morpheme (when used as a verb expansion suffix) and an inflectional morpheme (when used as negation marker). The table further specifies the more concrete functions associated with an affix, for instance, as a noun class prefix or a verb extension suffix, and the part(s) of speech with which it occurs.<sup>4</sup>

The bottom line of Table 4.1 provides frequencies of forms, functions, and the parts of speech that affixes attach to. With 20 prefix and 14 suffix forms, Gyeli has a total of 34 affixes. Prefix forms are higher in number, constituting 59% of the affixes. Many prefix forms are segmentally identical, for example *mi-*, *mì-*, and *mí-*. They differ, however, in their tonal pattern and thus must be formally distinguished. The affixes show a basic functional distribution: Most prefixes are inflectional (19 out of 20), while the majority of suffixes are derivational (9 out of 14 suffixes are solely derivational and the suffix *-lɛ* is both derivational and inflectional).

Though more forms are prefixes than are suffixes, prefix forms map onto

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<sup>1</sup>I do not consider null-forms here that are found in some nouns and agreement targets. To be consistent with noun class and agreement marking, however, I do represent them in glosses.

<sup>2</sup>The anaphoric marker *ndè* is an exception. It occurs as a bound morpheme with pronouns, but can also follow nouns as a free morpheme.

<sup>3</sup>Noun class and agreement prefixes often have alternate forms that are phonologically conditioned. In the table, I count a form and its alternate as only one form in order to not artificially increase the number of forms.

<sup>4</sup>'various' in the parts of speech column under prefixes always refers to the set of limiting modifiers, possessor pronouns, and quantifiers, which I had to abbreviate for space reasons.

	Prefixes			Suffixes		
	Forms	Function	POS	Forms	Function	POS
Deriv.	<i>na-</i>	SIM	N, QUAL, ADV	-èdè	NOM	N
				-a	NOM, EXT	N, V
				-ala	EXT	V
				-ele	EXT	V
				-ega/-aga	EXT	V
				-ese	EXT	V
				-cw	EXT	V
				-bc/-w	EXP	V
				-ke/ge	EXP	V
				-le	EXP, NEG	V
Infl.	<i>m-</i>	NC, AGR	N, various	(-)ndè	ANA	DEM, free
	<i>n-</i>	NC, AGR	N, MOD	-gà	CONTR	PRO
	<i>ba-/b-</i>	NC	N	-o	VOC	N, ADV
	<i>mi-</i>	NC	N	-H	TM	STAMP, V
	<i>le-/d-</i>	NC	N			
	<i>ma-/m-</i>	NC	N			
	<i>be-</i>	NC	N			
	<i>w-</i>	AGR	various			
	<i>bà-/b-</i>	AGR	various			
	<i>bá-</i>	AGR	NUM			
	<i>mì-/my-</i>	AGR	various			
	<i>mí-</i>	AGR	NUM			
	<i>lè-/l-</i>	AGR	various			
	<i>mà-/m-</i>	AGR	various			
	<i>má-</i>	AGR	NUM			
	<i>y-</i>	AGR	various			
	<i>bì-/by-</i>	AGR	various			
	<i>bé-</i>	AGR	NUM			
	<i>ny-</i>	AGR	various			
	H-	OBJLINK	N			
Total	20	4	7	14	8	7

Table 4.1: Frequency of affix types by form and function

fewer functions, namely only 4, while suffixes have 8 different functions. Most prefixes are agreement and/or noun class prefixes.<sup>5</sup> In addition to these most frequent functions, there is also an object linking H tone and the simulative marker *na-*. Suffixes display the inverse distribution: Relatively fewer forms map onto more functions. Most suffix forms are functionally derivational extension or expansion morphemes.<sup>6</sup> Other derivational suf-

<sup>5</sup>The relation between noun class, agreement class, and grammatical number is discussed in Chapter 5.2.

<sup>6</sup>See Section 4.1.2.2 for the difference between extension and expansion suffixes.

fixes serve as nominalization morphemes. Inflectional suffixes cover the functions of negation, anaphoric, contrastive, and vocative marker, and a suffix H tone that marks various tense and mood categories.

Cross-linguistically, it is not typical that anaphoric, contrastive, or vocative suffixes appear as inflection morphemes. In Gyeli, they differ from the other inflectional affixes since they are not obligatory. In order to make this distinction, I call them ‘markers’. I still consider them as inflection morphemes, however, for two reasons. First, unlike the derivation affixes, they do not form new lexemes, i.e., they do not have an entry in the lexicon. Second, their attachment is completely predictable, unlike for derivation affixes. For example, every non-subject pronoun can take the contrastive marker *-gà* (but not every verb can take a causative derivational suffix).

Finally, Table 4.1 lists the parts of speech that affixes attach to. Prefixes and suffixes attach to a roughly equal number parts of speech, but differ in the specific word classes to which they attach. Prefixes are restricted to the domain of the noun phrase, attaching to nouns (noun class prefixes and the similative marker) and to agreement targets such as limiting modifiers (MOD), possessor pronouns, quantifiers, and numerals<sup>7</sup>. In contrast, suffixes feature a broader variety of word classes, encompassing both noun and verb phrases. Nominalization and vocative suffixes attach to nouns. Extension, expansion, negation, and tense-mood suffixes attach to verbs. Also demonstratives, pronouns, adverbs, and the subject-tense-aspect-mood-polarity (STAMP) marker are word classes that suffixes attach to. In the following, I will briefly outline the various prefixes and suffixes grouped by function.

### 4.1.1 Prefixes

A noun stem can maximally take three prefixes, as illustrated in (299).

(299) OBJECT LINKING H TONE – NOUN CLASS – SIMILATIVE – STEM

The prefix that is closest to the stem is the similative marker *ná-*. This can be preceded by a plural noun class prefix and an object linking H tone.

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<sup>7</sup>See Chapter 3.8 for the criteria by which quantifiers and numerals are formally distinguished.

Gyeli has four different functional types of prefixes: the derivational similitive prefix *ná-*, and the inflectional noun class, agreement, and object linking H tone prefixes. I now discuss each briefly.

#### 4.1.1.1 The similitive prefix *na-*

The derivational similitive marker *na-* forms a functional category on its own expressing the meaning of ‘like’. The prefix is related to the free morpheme *ná* which serves as a similitive marker in noun + noun naming constructions, as discussed in Chapter 3.8.4.2. Words with the prefix *na-* are derived from either a (diachronic) verb or noun or are synchronically opaque. The application of *na-* results in common nouns, proper nouns, some adjectives, and temporal adverbs, as shown for each type in (300). In the derivation of common nouns, proper nouns, and adjectives, *na-* takes a H tone whereas, in the derivation of adverbs, it takes a L tone.

- (300) a. **ná-gyàlé** ‘breastfeeding woman [lit. like nursing period]’ (common noun)
- b. **Ná-nzé** (Nanzé) ‘female name [lit. like panther]’ (proper noun)
- c. **ná-vyû** ‘black [lit. like blackened]’ (adjective)
- d. **nà-ménɔ** ‘tomorrow [lit. like morning]’ (adverb)

The *na-* similitive marker is the most lexicalized prefix in the language since its use is not productive. Instead, it is lexically specified which nouns, adjectives, and adverbs occur with this marker. Especially in the case of nouns with the *na-* prefix, one could even argue that the prefix is synchronically frozen to the lexical stem since in many instances the meaning of the lexical stem is opaque. There are several reasons, however, why I consider *na-* as a prefix and not as part of the lexical stem. First, nouns with the *na-* prefix are structurally different from other common nouns. If one counted *na-* as part of the nominal stem, some of these stems would have a syllable length of four syllables. As discussed in Chapter 2.3.3.3, however, the maximum syllable length in stems is three syllables (and even this is dispreferred, accounting for only 10% of the nouns in the database). Second, the *na-* prefix occurs quite frequently and regularly, especially in the derivation of female names from male names and in adjectives. This suggests that there is a formal pattern (rather than just a random CV syllable shape).

Third, there is a clear function attributed to *na-*, namely that of expressing similarity, as shown in the examples in (300). Derivation with the prefix *na-* is discussed in greater detail in Section 4.2.2.

#### 4.1.1.2 Noun class prefixes

Noun class prefixes are inflectional bound morphemes that attach only to the part of speech of common nouns (but not proper nouns). There are 11 different overt forms which can be grouped into 6 underlying categories, based on phonological conditioning. The forms and their alternates are listed in Table 4.2.<sup>8</sup>

NC form	Alternate form	Phonological condition
m-	n-	assimilation of place of articulation
ba-	b-	before stem-initial vowel
mi-	m-	before stem-initial vowel
le-	d-	before stem-initial vowel
ma-	m-	before stem-initial vowel
be		

Table 4.2: Noun class prefix forms

Noun class prefixes fill the second of three possible prefix slots in nouns, potentially preceded by the object linking H tone (see Section 4.1.1.4) and followed by a similative marker (see Section 4.1.1.1).

It is an inherent property of each noun which noun class prefix(es) the noun can take. Some noun forms do not take any overt prefix at all. Since noun class prefixes are part of the gender and agreement system which operates on a morpho-syntactic rather than solely morphological level, these prefixes are discussed in greater detail in Chapter 5.2.2 where their forms are organized according to noun and agreement classes.<sup>9</sup>

#### 4.1.1.3 Agreement prefixes

Like noun class prefixes, agreement prefixes are inflectional bound morphemes. They attach to different parts of speech, however, including a range

<sup>8</sup>The prefix *be-* does not have a listed alternate form because there is no known instance of a noun using this prefix and having a stem-initial vowel.

<sup>9</sup>In the context of gender and agreement, I also view a null-form as a category, but since it is not overt, I do not list it as a morpheme in this section.

of agreement targets. In contrast to nouns, agreement targets have only one prefix slot. Gyeli has 13 agreement prefix forms plus an additional 5 alternate forms due to phonological conditioning. All forms are listed in Table 4.3, specifying which form attaches to which part(s) of speech.

AGR form	POS	Alternate form	Phonological condition
m-	MOD, POSS, QUANT		
n-	MOD		
w-	MOD, POSS, QUANT		
bà-	MOD, POSS, QUANT	b-	before stem-initial vowel
bá-	NUM		
mì-	MOD, POSS, QUANT	my-	before stem-initial vowel
mí	NUM		
lè-	MOD, POSS, QUANT	l-	before stem-initial vowel
mà-	MOD, POSS, QUANT	m-	before stem-initial vowel
má-	NUM		
bì-	MOD, POSS, QUANT	by-	before stem-initial vowel
bé-	NUM		
ny-	MOD, POSS, QUANT		

Table 4.3: Agreement prefix forms

Most consonantal and all L tone CV- prefix forms attach to the same set of agreement targets, namely limiting modifiers, possessor pronouns, and quantifiers. The prefix *n*- is an exceptional form in that it only attaches to certain limiting modifiers. All H tone agreement prefixes attach to numerals.<sup>10</sup> Like noun class prefixes, agreement prefixes have a morpho-syntactic dimension within the gender marking system. Chapter 5.2.1 provides information on how agreement prefix forms pattern into agreement classes.

#### 4.1.1.4 Object linking H tone

Some morphemes in Gyeli are not segmental, but solely tonal. This is the case for the H tone that attaches to the left of common nouns in certain contexts.<sup>11</sup> In terms of its function, this H tone prefix marks a noun as the object that is closest to the verb. As such, it is an inflectional morpheme

<sup>10</sup>Limiting modifiers, possessor pronouns, quantifiers, and numerals are not the only agreement targets in Gyeli, but they are the parts of speech that mark agreement by means of a prefix. Other agreement targets have free forms which are described as parts of speech in Chapter 3; all agreement targets are listed in Chapter 5.2.5.

<sup>11</sup>Proper nouns do not take an object linking H tone which is tied to the fact that proper nouns do generally not take noun class prefixes. Therefore, the object linking H tone does not have a toneless TBU to attach to.

that has to appear obligatorily in the specific environment. I call this prefix ‘object linking H tone’ and gloss it as ‘OBJLINK’, as shown in (301).

- (301) nkè nyì nzí sílē̃ bédéwò.  
       nkè nyi nzí sílē̃ H-be-déwò  
       ∅9.field 9 PROG.PST finish.COMPL OBJLINK-be8-food  
       ‘The field was already running out of food.’

The object linking H tone only appears on otherwise toneless CV- shape noun class prefixes, but is not realized on null-form or consonantal noun class prefixes.<sup>12</sup> More examples of the object linking H tone and information on its function as marking grammatical relations is provided in Chapter 7.2.1.2.

### 4.1.2 Suffixes

Gyeli suffixes can be categorized into eight different functions: nominalization, extension and expansion, negation, anaphoric marker, contrastive marker, vocative marker, and a tense-mood marking H tone suffix. I will outline each of these types in the following, discussing extension and expansion suffixes in the same section since their function is the same (but the level of productivity differs). Derivation suffixes are only briefly mentioned in this section, followed by more details in section 4.2 within the discussion of derivation processes, while inflectional suffixes are outlined in greater length here.

#### 4.1.2.1 Nominalization suffixes

Gyeli has two nominalization suffixes, namely *-èdè* and *-a* which occur with common nouns. The latter also serves as the passive extension suffix in verbal derivation. Nominalization suffixes do not occur in all derived nouns. In fact, a minority of nominalized nouns uses a nominalization suffix, and it is lexically specified which nouns take such a suffix. The distribution of *-èdè* and *-a* seems to be complementary. *-èdè* appears in agentive deverbal nouns of gender 1/2, but is not found in other genders and non-agentive nouns. In contrast, *-a* is used in non-agentive deverbal nouns in all other

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<sup>12</sup>Object nouns with null-form and consonantal noun class prefixes are completely unchanged; no downstep phenomena could be observed.

genders that deverbal nouns occur in. Section 4.2.1 gives a more detailed account of nominalization processes.

The suffix *-a* is used more frequently and more generically than *-èdè*. It occurs in two types of nominalizations. First, it is found in some deverbal nouns where the source verb either ends in /ɛ/ or /ɔ/, as shown in (302).<sup>13</sup> The resulting deverbal nouns are all clearly assigned to a gender, as discussed in Section 4.2.1, and behave morpho-syntactically just like other common nouns, as discussed in Chapter 3.1.2.1.

- (302) a. tálɛ ‘begin’ → ma-tál-á ‘beginning’
- b. díge ‘look’ → ma-díg-á ‘vision’
- c. dílɛ ‘bury’ → ma-díl-á ‘funeral’
- d. líbelɛ ‘show’ → ma-líbél-á ‘appearance, showing’
- e. tfúdɔ ‘pinch’ → tfúd-á ‘pinch (n.)’
- f. tsìlɔ ‘write’ → n-tsìl-á ‘hand writing’

All derived nouns in (302) take a H tone on the nominalization suffix. Tonal changes in nominalization are discussed further in Section 4.2.1.

There are also deverbal nouns that keep the verb’s final vowels /ɛ/ and /ɔ/ and do not take a final H tone, as shown in (303). Therefore, affixation of *-a* and a H tone assignment in nominalization do not seem to be phonological rules.

- (303) a. bwàlɛ ‘be born’ → ma-bwàlè ‘birth’
- b. gyè’elɛ ‘pray’ → ma-gyè’élè ‘prayer’
- c. dò ‘negotiate’ → ma-dò ‘negotiation’
- d. tèmbɔwɔ ‘set (sun)’ → ma-tèmbówó ‘sunset’

The second usage of the nominalization suffix *-a* is a nominalized participle form, examples of which are given in (304). 325 verbs in the verb database of 377 verbs allow the nominalized participle. As such, it is the most productive verbal derivation. In contrast to other deverbal nouns with *-a*, however, the nominalized participle is syntactically restricted to the predicate position in copula constructions, as discussed in Chapter 7.1.1. Other differences from common nouns are described in Chapter 3.1.2.3.

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<sup>13</sup>Nouns derived from verbs with other vowel endings such as /i/, /o/, and /a/ never undergo vowel change.

The derivation process always includes a nasal prefix as well and a specific tonal pattern which are explained in Section 4.2.1.6.

- (304) a. tsíbɔ ‘grind’ → n-tsíb-â ‘ground (thing)’
- b. tálɛ ‘begin’ → n-tál-â ‘begun (thing)’
- c. gyàga ‘buy’ → n-gyàg-â ‘bought (thing)’
- d. jì ‘open’ → n-jiy-â ‘opened (thing)’

There are only two known instances of the -èdè suffix. Both are used in deverbal nouns of gender 1/2 as agentive nouns. They are listed in (305).

- (305) a. gyámbɔ ‘cook’ → n-gyámb-èdè ‘cook (n.)’
- b. gyímbɔ ‘dance’ → n-gyímb-èdè ‘dancer’

The -èdè suffix might be a more marked form for agentive nouns in order to disambiguate between other nominalized forms. As explained in Section 4.2.1, agentive nouns are generally formed by combining the verb stem with a noun class marker. This also works, for instance, with the verb *gyímbɔ* ‘dance’ and the derived noun *n-gyímbɔ* ‘sorcerer’. In this instance, -èdè might be used to distinguish *n-gyímbɔ* ‘sorcerer’ from *n-gyímb-èdè* ‘dancer’.

#### 4.1.2.2 Extension and expansion suffixes

Extension and expansion suffixes are derivational suffixes which derive verbs from other verbs, changing their valency. The difference between extension and expansion pertains to the suffix’s level of productivity. Extension morphemes are synchronically productive, while expansion morphemes are not. Gyeli has six extension and three expansion morphemes, as listed in Table 4.1. Each of them is discussed in detail in Section 4.2.3.

#### 4.1.2.3 Negation suffix -lɛ

The suffix *-lɛ* has two functions and for both attaches to verbs. First, it serves as a derivational expansion suffix, as discussed in Section 4.2.3.7. Second, *-lɛ* also occurs as an inflectional suffix marking negation. As a negation suffix, *-lɛ* productively attaches to all verb stems in the present tense, as exemplified in (306). Tonal changes depend on the verb’s stem tones and are discussed in detail in Chapter 6.2.3.1.

- (306) a. gyámbó ‘cook’ → gyámbó-lé ‘not cook’  
       b. kòla ‘add’ → kólà-lè ‘not add’

In other tenses, auxiliary negation verbs are used that contain the suffix *-lè*, but whose lexical meaning is synchronically unknown.

#### 4.1.2.4 Anaphoric marker *-ndè*

The anaphoric marker *ndè* signals reference to an entity that has been mentioned before in the discourse. It occurs both as a bound and free morpheme in different contexts, in which speakers consistently judge the construction containing *ndè* as consisting of one or two words, respectively. When following a noun or an identificational marker, *ndè* is a free morpheme. This is further discussed in Chapters 3 and 3.8.5.4. If *ndè* follows a demonstrative, it is analyzed as a bound suffix to the demonstrative, as illustrated in (307).

- (307) bédewò **bíndè** byò mé ló njì lébèlè  
       be-déwò bí-ndè byò mε-H ló njì lébèlè  
       be8-food 8.DEM-ANA 8.EMPH 1-PRES RETRO come follow  
       bédewò bà wè.  
       H-be-déwò bà wè  
       be8-food AP 2S.NSBJ

‘That (aforementioned) food, I have come to look for the food at your place.’

The demonstrative form that *ndè* attaches to differs formally from the proximal and distal demonstrative paradigms described in Chapter 3.8.3.1. It takes the segmental CV shape of the proximal paradigm with a plain vowel, opposed to long vowels of the distal paradigm. The tonal pattern differs, however, since the form that *ndè* attaches to has a H tone rather than a falling tone as in the proximal paradigm. Given that many agreement encoding morphemes have a similar shape within their agreement class, one might wonder if the element preceding *ndè* is really a demonstrative. Possible other candidates could be an agreement prefix or attributive marker. I will rule out both of these possibilities and then explain why I consider the morpheme a demonstrative, despite formal differences.

Agreement prefixes with a plain vowel and a H tone are found with numerals and genitive markers, as shown in Chapter 5.2.1. Given the formal identity between these agreement prefixes and the element that precedes

*ndè*, one might be tempted to analyze *ndè* as a stem rather than a suffix and the CV element as its agreement prefix. This explanation has to be ruled out, however, since the occurrence of agreement prefixes is obligatory, but there are instances where *ndè* occurs without the CV element, namely when analyzed as a free form.

Another possibility would be to analyze the CV element as an attributive marker. As shown in Chapter 3.8.3.2, many of the attributive markers across different agreement classes have a CV shape with a plain vowel and a H tone. Most attributive markers link a noun to a second constituent that could be another noun or another part of speech, such as adjectives or interrogative pronoun, as discussed in Chapter 5.5. Thus, this analysis would also make sense syntactically. Arguments against this explanation, however, concern the form of some attributive markers and their distribution. First, the attributive marker forms of agreement classes 1, 3, 7, and 9 differ from the CV shape element found with *ndè*. For instance, in agreement class 1, the attributive marker is *wà*, while *ndè* would be preceded by *nú-*; in agreement class 7, the attributive marker is *yá*, but *ndè* is preceded by *yí-*. Second, there are examples where *ndè* plus its preceding CV morpheme follow a true attributive, as shown in (308). This makes it very clear that the morpheme cannot be an attributive marker.

- (308) mùdì      **wà**      núndé      dígé      mísí.  
       m-ùdì      **wà**      nú-ndè      dígé-H m-ísí  
       N1-person 1:ATT 1.DEM-ANA look-R ma6-eye  
       ‘That (aforementioned) person looks with his eyes [= thinks very hard].’

With both these other two options ruled out, I decide to analyze the preceding CV shape element as a demonstrative. Despite its formal mismatch to the independent proximal and distal demonstrative forms in terms of tone pattern or vowel length, there are reasons that support this categorization. First, all CV elements preceding *ndè* are segmentally identical to the proximal demonstrative paradigm. Second, demonstratives and the anaphoric marker are functionally and semantically related. They both serve to pick out referents from a set of entities. The anaphoric marker can be understood as a specification of general demonstratives in that it points the addressee to a referent that is not spatially distant, but that has come up in

the discourse before. This specification seems, however, optional since both demonstratives (in anaphoric contexts) and anaphoric markers can appear independently of each other.

#### 4.1.2.5 Contrastive marker *-gà*

The morpheme *-gà* is an inflectional suffix that attaches to non-subject pronouns, as shown in (309).

- (309) wé ké nà nyê nkòwáká, nyègà à nzíí  
       wε-H kè-H nà nyê nkòwáká nyè-gà a nzíí  
       2S-PRES go COM 1 equal.sharing 1-CONTR 1 PROG.PRES  
       wê vâáké sâ mpù.  
       wê vâáké sâ mpù  
       2S.NSBJ go[Bulu] do like.this  
       ‘You go with him equally sharing, he is going to do you like this [= tries to trick you].’

*-gà* serves to track referents and, in terms of information structure, indicates a switch of topics, as explained in Chapter 7.3.1.1. The suffix appears to be derived from the limiting modifier *-j(né)gá* ‘other’, as discussed in Chapter 3.8.1.4.

#### 4.1.2.6 Vocative marker *-o*

All proper nouns can take the vocative suffix *-o*, for instance as in *Mìnsém-o* or *Màmá-o*. The suffix attaches to the noun without undergoing assimilation; thus a final vowel of the noun stem does not delete. The tone of the suffix depends on speaker proximity. If the addressee is close to the speaker, the suffix has a L tone, if the addressee is further away, it has a H tone. The vocative suffix is not exclusively restricted to proper names, but can also be used with common nouns. These occurrences are, however, limited to common nouns expressing a relation that can be used as address, such as *nyá-ò* ‘mother’ and *tá-ò* ‘father’. The vocative can also attach to the locative adverb *wê* ‘there’, as shown in (310), where it also combines with the distal H tone.

- (310) mùdì kí tátò wúó!  
       m-ùdì kí tátò wû-o-H  
       N1-person NEG scream there-VOC-DIST

‘Nobody scream over there!’

#### 4.1.2.7 Tense-mood H tone suffix

A H tone suffix attaches to the subject-tense-aspect-mood-polarity (STAMP) marker and/or verbs in certain tense-mood categories. The STAMP marker takes the H tone suffix to mark PRESENT and SUBJUNCTIVE, while verbs take the the H tone suffix to encode RECENT PAST and REMOTE PAST. These processes are described in detail in Chapter 6.2.1.

## 4.2 Derivation and compounding

Having discussed the different morpheme types and their distribution, I now turn to describing the language’s word formation processes. This includes nominalization, verbal derivation, and compounding.

### 4.2.1 Nominalization

Nominalization is a word formation process in which nouns are formed from lexemes of other word classes. In Gyeli, the source word class for nominalization is generally restricted to verbs, at least for the derivation processes that are synchronically transparent.<sup>14</sup>

Formally, there are several means to mark nominalization on a derived noun, namely:

- (i) prefixation of a noun class prefix or similitive marker *ná-*
- (ii) suffixation of *-a* or *-èdè*
- (iii) final tone change

Based on how these means are systematically used in combination, three different types of nominalized forms can be achieved. First, there are those which are full nouns and assigned to a gender. Their prefixation pattern is based on assigned gender, and they have occasional suffixation of *-a* or *-èdè* as well as occasional tone change to final H. Second, there are defective

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<sup>14</sup>In nominalizations with the similitive marker *ná-*, the derivation process is rather opaque so that the derivational source is synchronically not recognizable, as discussed in Section 4.2.2.

nouns, which are nominalized participles. These always manifest prefixation of N- and suffixation of -a, and always have a final tone change to H or HL. Third, there are those derived with *ná*, producing nouns and adjectives. These always manifest prefixation of *ná-*, but never suffixation nor tonal changes.

Full deverbal nouns, found in genders 1/2, 3/4, 5/6, 6, and 7/8, and the nominalized participle use maximally all three formal means in the nominalization process, while derivation with *na-* is never subject to word final change, i.e. suffixation and tone change. Full nouns differ from the nominalized participle in the systematicity with which suffixation applies and the kind of final tone change that takes place, as outlined below.

What all three nominalization types have in common is that they take some sort of prefix. Full deverbal nouns are assigned to different genders. Depending on the gender they are assigned to, affixation of a noun class prefix is predictable. For instance, derived nouns in gender 1/2 will always take a nasal noun class prefix in the singular and the noun class prefix *ba-* in the plural. Nominalized participles always take a homorganic nasal prefix while nouns derived with the similitative always take the *na-* prefix.

In contrast to prefixation, suffixation and tone change occurring in nominalization seem less predictable. Nouns derived with *na-* never take a suffix, nominalized participles always take the suffix -a, and full deverbal nouns sometimes take a suffix: As explained in Section 4.1.2.1, the suffixes -èdè and -a occur in deverbal nouns of different genders. Their attachment seems lexically specified. The same is true for tonal changes in full deverbal nouns. Tonal changes can occur on full deverbal nouns in all genders except for gender 1/2. The change affects the underlyingly toneless TBUs of a verb, namely all syllables after the first one (see Chapter 2.4.1.3). In deverbal nominalization, all the tones become lexicalized, i.e. there are no toneless TBUs in noun stems. The verbal toneless units lexicalize either as a L, as in (311a) or a H, as in (311b).

- (311) a. ma-bwàlè ‘birth’ < bwàlè ‘give birth’
- b. ma-sòsí ‘happiness’ < sòsi ‘be happy’

Whether the final vowel(s) are lexicalized as a H or a L tone seems not predictable from their forms or meaning. Final H and L tones are found with any vowel quality and within the same gender. In contrast, nominalized

participles undergo obligatory tone change that is predictable, as discussed in Section 4.2.1.6.

Given the variability in suffixation and H tone change, a more systematic approach to present the data on nominalized forms in more detail is by their derivation outcome rather than the grammatical means used in the derivation. I first present full deverbal nouns that are assigned to gender 1/2, 3/4, 5/6, 6, or 7/8. (For more information on genders, see Section 5.2.3.) Gender assignment seems largely meaning driven. For instance, deverbal agentive nouns are assigned to gender 1/2 while event nouns are found in the transnumeral gender 6. Generally, deverbal nouns are found in all major genders except for gender 9/6. I then discuss nominalized participles as a type of defective noun. Nominalized forms derived with the similative *na-* are discussed in a distinct Section 4.2.2 following nominalization because *na-* not only derives nouns, but also adjectives. I also treat this type of nominalization separately because (i) nouns with *na-* only use limited nominalization means, excluding suffixation and tone change, and (ii) their derivational source is significantly more opaque than that of other derived nouns.

#### 4.2.1.1 Deverbal agentive nouns in gender 1/2

Deverbal nouns in gender 1/2 semantically designate a human or at least animate entity as an agent. These agentive nouns typically describe the ‘doer’ of an action. As animate entities, they are countable in Gyeli and thus always come with a plural form of the *ba* noun class, as described in Chapter 5.2.2.<sup>15</sup>

**Prefixation** All deverbal nouns in gender 1/2 take a nasal prefix in the singular and the prefix *ba-* in the plural. The systematic attachment of a nasal prefix in the singular is remarkable since most nouns of agreement class 1 do not take any prefix at all (see Chapter 5.2.2). The type of nasal prefix in class 1 depends on the phonological properties of the noun’s stem-initial consonant, as explained in Chapter 2.1.2.3. If the stem starts with a bilabial consonant, the nasal will be a labial nasal /m/ as in (312).

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<sup>15</sup>Nouns for humans are also found in other genders in Gyeli, but gender 1/2 is the human class in Proto-Bantu and many other Bantu languages synchronically. Also, in Gyeli most humans are assigned to gender 1/2.

## (312) m- prefix

- a. m-béðò ‘climber’ < bédò ‘climb’
- b. m-bwàlè ‘parent’ < bwàlè ‘be born’

On the other hand, if the consonant is an alveolar consonant, it will be an alveolar nasal /n/ as in (313).

## (313) n- prefix

- a. n-sálè ‘maker’ < sálè ‘make (tr.)’
- b. n-dìlè ‘undertaker’ < dìlè ‘bury’
- c. n-jì ‘opener’ < jì ‘open’

Finally, if the consonant is a velar, as in (314), the nasal will be a velar nasal /ŋ/.<sup>16</sup>

## (314) ŋ- prefix

- a. ŋ-gyàgà ‘buyer’ < gyàga ‘buy’
- b. ŋ-kòlè ‘helper’ < kòlè ‘help’
- c. ŋ-kwââlè ‘spy (n.)’ < kwââlè ‘spy (v.)’

**Suffixation** Most deverbal nouns in gender 1/2 do not take any nominalization suffix, but retain the original verb stem, as shown in (315) with the examples displaying different final vowels of /a/, /ɛ/, and /ɔ/.

- (315)
- a. n-gyàgà ‘buyer’ < gyàga ‘buy’
  - b. n-kòlè ‘helper’ < kòlè ‘help’
  - c. n-tsìlò ‘writer’ < tsìlò ‘write’
  - d. n-jíbò ‘sb. who closes’ < jibò ‘close’
  - e. n-gyìmbò ‘sorcerer’ < gyìmbò ‘dance’

All known deverbal nouns in gender 1/2 that do not take a nominalization suffix are bisyllabic. In the examples in (315), this is obvious since the verb stem is bisyllabic as well. There are, however, also cases where a bisyllabic version of a monosyllabic verb is, at least synchronically, not used in the language, as in (316). The derived noun is still bisyllabic, receiving the non-productive extension *-le* which is discussed in Section 4.2.3.7. Trisyllabic derived nouns without an extension suffix are not known.

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<sup>16</sup>In general orthography, however, I do not distinguish alveolar and velar nasals, as explained in Chapter 2.

- (316) a. n-dèlè ‘eater’ < ?dèlè ‘eat (?)’ < dè ‘eat’  
 b. n-kèlè ‘walker’ < ?kèlè ‘walk (?)’ < kè ‘walk’

Another opaque exception to the general retention of the verb stem is (317). Not only is the derivation process not clear, also the final vowel of the noun changes to /i/. There are no other nouns that follow this pattern.

- (317) n-jíbí ‘thief’ < ? < jíwɔ ‘steal’

If suffixation of deverbal nouns in gender 1/2 occurs, it is always with the suffix -èdè (but never with the nominalization suffix -a). Examples of this are given in (318).

- (318) a. n-gyámbèdè ‘cook (n.)’ < gyámbɔ ‘cook’  
 b. n-gyìmbèdè ‘dancer’ < gyìmbɔ ‘dance’

**Tone change** Deverbal nouns in gender 1/2 do not undergo final tone change to a H tone, unlike deverbal nouns other genders.

#### 4.2.1.2 Deverbal nouns in gender 3/4

Deverbal nouns in gender 3/4 are less frequent than those in gender 1/2 or 6. They are, however, formally very similar to nominalized participles, discussed in Section 4.2.1.6. All of them take a nasal prefix (in class 3), they all take the nominalization suffix -a, and bisyllabic nouns take a H tone on the final vowel, as shown in (319).

- (319) a. n-tsìl-á ‘hand writing’ < tsìlo ‘write’  
 b. n-sàl-á ‘crevice’ < sàlɔ ‘cut lengthwise’  
 c. n-lvúm-á ‘fork’ < lvúmɔ ‘sting’

In contrast to nominalized participles, deverbal nouns in gender 3/4 are full nouns including a singular and a plural form with the noun class prefix *mi*. They occur in all nominal environments, as described in Chapter 3.1, while nominalized participles do not.

Unlike deverbal agentive nouns of gender 1/2, deverbal nouns in gender 3/4 are not restricted to a bisyllabic pattern. As (320) shows, there are also instances of mono- and trisyllabic derived nouns. In these cases, the change to a H tone on the final vowel does not apply.

- (320) a. n-lā'story' < lâ 'tell'  
       b. n-sá'àwà 'repeated movement (e.g. leaves)' < sá'àwa 'move repeatedly, fidget'

#### 4.2.1.3 Deverbal nouns in gender 5/6

Deverbal nouns in gender 5/6 seem to be rare, just like those in gender 3/4. They all take the gender's noun class prefixes, *le-* in the singular class 5 and *ma-* in the plural class 6. There are no known instances of nominalization suffix attachment and nouns generally retain the final vowel of the verb, as shown in (321).

- (321) a. le-jìlò 'weight' < jìlɔ 'be heavy'  
       b. le-dà 'pond, source, well' < dà 'draw water'

An exception to the final vowel is presented in (322) where the derivation path is opaque. The final vowel of the synchronically existing verb and the derived noun do not match.

- (322) le-sù'ù 'waterfall' < ?sù'ù 'pour (?)' < sùbe 'pour out'

Deverbal nouns in gender 5/6 are either bi- or trisyllabic with the noun class prefix and a mono- or bisyllabic verb stem. There are instances where the verb stem is trisyllabic, as in (323), but in the derived noun, the first and second verb syllables are merged.

- (323) le-fwálá 'end, border, summit' < fúala 'end (RECIP)'

The example in (323) presents the only known instance where the final vowel of the derived noun takes a H tone; all other examples retain the original surface tone of the verb stem.

#### 4.2.1.4 Deverbal event nouns in gender 6

A vast number of deverbal nouns are assigned to the transnumeral gender 6. Semantically, deverbal nouns in this gender represent an event, as examples in (324) through (327) show (with the exception of *ma-nyâ* '(breast)milk' which is in this gender for its status as a liquid mass noun). Formally, all deverbal nouns in this gender take the noun class prefix *ma-* and are uncountable, lacking a singular counterpart in class 5. They differ, however,

with respect to suffixation of the nominalization suffix *-a* and tone behavior on the final vowel. Since these two features are independent of each other, there are four different classes of deverbal event nouns in class 6. (324) shows those that do not take a nominalization suffix nor final H tone.

- (324) a. ma-sâ ‘game, playing’ < sâ ‘make, do’
- b. ma-bwâsâ ‘thoughts’ < bwâsa ‘think’
- c. ma-nyàñò ‘pain’ < nyàñò ‘hurt’
- d. ma-nyâ ‘(breast)milk’ < nyâ ‘suckle, lick’
- e. ma-gyè’élè ‘prayer’ < gyè’ele ‘pray’
- f. ma-dò ‘negotiation, discussion’ < dò ‘negotiate, discuss’
- g. ma-bwàlè ‘birth’ < bwàlè ‘be born’ < bwà ‘give birth’

(325) provides an example of suffixation with the nominalization affix *-a*, but no final H tone change.

- (325) ma-díg-à ‘vision’ < díge ‘look, watch’

The third class comprises those nouns that take both the nominalization suffix *-a* and a final H tone, as in (326). (326c) further illustrates that derivation from trisyllabic verbs resulting in four-syllable nouns (including the noun class marker) is possible as well.

- (326) a. ma-tál-á ‘beginning’ < tálε ‘begin’
- b. ma-dìl-á ‘funeral’ < dìlε ‘bury’
- c. ma-líbél-á ‘showing, apparition (of moon)’ < líbelε ‘show’

Finally, there are also nouns that do not take a nominalization suffix, but a final H tone, as in (327).

- (327) a. ma-pámó ‘appearance, rise’ < pámo ‘appear’
- b. ma-tèmbówó ‘sun set’ < tèmbowó ‘set (sun)’
- c. ma-sòsí ‘joy’ < sòsi ‘be happy’

#### 4.2.1.5 Deverbal nouns in gender 7/8

Gender 7/8 also hosts deverbal nouns. They take the noun classes of their classes, namely  $\emptyset$  for class 7 and *be-* in class 8. All examples presented here

have a plural form, even the abstract nouns, such as *tfúgà*, *be-tfúgà* ‘suffering, sufferings’ or *kwàlē*, *be-kwàlē* ‘love (for different things/people)’.

Within deverbal nouns of gender 7/8, there are several formal subclasses, determined by the presence or absence of a nominalization suffix and/or final H tone. Examples in (328) neither take the suffix *-a* nor a final H tone, but are form identical to the verb they are derived from.

- (328) a. *sálè* ‘work (n.)’ < *sálε* ‘make, do (tr. v.)’
- b. *tfúgà* ‘suffering’ < *tfúga* ‘suffer’

In contrast, (329) exhibits cases where the final tone is changed to H, but no suffixation of *-a* occurs.

- (329) a. *sá* ‘thing’ < *sâ* ‘make, do’
- b. *kwàlē* ‘love (n.)’ < *kwàlè* ‘love (v.)’

In (330), both the final vowel changes to H tone and the nominalization suffix *-a* is attached.

- (330) *tfúd-á* ‘pinch (n.)’ < *tfúdɔ* ‘pinch (v.)’

And again, there are cases where the derivation process is synchronically not clear. In (331a), the source of *ndè* that is attached to *kè* ‘walk’ is unknown. In (331b), it seems that there might have been another verb form from which the noun has been derived, but which does not exist synchronically anymore.

- (331) a. *kèndè* ‘walk (n.)’ < *kè* ‘walk (v.)’
- b. *lògò* ‘curse (n.)’ < ? < *lùà* ‘curse (v.)’

#### 4.2.1.6 Nominalized past participles

The nominalized past participle is the most productive type of derivation, more productive than full deverbal nouns or derived verbs which are discussed in Section 4.2.3. In the database of 377 verbs, 325 (86%) allow for a nominalized participle.<sup>17</sup> It seems that the only restriction for a verb not to have a nominalized past participle form is semantic in nature and includes

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<sup>17</sup>Frequencies of derived verbs such as reciprocal, passive, or causative are provided in Table 4.4 in Section 4.2.3.

verbs of saying or intransitive verbs such as *dyúà* ‘swim’ or *sìsɔ* ‘be happy’. Grammatical properties of nominalized past participles as well as their status as nouns in terms of parts of speech are discussed in Chapter 3.1.2.3. Semantically, they encode resultativeness, as shown in (332).

- (332) a. n-kòl-á ‘(be) helped’ < kòla ‘help (v.)’
- b. n-dvùb-á ‘(be) soaked’ < dvùba ‘soak’
- c. n-gyámb-â ‘(be) cooked’ < gyámbɔ ‘cook (v.)’
- d. n-tfúmb-â ‘(be) wrinkled’ < tfúmba ‘wrinkle (v.)’

The derivation of nominalized participles is formally identical to that of deverbal full nouns. It involves prefixation of a nasal, suffixation of *-a*, and a tonal change on the final vowel. In contrast to deverbal full nouns (even within the same gender), these three features apply regularly on all derived forms. The tonal pattern on the suffix *-a* is determined by the tone on the first TBU, as shown in (333) for bisyllabic verbs. If the first tone is L, the suffix *-a* will take a H tone. If the first tone is H, the suffix will take a HL contour tone.

- (333) a. n-dvùb-á ‘(be) soaked’ < dvùbɔ ‘soak’
- b. m-bòg-á ‘(be) enlarged’ < bògɛ ‘enlarge’
- c. n-jímb-â ‘(be) lost’ < jímbe ‘lose’
- d. n-sél-â ‘(be) peeled’ < sélɔ ‘peel’

In fact, two syllables is the minimum requirement of length for nominalized past participles. In this, it differs from full deverbal nouns such as *n-jì* ‘eater’ which is derived from *dè* ‘eat’. The nominalized participle form, however, is *n-jìy-á* ‘(be) open’, as shown in (336). Monosyllabic verb stems keep their final vowel in the first syllable and attach the suffix *-a* as the second syllable, inserting an epenthetic consonant between the two vowels. The potential epenthetic vowels mainly include *y*, *w*, and *ng* which each occur in about a third of the monosyllabic verbs; there are a few exceptional cases which take *l*, *s*, or *n*. Only the insertion of *ng* as epenthetic consonant is mostly predictable.<sup>18</sup> It occurs in verbs that start with a nasal consonant and/or that have a nasalized vowel, as shown in (334).

<sup>18</sup>There are a few exceptions, e.g. *má’à* ‘accuse’ is not derived with *ng*, but with *g* in *mágâ* ‘(be) accused’, despite the nasal. The glottal stop seems to have more weight than the nasal, but other exceptions exist as well that do not appear to have an obvious explanation for their exceptionality, for instance *nyàg-á* ‘(be) defecated’ as derived from *nyàà* ‘defecate’.

- (334) a. ndàng-á ‘(be) crossed’ < ndà ‘cross’  
       b. n-làng-á ‘(be) passed’ < lâ ‘pass’  
       c. n-láng-â ‘(be) read’ < lâ ‘read’  
       d. nyíng-â ‘(be) entered’ < nyî ‘enter’

The insertion of *g* is predictable if the monosyllabic verb contains a glottal stop. There are, however, many instances of *g* insertion which are not predictable, for instance in *n-tsìg-á* ‘(be) alive’, derived from *tsìè* ‘live’, as opposed to *n-tsíy-â* ‘(be) cut’ which is derived from *tsíè* ‘cut’.

- (335) a. n-kwàg-á ‘(be) ground’ < kwà ‘grind’  
       b. n-dvùg-á ‘(be) hurt’ < dvùj ‘hurt’  
       c. n-kág-â ‘(be) rolled up’ < ká’â ‘roll up’  
       d. m-pág-â ‘(be) dug out’ < pá’â ‘dig out’

Further examples of *y* insertion are given in (336).

- (336) a. m-wèy-á ‘(be) dead’ < wè ‘die’  
       b. n-jìy-á ‘(be) open’ < jì ‘open’  
       c. n-kwéy-â ‘(be) fallen’ < kwê ‘fall’  
       d. m-véy-â ‘(be) given’ < vê ‘give’

As (334) through (336) show, the tonal patterns on the suffix is predictable as well. If the monosyllabic verb has a L tone, the derived form will have a L tone on the first and a H tone on the second syllable. If the monosyllabic verb has a HL contour tone, the first TBU of the derived form will surface H and the second HL.

Finally, nominalized past participles can also have three syllables. In this case, the tonal pattern of the suffix does not change according to the first TBU, but is the same for all derived forms: the second TBU surfaces H and the suffix *-a* HL, as shown in (337).

- (337) a. m-bélán-â ‘(be) used’ < bélane ‘use’  
       b. n-lèbál-â ‘(be) followed’ < lèbèle ‘follow’  
       c. n-súmál-â ‘(be) greeted’ < súmèle ‘greet’  
       d. m-víyál-â ‘(be) touched’ < víyala ‘touch’

### 4.2.2 Derivation with similitive *na-*

The similitive prefix *na-* derives common and proper nouns as well as adjectives and temporal adverbs. In this, it differs from other nominalization markers discussed in Section 4.2.1 which only result in the word class of common nouns. Formally, derivation with *na-* functions the same way for adjectives, common, and proper nouns,<sup>19</sup> but is tonally different in the derivation of adverbs. In all cases, the only derivation marker is the prefix *na-*. With nouns and adjectives, *na-* takes a H tone whereas it takes a L tone with derived adverbs.

Derivation with the similitive marker *na-* is more diverse in its derivational source than nominalization processes discussed in Section 4.2.1. In most cases, the derivational source is, in fact, synchronically opaque.<sup>20</sup> There are some clear cases, however, where the derivational source is a noun, as for instance in the proper name *Ná-nzé* which is derived from *nzé* ‘leopard’. There are also instances where the derivational source is likely to be a diachronic stative verb that is, however, not used synchronically anymore, as with the adjectives in (338). Especially the cross-linguistically uncommon color categories of a lightened or a darkened color suggest a change of state and make a verbal source likely.

(338) *ná-* with adjectives

- a. *ná-vyû(vyû)* ‘black [lit. like blackened]’
- b. *ná-bè(bè)* ‘red [lit. like reddened]’
- c. *ná-mbàmbàlà* ‘white [lit. like whitened]’
- d. *ná-yê(yê)* ‘lightened color [lit. like bleached out]’
- e. *ná-pfû(pfû)* ‘darkened color [lit. like darkened]’

Further evidence for a verbal derivation source comes from Cheucle (2014: 382) who analyzes the Proto-A80 particle <sup>°</sup>*na-* as a deverbal morpheme.<sup>21</sup>

Nouns derived with *na-* include both common and proper nouns. As for *na-* derived common nouns, they are all in gender 1/2 and their similitive

<sup>19</sup>While in most cases the derivational source is synchronically opaque, it still does not look as if there is any final vowel change to *-a* or tone change of the final vowel, as often found in deverbal nominalization.

<sup>20</sup>See Section 4.1.1.1 for why *na-* should still be viewed as a derivational morpheme.

<sup>21</sup>According to her data, <sup>°</sup>*na-* is synchronically a lot more productive in Bekwel (A85). Also colors in Bekwel are preceded by this morpheme. Cheucle views Bekwel color terms as nouns (p. 138) while the potential verbal source seems unclear.

prefix can be preceded by the plural noun class prefix *ba-*, as shown in (339). As a CV- shape noun class prefix, *ba-* also then allows for the attachment of another prefix, namely the object linking H tone, as discussed in Section 4.1.1.4. In contrast, singular noun forms with the simulative marker never take a noun class prefix or object linking H tone. Semantically, common nouns derived with *na-* comprise mostly animals, especially insects.

(339) *ná-* with common nouns

- a. *ná-búnjâ*, *ba-ná-búnjâ* ‘bed bug’
- b. *ná-mìnsógè*, *ba-ná-mìnsógè* ‘palm rat’
- c. *ná-mángò(mángò)*, *ba-ná-mángò(mángò)* ‘male Agama lizard’
- d. *ná-yûyû*, *ba-ná-yûyû* ‘vertigo’

With proper nouns, *na-* only occurs in female names, deriving them from male names, as illustrated in (340).

(340) *ná-* with proper nouns

- a. *Ná-nyémbá* (female name) > *Ngyémbá* (male name)
- b. *Ná-ntùngù* (female name) > *Ntùngù* (male name)
- c. *Ná-yímá* (female name) > *Yímá* (male name)
- d. *Ná-bàmù* (female name) > *Bàmù* (male name)

The prefix *na-* also derives adverbs, as shown in (341). Unlike all other derivations with *na-*, the prefix takes a L tone with adverbs and the derivational source is always a noun.

(341) *nà-* with adverbs

- a. *nà-ménj* ‘tomorrow’ > *ménj* ‘morning’
- b. *nà-kùgúù* ‘yesterday’ > *kùgúù* ‘evening’

In terms of frequency, the prefix *na-* is found with eight common nouns in the 875 entries noun database which is less than 1%. The simulative marker is relatively more widespread amongst proper names with 16 occurrences which is a third of a sample of about 50 female proper names. The simulative marker occurs with half of the 12 adjectives. This concerns all 5 color terms as well as *ná-tî* ‘straight’. Only two examples of derived adverbs have been found, but the class of adverbs is small in the first place.

### 4.2.3 Verbal derivation

Bantu languages are known for their multitude of productive verb extensions, also known under the term of ‘verbal derivation’. These suffixes bring about a valence change from intransitive to transitive verbs and may generally include such categories as applicatives, causatives, reversives, or reciprocals.

Table 4.4 summarizes verbal derivation morphemes in Gyeli, including both extensions and expansions, while Table 4.5 gives examples for each one. Nurse (2008) defines extensions as verbal “productive derivational suffixes” that “change the valency and meaning of [verb] roots” (p. 311). In Gyeli, they comprise the forms *-ala*, *-a*, *-ɛsɛ*, *-ɛlɛ*, *-ɛga*, and *-ɔwɔ*. In contrast, the Gyeli expansions *-kɛ*, *-lɛ*,<sup>22</sup> and *-bɔ* are not productive synchronically. They are low in number and, even more importantly, it is difficult to match their form onto a functional category.

Status	Form	Category label	# verbs
extensions	<i>-ala</i>	RECIPROCAL	270
	<i>-a</i>	PASSIVE	105
	<i>-ɛsɛ</i>	CAUSATIVE	89
	<i>-ɛlɛ</i>	APPLICATIVE	34
	<i>-ɛga</i>	AUTOCAUSATIVE MIDDLE VOICE	28
	<i>-ɔwɔ</i>	POSITIONAL MIDDLE VOICE	5
expansions	<i>-kɛ</i>	???	10
	<i>-lɛ</i>	???	6
	<i>-bɔ</i>	REVERSIVE	1

Table 4.4: Summary of verbal derivation morphemes

While historically the derivational system was most likely more productive, it is synchronically determined in the lexicon whether a verb takes verb extensions and, if so, which. There is no verb that takes all possible extensions. Also, there seems to be a general tendency to reduce verb extensions. For instance, the applicative and causative are currently merging into one transitivizing category, blurring semantic distinctions.

<sup>22</sup>It is not clear whether this suffix is related to the applicative. As shown in Section 4.2.3.7, there are instances of valency increase, as expected for the applicative, but also cases where the opposite happens. Also, there does not seem to be a phonological rule according to which the expansion suffix could have been reduced from the applicative form. Given the inconclusive data on a potential relation between *-lɛ* and the applicative suffix *-ɛlɛ*, I consider *-lɛ* as a form in its own.

Gyeli verb roots generally only take one derivation morpheme which appears to correlate with the verb stem restriction to three syllables, as discussed in Chapter 2.3.3.4. There are a few exceptions, however. Within the limits of a maximum of three syllables, a verb may combine two extensions/expansions. This is, for instance, the case with passives formed from other extensions such as the causative, applicative, or positional middle voice (see Section 4.2.3.2). Another exception to the trend of allowing only one derivation morpheme concerns the causative that may show (remnants of) a combination with the applicative, (342), or the expansion morpheme *-lɛ*, (343), again respecting the three syllable maximum of the verb stem. Examples such as in (342) are rare. One could likewise assume that *-s-* in (342) is an epenthetic consonant, as discussed in Chapter 3.2.1. Since /s/ as an epenthetic consonant is rare as well, however, it is possible that all of these instances stem from an original causative morpheme. Synchronously, this cannot be determined with certainty. Combinations of causative and applicative morphemes in Gyeli respect the originally fixed causative-applicative suffix ordering, as discussed by Good (2005).

- (342) kà-s-ele  
 catch-CAUS-APPL  
 ‘light sth. (make sth. catch fire)’

In combinations of the causative and the expansion *-lɛ*, in contrast, the expansion morpheme precedes the causative suffix, as shown in (343). Synchronously, it is not clear what this expansion does or what its semantic function is, as I discuss in more detail in Section 4.2.3.7. In (343), *-lɛ* may indicate a perfective reading:<sup>23</sup> *bwà* ‘give birth’ → *bwà-lɛ* ‘be born’ → *bwà-l-ɛsɛ* ‘make give birth’.

- (343) bwà-l-ɛsɛ  
 catch-lɛ-CAUS  
 ‘make give birth (e.g. midwife)’

Some verbs lacking the bisyllabic expansion form with *-lɛ*, still use /l/ as an epenthetic consonant in the causative form, for instance in *bâ* ‘marry’ → *bál-ɛsɛ* ‘make marry’ (but having no form *bále*). In verb forms that take

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<sup>23</sup>While there is definitely a difference in valency involved as well, *bwà-lɛ* ‘be born’ does not match the passive forms discussed in Section 4.2.3.2.

two different epenthetic consonants with different derivation morphemes, one of the consonants is often /l/, which may have its origin in the expansion morpheme *-le*. Extensions derived from the *-le* form include passive and applicative, for example in *bû* ‘destroy’ → *bûl-a* ‘destroyed’, while the reciprocal is formed with /y/ *búy-ala* ‘destroy each other’. As stated above, however, this observation does not translate into any synchronic rule and is currently lexically specified.

As Table 4.4 shows, extension forms vary hugely in the number of verbs they combine with, which may have different causes. While categories such as causative or applicative seem to have become reduced, other extensions such as *-cwɔ* and *-ega* are restricted semantically. *-cwɔ* as a positional category, for instance, only combines with semantically compatible verb roots. It should also be mentioned that the numbers given in the table should not be taken as absolute. For one, despite my attempt to elicit the entire paradigm of possible extended verb forms, there is the possibility that the speaker could not think of any appropriate context and rejected a possible extended verb form on these grounds, while another speaker would have accepted a potential form. So there may actually be more forms.

Category	Example			
RECIPROCAL	<i>lúnd-ala</i>	‘fill one another’	→	<i>lúndɔ</i> ‘fill ()’
PASSIVE	<i>lúnd-a</i>	‘be filled’	→	<i>lúndɔ</i> ‘fill oneself’
CAUSATIVE	<i>lúnd-ɛsɛ</i>	‘make sth. full’	→	<i>lúndɔ</i> ‘fill oneself’
APPLICATIVE	<i>lúnd-ɛlɛ</i>	‘fill sth.’	→	<i>lúndɔ</i> ‘fill oneself’
AUTOCAUSATIVE	<i>vìd-ɛga</i>	‘turn (by itself)’	→	<i>vìdɛ</i> ‘turn sth.’
POSITIONAL	<i>kèl-cwɔ</i>	‘assume hanging position’	→	<i>kèle</i> ‘hang sth.’
-KE	<i>jí-kɛ</i>	‘burn sth.’	→	<i>jíyɛ</i> ‘burn (intr.)’
-LE	<i>bwà-le</i>	‘be born’	→	<i>bwà</i> ‘give birth’
-Bɔ/CWɔ	<i>jì-bɔ</i>	‘close’	→	<i>jì</i> ‘open’

Table 4.5: Examples of verbal derivation morphemes

Another issue concerns verb forms that have an extension or expansion, but no synchronic underived form. I treat them as underived forms here, i.e. I do not count them as extensions in the table in order to be consistent across categories. While it is easy to recognize, for instance, a causative or applicative form, it is much harder for possible expansions such as *-kɛ*. As indicated in Table 4.4, there are 10 instances of this morpheme serving as an expansion to an underived form. There are, however, 5 instances in my database where a *-kɛ* ending appears as an apparent underived form

itself, taking yet its own extension morphemes. Synchronously, it is not possible to determine whether this *-ke* carries any morphological function or whether it is simply a random lexical form. Table 4.5, as a summary, provides examples of each extension and expansion category, including the underived verb form.

In the following, I will describe each derivation morpheme and its semantic functions in a decreasing order of frequency. As discussed in Chapter 2.4, all derivation morphemes are underlyingly toneless. Therefore, they are represented without tonal marking here.

#### 4.2.3.1 Reciprocal *-ala*

The verb extension *-ala* is by far the most frequent in Gyeli. Out of 377 verbs in the database, 270 (71.6%) allow for this extension which I label as reciprocal. Further, there are eight occurrences of verb stems ending in *-ala* that do not have an underived form.

In terms of the extension's semantic function, it has mostly a reciprocal meaning, as the examples in (344) show, which express 'mutuality'.

	dvùò	'hurt (intr.)'	→	dvùg-ala	'hurt one another'
	dyúwɔ	'hear'	→	dyúw-ala	'understand each other'
	gyíwɔ	'call'	→	gyíw-ala	'call each other'
(344)	kwàlɛ	'love'	→	kwàl-ala	'love each other'
	tsíndɔ	'push'	→	tsínd-ala	'push each other'
	bâ	'marry'	→	bán-ala	'marry each other'
	kɛ	'shave'	→	kèng-ala	'shave each other'

Beyond this reciprocal meaning, there are many instances of verbs whose semantics do not allow for a reciprocal use. In these cases, the extension *-ala* has a 'togetherness' reading, as shown in (345).

	nyùlɛ	'drink'	→	nyùl-àlà	'drink together'
	kóse	'cough'	→	kós-ala	'cough together'
	pámɔ	'show up'	→	pám-ala	'show up together'
(345)	tébɔ	'get up'	→	téb-ala	'get up together'
	bwà	'become big'	→	bòg-ala	'become big together'
	kwê	'fall'	→	kwéy-ala	'fall together'
	nyî	'enter'	→	nyíng-ala	'enter together'

It is possible that verbs which do allow a reciprocal meaning may get a ‘togetherness’ reading, depending on the context. This, however, needs further investigation.

#### 4.2.3.2 Passive *-a*

I will discuss the contrast between active and passive constructions following Siewierska’s (2013) defining criteria for passive constructions which I illustrate in (346).

- (346) a. bùdì            bá            tsìló            békálàdè.  
           b-ùdì            ba-H            tsìlɔ-H            H-be-kálàdè  
           ba2-person 2-PRES write-R OBJ.LINK-be8-book  
           ‘People write books.’
- b. békálàdè            bé            tsìlá            (nà            bùdì).  
           be-kálàdè            be-H            tsìl-a-H            nà            b-ùdì  
           be8-book 8-PRES write-PASS-R COM ba2-person  
           ‘Books are written (by people).’

(346a) is the active, while (346b) is the contrasting passive construction. According to Siewierska (2013), “the subject of the active corresponds to a non-obligatory oblique phrase of the passive or is not overtly expressed,” which is the case for the subject *bùdì* in (346a). Another characteristic of passive constructions is that their subjects correspond to the direct object in the active counterpart, as with *békálàdè* ‘books’. Siewierska also points out that passive constructions are pragmatically more restricted than active constructions, which is true in Gyeli as well. Finally, she notes that passive constructions receive a special morphological marking of the verb. In the case of Gyeli, this is a final vowel *-a*, in most cases, as will be discussed below.

Generally, passive forms are far less frequent than reciprocals, with only 105 attested instances (27.9% of the verbs in the database). Speakers appear to prefer the active form with the impersonal third person plural of class 2 and are forced to use this for the majority of verbs which do not have a passive form. Morphological marking of the passive on the verb in Gyeli differs phonologically, depending on the syllable number of the verb form the passive is derived from. Passives from mono- and bisyllabic roots differ from trisyllabic ones. I will discuss both in turn.

**Passive formation from mono- and bisyllabic roots** The passive in Gyeli is formed by the extension *-a*, resulting in a bisyllabic verb stem if it is derived from a mono- or bisyllabic verb root, as shown in (347).

	kwàlε	'love'	→	kwàl-a	'be loved'
	bvúj	'break sth.'	→	bvúg-a	'be broken'
	jì	'open'	→	jìy-a	'be open'
(347)	dyû	'kill'	→	dyúw-a	'be killed'
	jíwɔ	'steal'	→	jíy-a	'be stolen'
	vìde	'turn sth.'	→	vìd-a	'be turned'
	bàwe	'carry sth.'	→	bàw-a	'be carried'

All these instances have an underived form. There are, however, 36 bisyllabic verbs ending in *-a* which are underived, non-passive forms. Examples are given in (348). In fact, these verbs cannot be passivized nor do they have a passive meaning. Expressing passive meaning as in (347) is not possible for them since their ending is identical with the passive suffix.

	gyàga	'buy'
(348)	kòla	'add'
	kìya	'give'
	bwàndya	'despise'

For other bisyllabic verb stems ending in *-a* which do not have an underived form, agentivity is less specified. The examples in (349) can be thought of as having a non-specified agent while the subject takes the semantic role of an experiencer.

	vòwa	'wake up'
	wùsa	'forget'
(349)	káká	'shiver'
	kánda	'crack (intr.; e.g. bottle or glass)'
	sìya	'wash, bathe sb./oneself'

Finally, a few bisyllabic passive forms take a final *-ɛ* rather than the usual passive *-a* extension, as shown in (350) which lists all known instances.

	bwè	'catch'	→	bùl-ɛ	'be caught'
(350)	sàlɔ	'cut lengthwise'	→	sàl-ɛ	'be cut lengthwise'
	tìno	'harvest tubers'	→	tìl-ɛ	'be harvested (tubers)'

These exceptions are specified in the lexicon rather than stemming from a predictable morpho-phonological rule. Their origin and/or motivation is not clear at this point.

**Passive formation from trisyllabic stems** In a few rare cases, the passive can also be formed from trisyllabic stems, i.e. from verbs which already have an extension such as the causative, applicative, or positional middle voice. In these cases, not only the final vowel changes to *-a*, but also that of the second syllable, as shown in (351). The passive forms that are derived from applicatives *-ele* are identical with the reciprocal forms. I do not mark morpheme breaks with a hyphen for these passive forms since morpheme boundaries are not clear-cut. Rather, an extension morpheme such as *-awa* has to be considered a portmanteau morpheme, encoding both the passive via the vowels /a/ and the positional via the consonant /w/.

bál-ɔwɔ	'bend down'	→	bálawa	'be bent down'
bén-ele	'raise, lift sth.'	→	bénala	'be lifted (lift each other)'
(351) bùm-ele	'hit (nail)'	→	bùmala	'be hit (hit each other)'
dyɔ́l-eṣe	'make laugh'	→	dyɔ́lasa	'be made to laugh'
pín-eṣe	'squeeze'	→	pínasa	'be squeezed'

Historically, the passive extension is likely to have developed from the middle voice suffix *-aga* which is still used in Mabi as passive. In Gyeli, the velar stops got lost and the vowel contracted. In careful speech, the final *-a* is sometimes still lengthened, for instance in *gyàmbaa* 'be cooked' which is derived from *gyámbɔ* 'cook', but in fast speech and most lexemes, it surfaces as a short vowel.

The use of passive verbs is rather restricted, nevertheless. For one, many underived verbs do not allow for passivization, even though this would semantically be possible. Also, in terms of text frequency, even verbs that do have a passive form are rarely used.<sup>24</sup> In natural speech, the Bagyeli prefer to use an active construction with a class 2 (3<sup>rd</sup> person plural) subject as an agent which remains semantically unspecified, as in (352).

(352) bá	gyàgá	má-ntúà
ba-H	gyàgá-H	H-ma-ntúà
2-PRES	buy-R	OBJLINK-ma6-mango

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<sup>24</sup>The passive forms discussed in this Section stem mainly from elicitations.

‘They buy the mangos (= the mangos are bought).’

See also Chapter 7.3 on information structure for a more detailed discussion.

**Relation to other derivation forms** The passive appears to be related to two other derivation forms: the autocausative and the nominalized past participle. The passive could be the shortened form of the autocausative *-aga*, discussed in Section 4.2.3.5. As explained there, *-aga* is the regular passive suffix in Mabi. In Gyeli, it appears to have split into two categories: the passive and the autocausative. This can be seen in a few instances where the passive suffix is a lengthened vowel, as in (353). It seems lexically specified whether a verb can take the lengthened passive form. In any case, the lengthened suffix is in free variation with the default short form.

	kfúdε	‘cover’	→ kfúd-a(a)	‘be covered’
(353)	wàwε	‘spread’	→ wàw-a(a)	‘be spread’
	gyámbɔ	‘cook’	→ dyúg-a(a)	‘be cooked’
	kwèlɔ	‘cut down’	→ kwèl-a(a)	‘be cut down’

In a likely scenario, the consonant /g/ has been deleted from *-aga*, developing into a lengthened passive form which still exists in a few lexemes while the synchronic default form is a short vowel.

Semantically, the shift from autocausative middle voice to passive seems natural. In both cases, the agent is not overtly expressed. The main difference seems to concern the attribution of agentivity. In the autocausative, the subject has a certain degree of agentivity, while, in the passive, the subject is clearly the patient. Given the distinct functions of passive and autocausative, quite a few verbs take both extensions. This is true for all examples in (353); others are listed in Appendix 8.2.3.5.

The passive form is also related to the nominalized past participle described in Section 4.2.1.6. The difference between the two is both structural and semantic. The passive verb form is preceded by a STAMP marker, as in (354), while the nominalized past participle requires the STAMP copula (as discussed in Chapter 7.1.1) that agrees with the subject, as shown in (355).

(354)	yí	kèlà		
	yi-H	kèl-a		
	7-PRES	hang-PASS		
	‘It is being hung.’			

- (355) yî nkèlá  
yî n-kèl-a-H  
COP NOM-hang-PASS-NOM  
‘It has been hung [lit. It is a ‘hung-up one’].’

The meaning difference between the two constructions is in fact aspectual. The passive construction views an event as ongoing while the nominalized form is more resultative.

#### 4.2.3.3 Causative -ɛsɛ

The causative extension morpheme -ɛsɛ changes the argument structure of the verb in that it increases the verb’s valency, turning intransitive verbs into transitive and transitive verbs into ditransitive ones. Song (2013) defines causative constructions as denoting complex situations

“consisting of two component events [...]: (i) the **causing event**, in which the **causer** does or initiates something; and (ii) the **caused event**, in which the **causee** carries out an action, or undergoes a change of condition or state as a result of the causer’s action.”

This definition becomes clearer when looking at (356) where the causer, *Màmbì*, does something, namely teaching which is the causing event. As a consequence, the causee, *Àdà*, does something, namely learning English which is the caused event.

- (356) Mambì á gyíkésé Àdà ngèlénè  
Mambì a-H gyík-ɛsɛ-H Àdà ngèlénè  
Ø1.PN 1-PRES learn-CAUS-R Ø1.PN Ø1.English  
‘Mambi teaches Ada English (lit. makes Ada learn English).’

This type of morphological causative, as opposed to lexical and syntactic causatives (see Song (1996: 3)), is marked on the verb by a suffix. The morphological causative is not the only causative construction found in Gyeli. Also syntactic causatives using the verb *sâ* ‘make’ plus the complementizer *nâ*, as in (357), are quite common.

- (357) mé nzíí sâ nâ wé dyò  
mε-H nzíí-H sâ nâ wε-H dyò  
1S-PRES PROG-R make COMP 2S-PRES laugh

‘I make you laugh.’

The morphological causative in Gyeli is formed by the suffix *-ɛsɛ*. 89 verbs in the database (23.6%) have a causative suffix. There are another 6 verbs with a causative ending which do not have an underived form. Examples are provided in (358).

	gìyɔ	‘cry’	→	gìl-ɛsɛ	‘make cry’
	gyímbɔ	‘dance’	→	gyímb-ɛsɛ	‘make dance’
	dyúwɔ	‘hear, perceive’	→	dyúg-ɛsɛ	‘make feel’
(358)	nyâ	‘suckle, lick’	→	nyáng-ɛsɛ	‘breast-feed’
	mìno	‘swallow’	→	mìn-ɛsɛ	‘make swallow’
	jíyɔ	‘burn (intr.)’	→	jíg-ɛsɛ	‘make angry’
	lùnga	‘grow (intr.)’	→	lùng-ɛsɛ	‘raise, make grow’
	gyíkɛ	‘learn’	→	gyík-ɛsɛ	‘teach’

Some medial consonants of underived verb forms are subject to change in verbal derivation. This is precisely the case with epenthetic consonants such as /w/ (between /u/ and /ɔ/) and /y/ (between /i/ and /ɔ/) which may be replaced by another consonant in the derived forms. In this respect, bisyllabic underived verbs behave parallel to monosyllabic roots, as discussed in Section 3.2.1 for stem final vowels.

While in the great majority of cases, the suffix *-ɛsɛ* expresses causativity, there are a few cases where the semantic lines between causative and applicative are blurred, as for instance with the verb *dvùbɔ* ‘dip, soak’. For these, both the underived verb can be used, as in (359a), or the causative, as in (359b).

- (359) a. mé dvùbɔ́ pèmbɔ́ é kɔfí  
           mε-H   dvùbɔ-H pèmbɔ́ é kɔfí  
           1S-PRES dip-R   ∅1.bread LOC ∅7.coffee  
           ‘I dip the bread in coffee.’
- b. mé dvùbésé wê màjíwɔ́  
           mε-H   dvùb-ɛsɛ-H wê ma-jíwɔ́  
           1S-PRES dip-CAUS-R 2S ma6-water  
           ‘I dip you in water.’

The distribution and frequency of the underived versus the causative form needs further investigation. The occurrence of comparable cases in the corpus is so rare that no generalizations can be made at this point.

#### 4.2.3.4 Applicative *-ele*

The extension *-ele* is significantly rarer in Gyeli than the causative *-esɛ*, with only 34 (9%) instances in the database. Further, there are no verbs ending in *-ele* that have no underived form. I refer to the *-ele* suffix as ‘applicative’, a category that is commonly found in Bantu languages.

Morphosyntactically, the applicative changes the verb’s valency by increasing “the number of object arguments selected by the predicate [...] by one with respect to the basic construction” (Polinsky 2013). Peterson (1997: 278) specifies that, in applicative constructions:

“thematically peripheral objects are treated in a more core or direct object manner, and in terms of discourse, they often have higher relative topicality in applicative constructions as compared to when they occur in non-applicative constructions.”

Gyeli forms applicatives both from intransitive (360) and transitive (361) verbs, which seems to be the typical case in Bantu languages, according to Polinsky (2013).

(360)	nyùmbɔ	‘smell (intr.)’	→	nyùmb-ele	‘smell sth.’
	swásɔ	‘dry (intr.)’	→	swás-ele	‘dry sth.’
	bédɔ	‘go up’	→	béd-ele	‘mount sth.’
	lúndɔ	‘fill oneself’	→	lúnd-ele	‘fill sth.’
	só’ò	‘continue’	→	sós-ele	‘continue with sth.’
	jímbɛ	‘get lost’	→	jímb-ele	‘lose sth.’
	bámɔ	‘scold (intr.)’	→	bám-ele	‘scold sb.’
	dyû	‘be hot’	→	dyúng-ele	‘heat sth.’

Further, Polinsky (2013) distinguishes applicative constructions in terms of the semantic role of the applied object, pointing out that Bantu languages typically licence benefactive and other semantic roles. This is also true for Gyeli. Benefactive contexts usually arise with applicatives formed from transitive verbs, for instance as shown in (361) for *gyámbɔ* ‘prepare’. In these cases, a second object is added which often takes the role of a benefactive or an instrumental.

	lúme	'send'	→	lúm- <i>ɛlɛ</i>	'send to sb.'
	gyámbɔ	'prepare'	→	gyámb- <i>ɛlɛ</i>	'prepare for sb.'
(361)	dyúwɔ	'hear, perceive'	→	dyúw- <i>ɛlɛ</i>	'listen'
	vísɔ	'cover'	→	vís- <i>ɛlɛ</i>	'cover sth. (+ INSTR/BEN)'
	kfùbɛ	'provoke'	→	kfùb- <i>ɛlɛ</i>	'provoke sb. (+ INSTR/BEN)'
	víðɛ	'turn sth.'	→	víð- <i>ɛlɛ</i>	'turn sth. (+ INSTR/BEN)'

Applicatives which are derived from intransitive verbs typically do not have a benefactive reading. In fact, they differ significantly in the distribution of semantic roles across arguments from applicatives that are derived from transitive verbs. The subject of the intransitive verb, which has the role of an undergoer, is expressed as the object in the applicative form, as shown in (362). In many of these instances, the applicative forms have a causative meaning.

	vásɛ	'rise (dough)'	→	vás- <i>ɛlɛ</i>	'make (dough) rise'
(362)	vè'è	'try on clothes'	→	vè'- <i>ɛlɛ</i>	'make sb. try clothes on'
	kóse	'cough'	→	kós- <i>ɛlɛ</i>	'make cough'

In contemporary speech, the applicative and the causative seem to be merging into one category, with the applicative most likely becoming lost, given its lower frequency in comparison to the causative. It is rare that a verb has both an applicative and a causative form. In my database, I found only 5 instances where a verb takes both *-ɛsɛ* and *-ɛlɛ*. In the majority of cases, a verb has a causative, but no applicative form.

It is not surprising that these two categories are merging since, semantically, there is some overlap between them. For instance, the applicative form *nyíngɛlɛ* 'insert', derived from *nyí* 'enter', may be viewed as adding an applied object to the underived verb form. On the other hand, semantically, it can also be thought of as a causative context in the sense of 'making sth. enter'. The same is true for *dyû* 'be hot' which has an applicative form *dyíng-ɛlɛ* 'heat sth.' Again, an object is added to an otherwise intransitive verb, resulting in a reading of 'applying heat to sth.' At the same time, semantically, it can also be thought of as 'make sth. hot'.<sup>25</sup>

Just like the causative, also the applicative extension has a periphrastic

<sup>25</sup>Bostoen & Mundeké (2011) report a similar syncretism of applicative and causative for Mbuun (Bantu B87). According to them, however, the syncretism in Mbuun is based on phonological rather than semantic grounds.

alternative to convey the same, or at least similar, meaning, as shown in (363).

- (363) mé gyá gyá mpá'à wô  
       me-H gyâ-H gyá mpá'à w-ô  
       1S-PRES sing-R Ø7.song Ø3.side 3-2S.POSS  
       'I sing a song for you.'

#### 4.2.3.5 Autocausative middle voice *-ega/-aga*

The extension *-ega/-aga* appears 28 times in the verb database which means that 7.4% of the verbs allow this extension. Further, there are 4 verbs with this extension which have no synchronic underived form.

In contrast to other extensions, this derivation has two variant suffixes: *-ega* and *-aga*. A specific verb will only take one of the two forms, i.e. it is not possible for a given verb to use either one or the other. The choice for one of the two suffix forms seems to be lexically specified rather than depending on phonological rules. Even though there is a tendency that *-aga* is used after the glide /j/ ('y' in orthography) as well as after /m/ or /mb/, there are also a few cases where *-ega* appears after these consonants. Given that their form is very similar while the function is the same, I consider these two suffixes as belonging to the same category. It is possible that the form *-aga* has its origin in the neighboring language Mabi where the suffix is used productively for passive formation. This, however, does not explain why *-ega* is used for some and *-aga* for other verbs and how the existing distribution comes about. In terms of frequency, *-ega* is found more often than its variant *-aga*, the latter appearing only nine times in contrast to *-ega* with 19 times.

The suffix variants *-ega* and *-aga* constitute one of two middle voice categories in Gyeli. I distinguish, in terms of terminology, the autocausative middle voice extension *-ega/-aga* from the 'positional' middle voice suffix *-ɔwɔ*, discussed in Section 4.2.3.6. Unlike valency-increasing extensions, such as the applicative or causative, the middle voice constitutes a category 'intermediate in transitivity between one-participant and two-participant events', as defined by Kemmer (1993: 3).<sup>26</sup> In Gyeli, the autocausative mid-

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<sup>26</sup>Note that Kemmer (1993) primarily defines the middle voice as a semantic category which, in some languages, receives formal marking. I deviate from this notion in that

dle voice typically denotes one-participant events. It requires only one argument (the subject), having a valency decreasing effect. The autocausative, as exemplified in (364), is accordingly intransitive, derived from transitive verbs. Semantically, the subject of autocausative verbs incorporates the roles of both agent and undergoer, while syntactically the agent remains under-specified. Often, a certain self-causation is implied in such events which I translate as ‘by itself’.

	vìdε	‘turn (tr.)’	→	vìd-ega	‘turn (by itself)’
	wàwε	‘spread sth.’	→	wàw-ega	‘spread (by itself)’
	jìna	‘dive’	→	jìn-ega	‘sink (intr), melt (intr)’
(364)	kfúdε	‘cover sth.’	→	kfúd-ega	‘cover (by itself)’
	lèndo	‘flow’	→	lènd-ega	‘flow (by itself)’
	lége	‘singe’	→	lég-ega	‘singe (by itself)’
	tfúmbɔ	‘wrinkle sth.’	→	tfúmb-aga	‘get wrinkled (by itself)’
	líyɔ	‘clear land’	→	líy-aga	‘clear (by itself)’

Cross-linguistically, there seems to be a strong relation between middle voice and reflexive constructions. Kemmer (1993) even assumes that middle marking evolves from reflexive constructions. Speakers indeed tend to translate autocausative middle voice forms with a French reflexive construction using *se*, for example *tfúmb-aga* ‘get wrinkled (by itself)’ would be translated as *se plier* in French. Nevertheless, I argue that the autocausative in Gyeli constitutes a basic system which is not derived from reflexive constructions. This view is parallel to Maldonado’s (2009) observation on South American languages where middle voice also is a basic system independent of reflexives.

In comparison to the autocausative suffix, Bantu reflexives are canonically expressed by an affix preceding the stem, which Meeussen (1967: 109) calls ‘infix’ and reconstructs as \*-í- (-jí-? -jíj-?) for Proto-Bantu. Such a prefix is not found in Gyeli. Reflexivity in Gyeli is rather expressed by object pronouns plus *médè* ‘self’ as in (365) or, in other cases, carry reflexive meaning lexically as in *síya* ‘wash (oneself)’.

(365)	mé	nyé	mê	médè
	mε-H	nyê-H	mâ	médè
	1S-PRES	see-R	1S.NSBJ	self

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I consider middle voice categories in Gyeli as formal categories which map onto certain functions.

‘I see myself.’

Given these constructions which differ formally very much from the autocausative, there is no obvious reason to assume that they are related or even that the autocausative has evolved from the reflexive. On the other hand, the autocausative is structurally more similar to the passive in Mabi, which has the extension *-aga* or may even be related to the passive extension *-a(a)* in Gyeli itself. This is discussed in more detail in Section 4.2.3.2

#### 4.2.3.6 Positional middle voice -cwɔ

The extension *-cwɔ* constitutes the second type of middle voice category in Gyeli. *-cwɔ* is the least frequent verb extension in Gyeli with a total of 15 occurrences, 11 of which are part of the 377 verb database while four have not been considered for this database. Out of the 11 occurrences within the database, only six (1.6%) are used productively in the sense that they have synchronically an underived verb form.

I label this category as ‘positional middle voice’ since almost<sup>27</sup> all verbs with this extension describe the event of assuming a position, as illustrated in (366).

	kèlɛ	‘hang sth.’	→	kèl-cwɔ	‘assume a hanging position’
	kfúdɛ	‘cover sth.’	→	kfúd-cwɔ	‘lie down by covering head with arms’
(366)	kwádɔ	‘twist sth.’	→	kwád-cwɔ	‘assume a crooked position’
	ngwáwɔ	‘bend sth.’	→	ngwáng-cwɔ	‘bend (intr.)’
	pwásɔ	‘flatten sth.’	→	pwás-cwɔ	‘assume a flattened position, stretch out’

The same is true for verbs of this ending which do not seem to have a synchronic underived form, as exemplified in (367).

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<sup>27</sup>The one known exception to posture reference is the verb *bwèd-cwɔ* ‘be tasty/sweet’.

	bál-ɔwɔ	'bend down'
	kwàng-ɔwɔ	'lie down on side'
(367)	gyí-ɔwɔ	'lean back'
	pwàngy-ɔwɔ	'lie down stretched out (French: <i>s'allonger</i> )'
	sèngy-ɔwɔ	'assume inclined position'

Schadeberg (2003: 75) uses the term ‘positional’ for a stative category that talks about ‘assuming a position’ or ‘being in a position’. He reconstructs <sup>°</sup>-am- as the positional extension for PB which differs significantly in the segmental material -ɔwɔ in Gyeli. Nevertheless, both forms seem to carry the same meaning.

Schadeberg does not consider the derivation <sup>°</sup>-am- in PB as middle voice. He mentions, however, that this extension is known to have become a passive suffix in certain Bantu languages of zone C (cf. Schadeberg (2003: 76)). For languages such as Gyeli and Mabi, it seems that passive forms are more related to the autocausative middle voice category, as described in Sections 4.2.3.5 and 4.2.3.2.

**Passivization of the positional** A few positional forms can further be derived to passive forms by substituting the two final vowels /ɔ/ by the passive vowel /a/, as shown in (368).<sup>28</sup>

(368)	bál-ɔwɔ	'bend down'	→	bál-awa	'be bent down'
	pwás-ɔwɔ	'stretch out'	→	pwás-awa	'be stretched out'

**Middle voice categories in comparison** Comparing both middle voice categories, the autocausative and the positional, they do not only differ in their extension forms, but also in their distribution of admissible subjects, and their semantics. Subjects of the positional middle voice are typically human, at least animate, while the autocausative allows both animate and inanimate subjects. Very often, however, subjects of autocausative verb forms are inanimate, given that they incorporate the role of an undergoer which for many transitive verbs such as *kfúde* ‘cover’ or *lége* ‘singe’ is typically inanimate.

<sup>28</sup>Passive forms of the positional middle voice were not given for all positional verb forms. Given that passive forms are generally restricted and less frequent than logically possible, it seems that the same is true for passives of positional forms rather than assuming that these are gaps in the data, which in particular instances might be the case.

In terms of semantics, the agent in autocausative forms is underspecified, implying a certain self-causation which is possibly more metaphorical than real. For instance, when using the form *wàw-ega* ‘spread (by itself)’ with a subject such as ‘seeds’, this is generally understood as ‘the seeds spread by themselves’. In reality, they are probably spread by the wind or some other agent such as animals which is not salient enough to deserve mentioning. Thus, the subject is treated as the agent, even though this might not be the case in the world. In contrast, the agent of positional verb forms is always identical with the subject.

A verb can have both middle voice forms. Given the low frequency of forms of both middle voice categories, there are not many examples, but one is the verb *kwádɔ* ‘twist’ which has both the autocausative *kwád-ega* ‘get twisted, twist by itself’ and the positional *kwád-ɔwɔ* ‘assume a twisted, curved position’. The autocausative typically has an inanimate subject, for instance a rope or a net, while the positional form has a human subject. Further, this verb has a passive form *kwád-a* ‘be twisted’. Table 4.6 shows the whole range of possible agent specifications in Gyeli.

Transitive →	Positional →	Autocausative →	Passive
two participants	agent = SBJ	agent = SBJ implied	agent = non-SBJ
<i>kwádɔ</i> ‘twist sth.’	<i>kwádɔwɔ</i> ‘assume twisted position’	<i>kwád-ega</i> ‘get twisted’	<i>kwáda</i> ‘be twisted’

Table 4.6: Scale of decreasing expression of agentivity

#### 4.2.3.7 Expansions

Expansions, in contrast to extensions, are not productive. They are low in frequency and do not have an obvious core function. Gyeli has three expansion suffixes which I will discuss in turn.

**-kɛ/gɛ** The expansion suffix *-kɛ* or its weakened form *-gɛ* is found ten times in the database as a derivation from an underived verb form. Further, five other verbs in the database show this ending, all of which are transitive and do not have an underived intransitive form.

This suffix has different effects for different verbs which is lexically specified. In most instances, the suffix *-ke* is valency increasing, turning an intransitive verb into a transitive one, as shown in (369).<sup>29</sup>

bwà	'become big'	→	bò-ke	'make sth. big'
kàgo	'promise (intr.)'	→	kà-ge	'promise (tr.)'
lúñà	'whistle'	→	lúñ-ge	'whistle sth.'
té'è	'be soft'	→	té-ge	'soften sth.'
tòà	'boil (intr.)'	→	tò-ke	'boil sth.'
bô	'lie down (intr.)'	→	bú-ge	'lie sth. down'

In another case, which may be purely an exception, the inverse happens and the expansion *-ke* serves as a valency decreasing suffix, as in (370).

(370)	bvúò	'break sth.'	→	bvú-ke	'break (intr.)'
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For the majority of instances where the suffix *-ke* has a valency increasing effect, this is semantically linked to a causative meaning, for instance in examples such as *bò-ke* 'make big' or *té-ge* 'soften sth.'. The *-ke* expansion is, however, distinct from the standard causative *-ese*, and not an allomorph, as cases of verbs show which have both suffixes. For instance, the verb *jíyε* 'burn (intr.)', as shown in (371), allows *-ke* as a valency increasing expansion *jígε* 'burn sth'. Also, the causative form *jí-g-ese* is found with the figurative meaning 'make sb. angry'.

(371)	jíyε	'burn (intr.)'	→	jí-ge	'burn sth.'
			→	jí-g-ese	'make sb. angry'
	dvùò	'hurt (intr.)'	→	dvù-ge	'hurt sb.'
			→	dvù-g-ese	'make sb. hurt'

An alternative analysis to the suffixes *-ke/ge* and *-le* would be to assume an expansion *-e* which takes different epenthetic vowels /g/ and /l/, as described in Chapter 3.2.1. Under this view, /g/ in *jíg-e* 'burn sth.' would be treated as a root final epenthetic consonant. Given the tendency of a distinct causative function with the expansion *-ke/ge* which is not found with *-le*, I analyze *-ge/ke* and *-le* as distinct expansion morphemes rather than assuming one expansion *-e* with different epenthetic consonants.

<sup>29</sup>Some verbs with a sequence of /wa/ or /ua/ in their underived form change to /ɔ/ in the derived form, as with *bwà* 'become big' changing to *bòke* 'make big'. Whether this change happens is lexically specified and not a general phonological rule since there are verbs with the same sequences which do not change to /ɔ/, for example *bwà* 'be born' having the derived form *bwà-le* 'be born'.

**-lɛ** Another non-productive suffix is *-lɛ* with only 6 derived forms in the database. *-lɛ* is a frequent ending of bisyllabic verbs, however; 21 underived bisyllabic verbs end in this syllable. It is, however, uncertain whether this is a phonologically wide-spread syllable in verbs or whether diachronically there was a productive extension morpheme *-lɛ*.

As with the suffix *-ke/ge*, it is difficult to pinpoint *-lɛ*'s function. Often, it seems to be valency increasing, transitivizing an intransitive verb form, as in (372).

- (372)      vû        'leave'        →    vú-lɛ    'get rid of sth.'  
                 jí(yɔ)    'sit, live'    →    jí-lɛ    'seat sb.'  
                 té-bo     'rise'        →    té-lɛ    'place sth. upright'

In other cases, however, the *-lɛ* suffix more seems to have a passivizing function, as in (373). Usually, passivization is achieved by the passive morpheme *-a*. In these two cases, however, no such form is available and rather the *-lɛ* suffix is used.

- (373)      bwà     'give birth'        →    bwà-lɛ    'be born'  
                 tìnɔ    'harvest tubers'    →    tì-lɛ    'be harvested'

Given these different uses of *-lɛ*, it is not possible to provide a unified category label for this expansion.

**-bɔ/wɔ** Finally, another frequent suffix is the expansion *-wɔ/bɔ* used in bisyllabic verbs. With only two derived forms and eight verbs without an underived form the database provides few examples. This, again, makes it difficult to make generalizations about its function. It is tempting to assume a reversive category when considering (374).

- (374)      jì    'open sth.'    →    jì-bɔ    'close sth.'

Other examples, however, do not support this hypothesis, but rather suggest that in some cases at least, *-bɔ/wɔ* has a detransitivizing effect, as in (375).<sup>30</sup>

- (375)      sò-lɛ    'hide sth.'        →    swà-wɔ    'hide (intr.)'  
                 té-lɛ    'place sth.'        →    té-bɔ    'rise'  
                 láà      'tell sth.'        →    là-wɔ    'speak'

<sup>30</sup>In the two first cases, it is hard to specify which form is the derived and which is the underived form since both verbs have an expansion morpheme, but there is no monosyllabic form without derivation morpheme.

#### 4.2.4 Zero-derivation

Zero-derivation is found in only a few domains. Almost all postpositions are zero-derived from nouns, as shown in Table (4.7).<sup>31</sup> Postpositions and their source noun do not differ in form, but in their morphosyntactic behavior and distribution, as explained in Chapter 3.10.2.2.

Lexeme	Postposition	Nominal source
sí	‘under, down’	‘ground’
dyúwɔ	‘up, on top’	‘sky’
témɔ	‘between’	‘middle’
písè	‘behind’	‘behind, back (n.)’
sɔ	‘in front, before’	‘front (n.)’

Table 4.7: Derivation of postpositions

In the absence of any derivational marking, one might object that it is difficult to pinpoint the grammaticalization path from noun to postposition or vice versa. The phenomenon that locative adpositions are derived from body-part and environmental landmark nouns, however, has been observed by, for instance, Kießling et al. (2008: 215) for African languages and Bowden (1992) for Oceanic languages. It is rather noteworthy that, in Gyeli, these expressions are grammaticalized as postpositions instead of prepositions, as would be expected for Bantu languages (Dryer 2013a).

Another potential case of zero-derivation includes the quantifier *bvùbvù* ‘many’ and its nominal counterpart *bvúbvù* ‘multitude’ (cl. 9). In this case, however, there is a difference in the tonal pattern. Since this is the only example, it is not clear, however, if the tonal difference marks derivation or happened by chance. It is further not clear whether the noun is the source or the derived form.

#### 4.2.5 Compounding

In comparison to derivation, compounding is a less productive word formation strategy. Gyeli has two types of compound nouns which differ in their derivation source and complexity. Most compounds are formed from a nominalized verb and its nominal complement. A few compounds are derived

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<sup>31</sup>The only unclear case is the postposition *dé* ‘in’ for which a possible nominal source is synchronically not known.

from two underived nouns. Both types are discussed in the following.

#### 4.2.5.1 Deverbal noun-noun compounds

The most productive type of compounding is comprised of a nominalized verbal root and a noun, as illustrated in (376). Most nominal compounds semantically designate an agent, as shown in (377). Accordingly, the verbal root is nominalized as a deverbal noun of gender 1/2, as described in Section 4.2.1.1.<sup>32</sup>

- (376) [N<sub>deverbal</sub> + N]<sub>N</sub>.

The noun that follows the nominalized verb is the verb's direct argument that cannot be omitted as the nominalized verb of these constructions on its own is ungrammatical. The complement noun, however, is “not necessarily [an object] in the traditional syntactic sense” (Schadeberg 2003). The tonal pattern of a deverbal compound, as illustrated in (377), differs from the patterns found in a verb phrase between verb and object, as discussed in Chapters 6.2.2 and 7.2.1.2. In a VP, the noun class prefix of the nominal argument takes an object linking H tone and the final vowel of the verb takes a H tone in realis categories. In compounds, all these TBUs surface with a L tone though.

- (377) a. mbòmè-**màpô** ‘messenger’  
           < bòmè ‘bark, announce’ + ma-pô ‘news’
- b. ntsíè-**bènyàgà** ‘butcher’  
           < tsíè ‘cut’ + be-nyàgà ‘cows’
- c. nlólè-**mìnkòlé** ‘weaver, tailor’  
           < lô ‘sew, weave’ + mi-nkòlé ‘threads’
- d. ngyàgèsè-**bèsâ** ‘vendor, merchant’  
           < gyàg-ësë ‘make buy’ + be-sâ ‘things’
- e. mbwálèsè-**bùdì** ‘midwife’  
           < bwà(l)-ësë ‘make give birth’ + b-ùdì ‘people’
- f. nlímbó-**màmbò** ‘connoisseur, educated person’  
           < límbo ‘know’ + ma-mbò ‘things’

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<sup>32</sup>A more detailed discussion of compounding in Bantu, especially in Bemba, is provided in Basciano et al. (2011).

- g. nsálè-**mànké** ‘farmer’ < sá-le ‘do (tr.)’ + ma-nké ‘fields’

The tonal difference between objects in a VP and complement nouns in a compound can be explained by the compounds’ lexicalization history. Rather than stemming from a nominalized VP, these compounds have their origin in a N + N attributive construction, as discussed in Chapter 5.5, whose first constituent is a deverbal agentive noun. This is in line with Schadeberg (2003: 87) who points out that compound “nouns may originate from a genitival (connexive) [attributive] construction” which then become lexicalized as noun, as shown in (378).

- (378) °mbòmè wà màpô → mbòmè Ø màpô → mbòmè-màpô  
 m-bòmè wà ma-pô  
 N1-announce 1:ATT ma6-news

‘messenger [lit. announcer of news → news-announcer]’

Even in many synchronic attributive constructions, the attributive marker can optionally be omitted, as discussed in Chapter 5.5.1.1. In deverbal compounds, the omission of the attributive marker is no longer optional, but has become lexicalized. This lexicalization path explains why the prefix of the complement has a L tone rather than an object linking H tone. Since the preceding attributive marker *wà* has a L tone, the following prefix surfaces L as well (in contrast to the plural version shown in (379)). Another piece of evidence for lexicalization from an attributive construction comes from the plural formation of these compounds explained below.

There are two types of compounds which differ in the number of the argument nominal which is either plural or singular/transnumeral noun. In (377), all argument nouns are plural, marked by the plural noun class prefixes in bold. The number of the argument nominal has an impact on the plural formation of the compound noun. If the argument noun has a plural prefix, as in (377), its plural counterpart does not constitute a compound noun, but a N + N attributive construction. (379) shows the plural forms of the examples in (377). They are comprised of the plural nominalized verb, the plural argument noun and an attributive marker agreeing with the first noun that links the two constituents.<sup>33</sup>

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<sup>33</sup>I represent the noun class prefix of the nominalized verb as toneless which will take its surface tone from its syntactic environment. While the CV- noun class prefix of the second constituent is underlyingly toneless as well, it surfaces with a H tone which it acquires through high tone spreading from the preceding attributive marker.

- (379) a. ba-bòmè bá má-pô ‘messengers’  
       b. ba-tsíè bá bé-nyàgà ‘butchers’  
       c. ba-lólè bá mí-nkjlè ‘weavers, tailors’  
       d. ba-gyàgèsè bá bé-sâ ‘vendors, merchants’  
       e. ba-bwálèsè bá b-ùdì ‘midwives’  
       f. ba-límbó bá má-mbò ‘connoisseurs, educated people’  
       g. ba-sálè bá má-nkê ‘farmers’

The structural difference between singular compound nouns and their non-compound plural counterparts is due to their different stages in lexicalization. As described in Chapter 5.5.1.1, attributive markers can be omitted from N + N constructions under certain morphophonological and semantic conditions. Two plural noun constituents and a CV- shape noun class prefix on the second constituent, however, inhibit the omission of the attributive marker, explaining why the singular form is more lexicalized as a noun than its plural counterpart.

The second and less frequent type of deverbal compounds has a singular or transnumeral argument noun, as illustrated in (380).

- (380) a. nkè-nlô ‘gecko’<sup>34</sup>  
           < kè ‘shave’ + nlô ‘head’  
       b. mbúlj-mâ ‘fisherman’  
           < búlj ‘fish (v.)’ + mâ ‘sea’

In these cases, the plural counterpart remains a compound as well, as shown in (381). Rather than transforming into a N + N attributive construction, the compound only takes a plural noun class prefix for the nominalized verb while the second constituent remains unchanged. It thus appears that compounds with singular second constituents are more lexicalized than those with plural second constituents.

- (381) a. ba-nkè-nlô ‘geckos’  
       b. ba-búlj-mâ ‘fishermen’

As mentioned above, most compounds of the [VN] type constitute agent nouns. The only exception to this pattern I found is given in (382). Though it is still in gender 1/2, it lacks the nasal prefix in the singular.

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<sup>34</sup>It is believed that geckos eat people’s hair while they are sleeping.

- (382) tsíè-sámè, ba-tsíè-sámè ‘circumcision’  
     < tsíè ‘cut’ + nsámbò ‘penis’

Having a singular second constituent, the plural form remains a compound noun. The phonologically changed form of the argument nominal suggests that this compound is further along the lexicalization path.

#### 4.2.5.2 Underived noun-noun compounds

The second category of nominal compounds take the structure of N + N compounds. They differ from deverbal compounds in that their constituents are not derived. The most common lexical items involved in [NN] compounds include *mwánò* ‘child’ as a diminutive marker, as shown in (383). Semantically, the diminutive can refer both to the small size of a referent or a small amount.

- (383) a. mwánò-mùdâ ‘girl’ mwánò ‘child’ + mùdâ ‘woman’  
     b. mwánò-mùdû ‘boy’ < mwánò ‘child’ + mùdû ‘man’  
     c. mwánò-nlàwó ‘twig’ < mwánò ‘child’ + nlàwó ‘branch’  
     d. mwánò-sâ ‘little something’ < mwánò ‘child’ + sâ ‘thing’

Pluralization of such compounds requires both constituents to occur in their plural form, as shown in (384).

- (384) a. bwánò-bùdâ ‘girls’  
     b. bwánò-bùdû ‘boys’  
     c. bwánò-mìnlàwó ‘twigs’  
     d. bwánò-besâ ‘little things’

In diminutive compounds, the second constituent serves as the syntactic and semantic head. As such, agreement targets agree with the second constituent and not with the first, as shown in (385).

- (385) a. bwánò-békúmbé    bé        bà        njí        nà        byŷ        bé  
           b-wánò-be-kúmbé    bé        ba        njí-H        nà        by-ŷ        be-H  
           ba2-child-be8-tin 8:ATT 2.PST1 come-R COM 8-NSBJ 8-PRES  
           télé        màbé  
           téle-H        mà-bé  
           stand-R here-8  
           ‘The few tin roofs that they brought stand here.’

- b. \*bwán̩-békúmbé **bá**    bá    njí    nà    by̪    **bá**  
 b-wán̩-be-kúmbé bé    ba    njí-H    nà    by-̪    be-H  
 ba2-child-be8-tin 8:ATT 2.PST1 come-R COM 8-NSBJ 8-PRES  
 télé    màbá  
 téle-H    mà-bé  
 stand-R here-8
- ‘The few tin roofs that they brought stand here.’

Underived noun-noun compounds other than diminutives seem to describe an inherent property, such as gender or size, as shown in (386). As with deverbal [NN] compounds, these compounds appear to originate in attributive constructions.

- (386) a. só-mùdâ ‘female friend’ < só ‘friend’ + mùdâ ‘woman’  
 b. kfúbò-dyá ‘tall chicken’ < kfúbò ‘chicken’ + dyá ‘length’

There seems to be a lexicalization scale from attributive constructions which require the attributive marker, as described in Chapter 5.5, those which optionally omit the attributive marker, and finally those where the omission of the attributive marker is lexicalized in a way that the attributive-less construction, as in (386), differs in meaning from the one with an attributive marker, as illustrated in (387). I only view the latter type as compounds. Since examples with such a meaning contrast are hard to find, examples of these compounds are few in number.

(387)

- |  |   |
|--|---|
| a. só                wà        m-ùdâ<br>Ø1.friend    1:ATT    N1-woman | b. kfúbò                wà        dyá<br>Ø1.chicken    1:ATT    Ø1.length |
| ‘the friend of the woman’  | ‘the remote chicken’  |

Impressionistically, [NN] compounds in (383) differ structurally from the diminutive compounds in (386) with respect to their headedness. In the diminutives, the semantic and syntactic head is the second constituent, while, in the other compounds, the first constituent functions as the head. The first constituent as head would be expected from the compounds’ origin in a N + N attributive construction where the first constituent is the head as well. Given the limitation of examples, it is not possible at this point to explain the switch of headedness in diminutives.

**Note on absent derivation phenomena** I conclude this chapter with a note on another derivation type common across Bantu languages, namely noun-to-noun derivation. As Schadeberg (2003: 82) describes, noun-to-noun derivation is commonly achieved by shifting nouns to different genders. I have not observed this in my Gyeli data. Instead, Gyeli has different lexical stems or diminutive compounds to encode, for instance, size differences that may be expressed in different genders in other Bantu languages.

# Chapter 5

## The noun phrase

### 5.1 Introduction

Noun phrases can be viewed in relation to their syntactic status within a clause as well as to their internal structure. The status of a noun phrase within a sentence relates to its function as an argument (or else, for example as an adjunct) in relation to a predicate. The internal structure relates to questions such as ‘What elements do noun phrases contain?’ and ‘What is the order of these elements in a noun phrase?’

**The noun phrase on the sentence level** This latter perspective is usually assumed when defining the term ‘noun phrase’. A definition depends, at least to some extent, on the function that is attributed to the noun phrase. Andrews (2007: 132) points out that there are three ways to think of functions of the noun phrase, namely in terms of its semantic roles, its pragmatic or its grammatical functions.

Semantic roles are imposed on noun phrases by predicates which create a certain situation and imply certain ways in which noun phrases participate as actors in this situation. They are called ‘arguments’ to the predicate. Andrews (2007: 135) gives the example of the verbal element *kill* that requires a participant that takes over the role of the *killer* and one that is the *killed*. Traditionally, there are general classes of semantic roles such as *agent*, *patient*, *recipient*, *experiencer* and many more.<sup>1</sup>

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<sup>1</sup>See Jackendoff (1990), Andrews (2007), and Levin & Hovav (2005) for further readings on semantic roles.

Pragmatic functions relate to information structure and include core notions such as ‘topic’ and “focus”. Information structure will be discussed in Section 7.3 since, first, information structure has to be seen on a phrase or even discourse level. Second, focussed or topicalized elements of a phrase exceed noun phrases; for instance, verbs can also be the topic or focus of a sentence.

In terms of their grammatical functions, Dryer (2007b: 151) defines noun phrases as “syntactic constituents which serve as arguments of verbs” They express core grammatical relations such as ‘subject’ and ‘object’. Classes of semantic roles relate in a systematic way to grammatical roles. Thus, very often, agents are the subjects of a sentence while patients are found in the object position.

These different grammatical relations can be expressed in different ways across languages. Andrews (2007: 141) posits “three basic techniques which languages use to code syntactic functions: order and arrangement, np- marking, and cross-referencing.” These different coding strategies will be discussed in detail in Chapter 7.

It is important to make the distinction between semantic and grammatical functions of noun phrases and be aware of their relation. In this grammatical description of Gyeli, I adopt, however, an approach that focusses on a grammatical rather than a semantic description.

**The internal structure of noun phrases** Having introduced the main functions of noun phrases on a sentence level as discussed in the literature, I now turn to noun phrases’ internal constituency. Rijkhoff (2002: 23) points out that noun phrases vary in terms of their constituency and complexity, both within and across languages. And Dryer (2007b: 151) distinguishes different types of noun phrases for a typological discussion of noun phrases across languages, ranging from simple to more complex noun phrases.

The most minimal type of a noun phrase in Gyeli is its zero expression which is possible for subject noun phrases (Chapter 7.2.1.1), while the subject is cross-referenced through agreement on the STAMP marker or copula in the predicate.

Simple noun phrases include pronouns (Chapter 3.6). Pronouns can occur bare in all types of noun phrases: subject, object, and oblique. Pronouns can combine with the contrastive suffix *-gà* (Chapter 4.1.2.5) and be

followed by three modifiers, as shown in (388).

- (388) a. PRO *médé* ‘self’  
          b. PRO *-᷇(né)gá* ‘other’  
          c. PRO *-ésè* ‘all’

Simple noun phrases also consist of bare nouns;<sup>2</sup> Gyeli does not have articles and bare nouns can occur in subject, object, and oblique noun phrases. Bare nouns can combine in simple noun phrases with elements discussed in Chapter 3.8. Gyeli is a head-initial language and almost all modifiers, both agreeing and invariable, follow the noun. There are two exceptions, however: the negative polarity item *tà* and *nyá* ‘big’ always precede the noun. If a simple noun phrase includes more than one postnominal modifier, the order of the modifiers is freely variable<sup>3</sup> and there does not seem to be a particular modifier that is more closely bound to the noun than others. The reason for this could be that multiple modifiers in simple noun phrases are highly dispreferred. Tests on modifier combinations in a simple noun phrase all stem from grammaticality judgment tests in elicitation. In natural text, however, the only instance where two modifiers were combined in a noun phrase is given in (389).

- (389) bèsâ        bíndè    byésè  
       be-sâ        bí-ndè    by-ésè  
       be8-thing 8-ANA 8-all  
       ‘all these things’

Other simple noun phrases that regularly include two modifiers (or elements that are treated like modifiers) are complex cardinal numerals which contain an underlying multiplication operation, as in (390).

- (390) a. b-ùdì        [mà-wúmò má-báà]  
          ba2-person ma6-ten    6-two  
          ‘twenty people’  
       b. \*[mà-wúmò má-báà] b-ùdì  
          ma6-ten    6-two    ba2-person  
          ‘twenty people’

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<sup>2</sup>A detailed discussion of how referents of bare nouns in Gyeli are tracked is provided in Grimm (To appear).

<sup>3</sup>Maybe a change in order results in a slightly different reading in terms of emphasis on one or the other modifier, but this was not clear from my data.

The structure of (390a) is [N [N + Num]<sub>MOD</sub>]<sub>NP</sub>. While *mawúmò* ‘10s’ is a noun itself, in this construction, the entire complex numeral behaves like one postnominal modifier, without agreeing with the head noun *bùdì* ‘people’. It is not possible for the numeral NP to precede the quantified head noun, shown in (390b)

Complex noun phrases in Gyeli include distributive constructions and noun + noun possessive constructions. Also relative clauses fall in the category of complex noun phrases, according to Dryer (2007b). As they constitute a type of subordination, they are discussed in Chapter 8.2.1. In the remainder of this chapter, I first outline the gender and agreement system of Gyeli. I then discuss complex noun phrases and conclude with an excursus on the semantic category of numerals.

## 5.2 The gender and agreement system

As a typical feature of a Bantu language, Gyeli has a relatively elaborate gender and agreement system. In the literature, this is often referred to as ‘noun class’ or ‘concord’ systems, depending on the authors’ preferences and research tradition. Authors differ substantially in their definition of key notions such as ‘noun class’ and ‘gender’. Often, these terms seem to be used interchangeably as in Heine (1982: 190):

“A noun class or gender system is said to be present if the nouns of a given language are divided into classes by means of concordial agreement markers.”

Aikhenvald (2003), for instance, notices the widespread interchangeable use of ‘noun class’ and ‘gender’ and opts for adopting ‘noun class’ as the generic term for both noun class and gender, while the term ‘gender’ should be restricted to noun categorization systems that are sex-based, i.e. which make a distinction between grammatical *feminine* versus *masculine* (p. 19). In that, she deviates from Corbett (1991) who views also the term ‘gender’ as based on agreement classes.

Given the inconsistent terminology, some authors, for instance Medjo Mvé (2011: 85), establish gender systems solely based on pairings of noun class prefixes rather than by agreement classes. This method, most likely, artificially inflates the system since there are more pairings of noun class forms

than agreement classes. In the light of such terminological confusion, I will first clarify the terminology as I use it before moving on to the description of the Gyeli system. I distinguish three terms: ‘gender’, ‘agreement class’, and ‘noun class’, following Güldemann (2000) in his straightforward approach to analyze noun categorization in a consistent way that facilitates cross-linguistic comparison.

**Gender** The term ‘gender’ is largely discussed in the literature, especially by Corbett (1991). He defines ‘gender’ as “classes of nouns reflected in the behavior of associated words”, Corbett (1991: 1) who cites Hockett (1958: 231), or, more specifically, ‘gender’ is viewed as a “set of nouns which take the same agreements (typically a singular-plural pair)”, Corbett (1991: 45). Güldemann (2000: 13) emphasizes that nouns are assigned to a nominal category “according to some feature that is conceptually INHERENT to a given noun” and that “noun gender refers to a more abstract item of the lexicon.” I label genders in Gyeli by their pairing of agreement classes, as discussed below. For instance, the noun *-ùdì* ‘person’ inherently belongs to the class of nouns that triggers agreement class 1 in its singular form and agreement class 2 for the plural. It therefore belongs to gender 1/2.

**Agreement class** Gender cannot be established by solely investigating the noun itself and potentially its changing affixes in the singular and the plural. Rather, the gender of a noun is exclusively established by agreement phenomena, or as Hockett (1958) puts it, according to the ”behavior of associated words.” An agreement class is therefore defined by ”regular morphological processes on the parts of speech that are controlled by a particular noun in a given utterance” (Güldemann 2000: 13). Following Corbett (1991) and Güldemann (2000), the parts of speech that agree with a noun are called ‘agreement targets’, while the noun that controls agreement on depending parts of speech is called ‘agreement trigger’.<sup>4</sup> I label agreement classes in Gyeli following the traditional Bantu numbering.

The difference between agreement class and gender can be illustrated

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<sup>4</sup>The notion of ‘agreement class’ following Güldemann (2000) and the way I use it differs from the way Corbett (1991: 147) understands the term. An agreement class is exclusively defined by an agreement pattern on the agreement targets, but not determined by number.

with an example from Gyeli.<sup>5</sup> A nominal root such as *-kóndyì* ‘hand’ comes in two forms, namely as *le-kóndyì* in the singular and *ma-kóndyì* in the plural. The first triggers agreement of class 5, i.e. all dependent parts of speech will show the agreement pattern which belongs to this agreement class, while the latter triggers class 6 agreement on all agreement targets. Thus, the nominal lexeme *-kóndyì* belongs to gender 5/6 which is a pairing of agreement classes 5 and 6.

**Noun class** Since gender is determined only by agreement, noun classes are not decisive in establishing gender or agreement classes. Noun classes rather relate to prefix marking on the noun which does not necessarily index agreement class affiliation. In some cases, the noun class prefix reflects the agreement class that the noun triggers. For instance, the noun class prefix *le-* in *le-kóndyì* ‘hand’, is identical in form with most agreement targets such as subject marking, demonstratives, or the attributive marker (as shown in Table 5.1). There are, however, also noun classes which do not map onto their respective agreement classes. One example is the noun class that is marked by a nasal *N-*. This noun class is found both in agreement class 1 and 3. At the same time, there are nouns of agreement classes 1, 3, 7, 8, and 9 which do not take any noun class prefix at all. Unlike for genders and agreement classes, I refer to noun classes not by numbering, but by the form of their prefix.

### 5.2.1 Agreement classes

Gyeli has nine agreement classes that are reflected in the morphosyntactic behavior of their dependent word classes. These agreement targets and their agreement patterns are listed in Table 5.1. Parts of speech that agree with the agreement triggering noun include subject marking<sup>6</sup> and object pronouns, demonstratives,<sup>7</sup> attributive markers, possessive pronouns, quan-

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<sup>5</sup>The provided example is parallel to one that Güldemann (2000: 13) quotes from Nichols (1992: 125) on Luganda.

<sup>6</sup>Subject marking is achieved by subject-tense-aspect-mood-polarity (STAMP) markers which are portemanteau morphemes encoding subject agreement and tense-mood information. They are represented without tones because their surface tones depend on the tense-mood category (Section 3.9.1).

<sup>7</sup>Demonstratives have two patterns with a distinction for proximal versus distal. In this table, only the proximal demonstratives are shown as representatives of the whole

tifiers, deictic modifiers, and numerals.<sup>8</sup> Table 5.1 represents a simplified version of the agreement system in some respects in order to make it more reader-friendly for a first glance. An overview of agreement targets is given in Section 5.2.5 and each agreement target is discussed in detail in Chapter 3.

AGR class	Monomorphemic words			Agreement prefixes			
	STAMP	DEM	ATT	NSBJ	AGR- V	AGR(L)- C	AGR(H)- C
					POSS,	'1'	GEN, NUM
1	a/nyε	nû	wà	nyê	w-/n-	m-	-
2	ba	bâ	bá	b-ô	b-	bà-	bá-
3	wu	wô	wá	w-ô	w-	m-/ø-	-
4	mi	mî	mí	my-ô	m(y)-	mì-	mí-
5	le	lê	lé	l-ô	l-	l-/lè-	-
6	ma	mâ	má	m-ô	m-	mà-	má-
7	yi	yî	yá	y-ô	y-	ø-	-
8	bi	bî	bí	by-ô	b(y)-	bì-	bí-
9	nyi	nyî	nyà	ny-ô	ny-	m-/ø-	-

Table 5.1: Agreement classes and their target POS in Gyeli

The middle column including STAMP marker, demonstrative, and attributive marker, shows grammatical words which cannot be split up into further morphemes. In contrast, the right column shows agreement prefixes for non-subject pronouns, possessive pronouns, nominal modifiers such as some quantifiers and numerals, and the genitive marker. There are three sub-columns for the agreement prefixes based on the form of CV- shape prefixes: the first one does not have any CV- shape prefixes as an assimilation to a vowel initial stem, the second and third do have some CV- prefixes as the stem they are preceding starts with a consonant. In the second, CV- prefixes come with a L tone while in the last, CV- prefixes have a H tone.

Strictly speaking, one would need to split the AGR-V agreement targets up into more columns, i.e. agreement patterns, because of differing forms

paradigm.

<sup>8</sup>Quantifiers that agree with a noun show various patterns; variation can to some degree be explained by phonological constraints (Section 3.8.1). The agreement pattern of 'numerals' include the numbers from '2' through '5'. Since these are inherently plural, only plural agreement classes are represented since they would not show up in singular classes.

in cl. 1. Thus, while for the possessives and some quantifiers, cl. 1 has a *w*-prefix, and the deictics the prefix *n*. The same is true for deictic modifiers in the second sub-column which belong to the group of L tone CV- prefixes. Cl. 3 and 9 may either have a *m*- prefix or no prefix at all. The last sub-column only shows agreement prefixes in the plural class because either the modifier is inherently plural, as it is the case with the agreeing numerals, so that there are no singular agreement targets or singular forms do not take any agreement prefixes, which is the case for the genitive.

Agreement classes differ in size. Table 5.2 shows the distribution of the single agreement classes in terms of frequency in a database of 875 nominal lexemes. The noun database stems from elicitation with the SIL comparative African 1700 word list by Roberts & Snider (2006) and from texts and other elicitations.

AGR class	Frequency
1	164 (9.8%)
2	162 (9.6%)
3	170 (10.1%)
4	167 (9.9%)
5	137 (8.2%)
6	241 (14.4%)
7	306 (18.2%)
8	288 (17.2%)
9	43 (2.6%)
Total	1678

Table 5.2: Frequency of agreement classes

Table 5.2 reflects the agreement class distribution in a total of 1674 nominal forms. Assuming that each agreement class neatly pairs with a singular or plural counterpart, respectively, this would only provide 837 nominal lexemes, in contrast to 875 lexemes in the database. The discrepancy is explained by the fact that agreement classes do not always have a singular or plural counterpart, but there are also transnumeral classes.<sup>9</sup> It is thus worthwhile not to only show the frequency of the various genders as pro-

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<sup>9</sup>In the singular, 51 nouns in the database have no singular form, while only 21 have no plural form.

vided in Section 5.2.3, but also to give a general impression of agreement class frequency.

The agreement class with most members is class 7, followed by classes 8 and then 6. Agreement classes 1, 2, 3, and 4 are about equally numerous in members. The smallest agreement class is class 9 with only 43 members.

### 5.2.2 Noun classes

Gyeli has seven major formal head noun classes, as defined by and labelled according to their prefix, and a minor noun class ‘bw’ which only occurs once in the noun database. Table 5.3 shows how the different head noun classes map onto the agreement classes. The head noun class ‘N’, for example, which is characterized by a nasal prefix, is found both in agreement class 1 and 3. The prefixless noun class ‘∅’ occurs in agreement classes 1, 3, 7, 8, and 9. In contrast, head noun classes with a CV- prefix, namely ‘ba’, ‘mi’, ‘le’, ‘ma’, and ‘be’ only map onto one agreement class.<sup>10</sup>

Head noun class	AGR class	Example
<b>N</b>	1	m-ùdì ‘person’
	3	n-vèwò ‘breath’
<b>ba, (b-)</b>	2	ba-kálé ‘sisters’, b-ùdì ‘people’
	1	kálé ‘sister’
<b>∅</b>	3	mbè ‘drum’
	7	síngì ‘cat’
	8	bwâ ‘medicine’
	9	tsí ‘neck’
	4	mi-vèwò ‘breaths’
<b>le, (d-, j-)</b>	5	le-máá ‘cheek’, d-úú ‘nose’, j-áwè ‘goliath frog’
<b>ma, (m-)</b>	6	ma-máá ‘cheeks’, m-úú ‘noses’, m-áwè ‘goliath frogs’
<b>be</b>	8	be-síngì ‘cats’
<b>(bw)</b>	8	bw-álè ‘canoe’

Table 5.3: Noun classes and their corresponding agreement classes

In glosses, I distinguish head noun and agreement classes. Head nouns

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<sup>10</sup>Only CV- prefixes are syllabic. Nasal prefixes do not constitute syllables, as described in Chapter 2.3. As such, they do not serve as tone bearing units.

are thus glossed with their head noun and agreement class. For instance, *le-máá* would be represented as ‘le5-cheek’ and *síngì* as ‘Ø7.cat’.

Just like agreement classes, the distribution of nouns across different noun classes is not equal. Table 5.4 shows the size of each noun class in the second column, based on the 875 nouns database.<sup>11</sup> For instance, there are 26 nouns in the ‘N’ noun class which is only 1.5% of the total of 1678 noun forms, making the ‘N’ class the smallest of all major noun classes.<sup>12</sup> The largest noun class is ‘Ø’ with 660 noun forms which equals 39.3% of the total noun forms, followed by the ‘be’ class with 284 (16.9%) and the ‘ma’ class with 241 (14.1%) occurrences. I consider noun class ‘bw’ as a minor noun class because it has only one occurrence in the database, namely *bw-ále* ‘canoe’ with its plural form *m-ále*.

Noun class	Frequency	AGR class	Frequency	% of AGR class
<b>N</b>	26 (1.5%)	1	23	(14%)
		3	3	(1.8%)
<b>ba, (b-)</b>	162 (9.6%)	2	162	(100%)
		1	141	(86%)
		3	167	(98.2%)
		7	306	(100%)
		8	3	(1%)
		9	43	(100%)
<b>mi</b>	167 (9.9%)	4	167	(100%)
<b>le, (d-, j-)</b>	137 (8.2%)	5	137	(100%)
<b>ma, (m-)</b>	241 (14.4%)	6	241	(100%)
<b>be</b>	284 (16.9%)	8	284	(98.6%)
<b>(bw)</b>	1 (.06%)	8	1	(.4%)
Total	1678			

Table 5.4: Frequency of noun classes across agreement classes

The right columns in Table 5.4 illustrate the noun classes’ relation to agreement classes. It first lists the agreement classes that occur with the

<sup>11</sup>The total number is higher than 875 because most lexemes also have a plural form. Since some lexemes, however, lack a form in the singular or plural, the total is not simply double the amount of 875.

<sup>12</sup>In fact, deverbal nouns in gender 1/2, as discussed in Chapter 4.2.1, provide the majority of members in noun class ‘N’, together with other human relational nouns and a few body part terms.

different noun classes. For instance, noun class ‘N’ includes nouns from agreement class 1 and 3. The next column specifies that 23 of the 26 noun in noun class ‘N’ come from agreement class 1, while only 3 come from agreement class 3. The last column then indicates the percentage of these numbers in relation to the agreement class. Thus, the 23 nouns in noun class ‘N’ constitute only 14% of its agreement class 1. (The other 86% of agreement class 1 nouns are found in noun class ‘∅’.)

There are three types of relations between noun and agreement classes. First, in noun classes ‘ba’, ‘mi’, ‘le’, and ‘ma’, the members of a noun class and an agreement class overlap entirely: the noun class only contains nouns from one agreement class and all nouns of that agreement class are found in this noun class. Second, a certain agreement class is only found in one noun class, but the noun class also includes nouns from other agreement classes. This is the case for nouns of agreement classes 7 and 9 which have all their members in noun class ∅. And third, an agreement class has nouns in several noun classes. Thus, nouns of agreement classes 1 and 3 occur in both noun classes ‘N’ and ‘∅’, and agreement class 8 members occur in noun classes ‘∅’, ‘be’, and ‘bw’.

### 5.2.2.1 Phonologically conditioned variants

The ‘ba’, ‘le’, and ‘ma’ head noun classes have a variant which is phonologically conditioned in all cases. The vowel in their prefix is deleted if they precede a vowel initial stem. Thus, as (391) shows for agreement classes 2 and 6, the noun class prefix takes a CV shape when it precedes a consonant initial stem.

(391) CV- prefix

- a. bà-mbámbé ‘ancestors’, cl. 2
- b. bà-nyúâ ‘snakes’, cl. 2
- c. mà-léndí ‘palm trees’, cl. 6
- d. mà-gyé ‘teeth’, cl. 6

If the stem is vowel intial or starts with a labial glide, however, the prefix vowel is omitted and only the prefix consonant surfaces, as shown in (392).

(392) C- prefix

- a. b-ùdû ‘men’, cl. 2
- b. b-wánjò ‘children’, cl. 2
- c. m-éndì ‘courtyards’, cl. 6
- d. m-ù ‘ovens’, cl. 6

In the ‘le’ class, there is further a consonantal change from /l/ to /d/. (393) provides again examples of the CV- prefix when the stem is consonant initial.

## (393) CV- prefix

- a. le-léndí ‘palm tree’, cl. 5
- b. le-gyé ‘tooth’, cl. 5
- c. le-bélè ‘breast’, cl. 5
- d. le-kúndí ‘mat’, cl. 5

When the stem is vowel initial, the prefix vowel is deleted and /l/ becomes /d/, as shown in (394). The variants for vowel initial stems are marked in parentheses while the general name of the head noun class is marked in bold in Table 5.3.

## (394) C- prefix

- a. d-ísì ‘eye’, cl. 5
- b. d-ù ‘oven’, cl. 5
- c. d-éndì ‘courtyard’, cl. 5
- d. d-á ‘crab’, cl. 5

There are three exceptions where one would expect /d/ as a prefix, but instead the prefix surfaces as /j/, as shown in (395).

## (395) C- prefix

- a. j-ínjò ‘name’, cl. 5
- b. j-ímbjò ‘raffia palm’, cl. 5
- c. j-áwè ‘goliath frog (*Conraua goliath*)’, cl. 5

### 5.2.2.2 Noun class alternations in agreement classes 1 and 3

Agreement classes 1 and 3 show two patterns in terms of their head noun classes. Either, they take a nasal prefix from head noun class ‘N’ or they lack a prefix altogether. This variation, in contrast to head noun classes ‘ba’, ‘mi’, ‘le’, ‘ma’, and ‘be’, is not phonologically conditioned, but lexically specified.

23 (14%) of the nouns in agreement class 1 have a nasal noun class prefix while 141 (86%) lack a noun class prefix and thus belong to the head noun class ‘∅’. In agreement class 3, almost all nouns belong to the ‘∅’ head noun class with 167 nouns lacking a prefix and only 3 having a nasal prefix. 63 (44.7%) nouns of agreement class 1 belonging to head noun class ‘∅’ start with a non-nasal consonant. Examples are given in (396).<sup>13</sup>

- (396) a. sá > ba-sá ‘father’
- b. kálé > ba-kálé ‘sister’
- c. kó > ba-kó ‘uncle (mother’s brother)’
- d. só > ba-só ‘friend’
- e. kúmá > ba-kúmá ‘chief’
- f. tsídí > ba-tsídí ‘animal’
- g. kfúbò > ba-kfúbò ‘chicken’
- h. kímì > ba-kímì ‘monkey (generic)’
- i. fù > ba-fù ‘fish’
- j. kù > ba-kù ‘rat’
- k. wàà > ba-wàà ‘chimpanzee’
- l. púndí > ba-púndí ‘colobus monkey’

The other 55.3% of nouns of the ‘∅’ head noun class in agreement class 1 start with a nasal consonant; in agreement class 3, almost all nouns of the ‘∅’ head noun class start with a nasal. I analyze the nasal as part of the stem when the nasal consonant is retained in plural formation, as illustrated in (397).<sup>14</sup>

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<sup>13</sup>Semantically, more than 37% of nouns in class 1 that have a consonant initial and no noun class prefix are loan words; the others designate social relations and animals.

<sup>14</sup>Historically, the nasals were most likely a nasal noun class prefix which became frozen to the stem. I do not consider these frozen nasals, however, as (double) prefixes. Similar processes of former nasal noun class prefixes that got frozen onto the nominal root are

(397) no prefix (nasal retainment)

- a. ntèmbó > ba-ntèmbó ‘younger sibling’, cl. 1/2
- b. njó’ò > ba-njó’ò ‘elephant’, cl. 1/2
- c. mbámbé > ba-mbámbé ‘ancestor’, cl. 1/2
- d. mámé > ba-mámé ‘aunt (father’s sister)’, cl. 1/2
- e. nlô > mi-nlô ‘head’, cl. 3/4
- f. nkùzó > mi-nkùzó ‘widow(er)’, cl. 3/4
- g. mpàgó > mi-mpàgó ‘road’, cl. 3/4
- h. mbvû > mi-mbvû ‘year’, cl. 3/4

Some nouns such as in (398), however, lose the nasal and replace it simply with the corresponding plural noun class prefix. In these cases, the nasal is considered as a nasal noun class prefix. The latter pattern is much less frequent. (397) and (398) show examples for classes 1 and 3 with examples of both nasals /n/ and /m/. For class 3, however, no nasal retainment could be found with the nasal /m/.

(398) N- prefix (no nasal retainment)

- a. n-túmbà > ba-túmbà ‘older brother’, cl. 1/2
- b. n-tì > ba-tì ‘in-law’, cl. 1/2
- c. n-gyê > ba-gyê ‘stranger’, cl. 1/2
- d. n-jíbí > ba-jíbí ‘thief’, cl. 1/2
- e. m-ùdâ > b-ùdâ ‘woman’, cl. 1/2
- f. m-ùdî > b-ùdî ‘person’, cl. 1/2
- g. m-ùdû > b-ùdû ‘man’, cl. 1/2
- h. m-wánò > b-wánò ‘child’, cl. 1/2
- i. m-bwálè > ba-bwálè ‘parent’, cl. 1/2
- j. n-sùnè > mi-sùnè ‘calf’, cl. 3/4
- k. n-vèwò > mi-vèwò ‘breath’, cl. 3/4

Whether the nasal is retained in the plural form or not is lexically specified and not phonologically predictable. For instance, the lexemes *ntèmbó*

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known from other languages, for instance from the Grassfield language Oku as described by Blood (1999: 3).

‘younger sibling’ and *n-túmbà* ‘older brother’ are very similar in their phonological structure. The nasal precedes a voiceless plosive /t/, syllable structure and length are similar. Nevertheless, one retains the nasal while the other does not. Further, in terms of semantics, both lexemes express kinship relations as many other nouns in both patterns do. Thus, there does not seem to be an obvious semantic rule that assigns noun class prefix patterns.

Whether a noun stem starts with a nasal or a non-nasal consonant is also lexically specified and not predictable from the noun’s phonological shape. Many examples in (396) without a noun class prefix (and initial nasal consonant), for instance, have a velar /k/ as stem-intial consonant while many examples in (397) and (398) show an NC-cluster where C is a labial or alveolar obstruent. This may raise the question whether the occurrence of a nasal in the first place is conditioned by features of the consonant in an NC-cluster or a stem-initial position, i.e. by its place of articulation. This hypothesis, however, can be ruled out on the basis of counter-examples. Thus, /k/, for instance, can appear without a preceding nasal as in *kfíbò* ‘chicken’ or with a preceding nasal as in the near minimal pair *nkùzó* ‘widow/er’. The same is true for alveolar fricatives as in *sá* ‘father’ without and *nsá* ‘shore’ with a nasal.

Historically, the stem-initial nasal was most likely a noun class prefix which got frozen onto the nominal root in most Gyeli nouns of classes 1, 3 and also 9 (which I will discuss below). This is also assumed by Hyman (2003: 50) who points out that “when a stem appears to begin with NC, the nasal may have originally been a prefix.”

In Gyeli, this phenomenon is not restricted to nouns that start with a prenasalized consonant, but is also found for nasals that precede a vowel and are not part of a NC cluster. For instance, *mámé* ‘aunt’ forms its plural with a CV- shape prefix *ba-mámé*, the initial nasal being part of the stem (instead of \**m-ámé* > \**b-ámé*). In contrast, *m-ùdì* ‘person’ treats the nasal as a prefix that gets replaced by a class 2 prefix in the plural *b-ùdì* ‘persons’. Again, it seems to be specified in the lexicon whether a nasal preceding a vowel is part of the nominal stem or a nasal noun class prefix.

Synchronously, only few nouns still have a nasal ‘N’ prefix: 14% of the nouns in agreement class 1 (which is 22.7% of all nouns in class 1 that start with a nasal) and 1.8% of the nouns in agreement class 3. In most nouns, the nasal is now part of the nominal stem which also occurs then in

corresponding plural forms. Nouns of class 9, in contrast to those of classes 1 and 3, always treat initial nasals as part of the stem rather than a nasal prefix. About three quarters of class 9 nouns have a stem-initial NC cluster which is retained in plural formation.

### 5.2.2.3 Noun class pairings

Nouns differ in their singular/plural pairing patterns at the level of noun class marking from the pairing patterns at the agreement class level. As Figure 5.1 shows, Gyeli has five major patterns of singular and plural pairings, three minor patterns represented by dashed lines, and one major transnumerical category ‘ma’-.

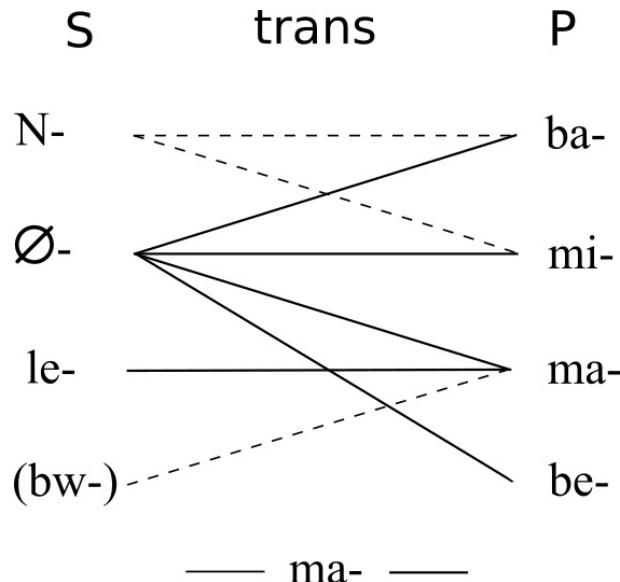


Figure 5.1: Noun class pairings

Though the number of major noun class pairings, including the transnumerical category, and the number of major genders is equal, the patterns in which noun classes and agreement classes pair are substantially different. (For comparison, see Section 5.2.3.)<sup>15</sup>

Table 5.5 shows the frequency of each noun class pairing. Just as noun classes by themselves, also their pairings differ significantly in size. For in-

<sup>15</sup>For both noun and agreement classes, the decision on what constitutes a major versus a minor class is based on frequency. I consider all classes as major if they are represented by 4% or more in the noun database.

stance, while the smaller noun class pairings such as  $\emptyset/\text{ma-}$  or the transnumeral noun class ‘ma’- each cover only a little more than 4% of the noun database, the largest noun class pairing,  $\emptyset/\text{be-}$ , constitutes a third of all noun class pairings. In addition to the 37 nouns in the transnumeral ‘ma’- class, there are another 35 nouns that lack a singular or plural form. These are subsumed under “minor transnumerals”. Their distribution is further specified in Table 5.6.

Noun class pairing	Frequency
N-/ba	23 (2.6%)
N-/mi-	3 (.3%)
$\emptyset/\text{ba-}$	139 (15.9%)
$\emptyset/\text{mi-}$	165 (18.9%)
$\emptyset/\text{ma-}$	40 (4.6%)
$\emptyset/\text{be-}$	296 (33.8%)
le-/ma-	136 (15.6%)
(bw-/ma-)	1 (.1%)
ma-	37 (4.2%)
(Minor transnumerals)	35 (4%)
Total	875

Table 5.5: Frequency of noun class pairings

### 5.2.3 The Gyeli gender system

The nine agreement classes in Gyeli form six major genders, as illustrated in Figure 5.2. The major genders are pairings of agreement classes 1/2, 3/4, 5/6, 7/8, and 9/6. Further, the language has a transnumeral gender which does not involve a singular-plural pairing. Instead, nouns only appear in agreement class 6. There are other nouns which do not have a counterpart in the singular or plural either, but which occur in only one number category. This ties in with mass and/or abstract nouns and countability and is discussed in Section 3.1.3.

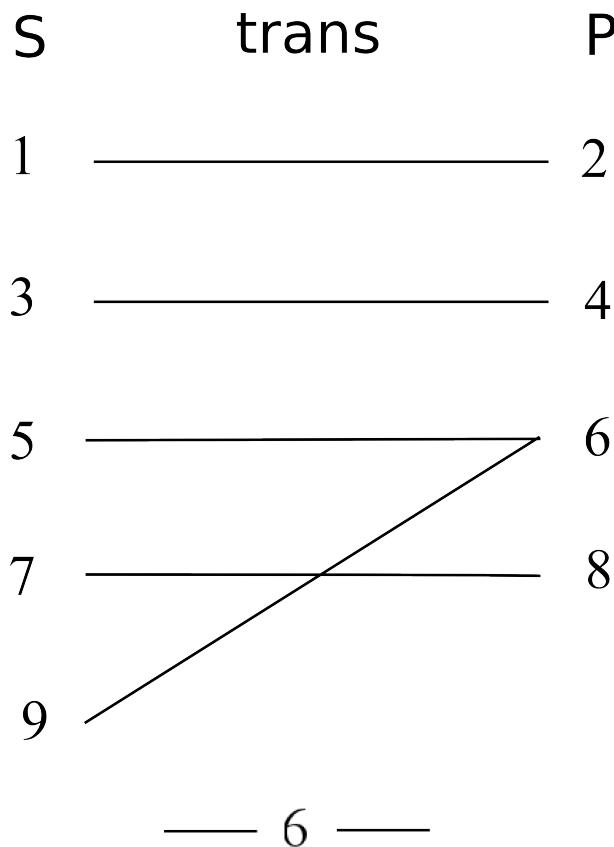


Figure 5.2: Major genders in Gyeli

There are other minor pairings of agreement classes which I do not consider as major, but inquorate genders since they have a limited number of members. They include, for instance, the inquorate genders 7/6, 3/6, 7/0, and 0/8 which I discuss below in gender size.

**Gender assignment** Corbett (2013) states that the way nouns are assigned to a gender can be either strictly semantic, predominantly semantic, or be based on a combination of semantic and formal criteria. In strictly semantic systems, the affiliation of a noun to a gender can be deduced from its meaning. Predominantly semantic systems have more complex assignment rules and therefore the semantic grounds on which affiliation to a gender is based appears less clearly. Corbett (2013: 2) notes that in these languages, “for at least some nouns there is no longer a principle for assignment which is still “live” for current speakers.” Finally, formal criteria both phonological and morphological can in some languages account for assignment of a noun to a gender, but there are no gender assignment systems that are entirely

form based, they rather occur in a combination with semantic assignment criteria (Corbett 2013: 3).

For Bantu languages, Corbett (2013: map 32) states in the WALS that gender is typically assigned on both semantic and morphological grounds. In Gyeli, semantic affiliation of a noun to a certain gender is often opaque and semantic principles governing gender assignment are much less clear-cut, at least synchronically. One cannot say, for instance, that nouns designating humans belong to gender 1/2 which is the typical ‘human’ gender in Bantu languages. It is true that a large part of gender 1/2 comprises humans, but words for humans are also found in almost all the other genders. The same is true for animals, body parts, tools, plants, and other semantic fields. Not one of them is exclusively found in one gender, but spread across several genders.<sup>16</sup>

It is rather a question of frequency which makes for the typicality of a noun belonging to a certain semantic field to be assigned to a specific gender. Thus, even though human nouns are found in many genders, they are most frequently and thus most typically found in gender 1/2. Another tendency in gender assignment concerns loan words which are most frequently found in gender 1/2 and less often in gender 7/8. Other patterns, if there are any, are less obvious.

**Gender size** The various genders differ in size, i.e. the number of members they have. Table 5.6 shows the distribution of the 875 lexemes in the nominal database across different genders, distinguishing major and inquorate genders.<sup>17</sup>

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<sup>16</sup>Contini-Morava (2000: 3) claims in her cognitive grammar approach on Swahili that “[n]oun classes [are] semantic in origin but [...] have lost much of their semantic coherence over time.” In order to verify whether this claim applies to Gyeli as well, much more data would be required which exceeds the limits of this grammar.

<sup>17</sup>I consider all genders as major which have a representation of more than 4% in the database. All other genders, both agreement class pairings and transnumeral genders, are inquorate genders.

	Gender	Frequency
<b>Major genders</b>	1/2	162 (18.5%)
	3/4	165 (18.9%)
	5/6	136 (15.5%)
	7/8	270 (30.9%)
	9/6	40 (4.6%)
	6	37 (4.3%)
<b>Inquorate genders</b>	7/6	24 (2.7%)
	7	13 (1.5%)
	8	12 (1.4%)
	9	3 (.3%)
	3/6	2 (.2%)
	8/6	2 (.2%)
	8/8	2 (.2%)
	4	2 (.2%)
	1	2 (.2%)
	3	2 (.2%)
	5	1 (.1%)
Total		875

Table 5.6: Frequency of genders

The largest gender is gender 7/8 with over 30% of the nouns in the database, followed by genders 3/4 and 1/2. The major genders with the least members are genders 9/6 and the transnumeral gender 6. The pairing of agreement classes 7 and 6 constitutes the largest inquorate gender, representing 2.7% lexemes in the noun database. Other inquorate genders with more than 1% are the transnumeral genders 7 and 8 while all other exceptional patterns are only represented between one and three times in the noun database.

In the following, I discuss each gender in turn, including examples and semantic tendencies relating to the semantic field of a noun. In order to determine the semantic field of a noun, I coded nominal entries according to the database Haspelmath & Tadmor (2009) use in their world loanword typology. The authors distinguish 24 categories differentiating, for instance, ‘the physical world’, ‘kinship’, ‘animals’, ‘body’, ‘food and drink’, ‘clothing’,

‘house’, ‘vegetation’, ‘technology’, or ‘time’.<sup>18</sup>

### 5.2.3.1 Gender 1/2

Gender 1/2 is a fairly large gender with regard to the number of nouns that are assigned to it with 162 members out of 875 nominal lexical entries. This gender is traditionally referred to as the ‘human’ gender in Bantu studies, but seems to have been extended to an ‘animate’ gender in Gyeli. Only about 30% of the nouns do refer to humans (if one excludes agentive deverbal nouns). Most of these human nouns designate kinship and a few social relations as shown in (399) and (400). In comparison to other genders containing human nouns, however, gender 1/2 contains the vast majority.

(399) kin relations

- a. sâ/ba-sâ ‘father’
- b. nyâ/ba-nyâ ‘mother’
- c. n-túmbâ/ba-túmbâ ‘older male relative’
- d. ntèmbó/ba-ntèmbó ‘younger sibling’
- e. kálé/ba-kálé ‘older sister’

(400) social relations

- a. só/ba-só ‘friend’
- b. n-gyê/ba-gyê ‘stranger’
- c. kfúmá/ba-kfúmá ‘chief’
- d. mbúmbù/ba-mbúmbù ‘person with the same name’
- e. ngângâ/ba-ngângâ ‘healer’

39% of the gender’s nouns belong to the semantic field of animals, both bigger and smaller, as illustrated in (401).

(401) animals

- a. tsídí/ba-tsídí ‘animal, meat’
- b. kímì/ba-kímì ‘monkey’
- c. nyû/ba-nyû ‘bee’
- d. fû/ba-fû ‘fish’

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<sup>18</sup>For a complete list of all categories and their affiliated lexemes as well as their coding, see Haspelmath & Tadmor (2009: 22-34).

- e. nyúà/ba-nyúà ‘snake’

The remaining 30% cover a variety of semantic fields such as ‘food’, ‘clothing’, ‘house’, ‘vegetation’, or ‘modern world’. It is remarkable that at least more than a third of them constitute loan words that are borrowed especially from English and French as shown in (402). They designate most often recently introduced items in the area of clothing, food, and the modern world.

#### (402) loan words

- a. sótì/ba-sótì ‘trousers (> English: shorts)’
- b. fàrínì/ba-fàrínì ‘flour (> French: *farine*)’
- c. mòné/ba-mòné ‘money’
- d. màtèlì/ba-màtèlì ‘mattress’
- e. ngóvìnà/ba-ngóvìnà ‘government’

Finally, the absence of a semantic field may be remarkable as well. While ‘body’ nouns<sup>19</sup> are found with a relatively high percentage in all other genders, they are basically absent in gender 1/2. So far, I only found three instances, all of which designate humans that have a health problem, such as *njímí/ba-njímí* ‘blind person’, *búò/ba-búò* ‘mute person’, and *nóó/ba-nóó* ‘deaf person’. Body parts, however, are completely absent in this gender.

#### 5.2.3.2 Gender 3/4

Gender 3/4 is about the same size as gender 1/2 with 165 members out of 875 nominal lexemes. In terms of the meaning of its nouns, the gender is more diverse concerning the semantic fields it covers. The biggest part of its vocabulary belongs to the body parts field with about 27%, examples of which are given in (403).

#### (403) body

- a. nlô/mi-nlô ‘head’
- b. d-ìsì/m-ìsì ‘eye’
- c. nyùmbù/mi-nyùmbù ‘mouth’

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<sup>19</sup>Note that the semantic field ‘body’ not only contains body parts, but also body functions, health and disease vocabulary as well as terms related to life cycles.

- d. mò/mi-mò ‘stomach’
- e. n-sùnè/mi-sùnè ‘calf’

Examples in (404) represent the next biggest semantic field in gender 3/4 with about 14% of nouns designating objects in the ‘physical world’.

(404) physical world

- a. nsá/mi-nsá ‘shore’
- b. nkìyá/mi-nkìyá ‘wave’
- c. mpá/mi-mpá ‘island’
- d. nsé/mi-nsé ‘sand’
- e. nkúdé/mi-nkúdé ‘cloud’

Further, a relatively large part (11%) of the lexicon in gender 3/4 designates what the Loanword Database labels as ‘basic actions/technology’, as exemplified in (405).

(405) technology

- a. ntúmé/mi-ntúmé ‘walking stick’
- b. ntúmò/mi-ntúmò ‘knife’
- c. nkwé/mi-nkwé ‘basket’
- d. nkúnkúmbé/mi-nkúnkúmbé ‘bow’
- e. nkwálá/mi-nkwálá ‘machete’

Animals are also represented in this gender with more than 8%; (406) gives examples of some of them.

(406) animals

- a. ntsântsúgé/mi-ntsântúgé ‘dragon fly’
- b. nsî/mi-nsî ‘mangoost’
- c. nkâ/mi-nkâ ‘colobus monkey’
- d. nkwúlá/mi-nkwúlá ‘cricket’
- e. mbúlò/mi-mbúlò ‘locust’

Nevertheless, the remaining 40% of nouns cover a wide range of semantic fields including ‘food’, ‘kin’, ‘house’, ‘vegetation’, ‘language’, and ‘time’, as illustrated in (407), just to mention a few.

## (407) others

- a. nkwan̡/mi-nkwan̡ ‘honey’
- b. mbambà/mi-mbambà ‘co-wife’
- c. mbê/mi-mbê ‘door’
- d. mpingá/mi-mpingá ‘cassava’
- e. nlâ/mi-nlâ ‘story’
- f. mbû/mi-mbvû ‘year’

**5.2.3.3 Gender 5/6**

Gender 5/6 is slightly smaller than genders 3/4 and 1/2 with 136 members. Like gender 3/4, it contains many body parts (408), namely 33%. The assignment of a body part noun to gender 3/4 or 5/6 seems to be arbitrary since no semantic or form based pattern is obviously discernible.

## (408) body

- a. d-úú/m-úú ‘nose’
- b. le-lô/ma-lô ‘ear’
- c. le-nkédé/ma-nkédé ‘hip’
- d. le-tólè/ma-tólè ‘navel’
- e. le-bélè/ma-bélè ‘breast’

Further, gender 5/6 contains roughly 19% animal nouns. Judging from examples such as in (409), size or habitat of an animal seem not to determine its gender affiliation since quite a range of different animals are found in this gender.

## (409) animals

- a. le-bondó/ma-bondó ‘frog’
- b. d-á/m-á ‘crab’
- c. le-bwî/ma-bwî ‘hyena’
- d. le-kénó/ma-kénó ‘duiker’
- e. j-áwè/m-áwè ‘goliath frog (*Conraua goliath*)’

Also humans are found in this gender which, according to the Loanword Database, are spread over various semantic fields such as ‘kin’, ‘social relations’, ‘religion’, and ‘body’ (for the ‘defective’ or sick humans). (410).

Taking these different categories together, human nouns make up 9% of gender 5/6.

(410) humans

- a. le-wă/ma-wă ‘twin’
- b. le-wányè/ma-wányè ‘young man’
- c. le-kàgà/ma-kàgà ‘bewitched woman’
- d. le-tóndí/ma-tóndí ‘lover’
- e. le-bùj/ma-bùj ‘cripple’

Further, gender 5/6 includes a small number of nouns belonging to the domain of ‘house’ and the ‘physical world’ with about 7% each and exemplified in (411) and (412) respectively.

(411) house

- a. le-wùdè/ma-wùdè ‘cooking stone’
- b. d-ù/m-ù ‘oven’
- c. d-éndè/m-éndè ‘courtyard’
- d. d-úgó/m-úgó ‘toilet’
- e. le-yímbálî/ma-yímbálî ‘entrance’

(412) physical world

- a. le-nángá/ma-nángá ‘star’
- b. le-bàdà/ma-bàdà ‘ground’
- c. le-kój/ma-kój ‘stone’
- d. le-lòj/ma-lòj ‘dew’
- e. le-tój/ma-tój ‘drop’

The remaining quarter of gender 5/6 nouns is spread across semantic fields such as ‘vegetation’, ‘technology’, ‘quantity’, ‘time’, ‘language’, and ‘hunting’. (413) gives a few examples.

(413) other

- a. le-léndé/ma-léndé ‘palm tree’
- b. le-kúndí/ma-kúndí ‘mat’
- c. le-wúmò/ma-wúmò ‘ten’

- d. le-wùlá/ma-wùlá ‘hour, time’
- e. le-kélé/ma-kélé ‘language’
- f. le-lámbò/ma-lámbò ‘trap’

Finally, gender 5/6 contains a number of deverbal nouns which are discussed in Section 4.2.1.

#### 5.2.3.4 Gender 7/8

Gender 7/8a is the largest gender in terms of its affiliated nouns with 270 members. ‘Body’ (414) and ‘animal’ (415) nouns constitute the majority with both around 20%.

##### (414) body

- a. vìnó/be-vìnó ‘finger’
- b. dò/be-dò ‘thigh’
- c. sé/be-sé ‘liver’
- d. kúdé/be-kúdé ‘skin’
- e. gímù/be-gímù ‘tonge’

##### (415) animals

- a. nòné/be-nòné ‘bird’
- b. tàwò/be-tàwò ‘goat’
- c. mgbèmgbèmè/be-mgbèmgbèmè ‘lion’
- d. sé’è/be-sé’è ‘baboon’
- e. síngì/be-síngì ‘cat’

Around 10% each is taken up by clothing vocabulary as in (416) and ‘food’ terms as exemplified in (417).

##### (416) clothes

- a. zíngó/be-zíngó ‘short dress’
- b. túnè/be-túnè ‘scarf for carrying babies’
- c. kàbà/be-kàbà ‘long dress’
- d. tsilì/be-tsilì ‘long skirt’
- e. póòlì/be-póòlì ‘hat’

## (417) food

- a. kálá/be-kálá ‘spice’
- b. kwàndò/be-kwàndò ‘plantain’
- c. dísì/be-dísì ‘bowl’
- d. ngùó/be-ngùó ‘sugar cane’
- e. búò/be-búò ‘mortar’

Another semantic field that is represented in gender 7/8 is ‘vegetation’ as in (418), however, only with around 6%.

## (418) vegetation

- a. mpànyè/be-mpànyè ‘bamboo’
- b. lé/be-lé ‘tree’
- c. làwó/be-làwó ‘branch’
- d. dùwá/be-dùwá ‘thorn’
- e. kókó/be-kókó ‘mushroom’

As in other genders as well, there is a proportion of nouns that belongs to a wide diversity of semantic fields. In gender 7/8, around a third of its member nouns constitute such a semantic diversity. Nouns of semantic fields that are represented with less than 5% cover semantic domains such as (in decreasing frequency) ‘language’, ‘physical word’, ‘technology’, ‘house’, ‘hunting’, ‘time’, ‘social/political relations’, ‘spatial relations’, and more. An example of each is provided in (419).

## (419) other

- a. bâ/be-bâ ‘word’
- b. nkúdé/be-nkúdé ‘fog’
- c. tûú/be-tûú ‘axe’
- d. pímáá/be-pímáá ‘wall’
- e. bwímò/be-bwímò ‘net hunt’
- f. ménjó/be-ménjó ‘day’
- g. túmbó/be-túmbó ‘country’
- h. dyá/be-dyá ‘distance’

Finally, gender 7/8 also has a few loan words. This is remarkable because usually loan words are found in gender 1/2. Gender 7/8 seems to be the only other gender that also takes a few borrowed nouns as listed in (420). Compared to gender 1/2, loan words are, however, much less numerous in gender 7/8.

(420) loan words

- a. sōbì/be-sōbì ‘soap’
- b. fùlápà/be-fùlápà ‘flower’
- c. súbì/be-súbì ‘soup’

It is not clear at this moment, on which grounds loan words get assigned to either one of the two genders that take loan words. If one considers gender 1/2 as the default gender for loan words, it is not clear on which grounds some exceptions are made by assigning loan words to gender 7/8. There is no obvious semantic nor phonological or morphological assignment rule. For instance, *sōbì* ‘soap’ (gender 7/8) forms a minimal pair with the loan words *sótì* ‘trousers’ of gender 1/2. Both nouns belong, according to Haspelmath & Tadmor (2009), semantically to the field of ‘clothing and grooming’. Another example concerns trisyllabic nouns which start both with /f/ and have the same tonal pattern L H L: *fùlápà* ‘flower’ belongs to gender 7/8 while *fàrínì* ‘flour’ belongs to gender 1/2. Gender 7/8 has about 10% food vocabulary, so it cannot be the case that *fàrínì* ‘flour’ is not assigned to this gender because it would not fit in semantically. In return, gender 1/2 has some (although few) nouns designating ‘vegetation’, so again it cannot be on semantic grounds that *fùlápà* ‘flower’ is not assigned to the default loan word gender 1/2. One determining factor could be the donor language. It seems that all loan words in gender 7/8 have an English origin. So far I have not come across any French loan words in this gender. In contrast, loan words in gender 1/2 may come from both English and French. The question still remains then why some English loan nouns are assigned to gender 7/8 while the majority goes into gender 1/2.

### 5.2.3.5 Gender 9/6

Gender 9/6 is the smallest of the major genders with only 40 members in the database of 875 nominal lexemes. Historically, Gyeli has lost agree-

ment class 10 with which agreement class 9 would pair in most other Bantu languages. Instead, Gyeli class 9 pairs synchronically with class 6. In comparison to inquorate genders as discussed in Section 5.2.4, gender 9/6 has, however, still more members (> 4%) than the inquorate ones. Even more importantly, agreement class 9 always pairs with agreement class 6 while agreement classes that occur in inquorate genders usually pair with other classes than they do in major genders.

Semantically, a large part of gender 9/6 nouns (about 29%) belong to the field of ‘body’ nouns. Examples are given in (421).

(421) body

- a. nyúlê/ma-nyúlê ‘body’
- b. mbòmbó/ma-mbòmbó ‘face’
- c. mbvúñɔ/ma-mbvúñɔ ‘hair’
- d. tsí/ma-tsí ‘neck’
- e. ndzílíkɔ/ma-ndzílíkɔ ‘elbow’

Further, a relatively big part (14%) of gender 9/6 nouns belongs to the semantic field of ‘language and speech’ as illustrated in (422).

(422) language

- a. ngòmò/ma-ngòmò ‘little drum (tam tam)’
- b. pó/ma-pó ‘news’
- c. tsí/ma-tsí ‘voice’
- d. mpàálé/ma-mpàálé ‘message’

Both, the physical world and ‘house’ vocabulary is represented with about 9% each and exemplified in (423) and (424) respectively.

(423) physical world

- a. mbí’ilì/ma-mbí’ilì ‘charcoal’
- b. sí/ma-sí ‘ground’
- c. pfùdí/ma-pfùdí ‘mold’

(424) house

- a. ndáwò/ma-ndáwò ‘house’
- b. ntábò/ma-ntábò ‘washing place’

- c. *ng̊é/ma-ŋ̊é* ‘garden’

The remaining 40% of nouns belong to semantic fields such as ‘food’, ‘technology’, ‘motion’, ‘spatial relations’, ‘law’, ‘religion’, and more. Some examples representing the listed semantic domains are given in (425).

(425) others

- a. *ndzà/ma-ndzà* ‘hunger’
- b. *nkábé/ma-nkábé* ‘paddle’
- c. *ndzì/ma-ndzì* ‘path’
- d. *nkwàló/ma-nkwàló* ‘edge’
- e. *mpìndá/ma-mpìndá* ‘prohibition’
- f. *nkwélè/ma-nkwélè* ‘witchcraft’

### 5.2.3.6 Gender 6

The transnumeral gender 6 is the smallest of the major genders with only 37 members (4.3% of nouns in the database). Semantically, it mostly includes liquid mass nouns, as exemplified in (426).

- (426)
- a. *ma-jíwó* ‘water’
  - b. *ma-wâ* ‘fat’
  - c. *ma-nyɔ́* ‘drink, wine’
  - d. *ma-nyálè* ‘urine’
  - e. *ma-dyúmù* ‘sperm’

Other instances of nouns in this gender cover deverbal eventive nouns, as shown in (427).

- (427)
- a. *ma-dìlá* ‘funeral’ → *dìlɛ* ‘bury’
  - b. *ma-dígà* ‘vision’ → *dígɛ* ‘watch’
  - c. *ma-bwálé* ‘birth’ → *bwálɛ* ‘be born’

### 5.2.4 Inquorate genders

Inquorate genders are those which have so few members (i.e. less than 4% of the nominal lexemes in the database) that I prefer to treat them as exceptions

rather than full-fledged genders in order not to artificially inflate the gender system. Inquorate genders in Gyeli contain the same agreement classes as major genders. Just their pairing is exceptional. For instance, agreement class 7 usually pairs with agreement class 8. In some exceptions, however, agreement class 7 pairs with class 6 and thus does not belong to the same gender as gender 7/8. Instead, it will be called gender 7/6. Inquorate genders in Gyeli are listed in Table 5.6 and will be discussed in order of decreasing member numbers.

**Gender 7/6** The inquorate gender 7/6 has 24 members in the nominal database. It covers widely diverse semantic fields such as ‘body’, ‘vegetation’, ‘social relations’, ‘animals’, ‘hunting’, or ‘possession’. (428) provides some examples.

- (428) a. *bè/ma-bè* ‘shoulder’
- b. *ntúà/ma-ntúà* ‘mango’
- c. *kwádʒ/ma-kwádʒ* ‘village’
- d. *yílì/ma-yílì* ‘viper’
- e. *wáadʒ/ma-wáadʒ* ‘net (for hunting)’
- f. *mbúlá/ma-mbúlá* ‘debt’

It is likely that nouns in this minor gender stem from various classes, but it is difficult to trace back since a reconstruction to Proto Bantu (PB) is hardly discernible. Only *bè* ‘shoulder’, out of all 7/6 nouns, can be reconstructed as *\*-bègà* according to Guthrie (1967: 154), and belonged to gender 5/6 (Meeussen 1967: 101). Other nouns such as ‘debt’ or ‘mango’ do not occur in Meeussen’s and Guthrie’s reconstructions while *kwádʒ* ‘village’ in Gyeli does not seem to have any relation with the PB reconstructions as seen in Guthrie (1971: 27). Likewise, it is then not clear whether the singular class of a noun has switched agreement classes or the plural class or whether both scenarios hold for different nouns.

**Gender 7** The transnumeral gender which only contains the singular agreement class 7 is represented with 13 members in the noun database. It contains a few abstract nouns which lack a plural, as illustrated in (429).

- (429) a. *sónì* ‘shame’

- b. mèvâ ‘pride’
- c. sòmònè ‘complaint’
- d. ngòngòlè ‘sadness’
- e. póné ‘truth’
- f. ngwámé ‘danger’

Other nouns that only have a singular form in agreement class 7 are country names, as shown in (430).

- (430) a. fàlà ‘France’  
 b. ngyàmànè ‘Germany’  
 c. ìtálíyèn ‘Italy’

**Gender 8** There are also 12 nouns in the database which only have a form in agreement class 8, but no singular or plural counterpart. Like with the transnumeral gender 7, they include abstract nouns, as listed in (431).

- (431) a. be-bêë ‘beauty’  
 b. be-síyá ‘imitation’  
 c. be-jîi ‘anger’  
 d. be-kîlì ‘attention, cunning’

Other nouns of this gender are inherently singular (e.g. as a mass noun or a singular occurrence in the world) and lack a plural form, as it is the case with the examples in (432).

- (432) a. vîyó ‘fire’  
 b. vísó ‘sun’

**Gender 9** Also agreement class 9 constitutes a transnumeral gender with three members. They are listed in (433).

- (433) a. ngwélè ‘witchcraft’  
 b. mpà’à ‘vapor, fog’  
 c. bvúbvù ‘multitude’

**Gender 3/6** Many exceptional agreement class pairings only occur a couple of times in the database. This is the case with the pairing of agreement classes 3 and 6. The only two examples that I found are shown in (434).

- (434) a. m-bó/mà-bó ‘arm’  
       b. n-ákó/m-ákó ‘earwax’

This lexeme *-bó* ‘arm’ may be reconstructed to PB *\*-bóko* ‘arm’ which belonged to gender 15/6 according to Meeussen (1967: 102).<sup>20</sup>

**Gender 8/6** Agreement class 8 has a few singular nouns. While the plural nouns of agreement class 8 all belong to head noun class ‘be’, the singular members of agreement class 8 do not take a prefix.<sup>21</sup> Historically, agreement class 8 nouns which do not take a prefix have probably merged from a former class 14 as the root beginning *bw-* or *b-* suggests. This would also be in line in with the plural pairing with class 6 since Meeussen (1967: 100) points out that class 14 in PB formed its plural with class 6. Pairings of class 8/6 are very rare in Gyeli. I only found two examples which are given in (435).

- (435) a. bwâ/ma-bwâ ‘medicine’  
       b. bw-álè/m-álè ‘canoe’

**Gender 8/8** There are two other examples where the singular variant of agreement class 8 pairs with the plural class 8, as shown in (436).

- (436) a. bvùl /be-bvùl  ‘night’  
       b. bírl /be-bírl  ‘smoke’

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<sup>20</sup>Other nouns that Meeussen (1967: 102) classifies as gender 15/6 nouns such as ‘leg’, ‘knee’, or ‘ear’ do not have any reflexes in synchronic Gyeli. Since many of them constitute body parts, this is, however, not surprising at all. Wilkins (1996), for instance, shows that especially body parts, or ‘parts of a person’ terminology, as he labels it, are subject to a great deal of semantic change which follows cross-linguistically natural tendencies. Therefore, synchronic noun stems of body parts may have an entirely different shape than the reconstructed PB forms. In any case, it is not possible to say that historic class 15 nouns merged systematically with class 3.

<sup>21</sup>There is one exception where a singular agreement class 8 noun takes a prefix of the shape *bw-*, a remnant of a former class 14. Since this is the only example, however, I do not list ‘bw’ as a head noun class on its own.

**Other exceptional transnumeral genders** Except for agreement class 2, all agreement classes show instances where they lack either a singular or plural counterpart. For classes 1, 3, 4, and 5, this is very rare with only one or two examples each. (437) shows the two examples found for agreement class 4.

- (437) a. mi-*ngyɛ* ‘hunting rats (digging out their dens)’
- b. *my-ɛ* ‘fur’

Instances where agreement class 1 does not have a plural form concern proper names of countries/continents which are inherently singular, as shown in (438).

- (438) a. *kàmèrún* ‘Cameroon’
- b. *àfríkà* ‘Africa’

There are also two examples of agreement class 3 nouns which do not take a plural form in class 4. These are listed in (439).

- (439) a. *bíwò* ‘bad luck’
- b. *mbvú* ‘white/grey hair’

Agreement class 5 only has one instance which lacks a plural counterpart, as shown in (440).

- (440) *dyúwò* ‘sky’

### 5.2.5 Agreement targets of the noun

The head noun triggers agreement on its agreement targets. While each of the agreement targets is described in detail according to their part of speech in Chapter 3, I give an overview of all agreement targets in Table 5.7.

## 5.3 Distributive numerals with reduplication

Distributives form series of numerals which are expressed by repetition of the numeral. They serve the purpose of disambiguating sentences such as in (441) which can have either a collective or a distributive reading.

	Modifiers with agreement prefix <i>-vúdû</i> ‘one’ <i>-fúsì</i> ‘different’ <i>-Ésè</i> ‘all’ <i>-j(né)gá</i> ‘other’ numerals ‘2’ through ‘5’ genitive marker <i>ngá</i> <i>nyá</i> ‘big’
Noun phrase internal	Modifiers with agreeing free morpheme Demonstratives Attributive markers
Noun phrase external	STAMP marker Copula

Table 5.7: Agreement targets

(441) Finn and Riley ate two apples.

In the collective reading, two apples altogether were shared between Finn and Riley whereas in a distributive interpretation, Finn ate two apples and Riley ate two apples. In English, such sentences can be disambiguated by the use of ‘each’: ‘Finn and Riley ate two apples each.’ Sentences as in (441) are, however, ambiguous and allow for both interpretations.

Some languages have means to regularly disambiguate such cases. For those languages that do that, the most common means is reduplication of numerals. Gil (2005: 4) explains this common strategy by its iconic motivation. According to him, copies of the numeral correspond to multiple sets of entities.

Gyeli also uses the reduplication strategy in order to express distributive numerals. Even though reduplication is a common strategy for distributive expression in the languages of the world, Rubino (2005: 3) states that, ‘The phonological nature of the reduplicated material varies from language to language and construction to construction.’ Borchardt (2011: 118) shows that the Benue-Congo language Ikaan, for instance, uses several types of reduplication in order to express distributives. These range from full reduplications including the agreement markers to full root reduplications excluding agreement markers and partial root reduplications where only part of the numeral root is copied.

In Gyeli, distributive numerals only display one kind of reduplication, namely full reduplication. The numeral, based on its cardinal form, is entirely copied, including its agreement prefixes, if required, and tones. (442) illustrates how distributives may be used in Gyeli.

- (442) bwánj̊    bá    dé    mímbàngá **mímbáà** **mímbáà**  
           b-wánj̊    ba    dè-H mí-mbàngá mí-mbáà mí-mbáà  
           ba2-child 2.PST1 eat-R mi4-nut    4-two    4-two  
           ‘The children ate two nuts each.’

Just like cardinals, distributive numerals agree with the head noun in its noun class, if the specific numeral takes an agreement marker. The distributives that take agreement markers are exactly the same as the cardinals that do, namely ‘2’ through ‘5’. For those modifier numerals that do not take any agreement prefixes (‘6’ through ‘9’), they are entirely reduplicated, just without prefixes. Nominal nouns as well as complex numerals involving noun phrases and/or coordination are also fully reduplicated as one would expect from their cardinal form. Table 5.8 lists Gyeli distributives using the noun *mbàngá* ‘nut’ of gender 3/4 as an example.

Examples of distributive numerals	Gloss
<i>mbàngá</i> <i>mvúdû</i> <i>mvúdû</i>	‘one nut each’
<i>mi-mbàngá</i> <i>mí-mbáà</i> <i>mí-mbáà</i>	‘two nuts each’
<i>mi-mbàngá</i> <i>mí-nláálè</i> <i>mí-nláálè</i>	‘three nuts each’
<i>mi-mbàngá</i> <i>mí-nâ</i> <i>mí-nâ</i>	‘four nuts each’
<i>mi-mbàngá</i> <i>mí-ntánè</i> <i>mí-ntánè</i>	‘five nuts each’
<i>mi-mbàngá</i> <i>ntù́</i> <i>ntù́</i>	‘six nuts each’
<i>mi-mbàngá</i> <i>mpúéré</i> <i>mpúéré</i>	‘seven nuts each’
<i>mi-mbàngá</i> <i>lòmbì</i> <i>lòmbì</i>	‘eight nuts each’
<i>mi-mbàngá</i> <i>rèbvùá</i> <i>rèbvùá</i>	‘nine nuts each’
<i>mi-mbàngá</i> <i>le-wúmò</i> <i>le-wúmò</i>	‘ten nuts each’
<i>mi-mbàngá</i> <i>le-wúmò</i> <i>ná</i> <i>mí-báà</i> <i>le-wúmò</i> <i>ná</i> <i>mí-báà</i>	‘twelve nuts each’
<i>mi-mbàngá</i> <i>ma-wúmò</i> <i>má-báà</i> <i>ma-wúmò</i> <i>má-báà</i>	‘twenty nuts each’
<i>mi-mbàngá</i> <i>bwúyà</i> <i>bwúyà</i>	‘a hundred nuts each’
<i>mi-mbàngá</i> <i>tódyínì</i> <i>tódyínì</i>	‘a thousand nuts each’

Table 5.8: Distributive numerals

## 5.4 Distributive construction with *náà*

In order to express distributivity over individuals, a (countable) noun is iterated while *náà* is inserted to link the two nouns. The quantified noun can occur both in the singular or in the plural as shown in (443). The use of plural nouns as in (443b) implies a distribution over a set of entities.

- (443) a. m-ùdì      náà m-ùdì  
           N1-person by  N1-person  
           'each person'  
       b. b-ùdì      náà b-ùdì  
           ba2-person by  ba2-person  
           'each (set of) people'

Iterated quantification in the sense of 'each' only works for countable nouns. Thus, neither liquid mass nouns nor granular aggregates in their singular form allow for iterated quantification as shown in (444). Granular aggregates in their plural form, however, can enter such a construction which then gives the reading of 'each set of entities of x' as in (444c).

- (444) a. \*ma-jíwó náà ma-jíwó  
           ma6-water by  ma6-water  
           'each water'  
       b. \*ndísì náà ndísì  
           Ø3.rice by  nc3.rice  
           'each rice'  
       c. mi-ndísì náà mi-ndísì  
           mi4-rice by  nc4-rice  
           'each set of packages of rice'

## 5.5 Attributive constructions

In his comparative study on Bantu attributive constructions, Van de Velde (2013) defines a 'canonical' attributive construction as a dependency relation between two nominal constituents. It is also known as associative or genitive constructions in the Bantu literature. Since in Gyeli these constructions are, however, not confined to genitive contexts, I prefer to call them

‘attributive constructions’. So, canonically, an attributive (or associative) marker links a head noun with a dependent noun. Van de Velde (2013: 217) illustrates this with an example from Kagulu (Bantu G12, Tanzania), cited from Petzell (2008: 86) in (445).

- (445) Kagulu (Bantu G12)

m-eji<sub>R1</sub> g-a<sub>REL</sub> mu-nyu<sub>R2</sub>  
 6-water VI-ATT 3-salt  
 ‘salt water’

Van de Velde (2013) describes the canonical attributive construction as HEAD (R1) - RELATOR (REL) - DEPENDENT (R2), where the relator (attributive marker) links the head noun (R1) to the dependent noun (R2). He further points out that Bantu languages are homogeneous with respect to the way they express attributive possession structurally. There is a huge variation in terms of, for instance, the shape of the attributive marker with a canonical shape of AGR-*a* (see Section 3.8.3.2 for the attributive marker). Also, the dependent constituent which is typically a noun, can also belong to another part of speech. This is the case for Gyeli. In terms of frequency, the dependent constituent is mostly a noun. It can, however, also belong to the category of adjectives, verbs, or interrogative words. While the part of speech of the dependent constituent may belong to various categories, the head of the construction seems always to be a noun. In the following, I will present the different construction types that occur with a noun + POS.

### 5.5.1 Noun + noun

Noun + noun attributive constructions in Gyeli typically express attributive possession. This core meaning, however, which is extended to other semantic properties of a noun, e.g. quantification ('a lot of cats') and location ('front of the house'). I will discuss in turn the different domains of attributive constructions, starting with the core meaning of possession.

Before turning to the different attributive constructions in Gyeli, however, I will first explore a general formal issue: the optional omission of the attributive marker. The core of a noun + POS construction seems to be the linking element, the attributive marker, which gives the construction its name. Often, the attributive marker can be omitted, while in some cases, it cannot, but must appear.

### 5.5.1.1 Optional omission of the attributive marker

In Gyeli, the attributive marker can in many cases be omitted optionally (which seems to be the default case) as shown in (446). In some special cases, however, the attributive is obligatorily, as in (447).<sup>22</sup>

- (446) m-íñà (má) bá-só  
ma6-name 6:ATT ba2-friend  
'the friends' names'

- (447) j-íñà lé só  
le5-name 5:ATT Ø1.friend  
'the friend's name'

This phenomenon cannot be based on free variation, but must be conditioned by some (set of) rules since speakers are consistent in their judgments of optional omission or obligatory presence of the attributive.

The question is then what conditions are at play in the presence or absence of the attributive marker. It seems that multiple factors determine whether the attributive marker has to appear, including i) phonological ones where a dependent noun that comes with a CV- shape noun class prefix favors omission of the attributive and ii) semantic ones concerning the relation between the two nouns. In the following, I will go through a number of possible determining factors and point out in how far they might influence the occurrence of an attributive marker. I will start out with phonological factors, then move on to morphological, and finally to semantic factors.

**Phonological factors: tonal patterns** The H tone of an attributive marker spreads on to a CV- noun class prefix of the dependent noun as shown in (448) and discussed in Section 2.4.2.1. One could assume that if the H tone of the attributive marker spreads to the otherwise L tone prefix of the dependent noun R<sub>2</sub>, the tonal process might mark the dependency relation and an overt attributive marker is not necessary as in (448a), while agreement classes that come with a L tone attributive marker where no H tone spreading occurs determine the obligatory use of the attributive as would seem to be the case in (448b).

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<sup>22</sup>Note that attributive markers in parentheses are optional while those without brackets cannot be omitted, but must obligatorily appear.

- (448) a. mì-nlô (mí) bá-tídí  
           mi4-head 4:ATT ba2-animal  
           ‘the heads of the animals’
- b. nlô      wà      tsídí  
       ∅3.head 3:ATT ∅1.animal  
       ‘the head of the animal’

This turns out not to be the case, however. (449) counterexemplifies the tonal hypothesis because in (449a), there is no high tone spreading, but the use of the attributive marker is still optional while in (449b) there is high tone spreading, but the use of the attributive marker is still obligatory.

- (449) a. m-páà      (wà) nlàmbó  
           N1-president 1:ATT ∅3.country  
           ‘president of the country’
- b. bà-páà      bá      nlàmbó  
       ba2-president 2:ATT ∅3.country  
       ‘presidents of the country’

**Phonological factors: syllable length** There is a tendency for monosyllabic dependent nouns R<sub>2</sub> to require an attributive marker rather than allowing for its omission as in (450) compared to bisyllabic dependent nouns R<sub>2</sub> in (451). A bit more than half of the elicited attributive constructions with monosyllabic R<sub>2</sub> behave this way.

- (450) a. só      wà      n-tí  
       ∅1.friend 1:ATT N1-in.law  
       ‘the friend of the in-law’
- b. bà-só      bá      n-tí  
       ba2-friend 2:ATT N1-in.law  
       ‘the friends of the in-law’
- (451) a. só      (wà) bà-tí  
       ∅1.friend 1:ATT ba2-in.law  
       ‘the friend of the in-laws’
- b. bà-só      (bá) bà-tí  
       ba2-friend 2:ATT ba2-in.law  
       ‘friends of the in-laws’

There are, however, many exceptions as in (452) where the dependent noun  $R_2$  is monosyllabic, but the use of the attributive marker is still optional.

- (452) a. ndzí (nyà) nsé  
           Ø9.path 9:ATT Ø3.sand  
           'path of sand'  
       b. j-ìnó (lé) n-tí  
           le5-name 5:ATT N3-in.law  
           'the name of the in-law'

At the same time, these examples concerning syllable length could also relate to number morphology. Monosyllabic nouns are almost exclusively singular while plural nouns are almost exclusively at least bisyllabic. So the question is whether a possibly conditioning factor is about syllable length or rather about number morphology or agreement class affiliation.

**Morphological factors: number of  $R_2$**  Another factor that seems to determine the obligatory presence of the attributive marker is the number of the dependent noun  $R_2$ . If  $R_2$  occurs in the singular, the attributive occurrence is often (more than 50% of the elicited examples) obligatory as exemplified in (453a). In fact, out of all cases where the attributive linker is obligatory, more than 75 % have a singular dependent noun  $R_2$ . In contrast, if  $R_2$  is plural as in (453b), the use of the attributive is mostly optional.

- (453) a. ndzí nyà tágò  
           Ø9.path 9:ATT Ø7.goat  
           'path of the goat'  
       b. ndzí (nyà) bë-tágò  
           Ø9.path 9:ATT be8-goat  
           'path of the goats'

Again, there are examples, such as in (454), where the inverse is the case.

- (454) a. j-ìnó (lé) d-á'á  
           le5-name 5:ATT le5-crab  
           'name of the crab'  
       b. j-ìnó lé m-á'á  
           le5-name 5:ATT ma6-crab  
           'name of the crabs'

**Morphological factors: noun class affiliation** Another hypothesis could be that attributive marker optionality is conditioned by gender or agreement class and depends on the gender/noun class of the head noun  $R_1$  or the dependent noun  $R_2$ . This is in fact the case in many closely related languages as described by Henson (2007) for Kol (A832),<sup>23</sup> by Beavon (2006) for Njyem (A84)<sup>24</sup> and by Heath (2003) for Makaa (A83).<sup>25</sup> For Gyeli, however, this does not seem to be the case for either the head nor the dependent noun. Changing the noun class of  $R_1$  in (455) gives both optional omission of the attributive as in (455a) and obligatory use of the attributive marker as in (455b).

- (455) a. só (wà) n-gyɛ̂  
           ∅1.friend 1:ATT N1-stranger  
           ‘friend of the stranger’
- b. ndzí nyà n-gyɛ̂  
           ∅9.path 9:ATT N1-stranger  
           ‘path of the stranger’

The same is true for the dependent noun  $R_2$  in (456): (456a) shows a case where the attributive can be omitted while it cannot in (456b).

- (456) a. só (wà) m-ùdā̂  
           friend.1 1:ATT N1-woman  
           ‘friend of the woman’
- b. só wà nkwanò̂  
           ∅1.friend 1:ATT ∅3.honey  
           ‘friend of honey’ (= somebody who likes honey)

It also does not depend on whether the head noun  $R_1$  and the dependent noun  $R_2$  belong to the same noun class or not: in (457), all constituents belong to noun class 7. In (C71), the use of the attributive is obligatory while in (C72) its use is optional.

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<sup>23</sup>Henson (2007: 113) points out for Kol that ”For most singular nouns, the ‘basic’ associative marker is either zero or a tonal marker”.

<sup>24</sup>Beavon (2006: 118) shows that head nouns of classes 1, 9, and 10 in Njyem occur without associative markers.

<sup>25</sup>As in Njyem, head nouns of classes 1, 9, and 10 in Makaa do not come with an associative marker and are therefore zero-marked in noun + noun constructions according to Heath (2003: 341).

- (457) a. véélá            yá        yí  
             Ø7.decoration 7:ATT Ø7.wood  
             ‘decoration of the wood’
- b. véélá            (yá)        tawò  
             Ø7.decoration 7:ATT Ø7.goat  
             ‘decoration of the goat’

**Morphological factors: overt noun class marking of R<sub>2</sub>** There is a tendency to omit the attributive marker when the dependent noun R<sub>2</sub> has a syllabic noun class prefix as seen for instance in (448a) or (451a). This is true for more than 80% of the elicited attributive construction examples.

Further, at the intersection of phonology and morphology, there is a tendency to avoid successive identical CV morphemes, i.e. when the attributive marker and the following noun class prefix have the same CV pattern as in (458). In more than 90% of these cases, speakers prefer to omit the attributive.

- (458) a. bà-só            (bá)        bá-tí  
             ba2-friend 2:ATT ba2-in.law  
             ‘the friends of the in-laws’
- b. j-inj            (lé)        lé-kă  
             le5-name 5:ATT le5-clan  
             ‘the name of the clan’

Nevertheless, there are again counterexamples as in (459).

- (459) mà-dyû        má        má-kă  
             ma6-fever 6:ATT ma6-clan  
             ‘the fevers of the clans’

**Semantic factors: relation between the nouns** It seems that the attributive linker can be omitted when the relation between the two nouns is an identity relation as with names in (460) and colors in (461).

- (460) kwádž        (yá)        Ngòló  
             Ø7.village 7:ATT Ø3.PN  
             ‘the village of Ngolo’

- (461) nsínó (wá) nábèbè  
 Ø3.color 3:ATT red  
 ‘the color red’

Also numeral head nouns are always followed by an optional attributive marker as shown in (462).

- (462) a. lè-wúmà (lé) bá-só  
 le5-ten 5:ATT ba2-friend  
 ‘ten friends’
- b. bwúyà (yá) bá-só  
 Ø7.hundred 7:ATT ba2-friend  
 ‘hundred friends’
- c. tógyínì (wà) bá-só  
 Ø1.thousand 1:ATT ba2-friend  
 ‘thousand friends’

Further, the omission of the attributive marker changes, in some cases, the meaning of the construction which supports the hypothesis on identity relation: if the head and dependent noun refer to the same entity, the attributive can or even must be omitted as in (463a) and (464a). In these cases, the second noun rather serves as a modifying noun to the head. In contrast, (463b) and (464b) which require the attributive marker, are attributive possession constructions.

- (463) a. só m-ùdâ  
 Ø1.friend N1-woman  
 ‘the female friend’
- b. só wà m-ùdâ  
 Ø1.friend 1:ATT N1-woman  
 ‘the friend of the woman’
- (464) a. kfúbò dyá  
 Ø1.chicken Ø7.length  
 ‘the tall chicken’
- b. kfúbò wà dyá  
 Ø1.chicken 1:ATT Ø7.length  
 ‘the chicken that is far away’ (poulet éloigné)

**Semantic factors: prototypical use** A final factor that I consider here concerns prototypicality of use which relates to the most frequent, most natural way, two nouns are linked. In (465), for instance, it seems that speakers naturally think of a country usually having only one president. In this case (465a), the attributive can be omitted. If, however, speakers talk about several presidents as in (465a), for instance historically successive presidents, this is the more marked form and there the use of the attributive is obligatory.

- (465) a. m-páà (wà) nlàmbó  
N1-president 1:ATT Ø3.country  
'president of the country'
- b. bà-páà bá nlàmbó  
ba2-president 2:ATT Ø3.country  
'presidents of the country'

It has to be noted that there might be other factors at play as well and also that there seem always to be exceptions to the rules and that these rules are rather tendencies. Ultimately, it is not completely clear at this moment what makes attributive occurrence obligatory, also because it is not clear in which way the different factors interact.

### 5.5.1.2 Nominal possessives

Having discussed the optional omission and obligatory presence of the attributive marker in noun + noun constructions, I will for reasons of simplicity in the following not indicate anymore, whether the attributive is optional or not. After having discussed the formal side of noun + noun attributive constructions, I now turn to semantically different noun + noun constructions. The core meaning of these is that of attributive possession. Examples of possessive noun + noun constructions are given in (466), where the head noun changes noun class. The head noun expresses the possessee while the dependent noun expresses the possessor.

- (466) a. m-ùdấ wà m-ùdì  
N1-woman 1:ATT N1-person  
'the person's wife'
- b. b-ùdấ bá m-ùdì  
ba2-woman 2:ATT N1-person

- ‘the person’s wives’
- c. d-ìsí    lé    m-ùdì  
le5-eye 5:ATT N1-person  
‘the person’s eye’
  - d. m-ísì    má    m-ùdì  
ma6-eye 6:ATT N1-person  
‘the person’s eyes’

**Split genitive** Gyeli has a split genitive system. Interestingly, the language has, however, not a typical possessive classification system which most often distinguishes grammatically between alienable and inalienable possession. Nichols & Bickel (2013) explain that this type of possessive classification is based on properties of the possessee. Typically, inalienable possession concern kinship relations and body parts while alienable possessions can be separated from the owner, for instance materials (axe, spear) or food items (mango, bread). According to the WALS map on possessive classification by Nichols & Bickel (2013), some Niger-Congo languages such as Gbeya Bossangoa (Central African Republic), Lango and Luganda (Uganda), or Luvale (Angola) have a two possessive classes with an alienable/inalienable distinction.

Gyeli does not make a grammatical distinction between alienable and inalienable possession as shown in (467). No matter whether the possessee is a kin (467a), body part (467b), or material possession (467c), the attributive marker always agrees in class with the head noun (possessee).

- (467) a. nyâ    wà    m-wánò  
Ø1.mother 1:ATT N1-child  
‘the child’s mother’
- b. d-úú    lé    m-wánò  
le5-nose 5:ATT N1-child  
‘the child’s nose’
- c. nkwálá    wá    m-wánò  
Ø3.machete 3:ATT N1-child  
‘the child’s machete’

In Gyeli, the genitive split is conditioned by properties of the possessor. If the possessor is expressed by a proper name, no attributive marker will

be used, but a genitive marker (Section 3.8.2.1) and exemplified again in (468). In (468a), the possessor is expressed by a proper name, thus it is preceded by a genitive marker. In contrast, a parallel construction in (468b) where the possessor is not a proper name, but the noun *mùdâ* ‘woman’, the construction occurs with an attributive marker instead.

- (468) a. m-ùdû **ngá** Nándtùngù  
N1-man GEN Ø1.PN  
'Nandtoungou's husband'
- b. m-ùdû **wà** m-ùdâ  
N1-man 1:ATT N1-person  
'the woman's husband'
- c. mà-kwámó **má-ngá** Nándtùngù  
ma6-bag 6-GEN Ø1.PN  
'Nandtoungou's bags'

The genitive marker only takes an agreement prefix if the possessee head noun occurs in a plural form, as it is the case in (468c). Therefore, the genitive marker is conditioned both by the head noun's grammatical number and the dependent noun's status as common or proper noun. The dependent possessor noun determines whether an attributive or a genitive marker is used. The head possessee noun determines number/agreement class marking.

### 5.5.1.3 Properties

A semantic sub-category of possession are those noun + noun constructions that express a property of the head noun such as ‘old’, ‘beautiful’, or ‘strong’. These properties are expressed by nouns in Gyeli; examples are given in (469).

- (469) a. só       wà       ntúlé  
Ø1.friend 1:ATT 3.oldness  
'old friend'
- b. b-ùdâ       bá       bé-bé  
ba2-woman 2:ATT be8-beauty  
'beautiful women'
- c. m-ùdî       wà       ngvùlé  
N1-person 1:ATT Ø9.strength  
'strong person'

The property noun + noun constructions differ structurally from nominal possessives in the role of the head noun. While in nominal possessive constructions the head noun is the possessee, in property noun + noun constructions the head noun is rather the possessor in the unmarked case following a pattern ‘a man of strength’. The order of head and dependent noun can, however, be reversed while the basic meaning remains the same, as in (470).

- (470) a. m-ùdû wà tílì  
N1-man 1:ATT Ø7.smallness  
'small man'
- b. tílì yá m-ùdû  
Ø7.smallness 7:ATT N1-man  
'small man/smallness of man'

(470a) exhibits the unmarked order which can literally be translated as ‘man of smallness’. In contrast, the order of the nouns is reverse in (470b). This case is ambiguous because it can mean either ‘the smallness of the man’, so talking about his size. Or it can still refer to the man himself in the sense of ‘a midget of a man’. The reversal in the second sense seems more to have pragmatic functions of irony or emphasis which is something that needs further research.

#### 5.5.1.4 Nominal quantifiers

Another extension of the canonical noun + noun construction concerns expression of quantification. Some quantifiers in Gyeli are nouns and combine with the noun that they quantify as the head of the construction. Nominal quantifiers include numerals, and non-numeral modifiers such as ‘many’, ‘few’, ‘a certain’, ‘some’, and partitive quantifiers such as ‘half’.

**Numerals** Some monomorphemic numerals in Gyeli constitute nouns. As discussed in Section 5.7 on enumeratives, these are the bases of the system, namely *le-wímò* ‘10’ (cl. 5), *bwúyà* ‘100’ (cl. 7), and *túdyíni* ‘1000’ (cl. 1). Being nouns themselves, they do not agree with the noun they quantify. Instead, they can become the head of a noun + noun genitive construction of which the nominal numeral is the head as exemplified in (471). The two nouns are linked by an attributive marker that can optionally be omitted.

- (471) a. lè-wúmò (lé) bá-só  
5cl-ten 5:ATT ba2-friend  
'ten friends'
- b. bwúyà (yá) bá-só  
7.hundred 7:ATT ba2-friend  
'hundred friends'
- c. tódyínì (wà) bà-só  
1.thousand 1:ATT ba2-friend  
'thousand friends'

The noun + noun construction with an attributive marker is the preferred option to express nominal cardinals which speakers would judge as 'good Gyeli'. Nevertheless, speakers sometimes seem to generalize characteristics of the majority modifier numerals and thus also allow for nominal numerals in a modifier numeral position, i.e. following the quantified noun as in (472). The two nouns are then juxtaposed without any attributive marker, thus copying the syntax of noun + modifier numeral noun phrases.

- (472) a. bà-só lè-wúmò  
ba2-friend 1e5-ten  
'ten friends'
- b. bà-só bwúyà  
ba2-friend 7.hundred  
'hundred friends'
- c. bà-só tódyínì  
ba2-friend 1.thousand  
'thousand friends'

*bvúbvù nyà 'many, lots of'* Many quantifiers in Gyeli are expressed by a noun + noun genitive construction as described in Section 3.8.2.1. In these cases, a quantifying noun serves as head of the construction, the quantified noun is linked by an attributive marker that agrees with the head noun as in (473).

- (473) bvúbvù nyà b-ùdì  
Ø9.multitude 9:ATT ba2-people  
'many people'

Only a few quantifiers in Gyeli make a distinction between countable and non-countable nouns, for instance ‘each’ or numeral quantifiers, as I will show below.  *bvúbvù* ‘many’, however, is used for both countable and non-countable nouns. (474) provides examples of quantified nouns which semantically belong to liquids or granular aggregates and which typically are not countable. Also in Gyeli, these mass nouns cannot occur with a numeral, but they take the same intersective quantifier (as defined in Section 3.8.1.3) for ‘many, lots’ as countable nouns.

- (474) a. bvúbvù nyà mà-jíwó  
           ∅9.multitude 9:ATT ma6-water  
           ‘lots of water’
- b. bvúbvù nyà ndísì  
           ∅9.multitude 9:ATT ∅3.rice  
           ‘lots of rice’
- c. bvúbvù nyà mì-nsé  
           ∅9.multitude 9:ATT mi4-sand  
           ‘lots of (types of) sand’

*mwánò wà* ‘child of (few, little)’ The counterpart to  *bvúbvù* ‘many, lots’ is *mwánò* ‘little’ and *bwánò* ‘few’. The primary lexical meaning of *mwánò/bwánò* is ‘child/children’. In a compound with a (countable) noun, however, it also has the meaning of ‘small (in size)’, as shown in (475a). This is quite typical for many Bantu languages. Used in a noun + noun genitive construction (with an attributive marker for countable nouns) as in (475b), one gets the quantifying interpretation of smallness in number rather than size.

- (475) a. b-wánò bá-kóbè  
           ba2-small ba2-cup  
           ‘small cups’
- b. b-wánò bá bá-kóbè  
           ba2-small 2:ATT ba2-cup  
           ‘few cups’

In some cases of countable nouns, however, the attributive marker can be omitted while the construction maintains a quantifying meaning rather than talking about size as in (476).

- (476) a. b-wánj̄ bá má-ntúà  
           ba2-small 2:ATT ma6-mango  
           ‘few mangoes’
- b. b-wánj̄ má-ntúà  
           ba2-small ma6-mango  
           ‘few mangoes’

This feeds into the issue of a possible attributive marker omission discussed in Section 3.8.3.2. It is not clear at the moment, which factors select for a preference of attributive marker use or omission in quantifying constructions with countable nouns. When asked what they would say for ‘small mangoes’, speakers state that they prefer the use of the adjective *píyj̄* ‘small’ for mangoes, as in (477). It is not clear what semantically selects for either *píyj̄* or *mwánj̄* when talking about smallness in size.

- (477) mà-ntúà má píyj̄  
       ma6-mango 6:ATT small  
       ‘small mangoes’

In contrast to  *bvúbvù* ‘many, lots’, ‘few, little’ is sensitive to countability distinctions. With countable nouns, obligatorily the plural form *bwánj̄* is used as in (475b) since ‘few’ is inherently plural. For uncountable nouns, however, the singular form *mwánj̄* ‘little’ is used in a compound construction with a singular non-countable noun, as in (478). Note also that this construction is a compound rather than a noun + noun genitive construction since using an attributive marker, as in (478c), is prohibited. So, this construction is parallel to the one in (475a).

- (478) a. m-wánj̄ nsé  
           N1-small Ø3.sand  
           ‘little sand’
- b. m-wánj̄ ndísì  
           N1-small Ø3.rice  
           ‘little rice’
- c. \*m-wánj̄ wà nsé  
           N1-small 1:ATT Ø3.sand  
           ‘little sand’

It is possible to use the plural of uncountable nouns as in (479). In these cases, the quantifying noun has to take its plural form as well. Still, in contrast to countable nouns, these constructions never come with an attributive marker. The semantic difference between singular and plural forms of mass nouns such as ‘sand’ or ‘rice’ seems context dependent. It could mean, on the one hand, that one is talking about a huge quantity of ‘sand’ or ‘rice’. On the other hand, one gets, according to the context, the reading of ‘different types/qualities’ (e.g. ‘different types of sand’) or ‘different entities’ (e.g. ‘different bags of rice’) of ‘sand’ or ‘rice’.

- (479) a. b-wánjì mì-nsé  
ba2-small mi4-sand  
'little sand'
- b. b-wánjì mì-ndísì  
ba2-small mi4-rice  
'little rice'

In contrast to other uncountable nouns such as ‘rice’ or ‘sand’ which have a singular and a plural form, liquids only have a transnumeral form in class 6 without any singular counterpart. They behave morphosyntactically differently because unlike in (479), the transnumeral class 6 does not allow the plural form of the quantifier noun, but requires its singular form, as shown in (480).

- (480) a. m-wánjì mà-jíwó  
N1-small ma6-water  
'little water'
- b. \*b-wánjì mà-jíwó  
ba2-small ma6-water  
'little water'

Countable nouns usually occur with the plural form *bwánjì* in a noun + noun attributive construction. Granular aggregates do have a plural form (even though they are not countable in the sense that one can use them with numerals) and use the singular form *mwánjì* for singular nouns and the plural form *bwánjì* for plural nouns. They differ from countable nouns in that they never seem to come with an attributive marker in a genitive construction, but rather in a compound. Finally, liquid mass nouns are again different

from granular aggregates in that they morphologically always appear in a plural form since they lack a singular. Unlike granular aggregates, they do not take a plural quantifier noun but the singular form *mwánò* while, parallel to granular aggregates, they do not come with an attributive construction.

Liquid mass nouns in Gyeli show an interesting difference to Mabi, the closest relative of Gyeli, since in Mabi, ‘little water’ is expressed with the plural form of the quantifying noun as *bwa majiwɔ*.

***njìmò wá* ‘a certain quantity (some)’** Gyeli does not make any further distinctions in terms of approximate quantities other than ‘many’ and ‘few’, i.e. additional quantifiers such as ‘a couple’ or ‘several’ do not exist. There is a means, however, to express unspecificity of both entity and number: *njìmò wá* ‘a certain’ or *quelconque* in French. Using this quantifier expresses that the entity is not known or specified and also its number or amount remains unspecified.

*njìmò wá* is used with both singular and plural nouns (481), as well as countable and uncountable nouns (482), while the quantifying head noun is invariable and does not take, in contrast to *mwánò/bwánò* ‘few, little’, singular or plural forms depending on the quantified noun.

- (481) a. njìmò wá m-ùdì  
Ø3.certain 3:ATT N1-person  
'a certain person'
  - b. njìmò wá b-ùdì  
Ø3.certain 3:ATT ba2-people  
'certain people'
- (482) a. njìmò wá mà-jíwó  
Ø3.certain ma6-water  
'certain water'
  - b. njìmò wá mí-nsé  
Ø3.certain 3:ATT mi4-sand  
'certain sands'

***bímbú yá* ‘quantity’** Another quantifier that expresses unspecificity is *bímbú yá* ‘a quantity of’. In contrast to *njìmò wá* ‘a certain’, the entity is not unknown, but its number or amount is unspecified.

Just as the genitive construction with *bvúbvù* ‘many, lot’, here too the quantifying noun serves as head in the noun + noun construction and links the quantified noun with an attributive marker that agrees with the head noun, as in (483). Also, both countable and uncountable nouns can be used with *bímbú* *yá*, i.e. this quantifier is not sensitive to the mass/count distinction.

- (483) a. bímbú      yá      b-ùdì  
       Ø7.quantity 7:ATT ba2-people  
       ‘a certain quantity of people (some people)’
- b. bímbú      yá      mà-jíwó  
       Ø7.quantity 7:ATT ma6-water  
       ‘a certain quantity of water (some water)’

Then, the unspecific noun quantifier can yet be made more specific in a combination with one of the other intersective quantifiers such as *bvúbvù* ‘many’ and *mwánò/bwánò* ‘few’ as shown in (484). Just like unspecific uses of *bímbú* as in (483), these constructions are not sensitive to a mass/count distinction as it is with *mwánò/bwánò* ‘few’.

- (484) a. m-wánò bímbú      yá      b-ùdì  
       N1-small Ø7.quantity 7:ATT ba2-people  
       ‘a small quantity of people’
- b. m-wánò bímbú      yá      ndísì  
       N1-small Ø7.quantity 7:ATT Ø3.rice  
       ‘a small quantity of rice’

*tsílè yá ’half of’* Gyeli only has few proportionality quantifiers, one of which is *tsílè yá* ‘half of’. This quantifying noun is semantically sensitive to a mass/count distinction concerning plural nouns in so far as countable nouns usually come as material entities that can be split into half. *tsílè* ‘half’ refers to material halves rather than half in terms of number. If the half of number is meant rather than splitting something numerically into half, this has to be made explicit with countable nouns.

- (485) a. tsílè      yá      b-ùdì  
       Ø7.half 7:ATT ba2-people  
       ‘the half of people (their bodies)’

- b. tsílè    yá    tâ    yá    b-ùdì  
 Ø7.half 7:ATT Ø7.number ba2-people  
 ‘half of the people (their number)’

This distinction does not have to be made, however, for liquid mass nouns where there is only one reading for ‘half of the water’, for instance, as in (486).

- (486) tsílè    yá    má-jíwò  
 Ø7.half 7:ATT ma6-water  
 ‘half of the water’

Other proportionality quantifiers such as ‘a quarter’ or ‘a third’ do not exist in Gyeli, but one could further subdivide ‘a half’ by saying ‘a certain part of half’ as in (487).

- (487) njìmò    wá    mpá’à    wá    tsílè  
 Ø3.certain 3:ATT Ø3.part 3:ATT half  
 ‘a certain part of half’

### 5.5.1.5 Nominal locatives

Another function of noun + noun constructions is to express location that is more specific than just the locative preposition *é* as discussed in Section 3.10.1.1. Examples (488) through (494) list (rather exhaustively) the different locative noun + noun constructions.

- (488) on top/over

- (é) dy-úwò    lé    ndáwò  
 LOC le5-behind 5:ATT Ø9.house  
 ‘on top/over the house’

- (489) under

- (é) sí    yá    ndáwò  
 LOC Ø7.ground 7:ATT Ø9.house  
 ‘under the house’

- (490) behind

- (é) písè    yá    ndáwò  
 LOC Ø7.behind 7:ATT Ø9.house

‘behind the house’

- (491) in front

(é) (mbómbó) sò yá ndáwò  
 LOC Ø9.face Ø7.front 7:ATT Ø9.house  
 ‘in front of the house’

- (492) next to

(é) ngwálò yá ndáwò  
 LOC Ø7.side 7:ATT Ø9.house  
 ‘next to the house’

- (493) opposite

(é) mwádèká yá ndáwò  
 LOC Ø7.other.side 7:ATT Ø9.house  
 ‘opposite of the house’

- (494) in the middle

(é) titímó yá ndáwò  
 LOC Ø7.middle 7:ATT Ø9.house  
 ‘in the middle of the house’

In comparison to a cross-linguistic tendency to express many specific locatives with body part nouns, as noted by Wilkins (1996), Gyeli does not make use of this source in order to express location. It seems rather that Gyeli uses landmark nouns such as *dyúwò* ‘top’ (French *haut*), which is also the word for ‘sky’, or *sí* ‘ground’. Also *písè* ‘back/behind’ differs from the body part ‘back’ which is *nkòŋ*. Some of these locative nouns can also be used postnominally as adpositions (Chapter 3.10.2.2).

### 5.5.2 Noun + adjective

While attributive constructions typically involve two nouns, a head and a dependent noun, the slot for the dependent noun can also be filled by a member of a different part of speech. Adjectives (Chapter 3.3), for instance, enter an attributive construction when combined with a noun, as shown for adjectives of value in (495) and (496). Both examples show the change in number/class of the head noun while the adjective is invariable.

- (495) a. m-wánò wà **mpà**  
           N1-child 1:ATT good  
           ‘good child’

- b. b-wánò bá **mpà**  
       ba2-child 2:ATT good  
       ‘good children’

- (496) a. m-wánò wà **bíwò**  
           N1-child 1:ATT bad  
           ‘bad child’

- b. b-wánò bá **bíwò**  
       ba2-child 2:ATT bad  
       ‘bad children’

These constructions are parallel to noun + noun constructions of properties as described in Section 5.5.1.3. The head noun is, so to speak, the possessor of a property which is expressed either by a dependent noun or by an adjective. The same is true for properties describing size as in (497) or colors as in (498).

- (497) a. m-wánò wà **píyò**  
           N1-child 1:ATT small  
           ‘small child’

- b. m-wánò wà **nénè**  
           N1-child 1:ATT big  
           ‘big child’

- (498) a. nsé wá **nábèbè**  
           ∅3.sand 3:ATT red  
           ‘red sand’

- b. nsé wá **návyûvyû**  
           ∅3.sand 3:ATT black  
           ‘black sand’

### 5.5.3 Noun + verb

Though less frequently, also verbs can be used in a noun + attributive construction as for instance in (499). Van de Velde (2013: 224) describes such constructions as deviations from the canonical dependent constituent R<sub>2</sub>

which are apparently found frequently in other Bantu languages such as Mongo or Ruwund.

- (499) sá      yá      dè  
       Ø7.thing 7:ATT eat  
       'something to eat'

### 5.5.4 Noun + interrogative

Gyeli has different types of noun + interrogative constructions where the interrogative serves different purposes, i.e. refers to different entities. On the one hand, the interrogative can refer to the head noun of the construction itself as in ‘which man?’ or ‘how many men?’. On the other hand, the head noun may systematically be used in a more or less grammaticalized way in order to form other complex interrogative constructions as it is the case, for instance, with the expression for ‘why’: *púù yá gyí?* which literally means ‘what reason?’. In the following, I will outline constructions with *vé* ‘which’ and *nýé* ‘how many’ and finally turn to constructions involving *púù* ‘reason’.

#### 5.5.4.1 *vé* ‘which’

The interrogative word *vé* ‘which’ is used as a second constituent in a noun - attributive - interrogative construction as shown in Table 5.9.

AGR class	Noun	ATT marker	INTERR	Gloss
1	m-ùdì	wà	vé	‘which person?’
2	b-ùdì	bá	vé	‘which people?’
3	nkwé	wá	vé	‘which basket?’
4	mi-nkwé	mí	vé	‘which baskets?’
5	le-lá	lé	vé	‘which fish trap?’
6	ma-má	má	vé	‘which fish traps?’
7	síngì	yá	vé	‘which cat?’
8	be-síngì	bé	vé	‘which cats?’
9	ndáwò	nyà	vé	‘which house?’

Table 5.9: Interrogative word ‘which’ in the different agreement classes

**Temporal interrogative constructions with *vé*** Further, *vé* ‘which’ is systematically used in order to ask for temporal adjuncts. There are two interrogative constructions asking for temporal adjuncts which can both be translated with ‘when’:

*wùlà yá vé* ‘when (which time/hour)’

*dúwò lé vé* ‘when (which day)’

Speakers use either one of the two depending on what the expected answer would provide as a time frame, i.e. based on whether the temporal information is about a day or rather about a particular time which is measured in hours or related to a part of the day, for instance morning or night.

**‘Type’ interrogative constructions with *vé*** Interrogative constructions with ‘which’ can be yet more complex and include in fact two attributives, when specifying the question by the noun *kà* ‘type/kind’ as shown in (500).

- (500) lèkà      lé      kálàdè      yá      vé  
       le-kà      lé      kálàdè      yá      vé  
       le5-kind 5:ATT Ø7.kalade 7:ATT which  
       ‘which kind of book?’

In these cases, the interrogative word *vé* still enters an attributive construction with the noun *kálàdè* ‘book’ rather than with *kà* ‘type’ while *kálàdè* ‘book’ serves as second constituent in the first attributive construction which has *kà* ‘type’ as head noun.

#### 5.5.4.2 *níyè* ‘how many’

The interrogative word *níyè* ‘how many’ behaves similar to *vé* ‘which’. Semantically, however, the use of ‘how many’ is restricted to plural noun classes, which are listed in Table 5.10.

AGR class	Noun	ATT marker	INTERR	Gloss
2	b-ùdì	bá	níyè	‘how many people?’
4	mì-nkwé	mí	níyè	‘how many baskets?’
6	mà-má	má	níyè	‘how many fish traps?’
8	bè-síngì	bé	níyè	‘how many cats?’

Table 5.10: Interrogative word ‘how many’ in the different agreement classes

*níyè* ‘how many’ can also be used when asking for temporal adjuncts as shown in (501).

- (501) a. à        ké [màwùlà máláálè]  
           a        kè-H [ma-wùlà má-láálè]  
           1.PST1 go-R ma6-hour 6-three  
           ‘I walked for three hours’
- b. à        ké    màwùlà    má    níyè  
           a        kè-H ma-wùlà    má    níyè  
           1.PST1 go-R ma6-hour 6:ATT how.many  
           ‘For how many hours did he walk?’

#### 5.5.4.3 *púù* ‘cause’

*púù* ‘cause’ is systematically used as a head noun in noun + interrogative constructions. The second constituent that *púù* ‘cause’ is the head of, is another invariable interrogative word, namely either *nzá* ‘who’, *gyí* ‘what’, or *vé* ‘which’. Different types of questions are formed with *púù*, ranging from benefactive to purpose or reason questions. Possible combinations are the following:

- púù yá gyí* ‘why (what cause)’  
*púù yá vé* ‘why (which cause)’  
*púù ngá nzá* ‘for whom’

**Purpose/reason** In order to express a question related to purpose or reason, the interrogative *gyí* ‘what’ is used as second constituent, as shown in (502).

- (502) púù        yá        gyí        wé        gyàgá        kálàdè        yî  
           púù        yá        gyí        wé-H        gyàga-H        kálàdè        yî<sup>1</sup>  
           Ø7.cause 7:ATT what 2S-PRES buy-R        Ø7.book 7.DEM.PROX  
           ‘Why do you buy this book?’

*gyí* can also be substituted by *vé* ‘which’ for the same question as shown in (503). The use of *gyí* as in (502) is, however, preferred.

- (503) púù        yá        vé        wé        gyàgá        kálàdè        yî  
           púù        yá        vé        wé-H        gyàga-H        kálàdè        yî<sup>1</sup>  
           Ø7.cause 7:ATT which 2S-PRES buy-R        Ø7.book 7.DEM.PROX  
           ‘Why do you buy this book?’

**Benefactive** *púù* in interrogative constructions also frequently has a benefactive meaning and speakers would spontaneously translate *púù* *yá* as ‘for’. Typically, the benefactor is human and so the interrogative *nzá* ‘who’ is then used as second constituent as shown in (504). Further, since the expected answer likely entails a proper name, the question word ‘for whom’ always has to be formed with the genitive marker *ngá* rather than an attributive marker.<sup>26</sup>

- (504) púù      ngá    nzá    wé      gyámbó    bédéwò  
       púù      ngá    nzá    we-H      gyámbó-H    H-be-déwò  
       Ø7.cause GEN who 2S-PRES cook-R    OBJ.LINK-be8-food  
       ‘For whom do you cook food?’

Finally, more complex interrogative constructions can be formed with a double attributive construction as in (505). In this example, *púù* ‘cause’ serves again as head noun of an attributive construction while its dependent constituent *b-ùdì* ‘people’ is at the same time the head of a second attributive construction with the interrogative word *níyè* ‘how many’ as second constituent.

- (505) púù      yá      b-ùdì      bá      níyè      wé      gyámbó  
       púù      yá      b-ùdì      bá      níyè      we-H      gyámbó-H  
       Ø7.cause 7:ATT ba2-person 2:ATT how.many 2S-PRES cook-R  
                 bédéwò  
                 H-be-déwò  
                 OBJ.LINK-be8-food  
       ‘For how many people do you cook food?’

### 5.5.5 Noun + numeral: ordinal numerals

Ordinal numerals differ from cardinals in that they do not assign an attributive quantification to a noun. Their function is rather to rank the noun within a given set ('first', 'second', 'third', and so on), as discussed in Borchartd (2011: 111). Stoltz & Veselinova (2005: 1) state that ordinals can morphologically be analyzed in a ‘derivational dependence’ to cardinals while Greenberg (1978: 288) points out that ordinals usually have a higher degree of overt marking than cardinals.

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<sup>26</sup>The different paradigms for genitive and attributive markers are discussed in Sections 3.8.3.2 and 3.8.2.1.

In Gyeli, ordinals generally take the numeral root that is found also in cardinals and enumeratives, as shown in Table 5.11. In that, they are derived from cardinal numerals. Also, they are morphologically more marked since they enter a genitive construction with the noun they modify, being linked by an attributive marker. (For more information of genitive constructions and attributives in particular, see Sections 3.8.2.1 and 3.8.3.2 respectively.)

Examples of ordinal numerals		Gloss
<i>kùsì wà</i>	<b>m-vúdû or mà-tálá</b>	'the first parrot'
<i>kùsì wà</i>	<b>m-báà</b>	'the second parrot'
<i>kùsì wà</i>	<b>n-láálè</b>	'the third parrot'
<i>kùsì wà</i>	<b>nâ</b>	'the forth parrot'
<i>kùsì wà</i>	<b>n-tánè</b>	'the fifth parrot'
<i>kùsì wà</i>	<b>ntùs</b>	'the sixth parrot'
<i>kùsì wà</i>	<b>mpúèré</b>	'the seventh parrot'
<i>kùsì wà</i>	<b>lòmbì</b>	'the eighth parrot'
<i>kùsì wà</i>	<b>rèbvùá</b>	'the ninth parrot'
<i>kùsì wà</i>	<b>le-wúmò</b>	'the tenth parrot'
<i>kùsì wà</i>	<b>le-wúmò ná vúdû</b>	'the eleventh parrot'
<i>kùsì wà</i>	<b>ma-wúmò má-báà</b>	'the twentieth parrot'
<i>kùsì wà</i>	<b>bwíyà</b>	'the hundredth parrot'
<i>kùsì wà</i>	<b>tɔdyíni</b>	'the thousandth parrot'

Table 5.11: Ordinal numerals

While ordinal roots generally have the same form as cardinals, there is one exception. For ‘first’, two options seem to be acceptable to express this ordinal. Either, it can take the shape found also in the cardinal roots, namely *-vúdû*, or it can take a suppletive form *ma-tálá* ‘beginning’. Further, the simplex modifier numerals (‘2’ through ‘5’) do not take the class 8 default agreement prefix as they do in the enumerative series or a prefix that agrees with the modified noun, but they take a nasal.<sup>27</sup> Also, *vúdû* takes a nasal in the agreement classes 1, 3, and 9 while in classes 5 and 7 only the root appears without any nasal.

Naturally, ordinals always occur with a singular noun and thus modifiers take singular agreement markers because an ordinal depicts one rank among a set of entities. (506) through (509) give examples of ordinals modifying

<sup>27</sup>The nasal does not surface in *-nâ* since this root starts with a nasal itself so that the prefix nasal gets assimilated.

nouns of different noun classes. (506) contrasts the noun classes which trigger a nasal on *vúdū* and those that don't giving examples from all possible noun classes. Concerning (507), I only provide noun class examples for classes 1 and 7 since then the ordinal root does not change anymore. (507) illustrates a construction where the ordinal modifier takes a nasal prefix while it does not in (508). Finally, (509) exemplifies that nominal numerals are integrated into the genitive construction exactly the same way modifier numerals are.

- (506) a. só      wà      mvúdū  
       Ø1.friend 1:ATT one  
       ‘the first friend’
- b. mbê      wá      mvúdū  
       Ø3.door 3:ATT one  
       ‘the first door’
- c. lè-kí      lí      vúdū  
       le5-egg 5:ATT one  
       ‘the first egg’
- d. sâ      yá      vúdū  
       Ø7.thing 7:ATT one  
       ‘the first thing’
- e. ntémò      nyà      mvúdū  
       Ø9.dream 9:ATT one  
       ‘the first dream’
- (507) a. só      wà      nláálè  
       Ø1.friend 1:ATT three  
       ‘the third friend’
- b. sâ      yá      nláálè  
       Ø7.thing 7:ATT three  
       ‘the third thing’
- (508) a. só      wà      ntù́  
       Ø1.friend 1:ATT six  
       ‘the sixth friend’
- b. sâ      yá      ntù́  
       Ø7.thing 7:ATT six  
       ‘the sixth thing’

- (509) a. só        wà        lè-wúmò  
           Ø1.friend 1:ATT le5-ten  
           ‘the tenth friend’
- b. sâ        yá        lè-wúmò  
           Ø7.thing 7:ATT le5-ten  
           ‘the tenth thing’

## 5.6 Noun phrase coordination

Noun phrases are coordinated by means of the comitative marker *nà* (Chapter 3.10.1.2). Coordinated noun phrases can be symmetric in the parts of speech they contain, as in (510), which links two phrases with bare noun.

- (510) m-ùdû    nà    m-ùdâ  
           N1-man COM N1-woman  
           ‘man and woman’

Noun phrase coordination can be asymmetric in terms of the parts of speech both constituents contain. In (511), for instance, a pronoun and a bare noun are coordinated.

- (511) bá    nà    m-ùdâ  
           2.SBJ COM N1-woman  
           ‘they and the woman’

Noun phrase coordination can also be asymmetric with respect to the complexity of each constituent. In (512), the first noun phrase constitutes a bare noun, while the second constituent is a noun plus modifier.

- (512) m-ùdâ    nà    m-wánò    w-ê  
           N1-woman COM N1-child 1-POSS.3S  
           ‘the woman and her child’

Just like the structure of simple noun phrases is usually restricted to a maximum of two modifiers, and even this is a rare occurrence in natural text (Section 5.1), the structure of noun phrases that are coordinated are generally fairly simple. One exception to this are complex numerals, especially in cardinal numeral constructions that involve a quantified head noun.

For the coordination numerals there are different options as to where the quantified noun can appear in the construction. Just like in the nominal numeral constructions, the quantified noun can enter a genitive construction with the nominal numeral by preceding it and linking the two nouns with an attributive marker. The addend then follows the quantified noun as shown in (513). If the simplex numeral in the second additive constituent is a modifier that takes an agreement marker, it will agree with the quantified noun. Thus, ‘2’ agrees with ‘person’ in (513b). As such, the coordination construction is the second constituent of a noun + noun construction, while the second constituent of the coordination is just the numeral.

- (513) a. [lè-wúmò lé [b-ùdì ná vúdū]]  
           le5-ten 5:ATT ba2-person COM one  
           ‘eleven people’
- b. [lè-wúmò lé [b-ùdì ná bá-báà]]  
           le5-ten 5:ATT ba2-person COM 2-two  
           ‘twelve people’

The other option as to the position of the quantified noun is to appear at the beginning, as shown in (514). The coordinated complex numeral, i.e. nominal numeral + modifier numeral, follows the quantified noun. In this case, the whole numeral construction is treated like a simplex modifier numeral. As in the first construction type, the simplex modifier numerals in the second constituent that take agreement markers agree with the quantified noun, as in (514a).

- (514) a. [b-ùdì [lè-wúmò ná vúdū]]  
           ba2-person le5-ten COM one  
           ‘eleven people’
- b. [b-ùdì [lè-wúmò ná bá-báà]]  
           ba2-person le5-ten COM 2-two  
           ‘twelve people’

For even more complex numerals containing multiple arithmetic operations and thus a combination of numeral noun phrases (multiplication) and coordination (addition), the quantified noun is preferably integrated into the least complex additive constituents. If, for instance, the first constituent in an addition coordination constitutes a base while the second constituent

consists of a multiplication operation and thus a N + Num noun phrase, the quantified noun will enter the first constituent, as in (515a). If the first constituent is a product while the other is not, the quantified noun will enter the second constituent, as in (515b). If both constituents are complex, the quantified noun precedes the whole construction, as in (515c). Having the quantified numeral in the initial position is an option in any case. Every construction in (515) involves the coordination of an attributive noun + noun construction and a simple noun phrase containing a bare noun and numeral modifier.

- (515) a. [[bwúyà    yá    b-ùdì]        ná    [mà-wúmò má-tánè]]  
7.hundred 7:ATT ba2-person COM ma6-ten 6-five  
'one hundred-fifty people'
- b. [[mà-wúmò má-báà] ná    [b-ùdì        bá-báà]]  
ma6-ten 6-two COM ba2-person 2-two  
'twenty-two people'
- c. [b-ùdì        [[bì-bwúyà    bék-tánè] ná    [mà-wúmò má-nâ]]]  
ba2-person be8-hundred 8-five COM ma6-ten 6-four  
'five hundred-forty people'

One could investigate very complex numeral constructions and the noun they quantify more thoroughly, but this seems rather artificial since numerals, at least very complex ones, are rarely used and many speakers have not mastered them.

## 5.7 Excursus on the semantic category of numerals

In this section, I discuss the various parts of speech that numerals are distributed over. I also explain the mathematical structures used in forming complex numerals after providing some ethnographic notes on number use among the Bagyeli.

**Ethnographic notes in number use among the Bagyeli** Generally, the use of numerals varies widely among speakers in that speakers show varying competence in number use. This most likely correlates with both the

degree of education and regular involvement in situations where number knowledge is required, for instance regular day labor. Speakers who have never been to school and/or who mostly stay in the Gyeli community without closer interaction with the farming Bantu show a limited competence in counting and numeral use. Many speakers cannot count further than ‘10’, sometimes even that only with difficulties. Also, number estimation tasks indicating the rough amount of given entities seem to be very difficult. Thus, many speakers cannot give an estimate of, for instance, the number of wooden sticks needed for making a fish trap which is about 40 sticks. The Bagyeli generally do not know their age and their age judgements often seem far from reality. Exact numbers do not play any role in the traditional Bagyeli lives. Of course, the Bagyeli today have to deal with money, but even there counting is not really required since bank notes seem not to be seen as a series that can be counted, but rather as individual bank notes which have their different names and values.<sup>28</sup>

The Bagyeli, however, who have had at least basic schooling and/or are in a professional relationship with Bantu farmers, do not have any problems counting even to higher numbers. In comparison to other Gyeli villages, this is very often the case in Ngolo, the language community this grammar is based on. It seems that in the Bulu contact region schooling is better than in other regions. This is why the children here get longer and/or more regular schooling than Bagyeli children in other language contact areas. Further, some men are (sporadically) working on the nearby palm oil and rubber plantations with Bantu farmers where they have more contact with numbers in terms of measurements, monetary value and time. Therefore, numeral competence is comparatively high in Ngolo in contrast to, for instance, the village Bibira in the coastal Mabi region.

**Arithmetic structure of the Gyeli numeral system** One typical use of numerals is counting. If counting is abstract and not referring explicitly to a certain entity, the numerals used are called enumeratives. They occur without any noun, in contrast to other numeral series such as cardinals

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<sup>28</sup>Nevertheless, the Bagyeli are just as competent in comparative number estimation tasks as people with a higher/literate educational background. In tasks that do not ask for the exact or rough number of some given entities, but that rather ask whether ‘one heap has more than the other’, the Bagyeli can definitely tell which one of two units contains more dots.

(Chapter 3.8.1.1 and 3.8.1.5) and Section 5.6, ordinals (Section 5.5.5), or distributives (Section 5.3).

Numeral systems have an internal structure, and I will explain the structure of the Gyeli numeral system on the basis of enumeratives, even though this is also true for other numeral series, especially for the cardinals. Morphologically, one can distinguish simplex from complex numerals. Simplex numerals are also called ‘atoms’ or ‘basic numerals’ in the literature, and denote those numerals that are monomophemic, i.e. they cannot be split up into further numeric elements (see Borchardt (2011: 25)). According to Greenberg (1978: 255), every numeral system has such numerals that ‘receive simple lexical representation’.

Functionally, simplex numerals can be further subdivided in terms of their role in the formation of complex numerals. The majority of simplex numerals serve as an argument that linearly changes within a sequence of a mathematic operation. For instance, the English numerals ‘21’ through ‘29’ are expressed via an addition sequence where the second argument changes linearly from ‘twenty-one’ to ‘twenty-two’ to ‘twenty-three’ and so on. A stable argument such as ‘**twenty-**’ is a ‘regular reference point in series of the same arithmetic operation’, and is commonly referred to as a ‘base’ (cf. Borchardt 2011: 23).

The functional distinction of these two types of arguments in an arithmetic operation that helps to form complex numerals is also reflected in the morphosyntactic behavior of numeral words. Thus, bases in Gyeli, namely ‘10’, ‘100’, and ‘1000’, are nouns (Section 5.5.1.4), while the other simplex numerals are not. The numerals ‘2’ through ‘5’ are clearly agreeing modifiers (Section 3.8.1.5) which take agreement prefixes. ‘1’ also agrees with the head noun, but exhibits a different agreement pattern than the numerals ‘2’ through ‘5’ (Section 3.8.1.1). The numerals from ‘6’ through ‘9’ (Section 3.8.5.1) are neither nouns nor do they behave like the other modifying numerals in that they are invariable, but occur in the same position as modifier numerals in a cardinal context.

	Gyeli	Mabi
‘1’	vúdù	wúré
‘2’	bí-báà	bá
‘3’	bí-láálè	bí-lá
‘4’	bí-nâ	bí-ná
‘5’	bí-tánè	bí-tán
‘6’	ntù́	ntù́
‘7’	mpúéré	mbúéré
‘8’	lòmbì	lòmbì
‘9’	rèbvùá	rèbvùá
‘10’	lè-wúm̀	wúm
’100’	bwúyà	búyà
’1000’	tódyínì	tógyínì

Table 5.12: Simplex enumeratives in Gyeli and Mabi

Enumeratives take invariably the same form since they do not agree with any head noun but occur on their own. Nevertheless, the simplex numerals from ‘2’ through ‘5’ require a prefix even as enumeratives, as shown in Table 5.12. They take the class 8 *bí*- agreement marker as a default plural prefix (since any number higher than ‘1’ is inherently plural). In contrast, ‘1’ and the numerals from ‘6’ through ‘9’ do not take any prefix as enumeratives. The other simplex numerals, i.e. the bases, are nouns. While *lè-wúm̀* ‘10’ always comes with its noun class prefix *lè*- of class 5, the other two nominal numerals are without noun class prefixes. *bwúyà* ‘100’ belongs to class 7 and *tódyínì* ‘1000’ to class 1. All the nominal numeral bases occur in singular classes, and only take plural prefixes once they are used in the construction of complex numerals.

In contrast to monomorphemic numerals, complex numerals contain two or more numeric elements. Based on the way different numeric elements are combined, Gyeli numerals form a decimal system: complex numerals are formed in reference to ‘10’ or bases that are multiples of ‘10’. According to the *World Atlas of Language Structures*, Comrie (2005: map 131), decimals are the most widespread bases in the numeral systems of the world. While in West Africa many vigesimal systems occur in Niger-Congo languages, especially Benue-Congo, Bantu languages typically have decimal systems. Gyeli is no exception.

Addition → Coordination	Multiplication → Noun phrase
‘11’ lè-wúmò ná vúdù	‘20’ mà-wúmò má-báà
‘12’ lè-wúmò ná bí-báà	‘30’ mà-wúmò má-láálè
‘13’ lè-wúmò ná bí-láálè	‘40’ mà-wúmò má-nâ
‘14’ lè-wúmò ná bí-nâ	‘50’ mà-wúmò má-tánè
‘15’ lè-wúmò ná bí-tánè	‘60’ mà-wúmò ntù́
‘16’ lè-wúmò ná ntù́	‘70’ mà-wúmò mpúéré
‘17’ lè-wúmò ná mpúéré	‘80’ mà-wúmò lòmbì
‘18’ lè-wúmò ná lòmbì	‘90’ mà-wúmò rèbvùá
‘19’ lè-wúmò ná rèbvùá	‘200’ bì-bwúyà bí-báà
	‘2000’ bà-tódyínì bá-báà

Table 5.13: Complex enumeratives in Gyeli

Functionally, Gyeli uses two types of arithmetic operations in order to form complex numerals: addition and multiplication as illustrated in Table 5.13. The different operations are reflected in different grammatical constructions. While addition operations are expressed by coordination, multiplication operations constitute noun phrases made of a nominal noun (the base) and a modifying or invariable simplex numeral.

Numeric elements used in these operations are ordered according to language specific rules. In Gyeli, higher numeric elements occur first, the lower ones second. Speaking in mathematical terms, multiplicands precede multipliers, and augends precede addends.<sup>29</sup> In the following, I will explain both the ordering of arithmetic operations and numeric elements.

The primary operation is addition. Starting out with the lowest base ‘10’, the first complex numeral is ‘11’, expressed as ‘10 + 1’ followed by ‘10 + 2’ and so on. This addition sequence continues as long as the addend is smaller than the augend, i.e. the base. As soon as the addend would be identical or higher in its numeric value, the base gets multiplied and thus the augend is formed by a multiplication operation. This rule holds as long as the multiplier is smaller than the multiplicand. If the multiplier were to

<sup>29</sup>The constituents of a multiplication process are called multiplicands and multipliers. The multiplicand is the number that is multiplied by another number. This other number is called the multiplier. Likewise, addition operations comprise two arguments which form a sum. An augend is the one that another number is added to while the added number is called an addend.

be identical or higher in its numeric value than the multiplicand, the next higher base is used instead. The highest base used is *tídyínì* ‘1000’. Even though logically higher bases would be possible they are not used and not part of the language. If higher numerals than multiples of thousands need to be used, for instance in a monetary context, speakers switch to French. In any case, these are amounts of money the Bagyeli do not interact with.

Both addition and multiplication operations can be combined in one numeral making the numeral even more complex. Multiplication occurs along with addition in one numeral in order to form an additive constituent (either an augend or an addend) by a product. Up to ‘100’, multiplication processes linearly precede addition. This correlates with the rule that the augend has a higher numeric value than the addend. In Table 5.14, the augend is formed by multiplication and the numeric value of the product is higher than the one of the addend.

		Augend	Addend	
Multiplicand	Multiplier			
mà-wúmò	má-báà	ná bí-láálè	‘23’ (10 x 2 + 3)	
mà-wúmò	má-tánè	ná lòmbì	‘58’ (10 x 5 + 8)	
mà-wúmò	mpúèrε	ná bí-nã	‘74’ (10 x 7 + 4)	
mà-wúmò	rèbvùá	ná vúdū	‘91’ (10 x 9 + 1)	

Table 5.14: Multiplication as augend (up to ‘100’)

This situation changes once the multiplier becomes higher than the multiplicand so that instead the next higher base is used. This is the case for the numerals between ‘101’ and ‘199’ and between ‘1001’ through ‘1999’. Then the augend is simply expressed by the next higher base *bwýà* ‘100’ or *tídyínì* ‘1000’ while the addend may be more complex, including for instance a product as shown in Table 5.15.

Augend	Addend		
	Multiplicand	Multiplier	
bwúyà ná	mà-wúmò	má-báà	'120' (100 + 10 x 2)
bwúyà ná	mà-wúmò	ntùó	'160' (100 + 10 x 6)
tódyínì ná	mà-wúmò	má-tánè	'1050' (1000 + 10 x 5)
tódyínì ná	bì-bwúyà	bí-tánè	'1500' (1000 + 100 x 5)

Table 5.15: Multiplication as addend

The higher the base, the more complex the numeral can become. Probably the most complex numeral in Gyeli would include four additive constituents, three of which being formed by a product, namely the multiples of the three Gyeli bases, as shown in (516). Logically, even with these three bases numerals could be more complex, for instance going into the hundred thousands, but as I stated before, their use would be highly artificial since there is no use in Gyeli culture for such high numerals, and most speakers would not be able to form such high numerals in Gyeli.

- (516) bà-tódyínì      bá-tánè ná      bè-bwúyà      bé-báà ná      mà-wúmò  
 ba2-thousand 2-five COM be8-hundred 7-two COM ma6-ten  
 má-láálè ná      lòmbì  
 6-three COM eight  
 '5238 ((1000 x 5) + (100 x 2) + (10 x 3) + 8 )'

Finally, multiple arithmetic operations in a Gyeli numeral do not always have to comprise a combination of multiplication and addition. It is also possible to have multiple addition processes in a numeral without involving any multiplication as shown in Table 5.16. The inverse, however, where a Gyeli numeral consists of multiple multiplication operations without involving addition is not possible.

Addition only			
bwúyà ná	lè-wúmò ná	bí-báà	'112' (100 + 10 + 2)
tódyínì ná	lè-wúmò ná	bí-báà	'1012' (100 + 10 + 2)
tódyínì ná	bwúyà ná	lè-wúmò ná	bí-báà

Table 5.16: Multiple addition operations

# Chapter 6

## The verbal complex

### 6.1 Introduction

In this chapter, I describe the verbal complex and its encoding of the grammatical categories of tense, aspect, mood, and negation. Gyeli has two main verbal construction types: i) those with a single verb, which I call simple predicates, and ii) those with two or three verbs, which I call complex predicates. There are two sub-categories of complex predicates. One is comprised of a single STAMP marker (Chapter 3.9.1), an auxiliary verb and one or two non-finite verbs. The other involves the STAMP marker and a finite form of *bè* ‘be’ which is followed by another STAMP marker and a finite verb form. I present simple predicates in Section 6.2 and complex predicates in Section 6.3.

Simple predicates occur significantly more frequently than complex predicate constructions, as shown in Table 6.1 for the 214 simple verbal clauses (Chapter 7) in the corpus. Complex predicates can be sub-divided into those that occur with a simple STAMP marker and those that have a double STAMP marker. The complex predicates with a simple STAMP marker take an auxiliary and either one or two non-finite main verbs (Sections 6.3.1 and 6.3.2). The constructions with only one main verb constitute roughly three quarters of the complex predicate constructions. Complex predicates with a double STAMP marker are formed by two constituents: a STAMP marker and an inflected form of *bè* ‘be’ and a second STAMP marker that is identical in its reference to the first one and followed by another inflected verb form (Section 6.3.4).

Feature	Frequency	
Simple predicates	158	(73.8%)
Complex predicates	56	(26.2%)
simple STAMP auxiliary constructions	55	(25.7%)
one non-finite verb	42	(76.4%)
two non-finite verbs	13	(23.6%)
double STAMP auxiliary constructions	1	(.5%)
Total	214	

Table 6.1: Distribution of predicate types in simple verbal clauses

The expression of grammatical categories such as tense, aspect, mood, and negation is achieved through multiple strategies for both simple and complex predicates, such as tonal patterns, morphological marking, and periphrastic structures including auxiliaries. Marking of tense and mood is more interdependent than aspect or negation marking: tense and mood categories form an interlocking system, as they are conjointly marked by tonal patterns. I therefore refer to them as ‘tense-mood (TM) categories’. The different verbal predicate structure types do not straightforwardly map onto specific grammatical categories. Instead, simple and complex predicates both encode a range of tense, mood, aspect, or negation categories. There are, however, certain tendencies in the distribution of grammatical categories across predicate types. For instance, tense-mood categories are mainly encoded through simple predicates, while aspect and negation categories are primarily found in complex predicates.

The discussion in this section is organized according to the verbal predicate type, as opposed to the semantic categories. Before proceeding with that analysis, I fix the terminology I use for broad grammatical categories such as tense, mood, negation, aspect, and negation and broadly discuss their encoding in Gyeli.

**Tense** Grammatical tense, and its relation to aspect, has been extensively discussed in the literature. Comrie (1985: 9), for instance, defines tense as “grammaticalised expression of location in time.” Dahl (1985: 25) notes more precisely that “tenses are typically deictic categories, in that they relate time points to the moment of speech. This is then distinguished from aspect, which is comprised of non-deictic categories.” As Comrie (1976: 5) explains, “Aspect is not concerned with relating the time of the situation to

any other time-point, but rather with the internal temporal constituency of the one situation". Or, as Timberlake (2007: 315) puts it: "aspect locates events (and measures their progress or change or results or liminality) in relation to an internal time".

Gyeli is a 'tense language' since tense (and mood) marking is in several respects more prominent than aspect marking. First, aspect marking is not obligatory, but tense and mood are obligatorily marked. Second, no aspect category is present in every tense. Instead, most aspect categories are restricted to a specific tense-mood category in which they can occur. And third, aspect markers cannot occur under negation. Negation marking depends on different tense-mood distinctions. For example, the PRESENT category has a specific negation marking strategy while the FUTURE and the PAST use different negation lexemes. These are, however, determined by the tense-mood categories and not by aspectual categories. Tense categories are discussed in detail in Section 6.2.1.

**Mood and modality** The term 'grammatical mood', as discussed by Nuyts (2016), has come to refer to a heterogeneous set of distinctions: (i) grammatical coding of modal meanings through the verb, (ii) the distinction among basic sentence types and their related illocutionary categories, and (iii) the distinction between indicative and subjunctive or realis and irrealis.

The challenge of adopting the term mood is assuaged by the form-based approach taken in this grammar, for it is not necessary to specify how Gyeli encodes the general (and unclear) category of mood, but rather to examine the different forms and their interpretations, wherein mood simply designates a class of related types of interpretations.

Mood and modality in Gyeli are expressed through various construction types, differing in their structural complexity. The distinction among basic sentence types and their related illocutionary categories is encoded by basic tonal patterns, indicative vs. imperative or subjunctive. The distinction between indicative and subjunctive or realis and irrealis is encoded through additional syntactic tone patterns. Finally, grammatical coding of fine-grained modal meanings is achieved with auxiliaries and/or combinations of tenses (future) or other mood distinctions (subjunctive).

I will refer to mood throughout as pertaining only to grammatical tense-mood categories whereas the term modality will pertain to the more spe-

cific semantic categories, such as possibility or ability. Table 6.2 gives an overview of the expression of different types of modality.

Type	Mood category	
Ability/dynamic (can)	expressed by realis	→ realis H tone
Deontic (must)	expressed by realis	→ realis H tone
Possibility	expressed by irrealis (FUT)	→ no realis H tone
Bouletic	expressed by irrealis (SBJV)	→ no realis H tone

Table 6.2: Modality expression and mood

The mood distinction between realis and irrealis is presented in Section 6.2.1, while modality categories are described in Section 6.3.2.

**Aspect** Tense and aspect are often referred to as an interlocking system. It sometimes can be hard to distinguish whether a form expresses tense or aspect since, in many languages, forms may express both at the same time. For this reason, some authors (Dahl 1985; Bybee et al. 1994) prefer to investigate so-called *gram-types*, i.e. categories such as ‘future’, ‘past’, ‘perfective’, and ‘imperfective’, without attempting to group these grams into higher categories such as tense and aspect. In my account of Gyeli tense-mood-aspect categories, I will also consider gram-type like categories, based on their formal commonalities. I represent these categories with small capitals, for instance PROGRESSIVE or HABITUAL.

Tense-mood and aspect marking are for the most part differentiated formally. While tense-mood is mainly expressed tonally (and obligatorily) on the STAMP marker and verb, aspect marking is achieved through (optional) segmental material, mainly auxiliary verbs. Aspect marking is also significantly less frequent in the corpus with 122 occurrences than utterances with tense-mood marking only (369 occurrences).

Gyeli has eight aspect markers which are presented in Table 6.3.<sup>1</sup> The table holds information on the morphosyntactic status of each aspect marker,

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<sup>1</sup>The abbreviations used in the table and in glosses are the following:  
 COMPL: absolute completive  
 HAB: habitual  
 PRF: experiential perfect  
 PROG: progressive  
 PROSP: prospective  
 RETRO: retrospective

the tonal pattern of its STAMP marker, its form, tense-mood restriction, and its function with which it is also glossed in examples and texts.

example	STAMP auxiliary	True auxiliary	Restrictions	Function
True auxiliary	yà	<b>nzíí</b>	special pattern 1	PROG.PRES
	yà	<b>nzéé</b>	special pattern 1	PROG.SUB
	yà, yáà	<b>nzí</b>	PST1, PST2	PROG
	yá	<b>ló</b>	PRES	RETRO
	mè, yá	<b>múà</b> ‘be’	special pattern 2	PROSP
	yà, yáà	<b>bwàá</b> ‘have’	PST1, PST2	PRF
Stem reduplication	yá	STEM-copy	PRES	HAB
Postverbal particle	yà	<b>mò/-VV̄</b>	PST1	COMPL

Table 6.3: STAMP markers for different aspect markers

Table 6.3 shows that aspect marking is structurally diverse. While most aspect categories are encoded by a true auxiliary in a complex predicate construction (Section 6.3.1), other aspect marking strategies are achieved through morphologically complex, but syntactically simple predicates (Section 6.2.3).

I only count grammaticalized markers as grammatical aspect markers (Chapter 3.2.2.2 and Section 6.3.1). There are, however, also non-grammaticalized semi-auxiliaries which can carry aspectual meaning, such as *kè* ‘go’ which can have an altrilocal meaning (i.e. the event takes place at a different location than the utterance) or *síle* ‘finish’ with a non-complete accomplishment reading (Section 6.3.2). Aspect categories are discussed both in simple predicates in Section 6.2.3 and complex predicates in Section 6.3.1

**Negation** Gyeli uses different negation markers and strategies for different grammatical categories and clausal constructions, as summarized in Table 6.4. The table further shows the frequency of each negation marker in the corpus.

I distinguish standard from non-standard negation, following Miestamo (2005: 1) in his definition of standard negation being “the standard way(s) a language has for negating declarative verbal main clauses”. In Gyeli, standard negation not only differs in the form of negation markers across tense categories, but also in the negation markers’ morpho-syntactic status. While negation in the PAST tenses and the FUTURE is syntactically marked by true

Negation marker	Status	Distribution	Frequency
Standard negation			
-le	negation suffix	Present	23 (59%)
sàlé/pálé	true auxiliary	Past tenses	4 (10.3%)
kálè	true auxiliary	Future	3 (7.7%)
Non-standard clausal negation			
dúù 'must not'	modal semi-auxiliary	Subjunctive, present	2 (5.1%)
tí	true auxiliary	Imperative, infinitive, present (PCF focus)	7 (17.9%)
Total			39

Table 6.4: Negation markers

auxiliaries, PRESENT negation is achieved morphologically through a suffix that attaches to the finite main verb. Non-standard clausal negation comprises two negation markers, a modal semi-auxiliary and a true auxiliary, which are used in different tense-mood categories, sentence types, and information structure constructions, as outlined in detail in Sections 6.2.3 and 6.3.1.

## 6.2 Simple verbal predicates

Simple verbal predicates consist of the STAMP marker (as discussed in Chapter 3.9.1) and a finite main verb:

$$\text{STAMP} - \text{Verb}_{\text{finite}}$$

The combined tone patterns of the STAMP marker and the verb instantiate tense-mood categories, as further discussed in Section 6.2.1. (517) shows that simple predicates can encode further grammatical information: sub-pattern I pertains to a verb-final H tone that attaches to the verb in certain tense-mood categories if the verb is in non-phrase-final position. The presence or absence of the grammatical H tone correlates with a realis/irrealis mood distinction.

Simple predicates:	STAMP Verb	→ Tense-Mood
(517) Sub-pattern I:	STAMP Verb(-H)	→ Realis/Irrealis
(Sub-pattern II:)	STAMP Verb-Suffix/Particle	→ Aspect, Negation)

Sub-pattern II includes morphologically complex simple predicates which involve a verbal suffix or verbal particle that encode certain aspect and

negation categories. Valency changing derivational suffixes, as described in Chapter 4.2.3, do not fall into this category as they are not inflectional, i.e. their occurrence is not restricted to finite verbs. (518) shows that both the negation and the reciprocal suffix attach to the finite verb of the sentence.

- (518) a. bá dyúlē  
           ba-H dyû-lε  
           2-PRES kill-NEG  
           ‘They do not kill.’
- b. bá dyúwàlà  
           ba-H dyû(w)-ala  
           2-PRES kill-RECIP  
           ‘They kill each other.’

In complex predicates with true auxiliaries, however, the negation suffix cannot attach to the main verb, while derivational suffixes can, as shown in (519).<sup>2</sup>

- (519) a. \*ba nzí dyúlē  
           ba PRES.PROG dyû-lε  
           2 kill-NEG  
           ‘They are not killing.’
- b. bà nzí dyúwàlà  
           ba nzí dyû(w)-ala  
           2-PRES kill-RECIP  
           ‘They are killing each other.’

Another argument for verb derivational suffixes and inflectional morphology belonging to different categories comes from their distribution: aspect and negation markers are in complementary distribution and cannot co-occur, as shown in (520). While (520a) and (520b) have a conflict in their tense categories, since *-lε* negates the present and *mò* occurs only in past tenses, even the co-occurrence of aspect and negation in the same tense category in a complex predicate is ungrammatical (520c).

- (520) a. \*bá dyúlē mò  
           ba-H dyû-lε mò  
           2-PRES kill-NEG COMPL

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<sup>2</sup>The tonal pattern on the STAMP marker changes with true auxiliaries, as discussed in Section 6.3.1. This is accounted for in the example: the ungrammaticality does not derive from the tonal pattern but from the morphology.

‘They have not killed.’

- b. \*bá dyú mólé  
ba-H dyû-H mó-lé  
2-PRES kill-R COMPL-NEG  
‘They have not killed.’
- c. \*bà sàlé dyû mó  
ba sàlé dyû mó  
2 NEG.PST kill COMPL  
‘They have not killed.’

In contrast, derivational suffixes can combine with negation across different tenses, as illustrated in (521), with the derivational suffix preceding the negation suffix.

- (521) a. bá dyúwálálé  
ba-H dyû(w)-ala-lé  
2-PRES kill-RECIP-NEG  
‘They do not kill each other.’
- b. bà sàlé dyúwàlà  
ba sàlé dyû(w)-ala  
2 NEG.PST kill-RECIP  
‘They did not kill each other.’

The remainder of this section is organized as follows: I first present the most basic simple predicates consisting of the STAMP marker and the finite verb only in Section 6.2.1. I then outline simple predicate sub-pattern I which includes the presence or absence of a realis marking H tone in Section 6.2.2 before I turn to discussing sub-pattern II, involving morphologically complex simple predicates in Section 6.2.3

### 6.2.1 Basic simple predicates

A remarkable feature of Gyeli is that tense-mood distinctions are entirely expressed through tone while lacking any segmental material (except for vowel lengthening in some tense-mood categories).<sup>3</sup> Consider the surface

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<sup>3</sup>Though tone plays a central role in TAM marking in other Northwestern Bantu languages as well, there is usually some segmental marking as well. Compare, for instance, Makasso (2012) for Basaa (A43) and Beavon (1991) for Koozime (A842).

forms of the minimal pair in (522).

- (522) a. mé dè  
1S eat  
'I eat.'
- b. mè dé  
1S ate  
'I ate.'

In the PRESENT in (522a), the STAMP marker has a H tone while the tone on the verb stem is L. In contrast, in (522b), the PAST form is characterized by a L tone on the STAMP marker and a H tone on the verb. Form patterns thus arise from the tonal combinations of the STAMP marker and the simple finite predicate.<sup>4</sup>

Gyeli exploits all tonal possibilities of the language in tense-mood encoding, including three verb tones and four STAMP marker tone patterns, as shown in (523). These patterns surface when the predicate is in phrase-final position.<sup>5</sup>

- (523) a. Verb tones: L, H, HL  
b. STAMP tones: L, H, HL, LH

The combination of the verb and STAMP marker tone patterns instantiate seven categories that mainly encode tense and mood, to varying degrees (except for the INCHOATIVE category which also carries some aspectual function). While mood encoding is most obvious for the tenseless IMPERATIVE and SUBJUNCTIVE categories, also the other categories inherently belong to the realis or irrealis category, as explained in Section 6.2.2.

As Table 6.5 shows, the verb tone patterns express basic meaning distinctions: a L verb tone indicates NON-PAST, a H tone indicates PAST tense-mood categories, and a HL pattern on the verb encodes tenseless categories. Tonal patterns on the STAMP marker then provide more fine-grained sub-categories.<sup>6</sup> While tonal patterns in a specific category are the same across

<sup>4</sup>Tonal patterns of the STAMP marker are different in some categories of complex predicates using a true auxiliary, as described in Section 6.3.1.

<sup>5</sup>The verb tone pattern changes in some tense-mood categories which take a grammatical H tone when the verb is not in phrase-final position. This is discussed in Section 6.2.2.

<sup>6</sup>The STAMP marker of the IMPERATIVE category is marked in parentheses in Table 6.5 since the first person plural is the only agreement class in which the STAMP marker appears, as described in Section 6.2.1.6.

persons, there is an exception in the FUTURE which generally is characterized by a HL tone on a long STAMP marker vowel. For the first and second person singular and the STAMP marker of agreement class 1, however, the long vowel has a LL tone pattern. There are further exceptions regarding the STAMP marker tone in some grammatical categories: the STAMP marker is different in the morphologically marked PRESENT negation with *-le* (Section 6.2.3.1) and in complex predicates with certain true auxiliary verbs, namely with the PROGRESSIVE markers *nzíí* and *nzéé* (Section 6.3.1.1), the PROSPECTIVE auxiliary *múà* ‘be almost’ (Section 6.3.1.3), and the negation marker *tí* when it is used in PRESENT main clauses (Section 6.3.1.7).

Basic distinction	TM category	STAMP	Verb Stem	Verb Tone	Gloss
NON-PST	PRES	yá	dè		‘we eat’
	INCH	yàá	dè	L	‘we are at the beginning of eating’
	FUT	yáà/mèè	dè		‘we/I will eat’
PST	PST1	yà	dé		‘we ate (recently)’
	PST2	yáà	dé	H	‘we ate (a long time ago)’
tenseless	IMP	(yá)	dè		‘let’s eat!’
	SBJV	yá	déè	HL	‘may we eat’

Table 6.5: Tonal patterns of tense-mood categories

The tenseless categories IMPERATIVE and SUBJUNCTIVE<sup>7</sup> differ from one another not only in their final vowel length, but also in the underlying tonal process which pertains to the presence or absence of High Tone Spreading (HTS) in trisyllabic verb forms. While no HTS occurs in IMPERATIVES where the penultimate syllable in trisyllabic verbs surfaces L, HTS occurs in SUBJUNCTIVES. Thus, the penultimate syllable in trisyllabic verbs surfaces H, as shown in Table 6.6. In contrast to the IMPERATIVE, the SUBJUNCTIVE further shows phonetic variation of the final long vowel. This vowel may occur with a glottal stop, as indicated by the apostrophe in, for instance, *á dé’è* ‘may he eat’, or as a pharyngealized vowel. All these forms occur in free variation. In fast speech, there is a tendency that the vowel is only lengthened, but not pharyngealized or glottalized.

As described in Chapter 2.4.1, verb stems have one, two, or three syllables while only the first syllable is specified for tone. In contrast, second

<sup>7</sup>These categories are form identical to monosyllabic HL stems and monosyllabic HL stems with a long vowel, respectively. For instance, *nyé* ‘see’ surfaces both as non-finite and imperative form and *ntáá* ‘climb over’ encodes both the non-finite and the subjunctive form.

and third syllables are underlyingly toneless. The verb *dè* ‘eat’ used as an example in Table 6.5 thus only represents one tonal-phonological set of verbs, namely the monosyllabic ones specified with a L tone. The tonal rules that apply for the other tonal-phonological verb sets are described in Chapter 2.4.2.2. Table 6.6 further provides an overview of the tone patterns for different phonological verb types in the different tense-mood categories.<sup>8</sup>

TM category	L verb <i>kè</i> ‘go’	HL verb <i>nyé</i> ‘see’	L Ø verb <i>gyàga</i> ‘buy’	H Ø verb <i>gyíbɔ</i> ‘call’	L Ø Ø verb <i>vìdèga</i> ‘turn’	H Ø Ø verb <i>lúmele</i> ‘send’
PRES	<i>kè</i>	<i>nyé</i>	<i>gyàgà</i>	<i>gyíbɔ</i>	<i>vìdègà</i>	<i>lúmèlè</i>
INCH	<i>kè</i>	<i>nyé</i>	<i>gyàgà</i>	<i>gyíbɔ</i>	<i>vìdègà</i>	<i>lúmèlè</i>
FUT	<i>kè</i>	<i>nyé</i>	<i>gyàgà</i>	<i>gyíbɔ</i>	<i>vìdègà</i>	<i>lúmèlè</i>
PST1	<i>ké</i>	<i>nyé</i>	<i>gyàgá</i>	<i>gyíbɔ</i>	<i>vìdégá</i>	<i>lúmélè</i>
PST2	<i>ké</i>	<i>nyé</i>	<i>gyàgá</i>	<i>gyíbɔ</i>	<i>vìdégá</i>	<i>lúmélè</i>
IMP	<i>kê</i>	<i>nyé</i>	<i>gyàgâ</i>	<i>gyíbɔ</i>	<i>vìdègâ</i>	<i>lúmèlè</i>
SBJV	<i>kéè</i>	<i>nyéè</i>	<i>gyàgáà</i>	<i>gyíbɔɔ</i>	<i>vìdégáà</i>	<i>lúmélèè</i>

Table 6.6: Verb tone patterns in different TM categories by phonological verb set

Looking at the occurrence of the different tense-mood in the Gyeli corpus, it becomes clear that the categories are not evenly distributed. Table 6.7 shows the frequency of each tense-mood category expressed through simple predicates in the corpus. It also specifies the realis or unrealis category that a tense-mood category belongs to and that is discussed in Section 6.2.2

Basic distinction	TM category	Mood	Frequency
NON-PST	PRES	realis	217 (58.8%)
	INCH	realis	5 (1.4%)
	FUT	unrealis	40 (10.8%)
PST	PST1	realis	69 (18.7%)
	PST2	realis	8 (2.2%)
other	IMP	unrealis	13 (3.5%)
	SBJV	unrealis	17 (4.6%)
Total			369

Table 6.7: Frequency of tense-mood categories in the corpus

There are 369 instances of simple predicates in the corpus. The vast majority (58.8 %) are encoded for the PRESENT category. While PAST1 and FUTURE

<sup>8</sup>Monosyllabic HL verb stems with a long vowel, such as e.g. *lää* ‘tell’, are form identical in their non-finite as well as their IMPERATIVE and SUBJUNCTIVE forms.

are still relatively frequent, the other tense-mood categories occur rarely. In the following sections, I discuss each tense-mood category with respect to its meaning and usage.

### 6.2.1.1 PRESENT

The PRESENT is the most frequent tense-mood category in the corpus in all text genres and can be viewed as the default tense-mood category in narrations. Even in the autobiographical narrative in Appendix II.1, the narrator switches to the PRESENT in the tenth intonation phrase, after having started out in the PAST 1.

Out of context, the PRESENT primarily relates to a time that is identical to speech time. Thus, the sentence in (524) is located at the time of utterance.

- (524) mé gyámbó bédéwò  
 mε-H gyámbó-H H-be-déwò  
 1S-PRES cook-R OBJ.LINK-be8-food  
 ‘I cook food.’

Within a specific context requiring common ground for the speech act participants, the sentence in (524) can also relate to a time that follows speech time. The PRESENT can thus be used to refer to future events as well. It is hard to delimit, how far into the future the PRESENT may refer and does not seem to be categorically bounded by, for instance, day times or even days. Especially when temporal adverbs or other means of time reference are used as in (525), the grammatical PRESENT form can extend into the future for at least several days.

- (525) mé ké jì é Ngòló sóndò nónégá  
 mε-H kè-H jì é Ngòló sóndò n-ónégá  
 1S-PRES go-R stay LOC Ø7.PN Ø1.week 1-other  
 ‘I will stay in Ngolo next week.’

The PRESENT tense form can also be used for imperative meanings, as in (526). Formally, the PRESENT in (526a) is clearly distinct from the IMPERATIVE pattern in (526b) in terms of the presence or absence of the STAMP marker, the tonal pattern on verb, and the realis marking H tone in the PRESENT (see Section 6.2.2) which is absent in the IMPERATIVE. The pragmatic effect for choosing one category over the other, however, for instance the PRESENT possibly being more polite, is not clear.

- (526) a. bwáá láá bô  
          bwáa-H láà-H b-â  
          2P-PRES tell-R 2-NSBJ  
          ‘You tell them!’
- b. láà ngá bô  
       láà nga-H b-â  
       tell.IMP PL-OBJ.LINK 2-NSBJ  
       ‘Tell them!’

The PRESENT is further used in contexts of genericity or states that persist as in (527). Here, the speaker talks about a general problem that applies to the time of utterance, but also extends to an unbounded time before and after time of utterance.

- (527) yá tfúgá nà ngùndyá mpángì  
       ya-H tfúga-H nà ngùndyá mpángì  
       1P-PRES suffer-R COM Ø9.raffia Ø7.bamboo  
       ‘We suffer from the straw, the bamboo.’

While the use of the PRESENT tense-mood category seems to be easily applied to the time at and after speech time, it extends less easily to time before the utterance. Thus, the sentence in (524) cannot be interpreted, under any circumstances, as having happened already. This correlates with the macro-distinction between NON-PAST and PAST tense-mood categories.

### 6.2.1.2 INCHOATIVE

The INCHOATIVE form refers to the entry into a state or beginning of an event. In the literature, the inchoative is generally assumed to be an aspectual category, which may differ in flavor depending on the language: The inchoative has been observed as part of the viewpoint aspectual system (ASPECT<sub>1</sub> in Sasse’s (2002) terms) for example by Melchert (1980) and Wichaya (2013: 50), who gives an example for Fengshun Hakka in (528).

- (528) Fengshun Hakka; Sinitic  
       ŋai<sup>11</sup> min<sup>11</sup>phak<sup>55</sup> liau<sup>42</sup>  
       1SG understand INCH  
       ‘I have understood.’

The INCHOATIVE has also been related to the Aktionsart of a verb (Sasse's ASPECT<sub>2</sub>) by, for instance, Botne (1983), Klein (1995), and Talmy (2007). An example is given for Russian in (529) by Braginsky (2008: 226).

- (529) Russian; Slavic

**zvezda za-sverkala<sup>PRF</sup> na nebe**  
 star INCH-twinkled on sky  
 'The star started twinkling in the sky.'

The Gyeli inchoative both shifts the viewpoint to the beginning of a situation and locates the situation temporally at speech time (or narration time in the case of story-telling). This is clearly the case when opposing the INCHOATIVE with other aspectual categories (see Section 6.3.1) in elicitation, as in (530).

- (530) a. mèé dè

mèé dè  
 1S.INCH eat

'I'm at the beginning of eating.'

- b. mè nzíí dè

me nzíí dè  
 1S PROG.PRES eat

'I'm eating.'

- c. mè múà dè

me múà dè  
 1S PROSP eat

'I'm about to eat.'

Speakers describe that, in (530a), the focus is about the start point of the action: the person is just taking the first few bites of her meal. In contrast, (530b) is about the entire duration of the eating event. Also the PROSPECTIVE aspect shown in (530c) differs in that the person is about to take the first bites, but has not actually started eating yet.

The example in (531) is taken from natural text and can similarly interpreted. It is at the moment when the woman arrives at the river bank that she is breaking out in tears and the activity of crying is (theoretically) unbounded.

- (531) ndènáà pámò lébû                              àá gyì  
 ndènáà pámo H-le-bû                              àá gyì  
 like.this arrive OBJ.LINK-le5-river.bank 1.INCH cry

‘Having arrived like this [= without the child] at the river bank she is at the beginning of crying.’

Activities (in terms of the verb’s *aktionsart*) can also be accompanied by temporal adjuncts specifying the duration of the event , as shown in (532).

- (532) àá bámálá tóbá mpfùmò nà pámò ménó  
 àá bámala-H tóbá mpfùmò nà pámo ménó  
 1.INCH scold-R since Ø3.midnight COM arrive Ø7.morning  
 ‘He is starting to scold [which lasts] from midnight until the morning.’

An example that is more difficult to interpret in terms of aspect and *aktionsart* in given in (533).

- (533) pílò àá pándè àà kfùmàlà bédéwò bè  
 pílò àá pánđe àà kfùmala bédéwò be  
 when 1.INCH arrive 1.FUT find OBJ.LINK-be8-food 8  
 sílēè  
 sílēè  
 finish.COMPL  
 ‘When he is at the beginning of arriving, he will find that the food is finished.’

The translation may sound awkward since *arrive* is clearly an achievement (a punctual event) in English, but this may not be the case for Gyeli as, more generally, *aktionsart* categorization across languages is surprisingly heterogeneous (see Botne 2006). Another explanation could be that the INCHOATIVE coerces a typical achievement verb into a durative even. Finally, the INCHOATIVE might have yet other functions in Gyeli which are not obvious from the limited examples in the corpus.

### 6.2.1.3 FUTURE

The use of the FUTURE category primarily relates to a time some point after speech time. Often, it is accompanied by temporal adverbials, as in (534) where Nzambi tells the mice that they will eat the bones of the burned bodies the next day.

- (534) àà nàménó bwáà dè, nàménó  
 àà nàménó bwáà dè nàménó  
 EXCL tomorrow 2P.FUT eat tomorrow

‘Ah, tomorrow you will eat, tomorrow.’

The FUTURE category can also relate to intended acts, as in (535).

- (535) pílò mèè bè nyá mùdì mèè tèlè mùdà ndáwò  
       pílò mèè bè nyá m-ùdì mèè tèlè mùdà ndáwò  
       when 1S.FUT be big N1-person 1S.FUT place great Ø9.house  
       ‘When I will be grown up, I will build a great house.’

The same is true for promises, as in (536).

- (536) mé kàgé wê nâ mèè njì nàménó  
       mε-H kàgε-H wê nâ mèè njì nàménó  
       1S-PRES promise-R 2S.NSBJ COMP 1S.FUT come tomorrow  
       ‘I promise you that I will come tomorrow.’

Apart from factual temporal reference, the FUTURE also expresses modal possibility, as in (537). In this example, the sentence has two readings. In the first, the speaker is convinced that the bag will break, thus, a more temporal reading is implied. In another reading, the speaker can express uncertainty and just gives the possibility that the bag might break.

- (537) ká wé kíyá lék’ò kwámó dè kwámó nyíi  
       ká wε-H kíya-H H-le-kó’ò kwámó dè kwámó nyíi  
       if 2S-PRES put-R OBJLINK-le5-stone Ø9.bag LOC Ø9.bag 9.FUT  
       búlè  
       búlε  
       break  
       ‘If you put the stone into the bag, the bag will/might break.’

Another example is given in (538) which has more of a possibility reading where time reference is universal.

- (538) ndí wé lèmbó nâ mbvúndá nyíi bvúdà nà  
       ndí wε-H lèmbo-H nâ mbvúndá nyíi bvúda nà  
       but 2S-PRES know-R COMP Ø9.trouble 9.FUT fight COM  
       mbvúndá  
       mbvúndá  
       Ø9.trouble  
       ‘But you know that trouble will fight with trouble.’

### 6.2.1.4 RECENT PAST (PST1)

Gyeli distinguishes two PAST tense forms: the RECENT PAST and the REMOTE PAST which I gloss, for convenience, as PST1 and PST2, respectively. The choice in using either one of the two PAST categories seems to depend more on subjective, attitudinal factors than on an objective deictic time reference. The RECENT PAST is the default past. It refers to situations that happened before speech time, as in (539), where the time is further specified by a temporal adverb.

- (539) mè gyámbó bédéwò nàkùgúù  
       mε gyámbø-H H-be-déwò nàkùgúù  
       1S.PST1 cook-R OBJ.LINK-be8-food yesterday  
       ‘I cook food yesterday.’

The actual distance between speech time and the past situation that is being referred to is relative. While, according to Nurse (2008: 22), many Bantu languages distinguish past tense categories such as hodiernal and hesternal past based on objective time intervals, namely days, this is not the case in Gyeli. Thus, when a phrase is lacking further time specification, as in (540), it is not inferrable at what time precisely the speaker has been visiting the Ngumba. This could be, according to the context, earlier the same day, the day before, the week before, or even a year before speech time.

- (540) mè bé ngyɛ̂ Ngvùmbò  
       mε bè-H n-gyɛ̂ Ngvùmbò  
       1S.PST1 be-R N1-guest Ø7.PN  
       ‘I was a guest of the Ngumba.’

Temporal proximity is not based on objectively measurable parameters, but rather relates to the speaker’s attitude towards the situation and potentially its impact on speech time. Thus, different situations which have the same temporal distance may be judged differently and therefore coded differently with respect to the RECENT PAST and REMOTE PAST. For instance, a speaker may use the RECENT PAST when reporting that they ate out with a good friend yesterday. In contrast, stating that they ate their last meal at the same temporal distance (yesterday) and have not eaten anything since then may involve the REMOTE PAST since not eating in 24 hours would be considered a long time.

The RECENT PAST is also used in story-telling to generally set the scene as in (541). Even though this autobiographic anecdote took place many years before telling the story (Appendix II.1), the temporal distance is not important to the speaker at this point. Therefore, he uses the default PAST category.

- (541) yóò ngà        nû        à        bé        ngà  
       yóò ngà        nû        a        bè-H ngâ  
       so Ø1.healer 1.DEM.PROX 1.PST1 be-R Ø1.healer  
       ‘So, this healer was a healer.’

#### 6.2.1.5 REMOTE PAST (PST2)

The REMOTE PAST category is the more marked past form and used significantly less frequently in the corpus. It refers to events that have happened relatively far away in the past, while the distance is based on the speaker’s attitude rather than on objective deictic parameters. In (542), for instance, the chief of Ngolo talks about the dangers of the Bagyeli’s lifestyle and points to a scar in his face that he got from a machete. By using the REMOTE PAST, he expresses his attitude towards the injuring event as being temporally far away.

- (542) m         bv         n         nk l         w ù        tf nd         m   
       m -H        bv -H        n         nk l         w ù        tf nd -H m   
       1S-PRES think-R COMP Ø3.machete 3.PST2 miss-R 1S.NSBJ  
       v   
       v   
       here  
       ‘I think that the machete had missed [= injured] me here.’

The same is true for his statement in (543). There, he talks about the former settlement before the current village of Ngolo was built. Again, it is not objectively inferrable whether the speaker had settled in the former village when he was a child or a young man or even only two years ago. Using the REMOTE PAST, however, shows that in terms of relevance to the present situation, settling in the old village is rather remote.

- (543)          p         m          t   
                p         m          t -H  
       LOC over.there 1S.PST2 found-PST  
       ‘Over there I had originally settled.’

The REMOTE PAST is also found in narrations such as the Nzambi folktale. The general narration tense is the PRESENT. From time to time, however, the narrator switches back from PRESENT to past, as seen in (544) where the three sentences appear in the same order in the story. (544a) starts out in the PRESENT, (544b) shows a temporal rupture using the remote past, and in (544c), the speaker switches back to the general PRESENT.

- (544) a. yóò nzàmbí wà núú niyè  
           yóò nzàmbí wà núú niyè  
           so Ø1.PN 1:ATT 1.DEM.DIST return  
           ‘So that Nzambi returns [home].’
- b. Ékè! nzàmbí wà nû áà sàlé bè nà  
     Ékè! nzàmbí wà nû áà sàlé bè nà  
     EXCL Ø1.PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM  
     bâ líná-á pámò  
     bâ líná a-H pámo  
     Ø7.word when 1-PRES arrive  
     ‘Oh! That Nzambi had no words when he arrives.’
- c. nyè nâ álè  
     nyè nâ álè  
     1 COMP allez[French]  
     ‘He [says]: *Allez!* [= Ok].’

It seems that the use of the REMOTE PAST is intended to sporadically relocate the story in time and emphasize that this (fictional) story happened a very long time ago. At the same time, the narrator can use the REMOTE PAST as a means to distance himself from the story and comment about it. While the general chain of events is told in the PRESENT (Nzambi returns home, he says...) comments from the narrator about the state of the character are realized in a different tense-mood category, the REMOTE PAST in this case.

The REMOTE PAST also seems to have a semantic component of anteriority, as in (545) taken from the Nzambi folktale (II.2). This question is uttered in the context of one Nzambi asking his friend whether he has really eaten his child. Presumably, the REMOTE PAST is used rather than the RECENT PAST in order to stress the fact that he as the child's father is too late to save his child, since it has already entirely been devoured.

- (545) wéè dé mwánò nò  
     wéè dè-H m-wánò nò  
     2.PST2 eat-R N1-child no

‘You have eaten the child, didn’t you?’

Another hint for an anteriority reading with the REMOTE PAST comes from translations. A REMOTE PAST phrase such as *méè dé* ‘I ate (a long time ago)’ is generally translated by speakers with the *plus-que-parfait* into French: ‘*j’avais mangé*’.

#### 6.2.1.6 IMPERATIVE

The category of IMPERATIVE is characterized by a HL tonal pattern on its ultimate syllable. For semantic/pragmatic reasons, the IMPERATIVE category is restricted with respect to the grammatical persons it can combine with, yielding three subgroups: (i) singular forms that have no STAMP marker, but only the bare imperative verb form, (ii) plural forms which have no STAMP marker either, but a plural particle following the imperative verb form, and (iii) what I label as “cohortative” forms which are almost identical to plural imperatives with the exception that a first person plural STAMP marker with a H tone precedes the verb form. These are schematized in (546). As they all have the same verb tone pattern as well as the same negation strategy with *tí* (see Section 6.3.1.7), they are unified under one category.

- (546) a. 1P: [STAMP Verb.IMP plural]
- b. 2S: [ $\emptyset$  Verb.IMP]
- c. 2P: [ $\emptyset$  Verb.IMP plural]

In the following, I provide examples of each sub-category.

**Cohortative** The cohortative describes a wish or invitation directed towards the first person plural and can be translated into English as *let’s*. Examples are given in (547).

- (547) a. yá            dê            gà  
ya-H        dè-HL     ga  
1P-PRES eat-IMP PL  
‘Let’s eat!’
- b. yá            gyàgâ        gà  
ya-H        gyàga-HL ga  
1P-PRES buy-IMP PL

'Let's buy!'

- c. yá      vidiégâ      gà  
 ya-H      vidiéga-HL ga  
 1P-PRES turn-IMP PL  
 'Let's turn!'

**Second person singular imperative** For second persons, the IMPERATIVE expresses requests, demands, and orders. (548) provides examples of singular imperative forms, marked by an exclamation sign. The examples cover all syllable lengths and tonal patterns found for verbs.

- (548) a. dê 'eat (sg.)!'  
 b. nyê 'see (sg.)!'  
 c. gyàgâ 'buy (sg.)!'  
 d. gyámbâ 'cook (sg.)!'  
 e. vidiégâ 'turn (sg.)!'  
 f. lúmélê 'send (sg.)!'

In the corpus, IMPERATIVE occurrences are rare as they are pragmatically restricted to direct communicative interactions between speech act participants, as in (549).

- (549) bímbú      lé      mámbòngò      mâ      wè      médé      dígê  
 bímbú      lé      ma-mbòngò      mâ      we      médé      dígê  
 Ø5.amount 5:ATT ma6-plant 6.DEM.PROX 2S self look.IMP  
 médé  
 médé  
 self

'The amount of these plants, yourself, look yourself.'

In narratives, they occur in the form of reported direct speech, as in (550), where the IMPERATIVE form is, in fact, the indicator of reported discourse through a switch of the deictic perspective.

- (550) bàmbé kê      jî mbúmbù      mwánò      sá      yí      dè  
 bàmbé kê      jî mbúmbù      m-wánò      sá      yí      dè  
 sorry go.IMP ask Ø1.namesake N1-child Ø7.thing 7:ATT eat  
 'Excuse me, go and ask the namesake [the other Nzambi] for a little to eat.'

**Second person plural imperative** If the addressee of an order is comprised of more than one person, the plural particle *ga*, or its variant *nga*, is used, following the IMPERATIVE verb form, as in (551).

- (551) a. dê        gà  
          dê        ga  
          eat.IMP PL  
          'Eat (pl.)!'  
b. gyàgâ        gà  
          gyàgâ        ga  
          buy.IMP PL  
          'Buy (pl.)!'  
c. vîdègâ        gà  
          vîdègâ        ga  
          turn.IMP PL  
          'Turn (pl.)!'

Plural IMPERATIVES are less frequent than their singular counterparts in the corpus. Examples are given in (552) and (553).

- (552) nyáà        ngà sîlé        nyî        ndáwò        dé        tù  
          nyáà        ngà sîlé-H        nyî        ndáwò        dé        tù  
          shit.IMP PL    finish-R enter Ø9.house LOC inside  
          'Faites chier, go all into the house.'  
(553) sîlê        ngà nyî        vâ  
          sîlê        ngà nyî        vâ  
          finish.IMP PL    enter here  
          'Enter all here.'

#### 6.2.1.7 SUBJUNCTIVE

Examples of the SUBJUNCTIVE category in Gyeli are given in (554) with the agreement class 1 STAMP marker. As outlined in Section 6.2.1, the final long vowel may also be glottalized or pharyngealized, as in (555).

- (554) a. á déè 'may he eat'  
b. á nyéè 'mayhe see'  
c. á gyàgâà 'may he buy'  
d. á gyámbóò 'may he cook'

- e. á vidiégáà ‘may he turn’
- f. á gyíkéséè ‘may he teach’

The SUBJUNCTIVE in Gyeli is often (but not exclusively) used in subordinate clauses to express i) wishes (555a), ii) obligations (555b), or iii) prohibitions (555c).

- (555) a. á lâá mê nâ m  v '  bw n   
           a-H lâ -H m  nâ m -H v '  b-w n   
           3S-PRES tell-R 1S.NSBJ COMP 1S-PRES give.SBJV ba2-child  
           b f mb   
           be-f mb   
           be8-orange  
           ‘He tells me that I should give the children oranges.’
- b. y  mp n g  n  w  k '  s k l   
       y  mp n g  n  w -H k '  s k l   
       7 Ø3.obligation COMP 2S-PRES go.SBJV Ø7.school  
           ‘It’s an obligation that you go to school.’
- c. y  mp nd  n  w  j w '   
       y  mp nd  n  w -H j w '   
       7 Ø9.prohibition COMP 2S-PRES steal.SBJV  
           b s   
           H-be-s   
           OBJ.LINK-be8-thing  
           ‘It’s forbidden that you steal things.’

The SUBJUNCTIVE is also used to express intentions, as in (556).

- (556) á l mb  n  b d  b   b  m    
           a-H l mb -H n  b -d  b   ba m    
           1S-PRES know-R COMP ba2-person 2.DEM.PROX 2 PROSP  
           b  l  n  b  dy   ny   
           b  l  n  ba-H dy   ny   
           fish COMP 2-PRES kill.SBJV 1.NSBJ  
           ‘He knows that these people are about to fish [= look for him] in  
           order to kill him.’

The SUBJUNCTIVE can further be used in a consecutive context, as in (557), which lacks an animate entity that could have wishes or intentions. When translating these phrases, speakers consistently use the French verb *vouloir* ‘want’ that is assigned to the inanimate entity.

- (557) ká yí nyí mē mbò mpángì yí kùgá  
       ká yi-H nyî-H mē m-bò mpángì yi-H kùga-H  
       when 7-PRES enter-R 1S N3-arm Ø7.bamboo 7-PRES can-R  
       nâ nyî wè mbò  
       nâ nyî wè m-bò  
       COMP enter.SBJV 2S N3-arm  
       ‘When it goes into my arm... the bamboo can sting your arm.’

The SUBJUNCTIVE expresses bouletic modality, as in (558). Other types of modality, e.g. deontic or dynamic, are encoded by semi-auxiliaries in complex predicates (6.3.2).

- (558) mé làwó náà mändáwò má zì má  
       mε-H làwo-H nâ ma-ndáwò má zì ma-H  
       1S-PRES say-R COMP ma6-house 6:ATT Ø7.tin 6-PRES  
       kùgáà mē vâ  
       kùgáà mè vâ  
       be.enough.SBJV 1S.NSBJ here

‘I say that there should be enough tin (roofed) houses here for me.’

While most SUBJUNCTIVE forms occur in a subordinate complement clause involving the complementizer *nâ* (Chapter 8.2.2.1), SUBJUNCTIVE forms can also occur in subordinate clauses without the complementizer *nâ*, as in (559).

- (559) yóò mé wúmbé mändáwò má zì má  
       yóò mε-H wúmbε-H H-ma-ndáwò má zì ma-H  
       so 1S-PRES want-R OBJLINK-ma6-house 6:ATT Ø7.tin 6-PRES  
       téwòò mē vâ ndá zì  
       téwòò mē vâ ndá zì  
       put.SBJV 1S.NSBJ here ATT[Bulu] Ø7.tin[Bulu]  
       ‘So I want tin (roofed) houses be put here for me, of tin.’

There are a few examples where the SUBJUNCTIVE is not restricted to a subordinate clause, but can occur in the main clause, as in (560). This construction marks a politely phrased order or invitation.

- (560) bëyá njî bíyè kfùmàlà  
       bëya-H njì bíyè kfùmala  
       2P-PRES come.SBJV 1P.NSBJ find  
       ‘You (pl) may come to meet us.’

The SUBJUNCTIVE has its own negation form *díúù*. This is outlined in Section 6.3.1.8.

### 6.2.2 The realis marking H tone

The basic simple predicate structure carries further grammatical information through the presence or absence of a grammatical H tone that surfaces in certain tense-mood categories when the finite verb is not in phrase-final position (see sub-pattern I STAMP - V(-H) in Section 6.2). It is inherent to each tense-mood category if the H tone will attach to the finite verb or not. The presence of the H tone correlates with realis categories, while its absence indicates irrealis categories, as shown in Table 6.8.

H tone presence → Realis	H tone absence → Irrealis
PRESENT	FUTURE
INCHOATIVE	IMPERATIVE
RECENT PAST	SUBJUNCTIVE
REMOTE PAST	

Table 6.8: Distribution of realis and irrealis categories

(561) provides examples for all realis marking tense-mood categories, where the grammatical H tone is marked in bold. The H tone that appears on the following noun is a distinct syntactic tone rather than a phonologically conditioned surface form (Chapter 7.2.1.2).<sup>9</sup>

- (561) a. mé wúmbé békwàndò  
           mε-H wúmbε-H H-be-kwàndò  
           1S-PRES want-R OBJLINK-be8-plantain  
           'I want plantains.'
- b. mèé wúmbé békwàndò  
       mèé wúmbε-H H-be-kwàndò  
       1S.INCH want-R OBJLINK-be8-plantain  
       'I'm at the beginning of wanting plantains.'
- c. mè wúmbé békwàndò  
       mε wúmbε-H H-be-kwàndò  
       1S.PST1 want-R OBJLINK-be8-plantain  
       'I wanted plantains (recently).'

<sup>9</sup>Grammatical verb-final H tones seem to be recurrent in Bantu languages, but have not yet found a unitary and transparent explanation. The term "metatony" is frequently used in the context of verb-final H tone phenomena (Dimmendaal 1995; Angenot 1971; Hyman & Lionnet 2011; Schadeberg 1995; Hadermann 2005; Costa & Kula 2008; Makasso 2012; Nurse 2008). The origins and functions assigned to metatonic H tones in the literature differ, however, considerably across diverse Bantu languages.

- d. mèè wúmbé békwàndò  
 mèè wúmbε-H H-be-kwàndò  
 1S.PST2 want-R OBJ.LINK-be8-plantain  
 'I wanted plantains (a long time ago).'

While the tonal change from a phrase final L to a non-phrase final H tone is obvious in the NON-PAST categories PRESENT and INCHOATIVE, this is less clear for both PAST categories, recent and remote. These categories are specified for a final H tone also in verb final positions, collapsing both tense and mood marking in non-phrase final position. In terms of glossing examples, I mark phrase final H tones on PAST verbs as '-PST', as in (562a). In non-phrase final position, however, H tones in PAST categories are marked as '-R', as in (562b), emphasizing the mood distinction.

- (562) a. mè gyámbó  
 mε gyámbø-H  
 1S.PST1 cook-PST  
 'I cooked.'
- b. mè gyámbó békwàndò  
 mε gyámbø-H H-be-kwàndò  
 1S.PST1 cook-R OBJ.LINK-be8-plantain  
 'I cooked plantains.'

Examples for the irrealis tense-mood categories are given in (563). The finite verbs do not take the grammatical H tone, but are only inflected for their tense-mood category as basic simple predicates (6.2.1).<sup>10</sup>

- (563) a. mèè gyámbò békwàndò  
 mèè gyámbø H-be-kwàndò  
 1S.FUT cook OBJ.LINK-be8-plantain  
 'I will/might cook plantain.'
- b. gyámbò békwàndò  
 gyámbø H-be-kwàndò  
 cook.IMP OBJ.LINK-be8-plantain  
 'Cook (sg.) plantains!'

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<sup>10</sup>The second person plural and the cohortative in the IMPERATIVE category have the same tonal pattern on the verb as (563b), but the tonal structure of the object noun is different due to the postverbal plural particle. As this concerns, however, the syntactic rather than the realis marking grammatical H tone, this phenomenon is discussed in Chapter 7.2.1.2.

- c. mé wúmbé nâ wé gyámbò  
 mε-H wúmbε-H nâ wε-H gyámbò  
 1S-PRES want-R COMP 2S-PRES cook.SBJV  
 békwàndò  
 H-be-kwàndò  
 OBJ.LINK-be8-plantain  
 ‘I want you to cook plantain.’

In the realis categories which do take the grammatical H tone, all parts of speech that follow the verb trigger the appearance of the H tone, as (564) shows. Thus, the decisive criterion is not the restriction to certain parts of speech, but that the verb is not intonation phrase final.

- (564) a. mé gyámbò ‘I cook’  
 b. mé gyámbó békwàndò ‘I cook plantains’ \_N  
 c. mé gyámbó byâ ‘I cook it’ \_PRO  
 d. mé gyámbó ndáà ‘I cook today’ \_ADV  
 e. mé gyámbó é kísíní dé tù ‘I cook in the kitchen’ \_PREP  
 f. mé gyámbó nà wómbèlè ‘I cook and sweep’ \_CONJ

As listed in (564), the phrase final verb *gyámbò* ‘cook’ surfaces with a L tone. If it is, however, followed by a noun, pronoun, adverb, preposition, or conjunction, the verb takes a final H tone. The same is true for complex predicates, as illustrated in (565). Again, if the verb *wúmbε* ‘want’ occurs phrase finally, it surfaces L. If it is followed by another element, in this case the non-finite main verb *gyámbò* ‘cook’, it takes a final H tone.

- (565) a. bá wúmbè ‘they want’  
 b. bá wúmbé gyámbò ‘they want to cook’ \_VERB

It is, however, only the finite verb that undergoes tonal change. If a second, non-finite verb is not intonation phrase final, it keeps its default tones, as shown in (566). In this example, the modal verb *wúmbε* ‘want’ takes the grammatical H tone that indicates the realis category. The final tone on *gyámbò* ‘cook’ surfaces L.

- (566) bá wúmbé gyámbò békwàndò  
 ba-H wúmbε-H gyámbò H-be-kwàndò  
 2-PRES want-R cook OBJ.LINK-be8-plantain  
 ‘They want to cook plantains.’

### 6.2.3 Morphologically complex predicates

Simple predicates can be morphologically complex through the addition of inflectional verbal suffixes or particles, as described in Section 6.2 under sub-pattern II. This includes the negation suffix *-lē* in Section 6.2.3.1, stem reduplication expressing HABITUAL in Section 6.2.3.2, and the postverbal particle *mɔ* encoding COMPLETIVE in Section 6.2.3.3.<sup>11</sup>

#### 6.2.3.1 Negation with *-lē* in the PRESENT

In the PRESENT tense-mood category, the verbal suffix *-lē* is used in negation. I consider this suffix as toneless since its surface tones depend on the verb stem's tonal specification. Negation with *-lē* shows structural and paradigmatic asymmetry in Miestamo's (2007) sense: the verb stem takes its own tonal pattern under negation, the STAMP marker differs from its positive counterpart in some person categories, and the realis marking H tone is absent which corresponds to the PRESENT negation being an irrealis category.

**Tonal patterns of the negated verb** The tonally specified first TBU of a verb stem (Chapter 2.4.1) determines the tonal pattern of a verb negated with the suffix *-lē*. In monosyllabic verb stems, the stem always changes to a H tone which then also spreads onto the negation suffix. (567) gives examples for underlyingly L tone verb stems and (568) for monosyllabic verb stems which surface as HL in isolation.

- (567) L → H

- a. dè 'eat' > dé-lé
- b. kè 'go' > ké-lé

- (568) HL → H

- a. nyê 'see' > nyé-lé
- b. pê 'choose' > pé-lé

---

<sup>11</sup>There are other verbal suffixes used in verbal derivation (Chapter 4.2.3) that bring about a valency change. These are, however, not treated here as morphologically complex predicates—although they are considered as such by, for instance, Butt (2010: 51) on morphological causativisation—due to their differing morphosyntactic behavior in Gyeli (Section 6.2.)

For bisyllabic verbs, the determining factor for the negated surface form is the first syllable's tonal specification. If the tonal pattern of a bisyllabic verb is H Ø, the H tone spreads onto the second, underlyingly toneless mora of the verb and also onto the negation suffix, as in (569).

- (569) H Ø → H H

- a. síndya 'change' > síndyá-lé
- b. símɛ 'respect' > símé-lé
- c. dzímbɛ 'get lost' > dzímbé-lé
- d. ngwáwɔ 'bend' > ngwáwó-lé

The same is true for trisyllabic verbs where the first mora is specified H and the two following morphemes are toneless. (570) shows that, again, the H tone from the first mora spreads to the right, all the way to the negation suffix.

- (570) H Ø Ø → H H H

- a. gyíkɛsɛ 'teach' > gyíkésé-lé
- b. líyelɛ 'show' > líyélé-lé
- c. lúmɛlɛ 'send' > lúmélé-lé
- d. súmɛlɛ 'greet' > súmélé-lé

The process changes if the first mora of a bi- or trisyllabic verb is specified with a L tone. In these cases, the tone on the first mora undergoes a featural change from L to H. This, however, does not affect the following toneless extension and negation suffix morphemes. These all surface as L, as shown in (571) for bisyllabic and in (572) for trisyllabic verbs.

- (571) L Ø → H L

- a. gyàga 'buy' > gyágà-lè
- b. vòwa 'wake up' > vówà-lè
- c. lùnga 'grow' > lúngà-lè
- d. tsìlɔ 'write' > tsílò-lè

- (572) L Ø Ø → H L L

- a. kfùbala 'move' > kfúbàlà-lè
- b. vìdèga 'turn' > vídègà-lè

- c. kàmbala ‘defend’ > kámbàlè-lè
- d. jìnèse ‘make sth. sink’ > jínèsè-lè

(573) illustrates the verb tone asymmetries between a basic PRESENT form and its negative counterpart with a L tone verb in (573a) that changes to a H on the first TBU in the stem while the following verbal TBUs stay L.

- |       |   |   |
|-------|---|---|
| (573) | a. bá            gìyò.<br>ba-H        gìyɔ<br>2-PRES cry<br>‘They cry.’                 | c. bá            límbè.<br>ba-H        límbe<br>2-PRES pull<br>‘They pull.’                 |
|       | b. bá            gíyòlè.<br>ba-H        gíyɔ-le<br>2-PRES cry-NEG<br>‘They do not cry.’ | d. bá            límbélè.<br>ba-H        límbe-le<br>2-PRES pull-NEG<br>‘They do not pull.’ |

In contrast, verb stems that are lexically specified with a H tone, as in (573c), on the first TBU stay H and spread that H tone across the following TBUs, including the negation suffix. This pattern also constitutes a structural asymmetry as the basic simple predicate in the positive PRESENT surfaces L.

**Patterns of the STAMP marker in PRESENT negation** As a default, the STAMP marker under PRESENT negation has the same pattern as the non-negated form, as shown for the agreement class 2 STAMP marker in (573). As with FUTURE non-negated STAMP markers, however, there are a few exceptions in certain grammatical person categories. The STAMP markers for first and second person singular as well as for class 1 take a special shape with a long vowel and rising LH pattern, as shown in (574) for the first person singular and the agreement class 1 STAMP marker.

- |       |   |   |
|-------|---|---|
| (574) | a. mé            gìyò.<br>mε-H        gìyɔ<br>1S-PRES cry<br>‘I cry.’                     | c. á            límbè.<br>a-H        límbe<br>1-PRES pull<br>‘S/he pulls.’                      |
|       | b. mèé            gíyòlè.<br>mèé        gíyɔ-le<br>1S.NEG.PRES cry-NEG<br>‘I do not cry.’ | d. àá            límbélè.<br>àá        límbe-le<br>1.NEG.PRES pull-NEG<br>‘S/he does not pull.’ |

Other PRESENT negation examples from the corpus are provided in (575) and (576).

- (575) **má dvúmólé** mbvú mbì mbvû  
       ma-H dvúmó-lé mbvú mbì mbvû  
       6-PRES produce-NEG Ø3.year like[Kwasio] Ø3.year  
       ‘They [the palm trees] don’t produce [fruit] every year.’

- (576) **mèé jílē** wê bvúbvû  
       mèé jí-lé wê bvúbvû  
       1S.PRES.NEG ask-NEG 2S.NSBJ much  
       ‘I don’t ask you for much.’

Negation of non-verbal existential constructions (Chapter 7.1) is achieved through verbal PRESENT negation, using the verb *bè* ‘be’, as in (577).

- (577) a. **bùdì bá bélé**  
       b-ùdì ba-H bè-le  
       ba2-person 2-PRES be-NEG  
       ‘There are no people/The people are not there.’
- b. **mùdì n ú bélé**  
       m-ùdì nu-H bè-le  
       N1-person 1-PRES be-NEG  
       ‘Nobody is there/The person is not there.’

As outlined in Chapter 3.9.1, agreement class 1 has different STAMP forms. Though their distribution is not exactly understood, it seems that there is a preference to use the form *nú* in the negation of existential clauses, as in (577b). Unlike the agreement class 1 negation STAMP marker *àá*, however, *nú* clusters with the default STAMP forms, carrying a H tone.

**PRESENT negation and mood** While the PRESENT category is a realis mood characterized by a grammatical H tone on the verb in non-phrase final position, the realis marking H tone is absent in PRESENT negation. Even if the negated verb appears in non-phrase final position, its tonal pattern does not change from the pattern outlined above for negated forms, as shown in (578).

- (578)

- |  |   |
|--|---|
| a. á            gyágá<br>a-H        gyàga-H<br>1-PRES buy-R<br>békáládè<br>H-be-káládè<br>OBJ.LINK-be8-book<br>'He buys books.'                  | c. á            dé<br>a-H        dè-H<br>1-PRES eat-R<br>mántúà<br>H-ma-ntúà<br>OBJ.LINK-ma6-mango<br>'He eats mangoes.'                  |
| b. àá            gyágàlè<br>àá        gyàga-le<br>1.PRES.NEG buy-NEG<br>békáládè<br>H-be-káládè<br>OBJ.LINK-be8-book<br>'He does not buy books.' | d. àá            délé<br>àá        dè-le<br>1.PRES.NEG eat-NEG<br>mántúà<br>H-ma-ntúà<br>OBJ.LINK-ma6-mango<br>'He does not eat mangoes.' |

In (578d), the negated verb surfaces with a H tone so that one could assume that the H tone has merged with the realis marking H tone. Since verbs of the pattern in (578b) do not take a verb-final H tone, however, I treat all negated verb forms in the PRESENT as having their own, fixed tonal pattern that lacks the grammatical H tone. The negated PRESENT thus belongs to the irrealis mood which constitutes a paradigmatic asymmetry in comparison to the positive PRESENT.

### 6.2.3.2 HABITUAL aspect by verb reduplication

Another morphologically complex simple predicate construction involves verb stem reduplication, expressing HABITUAL aspect, as in (579). In terms of its meaning, the HABITUAL relates to events that occur regularly or usually.

- (579) mé            nyùlènyùlè  
me-H        nyùle-nyule  
1S-PRES drink-drink  
'I often drink.'

The reduplicated stem follows the original one in form of a suffix rather than an independent word. Evidence for this comes from the duplicate's tonal pattern. First, the duplicate is underlyingly toneless, while the original stem is specified for its first TBU. (580) shows that *pánde* 'arrive' carries its lexical H tone on the first TBU in the stem, but this lexical H tone does not

appear on the toneless duplicate, which might even lose more features of the stem, such as vowel length and nasalization, as shown in (583).

- (580)   m        p  nd  p  nd    
           m  -H      p  nd  -p  nd    
           1S-PRES arrive-arrive  
           'I often arrive.'

Second, if a grammatical (or syntactic) H tone attaches to the right of the verb, it spreads across all toneless TBUs, just like in verbal extension suffixes (Chapter 4.2.3), including the second and third syllables of the original stem, as shown in (581) and (582).

- (581) mé dílésédílésé bwán̡  
       me-H dílēsē-dilese-H b-wán̡  
       1S-PRES feed-feed-R ba2-child  
       'I often give food to the children.'

- (582) mé gyámbógyámbó bédéwò  
       me-H    gyámbó-gyambó-H H-be-déwò  
       1S-PRES prepare-prepare-R OBJ.LINK-8-food  
       'I regularly prepare food.'

While, impressionistically from observing conversations, the HABITUAL aspect is very frequent, it is barely found in the corpus. From elicitation, however, it is clear that the HABITUAL is restricted to the PRESENT and SUBJUNCTIVE categories. An example of a SUBJUNCTIVE occurrence is given in (583) with *tād̄-ta* ‘tell often’.



The tonal marking of the subjunctive is on the original stem, while the duplicate appears underlyingly toneless. The duplicate further loses vowel length and nasalization.

### 6.2.3.3 ABSOLUTE COMPLETIVE aspect *mò*

The verbal particle *mò* (Chapter 3.9.2) expresses ABSOLUTE COMPLETIVE aspect. Historically, it probably stems from a serial verb construction which Nurse (2008: 67) views as a Niger-Congo derivative from *-mala* > *-ma* ‘finish’ and which is found in many northwestern Bantu languages, e.g., Maande (A46), Himba (B30), Yanzi (B85), and Nyanga (D43) (p. 100). *mò* has an assimilated variant that merges with the preceding verb vowel, while adding length, nasality, and a HL tone pattern to it, as in (584b).

- (584) a. mè lùngá mò  
           mè lùngá mò  
           1S grow COMPL  
           ‘I have (already) grown up.’
- b. mè lùngââ  
       mè lùngââ  
       1S grow.COMPL  
       ‘I have (already) grown up.’

The ABSOLUTE COMPLETIVE is restricted to the recent PAST.<sup>12</sup> In the corpus, 17 occurrences of the ABSOLUTE COMPLETIVE have the uncontracted form and 12 the contracted form. In sum, the ABSOLUTE COMPLETIVE is the most frequent aspect marker with 23.8 % in the corpus.

The ABSOLUTE COMPLETIVE mostly occurs with eventive verbs, as illustrated in (585) through (587).

- (585) míñò        má        bùdì        mà        kééé        máà vé  
       m-íñò        má        b-ùdì        ma        kééé        máà vé  
       ma6-name 6:ATT ba2-person 6.PST1 go.COMPL 6.ID where  
       ‘The people’s names have gone, where are they? [= strangers come once, but do not return again]’
- (586) bon        mpòngj        sílééé  
       bon        mpòngj        sílééé  
       OK[French] Ø7.generation finish.COMPL  
       ‘OK, the generation has been wiped out.’

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<sup>12</sup>Unlike other aspectual categories, such as the PAST PROGRESSIVE form *nzí* or the PERFECT *bwàà* which allow both PAST tense-mood categories, the use of PST2 is prohibited for the ABSOLUTE COMPLETIVE.

- (587) wè dyúwó mò  
 wε dyúwɔ-H mò  
 2S.PST1 hear-R COMPL  
 ‘Have you understood?’

While stative verbs rarely take this aspect marker, it is still possible, as (588) shows.<sup>13</sup>

- (588) wè lèmbôò sâ bányá màmbò  
 wε lèmbôò sâ H-ba-nyá m-àmbò  
 2S.PST1 know.COMPL do OBJ.LINK-ba2-important ma6-thing  
 nâ ká mé lúmó wê nláà nâ  
 nâ ká me-H lúmɔ-H wê nláà nâ  
 COMP if 1S-PRES send-R 2S.NSBJ Ø3.message COMP  
 ‘You know to do the important things that if I send you the message  
 that,’

All of these examples have in common that the aspect marker conveys a meaning of completeness. They are usually translated as *déjà* ‘already’ by speakers. In (585), the people have completely left, in (586), the generation has completely been wiped out, and in (587), the process of understanding has to be complete in order to count as understanding. The delimitation of the ABSOLUTE COMPLETIVE in comparison to other aspect categories with some semantic overlap in terms of completeness and/or perfectiveness is illustrated in the minimal pairs in (589). This example compares the ABSOLUTE COMPLETIVE with other aspectual constructions expressed by complex predicates, namely with the PERFECT *bwàà* (Section 6.3.1.4) and the semi-auxiliary *sílē* ‘finish’ which has a non-complete accomplishment reading (Section 6.3.2).

- (589) a. mè lá mò kálàdè yíndè  
 mε lâ-H mò kálàdè yí-ndè  
 1S.PST1 read-R COMPL Ø7.book 7-ANA  
 ‘I have read this book [= entirely, all of it].’
- b. mè sílē lâ kálàdè yíndè  
 mε sílē-H lâ kálàdè yí-ndè  
 1S.PST1 finish-R read Ø7.book 7-ANA

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<sup>13</sup>Another explanation for the occurrence of *mò* with *lèmbɔ* ‘know’ could be that this verb rather has an eventive character along the lines of ‘coming to understand’. The restricted corpus, however, does not clarify this.

'I'm done reading this book. [= but not necessarily the whole book]'

- c. mè **bwàá** lâ kálàdè yí-ndè  
 me bwàà-H lâ kálàdè yí-ndè  
 1S have-R read Ø7.book 7-ANA

'I have read this book [= more general/experiential].'

The example compares different aspect meanings in the situation of reading a book. If *mò* is used, the interpretation is that the book has been read entirely. Therefore, I call this aspect category ABSOLUTE COMPLETIVE. In comparison, the semi-auxiliary *síle* 'finish', also carries a completive meaning in that the subject has finished reading the book. The use of *síle*, however, does not entail that the book has been read in its entirety, just that the subject has stopped reading (parts of) it. Therefore, I label this aspect as NON-COMPLETE ACCOMPLISHMENT. For the PERFECT use in (589c), speakers provide a more vague translation, suggesting that the PERFECT has a more general and maybe experiential meaning. In that, the PERFECT has some semantic overlap with the ABSOLUTE COMPLETIVE since typical experiential meaning is also expressed by *mò*, as shown in (590).

- (590) wè       làdó      mò       nà      káliyâ  
      wε       làdtɔ-H mò       nà      káliyâ  
      2S.PST1 meet-R COMPL COM Ø1.sister:1S.POSS  
      'Have you (already, ever) met my sister?'

Finally, the ABSOLUTE COMPLETIVE is used in more figurative and idiomatic ways. In (591), for instance, Nzambi's wife states that she has died from hunger, even though, obviously, she is still alive.

- (591) nyè náà     mùdì       wāá,       mè wééé       nà      nzà  
      nyε náà     m-ùdì       w-áá       me wééé       nà      nzà  
      1   COMP N1-person 1-POSS.1S 1S die.COMPL COM Ø9.hunger  
      'She: 'My person, I'm dead from hunger.'

In the same way, speakers use the ABSOLUTE COMPLETIVE in situations of announcing their leaving, as in (592), while, literally, they have not left yet.

- (592) yóò nzàmbí kí   nâ      bon               mè       nìyé      mò  
      yóò nzàmbí kì-H nâ      bon               me       nìyε-H   mò  
      so Ø1.PN say-R COMP good[French] 1S.PST1 return-H COMPL  
      'So Nzambi says: Good, I am returning home.'

**The ABSOLUTE COMPLETIVE and mood** I consider the ABSOLUTE COMPLETIVE as part of the realis mood since the finite verb always surfaces with a final H tone, which is characteristic of this mood category (Sections 6.2.1 and 6.2.2). In comparison to other simple predicate constructions, the verb in the ABSOLUTE COMPLETIVE never appears phrase-finally since the ABSOLUTE COMPLETIVE marker *mò* puts the finite verb in a non-phrase final position. In (593a), the grammatical H tone thus appears on the final vowel of *gyámbɔ* ‘cook’.

- (593) a. mè gyámbó mò bédéwò  
           mɛ gyámbɔ-H mò H-be-déwò  
           1S cook-R COMPL OBJ.LINK-be8-food  
           ‘I have cooked the food.’
- b. mè gyámbɔ̃ bédéwò  
           mɛ gyámbɔ̃ H-be-déwò  
           1S cook:R:PRF OBJ.LINK-be8-food  
           ‘I have cooked the food.’

The more grammaticalized variant in (593b) also carries the H tone. Here, the verb and the COMPLETIVE marker *mò* have fused, resulting in a long final vowel that is nasalized and that reflects the tonal pattern of the *mò* variant: first the grammatical H tone and then the L tone of the postverbal aspect marker, surfacing as a long HL vowel.

### 6.3 Complex verbal predicates

According to Butt (2010: 50), “the term complex predicate refers to any construction in which two or more predicational elements each contribute to a joint predication.” In Gyeli, there are two types of complex predicates. I refer to the first type as complex predicates with a simple STAMP marker, which include the STAMP marker, a finite auxiliary verb, and at least one non-finite lexical verb, as the template in (594a) shows. Maximally, two non-finite verbs can occur in a complex predicate, as discussed in Section 6.3.3. The adverb and pronominal object that appear in square brackets in the template are not part of the verbal predicate, but they can occur between the finite and the main verb.

- (594) Complex predicate types

a. **Complex predicates with a simple STAMP**

STAMP – Auxiliary verb – [Adverb/pronominal object] – Verb  
– (Verb)

b. **Complex predicates with a double STAMP**

STAMP<sub>i</sub> – (Auxiliary) – *bè* ‘be’ – STAMP<sub>i</sub> – Auxiliary/Verb<sub>finite</sub> –  
(V)

I label the second type as complex predicate construction with a double STAMP marker, which has a template as in (594b).

Simple STAMP predicates can further be subdivided into those that take only one non-finite verb and those that take two. (595) gives an example of a minimal simple STAMP predicate with the verbal predicate in brackets.

- (595) mègà [mé lígé dè] mwánò wòjò  
me-gà me-H lígè-H dè m-wánò w-òjò  
1-CONTR 1S-PRES stay-R eat ma1-child 1-POSS.2S  
‘As of me, I stay and eat your child.’

An example of a maximal simple STAMP predicate is provided in (596).

- (596) áh gyí [wé ló njì gyésò]  
áh gyí we-H ló njì gyésò  
EXCL what 2S-PRES RETRO come look.for  
‘Ah, what have you just come to look for?’

Elements that are external to the simple STAMP predicate, but which occur between the finite and the non-finite verb, such as adverbs, sentential modifiers, and object pronouns, always follow directly the finite verb form, as in (597).

- (597) [wé yàné ná gyàgà] ndísì  
we-H yàné-H ná gyàga ndísì  
2S-PRES must-H again buy Ø3.rice  
‘You must again buy rice.’

If a sentential modifier is used in a three-verb simple STAMP predicate, as in the combination of modal and aspectual auxiliaries in (598), the modifier will still appear after the first, inflected auxiliary. It has not been observed to appear after the second auxiliary.

- (598) bí            bógà [yá        wúmbé    ndáà pâ        nyê] sâ  
       bí            bó-gà ya-H        wúmbé-H ndáà pâ        nyê sâ  
       1P.EMPH 2-other 1P-PRES want-R also PRIOR see Ø7.thing

bá        gyíbá        ngyùlè wá        kùrâ  
       ba-H        gyíbó-H ngyùlè wá        kùrâ  
       2-PRES call-R Ø3.light 3:ATT Ø7.electricity

‘We others, we also want to first see the thing they call the light of electricity.’

The same is true for fronted object pronouns (Chapter 7.3.3): the object pronoun will always appear after the first auxiliary, as in (599) for a two-verb construction and in (600) for three-verb constructions.

- (599) bùdì            [bà        sílēë        mè        wè] ndáwò        tù  
       b-ùdì        ba        sílēë        mè        wè ndáwò        tù  
       ba2-person 2.PST1 finish.COMPL 1S.NSBJ die Ø9.house inside  
       vâ  
       vâ  
       here

‘The people have all died here inside the house.’

- (600) [báà        sílè        bî        kúmbà lŵ] mánđáwò  
       báà        sílè        bî        kúmba lŵ H-ma-ndáwò  
       2.FUT finish 1P.NSBJ arrange build OBJ.LINK-ma6-house  
       ‘They will arrange for us building houses.’

These examples show that complex predicates in Gyeli are auxiliary-headed. Anderson (2011a: 9) explains that, in auxiliary-headed languages, the auxiliary verb serves as the head while the lexical verb is its dependent, appearing in its non-finite form. This is illustrated in, for instance, (595) where the auxiliary *lígé* ‘stay’ carries the realis marking H tone while *dè* ‘eat’ appears in its non-finite form. The auxiliary occupies “the position in the verb phrase that the lexical verb would occupy if it appeared alone in an inflected form” (p. 10). In Gyeli, this is directly after the STAMP marker and preceding the lexical verb. This pattern matches Dryer’s (2007c) observation that the auxiliary (generally) precedes the main verb in V O languages.

Double STAMP predicates involve two STAMP markers which are identical in their referent. Each of the STAMP markers is followed by a finite verb form. The first verb form always includes a form of the auxiliary *bè* ‘be’, either finite as in (601a) or non-finite as in (601b), while the second

involves another simple predicate or complex simple STAMP predicate. The square brackets indicate the double STAMP construction.

- (601) a. [méè      bé      mé      gyámbògyàmbò]  
           méeè      bè-H    me-H      gyámbɔ-gyambɔ  
           1S.PST2 be    1S-PRES cook-cook  
           'I used to cook (a long time ago).'  
       b. [mè nzí      bé      mè nzí      gyámbògyàmbò] à  
           mè    nzí      bè-H    me nzí      gyámbɔ-gyambɔ    a  
           1S    PROG.PST be-R 1S PROG.PST1 prepare-prepare    1  
           nzí      gyimbò  
           nzí      gyimbɔ  
           PROG.PST dance  
           'While I was preparing [food], he was dancing.'

Double STAMP predicates can be thought of as a combination of a simple predicate (or complex predicate with simple STAMP marker) with another simple (or complex predicate with simple STAMP marker) construction. The two finite verbs usually differ in their tense-mood encoding, with the function of shifting the viewpoint in temporal reference as well as enabling combinations of tense, mood, aspect, and negation that are excluded in simple STAMP constructions.

In the remainder of this chapter, I first discuss simple STAMP predicates. As outlined in Chapter 3.2.2.2, auxiliaries in Gyeli differ in their degree of grammaticalization. True auxiliaries are highly grammaticalized and have no synchronic lexical meaning. They are discussed in detail in Section 6.3.1. In contrast, semi-auxiliaries do have a full lexical meaning and a different distribution than true auxiliaries, as described in Section 6.3.2. Section 6.3.3 presents different levels of complexity in simple STAMP predicates, namely those that are morphologically and syntactically complex and those that involve two non-finite verbs. Section 6.3.4 is about double STAMP predicates.

### 6.3.1 Simple STAMP predicates with true auxiliaries

Complex predicates with a simple STAMP construction that use true auxiliaries (Chapter 3.2.2.2) involve grammaticalized auxiliaries which, unlike semi-auxiliaries, are restricted to certain tense-mood categories. This pred-

icate type differs internally with respect to the degree of grammaticalization: highly grammaticalized true auxiliaries have synchronically no lexical meaning while less grammaticalized true auxiliaries have a lexical meaning. This distinction is indicated by an English gloss for the ones with a lexical meaning and a lack thereof for the ones without lexical meaning. Table 6.9 lists all true auxiliaries that are used in complex predicates with simple STAMP constructions. Functionally, these auxiliaries encompass those that encode aspect and those that encode negation.

	STAMP example	True auxiliary	Restrictions	Function
Aspect	yà	<b>nzíí</b>	special pattern 1	PROG.PRES
	yà	<b>nzéé</b>	special pattern 1	PROG.SUB
	yà, yáà	<b>nzí</b>	PST1, PST2	PROG
	yá	<b>lí</b>	PRES	RETRO
	mè, yá	<b>múà</b> ‘be’	special pattern 2	PROSP
	yà, yáà	<b>bwàá</b> ‘have’	PST1, PST2	PRF
Negation	yà/yáà	<b>sàlé/pálé</b>	PST1, PST2	NEG
	yáà/mèè	<b>kálè</b>	FUT	NEG
	yá/∅/	<b>tí</b>	IMP, INF,	NEG
	yà	<b>tí</b>	special pattern 1	NEG
	yá	<b>dúù</b> ‘must not’	PRES, SBJV	NEG

Table 6.9: STAMP markers for different aspect markers

Table 6.9 further indicates the auxiliaries' restriction to certain tense-mood categories or special constructions (e.g. subordinate clauses, infinitives). While most true auxiliaries occur within a tense-mood category that is identical to those discussed under simple predicates (Section 6.2.1), there are four auxiliaries that take a special pattern.

Special pattern 1 includes the PRESENT PROGRESSIVE with *nzíí*, the SUBORDINATE PROGRESSIVE with *nzéé*, and the present tense use with *tí*. This pattern is characterized by a STAMP marker that surfaces with a L tone and a H verb tone. On the surface, this looks identical to the RECENT PAST pattern of simple predicates. Since the auxiliary, however, can never occur phrase-finally as it always requires a non-finite verb, it is not clear what underlying tone pattern the auxiliary verb has and thus if it is indeed identical to the RECENT PAST. Given that this (on the surface) identical tone pattern occurs in different predicate construction types and has different functions, all the while the underlying tone pattern of the verb is not discernable, I

consider the special pattern 1 as distinct from the RECENT PAST. All categories that take the special pattern 1 occur in present tense (*nzíí* and *tî*) or tenseless (*nzéé*) contexts. I suggest that, with these highly grammaticalized auxiliaries, the STAMP marker is deprived of the H tone that surfaces on the STAMP markers in simple predicate PRESENT. Tense information in these complex constructions is thus encoded lexically in the auxiliary, as in (602).

- (602) mè nzíí                gyámbò bédewò  
      mε nzíí                gyámbɔ H-be-dewò  
      1S PROG.PRES.R cook    OBJ.LINK-be8-food  
      ‘I am cooking food.’

To mark the difference between the RECENT PAST L tone of the STAMP marker, as in (603), and the absence of the H tone for special pattern 1 in complex predicates, I only gloss the STAMP marker in the latter for person. In contrast, the RECENT PAST STAMP marker is additionally marked for the tense information it encodes.

- (603) mè                gyámbó bédewò  
      mε                gyámbɔ-H H-be-dewò  
      1S.PST1 cook-R    OBJ.LINK-be8-food  
      ‘I cooked food.’

Special pattern 2 is only found with the PROSPECTIVE aspect *múà*. Here, the tonal pattern of the STAMP marker is comparable to the FUTURE where some person categories have an exceptional tonal pattern from the others. The first and second person singular as well as the agreement class 1 STAMP marker are different from the other agreement classes. The actual shape, however, differs between PROSPECTIVE and FUTURE STAMP markers. The PROSPECTIVE STAMP markers have all short vowels with a L tone for the exceptional (1S, 2S, and 1) person categories and H tones for the others. In contrast, the FUTURE STAMP markers have a long vowel which are all L for the exceptional cases (1S, 2S, and 1) and HL for the others.

Each aspect and negation category also cross-cuts with a mood category. Although there is no way to prove that a realis marking H tone attaches to the auxiliary verb since the auxiliary never occurs phrase-final and therefore its underlying tone pattern cannot be known, I classify the auxiliaries with a final H tone as realis mood and those that have a final L tone as unrealis. This analysis is based on an assumed parallel behavior between semi-auxiliaries

(Section 6.3.2) and highly grammaticalized true auxiliaries that are thought of as mirroring the mood category of their simple predicate counterparts. As Table 6.10 shows, this is true for *dúù* ‘must not’, which belongs to the realis category when it occurs in the PRESENT, but to the irrealis when it occurs in a SUBJUNCTIVE construction.

Mood	True auxiliary	TM restriction	Function
REALIS	<b>nzíí</b>	special pattern 1	PROG.PRES
	<b>nzí</b>	PST1, PST2	PROG.PST
	<b>nzéé</b>	special pattern 1	PROG.SUB
	<b>lí</b>	PRES	RETRO
	<b>bwàá</b> ‘have’	PST	PRF
	<b>sàlé/pálé</b> ‘have’	PST1, PST2	NEG.PST
	<b>dúù</b> ‘must not’	PRES	NEG
	<b>tí</b>	special pattern 1	IMP, INF, PRES
IRREALIS	<b>múà</b> ‘be almost’	special pattern 2	PROSP
	<b>kálè</b>	FUT	NEG.FUT
	<b>dúù</b> ‘have’	SBJV	NEG

Table 6.10: Mood categories of aspect markers

While most auxiliaries belong to the realis mood, there are a few irrealis auxiliaries characterized by their final L tone—PROSPECTIVE *múà*, FUTURE NEGATIVE *kálè*, and SUBJUNCTIVE *dúù*. Almost all auxiliaries match their simple predicate counterparts in their mood category.<sup>14</sup> The only exception is *tí* which is the negation form of the IMPERATIVE, infinitive constructions, and certain cases of the PRESENT. While *tí* clusters with the realis mood, the IMPERATIVE as well as PRESENT negation with *-le* (Section 6.2.3.1) belong to the irrealis categories. In the remainder of this section, I will present each true auxiliary and the grammatical category it encodes.

### 6.3.1.1 PROGRESSIVE aspect *nzíí*, *nzí*, and *nzéé*

The PROGRESSIVE aspect category has three suppletive forms for different tense related categories: *nzíí* for present, *nzí* for the general PAST, i.e. both recent and remote, and *nzéé* as a tenseless dependent form.<sup>15</sup> The PROGRES-

<sup>14</sup>*múà* ‘be almost’ is considered to belong to the FUTURE category for its formal and semantic proximity.

<sup>15</sup>The STAMP markers of *nzíí* and *nzéé* take a special tone pattern that does not match tense-mood categories of simple predicates, as outlined in Section 6.3.1.

SIVE forms for the PRESENT and both PAST tenses are used in main clauses, as shown in (604) with a temporal adverb in each example, and in most subordinate clauses, as in (608) and (609).

- (604) a. mè **nzíí** gyámbò téè  
           mɛ nzíí gyámbɔ téè  
           1S PROG.PRES.R cook now  
           ‘I’m cooking now.’
- b. mè      **nzí**      gyámbò nàkùgúù  
       mɛ      nzí      gyámbɔ nàkùgúù  
       1S.PST1 PROG.PST.R cook yesterday  
       ‘I was cooking yesterday.’
- c. mèè      **nzí**      gyámbò mbvû lâ  
       mèè.PST2 nzí      gyámbɔ mbvû lâ  
       1S        PROG.PST.R cook    Ø3.year pass  
       ‘I was cooking last year.’

In contrast, the tenseless PROGRESSIVE auxiliary *nzéé* is a dependent form that occurs in three environments: i) in the second constituent of a complex predicate construction with a double STAMP marker (Section 6.3.4), ii) in a subordinate clause where *nzéé* is the only marker of subordination (Chapter 8.2.3.5), and iii) in a complement clauses with *nâ* (Chapter 8.2.2.1). (605) provides an instance of a complex predicate with a double STAMP marker where the referent of the STAMP marker is identical for both constituents. As *nzéé* is generally not specified for tense, tense-mood information is encoded in the first constituent involving *bè* ‘be’. Though the first constituent anchors the event in the FUTURE, which belongs to the unrealis mood, *nzéé* always occurs with a realis marking H tone, irrespective of the tense-mood category of the first constituent in a complex predicate (or the matrix clause).

- (605) [mèè bè [mè **nzéé** kè]]  
       mèè bè mɛ nzéé kè  
       1S.FUT be 1S PROG.SUB.R go  
       ‘I will be going.’

In contrast to (605), the structure in (606) is not a complex predicate, but a case of “linkless” subordination. Though, on the surface, both examples look similar, (606) is not an instance of joint predication since the two

STAMP markers refer to different entities: the second person singular in the first constituent and the first person singular in the second. Another difference from (605) is that the finite verb in the first constituent is not the auxiliary *bè* 'be'. Nevertheless, the tenseless PROGRESSIVE auxiliary *nzéé* is used in this context since both predicate share the same tense specification, anchoring the second constituent temporally at the time of the first.

- (606) ká wé pámó māwùlā lòmbì [wé kfùmàlā [mè  
           ká wε-H pámó-H mā-wùlā lòmbì wε-H kfùmàlā mε  
           if 2S-PRES arrive-R ma6-hour eight 2S-PRES find 1S  
           nzéé gyámbɔ]]  
           nzéé gyámbɔ  
           PROG.SUB.R cook  
           ‘If you arrive at eight o’clock, you find me cooking.’

*nzéé* also occurs in complement clauses with *nâ* in places where the SUBJUNCTIVE would be used if the construction was a simple predicate, as in (607).

- (607) mé sìsó nâ wε nzéé gyìmbɔ  
       mε-H sìsɔ-H nâ wε nzéé gyìmbɔ  
       1S-PRES be.happy-R COMP 2S PROG.SUB.R dance  
       ‘I’m happy that you are dancing.’

*nzéé* does not, however, occur in every type of subordinate clause. In relative clauses (Chapter 8.2.1), for instance, a tensed form of the PROGRESSIVE auxiliary is used, as in (608).

- (608) bá dyúwɔ́ lékélè [lé wε  
       ba-H dyúwɔ-H H-le-kélè lé wε  
       2-PRES understand OBJ.LINK-le5-language 5:ATT 2S  
       nzíí làwɔ]REL  
       nzíí làwɔ  
       PROG.PRES.R speak  
       ‘They understand the language that you are speaking.’

The same is true for conditional clauses (Chapter 8.2.3.2), as in (609). The reason for this is most likely that these types of dependent clauses do not necessarily anchor the time of the subordinate clause at the same time of the matrix clause (even though they can be identical, as in (609)). Therefore, the tenseless auxiliary *nzéé* is prohibited.

- (609) [ká kééssó yì nzíí wê dyòdè]<sub>COND</sub> wé yáné  
 ká kééssó yi nzíí wê dyòdè wε-H yáne  
 if Ø7.peer 7 PROG.PRES 2S.NSBJ deceive 2S-PRES must  
 kílɔwɔ  
 kílɔwɔ.  
 be.vigilant
- ‘If somebody is deceiving you, you must be vigilant’

In terms of its meaning, the PROGRESSIVE describes situations as ongoing and unbounded, as shown in (610b). It is semantically distinct from the unmarked tense-mood form in (610a) which does not give any information about the internal constituency of the event. The emphasis of the PROGRESSIVE form, however, is specifically on the duration of the event. This is also reflected in speakers’ French translation of PROGRESSIVE constructions which are usually translated with the French construction *être en train de faire quelque chose* ‘being in the process of doing something’.

- (610) a. mé dè  
 mε-H dè  
 1S-PRES eat  
 ‘I eat.’
- b. mè nzíí dè  
 mε nzíí dè  
 1S PROG.PRES.R eat  
 ‘I’m eating.’

The PROGRESSIVE in Gyeli is especially found in questions, as in (611). While the unmarked, bare tense-mood form is also grammatically correct in questions, the PROGRESSIVE form is definitely preferred and much more frequent.<sup>16</sup>

- (611) nzá nzíí m̄e nȳe  
 nzá nzíí m̄e nȳe  
 who PROG.PRES 1S.NSBJ see  
 ‘Who is seeing me?’

Gyeli PROGRESSIVE aspect does not seem to be restricted to certain verb classes. While English, for instance, disfavors PROGRESSIVES with verbs expressing states, in Gyeli all kinds of verbs can occur with the PROGRESSIVE.

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<sup>16</sup>For more information on questions, see Chapter 7.4.1

This is illustrated in (612) for a stative verb and in (613) for a (desiderative) modal verb.

- (612) kó mbúmbù nyè nzí lèmbò dyùù bô fàmî  
 kó mbúmbù nyè nzí lèmbo dyùù b-â fàmî<sup>1</sup>  
 EXCL Ø1.namesake 1.PST1 PROG know kill 2-NSBJ Ø1.family  
 bá bùdì ná  
 bá b-ùdì ná  
 2:ATT ba2-person how

‘Oh namesake, how could he kill them, the family of people?’

- (613) mè nzí wúmbè nâ bwánà bâ bá  
 mè nzí wúmbè nâ b-wánà b-â ba-H  
 1S.PST1 PROG want COMP ba2-child 2-POSS.1S 2-PRES  
 bwámóò é mpù mìntángáné békúdé  
 bwámóò é mpù mi-ntángáné H-be-kúdé  
 become.SBJV LOC like.this mi4-white.person OBJ.LINK-be8-skin  
 bé mpâ  
 bé mpâ  
 8:ATT good

‘I was wanting my children to get like the white people good skin.’

In addition to describing a situation as ongoing and unbounded, the PROGRESSIVE is also used for backgrounding information, as shown in (614) which presents three chronological utterances by a speaker talking about his mother. The phrase in (614a) includes the main information, namely that the speaker’s mother is in another village (and not in Ngolo). He then explains as backgrounding information in (614b) that she went there for his brother’s funeral. In (614c), this is supplemented with further background information, namely that the brother had died there.

- (614) a. nyââ wâ núú Ntâbètendá pè  
 nyââ w-â núú Ntâbètendá pè  
 Ø1.mother 1-POSS.1S 1.DEM.DIST Ø7.PN there  
 ‘My mother is over there in Ntabetenda [= name of village].’
- b. à nzí kè lètsíndj lé  
 a nzí kè le-tsíndj lé  
 1 PROG.PST1 go le5-funeral.ceremony 5:ATT  
 ntùmbà wâ  
 n-tùmbà w-â  
 N1-older.brother 1-POSS.1S  
 ‘She was going to my older brother’s funeral ceremony.’

- c. nógá      à nzí      wè wû  
       nó-gá      a nzí      wè wû  
       1-CONTR 1 PROG.PST1 die there  
       ‘That one died over there.’

Especially the phrase in (614c) shows that in these instances, the PROGRESSIVE form is most likely not concerned with an unbounded, ongoing situation since the verb *wè* ‘die’ is typically punctual rather than ongoing and unbounded.

### 6.3.1.2 RETROSPECTIVE aspect *lɔ̄*

The RETROSPECTIVE auxiliary is the counterpart to the PROSPECTIVE (Section 6.3.1.3) on the time line, looking back at the endpoint of an event that just took place. It is likely a loan construction from French *venir de faire quelque chose* ‘just having done something [lit. come from doing something]’, while the lexeme *lɔ̄* is a loan word from Basaa (A42), with the meaning ‘come’ in Basaa. Though speakers are aware of the Basaa meaning, *lɔ̄* does not have any lexical meaning in Gyeli nor does it occur outside of the RETROSPECTIVE context. I therefore gloss *lɔ̄* only with its grammatical category instead of a lexical meaning. The RETROSPECTIVE auxiliary has only been observed to occur with eventive verbs and animate subjects in the corpus. It is restricted to the PRESENT (unlike French, where it can also be used in other tenses). Accordingly, STAMP markers carry the PRESENT H tone, as shown in (615), while the verb *lɔ̄* always occurs with a realis marking H tone.<sup>17</sup> Unlike the PROSPECTIVE, all STAMP markers carry the same tone in this aspect category, as (615a) and (615b) show.

- (615) a. á      lɔ̄      dè  
       a-H      lɔ̄      dè  
       1-PRES RETRO.R eat  
       ‘He has just eaten [*Il vient de manger.*]’
- b. bá      lɔ̄      dè  
       ba-H      lɔ̄      dè  
       2-PRES RETRO.R eat  
       ‘They have just eaten.’

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<sup>17</sup>Since *lɔ̄* never occurs phrase finally in Gyeli, there is no proof of any underlying tone. I therefore gloss *lɔ̄* with a H tone also in the underlying form which inherently carries the realis marking grammatical H tone.

The distance between speech time and the situation that is looked at retrospectively is relative. In (616), for instance, speech time and the situation are immediate in that the situation still affects speech time. The addressee of the question is still present and is still looking for something.

- (616) áh gyí wé ló njì gyésò  
       áh gyí we-H ló njì gyésò  
       EXCL what 2S-PRES RETRO.R come look.for  
       ‘Ah, what have you just come to look for?’

In contrast, in (617), the retrospect situation is already finished which is clearly marked by the verb *fwálà* ‘end’ and also the event of speaking is accomplished. Here, speech time and the situation are in close temporal proximity of about a few seconds.

- (617) yá ló fwálà nà mé ló láwò  
       ya-H ló fwálà nà mε-H ló láwò  
       1P-PRES RETRO.R end COM 1S-PRES RETRO.R speak  
       ‘We have just finished and I have just spoken.’

There are, however, also instances in the corpus where more time passes between speech time and the situation. In (618), Nzambi’s wife comes home after having lost her child and now explains the situation to her husband, namely that the husband’s friend has taken the child in return for food. She reports that the friend had said that they don’t work hard enough to earn their food. Between the situation where the friend said this, however, (the retrospect situation) and the time of utterance, the wife has left the friend’s home, walked all the way back to her own home, had cried and had gotten picked up by her husband. Thus, in this case, situation and speech time are not at all immediate.

- (618) yóò á ló kí náà é mpù wèé  
       yóò a-H ló kí náà é mpù wèé  
       so 1-PRES RETRO say COMP LOC like.this 2S.PRES.NEG  
       gyángyálé bédewò  
       gyángya-lé H-be-déwò  
       work-NEG OBJLINK-be8-food  
       ‘So he just said that: Like this, you don’t work for your food.’

The RETROSPECTIVE aspect is often viewed as PERFECT in the literature and the example in (618) could be taken as such. As Comrie (1976: 64)

states, the ‘perfect’ is retrospective.’ In Gyeli, however, the two are distinct and have distinct forms, as I show in Section 6.3.1.4.

### 6.3.1.3 PROSPECTIVE aspect *múà*

The PROSPECTIVE marker *múà* ‘be almost’ is the only aspect category that belongs to the irrealis mood in Gyeli which is characterized by the absence of a realis marking grammatical H tone on the auxiliary verb, as shown in (619). It is further similar to the FUTURE irrealis category in that the STAMP markers of the first and second person singular as well as the class 1 STAMP marker show a different tonal pattern from the other agreement classes, as contrasted in the same example.<sup>18</sup>

- (619) a. à **múà** dè  
          a **múà** dè  
          1 be.almost eat  
          ‘S/he is about to eat.’
- b. **bá**      **múà**      dè  
      ba-H      **múà**      dè  
      2-PRES be.almost eat  
      ‘They are about to eat.’

Since the PROSPECTIVE marker *múà* has a lexical meaning, ‘be almost’, I gloss *múà* with its meaning rather than the grammatical category that it encodes. This is consistent with cases where *múà* ‘be almost’ occurs in a simple predicate without another finite verb, as in (620).

- (620) mè **múà**      tísɔnì  
      mè **múà**      tísɔnì  
      1S be.almost Ø7.town  
      ‘I’m almost in town.’

Due to its inflectional restrictions (Section 6.3.1), however, I view *múà* as marking a grammatical category instead of being a non-grammaticalized semi-auxiliary (Section 6.3.2).

Comrie (1976: 64) describes the PROSPECTIVE as an aspect “where a state is related to some subsequent situation, for instance where someone is in the

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<sup>18</sup>See Section 6.3.1 for more information on tonal patterns of the STAMP marker in complex predicates with true auxiliaries.

state of being about to do something.” Speakers usually translate the use of this aspect marker in (619a) as *Je veux/vais déjà manger* into Cameroonian French, meaning ‘I want/will already eat.’ In a detailed description of the situation in (619a), speakers explain that a person would be sitting already at a table, a plate of food in front of them, and being in the state of just being about to start eating.

Using the French modals also reflects the future orientation of the Gyeli PROSPECTIVE, similarly to what Matthewson (2012) describes for Gitksan (Tsimshianic; British Columbia, Canada) modals. This future orientation explains the affiliation to the irrealis mood. Even though in terms of alternative realities, it is highly probable that the person in (619a) will indeed start to eat, consider (621).

- (621) mè **múà**      wè nà      nzà  
       mε múa      wè nà      nzà  
       1S be.almost die COM Ø9.hunger  
       ‘I’m about to die from hunger.’

This example shows that the prospected event is not inevitable and at the point of utterance, it is not certain that it will really happen. The same is true for (622) where the hitting is probable, but not certain.

- (622) nyè náà      à **múà**      wê      bíyò dέ  
       nyε nâ      a múa      wê      bíyo dέ  
       1 COMP 1 be.almost 2S.NSBJ hit today  
       ‘He [says] that he is about to beat you today.’

The PROSPECTIVE does not seem to be restricted to certain verb classes, but can occur with both eventive and stative verbs. Further, its subjects can be both animate and inanimate. The latter is exemplified in (623) where the speaker is talking about the port that is about to affect also the village of Ngolo.

- (623) à **múà**      njì      lâ      báà      bù      mpàgó  
       a múa      njì      lâ      báà      bù      mpàgó  
       1 be.almost come pass 2.FUT break Ø3.road  
       ‘It [the port] is about to come pass [= by here], they will build the road.’

### 6.3.1.4 PERFECT aspect *bwàà* ‘have’

The PERFECT in Gyeli is expressed by the auxiliary verb *bwàà* ‘have’. This aspect category is restricted to the past tense-mood categories and can occur in both recent and remote PAST, as shown in (624).

- (624) a. **mè**      **bwàá**    dè  
           mε        bwàà-H dè  
           1S.PST1 have-R eat  
           ‘I have eaten (recently).’
- b. **méè**      **bwàá**    dè  
           méè        bwàà-H dè  
           1S.PST2 have-R eat  
           ‘I have eaten (long ago).’

Just like the PROSPECTIVE verb *múà*, *bwàà* can occur in simple predicates without another non-finite verb, namely when it expressing identity relations, as in (625).

- (625) yóò báñzàmbí bá    tè    bà      **bwàá**    só  
           yóò ba-nzàmbí bá    tè    ba      bwàà-H só  
           so ba2-PN    2:ATT there 2.PST1 have-R Ø1.friend  
           ‘So, the Nzambis there had been friends.’

The PERFECT *bwàà* is rather rare both in the corpus and in Dahl’s (1985) TMA Questionnaire. It is thus challenging to delimit a core meaning for this category. At the same time, the PERFECT seems to be similar to other aspects, such as RETROSPECTIVE and ABSOLUTE COMPLETIVE, in the sense that the situation has been completed by speech time. In comparison to the RETROSPECTIVE, however, the emphasis of the PERFECT is a relative long time distance between the situation and speech time which is usually translated into Cameroonian French with the *plus-que-parfait* and the adverb *dépuis* which means ‘a long time ago.’ Thus, the phrase in (626) is consistently translated as *Il est depuis allé rester comme ça*.<sup>19</sup>

- (626) à **bwàá**    yéé    ké    jì    mpù  
           a bwàà-H yéé    kè-H jì    mpù  
           1 have-R then go-R stay like.this

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<sup>19</sup>Despite this translation and a possible implication of anteriority, I do not label *bwàà* as pluperfect or past perfect since this would require an anteriority relation to another thematically connected event in the past (Lee 2017). This other event in the past, however, is not given in (626) nor in (627a).

'He [the other Nzambi] has gone and stood like this.'

Also data from Dahl's (2000) PERFECT questionnaire supports that *bwàà* is used when the situation is temporally distant from speech time. (627) is the answer to the statement 'Don't speak so loud, you will wake up the baby', stating that the baby is already awake. In (627a), *bwàà* is used; speakers explain that the baby has woken up already a while ago. In contrast, the use of the ABSOLUTE COMPLETIVE in (627b) hints at the fact that he has only woken up recently.

- (627) a. à           **bwàá**   vòbà  
       a            bwàà-H vòbà  
       1S.PST1 have-R wake  
       'He has woken up already (a while ago).'  
 b. à           vòbá    mò  
       a            vòba-H mò  
       1S.PST1 wake-R COMPL  
       'He has woken up already (recently).'

Given that the PERFECT can occur in both PAST 1 and PAST 2 tense-mood categories, i.e. time distance between situation and speech time can be manipulated, a relatively long time distance between speech time and the situation cannot be the only information that the PERFECT encodes. Also, there are examples such as (628) where speech time and the situation are more immediate.

- (628) yóò nzàmbí kí   náà   mè           **bwàá**   wê           tsíyè  
       yóò nzàmbí kì-H náà   mè           bwàà-H wê           tsíyè  
       so Ø1.PN say-R COMP 1S.PST1 have-R 2S.NSBJ cut  
       lèkélè   dé    nâ    mé           lígé   dè mwánò wóò  
       le-kélè   dé    nâ    mè-H    líge-H dè m-wánò w-óò  
       le5-speech today COMP 1S-PRES stay-R eat N1-child 1-POSS.2S  
       'So Nzambi says 'I have cut your word today' [= I'm not listening to you] 'I stay and eat your child'.'

In fact, it seems that the narrator could also have chosen to use the RETROSPECTIVE form here, or the ABSOLUTE COMPLETIVE (Section 6.2.3.3). The reason for this preference of *bwàà* over other aspect forms in this context is not clear.

### 6.3.1.5 Negation with *sàlé/pálé* in the PAST

As outlined in Section 6.1, negation in Gyeli involves different negation markers and strategies across different tense-mood categories. For both the RECENT PAST and the REMOTE PAST categories, the negation auxiliary verbs *sàlé* or *pálé* are used. These forms seem to be freely interchangeable. Speakers state that they can both be used in the same context and due to a low frequency in the corpus, no limitation on any one usage can be seen. In (629), for instance, the remote PAST is used.

- (629) ékè nzàmbí wà nú áà **sàlé** bè nà  
      ékè nzàmbí wà nú áà **sàlé** bè nà  
      EXCL Ø1.PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM  
      bâ líná-á pámò  
      bâ líná a-H pámo  
      Ø7.word when 1-PRES arrive

‘Oh! That Nzambi had no words as soon as he arrives.’

In (630) and (631), the negation verb occurs with a RECENT PAST STAMP marker which surfaces with a L tone. The STAMP markers for both PAST categories take the same pattern under negation as in non-negated forms (Section 6.2.1).

- (630) a. yà **pálé** bè nà bùdâ  
      ya pálé bè nà b-ùdâ  
      1P.PST1 NEG.PST.R be COM ba2-woman  
      ‘We did not have any women.’
- b. yà bé nà bùdâ  
      ya bè-H nà b-ùdâ  
      1P.PST1 be-R COM ba2-woman  
      ‘We did not have any women.’

In (631a), the adverb *líí* ‘not yet’ is used, which can only occur in negated clauses (Chapter 3.4). In the positive counterpart in (631b), this adverb cannot occur. Instead, the positive is expressed by the ABSOLUTE COMPLETIVE aspect particle *mò* (Section 6.2.3.3).

- (631) a. à **pálé** líí bâ  
      a pálé líí bâ  
      1.PST1 NEG.PST.R not.yet marry  
      ‘He is not yet married.’

- b. à        bá        mò  
     a        bâ-H        mò  
     1.PST1 marry-R COMPL  
     ‘He is already married.’

Both *sàlē* and *pálē* end in *-le*, the negation suffix used also in the PRESENT negation. Since the meaning of *sà-* and *pá-* is unknown synchronically, however, I do not gloss *-le* separately as a negation suffix, but treat the whole verb as negation auxiliary.

Also, it seems that these negation auxiliaries are more grammaticalized than the PRESENT negation suffix *-le* in terms of their tonal behavior. Unlike the special tonal patterns in the PRESENT negation (Section 6.2.3.1), the PAST negation auxiliaries all surface with a final realis marking H tone, as seen in the previous examples.

Negation with *sàlē/pálē* is asymmetric with regards to its positive counterpart in several respects. First, there is a constructional asymmetry in terms of the predicate structure. The positive clause in (632a) is a simple predicate construction in which the lexical verb is tonally inflected for the realis mood. In contrast, the negated counterpart with the auxiliary *sàlē* in (632b) is a complex predicate in which finiteness marking is on the auxiliary and not on the lexical verb.

- (632) a. mè        gyámbó        bélòlò  
       me        gyámbó-H        H-be-lòlò  
       1S.PST cook-R        OBJ.LINK-be8-duck  
       ‘I cooked ducks.’
- b. mè        sàlē        gyámbò        bélòlò  
       me        sàlē        gyámbò        H-be-lòlò  
       1S.PST NEG.PST cook        OBJ.LINK-be8-duck  
       ‘I did not cook ducks.’

Second, there is a paradigmatic asymmetry: all aspect categories, such as the PROGRESSIVE in (633a), are lost under negation, as shown in (633b).

- (633) a. yà        nzí        dè        móntúà  
       ya        nzí        dè        H-ma-ntúà  
       1P.PST PROG.PST eat        OBJ.LINK-ma6-mango  
       ‘We were eating mangoes.’

- b. yà sàlé/pálé dè mántúà  
 ya.PST sàlé/pálé dè H-ma-ntúà  
 1P.PST NEG.PST eat OBJ.LINK-ma6-mango  
 ‘We did not eat mangoes.’

It is impossible to combine negation and aspect markers in a complex predicate with a simple STAMP marker. It is neither permissible to combine two true auxiliaries, as in (634a), nor can the PROGRESSIVE PAST auxiliary *nzí* in (634b) take the PRESENT negation suffix *-lε*.

- (634) a. \*yà sàlé/pálé nzí/ì dè mántúà  
 ya.PST sàlé/pálé nzí/ì dè H-ma-ntúà  
 1P.PST NEG.PST PROG.PST eat OBJ.LINK-ma6-mango  
 ‘We were not eating mangoes.’
- b. \*yà nzílē dè mántúà  
 ya.PST nzí-le dè H-ma-ntúà  
 1P.PST PROG.PST-NEG eat OBJ.LINK-ma6-mango  
 ‘We were not eating mangoes.’

Aspect and negation can only be combined through complex predicates with a double STAMP construction (Section 6.3.4).

#### 6.3.1.6 Negation with *kálè* in the FUTURE

Negation in the FUTURE is achieved through the auxiliary *kálè*. The STAMP marker patterns in both the positive and negative FUTURE are identical. For the first and second person singular and agreement class 1, the STAMP marker has a long vowel with a L tone pattern, as in (635), while all other agreements classes have a long vowel with a HL pattern, as exemplified in (636).<sup>20</sup>

- (635) a. [mèè kálè ná bè nà] jí é vâ  
 mèè kálè ná bè nà jí é vâ  
 1S.FUT NEG.FUT still be COM Ø7.place LOC here  
 ‘I won’t have a place here anymore.’
- b. [mèè bè ná nà] jí é vâ  
 mèè bè ná nà jí é vâ  
 1S.FUT be still COM Ø7.place LOC here  
 ‘I will still have a place here.’

---

<sup>20</sup>Square brackets indicate the verbal predicate.

FUTURE negation with *kálè* is asymmetric in the same ways are described for negation with PAST *sàlē/pálē*. There is a constructional asymmetry between simple predicates in positive and complex predicates in negative FUTURE. In contrast to the PAST tenses, however, the FUTURE belongs to the irrealis mood which lacks the realis marking H tone on the finite verb. Despite the absence of the grammatical tone, it is clear from the position of the adverb *ná* ‘still’ that *kálè* in (635a) is the finite verb, while *bè nà* in (635b) is finite. The adverb always occurs after the finite verb (Section 6.3).

- (636) a. ká wé      kíyá      lékó'ò      é      kwámó kwámó  
       ká wε-H      kíya-H H-le-kó'ò      é      kwámó kwámó  
       if 2S-PRES put-R OBJ.LINK-le5-stone LOC Ø9.bag Ø9.bag  
       [nyîì kálè      búlè]  
       nyîì kálè      búle  
       9.FUT NEG.FUT break  
       ‘If you put the stone in the bag, the bag will not break.’
- b. ká wé      kíyá      lékó'ò      é      kwámó kwámó  
       ká wε-H      kíya-H H-le-kó'ò      é      kwámó kwámó  
       if 2S-PRES put-R OBJ.LINK-le5-stone LOC Ø9.bag Ø9.bag  
       [nyîì búlè]  
       nyîì búle  
       9.FUT break  
       ‘If you put the stone in the bag, the bag will break.’

The paradigmatic asymmetry regarding the loss of aspect distinctions under negation as discussed for PAST negation in Section 6.3.1.5 also applies with *kálè*.

### 6.3.1.7 Negation with *tí*

There are three sub-types of the negation auxiliary *tí* with respect to the shape of the STAMP marker: i) *tí* is preceded by the H tone STAMP marker *yá* for the first person plural imperative (cohortative), ii) the STAMP marker is absent with *tí* negation of the second person singular and plural imperative as well as negation of infinitives in asyndetic subordinate clauses, and iii) the STAMP marker takes special pattern 1, as described in Section 6.3.1 for other auxiliaries as well, when *tí* is used as a negator of a PRESENT main clause. Since *tí* occurs in various tense-mood forms and construction types,

unlike other negation auxiliaries, I gloss *tí* as NEG.<sup>21</sup>

**Negation of the cohortative** When *tí* is used with the first person plural imperative, the STAMP marker *yá* precedes the negation auxiliary *tí* with the H tone of the PRESENT category, as in (637a), which is identical to the STAMP marker tone pattern in the affirmative IMPERATIVE in (637b). In contrast to other tense-mood categories, the IMPERATIVE requires a verbal plural marker *nga* (Chapter 3.9.2) that occurs immediately after the finite verb form.

- (637) a. *yá            tí            ngá dè*  
           ya-H        tí        nga dè  
           1P-PRES NEG.R PL eat  
           'Let's not eat!'
- b. *yá            dê            ngà*  
           ya-H        dê        nga  
           1P-PRES eat.IMP PL  
           'Let's eat!'

In that respect, *tí* cohortative negation is constructionally asymmetric to its positive counterpart: in the complex predicate in (637a), the auxiliary is the finite verb, while in the positive simple predicate counterpart, the lexical verb *dê* is the finite verb with the IMPERATIVE tonal pattern on the verb.

Another asymmetry concerns the tonal pattern of the verbal plural marker *nga* which surfaces H under negation in (637a), but L in the affirmative in (637b), which can be explained by high tone spreading from the preceding verb or lack thereof. The H tones on *nga* in (638) in both the negative and the affirmative, however, have different origins, as explained in Chapter 7.2.1.2.

- (638) a. *yá            tí            ngá gyàgà mántúà*  
           ya-H        tí        nga gyàga H-ma-ntúà  
           1P-PRES NEG.R PL buy    OBJLINK-ma6-mango  
           'Let's not buy mangoes!'

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<sup>21</sup>Though the PRESENT suffix *-lε* is also glossed -NEG, the difference between *-lε* and *tí* is obvious in glossing through their different morpheme status. *-lε* is glossed as a suffix, while *tí* is glossed as a free morpheme.

- b. yá gyàgâ ngá màntúà  
     yá gyàgâ nga-H mántúà  
     1P-PRES buy.IMP PL-OBJ.LINK ma6-mango  
     ‘Let’s buy mangoes!’

**Negation of second person imperative** Negative imperatives addressed to second persons are expressed by the negation verb *tí*, but lack the STAMP marker. An example for the second person singular with its affirmative counterpart is given in (639).

- (639) a. tí dè mántúà  
         tí dè H-ma-ntúà  
         NEG.R eat OBJ.LINK-ma6-mango  
         ‘Don’t (sg.) eat mangoes!’
- b. dê mántúà  
     dê H-ma-ntúà  
     eat.IMP OBJ.LINK-ma6-mango  
     ‘Eat (sg.) mangoes!’

Other lexical examples of the second person singular negation that follow the structure of (639a), are given in (640) without an object and in (641) with a following object.

- (640) a. tí dè ‘Don’t (sg.) eat!’  
     b. tí gyàgà ‘Don’t (sg.) buy!’  
     c. tí nyúlè ‘Don’t (sg.) drink!’  
     d. tí vìdègà ‘Don’t (sg.) turn!’
- (641) a. tí dè mántúà! ‘Don’t (sg.) eat mangoes’  
     b. tí gyàgà mántúà! ‘Don’t (sg.) buy mangoes!’  
     c. tí nyúlè májíwó! ‘Don’t (sg.) drink water!’  
     d. tí vìdègà wámíyè! ‘Don’t (sg.) turn fast!’

An example for the second person plural with its affirmative counterpart is given in (642).

- (642) a. tí ngá dè mántúà  
         tí nga dè H-ma-ntúà  
         NEG.R PL eat OBJ.LINK-ma6-mango  
         ‘Don’t (pl.) eat mangoes!’

- b. dê ngá màntúà  
      dê nga-H ma-ntúà  
      eat.IMP PL-OBJ.LINK ma6-mango  
      ‘Eat (pl.) mangoes!’

Other lexical examples of the second person singular negation that follow the structure of (642a), are given in (643) without an object and in (644) with a following object.

- (643) a. tí ngá dè! ‘Don’t (pl.) eat!’  
b. tí ngá gyàgà! ‘Don’t (pl.) buy!’  
c. tí ngá nyúlè! ‘Don’t (pl.) drink!’  
d. tí ngá vìdègà! ‘Don’t (pl) turn!’

- (644) a. tí ngá dè mántúà! ‘Don’t (pl.) eat mangoes’  
b. tí ngá gyàgà mántúà! ‘Don’t (pl.) buy mangoes!’  
c. tí ngá nyúlè májíwó! ‘Don’t (pl.) drink water!’  
d. tí ngá vìdègà wámíyè! ‘Don’t (pl.) turn fast!’

**Negation of infinitives** A common use of the negation auxiliary *tí* concerns the negation of infinitives. It is characteristic of these constructions that the negated lexical verb appears in its non-finite form, i.e. without tense-mood and/or realis H tone marking. The auxiliary *tí* is also not preceded by a STAMP marker in these constructions, as (647) and (646) show.

- (645) gbí gbí gbí gbí à múà nà  
      gbí-gbí-gbí-gbí a múà nà bábè tí wúmbè wè  
      IDEO:roaming 1 PROSP COM Ø7.illness NEG want-R die  
      bábè tí wúmbè wè

‘[depiction of disease roaming in his body] He was about to be sick, without wanting to die.’

- (646) nà    ké    jíí           dé    tù    nà    ndzí    pámò dê    tí  
       nà    kè-H jíí           dé    tù    nà    ndzí    pámò dē    tí  
       COM go-R Ø7.forest LOC inside COM Ø9.path arrive today NEG  
       nyê nyê  
       nyê nyê  
       see 1.NSBJ

‘And (he) goes in the forest on the path till today, without seeing him [= without being seen].’

In that sense, *tí* plus infinitive function as an infinitival subordinate clause (Chapter 8.2.3.4), where the subject is supplied from the main clause.

This negative infinitival construction with *bè nà* ‘be with’ is likely the source of the prepositional use of *tí* (Chapter 3.10.1). As (647) shows, *bè nà* ‘be with’ can also be elided, only leaving *tí* as the preposition ‘without’.

- (647) mé nyúlé kòfí      **tí** (**bè nà**) ngù́j  
       me-H nyúlé-H kòfí      tí    bè    nà    ngù́j  
       1S-PRES drink-R Ø7.coffee NEG be COM Ø7.sugar  
       ‘I drink coffee without (having) sugar.’

**PRESENT main clause negation with *tí*** *tí* can also be used for negation in a PRESENT main clause, as shown in (648a). This contrasts with the general PRESENT negation with the suffix *-lē* in (648b) (Section 6.2.3.1). The choice between standard *-lē* negation and *tí* in PRESENT tense main clauses relates to information structure principles and an immediate-after-verb focus position (Chapter 7.3).

- (648) a. mè **tí**      dè  
       me tí      dè  
       1S NEG eat  
       ‘I don’t EAT.’
- b. mèé                délē  
       mèé                dé-lé  
       1S.PRES.NEG eat-NEG  
       ‘I DON’T eat.’

In negation with *tí*, the lexical verb following the auxiliary is in focus position. In contrast, standard PRESENT negation with *-lē* focuses the negation.

Impressionistically, it seems that *tí* in main clauses is often used in conjunction with the adverb *ná* ‘still’, giving a reading of ‘anymore’ under negation. This might be the case since adverbs modify lexical verbs and the lexical verb is focused in (649a). When negation is focused, as in (649b), however, the use of adverbs such as *ná* ‘still’ is also grammatical.

- (649) a. mè tí ná dè  
       me tí ná dè  
       1S NEG still eat  
       'I don't EAT anymore.'
- b. mèé              délé        ná  
       mèé              dé-lé        ná  
       1S.PRES.NEG eat-NEG still  
       'I DON'T eat anymore.'

*tí* is the only negation marker in Gyeli which frequently undergoes code-switching with Kwasio in the corpus, as in (650). In Kwasio, the regular correspondence to Gyeli *tí* is *kí* or *kilè* in (651).

- (650) mè            kí              bè nà        tsídí  
       me            kí              bè nà        tsídí  
       1S.PST1 NEG[Kwasio] be COM Ø1.meat  
       'I didn't have any meat.'

The difference between *kí* and *kilè* in Kwasio might relate to different tense categories, as (650) with *kí* is located in the past, while *kilè* in (651) encodes the present. If this is the case<sup>22</sup>, the Kwasio negation auxiliaries might encode different tense categories than Gyeli *tí*: if *kí* only substituted the form *tí* in (650), the tense reading should be present. Speakers are very clear, however, that the sentence encodes the past. If the Gyeli use of Kwasio negation markers is identical to their use in Kwasio, in terms of tense encoding, is yet another question that cannot be answered here.

- (651) bá            lá            pámò vâ    téè    bà            kwèlɔɔ̄        yɔ̄  
       ba-H        lå-H        pámø vâ    téè    ba            kwèlɔɔ̄        y-ɔ̄  
       2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7-NSBJ  
       kílè            dyúwò tsíyà  
       kílè            dyúwò tsíyà  
       NEG[Kwasio] hear    Ø1.question  
       'They pass and arrive here now, they cut it already without hearing  
       a question [= without asking].'

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<sup>22</sup>There is very little information on Kwasio and Woungly's (1971) description of negation in Ngumba does not give a concise account of the different functions of *ki* or *kile*, but it seems that, as in Gyeli, both negation markers are found in different tense categories.

### 6.3.1.8 Negation with *dúù*

The auxiliary *dúù* ‘should/must not’, although having a lexical meaning, is classified as a true auxiliary since it is restricted to the PRESENT and SUBJUNCTIVE categories. In the PRESENT, *dúù* ‘should/must not’ takes a realis marking H tone, as in (652a), just as its positive counterpart *yáne* ‘must’ in (652b).<sup>23</sup>

- (652) a. bé            dúú            v̄ūū  
           be-H        dúù-H        v̄ūū  
           2P-PRES must.not-R worry  
           ‘You (pl.) should/must not worry.’
- b. bé            yáne            v̄ūū  
           be-H        yáne-H v̄ūū  
           2P-PRES must-R worry  
           ‘You (pl.) should/must worry.’

*dúù* is also used in its SUBJUNCTIVE form in main clauses, as in (653a). The difference from the PRESENT forms in (652) is that *dúù* ‘should/must not’ lacks the realis marking H tone. Its positive counterpart would be a subjunctive construction in (653b) instead of the modal semi-auxiliary in (652b).

- (653) a. bé            dúù            kè tísònì  
           be-H        dúù            kè tísònì  
           2P-PRES must.not.SBJV go Ø7.town  
           ‘You (pl.) may/should not go to town.’
- b. bé            kéè            tísònì  
           be-H        kéè            tísònì  
           2P-PRES go.SBJV Ø7.town  
           ‘You (pl.) may/should go to town.’

Just like the positive SUBJUNCTIVE, the SUBJUNCTIVE form of *dúù* ‘should/must not’ is found in complement clauses, as in (654a). The affirmative counterpart is given in (654b).

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<sup>23</sup>*yáne* ‘must’ is classified as a modal semi-auxiliary and discussed in Section 6.3.2 since it does not seem to have any tense-mood restrictions, unlike *dúù* ‘must not’.

- (654) a. bùdì        bà        wúmbé    nâ        bá        dúù  
           b-ùdì        ba        wúmbé-H nâ        ba-H        dúù  
           ba2-person 2.PST1 want-R    COMP 2-PRES must.not.SBJV  
           dyùù nyê  
           dyùù nyê  
           kill    1.NSBJ  
           ‘The people wanted that he not be killed.’
- b. bùdì        bà        wúmbé    nâ        bá        dyúù  
           b-ùdì        ba        wúmbé-H nâ        ba-H        dyùù.SBJV  
           ba2-person 2.PST1 want-R    COMP 2-PRES kill.SBJV  
           nyê  
           nyê  
           1.NSBJ  
           ‘The people wanted that he be killed.’
- c. bùdì        bà        sàlé        wúmbè nâ        bá  
           b-ùdì        ba        sàlé        wúmbé nâ        ba-H  
           ba2-person 2.PST1 want-R COMP 2-PRES must.not.SBJV  
           dyúù nyê  
           dyùù nyê  
           kill    1.NSBJ  
           ‘The people did not want that he be killed.’

Rather than the negative SUBJUNCTIVE *dúù* ‘should/must not’, however, negation of the matrix clause is generally preferred, as in (654c).

### 6.3.2 Simple STAMP predicates with semi-auxiliaries

The formal difference between true auxiliaries and semi-auxiliaries in Gyeli is discussed in Chapter 3.2.2.2. Semi-auxiliary verbs in Gyeli belong to different semantic verb classes, namely:

1. Aspectual verbs (*sílε* ‘finish’, *pâ* ‘do first’, *táale* ‘begin’, *bàga nà* ‘stop’)
2. Deictic motion/posture verbs (*kè* ‘go’, *njì* ‘come’, *líge* ‘stay’, *lâ* ‘pass’)
3. Modal verbs (*lèmbɔ* ‘can/know’, *kwàle* ‘like’, *wúmbε* ‘want’, *yáne* ‘must’)

I will provide examples of each in the following.

*sílè* ‘finish’ The semi-auxiliary *sílè* ‘finish’ is used aspectually in complex predicates with a NON-COMPLETE ACCOMPLISHMENT reading.<sup>24</sup> As explained in (589) in Section 6.2.3.3, *sílè* ‘finish’ implies that somebody has ceased to do an activity, without entailing that the activity has been carried out to completion (unlike the ABSOLUTE COMPLETIVE *mò*). Thus, the question in (655) is interpreted as to whether the addressee is done sweeping, but not, if they have swept everything (the whole house or yard).

- (655) nà wè **sílè**      wòmbèlè  
       nà wè *sílè*-H      wòmbelə  
       Q 2S finish-R sweep  
       ‘Have you finished sweeping?’

Besides this non-complete accomplishment implication, one of the core functions of *sílè* is to express distributivity of an event or kind. In the case of the palm wine in (656),<sup>25</sup> for example, it requires many episodes of ‘drinking a palm tree’, namely coming back every day and harvesting the wine. Again, it does not mean that there is no drop of sap left in the palm trees at the end, but that the speaker will keep harvesting palm wine from the trees until he is done with these multiple actions. The same is true for (655) where the event of sweeping is comprised of many episodes of moving the broom over the ground.

- (656) mè nzíí                kè nà      vúlé                lévúdū                nà  
       mε nzíí                kè nà      vúle-H                H-le-vúdū                nà  
       1S PROG.PRES go COM take.away-R OBJ.LINK-le5-one COM  
       lèvúdū mè      táálé      **sílè**      nyùlè  
       le-vúdū mε-H      táálε-H *sílè*      nyùlε  
       le5-one 1S-PRES begin-R finish drink  
       ‘I’m taking down one [palm tree] by one, I start to drink (them) up  
       [= make palm wine out of them].’

Under this distributivity function, *sílè* ‘finish’ can only be used with plural subjects in certain contexts, as in (657a), where the event distributes over the different participants, while singular subjects as in (657b) are thus ungrammatical.

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<sup>24</sup>Special thanks to Hana Filip for her advice on aspect category meaning and terminology.

<sup>25</sup>The occurrence of semi-auxiliaries as finite or non-finite verbs in complex predicates is addressed in Section 6.3.3.

- (657) a. bà sílé kè  
       ba sílé-H kè  
       2.PST1 finish-R go  
       ‘They have all gone.’
- b. \*à sílé kè  
       a sílé-H kè  
       1.PST1 finish-R go  
       ‘\*He has all gone.’

In this respect, *sílé* ‘finish’ differs from other semi-auxiliaries that do not have a distributivity function, such as *táalé* ‘start’ in (658) which allows both plural and singular participants.

- (658) a. bà táálé kè  
       ba táalé-H kè  
       2.PST1 begin-R go  
       ‘They began to walk.’
- b. à táálé kè  
       a táalé-H kè  
       1.PST1 finish-R go  
       ‘He began to walk.’

A singular participant is, however, grammatical if there are several events that the aspect marker can distribute over. (659) shows a coordinated clause where the first constituent is almost identical to the non-grammatical phrase in (657b). The second constituent adds another event, however, over which *sílé* can distribute which makes (659) perfectly acceptable.

- (659) áà sílé kè nà dvùwɔ dyúwɔ  
       áà sílé-H kè nà dvùwɔ-H dyúwɔ  
       1.PST2 finish-R go CONJ stuff-R Ø7.top  
       ‘He has gone and stuffed the top [= with straw],’

Other examples of *sílé* as distributing over individuals are given in (660) and (661). In (660), Nzambi of the story in Appendix II.2 forces the whole family of his friend to enter a house. *sílé* ‘finish’ refers to the single people who have to enter one after the other.

- (660) nyáà ngà sílé nyî ndáwɔ dé tù  
       nyáà ngà sílé-H nyî ndáwɔ dé tù  
       shit.IMP PL finish-R enter Ø9.house LOC inside  
       ‘Damn you *faites chier*, go all into the house.’

In (661), the chief of Ngolo talks about his fruits trees that will be destroyed once the road for the port will pass through their village. Again, *sílè* does not necessarily imply that not a single tree will be left at the end, but rather points to the distributivity of destroying one tree after the other.

- (661) byésè béké **sílè** ntàmànè  
 by-éssè béké sílè ntàmane  
 8-all 8.FUT finish ruin  
 ‘they all will be ruined.’

*pâ* ‘first’ Though *pâ* is consistently translated as *d’abord* ‘first’ into French, I gloss it as ‘do first’, as it is clearly a semi-auxiliary verb (Chapter 3.2.2.2). *pâ* ‘do first’ has a priorative aspectual meaning. It has no tense-mood restrictions, however, in the corpus, *pâ* never occurs in PAST tenses. This may have semantic/pragmatic reasons. Examples for *pâ* in the PRESENT are given in (662) and (663).

- (662) yî́ pè'è nyà mwánò mùdû mé **pâá** ná  
 yî́ pè'è nyà m-wánò m-ùdû me-H pâá-H ná  
 7.ID Ø9.memory 9:ATT N1-child N1-male 1S-PRES do.first-H again  
 nyô vè  
 ny-ô vè  
 9-NSBJ give

‘This is the memory of a boy [= talks about himself], I first give it [to him]. [= pay the other Nzambi back]’

- (663) wè médé **pâ** lígè yá nà nyè yá ké  
 wè médé pâ-H lígè ya-H nà nyè ya-H kè-H  
 2S self do.first-R stay 1P-PRES COM 1 1P-PRES go-R  
 mánkê  
 H-ma-nkê  
 OBJ.LINK-6-field

‘You stay first, we and her, we go to the field.’

In (664), *pâ* ‘do first’ occurs in the FUTURE and therefore lacks the realis marking H tone.

- (664) bwáà **pâá** ngâ dyà nà pówàlà wû  
 bwáà pâá ngâ dyà nà pówàlà wû  
 2P.FUT do.first PL sleep COM Ø7.calm there  
 ‘You (pl.) will first sleep quietly there.’

*pâ* has also been observed to occur in the IMPERATIVE form, as in (665).

- (665) **pâ**              bígè  
       pâ              bígè.  
       do.first.IMP develop  
       ‘Go on [speak] first.’

Other semi-auxiliaries that express the start or end point of an event are *táale* ‘start’ and *bàga nà* ‘stop sth.’, as exemplified in (666) and (667), respectively.

- (666) donc              bí              yá              **táálé**      bê yàlànè              àà  
       donc              bí              ya-H              táálé-H      bê yàlane              àà  
       so[French] 1P.EMPH 1P-PRES begin-R 2P respond[Bulu] EXCL  
       ‘So we start to respond to you, mhm.’
- (667) Tsímbò à              **bàgá**      nà      bâ      básigá  
       Tsímbò a              bàgá-H nà      bâ      H-ba-sígá  
       Ø1.PN 1.PST1 stop-R COM smoke OBJ.LINK-ba6-cigarette  
       ‘Tsimbo stopped smoking.’

**Deictic motion and location verbs** Deictic motion or location verbs serve as semi-auxiliaries, as shown in (668) through (671). The most pervasive motion verbs are *kè* ‘go’ and *njì* ‘come’. *kè*, as in (668), always has an altrilocal meaning, i.e. the event expressed in the main verb takes place at another location than where the speaker is at the point of utterance.

- (668) ngùndyá mé              **ké**      sólègà ngùndyá dyúwò  
       ngùndyá me-H              kè-H sólega ngùndyá dyúwò  
       Ø9.raffia 1S-PRES go-R chop Ø9.raffia on.top  
       ‘The raffia, I go to chop the raffia on top.’

*njì* ‘come’ naturally constitutes the counterpart to this altrilocal function. Thus, it expresses that the event of the lexical verb takes place at or towards the speaker’s location, as shown in (669).

- (669) é      tè      wègà      wé      **njí**      sâ mbvúndá é      ndzí  
       é      tè      wè-gà      wé-H      njì-H      sâ mbvúndá é      ndzí  
       LOC there 2S-CONTR 2S-PRES come-R do Ø9.trouble LOC Ø9.path  
       vâ  
       vâ  
       here  
       ‘There you, you come to make trouble on the way here.’

*lígé* ‘stay’ also gives information about the locality of an event, expressing that it is the same as the frame of spatial reference, e.g. the locality of utterance, as in (670).

- (670) mègà      mé      lígé      dè mwánò wóò  
       me-gà      me-H      lígé-H dè m-wánò w-óò  
       1-CONTR 1S-PRES stay-R eat N1-child 1-POSS.2S  
       ‘As for me, I stay and eat your child.’

Finally, also *lå* ‘pass’ has been observed to serve as a semi-auxiliary, as in (671).

- (671) bá      lå      pámò vâ      téè      bà      kwèlɔɔ̄      yɔ̄  
       ba-H      lå-H      pámo vâ      téè      ba      kwèlɔɔ̄      y-ɔ̄  
       2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7-NSBJ  
       kílè               dyúwò tsíyà  
       kílè               dyúwò tsíyà  
       NEG[Kwasio] hear    Ø1.question  
       ‘They pass and arrive here now, they cut it already without hearing  
       a question [= without asking].’

**Modal verbs** Modal verbs constitute the third semantic class of semi-auxiliaries in Gyeli. (672) through (676) provide examples of various modal verbs.

- (672) wè      lèmbô̄      sâ bányá      màmbò  
       wε      lèmbô̄      sâ H-ba-nyá      m-àmbò  
       2S.PST1 know.COMPL do OBJLINK-ba2-important ma6-thing  
       ‘You can/know to do the important things.’
- (673) á      kwàlé      ná gyìmbò mánzà      mésè  
       a-H      kwàlé-H ná gyìmbò H-ma-nzà      m-éṣè  
       1-PRES like-R still dance OBJLINK-ma6-dance 6-all  
       ‘He still likes to dance all dances.’
- (674) [mé      wúmbé      léè]      nà      bɔ̄  
       me-H      wúmbé-H léè      nà      bɔ̄  
       1S-PRES want-R talk[Kwasio] COM 3P  
       ‘I want to talk with them.’

- (675) bí            bógà [yá        wúmbé ndáà pâ        nyê] sâ  
           bí            bó-gà ya-H        wúmbé-H ndáà pâ        nyê sâ  
           1P.EMPH 2-other 1P-PRES want-R also do.first see Ø7.thing  
           bá            gyíbó ngyùlè wá        kùrâ  
           ba-H        gyíbó-H ngyùlè wá        kùrâ  
           2-PRES call-R Ø3.light 3:ATT Ø7.electricity[French]

‘We others, we also want to first see the thing they call the light of electricity.’

- (676) donc            wè bùdé ná        bàfû        wé        yàné        gyàgà  
           donc            we bùdε-H ná        ba-fû        wε-H        yànε-H gyàga  
           so[French] 2S be-R        again ba2-fish 2S-PRES must-R buy  
           bô  
           b-ô  
           2-NSBJ

‘So, you have fish again, you have to buy them.’

Many of the modal semi-auxiliaries are also used in the matrix clause of subordination through the complementizer *nâ* (Chapter 8.2.2.1).

### 6.3.3 Levels of complexity in simple STAMP predicates

Complex predicates with a simple STAMP construction can be complex on different levels. First, they can include morphological complexity through the ABSOLUTE COMPLETIVE marker *mò* (Section 6.2.3.3). Second, they can differ in the number of finite verbs which can range between one and two. I will discuss both cases in turn, describing which grammatical categories can combine in complex predicates with a simple STAMP marker and which cannot.

The ABSOLUTE COMPLETIVE marker *mò* does not only occur in simple predicates, but is also found in complex predicates. Unsurprisingly, *mò* (or its nasal vowel variant at the end of the verb) occurs on the finite verb, as in (677).

- (677) ké        mbúmbù        bwánò        bà        sílēë        kè vé  
           ké        mbúmbù        b-wánò        ba        sílēë        kè vé  
           EXCL Ø1.namesake ba2-child 2.PST1 finish.COMPL go where  
           ‘Ey namesake, where have all the children gone to?’

What is more remarkable is that *mò* can also occur on the first non-finite verb, as in (678). This is the case when the finite verb is the true auxiliary

*nzí* marking PROGRESSIVE. Other true auxiliary combinations with *mò* are ungrammatical. This includes any combination with negation auxiliaries since aspect marking is lost under negation in simple STAMP constructions.

- (678) nkè nyì nzí sílḗ́́ bédéwò  
       nkè nyi nzí sílḗ́́ H-be-déwò.  
       Ø9.field 9 PROG.PST finish.COMPL OBJ.LINK-be8-food  
       ‘This field was already running out of food.’

Complex predicates can also vary in their syntactic complexities. Having presented multiple examples of two-verb complex predicates in Sections 6.3.1 and 6.3.2, I show constructions with three verbs in the following. No matter whether a complex predicate has one or two non-finite verbs, true auxiliaries can only appear as the finite verb. An example of a true auxiliary with two non-finite verbs is given in (679).

- (679) bónégá [bá ló sílè làwò] nâ bvúlè bá  
       bó-négá ba-H ló sílè làwò nâ bvúlè ba-H  
       2-other 2-PRES RETRO finish speak COMP ba2.Bulu 2-PRES  
       ntégélé bágylé  
       ntégelé-H H-ba-gyélí  
       bother-R OBJ.LINK-ba2-Gyeli  
       ‘The others have just said that the Bulu bother the Bagyeli.’

The same construction is possible with a negation auxiliary, as in (680).

- (680) bónégá [bà pálé sílè làwò]  
       bó-négá ba pálé sílè làwò  
       2-other 2PST1 NEG.PST.R finish speak  
       ‘The others have not finished speaking.’

Since semi-auxiliaries have a lexical meaning and are less grammaticalized (Chapter 3.2.2.2), they can occur both as the finite or non-finite verb in a complex predicate. In (681), *kè* ‘go’ is the finite first verb, while in (682), it is the non-finite second verb.

- (681) bwánò bá kálé bâ bó [bá ké  
       b-wánò bá kálé b-â bó ba-H kè-H  
       ba2-child 2:ATT Ø1.older.sister 2-POSS.1S 2.EMPH 2-PRES go-R  
       sílè pándè]  
       sílè pándé  
       finish arrive  
       ‘The children of my older sister, they all arrive.’

- (682) [mé pâ ná kè dígè] mùdì wà nû  
 mε-H pâ-H ná kè díge m-ùdì wà nû  
 1S-PRES do.first-H again go see N1-person 1:ATT 1.DEM.PROX  
 é pée  
 é pé-é  
 LOC over.there.DIST  
 ‘I go first again to see this person over there.’

The same distribution applies, for instance, to the semi-auxiliary *sílè* ‘finish’ in (683) and (684).

- (683) é vâ mè dyùwó nâ é vâ [yî sílè njì  
 é vâ mε dyùwɔ-H nâ é vâ yî sílè njì  
 LOC here 1S.PST1 hear-R COMP LOC here 7.FUT finish come  
 búlè]  
 búlè  
 destroy  
 ‘Here I heard that here it will all come to be destroyed.’
- (684) mè nzíí kè nà vúlè lévúdû nà  
 mε nzíí kè nà vúlè H-le-vúdû nà  
 1S PROG.PRES go COM take.away OBJ.LINK-le5-one COM  
 lèvúdû [mé táálé sílè nyùlè]  
 le-vúdû mε-H táálé-H sílè nyùlè  
 le5-one 1S-PRES begin-R finish drink  
 ‘I’m taking down one by one, I start to drink (them) (= make palm wine out of them).’

Lexical verbs that cannot serve as semi-auxiliaries, such as *nyùlè* ‘drink’ in (684), can only ever occur as the final non-finite verb in a complex predicate. In contrast, verbs that serve otherwise as semi-auxiliaries, can also appear for their lexical meaning in the final non-finite verb position of a complex predicate, as in (685).

- (685) [bà nzí kè sílè] bédéwò  
 ba nzí kè sílè H-be-déwò  
 2.PST1 PROG.PST go finish OBJ.LINK-be8-food  
 ‘They were coming to finish the food.’

### 6.3.4 Double STAMP predicates with *bè* ‘be’

The second type of complex predicates is those that involves two STAMP markers that refer to the same entity and that both precede a finite verb

form:

$$[\text{STAMP}_i - b\dot{\epsilon} \text{ 'be'} ]_1 - [\text{STAMP}_i - V]_2$$

The first constituent, which I also call *bè* constituent, always involves the verb *bè* 'be'. It expresses basic tense-mood and possibly negation distinctions while the second constituent is specified for tense-mood and/or aspect marking. This complex predicate type allows thus the combination of tense-mood, aspect, and negation categories which are not possible in simple STAMP constructions. In the following, I will show the different combinatory possibilities which include the main combinations of i) tense-mood with a different tense-mood category, ii) tense-mood with aspect, and iii) negation with aspect. In general, these double STAMP constructions are rare in the corpus, but are more pervasive in questionnaires, for instance in Dahl's (2000) future and perfect questionnaire, as well as in elicitations.

**Tense-mood combinations with other tense-mood categories** Double STAMP constructions can combine different tense-mood categories, shifting the temporal perspective on events. In double STAMP predicates, speech time is anchored at the time of the first constituent with the verb *bè* 'be', while the time of the second constituent, indicated by square brackets, is then relative to the time anchor of the first one. In (686), for instance, speech time is moved to the FUTURE in the *bè* constituent. From this perspective, the PRESENT of the second constituent expresses temporal identity to speech time in the *bè* constituent.

- (686) mèè      bè [mé      gyámbó     bédéwò]PRES                          [FUT - PRES]  
                   mèè      bè mε-H     gyámbó-H H-be-déwò  
                   1S.FUT be 1S-PRES cook-R     OBJ.LINK-be8-food  
                   'I will be cooking food.'

As a minimal pair, (687) shows that a change of the tense-mood category in the second constituent entails a change in the relation between newly anchored time and the situation. While the *bè* constituent still anchors speech time in the FUTURE, from this future perspective, the situation of cooking will have been completed in the REMOTE PAST.

- (687) mèè      bè [méè      gyámbó     bédéwò]PST2                          [FUT - PST2]  
                   mèè      bè méè     gyámbó-H H-be-déwò  
                   1S.FUT be 1S.PST2 cook-R     OBJ.LINK-be8-food

‘I will have cooked food.’

In contrast, changing the tense-mood category in the *bè* constituent simply anchors speech time at that particular reference time. In (688), the second constituent occurs in the INCHOATIVE. The tense-mood category of the *bè* constituent changes, however. In (688a), it is encoded for FUTURE while it is encoded for the recent PAST in (688b).

- (688) a. àà      bè      [àá      gyì]<sub>INCH</sub> nàménó      [FUT - INCH]  
       àà      bè      àá      gyì      nàménó  
       1.FUT be-PST 1.INCH cry      tomorrow  
       ‘She will be at the beginning of crying tomorrow.’
- b. à      bé      [àá      gyì]<sub>INCH</sub> nàkùgúù      [PST1 - INCH]  
       a      bè-H      àá      gyì      nàkùgúù  
       1.PST1 be-PST 1.INCH cry      yesterday  
       ‘She was at the beginning of crying yesterday.’

Impressionistically, it seems that any two tense-mood categories can be combined. (689), taken from the corpus, shows that even the two PAST categories can be combined in double STAMP constructions, a combination that might appear semantically or contextually unlikely.<sup>26</sup> Here, the *bè* constituent is encoded for the REMOTE PAST, while the second constituent appears in the RECENT PAST. Speech time is thus anchored in the REMOTE PAST, while the situation happens in the RECENT PAST, relative to the new time anchor.

- (689) áà      bé      [à      bó      nà      màbádò      nyúlè]<sub>PST1</sub>  
       àà      bè-H a      bô-H nà      ma-bádò      nyúlè  
       1.PST2 be-R 1.PST1 lie-R COM ma6-open.wound Ø9.body  
       ‘He was being lying with open wounds on the body.’

**Tense-mood combinations with aspect marking** While true auxiliaries encoding aspect categories are restricted to certain tense-mood categories in simple STAMP constructions (Section 6.3.1), aspect marking can be achieved for any tense-mood category in double STAMP complex predicates. Anchoring speech time at a certain reference point is done in the *bè* constituent

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<sup>26</sup>Speakers translate this construction with *Il était étant couché...* into Cameroonian French.

while aspect marking of the described situation is bound to the second constituent. (690) illustrates this for the PROGRESSIVE aspect which, in (690a), is anchored in the FUTURE and in (690b) in the INCHOATIVE.<sup>27</sup>

- (690) a. mèè bè [mè nzéé dè]<sub>PROG</sub> [FUT - PROG]  
           mèè bè me nzéé dè  
           1S.FUT be 1S PROG.SUB eat  
           'I will be eating.'
- b. mèé bè [mè nzéé dè]<sub>PROG</sub> [INCH - PROG]  
           mèé bè me nzéé dè  
           1S.INCH be 1S PROG.SUB eat  
           'I'm at the beginning of being eating.'

Another example of the PROGRESSIVE in a double STAMP construction is given in (691), showing a combination with the REMOTE PAST.

- (691) áà ké [à nzéé kè nà gyìyò]<sub>PROG</sub> [PST2 - PROG]  
           áà kè-H à nzéé kè nà gyìyò<sub>COM</sub>  
           1.PST2 go-PST 1 PROG.SUB go COM cry  
           'She left crying.'

Other aspect markers, both particles and auxiliary verbs, occur as well in the second constituent of a double STAMP predicate, as in (692a) with the ABSOLUTE COMPLETIVE particle *mò* and with the PROSPECTIVE auxiliary *múà* in (692b).

- (692) a. mèè bè [mè lùngá mò]<sub>PROG</sub> [FUT - COMPL]  
           mèè bè me lùnga-H mò  
           1S.FUT be 1S grow-R COMPL  
           'I will have grown up.'
- b. mèè bé [mè múà dè]<sub>PROG</sub> [PST2 - PROSP]  
           mèè bè-H me múà dè  
           1S.PST2 be 1S PROSP eat  
           'I'm at the beginning of being eating.'

**Negation with aspect marking** Complex predicates with a double STAMP marker also combine negation and aspect. Negation marking always appears in the *bè* constituent, which, at the same time, specifies the reference time, as in (693). Aspect is encoded in the second constituent.

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<sup>27</sup>The progressive aspect is the only aspect auxiliary that has a suppletive form *nzéé* for dependent constituents (Section 6.3.1.1) which has to be used in the second constituent instead of the *nzí* for the PRESENT or *nzí* for the PAST categories.

- (693) a. mèé                bélé        [mè nzéé        dè]<sub>PROG</sub> [PRES - PROG]  
               mèé                bé-le        mè nzéé        dè  
               1S.NEG.PRES be-NEG 1S PROG.SUB eat  
               'I am not eating.'
- b. mè                sàlé        bè [mè nzéé        dè]<sub>PROG</sub> [PST1 - PROG]  
               mè                sàlé        bè mè nzéé        dè  
               1S.PST1 NEG.PST be 1S PROG.SUB eat  
               'I was not eating.'
- c. mèè                kálè        bè [mè nzéé        dè]<sub>PROG</sub> [FUT - PROG]  
               mèè                kálè        bè mè nzéé        dè  
               1S.FUT NEG.FUT be 1S PROG.SUB eat  
               'I will not be eating.'

Future research needs to explore the combination possibilities further and check whether all negation forms can combine with any aspect marker.

# Chapter 7

## Simple clauses

In this chapter, I describe the different types of simple clauses in Gyeli. The distinction of simple clause types is based on their internal structure and mainly concerns different types of predicates. I first outline copula constructions including non-verbal and verbal copula elements in Section 7.1. I then discuss verbal clauses, grammatical relations, and basic clause types in Section 7.2 along with sentential modification. Section 7.3 is dedicated to information structure phenomena. In Section 7.4, I discuss special clause types, including questions, possessor raising, and comparison constructions.

### 7.1 Non-verbal and verbal copula constructions

Gyeli has copula clauses with both non-verbal and verbal copula constructions. They are typically comprised of a subject, a copula, and a predicate which is sometimes called a ‘copula complement’. There are copula forms in some languages, such as *ni* in Swahili in (694), which are clearly non-verbal as they do not inflect for person, tense, aspect, or mood. In this construction, *John* is the subject, *ni* the copula, and *mkubwa* ‘big’ the predicate.

- (694) John **ni** mkubwa ‘John is big’

In English, the copula in (695) is a verbal element, although the overall clause structure is the same.

- (695) John **is** big

Dryer (2007a: 225) suggests that, even though the copula *is* is an inflected

form of the verb *be*, the verb should not be regarded as the predicate since *tall* takes over the function of a predicate. He notes that:

‘The verb *be* is more of a function word than a predicate; its function can be thought of as combining with nonverbal predicates to form what is syntactically a verbal predicate.’ (p.225)

Based on the argument that the clauses in (694) and (695) are structurally the same, while the parts of speech status and morphosyntactic behavior of their copula elements differ, I treat both non-verbal and verbal copulas in Gyeli within the same chapter, although in different sections. Another argument for organizing non-verbal and verbal copulas within the same clause type is that the choice of either one in Gyeli often depends on the tense, aspect, mood, and polarity category of the clause. In (696a), a non-verbal copula is used in the present, whereas a verbal copula, an inflected form of *bè* ‘be’, has to be used in (696b) for its negated version and in (696c) for the past.

- (696) a. lènjù        léè        nábèbè  
           le-njù        léè        nábèbè  
           le5-banana 5.COP red  
           ‘The banana is red.’
- b. lènjù        lé        bélé        nábèbè  
           le-njù        le-H        bè-le        nábèbè  
           le5-banana 5-PRES be-NEG red  
           ‘The banana is not red.’
- c. lènjù        lè        bélé        nábèbè  
           le-njù        le        bè-H        nábèbè  
           le5-banana 5.PST1 be-R red  
           ‘The banana was red.’

This is in line with Dryer’s (2007a) observation that copula constructions differ structurally and cross-linguistically in different respects. First, as (696) shows, the grammatical status of the copula can differ, even within the same language. According to Dryer (2007a: 225-227), non-verbal copulas have cross-linguistically different morphosyntactic shapes, ranging from words to clitics and affixes.

Second, Dryer points out that there are three types of predicates, namely adjectival, nominal, and locative predicates. Semantically, copula construc-

tions encode two different types of relations which are, according to Curnow (2001: 1-2), identity relations and classifications, as exemplified in (697).

- (697) a. Identity: 'That man is my father.'  
 b. Classification: 'That man is a teacher.'

In Gyeli, both identity and classification relations are expressed by copula constructions. Gyeli copula constructions differ in the type of predicate and the type of copula. The predicate ranges from nominal to locative and adjective/quantifier (the equivalent to adjectival predicates in other languages) predicates. Also, demonstratives and possessive pronouns can serve as predicates as well as deictic elements, as I will show for the various copula types below.

Gyeli has six different copula types, three of which are non-verbal and three verbal, as shown in Table 7.1. The non-verbal copula types can only be used in affirmative clauses which occur in the PRESENT. The most frequent copula in the corpus is the STAMP copula that is expressed by a special STAMP form. It merges the subject and the copula in one morpheme and constitutes the most frequent of all copula constructions found in the corpus (43.7%). Another non-verbal copula is the invariable identificational marker *wé* which represents 11.6% of the copular clauses. There are also instances where the copula is zero-expressed. This construction, however, is only found in elicitations and does not occur in the corpus. All non-verbal copulas are restricted to the PRESENT tense-mood category. If other tense-mood categories are to be encoded, as well as negation, the verbal copula *bè* 'be' is used.

Status	Copula element	Label	Corpus frequency	
non-verbal	STAMP form	STAMP copula (COP)	49	(43.7%)
	<i>wé</i>	identificational (ID)	13	(11.6%)
	Ø-copula		0	
verbal	<b>bè</b> 'be'		27	(24.1%)
	<b>múà</b> 'be almost'		6	(5.4%)
	<b>bùdè</b> 'have'		17	(15.2%)
Total			112	

Table 7.1: Copula types

Two of the verbal copulas are forms of 'be': *bè* and *múà*. One is the more general and more frequent *bè* (24.1% of all copula constructions in

the corpus) and one is *múà* (5.4%) which is also used as the PROSPECTIVE auxiliary (Chapter 6.3.1.3). *bùdé* ‘have’ is the third verbal copula. It covers 15.2% of all copular constructions and is mostly used in predicate possession of the PRESENT.

I will describe each copula type in the following, providing examples and information on its distribution. This will also show that not every copula behaves like a real copula element in every context, i.e. linking a subject to a copula complement. In some cases, some copula elements also take over functions such as presentational or existential markers which do not require a predicate and thus are then not strictly speaking copulas in all contexts.

### 7.1.1 STAMP copula

The STAMP copula (COP) takes a special form of the STAMP marker which is identical to the STAMP marker of the FUTURE tense-mood category, as discussed in Chapter 6.2.1.3. It has a long vowel with a default HL tonal pattern for all agreement classes and speech act participants, except for the first and second person singular and agreement class 1 where the long vowel takes a L tone.

**Predication types** Unlike all other copula types, the STAMP copula agrees with the subject in gender. The STAMP copula can link a nominal subject to different predication types. In (698), the predicate is nominal, expressing a classification relation: Ada is a member of the set of teachers.

- (698) Àdà àà ngèlénè [nominal]  
       Àdà àà ngèlénè  
       ∅1.PN 1.COP ∅1.teacher  
       ‘Ada is a teacher.’

(699) and (700) provide examples where the predicate is an adjective.

- (699) Àdà àà mpà [adjective]  
       Àdà àà mpà  
       ∅1.PN 1.COP good

‘Ada is good.’

- |       |  |               |              |     |             |
|-------|--|---------------|--------------|-----|-------------|
| (700) | bon  | mpòngò        | sílēè        | nà  | béè         |
|       | bon,   | mpòngò        | sílēè        | nà  | béè         |
|       | good[French]   | Ø7.generation | finish.COMPL | COM | 2P.COP      |
|       | bànáyêyê   |               |              |     | [adjective] |
|       | ba-náyêyê  |               |              |     |             |
|       | 2-bleached.out   |               |              |     |             |
|       | ‘Good, the generation has been wiped out, and you are bleached out [= white].’ |               |              |     |             |

In (701) and (702), the predicate is a locative noun phrase.

- (701) Àdà àà ndáwò dé tù [locative]  
       Àdà áà ndáwò dé tù  
       ∅1.PN 1.COP ∅9.house LOC inside  
       ‘Ada is inside the house.’

(702) bónégá báà ná jíí dé tù [locative]  
       b-ónégá báà ná jíí dé tù  
       2-other 2.COP still ∅7.forest LOC inside  
       ‘The others are still in the forest.’

In addition to these predicate types which Dryer (2007a) views as the most common ones across languages, the STAMP copula in Gyeli can also be used with locative interrogative words as in (703) and with deictic elements, as in (704).

- (703) é nà mwánò nùù vé [interrogative]  
      é nà m-wánò nùù vé  
     LOC how N1-child 1.COP where  
     ‘What! Where is the child?’

(704) bá yóò yíí tè [deictic]  
      bá y-óò yíí tè  
     Ø7.word 7-POSS.2S 7.COP there  
     ‘Your word is there [= I understand you].’

Also numerals and quantifiers can serve as the copula complement, as in (705).

- (705) búdì            báà        bàbáà/bvùbvù  
       b-údì            báà        ba-báà/bvùbvù  
       ba2-person 2.COP 2-two/many  
                       [numeral/quantifier]

‘The people are two/many.’

Finally, the STAMP copula can also introduce reported speech in a quotative index. Thus, in (706), the STAMP copula *báà* serves as quotative index to the direct reported speech in the copula complement, marked by square brackets.

- (706) **báà** nâ [wè sílê kè sâ sálé] [complement]  
 báà nâ wè sílê kè sâ sálé  
 2.COP COMP 2S finish.IMP go do Ø7.work  
 ‘They are like ‘you, finish go do the work’.’

**STAMP copula as the predicate** In the vast majority of cases, the STAMP copula functions as element linking the subject to the predicate. In a few special cases, however, there is no copula complement and the STAMP marker serves as predicate, as in (707) and (708) which represent existential clauses. According to Dryer (2007a: 241),

“From a discourse point of view, the primary function of such [existential] clauses is apparently to introduce into the discourse a participant that is new to the hearer.”

In English, this is often achieved with constructions involving *there is* or *there are*.

- (707) bèsá bíndè byésè bék ndáà  
 be-sá bí-ndè by-ésè bék ndáà  
 be8-thing 8-ANA 8-all 8.COP also  
 ‘There are also all these things. [= way of introducing a problem]’
- (708) lé [yá wé nyê]\_REL [bá gyíbó ngàlé]\_REL yî  
 lé yá wé-H nyê ba-H gyíbó-H ngàlé yî  
 Ø7.tree 7:ATT 2S-PRES see 2-PRES call-R Ø7.PN 7.COP  
 ‘There is the tree that you see that they call *ngàlé*.’

**Expression of the subject** As mentioned above, a copula links a subject to a predicate. In the previous examples, the shape of the subject was some sort of noun phrase. In (703) and (708), the subject is expressed nominally while the subject noun phrase in (707) is more complex, including two modifiers. The STAMP copula can also encode subject and copula at the same time and thus can occur on its own, without a nominal noun phrase, as in (709).

- (709) mèé                    lémbòlè    é      mpù      báà      ndáwò    dé      tù  
       mèé                    lémbo-lè    é      mpù      báà      ndáwò    dé      tù  
       1S.PRES.NEG know-NEG LOC like.this 2.COP Ø9.house LOC inside  
       déné  
       déné  
       today[Bulu]

‘I don’t know how they are in the house today.’

This construction type is also used in generic ‘it is’ clauses where the subject is inanimate, but underspecified, as for instance in (710).

- (710) yîí      mpà yôô      wé      kâ      yô      dûmbó  
       yîí      mpà yôô      wé-H      kâ-H      y-ô      dûmbó  
       7.COP good Ø7.time 2S-PRES wrap-R 7-NSBJ Ø7.package

‘It is good when you wrap it in a (leaf) package.’

The *yîí* STAMP copula is also used in cleft sentences, as shown in Chapter 8.2.1.2.

### 7.1.2 Identificational marker *wé*

The identificational marker *wé* is invariable and does not agree with the subject. The marker occurs in two types of constructions. The primary use is as a copula, linking a subject and a predicate, as in (711).

- (711) ntémbó                    wâ                    wé nû  
       ntémbó                    w-â                    wé nû  
       Ø1.younger.brother 1-POSS.1S ID 1.DEM.PROX

‘My younger brother is this.’

In contrast to the STAMP copula, however, *wé* links a subject only to demonstratives and anaphoric markers. This is why I label *wé* as identificational marker. As Mikkelsen (2011: 1812) states for English, “[i]dentificational clauses are characterized by having a demonstrative pronoun or demonstrative phrase in the subject position.” In Gyeli, the demonstrative does not occur in the subject, but in the predicate position. Nevertheless, I label *wé* as an identificational marker since it takes over the same function, namely identifying people, places, and the location of things. In (711), the speaker identifies his younger brother by using a deictic demonstrative, at the same time pointing to the person in question. In (712), the chief of Ngolo talks

about a scar on his forehead, identifying its location and again pointing to it.

- (712) m   b   n   b  m   t   y  j   w   y    
 m  -H b  -H n   b  m   t   y  -j   w   y    
 1S-PRES think-R COMP   7.scar there 7-NSBJ ID 7.DEM.PROX  
 ‘I think, the scar there is this.’

Apart from demonstratives, anaphoric elements may also occur with the identificational marker *w  *. This can be the bare anaphoric marker *nd  * as in (713) which does not take an agreement prefix.

- (713) k  nd   w   nd    
 k  nd   w   nd    
   7.proverb ID ANA  
 ‘The story is this.’

Also, the anaphoric marker with an agreement prefix occurs in identificational constructions, as shown in (714).

- (714) b   y   m  fw  l   w   y  nd    
 b   y  -   ma-fw  l   w   y  -nd    
   7.word 7-POSS.1S ma6-end ID 7-ANA  
 ‘This is my last word.’

The second type of construction where *w  * is used is without a predicate. In (715), the parentheses indicate that the use of the demonstrative is optional. Often, the demonstrative is not expressed, so that only the subject and *w  * surface. In that sense, *w  * is not a real copula here since it does not link a subject to another constituent. It has its origin, however, in a copula construction. Environments where *w  * is used phrase-finally, i.e. without demonstrative or anaphoric marker, are usually those where the subject is a personal pronoun as in (715).

- (715) ny   w   (n  )  
 ny   w   (n  )  
 1.SBJ ID (1.DEM.PROX)  
 ‘This is him.’

Such identificational constructions show a particular structure when they involve a proper name, as in (716). Here, the personal pronoun is followed

by the proper name and the identificational marker *wé* occurs phrase-finally. They differ from the above examples in that *wé* is not a linking element, but rather functions as a deictic itself. In this view, it is not surprising that proper name constructions with *wé* do not involve demonstratives or anaphorics.

- (716)    mhm mè      Nziwù w̄  
           mhm mε      Nziwù wé  
           EXCL 1S.SBJ Ø1.PN ID  
           'Mhm, I'm Nziwu.'

Finally, *wé* is also used in cleft constructions, as shown in (717). The structure of the identificational clause is parallel to the one in (715) without a demonstrative predicate, namely *nyè wé*, except that the subject is more complex, specifying who *nyè* is. The identificational clause is followed by a relative clause which, in this case, does not have an attributive marker to indicate the relative clause.<sup>1</sup>

- (717) ntémbò                wà      mùdâ                wâ                nyè wé [bùdé  
           ntémbò                wà      m-ùdâ                w-â                nyè wé bùdε-H  
           Ø1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1 ID have-R  
           mwánò    wà      mùdâ                mvúdû]REL  
           m-wánò    wà      m-ùdâ                m-vúdû  
           N1-child 1:ATT N1-woman 1-one  
           'It's my wife's younger sister who has one girl.'

As with all other non-verbal copula types, also *wé* is restricted to the PRESENT tense-mood category.

### 7.1.3 Optional Ø-copula

In a few environments, a copula can be optionally omitted. This, however, seems to be restricted to semantic relations of identity between the subject and the predicate. Copula omission in Gyeli is grammatically optional and not grammatically conditioned, even though certain environments seem to favor omission. In all examples presented below, a copula could also be used. Environments which favor copula omission often seem to involve genitive predicates, as in (718) and (719). Both examples differ, however.

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<sup>1</sup>For more information on relative clauses, see Section 8.2.1.

In (718), the subject is a demonstrative while the predicate is a nominal noun phrase, modified by a possessive pronoun. The clause could also be expressed with a STAMP copula: *níúù mwánjò wâ*. Since examples of copula omission are rare, the sample is not sufficient to make any generalizations about the difference between the use of a STAMP copula in contrast to copula omission. It may be a matter of fast and colloquial speech to omit the copula. It may also be related to information structure. The bare demonstrative as subject, as in (718), could thus introduce a new topic, while the STAMP copula may suggest that the topic is already known.<sup>2</sup>

- (718) nû [mwánjò wâ]<sub>PRED</sub>  
 nû m-wánjò w-â  
 1.DEM.PROX N1-child 1-1S.POSS  
 ‘This is my child.’

In contrast to (718), the predicate in (719) is a possessive pronoun while the subject is a complex nominal noun phrase, including a demonstrative. Again, it is possible to use a copula, for instance the STAMP copula *wúù* of agreement class 3, which is deleted in fast speech.

- (719) nkwanjò wâ [wâ]<sub>PRED</sub>  
 nkwanjò wâ w-â  
 Ø3.honey 3.DEM.PROX 3-1S.POSS  
 ‘This honey is mine.’

In addition to genitive predicates, a copula can also be omitted in nominal predication when the subject is a personal pronoun, as in (720).

- (720) mè [nsálè gyàngó]<sub>PRED</sub>  
 mè n-sálè gyàngó  
 1 N1-doer Ø7.hunt  
 ‘I’m a hunter.’

Zero copula constructions always refer to the PRESENT tense. If non-verbal predicates are to be expressed in other tense-mood categories, a verbal copula is required.

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<sup>2</sup>It is also possible to use the identificational marker *wé* for (718), but in that case, subject and predicate would need to be reversed, making the predicate *mwánjò wâ* the subject and *nû* the predicate. This construction then differs also in terms of information structure, moving the demonstrative into focus position.

### 7.1.4 Verbal copula *bè* ‘be’

To express copular clauses in other tense-mood categories or to negate them, the verbal copula *bè* ‘be’ is used. Additionally, *bè* is used in expressing predicate possession by adding the comitative marker *nà*. Each of these uses is illustrated below.

**Tense expression with *bè* ‘be’** The verbal copula *bè* can be used in all tense-mood categories. Even though for the PRESENT tense-mood category, usually non-verbal copula types are used, also *bè* can serve as copula in the PRESENT. This seems to mainly occur when the subject is an emphatic pronoun, as in (721) and (722).

- (721) lûngà    yá    sâ    wâ    yó    bé    yí  
       lûngà    yá    sâ    w-â    yó    bè-H yí  
       Ø7.grave 7:ATT Ø1.father 1-POSS.1S 7.EMPH be-R 7.DEM.DIST  
       ‘My father’s grave is over there.’
- (722) ngùndyá tè    nyó    bé    nyî  
       ngùndyá tè    nyó    bè-H nyî  
       Ø9.raffia there 9.EMPH be-R 9.DEM.PROX  
       ‘The raffia there, it is that.’

Also, special construction types can trigger the use of *bè* as copula in the PRESENT. For instance, the copula *bè* can occur as second constituent in a coordination of verbs, as in (723). In order to keep the verbal structure of the first constituent, and share the first constituent’s subject *yí* ‘it’, the copula of the second constituent is verbal as well.

- (723) bon              pílì    yí    báàlá    nà    bè ndènáà    ndènáà  
       bon              pílì    yi-H    báàla-H    nà    bè ndènáà    ndènáà  
       good[French] when 7-PRES repeat-R COM be like.that like.that  
       ndáà ná  
       ndáà ná  
       also still  
       ‘So, when it continues and is still like this and like that.’

Another special construction type in the PRESENT where a verbal copula is chosen over the non-verbal copulas involves sentential modifiers, as illustrated in (724). Certain sentential modifiers such as *kòò* ‘still’ require an infinitival construction, as further discussed in Section 7.2.3.

- (724) nà bí bésè kóò kùrâ bè dé tù  
       nà bí b-ésè kóò kùrâ bè dé tù  
       COM 1P.EMPH 2-all still Ø7.electricity be LOC inside  
       ‘with all of us just electricity be inside.’

Besides these special cases in the PRESENT, the verbal copula *bè* is used in other tense-mood categories. This is shown for the RECENT PAST in (725) and (726). (725) represents a nominal predicate, while (726) gives an example where the predicate is an interrogative pronoun.

- (725) yóò ngâ nû à bé ngâ  
       yóò ngâ nû a bè-H ngâ  
       so Ø1.healer 1.DEM.PROX 1.PST1 be-R Ø1.healer  
       ‘So, this healer was a healer.’
- (726) mà bé vé  
       ma bè-H vé  
       6.PST1 be-R where  
       ‘Where were they [= the houses]?’

Similarly, *bè* can be used in the REMOTE PAST, as shown in (727).

- (727) yóò nzàmbí nógá nûù bé nzàmbí wà gyí  
       yóò nzàmbí nój-gá nûù bè-H nzàmbí wà gyí  
       so Ø1.PN 1-other 1.PST2 be-R Ø1.PN 1:ATT what  
       ‘So this other Nzambi was which Nzambi?’

Finally, the verbal copula *bè* can even take the ABSOLUTE COMPLETIVE aspect marker *mà*, as shown in (728). This, however, seems to be the only possible combination of verbal copula and aspect. Also, it is noteworthy that this construction has been observed several times with the Mabi version of the completive aspect marker *mà* as an instance of code-switching, but has never been noticed with the Gyeli form of the aspect marker *mò*.

- (728) wú bé mà bî ndáwò dé tù  
       wú bè-H mà bî ndáwò dé tù  
       3 be-R COMPL[Kwasio] 1P.NSBJ Ø9.house LOC inside  
       ‘That it was already in our houses!’

**Negation with *bè*** *bè* is the only copula type that can be used in negated copula constructions. This holds for all predication types as well as for all

tenseood categories, including the PRESENT. Thus, the negated form *bélē* is used in the PRESENT, for instance with a nominal predicate, as in (729).

- (729) mèé              **bélē**      mùdì      wà      lèkélè  
       mèé              bé-lé      m-ùdì      wà      le-kélè  
       1S.PRES.NEG be-NEG N1-person 1:ATT le5-word  
       ‘I’m not a person of many words.’

The same construction is used with adjectival predicates, as in (730).

- (730) nkwanò wú      **bélē**      mpà  
       nkwanò wu-H      bë-lë      mpà  
       Ø3.honey 3-PRES be-NEG good  
       ‘The honey is not good.’

Also deictic predicates have been found with a negated copula *bélē*, as in (731).

- (731) nyè nâ      mèé      **bélē**      wû  
       nyè nâ      mèé      bë-lë      wû  
       1 COMP 1S.PRES.NEG be-NEG there  
       ‘He [says]: ‘I’m not there.’’

Finally, there are a few constructions which lack a predicate, parallel to what has been described for the STAMP copula in Section 7.1.1. In (732), the negated copula expresses a negative existential clause: the person is not there. While in English, the use of ‘there’ is obligatory in these constructions, in Gyeli, the occurrence of the deictic as in (731) is optional. In (732), the deictic does not appear so that the negated form of ‘be’ serves as predicate in this case.

- (732) mùdì      nû      **bélē**  
       m-ùdì      nû      bé-lé  
       N1-person 1.DEM.DIST be-NEG  
       ‘This person is not there.’

**Predicate possession with *bè nà*** The verbal copula *bè* ‘be’ in conjunction with the comitative marker *nà* express predicate possession. Typically, the predicate is nominal in these cases. Predicate possession with *bè nà* can be used in all tense-mood categories. I provide examples for some of them in (733), namely for the PRESENT, the RECENT PAST, and the FUTURE.

- (733) a. mé      bé      nà      nkwanò  
       mε-H      bè-H nà      nkwanò  
       1-PRES be-R COM Ø3.honey  
       'I have honey.'
- b. mè      bé      nà      nkwanò  
       mε      bè-H nà      nkwanò  
       1.PST1 be-R COM Ø3.honey  
       'I had honey.'
- c. mèè      bè nà      nkwanò  
       mèè      bè nà      nkwanò  
       1.FUT be COM Ø3.honey  
       'I will have honey.'

Encoding of predicate possession in the PRESENT is special in that it can also take other forms to express the meaning of 'have'. While the verbal copula plus comitative marker as in (733a) is one option, the copula can also be omitted in the PRESENT so that only the comitative marker surfaces, as in (734).

- (734) mé      nà      nkwanò  
       mε-H      nà      nkwanò  
       1-PRES COM Ø3.honey  
       'I have honey.'

Further, another verbal copula, *bùdé*, can be used, as discussed in Section 7.1.6.

*bè nà* can be used for affirmative clauses, but also in negation, thus expressing negative possession. Negation of *bè nà* constructions is achieved by regular negation patterns for the different tense-mood categories. In the PRESENT, two construction types are possible. One involves the negation suffix *-lè*, as in (735).

- (735) mèè                  bélè      nà      nkwanò  
       mèè                  bè-lè      nà      nkwanò  
       1S.PRES.NEG be-NEG COM Ø3.honey  
       'I don't have any honey.'

The second possible negation construction involves the negation particle *tí*, or, as in (736), the Mabi form *kí* which is often used in code-switching.

- (736) mè kí                    bè nà       tsídí  
        me kí                    bè nà       tsídí  
        1S NEG[Kwasio] be COM Ø1.meat  
        ‘I don’t have any meat.’

Also for PAST negation, both negation words, *sàlē* and *pálē* can be used, as (737) and (738) show. The negation words precede *bè nà* as they would with any other verb.

- (737) ékè! nzàmbí wà        nú                áà                sàlē                bè nà  
        ékè! nzàmbí wà        nú                áà                sàlē                bè nà  
        EXCL Ø1.PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM  
        bâ                líná-á pámò  
        bâ                líná a-H        pámo  
        Ø7.word when 1-PRES arrive  
        ‘Oh! That Nzambi had no words as soon as he arrives.’

- (738) yà pálé                bè nà       bùdâ  
        ya pálé                bè nà       b-ùdâ  
        1P NEG.PST be COM ba2-woman  
        ‘We did not have any women.’

Accordingly, negation of predicate possession in the FUTURE is achieved with the FUTURE negation word *kálè*, as shown in (739).

- (739) mèè        kálè        ná                bè nà       jí                é        vâ  
        mèè        kálè        ná                bè nà       jí                é        vâ  
        1S.FUT NEG.FUT anymore be COM Ø7.place LOC here  
        ‘I won’t have a place here anymore.’

### 7.1.5 Verbal copula *múà* ‘be almost’

The verbal copula *múà* seems to be a special variety for expressing copular clauses in the RECENT PAST. As such, its use is very limited as well as its occurrence in the corpus. While the general verbal copula *bè* constitutes 24.1% of all copula occurrences in the corpus, *múà* only constitutes 5.4%. Also, the use of *múà* as a copula seems to depend on speaker preference. Only one of the speakers chose *múà* over *bè* while other speakers only used *múà* as PROSPECTIVE marker (see Chapter 6.3.1.3). Therefore, in all copular clauses with *múà*, *múà* could be replaced by the more general verbal copula

*bè*. Examples from the corpus with *múà* as copula are given in (740) and (741).

- (740) à **múà** médé nyá mùdì  
       a *múà* *médé* *nyá* *m-ùdì*  
       1S be self real N1-person  
       ‘He was about to be a real (old) man.’
- (741) mè **múà** póné wá yìmbá nté wû  
       mè *múà* *póné* *wá* *yìmbá* *nté* *wû*  
       1S be Ø7.truth 3:ATT Ø7.age Ø3.size there  
       ‘I was really about the age of this size there [makes a gesture with hand showing his height].’

*múà* as a copular verb is, however, more restricted than *bè* in that it can only occur in the RECENT PAST. Also, negation is not possible with *múà*.

**Predicate possession with *múà nà*** The expression of predicate possession is also possible with *múà* in conjunction with the comitative marker *nà*. Again, this is restricted to the RECENT PAST, as (742) shows.

- (742) gbí gbí gbí gbí à **múà** nà  
       gbí-gbí-gbí-gbí a *múà* *nà* bábè tí wúmbè wè  
       IDEO:roaming 1S PROSP COM Ø7.illness NEG want-R die  
       bábè tí wúmbè wè

‘[imitation of the disease roaming in his body] He was about to be sick, without wanting to die.’

*múà nà* cannot be directly negated, but requires the PAST negation words *sàlé* or *pálé* as in (737) and (738).

### 7.1.6 Verbal copula *bùdé* ‘have’

The verbal copula *bùdé* ‘have’ only expresses predicate possession. It is interchangeable with *bè* plus comitative marker *nà*, as (743) shows.

- (743) a. bá bé nà bvúbvù  
       ba-H bè-H nà bvúbvù  
       2-PRES be-R COM lots  
       ‘They have lots.’

- b. bá      **bùdé**    bvúbvù  
      ba-H    bùdé    bvúbvù  
      2-PRES have.R lots  
      ‘They have lots.’

*bùdé* occurs 17 times in the corpus which equals 15.2% of all copula occurrences. Out of 27 instances of *bè* as a copula, 10 occur with the comitative marker *nà*. Thus, *bè nà* constructions only constitute 11.2% of the copula constructions and are thus less frequent than predicate possession constructions with *bùdé*. Given the relatively few instances in the corpus of both constructions, it is not yet possible to determine distributional and/or semantic differences. Speakers generally state that both constructions mean the same and both can be used interchangeably.

*bùdé* differs from other verbs including the copula *bè* in its tonal behavior on the STAMP marker. Comparable to, for instance, the FUTURE tense-mood category, the first and second person singular and the STAMP marker of class 1 have a different tonal pattern, namely a L tone, than the STAMP markers of the other agreement classes which have a H tone, as in (743b). As to the tonal shape of the verb *bùdé*, it always ends in a H tone which suggests that it belongs to the realis mood, as discussed in Chapter 6.2.2. Since *bùdé* never occurs phrase-finally, however, it is not possible to prove that its final TBU is underlyingly L. I therefore gloss the realis H tone as being inherent to the verb.

The predicates in constructions with *bùdé* are all nominal or extended nominal noun phrases, as examples (744) through (746) show. In (744), the predicate is a noun plus a numeral.

- (744) mè      **bùdé**    bwánò    bábáà  
      mè      bùdé    b-wánò    bá-báà  
      1S.SBJ have.R ba2-child 2-two  
      ‘I have two children.’

In (745), the predicate is nominal as well, followed by a comitative construction which literally translates as ‘the Bulu has anger with me.’

- (745) pílì    wé      ké    nâ      wé      ké    tókè    mwánò    sáyà  
      pílì    wé-H    ké-H nâ      wé-H    ké-H tókè    m-wánò    sáyà  
      when 2S-PRES go-R COMP 2S-PRES go-R collect N1-child Ø7.thing

bvúlè	à	<b>bùdé</b>	lébvúú	nà	m̄e
bvúlè	a	bùdé	H-le-bvúú	nà	m̄e
ba2.Bulu 1 have.R OBJ.LINK-le5-anger COM 1S.NSBJ					
'When you go to go gather a small thing, the Bulu is angry with me.'					

*bùdé* can also occur in relative clauses, as (746) shows. Here, the relative clause modifies the object noun phrase *mwánò wóò*. The demonstrative following *bùdé* is coreferential with this object noun phrase.

(746)	v̄ē	m̄e	sâ	mwánò	wóò	[wà	wè	<b>bùdé</b>
	v̄ē	m̄e	sâ	m-wánò	w-óò	wà	wè	bùdé
								[nû]_REL
		nû						
			1:DEM.PROX					

'Give me only your child that you have here.'

The distribution of *bùdé* seems to be restricted to the PRESENT tense-mood category. Given the special tonal pattern of the STAMP marker which differs from the general PRESENT tonal pattern, tense-mood category affiliation cannot be determined by the default tonal shape. Speakers consistently translate clauses with *bùdé* with the PRESENT. The same is true for the special construction involving the Kwasio loan form of the ABSOLUTE COMPLETIVE marker *mà*. As discussed in Chapter 6.2.3.3, the Gyeli completive marker *mò/-V̄* is restricted to the RECENT PAST. In (747), however, it occurs with *bùdé* and speakers translate the sentence in the PRESENT into French as *Il a déjà une femme*.

(747)	à	<b>bùdé</b>	<b>mà</b>	mùdâ
	a	bùdé	mà	m-ùdâ
1 have.R COMPL[Kwasio] N1-woman				
'He already has a wife.'				

Two explanations are possible. One could propose that *bùdé* does not belong to the PRESENT tense-mood category and constitutes a general exception. As such, it can combine with the ABSOLUTE COMPLETIVE marker *mà*. Semantically, it encodes a present perfect reading, comparable to English *have got* constructions. Alternately, one could propose that *bùdé* belongs to the PRESENT tense-mood category, despite the special tonal pattern of the STAMP marker. The co-occurrence with *mà*, which is only expected to

occur in the RECENT PAST, can be explained by the potential grammaticalization of *mà* into an adverb. It is noteworthy that *bùdé* only co-occurs with the Kwasio loan form of *mà*, but never with its own ABSOLUTE COMPLETIVE marker *mò/-V̄*. At the same time, speakers consistently translate *mà* as *déjà* ‘already’. It is thus possible that *mà* functions as an adverb rather than an aspect marker which would explain why *mà* is not restricted to the RECENT PAST.

Finally, *bùdé* is also used in the quotative index of reported speech (see Chapter 8.2.2.3 for more information), as shown in (748) and (749). Generally, there seems to be a tendency that *bùdé* as verb in a quotative index indicates some kind of wish or order, as both examples illustrate.

- (748)   mais           mè **bùdé**   nâ       é       pè           é       wû  
         mais           me bùdé   nâ       é       pè           é       wû  
         but[French] 1S have.R COMP LOC over.there LOC there  
         bèyá              lwɔ́       kwádó      yâ           é       wû  
         bèya-H           lwɔ́-H    kwádó      y-â           é       wû  
         2P[Kwasio]-PRES build-R Ø7.village 7-POSS.1S LOC there  
         ‘But I say that over there, there you (pl) build my village over there.’
- (749)   mè **bùdé**   nâ       á       lwóngó               mê       màndáwò  
         me bùdé   nâ    a-H    lwóngó-H               mê       ma-ndáwò  
         1S have.R COMP 1-PRES build[Kwasio]-R 1S.NSBJ ma6-house  
         ‘I say that she [Nadine] builds me houses,’

Having outlined constructions with non-verbal predicates, I now turn to constructions with verbal predicates as well as a general discussion of grammatical relations in Gyeli.

## 7.2 Verbal clauses and grammatical relations

In this section, I first discuss the different grammatical relations found in Gyeli before describing basic clause types. I also address sentential modifiers.

### 7.2.1 Grammatical relations: definitions and diagnostics

In this section, I describe the grammatical relations in Gyeli. In doing so, I follow Dryer (1997) who argues against grammatical relations, such as

*subject* and *object*, as cross-linguistic notions, but emphasizes that grammatical relations are fundamentally language-specific. I therefore use a range of language specific formal criteria in order to determine the grammatical relations in Gyeli. These include word order, agreement, and suprasegmental noun phrase marking. Based on these criteria, I distinguish subjects, objects, and obliques in Gyeli, which I will discuss in turn.

### 7.2.1.1 Subjects

Subjects in Gyeli are formally characterized by their preverbal position in basic word order, as shown in (750) and (751), and by agreement of the STAMP marker, a portmanteau morpheme encoding subject agreement and other clause information such as tense-mood and negation (Chapter 3.9.1). Also, pronouns can serve as a subject diagnostic since subject pronouns differ in their shape from non-subject pronouns.

- (750) yóò [mùdâ]<sub>SBJ</sub> á kè [intransitive]  
yóò m-ùdâ a-H kè  
so N1-woman 1-PRES go  
‘So the woman goes.’

- (751) [nzàmbí]<sub>SBJ</sub> à bwàā mwánò [transitive]  
nzàmbí a bwàā-H m-wánò  
Ø1.PN 1.PST1 give.birth-R N1-child  
‘Nzambi has given birth to a child.’

As visible in these two examples, the subject has the same characteristics for intransitive and transitive verbs, both in terms of word order and agreement behavior.

The STAMP marker, *á* in (750) and *à* in (751), is a free grammatical morpheme rather than a prefix since it can optionally be omitted in certain contexts (Chapter 3.9.1). Still, the STAMP marker is a valid diagnostic for subjecthood since it can always be added to a nominal subject. The STAMP marker as subject agreement marker suffices as subject expression in cases where the subject noun phrase is zero expressed (before the verbal predicate in square brackets), as in (752) and (753) for intransitive and transitive verbs, respectively.

- (752) yóò [á kè] [intransitive]  
yóò a-H kè  
so 1-PRES go  
‘So she goes.’
- (753) [à bwàā] mwánò [transitive]  
a bwàā-H m-wánò  
1.PST1 give.birth-R N1-child  
‘He has given birth to a child.’

Another diagnostic is the form of subject pronouns which differs from non-subject pronouns (Chapter 3.6.1 and 3.6.2), as illustrated in (754) with the subject and non-subject pronouns for agreement class 6.

- (754) a. [má]<sub>SBJ</sub> má kwé mímpìndí [subject]  
má ma-H kwè-H H-mi-pìndí  
6.SBJ 6-PRES fall-R OBJ.LINK-mi4-non.ripe  
‘They [= the bread fruit] fall non ripe.’
- b. mé nyé [mô]<sub>OBJ</sub> [object]  
mε-H nyê-H mô  
1S-PRES see-R 6.NSBJ  
‘I see them [= the bread fruit].’
- c. mé njí [nà mô]<sub>OBL</sub> [oblique]  
mε-H njì-H nà mô  
1S-PRES come-R COM 6.NSBJ  
‘I bring them [= the bread fruit].’

(754a) shows the subject pronoun *má* which precedes the STAMP marker. In (754b), the agreement class 6 pronoun is in object position and takes the shape *mô*. This is the same form as the pronoun takes in obliques with the comitative marker *nà*, as in (754c).

### 7.2.1.2 Objects

While subjects can uncontroversially be recognized as a grammatical relation, it is more challenging to distinguish objects from obliques. This seems to be particularly common in northwestern Bantu. For instance, Van de Velde (2008: 287) only distinguishes subjects from non-subjects in Eton (A71) since “there are no clear syntactic arguments to define grammatical relations other than subject.” This corresponds to Schadeberg’s (1995) observation that

“Bantu languages recognize a type of syntactic relationship which is wider than our traditional category of object, including some but not all of our category of adjunct.” (p. 179)

In Gyeli, however, there are means to distinguish objects from obliques, even though they differ from the typical diagnostics used in Bantu languages.

Some of the typical object diagnostics for Bantu languages such as object prefixes on the verb or passivization, as suggested by Schadeberg (1995), do not work in Gyeli. In Gyeli, objects are generally not cross-referenced on verbs. (755) shows that the verb does not take any object marking prefixes, no matter whether the object is expressed by a lexical noun phrase, as in (755a), or a pronoun, as in (755b).

- (755) a. m<sup>é</sup> bìy<sup>j</sup> M<sup>à</sup>m<sup>bì</sup> S V O<sub>N</sub>  
          m<sup>ε</sup>-H bìy<sup>j</sup>-H M<sup>à</sup>m<sup>bì</sup>  
          1S-PRES beat-R Ø1.PN  
          ‘I beat Mambi.’
- b. m<sup>é</sup> bìy<sup>j</sup> ny<sup>ê</sup> S V O<sub>PRO</sub>  
          m<sup>ε</sup>-H bìy<sup>j</sup>-H ny<sup>ê</sup>  
          1S-PRES beat-R 1.NSBJ  
          ‘I beat him.’

In contrast to pre-verbal object prefixes, post-verbal object marking is more difficult to analyze. This is because, according to Marten & Kula (2012: 239), post-verbal object markers

“may in fact be normal pronouns, or pronouns in some special position with respect to the verb, or clitic pronouns with special phonological or morphological characteristics.”

In Gyeli, I consider them “normal” pronouns. As such, they do not qualify as object diagnostics.

Another diagnostic that is often used in determining objects in Bantu is passivization. In Gyeli, passivization seems, however, to be a rare process that mostly shows up in elicitations, but not in natural speech. I therefore do not consider passivization as a good diagnostic for objecthood, even though simple constructions such as in (756) yield the expected results. As described in Chapter 4.2.3.2, the object of an active construction as in (756a)

corresponds to the subject of a passive construction as in (756b), while the subject of an active construction can optionally be expressed as an oblique in the passive construction.

- (756) a. [bùdì        bá]<sub>SBJ</sub>    tsìló        [békálàdè]<sub>OBJ</sub>  
           b-ùdì        ba-H        tsìló-H        H-be-kálàdè  
           ba2-person 2-PRES write-R OBJ.LINK-be8-book  
           'People write books.'
- b. [békálàdè bé]<sub>SBJ</sub>    tsìlá        [(nà bùdì)]<sub>OBL</sub>  
           be-kálàdè be-H        tsìl-a-H        nà        b-ùdì  
           be8-book 8-PRES write-PASS-R COM ba2-person  
           'Books are written (by people).'

Passivization as object diagnostic in Gyeli is limited, however. First, passivization is a restricted morphological process, given that the possibility to form passives is lexically determined by the verb. Thus, many verbs that semantically would be expected to have a passive form, do not. Speakers generally prefer active constructions with unspecified agents expressed by the agreement class 2 STAMP marker *ba*. Second, while passivization might work as a diagnostic for single objects, it does not for double object constructions. The attempt to passivize both objects in a double object construction in elicitation proved to be an unnatural process and yielded dubious results.

Having ruled out some typical Bantu object diagnostics for Gyeli, I now turn to the two formal criteria that actually characterize objects in this language. These include suprasegmental marking of the object noun phrase, which I call an “object linking H tone”, and word order. I will discuss both in turn.

**Object linking H tone** Objects in Gyeli are marked by a syntactic H tone that attaches to underlyingly toneless tone bearing units of the object noun, namely to CV- noun class prefixes.<sup>3</sup> I gloss this object linking H tone as “OBJ.LINK.” Thus, in (757), the object receives a H tone, attaching to the noun class prefix which is underlyingly toneless.

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<sup>3</sup>There is one other toneless element that the syntactic object linking H tone can be realized on, namely the verbal plural particle *nga* (Chapter 3.9.2.2), which seems to ‘steal’ the object linking H tone from the object.

- (757) wè nzíí                bàlè [bébáá]OBJ  
       we nzíí                bàlè H-be-báá  
       2S PROG.PRES keep OBJ.LINK-be8-word  
       ‘You are keeping the words.’

In contrast, in (758), the noun phrase following the verb is not marked with a H tone, indicating its status as an oblique.

- (758) mè pàlé                kè dyô [màfú      málálè]OBL  
       me pàlé                kè dyô ma-fú      má-lálè  
       1S NEG.PST go sleep ma6-day 6-three  
       ‘I haven’t slept in three days.’

Since the appearance of the object linking H tone is restricted to toneless tone bearing units, namely CV- noun class prefixes, nominal objects that have no CV- prefix or pronominal objects are not marked for their object status suprasegmentally. Only a substitution test, substituting a tonally unmarked noun phrase with a noun that has a CV- noun class prefix, ultimately determines whether the noun phrase is an object or an oblique. This, however, is subject to further restrictions. As we will see below, in double object constructions, only the object that is closest to the verb is tonally marked as an object.

In Gyeli, I argue for two distinct tones, a grammatical realis marking H tone on the verb (Chapter 6.2.2), and an object linking H tone on the CV- noun class prefix of an object. While it is possible that the object linking H tone has its origin in high tone spreading from the realis marking H tone on the verb, synchronically, these two tones are distinct, as (759) shows. The object linking H tone shows up in conjunction with the realis marking H tone, as in (759a), but also without metatony, as in (759b). The latter case makes clear that HTS is not an explanation for the H tone on the object.

- (759) a. mé                gyámbó      bélòlò                (with realis H tone)  
       me-H        gyámbó-H H-be-lòlò  
       1S-PRES cook-R      OBJ.LINK-be8-duck  
       ‘I cook ducks.’
- b. mèè                gyámbò      bélòlò                (without realis H tone)  
       mèè        gyámbò H-be-lòlò  
       1S.FUT cook      OBJ.LINK-be8-duck  
       ‘I will cook ducks.’

Other evidence that the H tone on the object prefix cannot stem from height tone spreading comes from examples where multiple verbs occur between the realis marking H tone and the object H tone, as in (760).

- (760) à nzíí                    tálè    sélò [béntùgú]<sub>OBJ</sub>  
           a nzíí                    tálε    sélɔ H-be-ntùgú<sup>1</sup>  
           1 PROG.PRES.R begin peel OBJ.LINK-be8-potato  
           ‘S/he is starting to peel potatoes.’

The same is true when other parts-of-speech than verbs stand between the finite verb and the object, as for instance the adverb in (761).

- (761) mé                kwàlē    kójò                [bábwálè                bā̄ā]<sub>OBJ</sub>  
       mε-H                kwàlε-H    kójò                H-ba-bwálè                b-ā̄ā  
       1S-PRES love-R    always      OBJ.LINK-ba2-parent 2-1S.POSS  
       ‘I always love my parents.’

**Double objects and the linking H tone** The function of the linking H tone is to mark the object that is closest to the verb. This becomes apparent in constructions involving two objects. As (762) shows, a verb can be followed by two object noun phrases. Riedel & Marten (2012: 279) point out that indirect objects generally precede direct objects in Bantu languages. In Gyeli, however, there is no word order restriction as to which object is closer to the verb. (762b) illustrates that also the direct object can precede the indirect object. Further, there are no formal criteria to distinguish what is generally called a direct object from an indirect object. Therefore, I will rather refer to multiple objects as the first object, i.e. the object closer to the verb, and the second object. The crucial point is that, in Gyeli, the object that is closer to the verb is marked by the linking H tone, but not the second object.

- (762) a. mé                vé                bábwálè                bèfùmbí                S V O<sub>1</sub> O<sub>2</sub>  
       mε-H                v̄-H                H-ba-bwálè                be-fùmbí<sup>2</sup>  
       1S-PRES give-R    OBJ.LINK-ba2-parent be8-orange  
       ‘I give the parents oranges.’
- b. mé                vé                béfùmbí                bàbwálè                S V O<sub>1</sub> O<sub>2</sub>  
       mε-H                v̄-H                H-be-fùmbí                ba-bwálè<sup>3</sup>  
       1S-PRES give-R    OBJ.LINK-be8-orange ba2-parent  
       ‘I give oranges to the parents.’

Thus, tonally, the second object cannot be distinguished from an oblique noun phrase as in (758) where the noun class prefix also surfaces with a L tone. In order to distinguish objects from obliques, another diagnostic is needed, namely word order.

**Word order** Riedel & Marten (2012: 279) state that

“The clearest way to distinguish adjuncts from objects in Bantu languages appears to be word order. Bantu languages generally have the word order S V O X or rather S V IO DO X, where locatives usually follow any objects, and high adjuncts, such as temporal modifiers, also follow the objects.”

This generalization broadly applies to Gyeli as well, except that indirect and direct objects cannot be clearly distinguished, as noted above. Thus, it seems more accurate for Gyeli to suggest a general order of S V O<sub>1</sub> O<sub>2</sub> X<sub>n</sub>. The object slot can host any number of objects from none to two. Also the oblique position X can be filled by multiple adjuncts. Within the object slot, the order of the two objects is free. Similarly, adjuncts are also free in their relative order. Generally, however, objects are restricted to the object slot and obliques to the final X slot. This word order ultimately distinguishes objects from obliques and is illustrated in (763).

- (763) a. mè vé [bábwálè]<sub>OBJ1</sub> [bèfùmbí]<sub>OBJ2</sub> [màfú  
me vê-H H-ba-bwálè be-fùmbí ma-fú  
1S.PST1 give-R OBJ.LINK-ba2-parent be8-orange ma6-day  
málálè dê]<sub>X1</sub> [é tísònì]<sub>X2</sub>  
má-lálè dê é tísònì  
6-three today LOC Ø7.town  
'I gave the parents oranges three days ago in town.'
- b. mé vé [béfùmbí]<sub>OBJ1</sub> [bàbwálè]<sub>OBJ2</sub> [é  
me-H vê-H H-be-fùmbí ba-bwálè é  
1S-PRES give-R OBJ.LINK-be8-orange ba2-parent LOC  
tísònì]<sub>X1</sub> [màfú málálè dê]<sub>X2</sub>  
tísònì ma-fú má-lálè dê  
Ø7.town ma6-day 6-three today  
'I gave oranges to the parents in town three days ago.'

- c. \*mè vé [bábwálè]<sub>OBJ1</sub> [màfú málálè dê]<sub>X1</sub>  
 me vê-H H-ba-bwálè ma-fú má-lálè dê  
 1S.PST1 give-R OBJ.LINK-ba2-parent ma6-day 6-three today  
 [bèfùmbí]<sub>OBJ2</sub> [é tísònì]<sub>X2</sub>  
 be-fùmbí é tísònì  
 be8-orange LOC Ø7.town

'I gave the parents three days ago oranges in town.'

In (763a) and (763b), the relative order of objects and obliques is reversed within the object and oblique slot, respectively. While this is permissible, moving an oblique into an object position or an object into the oblique slot, mixing objects and obliques, as in (763c), is prohibited. Thus, word order principles characterize a second object such as *bèfùmbí* 'oranges' in (763a) as an object in comparison to the following oblique noun phrase *màfú málálè* 'three days'. Both noun phrases carry a L tone on the noun class prefix since only the first object is marked by the object linking H tone. The second object, however, can be promoted to the first object position while the oblique noun phrase can only be reversed in order with another oblique.

### 7.2.1.3 Obliques

In the previous section, I explained the formal distinction between objects and obliques which is related to an object linking H tone and word order. In this section, I present different types of obliques, following Dryer & Gensler's (2013) definition of "oblique":

"An oblique phrase is a noun phrase or adpositional phrase (prepositional or postpositional) that functions as an adverbial modifier (or "adjunct") of the verb."

(764) provides an example with multiple obliques, all of which represent different types of oblique phrases. As described in the previous section already, the order of the oblique phrases can be freely varied, provided that the obliques remain within the oblique slot and do not move to the objects' position.

(764) S V O X1 X2 X3

[bùdì        bógà    bá]<sub>SBJ</sub>    gyámbó    [bédéwò]<sub>OBJ</sub>  
 b-ùdì        bó-gà    ba-H        gyámbó-H H-be-déwò  
 ba2-person 2-other 2P-PRES prepare-R OBJ.LINK-be8-food  
 [púù        yá        bwánò]<sub>X1</sub> [kísínì        dé        tò]<sub>X2</sub> [nà        mäsössí]<sub>X3</sub>  
 púù        yá        b-wánò    kísínì        dé        tò        nà        ma-sössí  
 Ø7.reason 7:ATT ba2-child Ø7.kitchen LOC inside COM ma6-joy

‘Other people prepare food for the children in the kitchen with joy.’

X1 is an instance of a noun + noun construction expressing a benefactive oblique. X2 constitutes an adpositional noun phrase with the postposition *dé*, and X3 is a comitative phrase. I will describe different oblique phrase types in turn.

**Bare noun phrases** An oblique can have the structure of a bare noun phrase, i.e. a noun phrase without any adposition or other grammatical marker such as the comitative. A similar example of a temporal oblique is given in (765) (see also (758)).

- (765) mègà        mée        dyúwó        nzäǟ        [dúwò    lé        tè]<sub>X</sub>  
 mε-gà        mεé        dyúwó-H nzäǟ        d-úwò    lé        tè  
 1S-CONTR 1S.PST2 feel-R    Ø7.appetite le5-day 5:ATT there  
 ‘As for me, I felt appetite that day.’

Bare noun phrases can also encode other types of obliques, as in (766). Here, the first oblique, *bàgyé* ‘guest’, serves as a secondary predication relating to the subject. The second oblique is introduced by the associative plural marker and discussed below.

- (766) mē        ló        njì        [bàgyé]<sub>X1</sub> [bà wé]<sub>X2</sub>  
 mε-H        ló        njì        ba-gyé        bà        wé  
 1S-PRES RETRO come ba2-guest AP 2S  
 ‘I just came as a guest to you.’

The oblique nouns in both (758) and (766) can clearly be identified as such since they surface with a L tone on their noun class prefix. If they were object arguments, they would surface with an object linking H tone.

**Purpose/benefactive *púù yá* ‘reason of’** Some nouns are consistently used in obliques. This is, for instance, the case with *púù* ‘reason’ which is used in benefactive obliques, as shown in (767).

- (767) á gyàgá mántúà [púù yá bwánò]\_X  
 a-H gyàga-H H-ma-ntúà púù yá b-wánò  
 1-PRES buy-R OBJ.LINK-ma6-mango Ø7.reason 7:ATT ba2-child  
 ‘He buys mangoes for the children.’

*púù yá* obliques also express purpose, as illustrated in (768).

- (768) mé lí nñò mwánò [púù yá mábó’ò  
 mε-H lí nñò m-wánò púù yá ma-bó’ò  
 1S-PRES RETRO take N1-child Ø7.reason 7:ATT ma6-bread.fruit  
 mâ]\_X  
 mâ  
 6.DEM.PROX  
 ‘I have just taken the child for these bread fruit.’

**Manner/benefactive** *mpá’à wá* ‘side of’ While *púù* ‘reason’ seems to be the default noun for benefactive obliques, also *mpá’à* ‘side’ can be used for this function, as (769) shows.

- (769) á gyàgá mántúà [mpá’à wá bwánò]\_X  
 a-H gyàga-H H-ma-ntúà mpá’à wá b-wánò  
 1-PRES buy-R OBJ.LINK-ma6-mango Ø3.side 3:ATT 2ba-child  
 ‘He buys mangoes for the children.’

While speakers state that both nouns can be used interchangeably for benefactive obliques, there seems to be a tendency that *mpá’à* ‘side’ is used if the benefactor is expressed pronominally, as in (770), even though also pronominal benefactors are allowed with *púù* ‘reason’.

- (770) á gyàgá mántúà [mpá’à wâ]\_X  
 a-H gyàga-H H-ma-ntúà mpá’à w-â  
 1-PRES buy-R OBJ.LINK-ma6-mango Ø3.side 3-POSS.1S  
 ‘He buys mangoes for me.’

Further, *mpá’à* ‘side’ is used in manner obliques, as in (771).

- (771) bí bôò yá bíé [mpá’à wá vé]\_X  
 bí b-ôò ya-H bíé-H mpá’à wá vé  
 1P.EMPH 2-other 1P-PRES develop-R Ø3.side 3:ATT which  
 ‘How will we others develop?’

**Obliques with the associative plural marker *bà*** Another type of oblique phrase is introduced by the associative plural marker *bà* and its functional extensions (Chapter 3.10.1.4) and expresses usually location, as in (772) and (773).<sup>4</sup>

- (772) bèdewò bénḍè byò mé lí njì lèbèlè bédewò  
 be-déwò bé-ndè byò mε-H lí njì lèbelè H-be-déwò  
 be8-food 8-ANA 8.EMPH 1-PRES RETRO come follow be8-food  
 [bà wê]<sub>X</sub>  
 bà wê  
 AP 2S.NSBJ

‘It is that food that I have come to look for at your place.’

- (773) mùdì á sómóné mùdâ [bà kfúmá wà  
 m-ùdì a-H sómōne-H m-ùdâ [bà kfúmá wà  
 N1-person 1-PRES complain-R N1-woman AP Ø1.chief 1:ATT  
 kwád]\_X  
 kwád  
 Ø7.village  
 ‘The person complains about the woman at the chief of the village’s place.’

The associative plural corresponds to the French preposition *chez* ‘at’ and is consistently translated as such.

**Adpositional obliques** Adpositional obliques express location. They come in two types, namely with i) the preposition *é* and ii) the postposition *dé*, as described in Chapter 3.10.1.1 and 3.10.2.1, respectively. The oblique including the preposition *é* in (774) refers to some general location, corresponding to *at* in English.

- (774) nyàá sùbò èsâs [é dyúwò]\_X  
 nyàá sùbò èsâs é dyúwò  
 1.INCH pour Ø1.fuel LOC Ø7.top  
 ‘He starts pouring fuel on top.’

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<sup>4</sup>While associative plurals canonically co-occur with nouns whose referents are typically human, as stated by Daniel & Moravcsik (2013), the associative plural morpheme *bà* also extends to pronouns in Gyeli. Other than expressing association with the nominal referent, the associative plural can also express location at the referent’s place which is systematically translated by the preposition *chez* ‘at somebody’s place’ into French.

In contrast, the postpositional oblique in (775) rather refers to containment, i.e. a location inside the locative noun.

- (775) bùdì      bésè    bà nzíí      kè nà    kè dē      [bèjíí      dé  
       b-ùdì      b-ésè ba nzíí      kè nà    kè dē      be-jíí      dé  
       ba2-person 2-all 2 PROG.PRES go COM go today be8-forest LOC  
       tù]<sub>X</sub>  
       tù  
       inside

‘All the people are going into the forest today.’

**Locative obliques and the H tone** Noun phrases that appear bare on the surface and expressing location and/or direction can also serve as obliques. In (776), the verb *kè* ‘go’, which is mostly intransitive, is followed by the location oblique *mánk̄e* ‘fields’. I propose that the H tone on *mánk̄e* ‘fields’ stems from an assimilated locative preposition *é* (Chapter 3.10.1.1), whose H tone survives on the noun class prefix.

- (776) wè      médé pā      lígè yá      nà    nyè yá      ké  
       wε      médé pâ-H    lígε ya-H      nà    nyε ya-H      kè-H  
       2S.EMPH self start-R stay 1P-PRES COM 1    1P-PRES go-R  
       [*mánk̄e*]<sub>OBL</sub>  
       é?-ma-nk̄e  
       LOC?-6-field

‘You [= his wife] stay first, we and her, we go to the fields.’

One might assume that the H tone on *mánk̄e* ‘fields’ could also be an object linking H tone, since, in Gyeli, the verb *kè* ‘go’ might require a location argument. This possibility can, however, be excluded on the grounds that the location noun phrase clearly appears in an oblique position. In (777), the location oblique *mánk̄e* ‘fields’ follows another oblique noun phrase. Arguments, however, cannot appear after obliques.

- (777) mùdâ      ké    [nà    nyè]<sub>OBL</sub> [*mánk̄e*]<sub>OBL</sub>  
       m-ùdâ      kè-H nà    nyè      é-ma-nk̄e  
       N1-woman go-R COM 1      LOC?-ma6-field

‘The woman [his wife] shall go with him to the fields,’

**Comitative obliques** A lot of oblique phrases contain the comitative marker *nà* ‘and/with’. The notion ‘comitative’, as used in the Bantuist tradition,

should however, not lead to any terminological confusion in assuming that it has only the use of accompaniment, for it shows a broad range of uses, as I will show in the following.

One salient function of comitative obliques is accompaniment, as shown in (778) and (779). In (778), the intransitive verb *njì* ‘come’ is followed by the comitative phrase. This construction of ‘come with’ is systematically used to express ‘bring’ in English.

- (778) é pè nâ á njíyè m̄ê [nà ȳɔ]x  
      é pè nâ a-H njíyè m̄ê nà ȳɔ  
     LOC there COMP 1-PRES come.SBJV 1S.NSBJ COM 7-NSBJ  
     ‘So that she bring me that [food].’

In (779), the comitative oblique *nà màbɔ́ò* ‘with bread fruit’ is the accompaniment to the verb *dè* ‘eat’.

- (779) nyè nâ m̄éè dé p̄óné [nà màbɔ́ò]x  
      nyε nâ m̄éè dè-H p̄óné nà ma-bɔ́ò  
     1 COMP 1S.PST2 eat-R Ø7.truth COM ma6-bread.fruit  
     ‘He [says]: I really ate [it] with bread fruit.’

The comitative oblique phrase can also have an instrumental function, as in (780).

- (780) á ké sólègà ngùndyá [nà nkwlá]x  
      a-H kè-H sólega ngùndyá nà nkwlá  
     1-PRES go-R chop Ø9.raffia COM Ø3.machete  
     ‘He goes to cut the raffia with the machete.’

Instrumental meaning can extend to contexts which are expressed by locatives in English. In (781), the speaker chooses to employ a comitative oblique rather than a locative oblique with the preposition *é*. This gives more of an instrumental than locative reading.

- (781) á ké jíí dé tù [nà ndz̄í gyâ]x  
      a-H kè-H jíí dé tù nà ndz̄í gyâ  
     1-PRES go-R Ø7.forest LOC inside COM Ø9.path Ø7.length  
     ‘He goes into the forest using the long path.’

Another function of the oblique phrase is to express the agent role in a passive construction, as in (782).

- (782) lé yí lèyá [nà mpèwó]x  
      lé yi-H lèya-H      nà mpèwó  
      Ø7.tree 7-PRES uproot:PASS-R COM Ø3.wind  
      ‘The tree is uprooted by the wind.’

This structure is parallel to many verb constructions which synchronically cannot be transparently recognized as passive forms since they lack another underived form which does not end in *-a*.<sup>5</sup> In these instances, the oblique expresses some kind of source which is usually encoded by a prepositional phrase with *from* in English. In (783), the source of the suffering is the raffia and bamboo.

- (783) yá tfúgá [nà ngùndyá mpángì]x  
      ya-H tfúga-H nà ngùndyá mpángì  
      1P-PRES suffer-R COM Ø9.raffia Ø7.bamboo  
      ‘We suffer from the straw, the bamboo.’

In (784), the source of death is hunger.

- (784) mè múà wè [nà nzà]x  
      mè múà wè nà nzà  
      1S PROSP die COM Ø9.hunger  
      ‘I’m about to die from hunger.’

Another example where the comitative oblique expresses the source is given in (785).

- (785) nyègà váà nyègá tsíyé sáà [nà máléndí]x  
      nye-gà váà nye-gá tsíyé sáà nà ma-léndí  
      3S-CONTR here 3S-CONTR live-R only COM 6-palm.tree  
      máléndí máà mógà  
      ma-léndí máà mó-gà  
      6-palm.tree 6:DEM 6-CONTR  
      ‘Him here, he lives only from palm trees, these palm trees.’

Certain verbs such as *dílesè* ‘feed’ in (786), also require a comitative oblique phrase rather than taking a noun phrase object. In such instances, one can think of the comitative’s function either as manner or instrumental.

- (786) Màmbì à nzí dílesè Àdà [nà ntúà]x  
      Màmbì a nzí dílesè Àdà nà ntúà  
      Ø1.PN 1 PROG.PST feed Ø1.PN COM Ø7.mango

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<sup>5</sup>See Chapter 4.2.3.2 for more information on passive formation.

‘Mambi feeds Ada a mango.’

Comitative obliques may encode a stimulus, as in (787) where the snake causes fear.

- (787) Àdà á sàgá [nà nyùà]x  
       Àdà a-H sàga      nà nyùà  
       Ø1.PN 1-PRES be.scared-R COM Ø1.snake  
       ‘Ada is scared of the snake.’

These sentences provide a few examples of the functional range of comitative obliques. While they seem to cover the most frequent functions, they most likely do not constitute an exhaustive list.

### 7.2.2 Basic word order

Based on the grammatical relations that I established for Gyeli in the previous section, I now discuss the basic word order in this language. According to Dryer (2007c: 73-76), basic word order can be identified through a number of criteria, such as:

1. Frequency
2. Pragmatic neutrality
3. Possible restrictions in distribution

For Gyeli, I will mostly consider frequency as determining the basic word order. Pragmatic neutrality ties in with this factor since those constructions that are not pragmatically neutral, i.e. which take over some special topic or focus function, as discussed in Section 7.3, are naturally less frequent. As to possible restrictions in distribution, we will see in Chapter 8 that Gyeli generally keeps the basic word order of simple, main clauses also in dependent clauses.

Table 7.2 summarizes the frequency of each basic clause type relating to word order as found in the Gyeli corpus. ‘Basic clause type’ includes all simple, non-dependent clauses with a verbal predicate. By definition, other clause types are excluded from this count, namely complex clauses, such as relative clauses and coordination, and clauses with non-verbal predicates. I also do not consider unfinished sentences that obviously occur in natural

speech. Repeated clauses are only listed once to not artificially enlarge the corpus with one construction type. Subjects and objects include both instances of lexical noun phrases and bare STAMP markers or pronominal objects.

	S V ( $X_n$ )	104	(48.8%)
Basic word order	S V O ( $X_n$ )	74	(34.7%)
	S V $O_1 O_2$ ( $X_n$ )	3	(1.4%)
Imperatives	$\emptyset$ V ( $X_n$ )	5	(2.3%)
	$\emptyset$ V O ( $X_n$ )	3	(1.4%)
Special object position	S V X LO	1	(0.5%)
	Object fronting	17	(8%)
	Left dislocation	6	(2.8%)
Total		213	

Table 7.2: Word order in simple clauses

As Table 7.2 shows, the most frequent word order patterns in Gyeli are S V (48.8%) and S V O (34.7%). Intransitive constructions are more frequent than those containing an object, while double object constructions are rather rare in the corpus, representing only 1.4% of the basic verbal clauses.<sup>6</sup> Every construction type can be followed by one or more oblique phrases. As outlined in Section 7.2.1.3, obliques generally follow the object slot. This is also true for special word order patterns such as object fronting and left dislocation. The only exception concerns locative objects with the verb *kè* ‘go’ where a comitative oblique can precede the object noun phrase expressing a goal or direction.

Imperatives and special object positions in Table 7.2 list exceptional patterns. First, imperative forms, except for the first person plural, lack STAMP marking. Therefore, both intransitive and transitive imperative constructions do not contain a subject, while maintaining the general word order of verb before object.

Object positions can be exceptional in various ways. The first construction type of S V X LO is special in that the oblique precedes the object. This, as confirmed in elicitations and further discussed in Section 7.2.1.2, only works with locative objects. Object fronting and left dislocation are

<sup>6</sup>Note that ‘V’ generally represents the predicate without specifying whether the predicate is simple or complex. Thus, ‘V’ may be comprised of 1-3 verbs; complex predicates are discussed in Section 6.3.

pragmatically non-neutral constructions and relate to information structure. Both are discussed in more detail in Section 7.3. Object fronting subsumes all instances where a pronominal object precedes the simple verb or part of a multi-verb construction. In addition to the basic word order criterion of being pragmatically neutral, object fronting is further restricted in its distribution since only pronominal objects can be fronted. As such, object fronting cannot be considered a basic word order type. The same is true for left dislocation where the lexical object noun phrase precedes the subject noun phrase (and is then pronominally taken up again in situ). These construction types are non-basic due to their low frequency.

Having investigated the basic word order of all grammatical relations, I now briefly discuss the relation between pairs, namely the order of subject to verb, verb to object, and object to subject. These dual relations confirm the findings of a general S V O (X) word order in Gyeli.

Table 7.3 summarizes the relative order of only two grammatical relations. The first column states the grammatical relations whose order are investigated, followed by the total number of occurrences in the corpus. For instance, there are 205 simple verbal clauses which contain a subject and a verb.<sup>7</sup> Given that there are transitive and intransitive simple verbal clauses, this total number changes for the relation between verb and object which only has 104 occurrences in the corpus; subject to object order can be investigated for 101 instances.

Grammatical relations	Word order	Frequency	
S - V (205)	S V	205	(100%)
V - O (104)	V O	81	(77.9%)
	O V	23	(22.1%)
S - O (101)	S O	95	(94.1%)
	O S	6	(5.9%)

Table 7.3: Order of dual grammatical relations

In all instances, the subject precedes the verb. In relations between the verb and the object, there are two options for the relative order. In verb - object relations, the verb canonically precedes the object. This is the case for 77.9% of all verb - object relations. There are a few exceptions, however, where the object precedes the verb. This is the case in left dislocation

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<sup>7</sup>This number can also be deduced from Table 7.2 where every construction type involves a subject and an object except for the imperative constructions.

where the nominal object noun phrase appears even before the subject and in pronominal object fronting. Due to its low frequency and special pragmatic function in terms of information structure, O V order should be considered as non-basic. In addition to this, Dryer (2007c: 80) suggests to identify basic word order based on nominal noun phrases rather than pronominal ones. The fact that nominal objects cannot be fronted further indicates the special, rather than basic, order of O V. Finally, also the relation between subject and object clearly shows that subjects generally precede objects, as in 94.1% of all subject - object co-occurrences. Again, the only exception to this basic order is related to left dislocation.

In the following subsections, I will give examples of the basic word order types, namely S V, S V O, and S V O<sub>1</sub> O<sub>2</sub>. Note that obliques have been discussed in Section 7.2.1.3 and will not be subject to further investigation here.

### 7.2.2.1 S V word order

Intransitive S V clauses constitute the most frequent construction type in Gyeli simple verbal clauses. In the most simple case, as in (788), the clause minimally consists of a zero expressed subject noun phrase and the simple predicate which contains the STAMP marker (with subject reference) and a verb.

- (788) [Ø]<sub>S</sub> [á vòdà]<sub>V</sub>  
 Ø a-H vòda  
 Ø 1-PRES rest  
 ‘She rests.’

S V clauses can be more complex than that. For instance, the subject can be expressed by a lexical noun phrase and the verb may be accompanied by aspect marking which, in (789), appears postverbally.

- (789) [bànzàmbí bá tè]<sub>S</sub> [bá jìlē mà]<sub>V</sub>  
 ba-nzàmbí bá tè ba-H jìlē-H mà  
 2-PN 2:ATT there 2-PRES sit-R COMPL[Kwasio]  
 ‘The Nzambis there live there already.’

Also, an S V clause can be expanded by an oblique noun phrase. In (790), the oblique is a bare locative noun phrase. In addition to the oblique, the

verb is also followed by the sentential modifier *sâ* ‘only’.<sup>8</sup>

- (790) [Ø]s [à télé]<sub>V</sub> sâ [déndì témó]<sub>X</sub>  
           Ø a      téle-H sâ d-éndì      témó  
           Ø 1.PST1 stand-R only le5-courtyard middle  
           ‘He just stood in the middle of the courtyard.’

An S V clause can further increase in complexity through auxiliary constructions (Chapter 6.3), as in (791). In this example, the predicate consists of the RETROSPECTIVE aspectual verb *l̪í* ‘come’ and the non-finite verb *njì* ‘come’.

- (791) [Ø]<sub>S</sub> [mé ló nji]\_<sub>V</sub> [bàgyê]\_<sub>X1</sub> [bà wê]\_<sub>X2</sub>  
           Ø mε-H ló nji ba-gyê bà wê  
           Ø 1S-PRES RETRO come ba2-stranger AP 2S  
           'I just came as a guest to you.'

Also, the clause contains two oblique noun phrases, a bare noun phrase and one with associative plural marker *bà*.

### 7.2.2.2 S V O word order

S V O word order is found in the corpus in 34.7% of all simple verbal clauses. Just like S V clauses, their shape differs as well concerning complexity. The clause in (792) represents a relatively simple case with a lexical subject noun phrase, including the STAMP marker, a simple predicate, and a lexical object noun phrase.

- (792) [Màmbì]<sub>S</sub> [à            dé]<sub>V</sub>    [mántúà]<sub>O</sub>  
       Màmbì     à            dè-H     H-ma-ntúà  
       Ø1.PN     3S.PST1 eat-PST OBJ.LINK-ma6-mango  
       ‘Mambi ate mangoes.’

Both subject and object can, however, be also expressed by non-lexical noun phrases. In (793), the subject is only expressed by the STAMP marker and the object by a pronoun.

- (793) [Ø]<sub>S</sub> [bwáá lá]\_<sub>V</sub> [b̪̪]<sub>O</sub>  
           Ø    bwáá-H  lā-H  b-ᬁ  
           Ø    2P-PRES tell-R 2-NSBJ  
           ‘You tell them!’

<sup>8</sup>Sentential modification is discussed in Section 7.2.3.

(794) represents an example of a complex object noun phrase, containing a noun + noun genitive construction with a possessive pronoun.

- (794) [Ø]<sub>S</sub> [à nzí                kè]<sub>V</sub> [létsíndó                lé  
       Ø     a nzí                kè     H-le-tsíndó                lé  
       Ø     1 PROG.PST1 go     OBJ.LINK-le5-funeral.ceremony 5:ATT  
             ntùmbà                wâ]<sub>O</sub>  
             n-tùmbà                w-â  
             N1-older.brother 1-POSS.1S

‘She was going to my older brother’s funeral ceremony.’

S V O clauses can be complex in terms of their predicate. In (795), the verb is preceded by a PROGRESSIVE aspect.

- (795) [Ø]<sub>S</sub> [wè nzíí                bàlè]<sub>V</sub> [bébââ]<sub>O</sub>  
       Ø     we nzíí-H                bàlè     H-be-bââ  
       Ø     2S PROG-PRES keep     OBJ.LINK-be8-word  
             ‘You are keeping the words.’

Finally, S V O clauses can be increased in complexity through the addition of oblique noun phrases as with the comitative oblique in (796).

- (796) [mègà]<sub>S</sub>                [mé     lígé     dè]<sub>V</sub> [mwánò wóò]<sub>O</sub>     [nà  
       mè-gà                mε-H     lígε-H dè     m-wánò w-óò     nà  
       1/SBJ-CONTR 1S-PRES stay-R eat     N1-child 1-POSS.2S COM  
             màbóò]<sub>X</sub>  
             ma-bóò  
             ma6-bread.fruit  
             ‘As for me, I stay and eat your child with bread fruit.’

### 7.2.2.3 S V O O word order

Double object constructions are rather rare in the corpus with only three instances. As discussed in Section 7.2.1.2, however, each object in a double object construction can occur as first or as second object. This is illustrated in example (797).

- (797) a. [Àdà]<sub>S</sub> [á     líbélé]<sub>V</sub> [Màmbì]<sub>O1</sub> [màtúà]<sub>O2</sub>  
       Àdà     à-H     líbelé-H     Mambì     màtúà  
       Ø1.PN 1S-PRES show-R Ø1.PN     Ø1.car  
             ‘Ada shows Mambi A/THE CAR.’

- b. [Àdà]<sub>S</sub> [á líbélé]<sub>V</sub> [màtúà]<sub>O1</sub> [Màmbì]<sub>O2</sub>  
 Àdà à-H líbelé-H màtúà Mambì  
 Ø1. PN 1S-PRES show-R Ø1.car Ø1.PN  
 ‘Ada shows MAMBI a/the car.’

Pragmatically, the second object position seems to be the focus position. Thus, the choice of which object appears first and which second is conditioned by the information structure of the clause. In (797a), *màtúà* ‘car’ is in focus, while in (797b) it is the animate object *Màmbì*.<sup>9</sup>

Just as lexical object noun phrases can appear in both object positions, as in (798), also pronominal objects can occur either in the first or second object position, depending on which object is in focus.

- (798) a. [Ø]<sub>S</sub> [mè vé]<sub>V</sub> [bábwálè]<sub>O1</sub> [bèfùmbí.]<sub>O2</sub>  
 Ø me vê-H H-ba-bwálè be-fùmbí  
 Ø 1S.PST1 give-R OBJ.LINK-ba2-parent be8-orange  
 ‘I gave the parents ORANGES.’
- b. [Ø]<sub>S</sub> [mé vé]<sub>V</sub> [béfùmbí]<sub>O1</sub> [bàbwálè]<sub>O2</sub>  
 Ø mε-H vê-H H-be-fùmbí ba-bwálè  
 Ø 1S-PRES give-R OBJ.LINK-be8-orange ba2-parent  
 ‘I gave THE PARENTS oranges.’

In (799), the lexical object noun phrases of (798) are replaced by pronouns. Each of them can occur in either the first or second object position. The second object position is, again, the focus position.

- (799) a. [Ø]<sub>S</sub> [mè vé]<sub>V</sub> [bŷ]<sub>O1</sub> [byŷ]<sub>O2</sub>  
 Ø me vê-H b-ŷ by-ŷ  
 Ø 1S.PST1 give-R 2-NSBJ 8-NSBJ  
 ‘I gave them [the parents] THEM [the oranges].’
- b. [Ø]<sub>S</sub> [mé vé]<sub>V</sub> [byŷ]<sub>O1</sub> [bŷ]<sub>O2</sub>  
 Ø mε-H vê-H b-yŷ b-ŷ  
 Ø 1S-PRES give-R 8-NSBJ 2-NSBJ  
 ‘I gave THEM [the parents] them [the oranges].’

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<sup>9</sup>Note that I refrain from using the terminology of ‘direct’ and ‘indirect’ objects in Gyeli since they cannot be distinguished on formal grounds. As explained in Section 7.2.1.2, the first object which is closer to the verb receives an object linking H tone if it has a CV- shape noun class prefix while the second does not. When changing positions, still the first object will receive the H tone, but not the second object.

### 7.2.3 Sentential modification

Gyeli has a range of sentential modifiers, listed in Table 7.4. They are all monosyllabic and clearly not nouns. These modifiers are special instances of adverbs which, in contrast to adverbs discussed in Chapter 3.4, occur in a preverbal position. As such, they show greater variability in their possible positions. In terms of their function, they modify the action and/or state of the verb.

<b>ndáà</b>	‘also’	21	(37.5%)
<b>ná</b>	‘again, still’	13	(23.2%)
<b>vèè</b>	‘only, still’	8	(14.3%)
<b>kɔɔ</b>	‘only, still’	7	(12.5%)
<b>sâ</b>	‘only, just’	5	(8.9%)
<b>lìí</b>	‘not yet’	2	(3.6%)
<b>Total</b>		<b>56</b>	

Table 7.4: Sentential modifiers

Sentential modifiers also play a role in information structure, relating to the expression in focus and affecting the presuppositions of the sentence. For instance, *ndáà* ‘also’ as an additive particle is used to “express that the predication holds for at least one alternative of the expression in focus” (Krifka 1999: 111). In contrast, exclusive particles such as *vèè*, *kɔɔ*, and *sâ* “presuppose that the predication holds for the expression in focus, and assert that it does not hold for any alternative” (*Ibid.*).

*ná* ‘again, still’ can be used for both verbs and other grammatical relations. Further, *vèè* and *kɔɔ* can introduce subordinate clauses, similar to the negation particle *tí*, acting as a sequential marker. These constructions are discussed in Chapter 8.2.3.4. Finally, *lìí* ‘not yet’ not only modifies verbs, but it is a negative polarity item. As such, it interacts with tense-mood and polarity categories which goes beyond just modifying a verb.

The most frequent sentential modifier in the Gyeli corpus is *ndáà* ‘also’, constituting 37.5% of all sentential modifiers. Table 7.4 lists modifiers in decreasing frequency. Thus, the second most frequent modifier is *ná* ‘again, still’ which is translated as *encore* into French. The modifiers *vèè*, *kɔɔ*, and *sâ* are about equally frequent. In terms of their semantics, they are difficult to distinguish. They definitely have some overlap and speakers often state that one can be used interchangeably for the other. Typically, they are translated

as either *seulement* or *toujours* into Cameroonian French. Examples of each sentential modifier and its range of use is given in the following.

***ndáà ‘also’*** The sentential modifier *ndáà ‘also’* generally serves to expand a grammatical relation in terms of information structure. It generally follows the constituent it refers to. Thus, in (800), *ndáà* follows the lexical subject noun phrase, expanding the subject topic.

- (800) The woman ate mangoes.

nà	[mwánò mùdâ]s	<b>ndáà</b>	à nzí	dè
nà	m-wánò m-ùdâ	ndáà	a nzí	dè
COM	N1-child	N1-woman	also	1 PROG.PST eat
mántúà				
H-ma-ntúà				
OBJ.LINK-ma6-mango				

‘And the girl also ate mangoes.’

*ndáà* also occurs directly after verbs, as in (801). In the previous clause, the speaker stated that the Bulu contest the Bagyeli’s ownership of their village. Now he expands on what else the Bulu do, namely also bother them.

- (801) bvúlè      bá      ntégélé      **ndáà**      bíyè  
 bvúlè      ba-H      ntégélé-H      ndáà      bíyè  
 ba2.Bulu 2-PRES bother-R also 1P.NSJ  
 ‘The Bulu bother us, too.’

Further, *ndáà* is used under negation, as in (802).

- (802) ká wèé      wúmbélé      **ndáà**      mé      nò́      nkŵé      wá  
 ká wèé      wúmbé-lé      ndáà      me-H      nò́-H      nkŵé      wá  
 if 2S.PRES.NEG want-NEG also 1S-PRES take-R Ø3.basket 3:ATT  
 mábó’ò  
 H-ma-bó’ò  
 OBJ.LINK-ma6-bread.fruit  
 ‘if you don’t want [this] either, I take the basket with the bread fruit.’

*ndáà* also occurs phrase-finally, as in (803). Here, it modifies the copula complement *kùrà ‘electricity’*, which is one of the things, among others, that the Bagyeli wish to obtain.

- (803) yá wúmbé **ndáà** náà bí bógà yá  
 ya-H wúmbé-H **ndáà** náà bí b-ógà ya-H  
 1P-PRES want-R also COMP 1P.EMPH 2-other 1P-PRES  
 pángó bè ná kùrâ **ndáà**  
 pángó-H bè ná kùrâ ndáà  
 PRIOR[Kwasio]-R be COM Ø7.electricity also  
 ‘We also want that we others first have also electricity.’

*ná* ‘again’ The sentential modifier *ná* is mostly translated as *encore* into Cameroonian French, but in some contexts also as *toujours*, roughly translating to ‘still’ and ‘again’ in English. *ná* mostly occurs directly after the verb. If the clause contains a complex predicate with an auxiliary, the sentential modifier occurs between the auxiliary and the main verb, as in (804) with a modal auxiliary and (805) with an aspectual auxiliary.

- (804) wé yàné **ná** gyàgà ndísì  
 wé-H yàné-H **ná** gyàgà ndísì  
 2S-PRES must-H again buy Ø3.rice  
 ‘You must again buy rice.’

- (805) mé pâ **ná** kè dígè mùdì wà nû  
 mè-H pâ-H **ná** kè dígè m-ùdì wà nû  
 1S-PRES PRIOR-H again go see N1-person 1:ATT 1.DEM.PROX  
 é péé  
 é pé-é  
 LOC over.there.DIST  
 ‘I try again and go see this person over there.’

When *ná* follows negation, as in (806), its meaning is ‘anymore’. Thus, comparable to *ndáà* under negation, no negative polarity item is required.

- (806) mèè kálè **ná** bè ná jí é vâ  
 mèè kálè **ná** bè ná jí é vâ  
 1S.FUT NEG.FUT anymore be COM Ø7.place LOC here  
 ‘I won’t have a place here anymore.’

In non-verbal predicates, *ná* follows the STAMP copula, as in (807).

- (807) bónégá báà **ná** jí dé tù  
 b-ónégá báà **ná** jí dé tù  
 2-other 2.COP still Ø7.forest LOC inside  
 ‘The others are still in the forest.’

*ná* further occurs frequently at the end of a phrase. For example, in (808), *ná* follows the object rather than the verb. While the modifier could also appear after the auxiliary, the choice of a phrase-final position in this instance is most likely related to information structure, making *bényámè* more salient. This, however, requires further investigation.

- (808) ónóò bí            bógà    yá        pã      jî    bényámè  
       ónóò bí            b-ágà    ya-H     pâ-H    jî    H-be-nyámè  
       EXCL 1P.EMPH 2-other 1P-PRES start-R stay OBJ.LINK-be8-poor  
       ná  
       ná  
       still  
       ‘Ohhh, we other will first stay still poor.’

*ná* can co-occur with other sentential modifiers, such as *ndáà* ‘also’. In this case, *ná* follows *ndáà*, as shown in (809).

- (809) bwánò    bá        bùdâ        bábáà    èè    nà    mwánò    wà  
       b-wánò    bá        b-ùdâ        bá-báà    èè    nà    m-wánò    wà  
       ba2-child 2:ATT ba2-woman 2-two EXCL COM N1-child 1:ATT  
       mùdâ        nláálè ndáà ná  
       m-ùdâ        nláálè ndáà ná  
       N1-woman three also again  
       ‘Two girls, yes, and also again a third girl.’

There are a few cases where *ná* appears twice in a clause. In (810), the modifiers occurs after the auxiliary as well as phrase-finally.

- (810) áà    mè nzíí            ná    làwò ná  
       áà    me nzíí            ná    làwò ná  
       yes 1S PROG.PRES still talk still  
       ‘Yes, I am still talking.’

Finally, *ná* can also occur preverbally, as in (811). Here, it follows the subject *wé* ‘you’ (while the other instances of *ná* in the clause follow the verb.)

- (811) wé        ná    báàlá    nà    nyé    fí        nà    wé  
       wé-H        ná    báàla-H    nà    nyê-H fí        nà    wé-H  
       2S-PRES again repeat-R COM see-R different COM 2S-PRES  
       ndyándyá    ná    sálé        é    pè        nà    wé    kòlá  
       ndyándya-H ná    sálé        é    pè        nà    wé-H    kòla-H  
       work-R        again Ø7.work LOC over.there COM 2S-PRES add-R

ná mòné nû  
ná mòné nû  
again Ø1.money 1.DEM.PROX

‘You repeat again and see differently [= find another work] and you do again work there and you add again this money [= same amount of 250 Francs].’

Instances of *ná* following the STAMP marker seem to be rather rare, however, at least rarer than *ndáà* ‘also’ modifying noun phrases.

*vèè* ‘only, still’ In contrast to *ndáà* ‘also’ and *ná* ‘again’, *vèè* ‘only, still’ generally has scope over the constituents that follow the modifier. This may either be a noun phrase, a verb, or the whole sentence. At the same time, *vèè* seems to acquire different meanings in different contexts, as we will see below. Even though it is beyond the scope of this work to disentangle the entire semantic range of sentential modifiers, it seems that *vèè* has a restrictive function when it has scope over single constituents of the sentence. In contrast, when it has scope over the whole sentence, it seems to rather function as a sequential marker connecting subsequent events and adding a dramaturgic aspect.

In (812) and (813), *vèè* appears phrase-initially. In both cases, it has a restrictive meaning which can truly be translated as ‘only’ in the sense of ‘nothing but’.

- (812) mè nyé kwádó yî Kúndúkùndù vèè  
mε nyê-H kwádó yî Kúndúkùndù vèè  
1S.PST1 see-R Ø7.village 7.DEM.PROX Ø7.PN only  
màndáwò má zì mŷ nà mŷ  
ma-ndáwò má zì m-ŷ nà m-ŷ  
ma6-house 6:ATT Ø7.tin 6-NSBJ COM 6-NSBJ  
‘I saw this village, Kundukundu. Only tin (roofed) houses, each and each.’

In (812), the *vèè* modifies *màndáwò má zì* ‘tin houses’ (in contrast to houses with raffia roofs). In (813), it refers to *nàménó* ‘tomorrow’.

- (813) vèè nàménó nàménó nà pámò dè  
vèè nàménó nàménó nà pámo dè  
only tomorrow tomorrow COM arrive today

‘Only tomorrow, tomorrow, until today. [= only heard promises till today]’

In (814), the modifier also appears phrase-initially, but in this instance, it does not have a restrictive meaning and as such does not seem to modify the subject noun phrase. Instead, it seems to rather have scope over the whole sentence and function as a dramatic sequential marker which is best translated as ‘suddenly’ or ‘unexpectedly’.<sup>10</sup>

- (814) nâ      bá      dyúù      nyê      vèè      mùdì      nyê jâàsà  
       nâ      ba-H      dyúù      nyê      vèè      m-ùdì      nyê jâàsà  
       COMP 2-PRES kill.SBJV 1.NSBJ only N1-person 1 disappear  
       ‘That they kill him. Suddenly the person disappears.’

Another instance of a sequential function is given in (815). Here, the Nzambi story (see Appendix II.2) reaches its climax where the protagonist locks his friend’s family into a house, pours fuel over the house, takes a lighter and lights it. The phrase in (815) is the last step in this chain of events, the sentential modifier *vèè* serving as a sequential marker that seems to express a dramaturgic effect at the same time.

- (815) vèè      bédè  
       vèè      bédè  
       only light  
       ‘just light [the house].’

*vèè* can also precede adverbs which it modifies in a restrictive sense. This is the case for both (816) and (817).

- (816) é      vâ      màkwèlò      má      fúgè vèè      vâ  
       é      vâ      ma-kwèlò      ma-H      fúgè vèè      vâ  
       LOC here ma6-felling 6-PRES end only here  
       ‘Here, the felling ends, only here.’

- (817) yóò      pònè      vèè      mpù  
       yóò      pònè      vèè      mpù  
       7.COP Ø7.truth still like.this  
       ‘It is still true like this.’

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<sup>10</sup>In Cameroonian French, *vèè* is still translated as *seulement* ‘only’, but the meaning of *seulement* in this case is far from being clear.

In some instances, the modifier seems to pick out a whole verb phrase (i.e. verb plus noun phrase) while actually restricting only the noun phrase. This is the case in (818) where *vèè* precedes the verb, but in terms of its meaning, it rather serves as a restriction to the object *mímpìndí* ‘non-ripe’: in contrast to falling ripe, the palm nuts only fall non-ripe.

- (818) màlénđí            máà            vèè kwè mímpìndí  
       ma-léndí            máà            vèè kwè H-mi-mpìndí  
       ma6-palm.tree 6.DEM.PROX only fall OBJ.LINK-mi4-non.ripe  
       ‘These palm trees only fall non-ripe [fruit].’

*kòò* ‘still, just’ The sentential modifier *kòò* has some functional and semantic overlap with both *vèè* and *sâ*. Therefore, it is hard to distinguish the functional and semantic range of these three modifiers. *kòò* has in common with *vèè* that both can be used as a sequential marker which have scope over a whole sentence rather than single constituents. This is the case, for instance, in (819) where *kòò* links an event within a chain of events. Nzambi locks his friend’s family into a house, pours fuel over the house and then takes a lighter—the following event is introduced with *vèè* as explained in (815).

- (819) kòò nòò brìkê            w̄  
       kòò nòò brìkê            w-̄  
       just take Ø1.lighter[French] 1-POSS.3S  
       ‘just takes his lighter,’

In (820), the speaker wraps up a conversation by stating that they were three people who spoke and then finished. As such, *kòò* again more serves as a sequential marker rather than a restrictive modifier.

- (820) kòò sílè  
       kòò sílè  
       just finish  
       ‘Just finish.’

As a second function, *kòò* is also used for restricting information. Thus, the statement in (821), ‘The woman bought oranges and beans for the children.’ is corrected, noting that only oranges have been bought. In this case, the modifier precedes the constituent it modifies, namely *befùmbí* ‘oranges’. As (821a) and (821b) illustrate, the modifier always precedes the object noun phrase, no matter whether it occurs as first or second object.

(821) The woman bought oranges and beans for the children.

- a. tòsâ, à nzí                gyàgà sâ/kóò békumbí  
             tòsâ a nzí                gyàga sâ/kóò H-be-fùmbí  
             no 1 PROG.PST buy only    OBJ.LINK-be8-orange  
             bwánjò  
             b-wánjò  
             ba2-child  
             ‘No, she bought only oranges for the children.’
- b. tòsâ, à nzí                gyàgà b-wánjò sâ/kóò békumbí  
             tòsâ a nzí                gyàga b-wánjò sâ/kóò be-fùmbí  
             no 1 PROG.PST buy ba2-child only be8-orange  
             ‘No, she bought only oranges for the children.’

What this example also shows is that the modifiers *kóò* and *sâ* can be used interchangeably in this context, namely whenever *kóò* expresses restriction. Also (822) represents such a case. When Nzambi realizes that his family has been killed, he just cries (and does not do anything else).

- (822) nzàmbí wà nû                kóò kiyà léwê  
             nzàmbí wà nû                kóò kiyà H-le-wê  
             Ø1.PN 1:ATT 1:DEM.PROX only give OBJ.LINK-le5-cry  
             ‘This Nzambi only gives a cry.’

In other contexts, *kóò* seems to be less restrictive in its function, but expresses something like ‘just’ or ‘simply’ in English. This is the case in (823), which is certainly not restrictive since the Bagyeli state that they also wish for other improvements, for instance tin roofs.

- (823) nà bí bésè kóò kùrà                bë dé tù  
             nà bí b-ésè kóò kùrà                bë dé tù  
             COM 1P.EMPH 2-all just Ø7.electricity be LOC inside  
             ‘with all of us just electricity be inside.’

Another way of translating *kóò* into Cameroonian French is *toujours* ‘still’, which applies in examples such as (824) and (825). In both cases, the function of *kóò* is to take up a previous discourse topic and re-introduce it.<sup>11</sup>

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<sup>11</sup>An English translation with ‘just’ also seems plausible and the exact difference between ‘just’ and ‘still’ in these contexts is hard to grasp. Speakers, however, make a difference whether they use *seulement* ‘only’ or *toujours* ‘still’ in their translations.

- (824) yá mbàà yá mbàà yî nâ kôò mpù é nzìwù  
 yá mbàà yá mbàà yî nâ kôò mpù é nzìwù  
 7:ATT second 7:ATT second 7.COP COMP still like.this LOC Ø1.PN

ló táálè làwò nâ bon

ló táálé làwɔ nâ bon

RETRO begin talk COMP good[French]

‘The second, the second is that still as Nze just began to say that, good,’

- (825) yî póné kôò lèváá lèvúdû nâ bí  
 yî póné kôò le-váá lè-vúdû nâ b-í  
 7.COP Ø7.truth still le5-thing 5-one COMP ba2-non.Bagyeli

bá ntégélé bágylé

ba-H ntégele-H H-ba-gyélí

2-PRES bother-R OBJ.LINK-ba2-Gyeli

‘It is true, still the same thing that the non-Bagyeli bother the Bagyeli.’

Finally, *kôò* seems to express some kind of irrealis modality, as in (826)

- (826) kôò nyégà á làwó ndáà  
 kôò nyé-gà a-H làwɔ-H ndáà  
 only 1-CONTR 1-PRES speak-R also  
 ‘If only him, he would also speak.’

For a better understanding of the use and semantic range, a much larger corpus is needed as well as a more systematic investigation of sentential modifiers.

*sâ* ‘only’ The primary function of the modifier *sâ* is restrictive, as already seen in (821). *sâ* seems to only have scope over single constituents in a clause rather than over the whole sentence. It immediately precedes the constituent that it modifies. In (827), for instance, *sâ* precedes the oblique noun phrase *nâ máléndí* ‘from palm trees’. In terms of its meaning, *sâ* restricts the interpretation to this noun phrase, i.e. Nzambi only lives from palm trees and no other crops.

- (827) nyègà váà nyègá tsíyé sâ nâ máléndí  
 nyé-gà váà nyé-gá tsíyé sâ nâ ma-léndí  
 3S-CONTR here 3S-CONTR live-R only COM 6-palm.tree  
 máléndí máà mógà  
 ma-léndí máà mó-gà  
 6-palm.tree 6:DEM 6-CONTR

‘Him here, he lives only from palm trees, these palm trees.’

In (828), the *sâ* restricts the object interpretation and thus precedes the object noun phrase *mwánò wó* ‘your child’. Nzambi asks his friend’s wife for her child in return for food. In this example, he restricts the payment for food to her child, rather than accepting money or other goods in return.

- (828) v̄ê m̄ê sâ mwánò wó wà wè bùdé  
          v̄ê m̄ê sâ m-wánò w-ó wà wè bùdε-H  
          give.IMP 1S.NSBJ only N1-child 1-POSS.2S 1:ATT 2S have-R  
          nû  
          nû  
          1:DEM.PROX

‘Give me only your child that you have here.’

*sâ* can also modify adverbs, as in (829). The implicit contrast of the restriction is ‘here’ as opposed to some other place. Thus, the speaker emphasizes that he stays only in the same place and does not go elsewhere so that his relatives are encouraged to join him in his village.

- (829) ká wé nyé m̄ê jíi sâ vâ nâ bá  
          ká wε-H nȳ-H m̄ê jíi sâ vâ nâ ba-H  
          if 2S-PRES see-R 1S.NSBJ stay only here COMP 2-PRES  
          nzíyè bá nzíyè jíyɔ  
          nzíyè ba-H nzíyè jíyɔ  
          come.SBJV 2-PRES come.SBJV stay
- ‘When you see me staying only here, so that they come, they come to stay.’

While *sâ* is observed in the vast majority of cases to have a restrictive function, there are, however, non-restrictive uses which more convey the sense of ‘just/simply’. In (830), there is no restriction on the following locative noun phrase, nor on any other constituent of the phrase.

- (830) à télé sâ déndì témo  
          a téle-H sâ d-éndì témo  
          1.PST1 stand-R just le5-courtyard middle
- ‘He just stood in the middle of the courtyard.’

*líi* ‘not yet’ The least frequently found sentential modifier in the corpus is *líi* which is a negative polarity item only occurring with past negation words.

This is confirmed by elicitations, given the scarcity of data in the corpus. As such, it is not just simply an adverb modifying a verb, but also depends on the polarity category. Therefore, I classify it as a sentential rather than a verbal modifier.

*lìí* directly follows the negation word. As such, it is the only sentential modifier whose occurrence is restricted to one position only. In (831), the modifier occurs between the negation and the main verb.

- (831) mè        pálé        **lìí** bâ  
       mε        pálé        lìí bâ  
       1S.PST1 NEG.PST yet marry  
       ‘I am not yet married.’

The same is true for (832) which also includes an object, but this does not affect the position of the modifier.

- (832) mè        pálé        **lìí** dè mántúà  
       mε        pálé        lìí dè H-ma-ntúà  
       1S.PST1 NEG.PST yet eat OBJ.LINK-ma6-mango  
       ‘I have not yet eaten the mangoes.’

*lìí* has only been observed to occur with the negation word *pálé*. It is not clear whether it can occur also with the variant *sàlé*.

### 7.3 Information structure

Following Güldemann et al. (2015: 156), information structure

“is about how speakers structurally encode propositional content with respect to their assessment of knowledge that is (not) shared by the interlocutors in a particular communicative situation.”

**Topic** I follow Dik (1997: 312) in his definition of topic and topicality who states that

“Topicality concerns the status of those entities “about” which information is to be provided or requested in the discourse. The topicality dimension concerns the participants in the event structure of the discourse”

Gyeli uses a variety of strategies to express “aboutness”. In order to follow a current topic in the discourse, not only single clauses in isolation have to be examined, but their context in the discourse so that given information can be distinguished from new or newly requested information. Therefore, I provide the discourse context of each example either by description or by a sentence in the example line.

**Focus** According to Dik (1997: 326),

“The focal information in a linguistic expression is that information which is relatively the most important or salient in the given communicative setting.”

Fiedler et al. (2010: 236) note that this relative importance or salience is expressed either by “introducing new information into the discourse (information focus), or by standing in explicit or implicit contrast to a set of comparable alternatives (contrastive focus).”

Gyeli has at least three ways of expressing focus, namely a dedicated focus position that is immediately after the verb, fronting of an object pronoun to achieve predicate focus (PCF), and cleft constructions in order to express subject focus.

Gyeli uses a range of strategies to package information in clauses and discourse. The most important information structure strategies are listed in Table 7.5. Both topic and focus can be encoded in-situ, optionally through an expanded noun phrase. Left dislocation of object and adjunct noun phrases topicalizes these constituents. Object fronting puts the predicate into focus. And finally, cleft constructions are a focus means for subjects and obliques. Since they constitute a subordinate construction, they are discussed in Chapter 8.2.1.2.

Word order					Information structure effect
$S_{TOP}$ V $O_{FOC}$ X					basic word order
$O_{i, TOP} S$ V $O_{PRO, i} X$					object left dislocation → object topic
$X_{TOP} S_{TOP}$ V O					adjunct left dislocation → adjunct topic
$S_{TOP}$ $O_{PRO}$ $V_{FOC}$ X					object pronoun fronting → predicate focus
It is $S_{FOC}$ [...] <sub>REL</sub>					cleft construction → subject focus
It is $X_{FOC}$ [...] <sub>REL</sub>					cleft construction → adjunct focus

Table 7.5: Basics of Gyeli information structure

This list is not exhaustive. For instance, prosodic means seem to be relevant as well, but this requires further research. Data on information structure stem both from the questionnaire on information structure (mainly the topic and focus translation tasks) by Skopeteas et al. (2006) and the Gyeli corpus.<sup>12</sup>

### 7.3.1 In-situ positions

Information structure roles can be encoded in-situ through basic word order. According to Güldemann et al. (2015: 159), subjects are often default topics, which conflate “topicality with the semantic role of intransitive subject/transitive agent, leaving the scope of assertion over the following material.” This results, in many languages, in a basic linear IS order template of [[TOP] [FOC]] (ibid.), a generalization that also applies in Gyeli. The default focus position is immediately after the verb. According to Downing & Hyman (2014: 793), this is typical for Bantu languages where, “(most) focused constituents, including WH-elements, occur in the immediate after verb (IAV) position, while non-focal information commonly occurs in peripheral positions.”

#### 7.3.1.1 In-situ topic

In-situ subjects are either not marked at all, but zero expressed, as illustrated in Section 7.2.2, or they are specially marked through an extended pronominal noun phrase. The latter is the case in (833). In this example, a new topic is introduced. In the previous sentence, the speaker was talking about the team of linguists who come to his village. Now he changes the topic to the Bagyeli themselves and how they react to their visitors.

(833) You come to find us here.

donc	bí	yá	táálé	bê yàlànè	àà
donc	bí	ya-H	táálé-H	bê yàlane	àà
so[French]	1P.SBJ	1P-PRES	begin-R	2P respond[Bulu]	EXCL
‘So we, we start to respond to you, mhm.’					

<sup>12</sup>Information structure questionnaires turned out to be less successful to elicit relevant data since speakers strongly preferred to give one-word answers or provide pragmatically neutral answers. The corpus, however, in combination with the questionnaires, allow some reliable generalizations on information structure phenomena in Gyeli.

Also, a subject pronoun can be used with the sentential modifier *ndáà* ‘also’, as in (834). The chief of Ngolo addresses the Ngumba and Mabi speakers among the visitors. He points out that they as well, in addition to the European people in the group, also speak French (while he does not).

- (834) èsé                bée                **ndáà** bèyá                làwó                fàlà  
       èsé                bée                ndáà bèya-H                làwó-H                fàlà  
       is.it[French] 2P.SBJ also 2P[Kwasio]-PRES speak-R Ø1.French  
       ‘Isn’t it, you, you also speak French.’

Often, the subject pronoun is combined with the contrastive marker *-ga*, indicating a contrastive topic, as in (835). The speaker talks about NGOs and white people who receive money in Europe to help Africans. Assuming that other people in Africa profit from this money, he now states that the people in Ngolo also want to receive help for obtaining electricity, where the marker *-ga* contrasts the Bagyeli to other African communities.

- (835) White people working for NGOs receive money in Europe.

- bí                bógà                yá                wúmbé                ndáà pâà nyê sâ  
       bí                bó-gà                ya-H                wúmbé-H ndáà pâà nyê sâ  
       1P.SBJ 2-CONTR 1P-PRES want-R also start see Ø7.thing  
       bá                gyíbá                ngyùlè wá                kùrâ  
       ba-H                gyíbó-H ngyùlè wá                kùrâ  
       2-PRES call-R Ø3.light 3:ATT Ø7.electricity  
       ‘We others, we also want to first see the thing they call the light of  
       electricity.’

The marker *-gà* is used in order to contrast a new subject topic from an old one. For instance, in (836), the speaker talks about the problems the Bagyeli encounter with the Bulu. He states that if a Gyeli person goes hunting on terms of equal sharing with a Bulu person, the Bulu person in turn will deceive him.

- (836) wé                ké                nà                nyê nkòwáká                nyègà                à nzíí  
       wε-H                kè-H nà                nyê nkòwáká                nyè-gà                a nzíí  
       2S-PRES go                COM 1                equal.sharing 1.SBJ-CONTR 1 PROG.PRES  
       wê                vâáké                sâ mpù  
       wê                vâáké                sâ mpù  
       2S.NSBJ go[Bulu] do like.this  
       ‘You go with him [= the Bulu] equally sharing. As for him, he is  
       going to do you like this [= tries to trick you].’

This contrast of subject topics is also illustrated in (837). Here, Nzambi offers his friend's wife bread fruit in return for her child, specifying the terms of the deal. She will get the bread fruit, while he will eat her child.

- (837) You take the bread fruit.

wègà	wé	ké	nà	mô	mègà	mé
wè-gà	we-H	kè-H	nà	m-ô	mè-gà	mè-H
2S.SBJ-CONTR 2S-PRES go-R COM 6-NSBJ 1.SBJ-CONTR 1S-PRES						
lígé	dè	mwánjò	wójò			
lígε-H	dè	m-wánjò	w-ójò			
stay-R	eat	N1-child	1-POSS.2S			

'As for you, you take them [= the bread fruit] away. As for me, I stay and eat your child.'

A final example for the marker *-gà* is provided in (838). Again, the speaker contrasts a new subject topic to an old one. The previous topic was himself where he says that he asks his friend for help. As for the friend ('you'), he does not react in the expected way, but causes trouble.

- (838) I send you the message and ask you to help me.

é	tè	wègà	wé	njí	sâ	mbvúndá	é
é	tè	wè-gà	we-H	njì-H	sâ	mbvúndá	é
LOC there 2S.SBJ-CONTR 2S-PRES come-R do Ø9.trouble LOC							
ndzí	vâ						
ndzí	vâ						
Ø9.path	here						

'There you, you come to make trouble on the way here.'

### 7.3.1.2 *In-situ focus*

Focus in the immediate-after-verb position seems to be the most common focus strategy in Gyeli for objects and obliques. An example for object focus is given in (839b), which is a correction of the clause in (839a).

- (839) a. mùdâ à dé mántúà  
           m-ùdâ a dè-H H-ma-ntúà  
           N1-woman 1.PST1 eat-R OBJLINK-ma6-mango  
           'The woman ate the MANGOES.'

- b. tòsâ à nzí            dè ndísì  
      tòsâ a nzí            dè ndísì  
      no 1 PROG.PST eat Ø3.rice  
      ‘No, she was eating RICE.’

(840) represents an example of in-situ adjunct focus. Here, the oblique noun phrase *lèwùlà lé vé* ‘when’ occurs in-situ. As explained in Section 7.4.1, such question noun phrases can also appear phrase-initially, but the general focus position is at the end of a phrase in Gyeli.

- (840) áá bî mändáwò má zì yáà m̄  
      áá bî ma-ndáwò má zì yáà m-̄  
      EXCL 1P.NSBJ ma6-house 6:ATT Ø7.tin[Bulu] 1P.FUT 6-NSBJ  
      fúàlà bwê lèwùlà lé vé  
      fúala bwê le-wùlà lé vé  
      end receive le5-hour 5:ATT which  
      ‘Ah, us, as for the tin houses, WHEN will we receive them?’

### 7.3.2 Left dislocation

Left dislocation concerns both object and adjunct noun phrases which can be moved to the left edge of the sentence either in form of a nominal or pronominal noun phrase.

#### 7.3.2.1 Left dislocation of nominal noun phrases

One means to express topicality is left dislocation. This phenomenon applies mainly to objects. In nominal object left dislocation, an object noun phrase is left dislocated in front of the subject and later taken up again in-situ by an object pronoun. This is illustrated in (841). Previously to this phrase, the chief of Ngolo talks about how he got injured cutting raffia for his roof. He then changes the topic from ‘raffia’ to ‘tin-roofed houses’ which will prevent future injuries related to cutting raffia. Note that the left dislocated object noun phrase usually occurs with a prosodic break which is indicated by the comma.

- (841) áá bî màndáwò má zì yáà mó  
 áá bî ma-ndáwò má zì yáà m-ó  
 EXCL 1P.NSBJ ma6-house 6:ATT Ø7.tin[Bulu] 1P.FUT 6-NSBJ  
 fúàlà bwê lèwùlà lé vé  
 fúala bwê le-wùlà lé vé  
 end receive le5-hour 5:ATT which  
 ‘Ah, us, as for the tin houses, when will we receive them?’

The same pattern applies in (842) where the speaker talks about the Bulu people. He then changes the topic from the Bulu person to the Gyeli child about whom he says that the Bulu will beat him.

- (842) The Bulu person says that he will quarrel with you [= the Gyeli child].

pílì mwánò bàgyèlì àà nyê kë bíyò  
 pílì m-wánò ba-gyèlì àà nyê kë bíyò  
 when N1-child ba2-Gyeli 1.FUT 1.NSBJ go hit  
 ‘At times the Gyeli child, he will go hit it,’

While in most cases the left dislocated object is expressed in-situ pronominally, it can also surface lexically, as shown in (843). The discourse context is the same as for (841) where the chief of Ngolo talks about his injury and a scar he got on his forehead. To clarify the source of his scar, he changes the topic to the raffia which he cuts up in the trees. In (843), *ngündyá* ‘raffia’ is left dislocated before the subject and the occurs again in its lexical form in-situ.

- (843) I think, the machete missed me here [= pointing to his forehead].

ngündyá mé kë sólègà ngündyá dyúwò  
 ngündyá mε-H kë-H sólèga ngündyá dyúwò  
 Ø9.raffia 1S-PRES go-R chop Ø9.raffia on.top  
 ‘The raffia, I go to chop the raffia on top.’

Left dislocation is also used in conjunction with the sentential modifier *ndáà* ‘also’, as in (844).

- (844) The woman ate the oranges.

nà mántúà ndáà à nzí dè mó  
 nà mà-ntúà ndáà a nzí dè m-ó  
 COM ma6-mango also 1 PROG.PST eat 6-NSBJ

‘And she also ate mangoes.’

Left dislocation can also be achieved through pronouns that combine with an object noun phrase, as in (845). Nzambi’s wife explains to her husband’s friend that their fields are not producing enough food. She then changes the topic from the problems in food production to the food itself which she asks the friend for.

- (845) The field is running out of food.

bèdewò bénḍè byò mé lì nji lèbèlè bédewò  
 be-dewò bé-ndè b-yò mε-H lì nji lèbèlè H-be-dewò  
 be8-food 8-ANA 8-NSBJ 1-PRES RETRO come follow be8-food  
 bà wê  
 bà wê  
 AP 2S.NSBJ

‘This food, I have come to look for the food at your place.’

### 7.3.2.2 Left dislocation of pronominal noun phrases

Left dislocation of pronominal objects which, in contrast to nominal left dislocated objects, are not referenced in-situ again, is often referred to as topicalization. Thus, in (846), the object pronoun is left dislocated, but does not occur in-situ after the verb. In this example, the chief of Ngolo talks about his wishes to obtain houses with tin roofs. He finishes his statements by the summary ‘This I want.’, referring to all the points he brought up about new houses in the village and tin roofs.

- (846) I will build houses in Ngolo, each with a tin roof.

yòò mè wúmbé wû  
 y-òò mε-H wúmbε-H wû  
 7-NSBJ 1S-PRES want-R there  
 ‘This I want there.’

In (847), he similarly talks about a topic, namely a tree that people are going to take down without even asking for permission. He concludes by summarizing the general topic of the tree: ‘This I have planted.’

- (847) yòò yòò mè jilé mà  
 y-òò y-òò mε jile-H mà  
 7-NSBJ 7-NSBJ 1S.PST1 place-R COMPL[Kwasio]  
 ‘This, this I have placed [there].’

While most instances of topicalization seem to involve a pronominal object, as in (846) and (847), there are also examples where a lexical object noun phrase is left dislocated, but not cross-referenced in-situ. This is the case in (848).

- (848) The woman cooked rice for her child.

nà	<b>nákúndèkúndè</b>	<b>ndáà</b> , à	bíyélé.
nà	nákúndèkúndè	ndáà a	bíyélé-H
CONJ	Ø1.bean	also	1.PST1 cook-PST

‘And she also cooked beans.’

### 7.3.3 Object pronoun fronting

The phenomenon of preverbal objects in Benue-Congo languages is extensively discussed by Güldemann (2007). Following him, I propose that the marked preverbal object position moves the object into an extrafocal position, resulting instead in the predicate being in focus. This hypothesis is supported by the fact that only pronominal objects can be fronted before the verb, but not lexical objects. Pronouns usually refer to already given information and are thus less salient in terms of new or contrastive information.

Pronominal objects can be fronted in a way that they occur before a simple predicate, as in (849). While in a pragmatically more neutral clause the object pronoun *yŷ* ‘it’ would occur after the verb, it is here fronted and the predicate appears phrase-finally, making it more salient in terms of information structure. The Nzambi explains to his friend’s wife that her child would be very tender when one steams it, wrapped in leaves. He then emphasizes that he will EAT the child, which can be interpreted as an instance of truth value focus, highlighting the truth of his future deeds.

- (849) This tender child is good when you wrap it in a leaf package.

mèè	<b>yŷ</b>	<b>dè</b>
mèè	y-ŷ	dè
1S.FUT	7-NSBJ	eat

‘I will EAT it [= the child].’

If a clause contains a complex predicate with an auxiliary, the pronominal object under fronting appears between the auxiliary and the main verb, as shown in (850). The context is the same as in (849). Again, the protagonist of the story stresses what he is going to do with the child, namely eat it. The verb *dè* ‘eat’ appears in focus position since the pronoun *nyɛ* ‘him’ is defocussed.

- (850) m<sup>é</sup> líg<sup>é</sup> ny<sup>ɛ</sup> d<sup>é</sup>  
          m<sup>ε-H</sup> líg<sup>é-H</sup> ny<sup>ɛ</sup> d<sup>é</sup>  
          1S-PRES stay-R 1.NSBJ eat  
        ‘I stay to EAT him [= the child].’

A similar example is presented in (851). Again, the predicate is complex with an aspectual auxiliary verb that is followed by a pronominal object so that the main verb occurs phrase-finally. Here, the speaker explains the troubles the Bagyeli encounter with their Bulu neighbors.

- (851) ny<sup>ɛ</sup> náà à múa w<sup>ɛ</sup> bíy<sup>ɔ</sup>  
          ny<sup>ɛ</sup> nâ a múa w<sup>ɛ</sup> bíy<sup>ɔ</sup>  
          1 COMP 1 PROSP 2S.NSBJ hit  
        ‘He [the Bulu person says] that he is about to BEAT you [= the Gyeli person].’

He reports that the Bulu often threaten to beat the Bagyeli. With the object pronoun *w<sup>ɛ</sup>* ‘you’ in preverbal position, the verb *bíy<sup>ɔ</sup>* ‘hit’ is in focus position.

## 7.4 Special clause types

Having investigated the basic word order in simple clauses as well as special constructions relating to information structure, I discuss some special clause types in this section. These include questions, possessor raising, and comparison constructions.

### 7.4.1 Questions

I distinguish three basic types of questions: i) polar questions, ii) leading questions, and iii) constituent questions (what is also known as wh- questions for English). Generally, polar and leading questions occur in basic

word order, but add a question marker either at the beginning or the end of the phrase. Constituent questions, in contrast, are more flexible with respect to the occurrence of the interrogative. I will discuss each of these types in turn, basing my analysis both on the question types questionnaire developed by Patin & Riedel (2011) as well as questions occurring in the Gyeli corpus.

**Polar questions with *nà(nâ)*** Polar questions are those which typically entail a yes or no answer. They are usually marked by the question marker *nà* or *nànâ* which grammatically marks a sentence as a question. The first version is the shorter default form *nà*, as shown in (852), which also has a longer emphatic form *nànâ*, as in (853). Both only occur at the beginning of a phrase.

- (852) **nà wè nyé nyê**  
*nà we nyê-H nyê*  
 Q 2S.PST1 see-R 1.NSBJ  
 ‘Did you see him?’

The emphatic question marker *nànâ* in polar questions pragmatically expresses insistence or even disbelief. Thus, in (853), the speaker who asks the question rather expects the addressee to not have seen the person in question and insists on getting a true answer.

- (853) **nànâ wè nyé nyê**  
*nànâ we nyê-H nyê*  
 Q 2S.PST1 see-R 1.NSBJ  
 ‘Did you really see him?’

Prosody does not seem to play a role in terms of indicating a question. Therefore, question markers are the only means to mark questions clearly as such, especially in polar questions which do not employ any other question indicating devices, in contrast to constituent questions which use interrogatives. Nevertheless, the use of question markers is not obligatory, not even in polar questions, as shown in (854). In this example, it has to be clear from the context, however, that the sentence is a question. Otherwise, *nà* as in (852) has to be used.

- (854) wè nyé nyê  
 wε nyê-H nyê  
 2S.PST1 see-R 1.NSBJ  
 ‘Did you see him?’

In addition to their syntactic function of marking a phrase as a question, question markers also have a pragmatic function. In contexts where it is clear that a phrase is meant as a question and *nà* is still used, the question marker serves as marking emphasis. For instance, (852) could also be translated as ‘Did you really see him?’, just as in (853). Using the longer form *nànâ*, as in (853), is even more emphatic and indicates the speakers disbelief: speakers would also translate the question in (853) as ‘Are you sure that you saw him?’

*nà* can also co-occur with interrogatives, as shown in (855). *nà* is not required to indicate that the sentence is a question since this is already achieved through the interrogative construction *púù yá gyí* ‘why’. It seems, however, that *nà* here has an emphasizing function.

- (855) nà púù yá gyí wè pálé gyàgà  
 nà púù yá gyí wè pálé gyàgà  
 Q Ø7.reason 7:ATT what 2S.PST1 NEG.PST buy  
 mányâ  
 H-ma-nyâ  
 OBJ.LINK-ma6-milk  
 ‘Why didn’t you buy milk?’

**Leading questions with *ngáà*** The question marker *ngáà* is used for leading questions, i.e. polar questions which lead the addressee to give a specific yes or no answer, as expected by the speaker. *ngáà* roughly corresponds to *n'est-ce pas* in French and *right?* or *isn't it?* in English, which are sometimes also referred to as tag questions. I therefore gloss *ngáà* as ‘Q(tag)’. Just like the question marker *nànâ*, *ngáà* has both a syntactic and pragmatic function. Syntactically, it encodes question marking. Pragmatically, it leads the addressee to give an expected answer. In contrast to *nà(nâ)*, *ngáà* can occur both at the beginning and the end of a question, as shown in (856). The expected answer to the questions in (856) would be ‘yes’.

- (856) a. wè nyé nyê **ngáà**  
 2S.PST1 see 3S Q(tag)

‘You saw him, didn’t you/right?’

- b. **ngáà** wè nyé nyé  
Q(tag) 2S.PST1 see 3S

‘Right, you saw him?’

*ngáà* is used in the same form for negated questions, as shown in (857). Here, the expected answer would be ‘no’.

- (857) a. wè nyélé nyé, **ngáà**  
wε nyé-le nyé ngáà  
2S.PST1 see-NEG 1.NSBJ Q(tag)  
‘You didn’t him, did you?’
- b. **ngáà**, wè nyélé nyé  
ngáà we nyé-le nyé  
Q(tag) 2S.PST1 see-NEG 3S  
‘Right, you didn’t see him?’

In contrast to constituent questions, *ngáà* does not co-occur with *nà* in the same question.

**Constituent questions** Constituent questions are expressed by interrogatives. Subject and object questions employ the interrogative pronouns *nzá* ‘who’ for human/animate and *gyí* ‘what’ for inanimate entities. Adjunct questions use a range of interrogatives such as *é vé* ‘where’ and oblique noun phrases, such as *dúbò lé vé* ‘when [= which day]’, *wùlà yá vé* ‘when [= what time]’ and *púù yá gyí* ‘why [= what reason]’. I will discuss the various constituent question types sorted by constituent, starting out with subject questions.

Subject interrogative pronouns always occur in-situ, i.e. phrase-initially. An example of a subject question using the human/animate interrogative pronoun *nzá* ‘who’ is given in (858).

- (858) **nzá** nzí nyé Mambì S V O  
nzá nzí nyé Mambì<sup>1</sup>  
who PROG.PST see PN  
‘Who saw Mambi?’

(859) provides an example for a question asking for an inanimate subject, thus using *gyí* ‘what’.

- (859) **gyí** nzí bvúò kàsà S V O  
       **gyí** nzí bvúò kàsà<sup>7</sup>  
       what PROG.PST break 7.bridge  
       ‘What broke the bridge?’

As a side note, there seems to be a preference to use the PROGRESSIVE marker *nzi* in past questions, even though the meaning is not necessarily progressive. Questions can also be formed without the PROGRESSIVE marker, as in (860), but speakers would spontaneously form questions with this aspect marker while stating that questions without it are also grammatical and apparently mean the same. *nzi* therefore most likely also serves another function than PROGRESSIVE, but this needs further investigation.

- (860) gyí bvúó kàsà S V O  
          gyí bvúò-H kàsà  
         what break-R Ø7.bridge  
        ‘What broke the bridge?’

Other constituents besides objects have two positional options. Either, interrogatives for objects and adjuncts appear in-situ or are left dislocated to a phrase initial position. I will first demonstrate this with object questions.

For object questions, the same interrogative pronouns are used as for subject questions. In (861), the object interrogative pronoun *nzá* ‘who’ is left dislocated to the beginning of the phrase. As (861b) shows, this also holds for negated questions. Both questions occur in O S V (X) word order.

- (861) a. **nzá** wè nzí nyê ménó yî mákítì  
           nzá wè nzí nyê ménó yî mákítì<sup>1</sup>  
         who 2S PROG.PST see Ø7.morning 7.DEM ma6.market  
         ‘Who did you see this morning at the market?’

b. **nzá** wèé kwálélè  
       nzá wèé kwàlè-le  
       who 2S.PRES.NEG like-NEG  
       ‘Who don’t you like?’

Likewise, the inanimate interrogative pronoun *gyí* ‘what’ can be left dislocated in object questions, as shown in (862). Again, this also holds for negated questions, as in (862b).

- (862) a. gyí bwáà nzí nyê tísòní O S V X  
          gyí bwáà nzí nyê tísòní  
          what 2P PROG see Ø7.town  
          ‘What did you (Pl.) see in town?’
- b. gyí wèé kwálélé tísòní dé tù O S V X  
          gyí wèé kwálé-lé tísòní dé  
          what 2S like-NEG Ø7.town LOC inside  
          ‘What don’t you like in town?’
- c. gyí Àdà lâá pá’á wà sâ O S V X  
          gyí Àdà lâá-H pá’á wà sâ  
          what Ø1.PN read-R Ø1.side 1:ATT Ø1.father  
          ‘What does Ada read for father?’

The object interrogative pronoun can also occur in-situ, as shown in (863) for both *nzá* ‘who’ and *gyí* ‘what’. In terms of its pragmatics, the in-situ position differs from left dislocation in terms of information structure. The object position in-situ is the focus position, and thus the object interrogative appears in focus in (863).

- (863) a. wèé kwálélé nzá S V O  
          wèé kwálé-lé nzá  
          2S.PRES.NEG like-NEG who  
          ‘WHO don’t you like?’
- b. Àdà lâá gyí pá’á wà sâ S V O X  
          Àdà lâá-H gyí pá’á wà sâ  
          Ø1.PN read-R what Ø1.side 1:ATT Ø1.father  
          ‘WHAT does Ada read for father?’

In questions with double objects, the object interrogative can occur in three positions. In (864), the question asks for the recipient object (which is often referred to as the direct object, but, as explained in Section 7.2.1.2, direct and indirect objects cannot be distinguished on formal grounds in Gyeli). The object interrogative can appear either in i) left dislocation at the beginning of the phrase, as in (864a), ii) in the first object slot, as in (864b), and iii) in the second object slot, as in (864c).

- (864) a. nzá á vé békumbí O<sub>1</sub> S V O<sub>2</sub>  
          nzá a-H vê-H H-be-fékumbí  
          who 3S-PRES give-R OBJLINK-be8-orange  
          ‘Whom does s/he give the oranges?’

- b. á vé nzá bēfūmbí S V O<sub>1</sub> O<sub>2</sub>  
     a-H v̄e-H nzá be-fūmbí<sup>1</sup>  
     3S-PRES give-R who be8-orange  
     ‘Whom does s/he give the oranges?’
- c. á vé bēfūmbí nzá S V O<sub>1</sub> O<sub>2</sub>  
     a-H v̄e-H H-be-fūmbí nzá  
     3S.PRES give-R be8-orange who  
     ‘WHOM does s/he give the oranges?’

The same holds for *gyí* when asking for the patient object, as illustrated for all three possible positions in (865).

- (865) a. gyí wé gyíkésé bwán̄ò O<sub>1</sub> S V O<sub>2</sub>  
     gyí wε-H gyíkese-H b-wán̄ò  
     what 2S-PRES teach-R ba2-child  
     ‘What do you teach the children?’
- b. wé gyíkésé gyí bwán̄ò S V O<sub>1</sub> O<sub>2</sub>  
     wε-H gyíkese-H gyí b-wán̄ò  
     2S-PRES teach-R what ba2-child  
     ‘What do you teach the children?’
- c. wé gyíkésé bwán̄ò gyí S V O<sub>1</sub> O<sub>2</sub>  
     wε-H gyíkese-H b-wán̄ò gyí  
     2S-PRES teach-R ba2-child what  
     ‘WHAT do you teach the children?’

Just like object questions, also adjunct questions can occur both phrase-initially or in-situ. I demonstrate this for various adjunct questions. In (866), for instance, the constituent that is asked for is a comitative oblique encoding accompaniment. This is expressed by a comitative marker plus an interrogative pronoun in the question. The oblique question can occur both phrase-initially and in-situ.

- (866) a. nà nzá wèè kè p̄e X S V  
     nà nzá wèè kè p̄e  
     COM who 2S.FUT go over.there  
     ‘With whom will you go there?’
- b. wèè kè p̄e nà nzá S V X  
     wèè kè p̄e nà nzá  
     2S.FUT go over.there COM who  
     ‘WITH WHOM will you go there?’

The same pattern holds for oblique questions comprised of an associative plural construction, as in (867).

- (867) a. báà nà nzá báà kè p̄é X S V  
           báà nà nzá báà kè p̄é?  
           AP COM who 2.FUT go over.there  
           ‘They and who will go there?’
- b. báà kè p̄é               báà nà nzá               S V X  
           báà kè p̄é               báà nà nzá  
           2.FUT go over.there AP COM who  
           ‘They and who will go there?’

Some verbs with reciprocal meaning require the comitative marker *nà*. They behave peculiarly in question formation in that they both require an interrogative pronoun in left dislocation and a comitative oblique noun phrase at the end of the question. The object is taken up again in the oblique phrase by a pronominal resumptive. This is shown in (868).

- (868) a. nzá yáà láà nà nȳé  
           nzá yáà lá-H nà nȳé  
           who 1P.PST2 talk-R COM 1.NSBJ  
           ‘Who did we talk to?’
- b. nzá wè nzí               lādtò nà nȳé       tísònì  
           nzá we nzí-H       lādtò nà nȳé       tísònì  
           who 2S PROG-PST meet COM 1.NSBJ Ø7.town  
           ‘Who did you meet in town?’

Other examples of adjunct questions concern locative questions. Again, as shown in (869), the locative oblique phrase can occur phrase-initially or in-situ, even though the left dislocated variant seems to be much more frequent, given its relatively unmarked status.

- (869) a. é vé wéè lúmèlè bwánò sùkúlì X1 S V O X2  
           é vé wéè lúmèlè b-wánò sùkúlì  
           LOC where 2S.FUT send ba2-child Ø7.school  
           ‘Where will you send the children to school?’
- b. wéè lúmèlè bwánò sùkúlì é vé X1 S V O X2  
           wéè lúmèlè b-wánò sùkúlì é vé  
           2S.FUT send ba2-child Ø7.school LOC where  
           ‘WHERE will you send the children to school?’

Temporal questions are also formed with oblique noun phrases. Depending on the expected time specificity, speakers usually use *dúbò lé vé* ‘what day’, as in (870a), or *wùlà yá vé* ‘what time’, as in (870b). Again, both examples can occur phrase-initially and in-situ with the in-situ position being the more marked one.

- (870) a. **dúbò**    **lé**    **vé**    à nzí    pámò               X S V  
             d-úbò    lé    vé    a nzí-H    pámò  
             le5-day 5:ATT which 3S PROG-R arrive  
             ‘When did she arrive [= what day]?’
- b. à nzí    pámò **wùlà**    **yá**    **vé**               S V X  
             a nzí-H    pámò wùlà    yá    vé  
             3S PROG-R arrive Ø7.hour 7:ATT which  
             ‘WHEN did she arrive [= what time]?’

Finally, also purpose obliques including *púù yá gyí* ‘what reason’ are expressed following the same structure, as (871) shows.

- (871) a. **púù**    **yá**    **gyí**    bá    gyíbó nyê               X S V  
             púù    yá    gyí    ba-H    gyíbó-H nyê  
             Ø7.reason 7:ATT what 2-PRES call-R 1.NSBJ  
             ‘Why do they call him?’
- b. bá    gyíbó nyê    **púù**    **yá**    **gyí**               S V X  
             ba-H    gyíbó-H nyê    púù    yá    gyí  
             2-PRES call-R 1.NSBJ Ø7.reason 7:ATT what  
             ‘WHY do they call him?’

### 7.4.2 Possessor raising

Possessor raising is a pervasive phenomenon in Gyeli. While I use the term possessor raising in line with the literature on this topic, I do not imply an analysis of raising in the syntactic tree, but rather a marked possession construction. Thus, the possessor can be expressed as the subject or object of a clause, avoiding adnominal possession marking and benefactive obliques. In (872), the possessor is expressed in the subject.

- (872) **mé**    dvúó nkû  
             mε-H    dvúò-H nkû  
             1S-PRES hurt-R Ø3.foot  
             ‘My foot hurts.’

In most cases, however, the possessor has object status. In (873), for instance, the possessor *mê* takes the object position while *mbò* ‘arm’ occurs as a bare locative oblique noun phrase.

- (873) ká yí nyí **mê** mbò mpángì yí kùgá  
           ká yi-H nyí-H **mê** m-bò mpángì yi-H kùga-H  
         when 7-PRES enter-R 1S.NSBJ N3-arm Ø7.bamboo 7-PRES can-R  
       nâ nyí **wè** mbò  
       nâ nyí **wè** m-bò  
     COMP enter.SBJV 2S N3-arm  
     ‘When it goes into my arm... the bamboo can sting your arm.’

A possessor can also occur in copula constructions, as shown in (874). Here, the possessor appears in the copula complement.

- (874) nzà nyí **mè** mô  
       nzà nyí **mè** mô  
       Ø9.hunger 9.COP 1S.NSBJ Ø3.stomach  
       ‘I am hungry (lit.: hunger is me in the stomach).’

While the previous examples could also have been expressed by possessive pronouns as modifiers to the noun, other possessor raising constructions are rather equivalent to benefactives. In (875), for example, the structure could be modified to ‘build houses for me’ with a purpose or benefactive oblique phrase introduced by *píúù yá* (see Section 7.2.1.3).

- (875) mè bùdé nâ á lwóngó **mê** mändáwò  
       mè bùdε-H nâ a-H lwóngo-H **mê** ma-ndáwò  
       1S have-R COMP 1-PRES build[Kwasio]-R 1S.NSBJ ma6-house  
       ‘I say that she [Nadine] builds me houses.’

The same benefactive reading holds for copula constructions, as in (876).

- (876) nlâ wá zì ndáwò nyà zì nyí **mê** vé  
       nlâ wá zì ndáwò nyà zì nyí **mê** vé  
       Ø3.story 3:ATT Ø7.tin Ø9.house 9:ATT tin 9.COP 1S.NSBJ where  
       ‘The problem with the tin, where is the tin (roofed) house for me?’

As a counterpart to benefactive readings, possessor raising can also express adverse functions, as in (877) where the speaker experiences a bad event. The construction is further special in terms of information structure since the possessor object pronoun is fronted before the verb so that the

verb appears in focus position (see Section 7.3.3). This shows that possessor objects indeed behave identical to other objects.

- (877) bùdì        bà        sílēè        mē        wè ndáwò    tù  
       b-ùdì        ba        sílēè        mē        wè ndáwò    tù  
       ba2-person 2.PST1 finish.COMPL 1S.NSBJ die Ø9.house inside  
       vâ  
       vâ  
       here

‘The people have all died here inside the house.’

### 7.4.3 Comparison constructions

Comparison and superlative constructions in Gyeli, just as in many other Bantu and generally African languages, as observed, for instance, by Stassen (1984: 157) are expressed verbally with the verb *bále* ‘surpass’. This holds for the comparison of the quality of two entities, as in (878). In this example, the compared quality is *mpà* ‘good’, an adjective, followed by the infinitival form of *bále* ‘surpass’. The slot of the adjective can also be filled with nouns denoting quality, size, or color, for instance with *nkpámá* ‘new (cl. 3/4)’ or *mpùlé* ‘yellow (cl. 3/4)’. Morphosyntactically, there is no difference in the use of such a noun or an adjective as a comparison parameter.

- (878) kàbà yîi mpà bálè sótì  
          kàbà yîi mpà bále sótì  
       Ø7.dress 7.COP good surpass Ø1.trousers  
       ‘The dress is better than the trousers.’

The pattern is the same for adverbial comparison. In (879), *mpà* serves as an adverb to *kè* ‘go, run’. Just as in the previous example, it is followed by the comparison verb.

- (879) Màmbì á        kéké mpà bálè        Àdà  
          Màmbì a-H        kéké-H mpà bálè        Àdà  
       Ø1.PN 1-PRES go-R good surpass Ø1.PN  
       ‘Mambi runs better than Ada.’

*bále* is further used in comparison of quantities. Here, *bále* follows the object noun phrase that the quantity refers to and directly precedes the entity that is subject to comparison, namely the person Màmbì.

- (880) Adà à tsìló békáládè bálè Mambì<sup>1</sup>  
          Adà a tsìlɔ-H H-be-káládè bálè Mambì<sup>1</sup>  
          Ø1.PN 1.PST1 write-R OBJ.LINK-be8-letter surpass Ø1.PN  
          ‘Ada wrote more letters than Mambi.’

In (879) and (880), the comparison is between two subjects. *bále* is also used to compare two objects while the subject is identical, as in (881).

- (881) Àdà à dé mántúà bálè mānjù<sup>1</sup>  
          Àdà a dè-H H-ma-ntúà bálè ma-njù<sup>1</sup>  
          Ø1.PN 1.PST1 eat-R OBJ.LINK-ma6-mango surpass ma6-banana  
          ‘Ada ate more mangoes than bananas.’

*bále* can also function as the only verb in a clause that is tonally inflected for tense and mood, as in (882). Here, the comparison is between the second constituents of a noun + noun genitive construction while the first constituent of the second construction is elided.

- (882) lèdyúù lé dê bálé nàkùgúù<sup>1</sup>  
          le-dyúù lé dê bále-H nàkùgúù<sup>1</sup>  
          le5-heat 5:ATT today surpass-R yesterday  
          ‘Today it’s warmer than yesterday.’

In (883), a comparison construction is used to express semantically a superlative by comparing one person’s driving style to that of everyone else.

- (883) Adà á dvùdó mātúà bálè bógà<sup>1</sup>  
          Adà a-H dvùdɔ-H mātúà bále bó-gà<sup>1</sup>  
          Ø1.PN 1-PRES drive-R Ø1.car surpass 2-other  
          ‘Ada drives the car faster than all [= the fastest].’

In contrast, in (884), a superlative is expressed without comparing two entities. Instead, *bále* follows an object noun phrase which is subject to the superlative interpretation while *kè mpfúndó* encodes in which way Ada’s car is the best, namely in going fast.

- (884) Adà á dvùdó mātúà bálè kè mpfúndó<sup>1</sup>  
          Adà a-H dvùdɔ-H mātúà bále kè mpfúndó<sup>1</sup>  
          Ø1.PN 1-PRES drive-R Ø1.car surpass go Ø3.speed  
          ‘Ada drives the fastest car.’

Finally, some comparison construction types take additionally to *bále* the adverb *mpù* ‘like’. This is the case in equatives, as shown in (885).

- (885) mèé                    bálélé                    bè nà                    mòné                    é                    mpù                    nàkùgúù  
        mèé                    bále-le                    bè nà                    mòné                    é                    mpù                    nàkùgúù  
        1S.PRES.NEG surpass-NEG be COM Ø1.money LOC like yesterday

‘I don’t have as much money as yesterday.’

Further, *mpù* is used in comparisons of non-identical objects, as in (886).

- (886) Àdà    à                    dé                    mántúà                    bálè                    mpù                    Màmbì  
        Àdà    a                    dè-H                    H-ma-ntúà                    bále                    mpù                    Màmbì  
        Ø1.PN 1.PST1 eat-R OBJ.LINK-ma6-mango surpass like Ø1.PN  
        à                    dé                    mánjù  
        a                    dè-H                    H-ma-njù  
        1.PST1 eat-R OBJ.LINK-ma6-banana
- ‘Ada ate more mangoes than Mambi bananas.’

Constructions involving the comparison of identical objects is done without *mpù*, but only with *bálè* ‘surpass’, as in (887).

- (887) Àdà    à                    dé                    mántúà                    bálè                    mánjù  
        Àdà    a                    dè-H                    H-ma-ntúà                    bále                    ma-njù  
        Ø1.PN 1.PST1 eat-R OBJ.LINK-ma6-mango surpass ma6-banana
- ‘Ada ate more mangoes than bananas.’

Having described major types and phenomena of simple clauses, I now turn to complex clauses in the next chapter.

# **Chapter 8**

## **Complex clauses**

Complex sentences are those which are comprised of more than one clause, following the standard notion of complex clauses, including coordination and subordination, as given, for instance, by Wegener (2012). A complex clause is coordinated when the two (or more) clauses it is comprised of, are equal in their status. Usually, coordination involves the combination of two (or more) independent clauses. In contrast to coordination, in subordination, clauses are combined which are not symmetrical in their status. They are formed by combining a main clause, i.e. a clause that can occur independently, with a dependent clause, i.e. a clause that cannot occur on its own. In this chapter, I present different types of coordination and subordination. I finally discuss the special case of reported discourse which I do not view as a type of subordination, but rather as being organized at a higher discourse level.

### **8.1 Coordination**

Haspelmath (2007: 1) defines coordination as: “syntactic constructions in which two or more units of the same type are combined into a larger unit and still have the same semantic relations with other surrounding elements.” He points out that these units can either be words (e.g. verbs), phrases (e.g. noun phrases), subordinate clauses, or full sentences. In terms of terminology, Haspelmath calls the units that are combined ‘coordinands’ while the element that links the coordinands is called ‘coordinator’.

Gyeli uses a range of coordinators which broadly map onto different

coordination relations as distinguished by Haspelmath:

1. combination (conjunction)
  - conjunction *nà* ‘and’
  - asyndetic (covert) coordination
2. alternative (disjunction) *nânà/kânà* ‘or’
3. contrast (adversative coordination) *ndí* ‘but’

The most frequent coordinator in the corpus is *nà* for conjunction<sup>1</sup> with 42 occurrences, followed by *ndí* with 9 instances. Both covert coordination and disjunction are rather rare in the corpus for which there are only a couple of examples each. Nevertheless, corpus example have been supplemented with elicitations. I discuss each of these coordination strategies in turn.

### 8.1.1 Conjunction with *nà* ‘and’

Conjoining two clauses with the conjunction *nà* is the most frequent coordination strategy in the Gyeli corpus. *nà* usually appears between two clauses, but can also occur at the beginning of a new clause, linking the clause to the previous text, as in (888). *nà* is never found sentence-finally.

(888) He is going into the forest on the long path.

<i>nà</i>	pándè	vâ	bùdì	báà	bè
<i>nà</i>	pándè	vâ	b-ùdì	báà	be
CONJ arrive here ba2-person 2.DEM.PROX be.there					
‘And having arrived here, these people are there.’					

There are structural differences among conjoined clauses relating to the overt expression or elision of subjects and objects. In the following, I will first discuss subject expression and elision before turning to objects. Other differences are explained as well in the following examples, which pertain to general symmetry and asymmetry of the two coordinands in terms of clause type, word order, and aspect marking.

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<sup>1</sup>Though the conjunction *nà* and the comitative marker *nà* are form identical, I distinguish them on the basis of their distribution. Conjunctions coordinate verb phrases while the comitative marker coordinates noun phrase (Chapter 5.6).

**Subject expression in both coordinands** Two clauses can be conjoined with *nà* where both coordinands display overt subject marking. This is true for both same and different subjects. Subjects are always overtly expressed in both coordinands if they are not identical. In (889), for example, a lexical noun phrase serves as subject, while the second clause only marks subject agreement on the STAMP copula. The two coordinands are asymmetrical in terms of their clause type. The first coordinand represents an intransitive verbal clause while the second constitutes a non-verbal copula construction.

- (889) bon mpònḡ sílē̄ nà bée  
       bon, mpònḡ sílē̄ nà bée  
       OK[French] Ø7.generation finish.COMPL COM 2P.COP  
       bànáyêyê  
       ba-náyêyê  
       2-bleached.out  
       ‘OK, the generation has been wiped out and you are bleached out [= white].’

(890) also has different subjects in the two coordinands. At the same time, it is noteworthy that both have the same aspect marker which cannot be elided in the second constituent.

- (890) yá ló fúàlā nà mè ló làwò  
       ya-H ló fúala nà me ló làwò  
       1P-PRES RETRO end CONJ 1S RETRO talk  
       ‘We just finished and I just spoke.’

Although the subject of the second coordinand can be elided if it is identical with the subject of the first coordinand, there are circumstances in which speakers prefer overt subject expression in the second clause over elision. This is, for instance, the case, when both coordinands are relatively complex, as in (891).

- (891) mé lámbó nzàmbí wà nû nà mé  
       mε-H lámbo-H nzàmbí wà nû nà mε-H  
       1S-PRES trap-R Ø1.PN 1:ATT 1.DEM.PROX CONJ 1S-PRES  
       wúmbé lèmbò é mpù à bùdé mē  
       wúmbé-H lèmbo é mpù a bùdé-H mē  
       want-R know LOC like.this 1 have-R 1S.NSBJ  
       ‘I trap this Nzambi and I want to know like this how he takes me (what he thinks of this story).’

Overt expression of the same subject is also preferred when the two coordinands differ in their aspect marking, as shown in (892).

- (892)   donc           bèyá       lí       kè **nà**      bèyà nzíí           pándè  
       donc           bèya-H    lí       kè nà      bèya nzíí           pándè  
       so[French] 2P-PRES RETRO go CONJ 2P PROG.PRES arrive  
       ‘So, you just came and you are arriving.’

Another instance where the subject of the first coordinand is resumed in the second is when the two clauses differ with respect to their information structure. In (893), the first coordinand has a left dislocated object while the second appears in basic word order.

- (893) békúmbé báà   njì   nà   by᷑     **nà**   báà   njì   lw᷑  
      be-kúmbé báà   njì   nà   by-᷑    nà   báà   njì   lw᷑  
      be8-roof 2.FUT come COM 8-NSBJ CONJ 2.FUT come build  
      mándáw᷑  
      H-ma-ndáw᷑  
      OBJ.LINK-ma6-house  
      ‘Roofs they will bring and they will come and build houses.’

**Subject elision in second coordinand** Subjects of second coordinands can be elided under identity with the first coordinand. The subject of the first coordinand, however, cannot be elided. Elision, where possible, is generally preferred over overt expression and occurs twice as often in the corpus than overt subject expression. An example of subject elision in the second coordinand is given in (894).

- (894) vèè   mùdì       nyè jāàsà       **nà**   ké   jíí           dé   tù  
      vèè m-ùdì       nye jāàsà       nà   kè-H jíí           dé   tù  
      only N1-person 1 disappear CONJ go-R Ø7.forest LOC inside  
      nà   ndz᷑   pámò d᷑  
      nà   ndz᷑   pámò d᷑  
      COM Ø9.path arrive today  
      ‘Suddenly the person disappears and goes in the forest on the path till today,’

A very common conjunction type is represented in (895a) which encodes a chain of events. First, the agent has gone and then stuffed the top

of the roof with straw. The occurrence of the coordinator *nà* clearly distinguishes the sentence in (895a) from the one in (895b) where no coordinator is present.

- (895) a. áà sílé kè **nà** dvùwɔ́ dyúwɔ́  
           áà sílé-H kè nà dvùwɔ́-H dyúwɔ́  
           1.PST2 finish-R go CONJ stuff-R Ø7.top  
           ‘He has gone and stuffed the top [= with straw].’
- b. áà sílé kè dvùwɔ́ dyúwɔ́  
           áà sílé-H kè dvùwɔ́ dyúwɔ́  
           1.PST2 finish-R go stuff Ø7.top  
           ‘He has gone to stuff the top [= with straw].’

(895b) represents an instance of a complex auxiliary construction. As such, the verb *dvùwɔ́* occurs in its infinitival form, i.e. with a final L tone. In contrast, under coordination as in (895a), the verb is tonally inflected for tense and mood and thus occurs with a H tone.

Finally, conjunction constructions can have multiple coordinands, as (896) shows. This complex example contains both coordinands with elided subjects and overt subject expression.

- (896) wé ná báàlá **nà** nyé ffí **nà** wé  
       wε-H ná báàla-H nà nyê-H ffí nà wε-H  
       2S-PRES again repeat-R CONJ see-R different CONJ 2S-PRES  
       ndyándyá ná sálé é pè **nà** wé kòlá  
       ndyándya-H ná sálé é pè nà wε-H kòla-H  
       work-R again Ø7.work LOC over.there CONJ 2S-PRES add-R  
       ná mòné nû  
       ná mòné nû  
       again Ø1.money 1.DEM.PROX  
       ‘You repeat again and see differently [= find another work] and you do again work there and you add again this money [= same amount of 250 Francs].’

**Object elision** In contrast to subjects, objects can be elided under identity in both the first and the second coordinand. (897a) provides an example where the identical subject and object are expressed in both coordinands. In (897b), the object is elided in the first coordinand while it is elided in the second coordinand in (897c). At the same time, it is possible to also elide the identical subject in the second coordinand, as indicated by the parentheses.

- (897) a. m<sup>é</sup> sél<sup>ó</sup> bén<sup>tòg</sup><sub>j</sub> nà m<sup>é</sup>  
       m<sup>ε</sup>-H sél<sup>ó</sup>-H H-be-nt<sup>tòg</sup><sub>j</sub> nà m<sup>ε</sup>-H  
       1S-PRES peel-R OBJ.LINK-be8-sweet.potato CONJ 1S-PRES  
       vúl<sup>ó</sup> bén<sup>tòg</sup><sub>j</sub>  
       vúl<sup>ó</sup>-H H-be-nt<sup>tòg</sup><sub>j</sub>  
       cut-R OBJ.LINK-be8-sweet.potato  
       'I peel sweet potatos and I cut sweet potatos.'
- b. m<sup>é</sup> sél<sup>ó</sup> nà (m<sup>é</sup>) vúl<sup>ó</sup>  
       m<sup>ε</sup>-H sél<sup>ó</sup>-H nà m<sup>ε</sup>-H vúl<sup>ó</sup>-H  
       1S-PRES peel-R CONJ 1S-PRES cut-R  
       bén<sup>tòg</sup><sub>j</sub>  
       H-be-nt<sup>tòg</sup><sub>j</sub>  
       OBJ.LINK-be8-sweet.potato  
       'I peel and (I) cut sweet potatos.'
- c. m<sup>é</sup> sél<sup>ó</sup> bén<sup>tòg</sup><sub>j</sub> nà (m<sup>é</sup>)  
       m<sup>ε</sup>-H sél<sup>ó</sup>-H H-be-nt<sup>tòg</sup><sub>j</sub> nà m<sup>ε</sup>-H  
       1S-PRES peel-R OBJ.LINK-be8-sweet.potato CONJ 1S-PRES  
       vúl<sup>ó</sup>  
       vúl<sup>ó</sup>  
       cut  
       'I peel sweet potatos and (I) cut [them].'

In addition to the overt expression of a nominal object and its elision, there is a third option, namely to express an object pronominally, as shown in (898). In (898a), the natural interpretation is that the objects of the coordinated clauses are identical. If, however, the first coordinand has a pronominal object while the second has a nominal object, as in (898b), the two objects are likely not identical, but the pronoun would refer to an antecedent from previous discourse.

- (898) a. m<sup>é</sup> sél<sup>ó</sup> bén<sup>tòg</sup><sub>j</sub> nà (m<sup>é</sup>)  
       m<sup>ε</sup>-H sél<sup>ó</sup>-H H-be-nt<sup>tòg</sup><sub>j</sub> nà m<sup>ε</sup>-H  
       1S-PRES peel-R OBJ.LINK-be8-sweet.potato CONJ 1S-PRES  
       vúl<sup>ó</sup> by<sup>ô</sup><sub>i</sub>  
       vúl<sup>ó</sup>-H by<sup>ô</sup>  
       cut-R 8.NSBJ  
       'I peel sweet potatos and (I) cut them.'
- b. m<sup>é</sup> sél<sup>ó</sup> by<sup>ô</sup><sub>i</sub> nà (m<sup>é</sup>) vúl<sup>ó</sup>  
       m<sup>ε</sup>-H sél<sup>ó</sup>-H by<sup>ô</sup> nà m<sup>ε</sup>-H vúl<sup>ó</sup>-H  
       1S-PRES peel-R 8.NSBJ CONJ 1S-PRES cut-R

béntògòj  
 H-be-ntògò  
 OBJ.LINK-be8-sweet.potato  
 ‘I peel them and (I) cut sweet potatos.’

**nà in non-clausal coordination** The conjunction *nà* is not only used in clausal coordination, but also in coordination of, for instance, noun phrases, as shown in (899).

- (899) nà mìmbàngá      nà màsá      nà bègyí      nà  
 nà mi-mbàngá      nà ma-sá      nà be-gyí      nà  
 COM mi4-coconut.tree COM ma6-prune COM be8-what COM  
 bègyí      byésè béké      sîlè ntàmànè  
 be-gyí      by-ésè béké      sîlè ntàmane  
 be8-what 8-all 8.FUT finish ruin  
 ‘And the coconut trees and the pruniers and so on and so forth, they all will be ruined.’

Also, this coordinator can conjoin two oblique phrases, as in (900).<sup>2</sup>

- (900) S V X<sub>1</sub> ‘and’ X<sub>2</sub>

àá      bámálá tóbá mpfùmò      nà      pámò ménó  
 àá      bámala-H tóbá mpfùmò      nà      pámo ménó  
 1.INCH scold-R since Ø3.midnight COM arrive Ø7.morning

‘He is at the beginning of scolding from midnight until the morning.’

Coordination of verbs sharing the same object has not been observed in the corpus.

### 8.1.2 Covert coordination

A minor strategy to conjoin clauses is asyndetic coordination, i.e. coordination without any overt coordinator. This is also called ‘covert coordination’. In Gyeli, covert coordination seems to be quite restricted and involves two clauses with different verbal predicates, the second of which is ditransitive. The second clause does then not only share the first’s clause subject, but

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<sup>2</sup>Note that *pámò* ‘arrive’ is consistently used in a preposition-like function of ‘till’.

also its object, both of which are elided in the second clause, as shown in (901) and (902).<sup>3</sup>

- (901) S V<sub>1</sub> O<sub>1</sub> ['and'] V<sub>2</sub> O<sub>2</sub>

[yóò mÙdâ tÓké mwánò] [kàlànè nyê]  
 yóò m-Ùdâ tÓké-H m-wánò kàlane nyê  
 so N1-woman collect-R N1-child hand.over 1.NSBJ

'So the woman picks up the child [and] hands [it] over to him.'

- (902) S V<sub>1</sub> O<sub>1</sub> ['and'] V<sub>2</sub> O<sub>2</sub>

[yóò mÉ tÓké mònÉ wÈ] [vÈ nyê]  
 yóò m-E-H tÓké-H mònÉ w-È vÈ nyê  
 so 1S-PRES collect-R Ø1.money 1-POSS.3S give 1.NSBJ

'So I collect her money [and] give [it to] her,'

I analyze these constructions as instances of covert coordination rather than complex predicate constructions for two reasons. First, the verb of the first clause is not a typical auxiliary verb. As explained in Chapter 6.3, auxiliaries generally belong to three verb classes, namely aspectual verbs, deictic motions verbs, and modal verbs. *tÓke* 'collect' clearly does not fit into any of these categories and has not been observed in any other instances to occur as auxiliary in complex predicate constructions. Second, while complex predicates often describe one event expressed by the final main verb, clauses with covert coordination clearly encode a sequence of events. Thus, in (901), the woman first picks up her child and then hands it over to Nzambi.

### 8.1.3 Disjunction with *kânà/nânà* 'or'

Disjunction, also called 'alternative coordination', can be expressed with both coordinators *kânà* and *nânà* 'or'. Disjunction is rather rare in the corpus where only the variant *kânà* appears, but speakers state that it can always be replaced with *nânà*. Just like the conjunction coordinator *nà*, *kânà/nânà* can appear in between clauses and sentence initially, as in (903). Here,

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<sup>3</sup>Instances of such covert coordination constructions where the second clause has a transitive verb which it shares with the first clause have not been observed. Future research will have to show whether such constructions are possible.

Nzambi explains that his friend told him to kill people in order to help them get white skin. He then concludes in a new sentence ‘Or I also broke the interdiction’, as an alternative judgement of his deeds.

- (903) You were telling me to do so.

kánâ mè	kòbé	ndáà tsì	mèé
kánâ mε	kòbε-H	ndáà tsì	mèé
or 1S.PST1 break-R also Ø7.interdiction 1S.PRES.NEG			
lémbólé			
lémbo-lε			
know-NEG			

‘Or I also broke the interdiction, I don’t know.’

(904) represents an example where the disjunctive coordinator appears between two clauses. Again, it shows that both coordinators *nânà* and *kânà* can be used as ‘or’. In contrast to conjunction, in disjunction, there seems to be a general preference to express the (same) subject overtly in both coordinands. Thus, *wé* ‘you’ is resumed also in the second clause.

- (904) wé njí nà bî nânà/kânà wé lígè  
 wε-H njí-H nà bî nânà/kânà wε-H lígε  
 2S-PRES come-R COM 1P.NSBJ or 2S-PRES stay  
 ‘Do you come with us or do you stay?’

*kânà* can also be used in both of the coordinands, expressing ‘either...or’. This is shown in (905). In this construction, the coordinator in the second clause can be abbreviated to *kâ*.

- (905) kânà àà njí nà byô kâ(nà) àà lúmèlè  
 kânà àà njí nà by-ô kâ(nà) àà lúmèlè  
 or 3S.FUT come COM 8-NSBJ or 3S.FUT send  
 ‘Either he will bring them [= books] or he will send [them].’

(905) also shows that the second coordinand elides its object which it shares with the first clause. Elision of shared objects is also a feature of covert coordination, as shown in (901).

Finally, (906) represents a case where the first and the second coordinand are asymmetrical in that the second coordinand consists only of a negated substitute *m̄m̄* ‘no’ of the first clause. The speaker makes a suggestion in the first coordinand, but then changes his mind and suggests the opposite.

- (906) mùdâ      ké    nà    nyè mánk̩é      kánâ m̩m  
       m-ùdâ      kè-H nà    nyè H-ma-nk̩é      kánâ m̩m  
       N1-woman go-R COM 1    OBJ.LINK-ma6-field or      no  
       'The woman [his wife] shall go with him to the field or no.'

### 8.1.4 Adversative coordination with *ndí* 'but'

Adversative coordination is expressed by *ndí* 'but' in Gyeli. Haspelmath (2007) distinguishes different subtypes of contrast, depending on the origin of conflict. Thus, the adversative coordinator can be i) 'oppositional', as in (907), ii) 'corrective', as in (908), or iii) 'counterexpectative', as in (909).<sup>4</sup> Gyeli does not make any lexical distinction between these subtypes, but expresses all of them with the same adversative coordinator *ndí* 'but'.

- (907) Oppositive

- mè      gyàgá      békündá      **ndí** Àdà    à  
       mε      gyàga-H      H-be-kündá      ndí Àdà    a  
       1S.PST1 buy-PST1 OBJ.LINK-be8-shoe but Ø1.PN 3S.PST1  
       gyàgá      tsílè      yá      sótì  
       gyàga-H      tsílè      yá      sótì  
       buy-PST1 Ø7.smallness 7:ATT Ø1.trousers  
       'I bought shoes whereas Ada bought shorts.'

- (908) Corrective

- á      sàlé      bédò nkòlé mpfùndò **ndí** à      nzí      kè  
       a-H      sàlé      bédò nkòlé mpfùndò ndí a      nzî-H      kè  
       3S-NEG PST.NEG ascend Ø3.hill fast      but 3S.PST1 PROG-R go  
       nà      kè      tsídéè  
       nà      kè      tsídéè  
       COM Ø7.walk slow  
       'He didn't run up the hill, but went slowly.'

- (909) Counterexpectative

- Àdà      á      dyà      nté      bvùbvù **ndí** àá  
       Àdà      a-H      dyà      nté      bvùbvù ndí àá  
       Ø1.PN 3S-PRES Ø7.tallness Ø3.size much      but 3S.PRES.NEG  
       lálé      basket  
       lá-lé      basket  
       play-NEG basketball

<sup>4</sup>Examples of these different adversative subtypes stem from Mauri (2008).

‘Ada is very tall, but he doesn’t play basketball.’

Just like other coordinators, *ndí* ‘but’ occupies the initial position within a clause, as shown by the double occurrence of *ndí* in (910).

- (910) **ndí** mèé sálé wê bvùbvù **ndí** vèdáà  
 ndí mèé sâ-lé wê bvùbvù ndí vèdáà  
 but 1S.PRES.NEG do-NEG 2S.NSBJ much but but[Bulu]  
 mé dyúwó nâ wéè dé mwánò nòò  
 me-H dyúwɔ-H nâ wéè dè-H m-wánò, nòò  
 1S-PRES understand-R COMP 2.PST2 eat-R N1-child no  
 ‘But I don’t do you a lot, but I understand that you have eaten the child, didn’t you?’

In contrast to other coordinators, *ndí* is the only one that is prone to code-switching, which systematically happens both to Bulu and French. In (911), the Bulu coordinator *vèdáà* ‘but’ is used instead of *ndí*. In other cases, *ndí* and *vèdáà* are both used, the Gyeli variant preceding the Bulu one, as shown in (910).

- (911) yí ntégele vèdáà mé sùmbélé bê  
 yi-H ntégele vèdáà me-H sùmbélé-H bê  
 7-PRES disturb but[Bulu] 1S-PRES greet[Kwasio]-R 2P.NSBJ  
 ‘That disturbs, but I greet you.’

Also, *ndí* is often substituted by the French form *mais* ‘but’, as in (912).

- (912) ká wé sílé kè sâ sálé **mais** pílì wé  
 ká we-H sílé-H kè sâ sálé mais pílì we-H  
 if 2S-PRES finish-R go do work.7 but[French] when 2S-PRES  
 ké nâ wé ké jí mòné wâ á  
 kè-H nâ we-H kè-R jí mòné w-â a-H  
 go-R COMP 2S-PRES go-R ask Ø1.money 1-POSS.2S 1-PRES  
 làwó wê nyùmbò  
 làwɔ-H wê nyùmbò  
 tell-R 2S Ø3.mouth  
 ‘If you go do all the work, but when you go to go ask for your money, he frowns at you.’

## 8.2 Subordination

As described by Haspelmath (2007: 46-48), coordination and subordination generally differ in two main respects. First, while coordination can be used for both phrases and clauses, subordination only applies to clauses. Second, in contrast to coordination, clauses in subordination are not symmetrical. I take a traditional view on subordination, as summarized in Cristofaro (2003: 15), which is defined by morphosyntactic criteria of syntactic embedding and structural dependency.

In syntactic embedding, the subordinate clause functions as a constituent of another clause and combines with a specific element of the main clause. In Gyeli, relative clauses (Section 8.2.1) are embedded in verbal or non-verbal clauses, modifying a noun. In contrast, complement clauses (Section 8.2.2.1) serve as core arguments of a predicate, combining with verbs. Adverbial clauses (Section 8.2.3) are defined by their structural dependency on the main clause. Gyeli has several sub-types of adverbial clauses which all have in common that they cannot be used independently of the main clause. Some of them are also inflectionally reduced.

### 8.2.1 Relative clauses

Relative clauses are embedded clauses which combine with a noun phrase constituent of a matrix clause. Andrews (2007: 206) specifies in his functional definition, “A relative clause (RC) is a subordinate clause which delimits the reference of an NP by specifying the role of the referent of that NP in the situation described by the RC.” In Gyeli, relative clauses follow a nominal head. They generally have the same syntactic structure as simple main clauses:

$$\text{NP } [(\text{ATT}) \text{ S V O (X)}]_{\text{REL}}$$

There are differences, however, in terms of the expression, elision, or cross-referencing of the nominal head in the relative clause, depending on its function within the relative clause, as discussed below. Relative clauses may be introduced by an attributive marker which, in many cases, is optional.

Gyeli relative clauses are usually externally headed. I only found one example of a headless relative clause, as shown in (913). In this construction,

the relative clause appears as the copula complement in a non-verbal predicate construction, following the STAMP copula. The subject of the main clause serves as the object complement of the relative clause and is cross-referenced by a resumptive pronoun at the end of the relative clause. There is, however, no expression of a head.

- (913) lèbvúú    lé    tè    lɔ́ɔ    [yá    bùdé    l̩]<sub>REL</sub>  
       le-bvúú    lé    tè    lɔ́ɔ    ya-H    bùdε-H l̩  
       le5-anger 5:ATT there 5.COP 1P-PRES have-R 5.NSBJ  
       ‘The anger there it is that which we have.’

Other free relative clauses, as discussed in Section 8.2.1.5, usually occur with a default head that takes different shapes depending on whether the head denotes a human or not.

I explore relative clauses in Gyeli in various directions. In Section 8.2.1.1, I investigate the range of syntactic functions of noun phrases in the matrix clause that can serve as the head of a relative clause. I treat cleft constructions as a special subtype of relative clauses in Section 8.2.1.2. I then describe clause linkage of relative clauses in Section 8.2.1.3. In Section 8.2.1.4, I show the different syntactic roles that the nominal head of a relative clause can take within the relative clause. I provide examples of different types of relative clauses such as restrictive, non-restrictive, and free relative clauses in Section 8.2.1.5 and finally give a few examples of complex relative clauses in Section 8.2.1.6. Data on relative clauses stem both from the Gyeli corpus and the Relative Clause Questionnaire by Downing et al. (2010).

### 8.2.1.1 Nominal heads and the main clause

Noun phrases that can be modified by a relative clause in Gyeli include all available noun phrases in a verbal clause, namely subject, object, and oblique noun phrases, as illustrated in (914) through (918). In (914), the relative clause modifies the subject noun phrase of a verbal main clause.

- (914) bwánɔ́-békúmbé    [bé    bà    njí    nà    byɔ́]<sub>REL</sub> bé  
       b-wánɔ́-be-kúmbé bé    ba    njì-H    nà    by-ɔ́    be-H  
       ba2-child-be8-tin 8:ATT 2.PST1 come-R COM 8-NSBJ 8-PRES  
       télé    màbé  
       télε-H    mà-bé  
       stand-R here-8  
       ‘The few tin roofs that they brought stand here.’

Relative clauses can modify object noun phrases. In (915), the first object of a double object construction is followed by a relative clause.

- (915) v̄ê mwán̄ò w̄ò [wà w̄è bùd̄é n̄û]<sub>REL</sub>  
 v̄ê m-wán̄ò w̄-̄ò wà w̄e bùd̄e-H n̄û  
 give.IMP N1-child 1-POSS.2S 1:ATT 2S have-R 1:DEM.PROX  
 mwán̄ò-sâ yá dè  
 m-wán̄ò-sâ yá dè  
 N1-child-∅7.thing 7:ATT eat  
 ‘Give your child that you have here a little to eat.’

The relative clause can also modify the second object in a double object construction, as in (916).

- (916) v̄ê m̄ê sâ mwán̄ò w̄ò [wà w̄è bùd̄é  
 v̄ê m̄ê sâ m-wán̄ò w̄-̄ò wà w̄e bùd̄e-H  
 give.IMP 1S.NSBJ only N1-child 1-POSS.2S 1:ATT 2S have-R  
 n̄û]<sub>REL</sub>  
 n̄û  
 1:DEM.PROX  
 ‘Give me only your child that you have here.’

Further, left dislocated object noun phrases can be modified by a relative clause, as shown in (917).

- (917) nyè nâ yáà m̄é láà nâ sá [wé sá n̄ogá  
 nyε nâ yáà m̄ε-H láà nâ sá w̄ε-H sâ-H n̄ó-gá  
 1 COMP yes 1S-PRES say COMP ∅7.thing 2S-PRES do-R 1-other  
 mùdì]<sub>REL</sub> àà ȳò w̄e nyē  
 m-ùdì àà y-̄ò w̄e nyē  
 N1-person 1.FUT 7-NSBJ 2S return  
 ‘He: Yes, I say, the thing that you do to another person, he will return [its] to you.’

Finally, relative clauses may modify oblique noun phrases, as illustrated with the locative oblique in (918).

- (918) à làdó nà só é ndáwò dé tù [nyà  
 a làdo-H nà só é ndáwò dé tù nyà  
 1.PST1 meet-R COM ∅1.friend LOC ∅9.house LOC inside 9:ATT  
 sâ w̄e à lw̄ô]<sub>REL</sub>  
 sâ w-̄e a lw̄ô  
 ∅1.father 1-POSS.3S 1.PST1 build  
 ‘He met with a friend in the house that his father built.’

Relative clauses further appear in noun phrases of non-verbal clauses. They can appear both with the main clause's subject, as in (919) and with noun phrases in complement position, as in (920).

- (919) bâ [yá bwánò bá ló làwò]<sub>REL</sub> yî tè  
       bâ yá b-wánò ba-H ló làwò yî tè  
       Ø7.word 7:ATT ba2-child 2-PRES RETRO speak 7.COP there  
       ‘The word that the children just said is there. [= it is true]’

- (920) bàngyé'élè báà bùdì [bá gyíkésé bwánò]<sub>REL</sub>  
       ba-nyé'élè báà b-ùdì ba-H gyíkésé-H bwánò  
       ba2-teacher 2.COP ba2-person 2-PRES teach-R ba2-child  
       ‘Teachers are people who teach children.’

A special type of non-verbal clause that embeds a relative clause is the so-called cleft construction which I discuss in the following section.

### 8.2.1.2 Cleft constructions

Cleft constructions describe a type of non-verbal matrix clause in which the relative clause is embedded. Gyeli has two cleft constructions, involving either i) a STAMP copula or ii) the identificational marker *wé*. Both constructions have in common that they are pragmatically motivated as an information structure strategy expressing focus (Chapter 7.3).

Cleft constructions with a STAMP copula are characterized by the default STAMP copula of agreement class 7 *yî* ‘it is’ (Chapter 7.1.1), followed by a (pro-)nominal predicate which serves as the head of the relative clause:

*yî NP [...]<sub>REL</sub>*

As shown in (921), the class 7 STAMP copula is also used when the following predicate appears in a plural class. In terms of information structure, the subject is in focus, as an answer to the question ‘Who ate the mangoes?’.

- (921) yî bwánò [bá dé mántúà]<sub>REL</sub>  
       yî b-wánò ba-H dè-H H-ma-ntúà  
       7.COP ba2-child 2-PRES eat-R OBJ.LINK-ma6-mango  
       ‘It’s the children who eat mangoes.’

Also with cleft constructions, the use of the attributive marker is optional, as indicated by the parentheses in (922). Since the attributive marker

and the following STAMP marker are identical in their shape, the omission of the attributive marker is preferred.

- (922) yî bwánjò bùdâ [(bá) bá sá  
yí b-wánjò b-ùdâ (bá) ba-H sâ-H  
7.COP ba2-child ba2-woman (2:ATT) 2-PRES do-R  
másâ é jíwó]<sub>REL</sub>  
H-ma-sâ é jíwó  
OBJ.LINK-ma6-game LOC Ø7.river  
‘It’s the girls who are playing by the river.’

While cleft constructions are mostly used to express subject focus, as in (922), the nominal predicate can also serve as the object of the relative clause, as in (923).

- (923) yî bwánjò bùdâ [wè nzí nyê]<sub>REL</sub>  
yî b-wánjò b-ùdâ wè nzí nyê  
7.COP ba2-child ba2-woman 2S PROG.PST see  
‘It’s the girls that you saw.’

(924) provides an example of a double object construction, where the indirect object of the relative clause is encoded by the external head of the relative clause.

- (924) yî bwánjò bùdâ [bá àà lúmèlè békúlā]<sub>REL</sub>  
yî b-wánjò b-ùdâ bá àà lúmèlè be-kúlā  
7.COP ba2-child ba2-woman 2:ATT 1.FUT send be8-present  
‘It’s the girls that she will send presents to.’

Under negation, the STAMP copula is replaced by the verbal copula *bè* ‘be’, as expected and discussed in Section 7.1.4. Thus, in (925), the negated correction of the statement ‘That woman ate the mangoes’ is expressed by the negated verbal copula *bélé* for ‘it is not X’, while for the affirmative cleft, the STAMP copula is used again.

- (925) That woman ate the mangoes.

- tòsâ yí bélé mùdâ núnđè yî mè [mè nzí  
tòsâ yí bè-le m-ùdâ nû-ndè, yî mè me nzí  
no 7.PRES be-NEG N1-2 woman 1-ANA 7.COP 1S.NSBJ 1S  
dè mántúà]<sub>REL</sub>  
dè H-ma-ntúà  
PROG.PST eat

'No, it is not that woman, it is me who ate the mangoes.'

The second cleft type uses the identificational marker *wé*, following a subject pronoun which serves as the head of the relative clause:

PRO ID [...]<sub>REL</sub>

This construction is used if the subject in focus consists of a complex lexical noun phrase, as in (926). One might think of it as a resumptive cleft or an after-thought focus marking. As in the previous examples, omission of the attributive marker is preferred (but its use is grammatical).

- (926) ntémbò                  wà      mùdâ                  wâ                  nyè *wé* [bùdé  
 ntémbò                  wà      m-ùdâ                  w-â                  nyè *wé* bùdε-H  
 Ø1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1 ID have-R  
 mwánò      wà      mùdâ                  mvúdû]<sub>REL</sub>  
 m-wánò      wà      m-ùdâ                  m-vúdû  
 N1-child 1:ATT N1-woman 1-one

'My wife's younger sister, it is her who has one girl.'

Both cleft types, with the STAMP copula and identificational marker *wé*, can appear in combination as a double cleft construction, as shown in (927). In these double clefts, first the STAMP copula cleft type is used and then the identificational cleft with *wé*. These constructions seem to be more marked than simple clefts and thus seem to emphasize the subject focus even more.

- (927) The woman ate the mangoes, didn't she?

- a. tòsâ [yî]      ntèmbó      wê]                  [nyè      *wé*] [nzí      dè  
 tòsâ yî      ntèmbó      w-ê                  nyè      *wé* nzí      dè  
 no 7.COP Ø1.sibling 1-POSS.3S 1.NSBJ ID PROG.PST eat  
 mántúà]<sub>REL</sub>  
 H-ma-ntúà  
 ma6-mango

'No, it is her sister who ate the mangoes.'

- b. tòsâ [yî]      sínì]                  [yô      *wé*] [nzí      dè]<sub>REL</sub>  
 tòsâ yî      sínì                  y-ô      *wé* nzí      dè.  
 no 7.COP Ø7.monkey 7-NSBJ ID PROG.PST eat  
 'No, it is the monkey who ate [= them].'

### 8.2.1.3 Linkage of relative clauses

Gyeli does not have a distinct marker of relative clauses such as, for instance, relative pronouns. Instead, an attributive marker (ATT) can be used to indicate the embedding relation between subordinate clause and modified noun phrase. This attributive marker, which agrees in gender with the head noun, is also used in noun + noun constructions, as discussed in Chapter 3.8.3.2. In most cases, however, the use of the attributive marker is optional so that a relative clause is often not marked morphologically. The circumstances under which speakers omit the attributive marker in contrast to using it are not clear. In the corpus, about half of the relative clauses appear with an attributive marker and about half without. Few generalizations can be made at this point as to what conditions the marker's appearance or optional omission. Both appearance and omission occur with attributive markers of all agreement classes, singular and plural. Further, attributive markers and their omission are found with all subject, object, and oblique noun phrases that are being modified. Finally, the role that the head noun plays in the relative clause does not seem to be decisive for appearance or omission of the attributive marker since examples of both variants are found for cases where the head of the relative clause is the subject or any type of object of the relative clause, as I will show below. The only criterion that seems to favor attributive marker deletion is when the attributive marker and the following STAMP marker are identical in shape, as for instance in (928).

In contrast to optional morphological marking, all relative clauses are marked prosodically in that they are treated as distinct intonation units. As such, verb final relative clauses do not take a realis marking H tone in the realis moods as they would within an intonation phrase. Also, a pause indicates the end of a relative clause.

### 8.2.1.4 Nominal heads and the relative clause

Relative clauses can further be distinguished based on the syntactic function of the head noun within the relative clause. The head noun can serve, for instance, as the subject of the relative clause, but also as an object or an oblique.

In (928), the nominal head noun *bwánò-bùdā*<sup>†</sup> 'girls' serves as the subject of the relative clause. In these constructions, the nominal head of the

matrix clause is cross-referenced by the STAMP marker indicating subject agreement. The relative clause follows the basic word order of S V. In the absence of an attributive marker, prosody is the only means to indicate the relative clause which otherwise would not be distinguishable from a basic clause followed by another basic clause.

- (928) bwánò-bùdâ [bá lìmbó dyúà]<sub>REL</sub> bá sá  
 b-wánò-b-ùdâ ba-H lìmbó-H dyúà ba-H sâ-H  
 ba2-child-ba2-woman 2-PRES know-R swim 3S-PRES do-R  
 másâ é nsá'à wá jíwó  
 H-ma-sâ é nsá'à wá jíwó  
 OBJ.LINK-ma6-game LOC Ø3.shore 3:ATT Ø7.river  
 ‘The girls who know how to swim are playing at the riverbanks.’

The head of the relative clause can also take the function of an object of the relative clause, as in (929) and (930). In both examples, the head noun serves as the object for the main clause as well as for the relative clause with a structure of NP<sub>O</sub> [S V \_O (X)]. The object is only expressed in the main clause, but not in the relative clause where it is neither repeated nor cross-referenced, leaving the object outside of the relative clause.

- (929) bá dyúwó lékélè [lé wé  
 ba-H dyúwó-H H-le-kélè lé wé-H  
 2-PRES understand OBJ.LINK-le5-language 5:ATT 2S-PRES  
 làwò]<sub>REL</sub>  
 làwò  
 speak  
 ‘They understand the language that you speak.’

In contrast to (929), (930) appears without the attributive marker, but the argument structure is identical. Both examples are grammatical either way, with or without the attributive marker.

- (930) bí bógà yá wúmbé ndáà pââ nyê sâ [bá  
 bí bó-gà ya-H wúmbé-H ndáà pââ nyê sâ ba-H  
 1P.SBJ 2-other 1P-PRES want-R also start see Ø7.thing 2-PRES  
 gyíbó ngyùlè wá kùrâ]<sub>REL</sub>  
 gyíbó-H ngyùlè wá kùrâ  
 call-R Ø3.light 3:ATT Ø7.electricity[French]  
 ‘We others, we also want to first see the thing they call the light of electricity.’

Double object constructions within the relative clause function similarly. The nominal head outside of the relative clause can function both as the direct and the indirect object of the relative clause, as shown in (931) and (932), respectively. The underlying structures for both examples can be represented as NP<sub>DO</sub> [S V IO \_DO] for (931) and NP<sub>IO</sub> [S V \_IO DO] for (932). Since, however, the order of two objects is relatively free, as described in Chapter 7.2.2.3, it is theoretically ambiguous which of the two objects is encoded by the nominal head outside of the relative clause and which role the object has that appears in the relative clause. It seems that (pragmatic) context and animacy effects determine the interpretation of patient and recipient roles.

- (931) kálàdè [yá Àdà nzí vè m̄e]<sub>REL</sub> yī mpâ  
           kálàdè yá Àdà nzí vè m̄e yī mpâ  
       Ø7.book 7:ATT Ø1.PN PROG.PST give 1S.NSBJ 7.COP good  
       ‘The book that Ada gave me is nice.’

- (932) mwánò mùdā [m̄e nzí vè kálàdè]<sub>REL</sub> áà mpâ  
       m-wánò m-ùdā m̄e nzí vè kálàdè áà mpâ  
       N1-child N1-woman 1S PROG-PST1 give Ø7.book 1.COP good  
       ‘The girl to whom I gave the book is nice.’

If the nominal head of a relative clause encodes an oblique within the relative clause, the nominal does not only appear outside of the clause, as with objects, but has to be marked by a resumptive pronoun following the comitative marker *nà*, as in (933).

- (933) ntfúmò [yá tsíyé pémbó nà w̄ɔ]<sub>REL</sub> wú vúljlé  
       ntfúmò ya-H tsíyε-H pémbó nà w-ɔ wu-H vúlɔ-lε  
       Ø3.knife 1P-PRES cut-R Ø7.bread COM 3-NSBJ 3-PRES slice-NEG  
       ná  
       ná  
       anymore  
       ‘The knife we cut bread with does not slice anymore.’

The same resumptive pronoun is used in constructions where the relative clause has a verb requiring a preposition, such as *ládo nà* ‘meet with’ in (934). In these cases, however, the object and its preposition appear in the object position after the verb, followed by potential other oblique noun phrases.

- (934) só [mè ládó nà nyé mbvû lâ]REL àà pándè  
       só      mè      ládó-H nà   nyé   mbvû   lâ      àà    pándè  
       Ø1.friend 1S.PST1 meet-R COM 1.NSBJ Ø3.year pass 1.FUT arrive  
       njì   dígè   bî      nàménó  
       njì   dígè   bî      nàménó  
       come watch 1P.NSBJ tomorrow  
       ‘The friend I met last year will come to see us tomorrow.’

Finally, also possessors can be relativized, as shown in (935).

- (935) só [mè nzí kòlè másinì]REL áà wé  
       só      mè      nzí      kòlè   másinì    áà      wé-H  
       Ø1.friend 1S.PST PROG.PST.R borrow Ø1.bike   1.PST2 die-PST  
       ‘The friend whose bike I borrowed died.’

### 8.2.1.5 Types of relative clauses

The relative clauses discussed so far were ‘restrictive’ relative clause, i.e. the relative clause limits the referent(s) of the head to a subset of entities. There are, however, other types of relative clauses, such as non-restrictive, cleft, and free clauses. As I will show, these have the same structure as restrictive relative clauses.

Non-restrictive relative clauses do not limit the referent to a subset, but add information to a known participant or entity. This is the case in (936), where the head of the non-restrictive relative clause serves as its subject. This structure is the same as its restrictive counterpart in (928).

- (936) Àdà [á límbó mbásâ]REL àà só wáà  
       Àdà a-H límbó-H mbásâ àà só w-áà  
       Ø1.PN 1-PRES know-R Ø7.hunt 1.COP Ø1.friend 1-POSS.1S  
       ‘Ada who knows how to hunt is my friend.’

The same is true for non-restrictive relative clauses whose head serves as an object of the clause, as in (937).

- (937) míyù wáà [wè nzí nyé ndáwò]REL àà  
       míyù w-áà wé nzí nyé ndtawò àà  
       Ø1.sibling 1-POSS.1S 2S.PST1 PROG-PST1 see Ø9.house 1.COP  
       ngyé'élè  
       ngyé'élè  
       N1-teacher  
       ‘My brother, who you saw at the house, is a teacher.’

The third type of relative clause that Downing et al. (2010) control for in their questionnaire is free relative clauses. According to McArthur (2005), in these constructions, the “relative word in the nominal relative clause has no antecedent, since the antecedent is fused with the relative”. In English, *I know what you want.* is an example of a free relative clause. In Gyeli, free relatives with a human referent are either expressed by the generic noun *mùdì* ‘person’ or by the interrogative pronoun *nzá* ‘who’, as shown in (938). In this example, the free relative serves as the subject of the relative clause.

- (938) mé nyé mùdì/**nzá** [nzí njì pá’à  
 mε-H nyê-H m-ùdì/nzá nzî-H njì pá’à  
 1S-PRES see-R N1-person/who PROG-PST1 come Ø3.side  
 wāā]REL  
 w-āā  
 3-POSS.1S  
 ‘I see the person/who passed by me.’

(939) gives an example of a free relative clause where the head is the object of the relative clause. If the generic noun *mùdì* ‘person’ is chosen to express the free relative, the attributive marker *wà* of agreement class 1 can be used. In contrast, if the interrogative pronoun *nzá* was to be used, the use of the attributive marker is excluded.

- (939) mè lá bò mùdì [wà Àdà kwàlè]REL  
 mε lá-H b-ô m-ùdì wà Àdà kwàlè  
 1S.PST1 tell 2-NSBJ N1-person 1:ATT Ø1.PN like  
 ‘I told them who Ada likes.’

If the referent of a free relative clause is inanimate, the generic noun *sâ* ‘thing’ is used or the interrogative pronoun *gyí* ‘what’, as (940) demonstrates. In this example, a resumptive pronoun has to appear in the relative clause. Whether *sâ* ‘thing’ or the interrogative pronoun *gyí* ‘what’ is used, the resumptive pronoun will be of agreement class 7 in both cases.

- (940) mé nyé sâ/gyí [bá njí nà yɔ̄]REL  
 mε-H nyê-H sâ/gyí ba-H njì-H COM y-ɔ̄  
 1S-PRES see-R Ø7.thing/what 2-PRES come-R COM 7-NSBJ  
 ‘I see the thing/what they bring.’

Free relatives can also be formed with an interrogative pronoun where the interrogative serves as an object of the relative clause. This is the case in (941) where *nzá* ‘who’ serves as the indirect object of the clause.

- (941) mé lìmbó nzá [àà líbèlè békàgà]<sub>REL</sub>  
 mε-H lìmbo-H nzá àà líbèlè H-be-yìgà  
 1S-PRES know-R who 3S.FUT show OBJ.LINK-be8-picture  
 'I know who she will show the pictures to.'

### 8.2.1.6 Complex relative clauses

Relative clauses can be complex in various respects. They can either involve relative clause internal coordination or complementation. (942) shows an instance of asyndetic coordination within the relative clause. The head of both coordinands is the same, namely *lé* 'tree'. It serves as an object in both coordinands.

- (942) lé [yá wé nyê]<sub>REL</sub> [bá gyíbó ngàlé]<sub>REL</sub> yî  
 lé yá wε-H nyê ba-H gyíbó-H ngàlé yî  
 Ø7.tree 7:ATT 2S-PRES see 2-PRES call-R Ø7.PN 7.COP  
 'The tree that you see that they call 'ngàlé' is that.'

Relative clauses can also be coordinated overtly with the conjunction *nà*, as shown in (943).

- (943) bwánò [bà sílēè lâ békálàdè nà  
 b-wánò ba sílēè lâ H-be-kálàdè nà  
 ba2-child 2.PST1 finish.COMPL read OBJ.LINK-be8-book COM  
 bà sílēè dyíkèsè]<sub>REL</sub> bá kùgá nà kè  
 ba sílēè dyíkese ba-H kùga-H nà kè  
 2.PST1 finish.COMPL study 2-PRES can-R COM go  
 ndáwò  
 ndáwò  
 Ø9.house  
 'The children who have finished reading their books and who have finished studying can go home.'

Finally, there are examples of relative clauses which contain a complement clause, as in (944).

- (944) mùdì [mé bvúálá [nâ à nzí làwò]<sub>COMP</sub>]<sub>REL</sub> à  
 m-ùdì mε-H bvúala-H nâ à nzí làwò à  
 N1-person 1S-PRES think-R COMP 1 PROG.PST talk 1  
 nzí láà dó  
 nzí láà dó  
 PROG.PST tell Ø7.lie  
 'The person that I think she spoke with was lying.'

### 8.2.2 Complementizer clauses

The complementizer *nâ* in Gyeli marks both complement clauses and purpose clauses. There is some structural overlap between both construction types pertaining to the use of the complementizer and a dependent clause that is marked as such by use of the subjunctive. There are, however, also some differences which are reflected by a different tonal behavior with respect to the occurrence or absence of the realis marking H tone. The complementizer further introduces reported speech and inflectionally reduced dependent clauses where the verb occurs in its non-finite form. I discuss these different constructions in turn. There is another instance where the complementizer *nâ* is used, namely in combination with an adverb as a subordinator in adverbial clauses, as discussed in Section 8.2.3.3.

#### 8.2.2.1 Complement clauses

Complement clauses serve as arguments of a predicate, following Noonan (2007: 52) who defines complement clauses as follows: “By complementation, we mean the syntactic situation that arises when a notional sentence or predication is an argument of a predicate.” In Gyeli, sentential complementation most often occurs with verbs of perception ('hear', 'see'), consciousness ('know', 'remember', 'think'), intention ('want', 'like'), and attitude/emotion ('hate', 'be happy'). Both obligatory arguments, as in (945), and optional arguments, as in (946) are expressed by complement clauses. Complement clauses form one intonation unit with the main clause, as indicated by the realis marking H tone on the verb *wúmbε* 'want' in (945) and *síss* 'be happy' in (946). In this, they differ from purpose clauses with the complementizer *nâ*, as discussed in the next section.

- (945) mé wúmbé [nâ á gyámbóò bèdewò]COMP  
       mε-H wúmbε-H nâ a-H gyam̩bóò be-déwò  
       1S-PRES want-R COMP 3S-PRES cook.SBJV be8-food  
       'I want her/him to cook food.'

- (946) mé síss [nâ mè nzéé nyê]  
       mε-H sìss-H nâ me nzéé nyê  
       1S-PRES be.happy-R COMP 1S PROG.SUB see  
           mándáwò]  
           H-ma-ndáwò  
           OBJLINK-ma6-houses

‘I’m happy that I’m seeing the houses.’

In addition to being introduced by the complementizer *nâ*, Gyeli also marks the dependent clause in these constructions by using the subjunctive form when expressing intentions or orders, as in (945) (Chapter 6.2.1.7), and the subordinate form of the progressive marker in (946) (Chapter 6.3.1.1).

Also verbs of consciousness serve as predicates to complement clauses. This is the case, for instance, with *lèmbo* ‘know’, as shown in (947) and (948).

- (947) á lèmbó [nâ bùdì báá bá múà  
a-H lèmbo-H nâ b-ùdì báá ba-H múà  
1S-PRES know-R COMP ba2-person 2.DEM.PROX 2-PRES PROSP

búélè nâ bá dyúù nyê]<sub>COMP</sub>  
búélè nâ ba-H dyúù nyê  
fish COMP 2-PRES kill.SBJV 1.NSBJ

‘He knows that these people are about to fish (look for him) in order to kill him.’

- (948) ndí wé lèmbó [nâ mbvúndá nyî bvúdà nà  
ndí we-H lèmbo-H nâ mbvúndá nyî bvúda nà  
but 2S-PRES know-R COMP Ø9.trouble 9.FUT fight COM  
mbvúndá]<sub>COMP</sub>  
mbvúndá  
Ø9.trouble

‘But you know that trouble would fight with trouble.’

The same is true for *bvû* ‘think’, as in (949).

- (949) mé bvú [nâ nkwlá wúù tfundé m̄  
m̄e-H bvû-H nâ nkwlá wúù tfundé-H m̄  
1S-PRES think-R COMP Ø3.machete 3.PST2 miss-R 1S.NSBJ  
vâ]<sub>COMP</sub>  
vâ  
here

‘I think that the machete had missed [= injured] me here.’

Also verbs of perception can function as predicates of complement clauses. An example is given in (950).

- (950) mé dyúwó [nâ mpágó wá pódè lá vâ]<sub>COMP</sub>  
m̄e-H dyúwó-H nâ mpágó wá pódè lá-H vâ  
1S-PRES hear-R COMP Ø3.street 3:ATT Ø1.port pass-R here

‘I hear that the road to the port passes [= will pass] here. ’

(951) shows that complement clauses are also used with stative verbs such as *kùga* ‘be enough’.

- (951) ká yí nyí mē mbò mpángì yí kùgá  
 ká yi-H nyí-H mē m-bò mpángì yi-H kùga-H  
 when 7-PRES enter-R 1S N3-arm Ø7.bamboo 7.PRES be.enough-R  
 nâ nyî wê mbò  
 nâ nyî wê m-bò  
 COMP enter.SBJV 2S N3-arm
- ‘When it goes into my arm... the bamboo can sting your arm.’

While complement clauses typically occur in verbal predicates, they can also be used in the complementation of non-verbal predicates, as in (952). In this example, the main clause expresses a prohibition while the dependent clause specifies what the prohibition is about. The dependent clause complements the nominal predicate of the non-verbal clause.

- (952) yîi mpíndá [nâ mē déè]<sub>COMP</sub>  
 yîi mpíndá nâ mē-H déè  
 7.COP Ø9.prohibition COMP 1S-PRES eat.SBJV
- ‘It is forbidden that I eat.’

The complement clause can even serve as the predicate itself in a non-verbal clause, as shown in (953).

- (953) yîi nâ báà bvùbvù  
 yîi nâ báà bvùbvù  
 7.COP COMP 2.COP many
- ‘It is that they are many.’

Traditionally, quotes in reported discourse are viewed as a subtype of sentential complementation. As I will show in Section 8.2.2.3, however, reported discourse constructions are formally not the same.

### 8.2.2.2 Purpose clauses with *nâ*

Purpose clauses are dependent clauses that are introduced by the complementizer *nâ* and generally express purpose or intention, as illustrated in (954). Unlike complement clauses, however, the dependent clause does not function as an argument of the main clause. Another difference to complement clauses is that the main clause is treated as an intonation phrase

unit, while, with complement clauses, the dependent clause is also part of that unit. This can be seen in the tonal behavior with respect to the realis marking H tone. In (954), the verb *gyámbɔ* ‘cook’ in the main clause surfaces with a final L tone. In contrast, a complement clause would license the realis marking H tone to surface, as shown in (945).

- (954) mé gyámbɔ nâ wé déè  
       mε-H gyámbɔ nâ wε-H déè  
       1S-PRES cook COMP 2S-PRES eat.  
       ‘I cook so that you eat.’

Another example of a purpose clause is given in (955). Also in this instance, the subjunctive is used.

- (955) á lúndélé bâ lèkàá lé ndáwɔ nyî  
       a-H lúndelε-H b-â le-kâá lé ndáwɔ nyî  
       1-PRES fill-R 2-NSBJ le5-kind 5:ATT Ø9.house 9.DEM.PROX  
       [nâ bék vyâ]COMP  
       nâ bék vyâ  
       COMP be.SBJV full  
       ‘He fills them in this kind of house that it [house] be full.’

In contrast, (956) appears with a PRESENT tense-mood marking in the *nâ* clause, although also a subjunctive marking is equally possible.

- (956) ð múa gyésò [nâ wé kè]COMP  
       ð múa gyésò nâ wε-H kè  
       2S[Kwasio] RETRO search COMP 2S-PRES go  
       ‘you are about to want to leave.’

Purpose clauses with *nâ* not only modify main clauses, but also other dependent clauses, as for instance adverbial subordinate clauses in (957). In this example, the adverbial clause precedes the main clause and so does the complementizer clause which modifies the adverbial clause.

- (957) [pílì wé kè [nâ wé kè jí mòné wâ]COMP]ADV  
       pílì wε-H kè nâ wε-H kè-R jí mòné w-â  
       when 2S-PRES go COMP 2S-PRES go-R ask Ø1.money 1-POSS.2S  
       á làwó wê nyùmbò  
       a-H làwɔ-H wê nyùmbò  
       1-PRES tell-R 2S Ø3.mouth  
       ‘When you go to go ask for your money, he frowns at you.’

### 8.2.2.3 Reported discourse and other depictions

The complementizer *nâ* introduces *depictions*<sup>5</sup> such as reported discourse, ideophones, and gestures that contribute content to the speech event, for instance as embodied reenactments. As we shall see below, these depiction constructions differ from both complement and purpose clause uses. This is in line with Spronck & Nikitina's (2019) claim that reported speech forms a dedicated syntactic domain.

In the following, I will mostly concentrate on reported discourse, since this is most pervasive in the text corpus, and then conclude this section with examples of ideophones and gestures that are introduced by *nâ*. In terms of the terminology related to reported discourse, I follow Güldemann (2008: 6):

“Reported discourse is the representation of a spoken or mental text from which the reporter distances him-/herself by indicating that it is produced by a source of consciousness in a pragmatic and deictic setting that is different from that of the immediate discourse.”

Structurally, Güldemann (2008) distinguishes the quote, i.e. the reported spoken or mental text, from the quotative index (QI), which serves at introducing the quote. Thus, in (958), the unit marked as ‘QI’ introduces the reported text which, in turn, is marked by ‘RD’.

- (958) [yóò bá kí **nâ**]<sub>QI</sub> [éékè mwánj wéè mùdâ  
 yóò ba-H kí-H nâ éékè m-wánj w-éè m-ùdâ  
 so 2-PRES say-R COMP EXCL N1-child 1-POSS.3S N1-woman  
 wà nù à bwáà] RD  
 wà nù a bwáà  
 1:ATT 1:DEM 3SPST1 give.birth.PRF  
 ‘So they say: ”Oh, his child who is the wife of that one, has already given birth”.’

Both the structures of the quotative index and the quote differ from typical matrix and subordinate clauses. As for the QI, the complementizer *nâ*

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<sup>5</sup>A more detailed discussion on the concept of depiction in contrast to description is given in Clark & Gerrig (1990), Güldemann (2008), and Dingemanse (2015). Soulaimani (2018), for instance, investigates in particular the role of gesture and voice patterns in reported discourse.

belongs prosodically to the QI and not to the quote, which is indicated by a pause after the complementizer.<sup>6</sup> In some cases, the complementizer also undergoes salient lengthening, in addition to the following pause, as shown in (959).<sup>7</sup> This does not happen in purpose clauses where *nâ* rather belongs to the dependent clause, also prosodically.<sup>8</sup>

- (959) Speak Gyeli!

[mé	làwó	<b>náà</b> ] <sub>QI</sub>	[màndáwò	má	zì	má
mε-H	làwɔ-H	nâ	ma-ndáwò	má	zì	ma-H
1S-PRES	talk-R	COMP	ma6-house	6:ATT	∅7.tin	6-PRES
kùgáà		mê	vâ]	RD		
kùgáà		mê	vâ			
be.enough.SBJV	1S.NSBJ	here				

‘I say that there should be enough tin (roofed) houses here for me.’

Most QIs in Gyeli are bipartite, containing a verbal predicate, usually a say-verb, and the complementizer *nâ*. This is the case in (958) with the say-verb *kì* ‘say’, which is the most common and frequent predicate in a QI, and in (959) with *làwɔ* ‘talk’. Another element that can appear in the QI is the verbal copula *bùdé* ‘have’, as shown in (960).

- (960) [mais        mè bùdé     nâ]<sub>QI</sub> [é    pè            é    wû  
 mais        mε bùdε-H nâ     é    pè            é    wû  
 but[French] 1S have-R COMP LOC over.there LOC there  
 bèyá              lwɔ́       kwádó       yâ            é    wû]<sub>RD</sub>  
 bèya-H            lwɔ̂-H      kwádó       y-â            é    wû  
 2P[Kwasio]-PRES build-R ∅7.village 7-POSS.1S LOC there  
 ‘But I say that over there, there you (pl) build my village over there.’

When *bùdé* is used in a QI, it generally seems to imply a wish, request, order, or some sort of intention expression, as also shown in (961).

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<sup>6</sup>This phenomenon has also been noted, for instance, in Hausa, as Güldemann (2008: 236) points out.

<sup>7</sup>In this example, the speaker has switched to Bulu and is reminded by the interpreter to speak in Gyeli. He then repeats what he has said by quoting his own speech. His quote is emphasized by the lengthened complementizer.

<sup>8</sup>Concerning the relationship between complement clauses and instances of reported discourse, there might be a continuum since also complement clauses with ‘say’ or ‘think’ verbs in the main clause may constitute examples of reported discourse as representations of spoken or mental text.

- (961) [bvúlè bà bùdé nâ]QI [ká wè ngyèlì wè bùdé tsídí  
 bvúlè ba bùdε-H nâ ká wε n-gyèlì wε bùdε-H tsídí  
 ba2.Bulu 2 have-R COMP if 2S N1-Gyeli 2S have-R Ø1.animal  
 wâ]RD bá sèngé nyê sí  
 w-â ba-H sèngε-H nyê sí  
 1-POSS.2S 2-PRES lower-R 1.NSBJ down  
 ‘The Bulu say that if you, Gyeli, you have your animal, they lower  
 it [= its price].’

QIs in Gyeli can also occur without any predicate at all which distinguishes them from matrix clauses or complement clauses. Minimally, they contain speaker reference in the form of a subject pronoun and the complementizer *nâ*, as demonstrated in (962).

- (962) [nyè nâ]QI [ooh mùdâ bàmbé kè jî mbómbò  
 nyè nâ ooh m-ùdâ bàmbé kè jî mbómbò  
 3S COMP EXCL N1-woman sorry go ask.IMP Ø1.namesake  
 mwánò sá yí dè]RD  
 m-wánò sá yí dè  
 N1-child Ø7.thing 7.DEM eat  
 ‘He: ‘Oh, wife, excuse me, go and ask the namesake [the other Nzambi] for a little to eat.’’

Non-clausal QIs as in (962) provide another argument against analyzing reported discourse as typical sentential complementation. These non-clausal QIs, which occur pervasively in the corpus, do not possess any predicate that could require a complement clause.<sup>9</sup> Instead of analyzing the QI as the matrix clause of the quote that serves as a complement, it seems more consistent to view the QI being the tag to the quote on a higher structural level than sentential units, as Güldemann (2008: 231) explains.

While the arguments that Güldemann puts forth apply to direct reported discourse, I also extend them to indirect reported discourse for there is no structural difference in marking direct and indirect speech in Gyeli. Differences only concern “quote-internal referential adjustments” (p. 234) such as pronominal marking and the use of exclamations, which are restricted

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<sup>9</sup>Güldemann (2008: 226-233) lists other arguments against a sentential complementation analysis for direct reported discourse. For instance, often the QI does not have to be expressed at all in direct reported discourse. Also, if the QI includes a predicate, the predicate does not necessarily have a quote-oriented valency.

to direct reported discourse. In the corpus, most instances of reported discourse are direct. There are, however, also examples of indirect speech, as in (963).

- (963) [mùdì      wà      sòndyé      à      nzí      kí      nâ]QI      [ká mè  
       m-ùdì      wà      sòndyé      a      nzî-H      kì-H nâ      ká mè  
       N1-person 1:ATT Ø1.police 3S.PST PROG-R say COMP if 1S.PST  
       nyé      àksìd̂]RD  
       nŷ-H àksìd̂  
       see-R Ø1.accident[French]

‘The police officer asked whether I saw that accident.’

Also the quote displays characteristics that are not usually associated with subordinate clauses, which has been noted for other languages as well, for instance by Spronck (2017). Quotes can be significantly longer or shorter than usual subordinate clauses. They can actually comprise several sentences (see, for instance (C50) through (C53) in Appendix II.2). On the other hand, they can only contain an exclamation, as in (964).

- (964) [yóò bá      kí      nâ]QI      [éékè]RD  
       yóò ba-H      ki-H nâ      éékè  
       so      2-PRES say-R COMP EXCL  
       ‘So they say: [EXCL of surprise]!’

(964) illustrates neatly how quotes depict rather than describe speech events.

**Ideophones** These complementizer constructions also extend to the depiction of non-speech events in the form of ideophones (Chapter 3.5). Just like with reported speech, the complementizer *nâ* can introduce an ideophone, as in (965) and (966).

- (965) nâ      wòm, mùdì      nûú      jí      nâ      wòm.  
       nâ      wòm m-ùdì      nûú      jî-H      nâ      wòm  
       COMP IDEO N1-person 1.DEM.DIST stay-R COMP IDEO  
       ‘Be there silence, that person stay silent.’

- (966) nzàmbí màbòò      nkweè      dé      nâ      vósì  
       nzàmbí ma-bòò      nkweè      dé      nâ      vósì  
       Ø1.PN ma6-bread.fruit Ø3.basket LOC COMP IDEO:pouring  
       ‘Nzambi pours the bread fruits into the basket.’

In contrast to reported discourse, however, the complementizer is not part of a QI, but can either occur without a matrix clause at the beginning of a sentence, as in (965), or at the end of the phrase in a typical adjunct position describing manner, as in (966).

**Gesture** Parallel to the depiction of manner in non-speech events with ideophones, the complementizer is also used in non-sound depictions of gestures or bodily reenactments, as in (967).

- (967) ká á dígé nâ [gesture] á nyé mbúmbù<sup>1</sup>  
 when 1.PRES look COMP [gesture] 1.PRES see /1.namesake  
 w-éè á pámò  
 1-POSS.3S 1.PRES arrive  
 'When he looks like [imitation of manner of looking], he sees his namesake who arrives.'

#### 8.2.2.4 Complementizer + infinitive constructions

The complementizer *nâ* is also used in subordination of inflectionally reduced clauses, which are similar to infinitival adverbial constructions without subordinator (Section 8.2.3.4). The difference is, however, that subordination is marked by the complementizer *nâ* (and not 'linkless') and that the subject of the subordinate clause is overtly marked. If the subject of the main clause and the subject of the subordinate clause are coreferential, as in (968), the subject is still marked by a pronoun.

- (968) mùdâ à lí sìsèlè nónégá [nâ nyé nà  
 m-ùdâ a lí sìs-ele n-ónégá nâ nyé nà  
 N1-woman 1.PST RETRO scare-APPL 1-other COMP 1.SBJ COM  
 kósè]  
 kósè  
 cough  
 'The woman scared the other by her coughing.'

In contrast, subjects in infinitival adverbial constructions are zero expressed. Their subject referent is retrieved from the context and very often co-referential with the subject of the main clause. In complementizer + infinitive constructions, however, the subjects of the main and the dependent clause are clearly marked when they differ in their reference, as in (969).

(969)	bèlēé	bè	ló	kwè nâ	mùdâ	nâ	tjíndò
	be-léé	be	ló	kwè nâ	m-ùdâ	nâ	tjíndò
	be8-glass	8.PST	RETRO	fall	COMP	N1-woman	COM push
			mùdû				
			m-ùdû				
			N1-man				

'The glasses fell, the woman having pushed the man.'

Generally, these constructions encode complex causal chains.

### 8.2.3 Adverbial clauses

Adverbial clauses function as modifiers of verb phrases or entire clauses (Thompson et al. 2007). I distinguish four types of adverbial clauses in Gyeli, as shown in Table 8.1. This distinction is based on the inflectional status of the verb, the type of clause linkage devices (Hetterle 2015), and other subordinate markers, such as special aspect forms.

Clause type	Adverbial	Gloss	Function
<b>Full adverbial clause</b>	<i>líní</i>	'when'	temporal
	<i>pílì/pílò</i>	'when'	temporal
	<i>tò</i>	'even, although'	concessive
	<i>púù yá</i>	'because'	causal
	<i>yɔɔ̄</i>	'time'	temporal
<b>Adverbial + complementizer clause</b>	<i>ká</i>	'if'	conditional
	<i>lí nâ</i>	'when'	simultaneity
	<i>sòò nâ</i>	'before'	anteriority
<b>Adverbial infinitival clause</b>	<i>púù nâ</i>	'because'	causal
	Ø		anteriority, simultaneity, sequential
<b><i>nzéé</i> subordination</b>	Ø		simultaneity

Table 8.1: Adverbial clause types

First, full adverbial clauses have fully inflected verb forms and contain minimally a subject argument and a verb. They are linked to the main clause by an adverbial or by a nominal construction that acts like an adverb. I discuss most full adverbial clause constructions in Section 8.2.3.1. Conditional clauses are a type of full adverbial clause. As I discuss them at length, paying special attention to irrealis marking, I describe these constructions separately in Section 8.2.3.2. The second type of adverbial clauses (Section

8.2.3.3) uses a combined clause linkage device including an adverbial and the complementizer *nâ*. The third type of adverbial clause (Section 8.2.3.4) is special in that it has no clause linkage device and the dependent clause is reduced: it lacks subject expression and the verb appears in its non-finite form. Finally, subordination can be encoded by the special progressive form *nzéé* which is exclusively used in dependent clauses, as discussed in Section 8.2.3.5.

### 8.2.3.1 Full adverbial clauses

Gyeli uses a range of adverbials to introduce full subordinate clauses, including temporal, concessive, causal, and conditional clauses. These adverbials differ in their grammatical characteristics, ranging from adverbs to nominals, but all of them function as a subordinator in adverbial clauses. There are three variants for temporal adverbials, namely *líní* and *píli* or *pílb*. *píli* occurs most frequently in the corpus while *pílb* and *líní* may be loan words from neighboring languages since they are also used in, for instance, Mabi. When asked, speakers state, however, that they are also Gyeli words.

**Temporal *líní* ‘when’** The adverb *líní* ‘when’ is a temporal adverb that only showed up in elicitation, but not in the corpus. (970) gives an example of a preposed adverbial clause with *líní*.

- (970) [líní á sílé dè mántúà]<sub>ADV</sub> à tí ná  
 líní a-H sílé-H dè H-ma-ntúà, a tí ná  
 when 1-PRES finish-R eat OBJ.LINK-ma6-mango 1 NEG anymore  
*dyúwò nzà*  
*dyúwò nzà*  
 feel Ø9.hunger  
 ‘When he has eaten mangoes, he does not feel hunger anymore.’

(971) provides an example of a postposed adverbial clause with *líní*. Both sentences express temporal sequences, the event of the adverbial clause happening before the event of the main clause.

- (971) á súmélé bùdì [líní á pámó tísònì]<sub>ADV</sub>  
 a-H súmélé-H b-ùdì líní a-H pámó-H tísònì  
 1-PRES greet-R ba2-person when 1-PRES arrive-R Ø7.town  
 ‘He greets the people, when he arrives in town.’

**Temporal *pílì/pílò* ‘when’** The temporal adverb *pílì* is the most frequently used temporal adverb in the corpus, introducing a dependent clause. (In elicitation, also *pílò* was sometimes used.) Adverbial phrases with *pílì* can both precede and follow the main clause. In (972), it precedes the main clause.

- (972) [pílì mé làwò mpù]ADV mèé válé làwò  
 pílì mε-H làwɔ-H mpù mèé vá-lé làwɔ  
 when 1S-PRES speak-R like.this 1S.PRES.NEG tolerate-NEG speak  
 ‘When I speak like this, I don’t tolerate to talk [= I’m not lieing].’

Also in (973), the adverbial clause is preposed to the main clause. In this example, the dependent clause includes a non-verbal predicate with the verbal copula *múà* and a nominal locative predicate.

- (973) [pílì yí múà ndáwò nyà mànyò ndènáà]ADV á kí  
 pílì yí múà ndáwò nyà ma-nyò ndènáà a-H kì-H  
 when 7 be Ø9.house 9:ATT ma6-drink like.this 1-PRES say-R  
 náà à múà njì bvúdà nà wê  
 ná a múà njì bvúda nà wê  
 COMP 1 PROSP come quarrel COM 2S.NSBJ  
 ‘When it is in a bar like this, he says that he is about to come quarrel with you.’

Adverbial clauses with *pílì* can also be postposed, as shown, for instance, in (974).

- (974) báà bù mpàgó [pílì pòdè àà là]ADV  
 báà bù mpàgó pílì pòdè àà là  
 3.FUT break Ø3.road when Ø1.port 1.FUT pass  
 ‘They will build a road when the port passes.’

(975) provides a more complex example of a postposed adverbial clause. Here, the adverbial clause follows the basic word order S V O, while the object is expressed by a complement clause.

- (975) wé yàné ná gyàgà ndísì [pílì wé lèmbó  
 wε-H yànε-H ná gyàga ndísì pílì wε-H lèmbo-H  
 2S-PRES must-H again buy Ø3.rice when 2S-PRES know-R  
 [nâ bùdì bá ndáwò bvùbvù]COMP]ADV  
 ná b-ùdì bá ndáwò bvùbvù  
 COMP ba2-person 2:ATT Ø9.house many

‘You must again buy rice, when you know that there are many people at home.’

**Concessive *tò* ‘even, although’** Another adverbial used to introduce dependent clauses is the concessive *tò* ‘even, although’ which also appears in nominal modification, expressing ‘any’, as described in Chapter 3.8.4. Again, adverbial clauses introduced by *tò* can both precede and follow the main clause, as shown in (976) and (977), respectively.

- (976) [tò wèé kwálélé nyê]ADV wé yàné nyê  
       tò wèé kwále-le nyê wé-H yàné-H nyê  
       even 2.PRES.NEG like-NEG 1.NSBJ 2S-PRES must-R see  
       bégyémò  
       H-be-gyémò  
       OBJ.LINK-be8-good.manner  
       ‘Even if you don’t like him, you must still be polite [= lit. see good manners].’

- (977) à bwámó jí [tò mpù á  
       a bwámó-H jí tò mpù á  
       3S.PST receive-PST1 Ø7.position even like.this 3S.PST.NEG  
       sàlé sílé sùkúlì]ADV  
       sàlé sílé-H sùkúlì  
       NEG.PST finish-R Ø7.school  
       ‘He got the job although he didn’t finish school.’

**Causal *púù yá* ‘because’** *púù yá* marks the causal relation between the main clause and the dependent clause it introduces. Strictly speaking, it is not an adverbial but a noun and an attributive marker, literally meaning ‘reason of’. The dependent clause that follows *púù yá* is then the second constituent of the nominal attributive construction. In contrast to other adverbial clauses, *púù yá* clauses have only been observed to follow main clauses, as illustrated in (978).

- (978) yà nzí gyâ jíí [púù yá lévidó  
       ya nzí-H gyâ jíí púù yá le-vídó  
       1P.PST PROG-R sleep Ø7.forest Ø7.reason 7:ATT le5-darkness  
       lè múà jí]  
       le múà jí  
       5.PST PROSP Ø7.forest  
       ‘We slept in the forest because it was about to get dark in the forest.’

In the corpus, *púù yá* is not used to introduce subordinate clauses, but only in oblique phrases, as discussed in Chapter 7.2.1.3. Data for subordinate clauses stem from elicitation. In the corpus, the expression of causal relations between main and dependent clauses is subject to code-switching to Bulu, as shown in (979).

- (979) tè mèè jíbì kè lw̩ tè [àmú vâ mèé  
      tè mèè jíbì kè lw̩ tè àmú vâ mèé  
      there 1S.FUT first go build there because[Bulu] here 1S.NEG  
      bélé nà sí é vâ]  
      bé-lé nà sí é vâ  
      be-NEG COM Ø 9.ground LOC here  
      ‘There, I will first go construct there because here I don’t have any land.’

**Temporal relative clauses** Also the bare noun *y᷑ɔ̩* ‘time’ is used adverbially as a subordinator of adverbial clauses, as in (980).

- (980) yîi mpà [y᷑ɔ̩ wé kâ y᷑ dûmbó]\_REL  
      yîi mpà y᷑ɔ̩ wε-H kâ-H y-᷑ dûmbó  
      7.COP good Ø7.time 2S-PRES wrap-R 7-NSBJ Ø7.package  
      ‘It is good when you wrap it in a (leaf) package.’

### 8.2.3.2 Conditional clauses with *ká* ‘if’

The subordinator *ká* ‘if’ introduces conditional clauses, comparable to *if*-clauses in English. *ká* has been observed to also function as a temporal rather than a conditional marker, as shown in (981).

- (981) [ká á dígé nâ [gesture]] á nyé mbúmbù  
      ká a-H dígé-H nâ [gesture] a-H nyé-H mbúmbù  
      when 1-PRES look-R COMP [gesture] 1-PRES see-R Ø1.namesake  
      wéè á pámò  
      w-éè a-H pámo  
      1-POSS.3S 1-PRES arrive  
      ‘When he looks like [gesture], he sees his namesake who arrives.’

The remainder of this section is, however, dedicated to *ká* as a conditional marker which seems to be its primary function in terms of frequency.

In all instances in the corpus, the *ká*-clause is preposed to the main clause. Examples of preposed conditional clauses are given in (982) through

(984). The sentences in (982) and (983) show that the basic word order in the dependent clause is maintained.

- (982) [ká wé wúmbé jímbèlè lóbímbú]<sub>COND</sub> déè  
 ká wε-H wúmbε-H jímbεlε H-le-bímbú déè  
 if 2S-PRES want-R lose OBJ.LINK-le5-weight eat.SBJV  
 pémbó mwánjâ sâ  
 pémbó m-wánjâ sâ  
 Ø7.bread N1-child Ø7.thing

‘If you want to lose weight, you should eat less bread.’

The same is true for negated conditional clauses, as in (983).

- (983) [ká wèé wúmbélé ndáà]<sub>COND</sub> mε nòj nkŵe  
 ká wèé wúmbε-lé ndáà mε-H nòj-H nkŵe  
 if 2S.PRES.NEG want-NEG also 1S-PRES take-R Ø3.basket  
 wá mábójâ  
 wá H-ma-bójâ  
 3:ATT OBJ.LINK-ma6-bread.fruit
- ‘If you don’t want [this] either, I take the basket with the bread fruit.’

Conditional clauses can, however, also take a special word order in terms of focus strategies, as it is the case in (984). In this example, the object pronoun is fronted and occurs between the modal auxiliary and the main verb so that the main verb is in focus position.

- (984) [ká kééssj yí wúmbé wê dyòdè]<sub>COND</sub> wé  
 ká kééssj yi-H wúmbε-H wê dyòdε wε-H  
 if Ø7.peer 7-PRES want-R 2S.NSBJ receive 2S-PRES  
 kíljwô  
 kílwô.  
 be.vigilant
- ‘If somebody wants to deceive you, you are vigilant’

From elicitation, it is known that conditional *ká* clauses can also be postposed to the main clause, as shown in (985).

- (985) mèè njì nàménó [ká Àdà á wúmbé nâ  
 mèè njì nàménó ká Àdà a-H wúmbε-H nâ  
 1S.FUT come tomorrow if Ø1.PN 1-PRES want-R COMP  
 mε pándéè]<sub>COND</sub>  
 mε-H pándéè  
 1-PRES arrive.SBJV

'I will come tomorrow if Ada wants me to come.'

**Irrealis marking of conditional clauses** Conditional clauses can usually express different degrees of realis or irrealis, making a statement about the likelihood whether the event in the main clause will really happen. In English, this is achieved by the use of different tenses. In Gyeli, also different tense-mood categories can be used in conditional clauses, as shown in (986) through (989). Generally, the same tense-mood category is used in the conditional clause that is also used in the main clause. Thus, in (986), the main clause appears in the PRESENT and so does the conditional clause. When the PRESENT tense-mood category is used, the conditional has a high realis degree, i.e. the event of the main clause is very likely to happen. In such instances, where the reading is generic, *ká* may also be replaced by *píli* 'when'.

- (986) [ká mé bwé nkwàñò]COND mé dè  
 ká mε-H bwè-H nkwàñò mε-H dè  
 if 1S-PRES obtain-R Ø3.honey 1S-PRES eat  
 'If I get honey, I eat [it].'

In order to mark irrealis conditions, other tense-mood categories are used. The most salient strategy to mark a conditional clause as irrealis, however, is the use of the irrealis marker *kò*. In (987), for instance, the main and conditional clause appear in the FUTURE, which is inherently an irrealis category (Chapter 6.2.1). The speaker can then choose to use the irrealis marker *kò* in order to express that it is rather unlikely that he will find honey. If *kò* is not used, the speaker indicates that it is more likely to find honey in the future.

- (987) [ká mèè bwé nkwàñò]COND (kò) mèè dè  
 ká mèè bwè-H nkwàñò kò mèè dè  
 if 1S.FUT obtain-R Ø3.honey IRR 1S.FUT eat  
 'If I obtain honey, I will eat [it].'

The same choice is given for conditionals in the RECENT PAST, as (988) shows. Parentheses around *kò* indicate its optionality. Again, when the irrealis marker is used, it emphasizes the likelihood that the event of the main clause will not happen. In contrast to the PRESENT use in (986), the RECENT PAST seems to indicate a lower likelihood of finding honey.

- (988) [ká mè bwé nkwàñò]<sub>COND</sub> (kò) mè dé  
           ká mè bwè-H nkwàñò kò mè dè-H  
       if 1S.PST1 obtain-R Ø3.honey IRR 1S.PST1 eat-PST  
       ‘If I obtained honey, I would eat [it].’

The only circumstances where *kò* is systematically used is the clear irrealis context which is further expressed by the REMOTE PAST. This is shown in (989). Here, the speaker talks about an event that clearly did not happen.

- (989) [ká mée bwé nkwàñò]<sub>COND</sub> kò mée dé  
           ká mée bwè-H nkwàñò kò mée dè-H  
       if 1S.PST2 obtain-R Ø3.honey IRR 1S.PST2 eat-PST  
       ‘If I had obtained honey, I would have eaten [it].’

In the corpus, conditional clauses only appear with PRESENT marking, while data on other tense-mood categories in conditional clauses stem from elicitation.

### 8.2.3.3 Adverbials + complementizer constructions

In contrast to true complement clauses (Section 8.2.2.1), dependent clauses that are introduced by an adverbial plus *nâ* behave more like other adverbial dependent clauses in two respects. First, they constitute an intonation phrase on their own and second, they can both precede and follow the main clause. Some of the adverbials used in combination with *nâ* are also used to introduce full adverbial clauses (Section 8.2.3.1), such as *líní* ‘when’ vs. *lí nâ* ‘when’. The semantic differences seem intricate; speakers state that both forms can be used interchangeably.

**Temporal adverbials** There are two temporal adverbials in Gyeli which combine with the complementizer *nâ*, namely *lí* ‘when’ and *sɔ́ò* ‘before’. This is most likely not an exhaustive list and other adverbials might be possible in this construction type as well.

(990) gives an example of a postposed adverbial + complementizer clause, using the adverbial *lí* ‘when’. Semantically, the sentence expresses simultaneity, the event of the main clause happening at the same time as the event of the dependent clause.

- (990) mè nzí nô fótò [lí nâ Àdà à  
 mè nzî-H nô fótò lí nâ Àdà a  
 1S.PST PROG.PST1 take Ø1.photo when COMP Ø1.PN 3S.PST  
 nzí bè à nzéé dè mántúà]  
 nzî-H bè a nzéé dè H-ma-ntúà  
 PROG.PST1 be 3S PROG eat ma6-mango  
 ‘I was taking photos while Ada was eating mangoes.’

In contrast, the dependent clause in (991) precedes the main clause it modifies. In this example, the adverbial *sóò* ‘before’ is used, expressing anteriority. Thus, the event of the main clause happens before the event of the subordinate clause.

- (991) [sóò nâ á pámó tísònì] á súmélé  
 sóò nâ a-H pámo-H tísònì a-H súmélē-H  
 before COMP 1-PRES arrive-R Ø7.town 1-PRES greet-R  
 bùdì  
 b-ùdì  
 ba2-person  
 ‘Before he arrives in town, he greets the people.’

**Reason/purpose with *púù nâ* ‘reason that’** *púù nâ* expresses purpose in the dependent clause it introduces and is a variant of the noun plus attributive construction *púù yá* which is discussed in Section 8.2.3.1. An example is provided in (992).

- (992) yá pándé nà síngilitì [púù nâ wé  
 ya-H pándé-H nà síngilitì púù nâ wé-H  
 1P-PRES arrive-R COM Ø1.shirt Ø7.reason COMP 2S-PRES  
 bwádójò nyê púù màbwálé]  
 bwádójò nyê púù ma-bwálé  
 wear.SBJV 1.NSBJ Ø7.reason ma6-birth  
 ‘We bring the shirt so that you wear it for [your] birthday.’

Semantically, there seems to be a difference in that *púù yá* has a causal reading in the sense of ‘because’ while *púù nâ* expresses purpose, translated as ‘so that’.

#### 8.2.3.4 Infinitival adverbial clauses without subordinator

Gyeli has also one type of adverbial clause that lacks a dedicated clause linker (Hetterle 2015: 109). Instead of an overt morpho-syntactic subordi-

nator, the subordination relation is expressed by an infinitival verb and the lack of any subject agreement and tense, aspect, mood marking. The subject is identified with a salient discourse antecedent which often coincides with the subject of the main clause, but not necessarily, as seen in (995) and (996). The tense-mood interpretation is similar to that of past and present gerunds (except that there is neither dedicated gerund nor tense marking), encoding the wide range of temporal relations to the main clause of anteriority, simultaneity, and posteriority. Infinitival clauses without subordinators are also marked prosodically as a clausal unit by a pause between the dependent and the main clause.

Infinitival clauses can both be preposed and postposed to the main clause, as I show in the following. Infinitival clauses can further have the verb in their initial position or the infinitival verb can be preceded by another element such as the negation marker *tí* or a sequential marker.

**Preposed infinitival clauses** Preposed infinitival clauses, as in (993) through (998), often express temporal sequences, the event of the infinitival clause being posterior to the event of the main clause. Thus, in (993), the event of arriving in town is completed at the time of greeting people.<sup>10</sup>

- (993) [pámɔ́ tísɔ̃nì]SUB á súmélɛ́ bùdì  
 pámó tísɔ̃nì a-H súmélɛ-H b-ùdì  
 arrive Ø7.town 1-PRES greet-R ba2-people  
 ‘Having arrived in town, he greets the people.’

(993) and (994) are both instances where the implied subject of the infinitival clause is co-referential with the subject of the main clause. In (993), it is the same person who arrives in town and then greets the people. In (994), the person first eats mangoes and then, as a result, does not feel hungry anymore. The subject interpretation for the infinitival clause has to be, however, clear from the context. In the right context, it is also possible that the subject of the infinitival clause in (993) is interpreted as non-co-referential to the one in the main clause, for instance when the speaker talks

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<sup>10</sup>In my translation into English, I choose the gerund -ing form since it allows to not express the subject of the subordinate clause. I do not imply, however, that there are any other parallels between the English translation and the Gyeli structure. Speakers translate these constructions with a past participle form, for example for (993) as *Arrivé en ville, ilalue les gens.*

about his own arrival in town, but about a different person greeting the people (a similar case is presented below in (996) where the implied agent of the subordinate clause and the subject of the main clause are not co-referential). In (994), the co-referential reading is reinforced due to the causality chain: because the person ate the mangoes, he is not hungry anymore.

- (994) [sílε dè mántúà]<sub>SUB</sub> à tí ná dyúwò nzà  
       sílε dè H-ma-ntúà a tí ná dyúwɔ nzà  
       finish eat OBJ.LINK-ma6-mango 1 NEG anymore feel Ø9.hunger  
       ‘Having finished eating mangoes, he does not feel hunger anymore.’

In other cases, it is not quite clear whether the subject of the main and the infinitival clause are co-referential. In (995), for instance, the narrator talks about a healer who has turned into an antelope and has vanished into the forest, while the people of his village are following him with the intention of killing him. The infinitival clause in (995) allows both interpretations of either the healer having arrived ‘here’, i.e. in the forest, or the people of his village.

- (995) [nà pándè vâ]<sub>SUB</sub> bùdì báà bè  
       nà pándè vâ b-ùdì báà bē  
       COM arrive here ba2-person 2.DEM.PROX be.there  
       ‘And having arrived here, these people are there.’

In other instances, the subject of the main clause and the implied subject of the infinitival clause are clearly different. (996) is uttered by the same narrator in the same story. The context here is that the people of the village look for the healer in his hut and discover that he is not there. Thus, the infinitival clause has the people of the village as its implied subject, while the main clause’s subject is *mùdì* ‘person’.

- (996) [kè dígè mpù]<sub>SUB</sub> mùdì nū bélé  
       kè dígè mpù m-ùdì nū bélé  
       go look like.this N1-person 1.DEM.DIST be-NEG  
       ‘Going looking like this, nobody is there.’

While the main clause can have most of the tense-mood category that are allowed in a main clause, excluding IMPERATIVES, past categories and the FUTURE as well as the PRESENT are most common found in the corpus. There are, however, also examples of the INCHOATIVE in the main clause, as shown in (997).

- (997) [ndènáà pámò lébû]SUB                    àá        gyì  
       ndènáà pámo H-le-bû                    àá        gyì  
       like.this arrive OBJ.LINK-le5-river.bank 1.INCH cry  
       'Having arrived like this [= without the child] at the river bank she  
       is at the beginning of crying.'

While most preposed infinitival clauses seem to express temporal sequences, they may also express purpose, as in (998).

- (998) [donc        pè        tsíyè póné        lèkélè]SUB bvúlè        bá  
       donc        pè        tsíyè póné        le-kélè        bvúlè        ba-H  
       so[French] there cut Ø7.truth le5-word ba2.Bulu 2-PRES  
       ntégélé        bû        é        vâ  
       ntégele-H bû        é        vâ  
       bother-R 1P.NSBJ LOC here  
       'So, to say the truth, the Bulu bother us here.'

**Postposed infinitival clauses** Infinitival clauses can also follow the main clause, as shown in (999) through (1003). Postposed infinitival clauses seem to express purpose or manner rather than temporal sequences as with preposed clauses. In (999) and (1000), the infinitival clause modifies the main clause which is comprised of a non-verbal predicate. In both instances, the implied subject of the infinitival clause is co-referential with the subject of the main clause. Also, both express purpose, comparable to English *in order to-* sentences.

- (999) wè nà        ngvùlè        [kè sólègà wû]SUB nà        njí        kù  
       wè nà        ngvùlè        kè sólega wû        nà        njì-H        kù  
       2S COM Ø9.strength go fall        there        COM come-R fall[Kwasio]  
       é        sì  
       é        sì  
       LOC Ø9.ground  
       'You are strong to go fall there and come fall to the ground.'

(1000) also shows that infinitival clauses can be subject to non-basic word order. While in the basic word order, the object follows the verb, in (1000), an object pronoun is fronted, as discussed in Chapter 7.3.3 on information structure.<sup>11</sup>

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<sup>11</sup>This example is also noteworthy because the fronted object pronoun usually occurs between the auxiliary verb *sîle* 'finish' and the main verb *lwô* 'build'. In this example, however, it occurs before the auxiliary.

- (1000) bá nà ngvùlè [bíyè sílè lw̩ mán̩dáw̩]SUB  
 bá nà ngvùlè bíyè sílè lw̩ H-ma-ndáw̩  
 2 COM Ø9.strength 1P.NSBJ finish build OBJ.LINK-ma6-house  
 ‘They have the strength to build us all houses.’

While preposed infinitival clauses directly precede the main clause, post-posed infinitival clauses can constitute one of several subordinate clauses following the main clause. In these multiple subordinate constructions, the infinitival dependent clause usually modifies the clause it follows. In some cases, however, the zero expressed subject referent can be ambiguous, as in (1001). This example consists of a main clause, followed by an adverbial subordinate clause and an infinitival clause. The two subordinate clauses are juxtaposed. The subject of the infinitival clause could be co-referential with either the subject of the main clause or of the infinitival clause.

- (1001) S V O [ADV] [INF]

báà bù mpàgó [pílì pódè àà vâ]ADV [nji tsíyè vâ]SUB  
 báà bù mpàgó pílì pódè àà vâ nji tsíyè vâ  
 2.FUT break Ø3.road when Ø1.port 1.COP here come cut here

‘They will build a road when the port is here, coming cross-cutting here.’

(1002) is also comprised of a main clause, followed by two subordinate clauses, namely a complement and an infinitival clause. In this case, however, the infinitival clause picks its referent from the complement rather than the main clause.

- (1002) S V [[COMP] [INF]]

bónégá bá lí sílè làw̩ [nâ bvúlè bá  
 bó-négá ba-H lí sílè làw̩ nâ bvúlè ba-H  
 2-other 2-PRES RETRO finish speak COMP ba2.Bulu 2-PRES  
 ntégélé bágylì]COMP [kè nà kwàlè bùdâ kè nà  
 ntégelé-H H-ba-gyélì kè nà kwàlè b-ùdâ kè nà  
 bother-R OBJ.LINK-ba2-Gyeli go COM love 2n-woman go COM  
 kwàlè bùdâ bá bá-gyélì]SUB  
 kwàlè b-ùdâ bá bá-gyélì  
 love ba2-woman 2:ATT ba2-Gyeli

‘The others have just said that the Bulu bother the Bagyeli, coming and loving the women, coming and loving the women of the Bagyeli.’

Finally, also noun phrase constituents of an infinitival clause can serve as the head of another embedded clause, as shown in (1003). In this example, the main clause is followed by an infinitival clause, a relative clause and then another infinitival clause. The subject referent of the first infinitival clause is co-referential with the subject of the main clause. The object noun phrase of the first infinitival clause serves as subject head to the following relative clause. The second infinitival clause takes the subject of the relative clause as implied subject which, ultimately, is the object of the first infinitival clause.

(1003) S V X [[INF1] [REL] [INF2]]

yá	sàgà	ménó	wé [nyé mápà
ya-H	sàga	ménó	wé nyé H-ma-pà
1P-PRES be.surprised Ø7.morning in see OBJ.LINK-ma6-paw			
má	njìbù] <sub>SUB</sub>	[má bwámó	ndáwò dé tù] <sub>REL</sub> [kè
má	njìbù	ma-H bwámó-H	ndáwò dé tù kè
6:ATT Ø1.antilope 6-PRES come.out-R Ø9.house LOC inside go			
déndì] <sub>INF</sub>			
d-éndì			
le5-courtyard			

‘We are surprised in the morning to see paws of an antelope which come out of the house, going into the courtyard.’

The non-finite verb in infinitival subordinate clauses can be preceded by either a negation marker *tí* or sentential modifiers, as I show in the following.

**Infinitival subordinate clauses with *tí* negation** The negation marker *tí* can precede the non-finite verb of an infinitival subordinate clause, as in (1004) and (1005).

(1004) à múà nà bábè [tí wúmbè wè]<sub>SUB</sub>  
 a múà nà bábè tí wúmbè wè  
 1S be COM Ø7.illness NEG want-R die

‘He was sick, without wanting to die.’

The main clause in (1004) is comprised of a verbal copula construction and modified by the infinitival subordinate clause. Semantically, the events of the main and the subordinate clause happen simultaneously: the person is sick and, at the same time, does not want to die.

- (1005) nà ké jíí      dé tù nà ndzí pámò d̄ē [tí  
       nà ke-H jíí      dé tù nà ndzí pámò d̄ē tí  
       COM kè-R Ø7.forest LOC inside COM Ø9.path arrive today NEG  
       nyê nyê]<sub>SUB</sub>  
       nyê nyê  
       see 1.NSBJ  
       ‘And (he) goes in the forest on the path till today, without seeing  
       him.’

**Sequential marker** *vèè* *vèè* and *kɔɔ* are both used as sentential modifiers, as described in Chapter 7.2.3. They can also appear in an infinitival subordinate clause where they directly precede the verb, as in (1006).

- (1006) à nɔ́j brìkē      [vèè bédè ndáwò]<sub>SUB</sub>  
       a nɔ́j-H brìkē      vèè bédè ndáwò  
       1.PST1 take-R Ø1.lighter[French] SEQU light Ø9.house  
       ‘He took the lighter, just lighting the house.’

The sentential modifier in (1006) can be omitted without making the sentence ungrammatical. It changes, however, the sentence’s meaning. Without it, the infinitival dependent clause would express purpose ‘He took the lighter in order to light the house.’ The intended meaning with the sentential modifier is sequential: the person first takes the lighter and then sets the house on fire.

A special case is presented in (1007) where the infinitival clause has an overt subject. The verb *kwè* ‘fall’ appears still in its infinitival form, lacking the realis marking H tone. Since infinitival dependent clauses are very rare in the corpus, it is not possible at this point to establish what conditions the overt marking of subjects in this clause type.

- (1007) má dvúmólé mbvú mbì mbvû  
       ma-H dvúmó-lé mbvú mbì mbvû  
       6-PRES produce-NEG Ø3.year like[Kwasio] Ø3.year  
       [màlénđí máà vèè kwè mípìndí]<sub>SUB</sub>  
       ma-léndí máà vèè kwè H-mi-pìndí  
       ma6-palm.tree 6.DEM.PROX only fall OBJLINK-mi4-non.ripe

‘They don’t produce [fruit] every year, these palm trees only falling non-ripe [fruit].’

**Sequential marker *kɔ̀j*** The sequential marker *kɔ̀j* seems to have exactly the same function as *vèè* when introducing a dependent clause. While both sentential modifiers are compared in Chapter 7.2.3, their potential distributional and semantic differences are even less clear as clause introducing devices. It rather seems that they are freely interchangeable in this function. An example of *kɔ̀j* introducing an infinitival subordinate clause is given in (1008).

- (1008) à jí mbê [**kɔ̀j** gyíbò bwánò]<sub>SUB</sub>  
 a jì-H mbê kɔ̀j gyíbò bwánò  
 1.PST1 open-R Ø3.door SEQU call ba2-child  
 ‘She opened the door, just calling the children.’

As with *vèè*, omitting the sentential modifier in (1008) gives a purpose reading of ‘She opens the door in order to call the children.’ In contrast, *kɔ̀j* gives a sequential interpretation.

### 8.2.3.5 Subordination with progressive marker *nzéé*

Subordination can also be encoded by the subordinate form of the progressive marker, *nzéé*, which, in main clauses, takes different forms (Chapter 6.3.1.1). In (1009), the subordinate clause expresses simultaneity. Without the subordinate form of the aspect marker, the second clause would formally be identical to a main clause and could appear on its own.

- (1009) á gyímbò [à **nzéé** sâ mákwásì]  
 a-H gyímbò a nzéé sâ H-ma-kwásì  
 1-PRES dance 1 PROG.SUB do OBJLINK-ma6-clapping  
 ‘He dances while clapping.’

# Appendix I: Verb Extensions

In this Appendix, I provide the different extension forms for each verb in the verb database. In some cases, certain extension forms yield a semantic shift or a meaning different than expected. These can be found in the lexicon in Appendix III, while the verb extension Appendix just lists existing forms.

As a notational convention, I do not indicate morpheme breaks when they are opaque. This is, for instance, the case with some passive forms of trisyllabic verbs where the passive *-a* also affects the penultimate vowel of the second syllable, as in *bùməlɛ* ‘hit sth.’ which has a passive form *bùmala* ‘be hit’ instead of *\*bùmel-a*.

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
bâ	marry	bán-ala	-	bál-ɛɛɛ	-	-	-
bà	smoke sth.	báy-ala	-	-	-	bày-agá	-
bâàla (nà)	repeat	-	-	-	-	-	-
bâàlɛ	protect, guard	bâà-la	bâàl-a	-	-	-	-
bâgá (nà)	stop sth.	bá-ala	-	-	-	-	-
bâkɛ	glue, post	-	bâg-a	-	-	-	-
bâlɛ	surpass	-	bâl-a	-	-	-	-
bâlɛwɔ	bend down	-	bâlawâ	-	-	-	-
bâm	scold	bám-ala	bám-a	bám-ɛɛ	-	-	-
bâwɛ	carry	bâw-ala	bâw-a	bâw-ɛɛɛ	-	-	-
bâwɛ	injure (oneself)	bâw-ala	-	bâw-ɛɛɛ	-	-	-
bè	sow, plant	bèy-ala	bèy-a	-	-	béd-ɛga	-
béddɛ	light	béd-ala	-	-	-	béd-ɛga	-
bédo	go up, mount	béd-ala	béd-a	béd-ɛɛɛ	béd-ɛɛ	béd-ɛga	-
bèlànɛ	ferment	-	béd-a	-	-	-	-
bénele	use	-	bèlàn-a	-	-	bén-ɛga	-
bènɔ	raise, lift	bén-ala	bénala	-	-	-	-
béyɔ	refuse	bén-ala	bén-a	-	bél-ɛɛɛ	béy-agá	-
bígɛ	ripen	-	-	-	bíg-ɛɛɛ	-	-
	develop, emerge	-	-	-	-	-	-



Verb	Gloss		Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
<b>bwéɛlɛ</b>	wait	bwá-ǎla	-	-	-	-	-	-
bwà	give birth	-	-	-	-	-	-	-
bwà	become big	bòg-ala	-	-	-	-	-	-
bwádɔ	dress, wear	bód-ala	-	-	-	-	-	-
bwámɔ	receive	bwám-ala	bwám-a	-	-	-	-	-
bwàndɔ	peel (mango)	bwànd-ala	bwànd-a	-	-	-	-	-
bwàndya	despise	bwàndy-ala	-	-	-	-	-	-
bwè	catch, arrest	bèy-ala	bùl-ɛ	-	-	-	-	-
bwèɛɛɛɛ	be tasty	-	-	-	-	-	-	-
byáàda	answer	-	-	-	-	-	-	-
dà	draw water	dàŋg-ala	dàll-a	-	-	-	-	-
dè	eat	díy-ala	díl-a	díl-ɛɛ	-	-	-	-
déndɛ	set trap	dénd-ala	dénd-a	-	-	-	-	-
dílɛ	bury	díl-ala	díl-a	-	-	-	-	-
dì	negotiate	-	-	-	-	-	-	-
dvùbɛ	soak, dip	dvùb-ala	-	-	-	-	-	-
dvùdɔ	drive	dvùd-ala	dvùd-a	-	-	-	-	-
dvúmɛlɛ	praise sb.	dvúm-ala	-	-	-	-	-	-
dvùmɛ	fall down	dvùm-ala	dvùm-a	dvùm-ɛɛ	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛc
dvùò	hurt (intr.)	dvùg-ala	dvùg-a	dvùg-ɛɛ	-	-	-
dwàambo	ask for sth.	dwàmb-ala	-	-	-	-	-
dyâà	chase	dyâng-ala	dyâng-a	-	-	-	-
dyû	be hot	dyúng-ala	-	-	-	-	-
dyà	sing	dyà-ala	dyày-a	-	-	-	-
dyâ	lie down	dyá-ala	-	-	-	-	-
dyégɛ	lean sth.	dyék-ala	-	-	-	-	-
dyò	laugh	dyò-ala	dyòlasa	dyòl-ɛɛ	-	-	-
dyòdɛ	deceive	dyòd-ala	dyòd-a	-	-	-	-
dyû	kill	dyúw-ala	dyúw-a	-	-	-	-
dyúà	swim	-	-	-	-	-	-
dyúàda	perceive	-	-	-	-	-	-
dyùlɛ	be bitter	dyùl-ala	dyùl-a	dyùl-ɛɛ	-	-	-
dyùm	heal, get well	-	dyùm-a	-	-	-	-
dyúna	quarrel	-	-	-	-	-	-
dyúw	hear	dyúw-ala	-	dyúg-ɛɛ	-	-	-
dzámɛ	excuse	-	-	-	-	-	-
fùɛɛ	shake	-	-	-	-	-	-
fúge	end	fú-ala	-	-	-	-	-
fùlɛ	miss	fùl-ɛɛ	-	-	-	-	-

Verb	Gloss		Reciprocal - <i>ala</i>	Passive - <i>a</i>	Causative - <i>ɛɛ</i>	Applicative - <i>ɛɛ</i>	Autocausative - <i>ɛga/-aga</i>	Positional - <i>ɛɛɛ</i>
fùlɔ	descend	-	fùl-a	fùl-ɛɛɛ	-	-	-	-
giyɔ (gyì)	cry	gyìl-ala	-	gìl-ɛɛɛ	-	-	-	-
gyà	paint	-	gyàng-g-a	-	-	-	-	-
gyâlc	roast	-	-	-	-	-	-	-
gyàga	buy	gyàg-ala	-	-	-	-	-	-
gyámbɔ	cook	gyámb-ala	gyámb-a(a)	-	gyámb-ɛɛɛ	gyámb-ag-a	-	-
gyáŋgya	work	gyáŋga-ala	-	gyáŋg-ɛɛɛ	-	-	-	-
gyé'ɛ	block	gyég-ala	gyég-a	-	-	-	-	-
gyɛ̂'ɛɛ	pray, beg	-	-	-	-	-	-	-
gyélɛ	jump, fly	gyél-ala	gyél-a	gyél-ɛɛɛ	-	-	-	-
gyèndɔ	slip	-	gyènd-a	-	-	-	-	-
gyéssɔ	search	gyéss-ala	gyéss-a	-	-	-	-	-
gyíbɔ	call	gyíb-ala	gyíb-a	-	-	-	-	-
gyìbɔ	sharpen	gyìb-ala	gyìb-a	-	-	-	-	-
gyidɛ	forgive	-	gyid-a(a)	-	-	-	-	-
gyílkɔ (nà)	resemble	-	-	-	-	-	-	-
gyílkɛ	learn	-	-	gyílk-ɛɛɛ	-	-	-	-
gyímbɔ	dance	gyímb-ala	gyímb-a(a)	gyímb-ɛɛɛ	-	-	-	-
gyímɛ	wake sb	-	gyím-a(a)	gyím-ɛɛɛ	-	gyím-ag-a	-	-
jímbɛ	get lost	jímb-ala	-	jímb-ɛɛɛ	jímb-ɛɛɛ	-	-	-

Verb	Gloss		Reciprocal <i>-ala</i>	Passive <i>-a</i>	Causative <i>-ɛɛ</i>	Applicative <i>-ɛɛ</i>	Autocausative <i>-ɛga/-aga</i>	Positional <i>-ɛɛɛɛ</i>
já̄asa	disappear	já̄-ała	-	-	-	-	-	-
jà̄ngala	have sex	-	-	-	-	-	-	-
jì	open	jìy-ala	jìy-a	-	-	-	-	-
jì(y)	sit, habiter	jìl-ala	jìl-a	-	-	-	-	-
jìbò	close	jìb-ala	jìb-a	-	-	-	-	-
jílɔ	be satisfied	-	-	-	jìl-ɛɛ	-	-	-
jìlɔ	be heavy	-	jìl-a	jìl-ɛɛ	-	-	-	-
jímese	extinguish	-	jím-a	-	-	-	-	-
jímɔ	be deep	-	-	-	-	-	-	-
jína	dive	-	jíb-ala	jíb-a	jìn-ɛɛ	-	jìn-ɛga	-
jíwɔ	steal	jíb-ala	-	-	-	-	-	-
jíyɛ	burn (intr.)	jíg-ala	-	jíg-ɛɛ	-	-	-	-
kâ̄	wrap	kâ̄-ała	-	-	-	-	-	-
kà	catch	-	-	-	kàs-ɛɛ	-	-	-
ká'à	role up	kág-ala	-	-	-	-	-	-
kàdɛ	detach	kàd-ala	-	kàd-ɛɛ	-	-	kàd-ɛga	-
kádɔ	be too much	kád-ala	-	-	-	-	-	-
kàgɔ	promise	kàg-ala	-	-	-	-	-	-
kákɑ	shiver	-	-	-	-	-	-	-
kàlānɛ	transmit	-	-	-	-	-	-	-

Verb	Gloss	Reciprocal - <i>ala</i>	Passive - <i>a</i>	Causative - <i>ɛɛ</i>	Applicative - <i>ɛɛ</i>	Autocausative - <i>ɛga/-aga</i>	Positional - <i>ɛɛɛ</i>
kàlega	stop over	-	-	-	-	-	-
kámbɔ	chew	kám̩b-ala	kám̩b-aa	-	-	-	-
kàmbɔ (nà)	defend	kàmb-ala	kàmb-a	-	-	-	-
kánda	crack	-	-	kánd-ɛɛ	-	-	-
kàselɛ	light	kàs-ala	-	-	-	-	-
kásɔ	become thin	kás-ala	-	-	-	-	-
kàbɔ	share	kàb-ala	kàb-a(a)	-	-	-	-
kè	go	-	-	-	-	-	-
kè	shave	kèŋg-ala	-	-	-	-	-
ké'ɛ	hatch	-	-	-	-	-	-
kèdɛlɛ	gnaw	kèd-ala	-	-	-	-	-
kèlɛ	hang	kèl-ala	kèl-a	-	-	-	-
kfúdɛ	cover	kfúd-ala	kfúd-a(a)	-	-	kfúd-ɛga	-
kfùlɔ	scrape	kfùl-ala	kfùl-a	-	-	kfùl-ɛga	-
kfùmala	find	-	kfùm-a(a)	-	-	-	-
kfùbɛ	provoke	kfùb-ala	-	-	kfùb-ɛlɛ	-	-
kílɛ	be vigilant	-	-	kíl-ɛɛ	-	-	-
kíŋgɛlɛ	become stiff	-	-	-	-	-	-
kìya	give	kìy-ala	-	kìy-ɛɛ	-	-	-
kìyɛ	try, tempt	kìy-ala	-	-	kìy-ɛɛ	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
kó	gather, pluck	kóy-ala	kóy-a	-	-	kóy-aga	-
kóbe	violate	kób-ala	-	-	-	-	-
kóde	turn sth	kód-ala	kód-a	kód-ɛɛ	-	kód-ega	-
kóge	straighten	kóg-ala	kóg-a	kóg-ɛɛ	-	-	-
kòla	add	kòl-ala	-	-	-	-	-
kòle	help	kòl-ala	-	-	-	-	-
kòlɛ	snore	-	-	-	-	-	-
kóssɛ	cough	kós-ala	-	-	-	-	-
kíelɛ	mock	kú-ala	-	-	-	-	-
kùga	spread, fit	-	-	-	-	-	-
kùlɛ	borrow	kùl-ala	-	-	-	-	-
kùmasa	prepare	-	-	-	-	-	-
kùmbɔ	repair	kùmb-ala	-	-	-	-	-
kwâ	cut raffia	kwâŋg-ala	kwâŋg-a	-	-	-	-
kwâ	betray	kwâŋg-ala	kwâŋg-a	kwâŋg-ɛɛ	-	-	-
kwâlɛ	spy	kwâl-ala	-	-	-	-	-
kwâ	grind	kwâg-ala	kwâg-a	-	-	-	-
kwâdɔ	twist sth	-	-	-	-	-	-
kwâlɛ	love	kwâl-ala	kwâl-a	-	-	-	-
kwâne	sell	-	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
kwê	fall, fail	kwéy-ala	-	kù-ɛɛɛ	-	-	-
kwêlɛ	bite	kwá-ala	-	-	-	-	-
kwɛlɔ	cut down	kwèl-ala	-	-	-	-	-
kyàlɛ	start engine	-	-	-	-	-	-
kyɛlɛga	fall from tree	kyèl-ala	-	-	-	-	-
lâ	read, count	láŋg-ala	-	-	-	-	-
lâ	pass	lâŋg-ala	-	-	-	-	-
lè	pour in	lɛŋg-ala	-	-	-	-	-
lû	insult	lúŋg-ala	-	-	-	-	-
lúâ	whistle	lóŋg-ala	-	-	-	-	-
lûjɔ	build	lúŋg-ala	-	-	-	-	-
lâ	harvest honey	léy-ala	-	-	-	-	-
láâ	tell	lá-ala	-	-	-	-	-
lâdo (nâ)	meet	lâd-ala	-	-	-	-	-
lágɑ	contaminate intr	lég-ala	-	-	-	-	-
lámbɔ	trap	lámb-ala	-	-	-	-	-
lána	distribute	lán-ala	-	-	-	-	-
lê	offer	léy-ala	-	-	-	-	-
lèbɛlɛ	follow	lèb-ala	-	-	-	-	-
lèɛ	uproot	lèy-ala	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
lége	sing	lég-ala	-	lég-ɛɛɛ	-	lég-ɛga	-
lèmbo	know, flee	lèmb-ala	-	lèmb-ɛɛɛ	-	-	-
lènd	flow	-	-	lènd-ɛɛɛ	-	lènd-ɛga	-
líbda	appear	-	-	-	-	-	-
líbde	show	líb-ala	-	-	-	-	-
límbɛ	pull	límb-ala	-	-	-	límb-ɛga	-
líi	leave	líg-ala	-	-	-	-	-
líyelɛ	accompany	líy-ala	-	-	-	-	-
cáy	clear land	líy-ala	líy-a	-	-	líy-aga	-
lì	sew, weave	lòy-ala	lòy-a	lòy-ɛɛɛ	-	-	-
lùà	curse	lòg-ala	lòg-a	lòg-ɛɛɛ	-	-	-
lúmɛ	send	lúm-ala	lúm-a	-	-	lúm-ɛɛɛ	-
lúnd	fill oneself	lúnd-ala	lúnd-a	lúnd-ɛɛɛ	-	lúnd-ɛɛɛ	-
lùn̩ga	grow	-	-	lùn̩g-ɛɛɛ	-	-	-
lùngelé	aim at	lùng-ala	-	-	-	-	-
lúw	bite	lúw-ala	lúw-a	lúw-ɛɛɛ	-	-	-
lvúm	sting	lvúm-ala	lvúm-a	lvúm-ɛɛɛ	-	-	-
má'à	accuse	mág-ala	mág-a	-	-	-	-
mánd	stuff mouth	mánd-ala	mánd-a	-	-	mánd-ɛɛɛ	-
méɛl	accept	mé-ala	mé-ɛl-a	-	-	-	-

Verb	Gloss		Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
mèm cù	admit		mèm-ala	-	-	-	-	-
mès c	wave		mès-ala	-	-	-	-	-
mgbámala	be sour		-	-	-	-	-	-
mímba	brag		mímb-ala	-	-	-	-	-
míno	swallow		mìn-ala	-	-	-	-	-
múeɛɛ	nibble		mú-ala	-	-	-	-	-
mwàsɔ	throw		mwàs-ala	mwàs-a	-	-	-	-
myàkɛ	sprinkle		myàk-ala	-	-	-	-	-
myámata	be narrow		-	-	-	-	-	-
myámɔ	knead, press		myám-ala	-	-	-	-	-
náàta (nà)	stick		-	-	-	-	-	-
ndà	cross		ndàŋg-ala	ndàŋg-a	-	-	-	-
ndtámanɛ	ruin, destroy		-	-	-	-	-	-
ŋgwáwɔ	bend, bow		-	-	-	-	-	-
níndya	urinate		níndy-ala	-	-	-	-	-
níyɛ	be beautiful		níndy-ala	-	-	-	-	-
njì	come		-	-	-	-	-	-
nòò	take		nòòg-ala	nòòg-a	-	-	-	-
ntáâ	climb over		ntàŋg-ala	-	-	-	-	-
ntégeɛɛ	disturb		ntég-ala	-	-	-	-	-

Verb	Gloss	Reciprocal	Passive	Causative	Applicative	Autocausative	Positional
		- <i>ala</i>	- <i>a</i>	- <i>ɛsɛ</i>	- <i>ɛlɛ</i>	- <i>ɛga/-aga</i>	- <i>ɛɛc</i>
nyâ	lick	nyâŋ-ala	-	nyâŋ-ɛsɛ	-	-	-
nyàà	defecate	nyàg-ala	-	nyàg-ɛsɛ	-	-	-
nyâlɛ	scratch	nyâl-ala	-	-	-	-	-
nyàmɔ	deteriorate	nyàm-ala	-	nyàm-ɛsɛ	-	-	-
nyàno	hurt	-	-	-	-	-	-
nyê	see	nyén-ala	-	-	-	-	-
nyɛsɛlɛ	deepen, press on	-	-	-	-	-	-
nyì	return	nyìg-ala	-	-	-	-	-
nyî	enter	nyíŋ-ala	-	-	-	nyíŋg-ɛlɛ	-
nyíme	refuse	nyím-ala	-	nyím-ɛsɛ	-	-	-
nyímɛlɛ	tighten	nyòmb-ala	-	-	-	-	-
nyòmb-ɛlɛ	tickle	nyòmb-ala	-	-	-	-	-
nyùlɛ	drink	nyùl-ala	-	nyùl-ɛsɛ	-	-	-
nyùmb	smell (intr)	nyùmb-ala	-	nyùmb-ɛsɛ	-	nyùmb-ɛlɛ	-
pâ	reign	pâŋ-ala	-	-	-	-	-
pâ'â	dig	pág-ala	-	-	-	-	-
pâ'â	grow intr	pâg-ala	-	-	-	-	-
pádɔ	pluck	pâd-ala	-	-	-	-	-
pálaba	blink (eye)	-	-	-	-	-	-
pálâ	sort	pál-ala	-	-	-	-	-

Verb	Gloss		Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛ
pámo	appear		pám-ala	-	-	-	-	-
pándɛ	arrive		pánd-ala	-	-	-	-	-
pánɛ	hang up		pán-ala	-	pán-ɛɛ	-	-	-
pàno	shine		-	-	-	-	-	-
pê	choose		péy-ala	-	-	-	-	-
pèndɛlɛ	lick out		pènd-ala	-	-	-	-	-
péndo	braid		pénd-ala	-	-	-	-	-
péya	booze		péy-ala	-	péy-ɛɛ	-	-	-
píñelɛ	crunch		pfú-ala	-	-	-	-	-
píñimbɛ	pull out		pfíñimb-ala	-	píñund-ɛɛ	-	-	-
píñindɔ	be frightened		píñund-ala	-	-	-	-	-
píñipɛlɛ	blow		píñip-ala	-	-	-	-	-
píñuwɔ	dust		píñuw-ala	-	-	-	-	-
pímbɛ	wipe		pímb-ala	-	-	-	-	-
pínasa	be squeezed		pín-ala	-	pín-ɛɛ	-	-	-
póndɛsɛ	punish		-	-	-	-	-	-
púj	pay		púŋg-ala	-	-	-	-	-
púndi	polish		púnd-ala	-	-	-	-	-
pùsɛ	push		pùs-ala	-	-	-	-	-
pwàs	stretch		pwàs-ala	-	-	-	-	-
							cwàs-pwàs	

Verb	Gloss		Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
â	vomit	sâŋg-ala	-	sâŋg-ɛɛ	-	-	-	-
sâ̄s̄a	mix	-	-	-	-	-	-	-
sî̄ (bà)	approach sth	síŋg-ala	-	-	-	-	-	-
sâ	do	sá-ala	-	-	-	-	-	-
sâ'âwa	move repeatedly	-	-	-	-	-	-	-
sâga	shock, scare	sâg-ala	-	-	-	-	-	-
sâl̄	cut lengthwise	sâl̄-ala	-	-	-	-	-	-
sâl̄	become plenty	-	-	-	-	-	-	-
sânc	decide	sán-ala	-	-	-	-	-	-
sêgges	sieve	-	-	-	-	-	-	-
séł̄	peel	séł̄-ala	séł̄-a	-	-	-	-	-
sênd̄	slip	sênd̄-ala	-	-	sênd̄-ɛɛ	-	-	-
sêŋḡ	lower	sêŋḡ-ala	-	-	-	-	-	-
síawa	have hiccup	-	-	-	-	-	-	-
síl̄	finish	síl̄-ala	-	-	síl̄-ɛɛ	-	-	-
sîlega	fade	síl̄-ala	-	-	síl̄-ɛɛ	-	-	-
síl̄	rub, smear	síl̄-ala	-	-	-	-	-	-
símasa	regret	-	-	-	-	-	-	-
simb̄	drag	simb̄-ala	-	-	-	-	-	-
sím̄	respect	sím̄-ala	-	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
síndya	exchange	síndy-ala	-	-	-	-	-
síseɛ	scare sb	sís-ala	-	-	-	sís-ɛga	-
síso (bà)	approach	sís-ala	-	-	-	-	-
síss	be happy	sís-ala	-	-	-	-	-
síya	wash, bathe	sìy-ala	-	-	-	-	-
síyɛ	saw	síy-ala	-	-	-	-	-
síyɛsɛ	swing, shake	-	-	-	-	-	-
síj	continue	-	-	-	-	-	-
sòbala	accumulate	-	-	-	-	-	-
sóle	undress	sól-ala	-	sól-ɛɛ	-	-	-
sòlè	hide sth.	sòl-ala	-	-	-	-	-
sólega	fall	-	-	-	-	-	-
sóndya	sharpen (point)	sóndy-ala	-	-	-	-	-
sásɛ	smoke meat	-	-	-	-	-	-
súmb	die mysteriously	súmb-ala	-	-	-	-	-
súmeɛ	greet	súm-ala	-	-	-	-	-
sùbɛ	pour out	sùb-ala	-	sùb-ɛɛ	-	-	-
swás	dry	swás-ala	-	-	swás-ɛɛ	-	-
swàw	hide intr	-	-	-	-	-	-
táala	judge	-	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
t̪ɛ	limp	t̪ɛŋg-ala	-	-	-	-	-
t̪ɛ̄̄	abandon	t̪ɛŋg-ala	-	-	-	-	-
t̪ɔ̄lɛ	guide	-	-	-	-	-	-
tá'älɛ	start	-	-	-	-	-	-
tàtɔ	squeak	tàt-ala	-	-	-	-	-
tátɔ	take care of	tát-ala	-	-	-	-	-
t̪ɛ	invent, create	t̪ɛy-ala	-	-	-	-	-
t̪ɛ̄	be soft	-	-	-	-	-	-
tébɔ	rise	téł-ala	-	-	-	-	-
t̪ɛg	tire, fatigue	t̪ɛg-ala	-	-	-	-	-
t̪ɛmbɛɛɛɛ	set (sun)	-	-	-	-	-	-
t̪ɛnd	tear	t̪ɛnd-ala	-	-	-	-	-
t̪fúada	be late	-	-	-	-	-	-
t̪fùbɔ	pierce, rape	t̪fùb-ala	-	-	-	-	-
t̪fùd	pinch	t̪fùd-ala	-	-	-	-	-
t̪fúga	suffer	t̪fúg-ala	-	-	-	-	-
t̪fúmbɛɛɛɛ	fold, wrinkle	t̪fúmb-ala	-	-	-	-	-
t̪í	get going	t̪íy-ala	-	-	-	-	-
t̪in	harvest tubers	t̪in-ala	t̪il-ɛ	-	-	-	-
t̪à	boil intr.	t̪ɔg-ala	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
t̪kɛ	pick up	t̪k-ala	t̪k-a	t̪k-ɛɛ	-	-	-
t̪wa	drip, leak	-	-	-	-	-	-
ts̪i	untie	tsɪŋ-ala	-	-	-	-	-
tsíclɛ	bind, tie	tsí-ala	-	-	-	-	-
tsàmɛ	spit	tsàm-ala	-	-	-	-	-
tsíbɔ	grind, trample	tsíb-ala	-	-	-	-	-
tsìɛ	live, be well	-	-	-	-	-	-
tsíɛ	cut	tsíy-ala	-	-	-	-	-
tsilɔ	write	tsil-ala	tsil-a	-	-	-	-
tsimelɛ	sneeze	tsím-ala	-	tsil-ɛɛ	-	-	-
tsíndɔ	shove, push	tsínd-ala	-	tsim-ɛɛ	-	-	-
túà	move places	tóg-ala	-	tóg-ɛɛ	-	-	-
tùndɛ	miss	tünd-ala	-	-	-	-	-
túncwɔ	float	-	-	-	-	-	-
túwanɛ (nà)	meet	túw-ala	-	-	-	-	-
twálɔ	peck	twál-ala	-	-	-	-	-
vàà	praise	vàg-ala	-	-	-	-	-
vàmòkwè	knock over	-	-	-	-	-	-
váse	rise (dough)	-	-	-	-	-	vás-ɛɛ
vɛ	give	véy-ala	-	-	-	-	-

Verb	Gloss	Reciprocal -ala	Passive -a	Causative -ɛɛ	Applicative -ɛɛ	Autocausative -ɛga/-aga	Positional -ɛɛɛɛ
vè'è	try on clothes	vèg-ala	-	-	vè'-ɛɛ	-	-
vémb	blow nose	vémb-ala	-	-	-	-	-
césa	have desire	vés-ala	-	-	-	-	-
cwè̥a	breathe	-	-	-	-	-	-
vèye	measure	vèy-ala	-	-	-	-	-
vidɛ	(re-)turn	vid-ala	vid-a	vid-ɛɛ	vid-ega	-	-
vímalá	groan	-	-	-	-	-	-
víndo	hate	vínd-ala	-	-	-	-	-
cís	cover	vís-ala	-	vís-ɛɛ	-	-	-
víwo	suck	víw-ala	-	-	-	-	-
víyāsa	be light	-	-	-	-	-	-
víyala	touch	-	-	-	-	-	-
víj	be calm/cold	víl-ala	-	víl-ɛɛ	-	-	-
vòda	rest	vòd-ala	-	-	-	-	-
vílɛ	help	víl-ala	-	-	-	-	-
vòwa	wake up	vòw-ala	-	vòl-ɛɛ	vòl-ega	-	-
vù	leave	vúy-ala	vúm-a	-	-	-	-
víelé	blow	-	-	-	-	-	-
cíl	be sharp	-	-	-	-	-	-
vúba (nà)	hug	-	-	-	-	-	-

Verb	Gloss	Reciprocal - <i>ala</i>	Passive - <i>a</i>	Causative - <i>ɛɛ</i>	Applicative - <i>ɛɛ</i>	Autocausative - <i>ɛga/-aga</i>	Positional - <i>CMC</i>
vyámbelɛ	surround	-	-	-	-	-	-
vyɛ	draw	vyɛg-ala	-	-	-	-	-
wɛ̄ɛ	skin animals	wéŋg-ala	-	-	-	-	-
wámsɛ	hurry	-	-	-	-	-	-
wàvɛ	spread out	wàw-ala	wàw-a(a)	-	-	-	-
wáwɔ	crawl	-	-	-	-	-	-
wɛ	die	-	-	-	-	-	-
wómbelɛ	sweep	wómb-ala	-	-	-	-	-
wúmbɛ	want	wúmb-ala	-	-	-	-	-
wùmɛ	pluck	wùm-ala	-	-	-	-	-
wúŋgala	wander, dangle	-	-	-	-	-	-
wùsa	forget	wìs-ala	wìs-a(a)	-	-	-	-
yàlane	respond	-	-	-	-	-	-
yémɛdɛ	tighten	yém-ala	-	-	-	-	-
yíɛ	avoid, dodge	yé-ala	-	-	-	-	-
yimbɔ	visit	yimb-ala	-	-	-	-	-

## Appendix II: Texts

This appendix contains the annotated Gyeli text corpus which is comprised of three texts of different genres. The first one, *The Healer and the Antelope*, is an autobiographic narration, the second one, the *Nzambi Story*, a folktale, and the third a conversation with multiple speakers in the village Ngolo.

Each text is split up into intonation phrases. Since intonation phrases are not always clear-cut, especially in fast natural speech, I relied on two principles in determining intonation phrases: pauses and speaker intuition. As a first parsing principle, I took pauses as indications for intonation phrases. Later on, text annotation was done with the help of a language consultant who would naturally break the text up into phrases as he repeated the recordings during transcription. Intonation phrases do not always match grammatical sentences.

Each intonation phrase has four annotation lines. The first represents the surface form on the word level. The second line shows the underlying form on the morpheme level, including tonal changes. Transcription lines do not contain punctuation marks as those are conventions for written, but not natural spoken language. The third line is the gloss and the fourth the translation. Code-switching to, for instance, Kwasio or French, is indicated in the gloss line with the language name in square brackets for non-Gyeli elements. If a whole phrase is in a language other than Gyeli, for instance in Bulu, only the surface form is indicated, but not the underlying form. Square brackets in the translation line serve as explanations and do not translate the transcription literally.

## II.1 The Healer and the Antelope

The story about the healer who turned into an antelope is an autobiographic narrative by Ada Joseph, about 30 years old at the time of recording. The narrative was audio recorded in May 2011 in Nziou, a village close to Kribi. During lunch time small talk with the Mabi speakers Djiedjhie François and Bimbvoung Emmanuel Calvin, and me, this anecdote came up and Ada agreed to tell it again for the recording.

The narrative is about an old man that Ada knew from his village when he was a teenager. This man was a healer and became sick himself. Since he did not want to die, he turned himself into an antelope and fled into the forest. The villagers were worried about this and tried to kill the antelope, but they could never find it.

(A1) yóò yá            táàlè  
yóò ya-H        táàlè  
so 1P-PRES begin  
'So, we begin.'

(A2) yóò ngâ            nû            à            bé        ngâ  
yóò ngâ        nû            a        bë-H ngâ  
so Ø1.healer 1.DEM.PROX 1.PST1 be-R Ø1.healer  
'So, this healer was a healer.'

(A3) ngâ  
ngâ  
Ø1.healer  
'a healer.'

(A4) à            jílé        mâ  
a        jíle-H        mâ  
1S.PST1 stay-R COMPL  
'He was there.'

(A5) à            njâ        dyùmó        bùdàà        dyùmó        bùdàà        dyùmó  
a        nji-H        a        dyùmɔ-H b-ùdì        a        dyùmɔ-H  
1.PST1 come-R 1S.PST1 heal-R    ba2-person 1S.PST1 heal-R  
bùdàà        dyùmó        bùdì  
b-ùdì        a        dyùmɔ-h b-ùdì  
ba2-person 1S.PST1 heal-R    ba2-person  
'He came, he was healing people (4x).'

- (A6) à múà      médé nyá mùdì  
       a múà      médé nyá m-ùdì  
       1 be.almost self real N1-person  
       'He was himself a real (old) man.'
- (A7) à      dyùḿ bùdì      à      dyùḿ bùdì  
       a      dyùm-H b-ùdì      a      dyùm-H b-ùdì  
       1S.PST1 heal-R ba2-person 1S.PST1 heal-R ba2-person  
       à      múà      médé nyá mùdì      póné      ntúlé  
       a      múà      médé nyá m-ùdì      póné      ntúlé  
       1S.PST1 be.almost self real N1-person Ø7.truth Ø3.old  
       'He was healing people, he was healing people, he was himself a real old man.'
- (A8) nyè      táàlé      bábè  
       nyε      táàlε-H bábè  
       1S.PST1 begin-R Ø7.illness  
       'He started to be sick.'
- (A9) gbí-gbí-gbí-gbí-gbí à múà      nà      bábè      tí      wúmbè wè  
       gbí-gbí-gbí-gbí-gbí a múà      nà      bábè      tí      wúmbε wè  
       IDEO:roaming      1 be.almost COM Ø7.illness NEG want die  
       '[imitation of the disease roaming in his body] He was about to be sick, without wanting to die.'
- (A10) bá      sàgà      é      kfùmàlà mè múà      ndáà mùdì  
       ba-H      sàga      é      kfùmala me múà      ndáà m-ùdì  
       2-PRES be.surprised LOC find      1S be.almost also N1-person  
       'They are surprised to find that I was a grown up person (story teller about his own age at point of when story takes place).'
- (A11) mè múà      póné      wá      yìmbá nté      wû  
       me múà      póné      wá      yìmbá nté      wû  
       1S be.almost Ø7.truth 3:ATT Ø7.age Ø3.size there  
       'I was really about the age of this size there [makes a gesture with hand showing his height].'
- (A12) allez  
       go.IMP.PL  
       '[French] so...'
- (A13) yá      sàgà      àà      ndáwò      dé      tù      nyè médé támé  
       ya-H      sàga      àà      ndáwò      dé      tù      nyε médé támé  
       1P-PRES be.surprised 1.COP Ø9.house LOC inside 1 self alone

‘We are surprised. He is in his house all by himself.’

- (A14) m̄h-m̄h-m̄-m̄-m̄h  
m̄h-m̄h-m̄-m̄-m̄h  
IDEO:self.talk  
‘[imitation of healer’s self talk and noises he makes in the house].’
- (A15) yá sàgà ménó wê nyéè  
ya-H sàgà ménó wê nyéè  
1P-PRES be.surprised 7Ø.morning in see.SBJV  
mápà má njibù má bwámó  
H-ma-pà má njibù ma-H bwámó-H  
OBJ.LINK-ma6-paw 6:ATT Ø1.antilope 6-PRES come.out-R  
ndáwò dé tù  
ndáwò dé tù  
Ø9.house LOC inside  
‘We are surprised in the morning to see traces of an antelope which  
come out of the house,’
- (A16) kè dèndì  
kè d-éndì  
go le5-courtyard  
‘going into the courtyard.’
- (A17) kè dígè mpù  
kè díge mpù  
go look like.this  
‘Going looking like this,’
- (A18) mùdì nû bélé  
m-ùdì nû bélé  
N1-person 1.DEM.DIST be-NEG  
‘nobody is there.’
- (A19) ndùù à vidiégáà njibù  
ndùù a vidiég-áà njibù  
so 1S.PST1 turn-PRF Ø1.antilope  
‘[French: So], he has already turned into an antelope.’
- (A20) à múa á kék jíi dé tù  
a múa a-H kék-H jíi dé tù  
1.PST1 be.almost 1-PRES go-R Ø7.forest LOC inside  
‘He was about to go into the forest,’

- (A21) nà ndzí gyâ  
       nà ndzí gyâ  
       COM Ø9.path Ø7.length  
       ‘on the long path.’
- (A22) ké jíí dé tù  
       kè-H jíí dé tù  
       go-R Ø7.forest LOC inside  
       ‘(He) goes into the forest’
- (A23) nà ndzí gyâ  
       nà ndzí gyâ.  
       COM Ø9.path Ø7.length  
       ‘on the long path.’
- (A24) ké jíí dé tù  
       kè-H jíí dé tù  
       go-R Ø7.forest LOC inside  
       ‘(He) goes into the forest’
- (A25) nà ndzí gyâ  
       nà ndzí gyâ  
       COM Ø9.path Ø7.length  
       ‘on the long path.’
- (A26) nà pándè vâ bùdì báà bë  
       nà pándè vâ b-ùdì báà bë  
       CONJ arrive here ba2-person 2.COP there[Kwasio]  
       ‘And having arrived here, these people are there.’
- (A27) á lèmbó nâ bùdì báà bá  
       a-H lèmbo-H nâ b-ùdì báà ba-H  
       1S-PRES know-R COMP ba2-person 2.DEM.PROX 2-PRES  
       múà búélè nâ bá dyúù nyê  
       múà búélè nâ ba-H dyúù nyê  
       be.almost fish COMP 2-PRES kill.SBJV 1.NSBJ  
       ‘He knows that these people are about to fish (look for him) in order  
       to kill him.’
- (A28) nâ bá dyúù nyê vèè mùdì nyè jääsà  
       nâ ba-H dyúù nyê vèè m-ùdì nyè jääsà  
       COMP 2-PRES kill.SBJV 1.NSBJ only N1-person 1.SBJ disappear  
       ‘That they kill him. Suddenly the person disappears,’

(A29) nà      ké      jií      dé      tù      nà      ndzí      pámò dê  
nà      kè-H jií      dé      tù      nà      ndzí      pámò dē  
CONJ go-R Ø7.forest LOC inside COM Ø9.path arrive today  
'And (he) goes in the forest on the path till today,'

(A30) tí      nyê nyê  
tí      nyê nyε  
NEG see 1.NSBJ  
'without seeing him.'

## II.2 Nzambi Story

The *Nzambi Story* is a well-known folktale among the Bagyeli. It was video recorded in August 2012 in the Gyeli village Ngolo. While Tata is the main narrator, standing in the middle of the village under the big tree, the rest of the village is gathered around him and comments on both the story and the recording.

The folktale is about two friends, both called *Nzambi*, which means ‘God’. One of them grows breadfruits, the other palm nuts. The Nzambi growing breadfruit marries the daughter of his friend and they have a child. When the palm trees are not producing well, the family suffers hunger and the palm nut grower Nzambi sends his wife to the breadfruit grower Nzambi to ask for food. The breadfruit grower Nzambi agrees to give food to the wife, but keeps their child in return and eats it. When the palm nut grower learns about this, he goes to see his friend and ask him why he did this. The breadfruit grower admits that he ate the child and pretends that he also ate his own children by showing him monkey skulls. He then suggests that the palm nut grower should also eat his children so that they get good skin like white people. But the palm nut grower rather takes revenge on his friend by locking the breadfruit grower’s family in a house which he then burns down. He then has mice eat the remains of the burned bodies. When the breadfruit grower Nzambi returns home and finds his whole family dead, he is devastated.

Tata:

(N2) jíyò.

jíyò

sit.down

‘Sit down [Introductory words to a story]’

(N3) yóò nzàmbí núù                        jì  
yóò nzàmbí núù                        jì.  
so Ø1.PN 1.DEM.PROX sit

‘So, there is this [person called] Nzambi.’

(N4) nzàmbí jìlē    mà  
nzàmbí jìlē-H mà  
Ø1.PN sit-R COMPL[Kwasio]

‘Nzambi is already there.’

Aminu to cameraman:

- (N5) wè nzíí                bálè bébáà  
wε nzíí                bále H-be-báà  
2S PROG.PRES keep OBJ.LINK-be8-word  
‘You are keeping the words.’

Tata:

- (N6) wè nzíí                bálè mpà  
wε nzíí                bále mpà  
2S PROG.PRES keep good  
‘You are keeping [the words] well.’
- (N7) yóò nzàmbí núù                jì  
yóò nzàmbí núù                jì  
so Ø1.PN 1.DEM.PROX sit  
‘So there is this [person called] Nzambi.’

Aminu:

- (N8) bwáá lá bô  
bwáa-H lâ-H b-ô  
2P-PRES tell-R 2-NSBJ  
‘You tell them!’

Tata:

- (N9) nzàmbí jíí                à                lwó                mò                kwádó  
nzàmbí jíí                a                lwô-H mò                kwádó  
Ø1.PN sit.COMPL 1S.PST build-R COMPL Ø7.village  
‘Nzambi is there, he has already built a village,’

- (N10) bá nà mùdâ wê  
bá nà m-ùdâ w-ê  
2.SBJ COM 1-woman 1-POSS.3S  
‘they [= him] and his wife.’

- (N11) bànzàmbí bábáà  
ba-nzàmbí bá-báà,  
ba2-PN 2-two  
‘Two Nzambis,’

- (N12) nógá gyáà nkè nógá gyáà mbyê  
 nó-gá gyáà nkè nó-gá gyáà mbyê  
 1-other Ø1.side Ø3.low 1-other Ø1.side Ø3.high  
 'one down-stream, the other up-stream.'
- (N13) é mpù bá kí nâ jíwó mbyê nà jíwó  
 é mpù ba-H ki-H nâ jíwó mbyê nà jíwó  
 LOC like.this 2-PRES say-R COMP Ø7.river Ø3.high CONJ Ø7.river  
 nkè  
 nkè.  
 Ø3.low  
 'Like this they say that up the river and down the river.'
- (N14) yóò bànzàmbí bá tè bá jì  
 yóò ba-nzàmbí bá tè ba-H jì  
 so ba2-PN 2:ATT there 2-PRES sit  
 'So the Nzambis there sit [are settled].'
- (N15) yóò nzàmbí nógá núù bé nzàmbí wà gyí  
 yóò nzàmbí nó-gá núù bë-H nzàmbí wà gyí  
 so Ø1.PN 1-other 1.PST2 be-R PN 1:ATT what  
 'So this other Nzambi was which Nzambi?'
- (N16) mé líbélè nzàmbí wà lèléndí  
 mε-H líbelε nzàmbí wà le-léndí  
 1S-PRES show Ø1.PN 1:ATT le5-palm.tree  
 'I show [gesture], the Nzambi of the palm tree.'
- (N17) nónégá nyègà  
 nó-négá nyè-gà  
 1-other 1.SBJ-CONTR  
 'The other one,'
- (N18) wà lè-bóò  
 wà le-bóò.  
 1:ATT le5-breadfruit.tree  
 'the one of the breadfruit tree.'
- (N19) yóò bànzàmbí bá tè bà bwàá só  
 yóò ba-nzàmbí bá tè ba bwàà-H só,  
 so ba2-PN 2:ATT there 2.PST1 have-R Ø1.friend  
 'So, the Nzambis there became friends,'

- (N20) nâ      bá      jî  
       nâ      ba-H      jî  
       COMP 2-PRES sit.SBJV  
       'so that they stay,'
- (N21) é      nû                  pè      é      nû                  pè  
       é      nû                  pè      é      nû                  pè  
       LOC 1.DEM.PROX there LOC 1.DEM.PROX there  
       'one there and one there.'
- (N22) bànzàmbí    bá      tè      bá      jìlé    mà  
       ba-nzàmbí    bá      tè      ba-H      jìlē-H    mà  
       ba2-PN      2:ATT there 2-PRES sit-R COMPL[Kwasio]  
       'The Nzambis there live there already.'
- (N23) yóò    bá      kí      nâ      éékè  
       yóò    ba-H      ki-H      nâ      éékè  
       so    2-PRES say-R COMP EXCL  
       'So they say that [EXCL of surprise]!'
- (N24) mwánjò    wê                  mùdâ      wà      nû  
       m-wánjò    w-ê                  m-ùdâ      wà      nû  
       N1-child 1-POSS.3S N1-woman 1:ATT 1.DEM.PROX  
       'His child [is] the wife of this one [pointing to imaginary breadfruit Nzambi].'
- (N25) à      bwàà  
       a      bwàà  
       1.PST1 give.birth  
       'She has given birth.'
- (N26) nyègà      váà      nyègá                  tsíyé    sâ      nà      máléndí,  
       nyε-gà      váà      nyε-gá                  tsíyé    sâ      nà      ma-léndí,  
       1.SBJ-CONTR here 1.SBJ-CONTR live-R only COM 6-palm.tree  
       máléndí    máà      móga  
       ma-léndí    máà      m-ó-gà  
       6-palm.tree 6:DEM 6-NSBJ-CONTR  
       'Him here, he lives only from palm trees, these palm trees.'
- (N27) má      dvúmólé      mbvú      mbì                  mbvû  
       ma-H      dvúmó-lé      mbvú      mbì                  mbvû  
       6-PRES produce-NEG Ø3.year like[Kwasio] Ø3.year  
       'They don't produce [fruit] every year,'

- (N28) màléndí        máà        vèè kwè mímpìndí  
       ma-léndí        máà        vèè kwè H-mi-mpìndí  
       ma6-palm.tree 6.DEM.PROX only fall OBJ.LINK-mi4-non.ripe  
       ‘these palm trees only falling non-ripe [fruit].’
- (N29) nzàmbí à        bwàā        mwánò  
       nzàmbí a        bwàā-H        m-wánò  
       Ø1.PN 1.PST1 give.birth-R N1-child  
       ‘Nzambi has given birth to a child.’
- (N30) yóò nzàmbí nyègà        à        k̄éé        dígè        mísi  
       yóò nzàmbí nyε-gà        a        k̄éé        dígε        m-ísì  
       so Ø1.PN 1.SBJ-CONTR 1.PST1 go.COMPL watch ma6-eye  
       ‘So this Nzambi has gone and watched with his eyes [= was thinking].’
- (N31) nyè nâ        óóó        mùdâ  
       nyε nâ        óóó        m-ùdâ  
       1.SBJ COMP EXCL N1-woman  
       ‘He: ‘Oh, wife,’
- (N32) bàmbé kê        jî mbúmbù        mwánò sá        yí        dè  
       bàmbé kê        jî mbúmbù        m-wánò sá        yí        dè  
       sorry go.IMP ask Ø1.namesake N1-child Ø7.thing 7:ATT eat  
       ‘excuse me, go and ask the namesake [the other Nzambi] for a little  
       to eat,’
- (N33) é        pè        nâ        á        njíyè        m̄é        nà        ȳ  
       é        pè        nâ        a-H        njíyε        m̄é        nà        ȳ-̄  
       LOC there COMP 1-PRES come.SBJV 1S.NSBJ COM 7-NSBJ  
       ‘there so that she bring me that [food].’
- (N34) mè móà        wè nà        nzà  
       me móà        wè nà        nzà  
       1S be.almost die COM Ø9.hunger  
       ‘I’m about to die from hunger.’
- (N35) yóò mùdâ        nùù        tè  
       yóò m-ùdâ        nùù        tè,  
       so N1-woman 1.COP there  
       ‘So the woman is there [= leaves],’

- (N36) kíyà mwánò ndzèngò  
       kíya m-wánò ndzèngò  
       carry N1-child inclined  
       ‘carry the child on her side [in contrast to on the back],’
- (N37) nkwé      nkô  
       nkwé      nkô.  
       ∅3.basket ∅3.back  
       ‘the basket on the back.’
- (N38) wóóóóóó      gbìm  
       wóóóóóó      gbìm  
       IDEO:moving IDEO:surface.impact  
       ‘[depiction of moving by foot or motorbike and imitating sound of putting basket down]’
- (N39) áá      gyí      wé      ló      njì      gyésò  
       áá      gyí      wε-H      ló      njì      gyésò  
       EXCL what 2S-PRES RETRO come look.for  
       ‘[Breadfruit Nzambi talking] Ah, what have you just come to look for?’
- (N40) nyè      náà      mùdì      wáá      mè wééé      ná  
       nyε      náà      m-ùdì      w-áá      mε wééé      ná  
       1.SBJ COMP N1-person 1-POSS.1S 1S die.COMPL COM  
       nzà  
       nzà  
       ∅9.hunger  
       ‘She: ‘My person, I’m dead from hunger.”
- (N41) nkè      nyì nzí      sílééé      bédéwò  
       nkè      nyi nzí      sílééé      H-be-déwò  
       ∅9.field 9 PROG.PST finish.COMPL OBJ.LINK-be8-food  
       ‘The field was already running out of food.’
- (N42) bédéwò bíndè      byò      mé      ló      njì      lébèlè  
       be-déwò bí-ndè      by-ò      mε-H      ló      njì      lébèlè  
       be8-food 8.DEM-ANA 8-NSBJ 1-PRES RETRO come follow  
       bédéwò      bà wé  
       H-be-déwò bà wè  
       be8-food AP 2S.NSBJ  
       ‘This food, I have come to look for the food at your place.’

- (N43) náà      ká wè múà      wáà      vólè mē  
       náà      ká we múà      wáà      vóle mè  
       COMP if 2S be.almost 2S.FUT[Kwasio] help 1S.NSBJ  
       'If you can help me...'
- (N44) nzà      nyîi      mê      mî  
       nzà      nyîi      mê      mî  
       Ø9.hunger 9.COP 1S.NSBJ Ø3.stomach  
       'I have hunger in my stomach.'
- (N45) nágylé      wà      mùdâ  
       nágylé      wà      m-ùdâ  
       Ø1.breastfeeding 1:ATT N1-woman  
       '[I am a] breastfeeding woman.'
- (N46) yóò mé      lí      njì      gyésò      sá      yí      dè  
       yóò mε-H      lí      njì      gyésò      sá      yí      dè  
       so 1S-PRES RETRO come search Ø7.thing 7:ATT eat  
       'So I just came to look for something to eat.'
- (N47) yóò nzàmbí á      kí      náà      éè  
       yóò nzàmbí a-H      kí-H      náà      éè  
       so Ø1.PN 1-PRES say-R COMP yes  
       'So Nzambi says yes,'
- (N48) bá      yóò      yîi      tè  
       bá      y-óò      yîi      tè  
       Ø7.word 7-POSS.2S 7.COP there  
       'Your speech is there [= I understand you].'
- (N49) ndí vèdáà  
       ndí vèdáà  
       but but[Bulu]  
       'But still,'
- (N50) yîi      mùdà nlâ  
       yîi      mùdà nlâ  
       7.COP big      Ø3.story  
       'this is a big story.'
- (N51) yóò nzàmbí kí      nâ      bô  
       yóò nzàmbí kí-H      nâ      bô  
       so Ø1.PN say-R COMP good[French]  
       'So Nzambi says 'Good."

- (N52) mùdâ kê nà nyè mánkê  
 m-ùdâ kè-H nà nyè [é?] ma-nkê  
 n1-woman go-R COM 1.NSBJ [LOC?] ma6-field  
 ‘Woman [his wife], go with her to the fields,’
- (N53) kánâ m̄m̄  
 kánâ m̄m̄  
 or no  
 ‘or no.’
- (N54) wè médé pâ lígè yá nà nyè yá ké  
 wε médé pā lígε ya-H nà nyε ya-H kε-H  
 2S.SBJ self do.first stay 1P-PRES COM 1.NSBJ 1P-PRES go-R  
 mánkê  
 H-ma-nkê  
 OBJ.LINK-6-field  
 ‘You [= his wife] stay first, we and her, we go to the fields.’
- (N55) yjò bá téé kēndè  
 yjò ba-H téè-H kēndè  
 so 2-PRES start.walking-R Ø7.walk  
 ‘So they go on a walk,’
- (N56) bà mùdâ wà nû  
 bà m-ùdâ wà nû  
 AP N1-woman 1:ATT 1.DEM.PROX  
 ‘they with this woman.’
- (N57) wóóóó pámò mánkê  
 wóóóó pámo H-ma-nkê  
 IDEO:moving arrive OBJ.LINK-ma6-field  
 ‘[depiction of moving] Having arrived in the fields,’
- (N58) nzàmbí màbòò nkweè dé nâ v̄sì  
 nzàmbí ma-bòò nkweè dé nâ v̄sì  
 Ø1.PN ma6-bread.fruit Ø3.basket LOC COMP IDEO:pouring  
 ‘Nzambi pours the bread fruits into the basket.’
- (N59) yjò nzàmbí á nòò mábòò mánđè  
 yjò nzàmbí a-H nòò-H H-ma-bòò má-ndè  
 so Ø1.PN 1-PRES take-R OBJ.LINK-ma6-bread.fruit 5.DEM-ANA  
 ‘So Nzambi takes those bread fruit.’

- (N60) nyè nâ bò  
 nyε nâ bò  
 1.SBJ COMP good[French]  
 ‘He says ‘Good,’
- (N61) ò múa gyésò nâ wé kè  
 o múa gyésɔ nâ wε-H kè  
 2S[Kwasio] be.almost search COMP 2S-PRES go  
 ‘you are about to want to leave.’
- (N62) sílê nà mè kèndè vúdû  
 sílê nà mè kèndè vúdû  
 finish.IMP COM 1S Ø7.time one  
 ‘Finish with me one time [= in one go, immediately].’
- (N63) mèé jílé wé bvùbvù  
 mèé jí-lé wè bvùbvù  
 1S.PRES.NEG ask-NEG 2S.NSBJ much  
 ‘I don’t ask you for much.’
- (N64) vê mê sâ mwánò wóò wà wè bùdé  
 vê mè sâ m-wánò w-óò wà wε bùdε-H  
 give.IMP 1S.NSBJ only N1-child 1-POSS.2S 1:ATT 2S have-R  
 nû  
 nû  
 1.DEM.PROX  
 ‘Give me only your child that you have here.’
- (N65) mé lígé nyê dè  
 mε-H lígε-H nyê dè  
 1S-PRES stay-R 1.NSBJ eat  
 ‘I stay to eat it,’
- (N66) nà màbó’ò máà  
 nà ma-bó’ò máà  
 COM ma6-bread.fruit 6:DEM.PROX  
 ‘with these bread fruit.’
- (N67) wé nòó mábó’ò máà  
 wε-H nòò-H H-ma-bó’ò máà  
 2S-PRES take-R OBJ.LINK-ma6-bread.fruit 6:DEM.PROX  
 ‘You take these bread fruit.’

- (N68) wègà            wé            ké     nà     mâ  
       wε-gà            wε-H            kε-H nà     m-â  
       2S.SBJ-CONTR 2S-PRES go-R COM 6-NSBJ  
       ‘As for you, you take them [= the bread fruit] away.’
- (N69) mègà            mé            lígé     dè     mwánò     wóò  
       mε-gà            mε-H            lɪgε-H dè     m-wánò     w-óò  
       1.SBJ-CONTR 1S-PRES stay-R eat ma1-child 1-POSS.2S  
       ‘As for me, I stay and eat your child,’
- (N70) nà     màbóò  
       nà     ma-bóò  
       COM ma6-bread.fruit  
       ‘with bread fruit.’
- (N71) sílè  
       sílē  
       finish  
       ‘That’s it!’
- (N72) éékè     mùdâ     à     gyééé     à     gyééé     áh  
       éékè     m-ùdâ     a     gyééé     a     gyééé     áh  
       EXCL N1-woman 1.PST1 cry.COMPL 1.PST1 cry.COMPL EXCL  
       mùdì     wááá     wé     sá     mē     ná  
       m-ùdì     w-ááá     wε-H     sâ-H mē     ná  
       N1-person 1-POSS.1S 2S-PRES do-R 1S.NSBJ how  
       ‘Oh, the woman cried and cried; ah, my person, what do you do to  
       me?’
- (N73) yóò nzàmbí kí     náà     mè     bwàá     wé     tsíyé  
       yóò nzàmbí kì-H náà     mε     bwàà-H wé     tsíyé  
       so     Ø1.PN say-R COMP 1S.PST1 have-R 2S.NSBJ cut  
       lèkélè     dé     nâ     mé     lígé     dè     mwánò     wóò  
       le-kélè     dé     nâ     mε-H     lɪgε-H dè     m-wánò     w-óò  
       le5-speech today COMP 1S-PRES stay-R eat N1-child 1-POSS.2S  
       ‘So Nzambi says ‘I have cut your word today’ [= I’m not listening  
       to you] ‘I stay and eat your child’,’
- (N74) nà     màbóò  
       nà     ma-bóò  
       COM ma6-bread.fruit  
       ‘with bread fruit.’

- (N75) lèkáà lé tè'ètè yá mwánò yî  
 le-káà lé tè'ètè yá m-wánò yî  
 le5-kind 5:ATT Ø7.tenderness 7:ATT N1-child 7.DEM.PROX  
 'The kind of this tenderness of the child,'
- (N76) yî mpà yôò wé kâ yô dùmbó  
 yî mpà yôò wé-H kâ-H y-ò dùmbó  
 7.COP good Ø7.time 2S-PRES wrap-R 7-NSBJ Ø7.package  
 'is good when you wrap it in a (leaf) package.'
- (N77) mèè yô dè  
 mèè y-ô dè  
 1S.FUT 7-NSBJ eat  
 'I will eat it.'
- (N78) yô ñzàmbí kí náà bô  
 yô ñzàmbí kì-H náà bô  
 so Ø1.PN say COMP good[French]  
 'So Nzambi says 'Good','
- (N79) ká wèé wúmbélé ndáà  
 ká wèé wúmbé-lé ndáà  
 if 2S.PRES.NEG want-NEG also  
 'if you don't want [this] either,'
- (N80) mé nòó nkŵê wá mábô  
 me-H nòò-H nkŵê wá H-ma-bô  
 1S-PRES take-R Ø3.basket 3:ATT OBJ.LINK-ma6-bread.fruit  
 'I take the basket with the bread fruit.'
- (N81) wé ké wè nà nzà nyôò é pè wé  
 wé-H ké-H wè nà nzà ny-ôò é pè wé-H  
 2S-PRES go-R die COM Ø9.hunger 9-POSS.2S LOC there 2S-PRES  
 ké wè nà nyôò  
 ké-H wè nà ny-ôò  
 go-R die COM 9-OBJ  
 'Your are going to die of your hunger there, you are going to die of it.'
- (N82) yô mùdâ dígé mísi ndééé  
 yô m-ùdâ dígé-H m-ísì ndééé  
 so N1-woman watch-R ma6-eye IDEO:staring  
 'So the woman looks with her eyes [ideophone for staring].'

- (N83) nyè nâ tòsâ  
 nyε nâ tòsâ  
 1.SBJ COMP nothing  
 ‘She [says]: no!’
- (N84) yóò mùdâ tóké mwánò kàlànè nyê  
 yóò m-ùdâ tóke-H m-wánò kàlane nyê  
 so N1-woman collect-R N1-child hand.over 1.NSBJ  
 ‘So the woman picks up the child, hands it over to him.’
- (N85) nzàmbí nyè nâ nkè  
 nzàmbí nyε nâ nkè  
 Ø1.PN 1.SBJ COMP go.HORT  
 ‘Nzambi [says]: Let’s go.’
- (N86) wóóóó bó pámdò  
 wóóóó bo-H pámo  
 IDEO:moving 2-PRES[Kwasio] arrive  
 ‘[depiction of motor sound] They arrive.’
- (N87) nzàmbí nyè nâ é mùdâ wâ  
 nzàmbí nyε nâ é m-ùdâ w-â  
 Ø1.PN 1.SBJ COMP LOC N1-woman 1-POSS.1S  
 ‘Nzambi [says]: My woman,’
- (N88) mwánò wéè nyè nû  
 m-wánò w-éè nyε nû  
 N1-child 1-POSS.3S 1 1.DEM.PROX  
 ‘her child is this.’
- (N89) mé lí nòò mwánò púù yá mábó’ò  
 mε-H lí nòò m-wánò púù yá ma-bó’ò  
 1S-PRES RETRO take N1-child Ø7.reason 7:ATT ma6-bread.fruit  
 mâ  
 mâ  
 6.DEM.PROX  
 ‘I have just taken the child for these bread fruit.’
- (N90) kálè mè báà kì nâ bá dûù bë  
 kálè mè báà kì nâ ba-H dûù bë  
 NEG.FUT 1S.SBJ 2.FUT say COMP 2-PRES must.not.SBJV grow  
 bédéwò  
 H-be-déwò  
 be8-food  
 ‘It’s not me, they [= who] will say that they must not grow food.’

- (N91) yóò mùdâ            nû        kè  
       yóò m-ùdâ            nû-H     kè  
       so N1-woman 1-PRES go  
       'So the woman goes.'
- (N92) ndènáà pámò lébû                      àá        gyì  
       ndènáà pámo H-le-bû                      àá        gyì  
       like.this arrive OBJ.LINK-le5-river.bank 1.INCH cry  
       'Having arrived like this [= without the child] at the river bank she  
       is at the beginning of crying.'
- (N93) àá        gyì àá        gyì dyúmò    nji     nyê     nòò  
       àá        gyì àá        gyì dyúmò    nji     nyê     nòò  
       1.INCH cry 1.INCH cry Ø1.spouse come 1.NSBJ take  
       'She's at the beginning of crying, she's at the beginning of crying,  
       the husband comes to fetch her.'
- (N94) é        ná    mwánò    nùù    vé  
       é        ná    m-wánò    nùù    vé  
       LOC how N1-child 1.COP where  
       'What! Where is the child?'
- (N95) nyè    nâ        só            wòò            nòò    mò        mwánò  
       nyè    nâ        só            w-òò            nòò-H    mò        m-wánò  
       1.SBJ COMP Ø1.friend 1-POSS.2S take-R COMPL 1-child  
       'She [says] 'Your friend has taken the child."
- (N96) à        këë            nyê        dè  
       a        këë            nyê        dè  
       1.PST1 go.COMPL 1.NSBJ eat  
       'He has left to eat it.'
- (N97) yóò á        ló        kí    náà  
       yóò a-H        ló        kí    náà  
       so 1-PRES RETRO say COMP  
       'So he just said that.'
- (N98) é        mpù        wèé            gyángyálé    bédéwò  
       é        mpù        wèé            gyángya-lé    H-be-déwò  
       LOC like.this 2S.PRES.NEG work-NEG OBJ.LINK-be8-food  
       'Like this, you don't work for your food.'

- (N99) yóò nyègá              nòò mwánò  
       yóò nyε-gá              nòò m-wánò  
       so 1.SBJ-CONTR take N1-child  
       ‘So the other taking the child,’
- (N100) á              lígé      nyê      dè  
       a-H              lígε-H      nyê      dè  
       1-PRES stay-R 1.NSBJ eat  
       ‘he stays to eat it,’
- (N101) nà      màbó’ò              méè  
       nà      ma-bó’ò              m-éè  
       COM ma6-bread.fruit 6-POSS.3S  
       ‘with his bread fruit.’
- (N102) yóò nzàmbí wà      nû              ké      dígè mpù      nâ      ké  
       yóò nzàmbí wà      nû              kè-H dígε mpù      nâ      ké  
       so Ø1.PN 1:ATT 1.DEM.PROX go-R look like.this COMP EXCL  
       ‘So this Nzambi goes and looks like this: ‘Ey!’
- (N103) mbúmbù      wâ              wé              kúmbó      mê              sá  
       mbúmbù      w-â              wε-H              kúmbɔ-H      mê              sá  
       Ø1.namesake 1-POSS.1S 2S-PRES arrange-R 1S.NSBJ Ø7.thing  
       mpù  
       mpù  
       like.this  
       ‘My namesake, you really do this to me.’
- (N104) é      mwánò wâ              dyúwò  
       é      m-wánò w-â              dyúwò  
       EXCL N1-child 1-POSS.1S on  
       ‘Hey, about my child!’
- (N105) [clicking] yóò wà      nûndè              dígé      mísi  
       [clicking] yóò wà      nû-ndè              dígε-H m-ísì  
       [clicking] so 1:ATT 1.DEM-ANA look-R ma6-eye  
       ‘[sound of disappreciation] So this one looks with his eyes,’
- (N106) ndééééé      nyè      nâ      tòsâ  
       ndééééé      nyε      nâ      tòsâ  
       IDEO:staring 1.SBJ COMP nothing  
       ‘[depiction of staring] He [says]: No!’

(N107) yî pè'è nyà mwánò mûdû mé pâ̄  
yî pè'è nyà m-wánò m-ùdû m-e-H pâ̄-H  
7.COP Ø9.memory 9:ATT N1-child N1-male 1S-PRES do.first-H

ná nyâ vè  
ná ny-â vè  
again 9-NSBJ give

‘This is the memory of a boy [= talks about himself], I first give it  
[to him]. [= pay the other Nzambi back]’

(N108) yóò nzàmbí wà nû nyî<sup>1</sup>  
yóò nzàmbí wà nû nyî<sup>1</sup>  
so Ø1.PN 1:ATT 1.DEM.DIST enter

‘So that Nzambi comes in.’

(N109) bóŋ  
bóŋ  
good[French]

‘Good.’

(N110) mé lámbó nzàmbí wà nû  
m-e-H lámbo-H nzàmbí wà nû  
1S-PRES trap-R Ø1.PN 1:ATT 1.DEM.PROX

‘I trap this Nzambi,’

(N111) nà mé wúmbé lèmbò é mpù à bùdé mê  
nà m-e-H wúmbé-H lèmbò é mpù a bùdé-H mê  
CONJ 1S-PRES want-R know LOC like.this 1 have-R 1S.NSBJ

‘and I want to know like this how he takes me (what he thinks of  
this story).’

(N112) yóò nzàmbí wà nû ké̄ ké̄ bwâsà nyè nâ  
yóò nzàmbí wà nû ké̄ ké̄ bwâsa nyè nâ  
so Ø1.PN 1:ATT 1.DEM.PROX go.COMPL think 1.SBJ COMP

‘So this Nzambi has gone to think, he [says]:’

(N113) sá mè nzí sâ yî  
sá mè nzí sâ yî  
Ø7.thing self 1S PROG.PST do 7.DEM.PROX

‘The thing itself, I was doing it [= by sending his wife].’

(N114) mé pâ ná kè dígè mùdì wà nû  
mε-H pâ-H ná kè dígε m-ùdì wà nû  
1S-PRES do.first-H again go see N1-person 1:ATT 1.DEM.PROX

é péé  
é pé-é  
LOC over.there.DIST

‘I go first again to see this person over there.’

(N115) yóò nzàmbí njí mpù bâââââ njì dígè  
yóò nzàmbí njî-H mpù bâââââ njì dígε  
so Ø1.PN come-R like.this IDEO:walking.far come look  
mpù  
mpù  
like.this

‘So Nzambi comes like this [depiction of walking a long distance],  
comes looking like this.’

(N116) nyè nâ kéééé  
nyε nâ kéééé  
1.SBJ COMP EXCL

‘He [says]: What!’

(N117) mbúmbù  
mbúmbù  
Ø1.namesake

‘Namesake!’

(N118) mélj njì bàgyê bà wê  
mε-H lj njì ba-gyê bà wê  
1S-PRES RETRO come ba2-stranger AP 2S

‘I just came as a guest to you.’

(N119) ndíííí  
ndí  
but  
‘But...’

(N120) njímò wá sá njìnî  
njímò wá sá njìnî  
Ø3.entire 3:ATT Ø7.thing different  
‘the whole thing is different.’

(N121) mé lí njì gyésò bà wê  
mε-H lí njì gyésɔ bà wê  
1S-PRES RETRO come search AP 2S

‘I just came to search at your’s.’

(N122) ééé nzàmbí kí nâ éé  
ééé nzàmbí kì-H nâ éé  
EXCL Ø1.PN say-R COMP yes

‘Hey, Nzambi says: ‘Yes,’

(N123) bèsá bíndè byésè béè ndáà  
be-sá bí-ndè by-ésè béè ndáà  
be8-thing 8.DEM-ANA 8-all 8.COP also

‘All those things are also there. [= way of introducing a problem]’

(N124) bèsá bíndè byésè béè ndáà  
be-sá bí-ndè by-ésè béè ndáà  
be8-thing 8.DEM-ANA 8-all 8.COP also

‘All these things are also there [= way of introducing a problem]’

(N125) ndí mèé sálé wê bvùbvù ndí vèdáà  
ndí mèé sâ-lé wê bvùbvù ndí vèdáà  
but 1S.PRES.NEG do-NEG 2S.NSBJ much but but[Bulu]  
mé dyúwó nâ  
mε-H dyúwɔ-H nâ  
1S-PRES understand-R COMP

‘But I don’t do you a lot, but I understand that,’

(N126) wéè dé mwánò nòò  
wéè dè-H m-wánò nòò  
2.PST2 eat-R N1-child no  
‘you have eaten the child, didn’t you?’

(N127) nyè nâ mèè dé póné nà màbó’ò  
nyε nâ mēè dè-H póné nà ma-bó’ò  
1.SBJ COMP 1S.PST2 eat-R Ø7.truth COM ma6-bread.fruit

‘He [says]: I really ate [it] with bread fruit.’

(N128) mègà mèè dyúwó nzâà dûwò lé  
mε-gà mēè dyúwɔ-H nzâà d-úwò lé  
1S.SBJ-CONTR 1S.PST2 feel-R Ø7.appetite le5-day 5:ATT  
tè  
tè  
there

‘As for me, I felt appetite that day.’

- (N129) mè kí bè nà tsídí  
       mɛ kí bè nà tsídí  
       1S.PST1 NEG[Kwasio] be COM Ø1.meat  
       ‘I didn’t have any meat.’
- (N130) á kfùmálá mpù nzàmbí lúndéléɛ́ é mpù  
       a-H kfùmala-H mpù nzàmbí lúndéléɛ́ é mpù  
       1-PRES find-R like.this Ø1.PN fill.COMPL LOC like.this  
       ‘He finds [it = inside the house] like this, Nzambi has filled [it =  
       the house] like this.’
- (N131) ké mbúmbù bwánò bà síléɛ́ kè vé  
       ké mbúmbù b-wánò ba síléɛ́ kè vé  
       EXCL Ø1.namesake ba2-child 2.PST1 finish.COMPL go where  
       ‘Ey namesake, where have all the children gone to?’
- (N132) nyè nâ kééé bwánò bâ mè síléɛ́  
       nyɛ nâ kéè b-wánò b-å mè síléɛ́  
       1.SBJ COMP EXCL ba2-child 2-POSS.1S 1S finish.COMPL  
       bô dyùù  
       b-ô dyùù  
       2-NSBJ kill  
       ‘He [says]: Ha, my children, I have already killed them all.’
- (N133) ngáà wé nyé mpù  
       ngáà wɛ-H nyɛ-H mpù  
       Q(tag) 2S-PRES see-R like.this  
       ‘Right, you see that?’
- (N134) békókó bé nlô bé tè  
       be-kókó bé nlô bé tè  
       be8-hollowness 8:ATT Ø3.head 8:ATT there  
       ‘The skulls there,’
- (N135) béè tè  
       béè tè  
       8.COP there  
       ‘are there,’
- (N136) mìnlô mí bákímì  
       mi-nlô mí ba-kímì  
       mi4-head 4:ATT ba2-monkey  
       ‘monkey heads.’

- (N137) kó mbúmbù nyè nzí lèmbò dyùù bô  
           kó mbúmbù nyε nzí lèmbo dyùù b-ô  
         EXCL Ø1.namesake 1.SBJ PROG.PST know kill 2-NSBJ  
       fàmîi      bá      bùdì      ná  
       fàmîi      bá      b-ùdì      ná  
     Ø1.family 2:ATT ba2-person how  
     ‘Oh namesake, how could he kill them, the family of people?’
- (N138) nyè nâ ó  
       nyε nâ ó  
       1.SBJ COMP EXCL  
     ‘He [says]: ‘Oh,’
- (N139) mbúmbù  
       mbúmbù  
     Ø1.namesake  
     ‘Namesake!’
- (N140) é yóò wà mwánò mùdû sá màmbò má  
       é yóò wà m-wánò m-ùdû sâ-H m-àmbò má  
       LOC so 2S[Bulu] N1-child N1-man do-R ma6-thing 6:ATT  
       mwánò mùdû  
       m-wánò m-ùdû  
       N1-child N1-man  
     ‘So you boy do boy things.’
- (N141) mè nzí wúmbè nâ bwánò bâ bá  
       mε nzí wúmbè nâ b-wánò b-â ba-H  
       1S.PST1 PROG.PST want COMP ba2-child 2-POSS.1S 2-PRES  
       bwámóò é mpù mìntángáné békúdé  
       bwámóò é mpù mi-ntángáné H-be-kúdé  
       become.SBJV LOC like.this mi4-white.person OBJ.LINK-be8-skin  
       bé mpâ  
       bé mpâ  
       8:ATT good  
     ‘I have been wanting my children to get like the white people good skin.’
- (N142) nzàmbí kí nâ bon  
       nzàmbí kì-H nâ bon  
       Ø1.PN say-R COMP good[French]  
     ‘Nzambi says: ‘Good,’

- (N143) mè dyúwó mò  
      mɛ dyúwɔ-H mò  
      1S.PST1 understand-R COMPL  
      ‘I have understood.’
- (N144) yóò nzàmbí kí nâ bon mè niyé mò  
      yóò nzàmbí kì-H nâ bon mɛ niye-H mò  
      so Ø1.PN say-R COMP good[French] 1S.PST1 return-H COMPL  
      ‘So Nzambi says: Good, I am returning home.’
- (N145) nyè nâ mbúmbù nlâ wùú gyálé  
      nyɛ nâ mbúmbù nlâ wùú gyà-lé  
      1.SBJ COMP N1-namesake Ø3.story 3.PRES.NEG be.long-NEG  
      ‘He [says]: ‘Namesake, the story isn’t long. [= it is easy]”
- (N146) sîlê dyùù fámí wóò wà bùdî wèè  
      sîlê dyùù fámí w-óò wà b-ùdî wèè  
      finish.IMP kill Ø1.family 1-POSS.2S 1:ATT ba2-person 2S.FUT  
      nyê  
      nyê  
      see  
      ‘Kill your whole family of people, you will see.’
- (N147) bwánò bóò báà bwámò míntángáné  
      b-wánò b-óò báà bwámo H-mi-ntángáné  
      ba2-child 2-POSS.2S 2.FUT become OBJ.LINK-mi4-white.person  
      ‘Your children will become white people.’
- (N148) gyí mèdé wé ké nà vùù wé  
      gyí mèdé wε-H kè-H nà vùù wé  
      what self 2S-PRES go-R CONJ worry there  
      ‘What do you go and worry about there?’
- (N149) yóò nzàmbí wà nûú niyè  
      yóò nzàmbí wà nûú niye  
      so Ø1.PN 1:ATT 1.DEM.DIST return  
      ‘So that Nzambi returns [home].’
- (N150) ékè nzàmbí wà nû áà sàlé bè nà  
      ékè nzàmbí wà nû áà sàlé bè nà  
      EXCL Ø1.PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM  
      bâ líná-á pámò  
      bâ líní a-H pámo  
      Ø7.word when 1-PRES arrive  
      ‘Oh! That Nzambi had no words as soon as he arrives.’

- (N151) nyè nâ álè  
      nyε nâ álè  
      1.SBJ COMP allez[French]  
      ‘He [says]: *Allez!* [= Ok].’
- (N152) nyáà ngà sílé nyî ndáwò dé tù  
      nyáà ngà sílé-H nyî ndáwò dé tù  
      shit.IMP PL finish-R enter Ø9.house LOC inside  
      ‘Shit, go all into the house.’
- (N153) sílê ngà nyî vâ  
      sílê ngà nyî vâ  
      finish.IMP PL enter here  
      ‘Enter all here.’
- (N154) á lúndélé bô lèkàá lé ndáwò nyî<sup>9</sup>  
      a-H lúndelε-H b-ô le-kàá lé ndáwò nyî  
      1-PRES fill-R 2-NSBJ le5-kind 5:ATT Ø9.house 9.DEM.PROX  
      nâ béè vyâ  
      nâ béè vyâ  
      COMP be.SBJV full  
      ‘He fills them in this kind of house that it [house] be full.’
- (N155) áà sílé kè nà dvùwó dyúwò  
      áà sílε-H kè nà dvùwɔ-H dyúwɔ  
      1.PST2 finish-R go CONJ stuff-R Ø7.top  
      ‘He has gone and stuffed the top [= with straw],’
- (N156) nâ tâ  
      nâ tâ  
      COMP tight  
      ‘tight.’
- (N157) yóò nzàmbí dígé mísi é mpù  
      yóò nzàmbí dígε-H m-ísì é mpù  
      so Ø1.PN look-R ma6-eye LOC like.this  
      ‘So Nzambi looks with the eyes like this.’
- (N158) nzá nzíí mêt nyê  
      nzá nzíí mêt nyê  
      who PROG.PRES 1S.NSBJ see  
      ‘Who is seeing me?’

- (N159) ah mbúmbù wè wé télé núndè  
       ah mbúmbù wε wε-H télε-H nú-ndè  
       EXCL Ø1.namesake 2S.SBJ 2S-PRES stand-R 1.DEM-ANA  
       ‘Ah namesake, is it you who is standing there?’
- (N160) nyàá jìwò jìwò jìwò wè  
       nyàà-H jìwɔ jìwɔ jìwɔ wε  
       shit-R close close close 2S  
       ‘Shit, close, close, close you!’
- (N161) nà mùdâ wóò wéè bésè báà tù wû  
       nà m-ùdâ w-óò wéè b-ésè báà tù wû  
       COM N1-woman 1-POSS.2S EXCL 2-all 2.COP inside there  
       ‘with your wife, so all are inside there.’
- (N162) lígè sâ nzàmbí nyè médé  
       líge sâ nzàmbí nyε médé  
       stay only Ø1.PN 1 self  
       ‘Only Nzambi himself stays [outside].’
- (N163) yóò nzàmbí sá mpù  
       yóò nzàmbí sâ-H mpù  
       so Ø1.PN do-R like.this  
       ‘So Nzambi does like this.’
- (N164) à kéé̄ nyî pè dyúwò à dígéé̄  
       a kéé̄ nyî pè dyúwò a dígéé̄  
       1.PST1 go.COMPL enter there on.top 1.PST1 watch.COMPL  
       à díg-â dígéé̄  
       a dígéé̄ a dígéé̄  
       1.PST1 watch.COMPL 1.PST1 watch.COMPL  
       ‘He went inside there on top and watched and watched and watched.’
- (N165) kì nâ nzá nyé mē  
       kì nâ nzá nyê-H mē  
       say COMP who see-R 1S.NSBJ  
       ‘[He] says: ‘Who sees me?’
- (N166) yá nyé-lé yá nyé-lé wóò  
       ya-H nyé-lé ya-H nyé-lé wóò  
       1P-PRES see-NEG 1P-PRES see-NEG 2S.OBJ[Kwasio]  
       ‘We don’t see, we don’t see you.’

(N167) nyè nâ àwâ  
nyε nâ àwâ  
1.SBJ COMP thanks

‘He: ‘Thanks.’

(N168) nyàá sùbò èsâs é dyúwò  
nyàá sùbɔ èsâs é dyúwò  
1.INCH pour Ø1.fuel LOC Ø7.top

‘He starts pouring fuel on top.’

(N169) wùùùù wùùùù  
wùùùù wùùùù  
IDEO:pouring IDEO:pouring  
‘[depiction of pouring].’

(N170) àlé  
àlé  
allez[French]  
‘Allez [= Ok],’

(N171) kóò nòò brìkê wê  
kóò nòò brìkê w-ê  
SEQU take Ø1.lighter[French] 1-POSS.3S  
‘then takes his lighter,’

(N172) vèè bédè  
vèè bédè  
only light  
‘just light [the house].’

(N173) tèèè uf  
tèèè uf  
IDEO:waiting IDEO:ignition  
‘[depiction of waiting and then the flame].’

(N174) mùdì kí tátò wúó  
m-ùdì kí tátò wú-o-H  
N1-person NEG.IMP scream there-VOC-DIST  
‘Nobody scream over there!’

(N175) áá nyáò áá táò  
áá nyá-ò áá tá-ò  
EXCL N1-mother-VOC EXCL N1-father-VOC  
‘Oh mother, oh father!’

(N176) nâ wòm mùdì núú jí nâ  
nâ wòm m-ùdì núú jì-H nâ  
COMP IDEO:silence N1-person 1.DEM.DIST stay-R COMP

wòm

wòm

IDEO:silence

‘Be there silence, that person stay silent.’

(N177) màà mâ  
m-àà mâ  
ma6-thing 6.DEM.PROX

‘These things...’

(N178) é mùdì nógá núù lígé vâ  
é m-ùdì nô-gá nûú lígé-H vâ  
LOC N1-person 1-other 1.DEM.PROX stay-R here

‘Is there any person left here?’

(N179) lèkfúdè  
le-kfúdè  
le5-idiot  
‘Idiot!’

(N180) à bwàá yéé kékì jì mpù  
a bwàà-H yéé kè-H jì mpù  
1 have-R then? go-R stay like.this

‘He [the other Nzambi] has gone and stood like this. [*Il est depuis allé rester comme ça.*]’

(N181) nyè nâ mèé bélé wû  
nye nâ mèé bë-lë wû  
1.SBJ COMP 1S.PRES.NEG be-NEG there

‘He: ‘I’m not there.’’

Nze:

(N182) yà!  
yà  
yes[German]  
‘Yes!’

Tata:

- (N183) mìntángáné mí múà vìdègà dé  
           mi-ntángáné mi-H múà vìdèga dé  
           mi4-white.person 4-PRES be.almost turn LOC  
       ‘They are about to turn into white people.’
- (N184) bon mpòngò sílēɛ  
       bon mpòngò sílēɛ  
       OK[French] Ø7.generation finish.COMPL  
       ‘OK, the generation has been wiped out,’
- (N185) nà bék bà-náyêyê  
       nà bék ba-náyêyê  
       CONJ 2P.COP ba2-bleached.out  
       ‘and you are bleached out [= white].’
- (N186) é mpù mbúmbù núú láá mê nâ  
       é mpù mbúmbù núú láà-H mê nâ  
       LOC like.this Ø1.namesake 1.DEM.DIST tell-R 1S.NSBJ COMP  
       ‘Like this, that namesake tells me that,’
- (N187) báà sâ nâ lèfû lèvúdû  
       báà sâ nâ le-fû lè-vúdû  
       2.FUT do COMP le5-day 5-one  
       ‘They will make that one day,’
- (N188) báà dyâ wû  
       báà dyâ wû  
       2.FUT sleep there  
       ‘they will sleep there.’
- (N189) wé dyúwó mpù bà-mìntùlè bógá bá tsígè  
       wε-H dyúwɔ-H mpù ba-mìntùlè bó-gá ba-H tsíge  
       2S-PRES hear-R like.this ba2-mouse 2-other 2-PRES take.off  
       tsùk tsùk tsùk  
       tsùk-tsùk-tsùk  
       IDEO:rustling  
       ‘You hear like this the other mice take off [depiction of noise of mice].’
- (N190) àà nàménó bwáà dè nàménó  
       àà nàménó bwáà dè nàménó  
       EXCL tomorrow 2P.FUT eat tomorrow  
       ‘Ah, tomorrow you will eat, tomorrow.’

(N191) bwáà pää ngâ dyà nà pówàlà wû  
bwáà pää ngâ dyà nà pówàlà wû  
2P.FUT do.first PL sleep COM Ø7.calm there

‘You (pl.) will first sleep quietly there.’

(N192) bé dúú vuu  
be-H dúu-H vuu  
2P-PRES must.not-R worry

‘Don’t worry.’

(N193) bédewò bíné mè nzí byô gyámbò  
be-déwò b-íne me nzí by-ô gyámbò  
be8-food 8-POSS.2P 1S PROG.PRES 8-NSBJ prepare

‘Your food, I am preparing it.’

Nze:

(N194) yééééé  
yééééé  
EXCL

‘[sound of disappreciation]!’

Tata:

(N195) wùf wùf  
wùf-wùf  
IDEO:pitter-patter  
‘[depiction of sound when mice are walking].’

(N196) bàmìntùlè bá lèmbó nâ màmbò má bvùlé  
ba-mìntùlè ba-H lèmbo-H nâ m-àmbò má bvùlé  
ba2-mouse 2-PRES know-R COMP ma6-thing 6:ATT Ø8.night

‘The mice know that these are things of the night.’

(N197) bá múà gyésò bédewò byáwó  
ba-H múà gyésò H-be-déwò by-áwó  
2-PRES be.almost search OBJ.LINK-be8-food 8-POSS.3P

‘They are about to look for their food.’

(N198) ùwù ùwù bàmìntùlè báà wû  
ùwù-ùwù ba-mìntùlè báà wû  
IDEO:rustling ba2-mouse 2.COP there  
‘[depiction of sound of mice] The mice are there.’

- (N199) nzàmbí nzí                kàmbò  
           nzàmbí nzí                kàmbɔ  
           Ø1.PN PROG.PST defend  
           ‘Nzambi was defending [the house, in vain].’
- (N200) àá                bámálá    tóbá    mpfùmò    nà    pámò ménó  
           àá                bámala-H    tóbá    mpfùmò    nà    pámo ménó  
           1.INCH scold-R    since Ø3.midnight COM arrive Ø7.morning  
           ‘He is at the beginning of scolding from midnight until the morning.’
- (N201) à                télé            sâ                déndì                témó  
           a                télε-H        sâ                d-éndì                témó  
           1.PST1 stand-R only le5-courtyard middle  
           ‘He just stood in the middle of the courtyard.’
- (N202) ménó                wèè                nyê nâ                mbúmbù                nzíí                kì  
           ménó                wèè                nyê nâ                mbúmbù                nzíí                kì  
           Ø7.morning 2S.FUT see COMP Ø1.namesake PROG.PRES say  
           nâ  
           nâ  
           COMP  
           ‘In the morning you will see that namesake is saying that,’
- (N203) bímbú                lékàá                lé                wùlà                yá                Nadine lí                sémbò  
           bímbú                le-kàá                lé                wùlà                yá                Nadine lí                sémbɔ  
           Ø7.amount le5-kind 5:ATT Ø7.time 7:ATT Ø1.PN RETRO arrive  
           vâ  
           vâ  
           here  
           ‘The amount of time that Nadine just arrived here, [= when Nadine just arrived here]’
- (N204) nzàmbí vèèké                yjò                mbè  
           nzàmbí vèèké                yjò                mbè  
           Ø1.PN go[Bulu] open[Bulu] Ø3.door  
           ‘Nzambi just goes open the door.’

Mambi:

- (N205) vèè    vèè    vèè    vèè    kíngèlè                kíngèlè                kíngèlè  
           vèè    vèè    vèè    vèè    kíngelε                kíngelε                kíngelε  
           only only only only become.stiff become.stiff become.stiff  
           ‘Only, only, only, only stiff, stiff, stiff.’

Tata:

- (N206) bènké'é  
be-nké'é  
be8-scream

‘Screams.’

- (N207) nzàmbí nké'é      yá      nzàmbí nùù      vè      vâ  
nzàmbí nké'é      yá      nzàmbí nùù      vè      vâ  
Ø1.PN Ø7.scream 7:ATT Ø1.PN 1.DEM.PROX give here  
‘Nzambi, the scream that Nzambi gave here.’

- (N208) à nzíí      kìyà nké'é  
a nzíí      kìya nké'é  
1 PROG.PRES give Ø7.scream

‘He is screaming.’

- (N209) ká      á      dígé      nâ      [gesture] á      nyé  
ká      a-H      dígε-H nâ      [gesture] a-H      nyê-H  
when 1-PRES look-R COMP [gesture] 1-PRES see-R  
mbúmbù      wéè      á      pámò  
mbúmbù      w-éè      a-H      pámo  
Ø1.namesake 1-POSS.3S 1-PRES arrive

‘When he looks like [gesture], he sees his namesake who arrives.’

Aminu:

- (N210) mbúmbù      wà      lèbó'ò  
mbúmbù      wà      le-bó'ò  
Ø1.namesake 1:ATT le5-bread.fruit

‘The namesake of the bread fruit.’

Tata:

- (N211) àá      à      pámôò  
àá      a      pámôò  
EXCL 1.PST1 arrive.COMPL

‘Yes, he has arrived,’

- (N212) wà      máléndí  
wà      ma-léndí  
1:ATT ma6-palm.tree  
‘of the palm trees.’

(N213) yóò á sémbò  
yóò a-H sémbò  
so 1-PRES arrive

‘So he arrives.’

(N214) mbúmbù é ná  
mbúmbù é ná  
∅1.namesake LOC how

‘Namesake, how is it?’

(N215) mbúmbù lèbvúú léè nlémò dé  
mbúmbù le-bvúú léè nlémò dé  
1n.namesake le5-anger 5.COP ∅3.heart LOC

‘The namesake has anger in his heart (he is angry).’

(N216) mèé lémbòlè bàssó bóò é mpù  
mèé lémbo-lè bà-ső b-óò é mpù  
1S.PRES.NEG know-NEG ba2-father 2-POSS.2S LOC like.this  
bâ  
bâ  
2.COP

‘I don’t know how your fathers are.’

(N217) mèé lémbòlè é mpù báà ndáwò dé  
mèé lémbo-lè é mpù báà ndáwò dé  
1S.PRES.NEG know-NEG LOC like.this 2.COP ∅9.house LOC  
tù dénè  
tù dénè  
inside today[Bulu]

‘I don’t know how they are in the house today.’

Ada:

(N218) nâ wè sílēé nyàà dyùù mpòngò yá  
nâ we sílēé nyàà dyùù mpòngò yá  
COMP 2S.PST1 finish.COMPL shit kill ∅7.generation 7:ATT  
bùdì  
b-ùdì  
ba2-person

‘That you have completely killed a generation of people!’

Tata:

- (N219) bá      lí      sâ      ná  
       ba-H      lí      sâ      ná  
       2-PRES RETRO do how  
       'How did they do [that]?'

(N220) bùdì      bà      sílēé      mē      wè      ndáwò      tù  
       b-ùdì      ba      sílēé      mē      wè      ndáwò      tù  
       ba2-person 2.PST1 finish.COMPL 1S.NSBJ die Ø9.house inside  
       vâ  
       vâ  
       here  
       'The people have all died here inside the house.'

(N221) é      mpù      wè nzí      mē      láà  
       é      mpù      wε nzí      mē      láà  
       LOC like.this 2S PROG.PST 1S.NSBJ tell  
       'You were telling me like this.'

(N222) kánâ mè      kòbé      ndáà tsì  
       kánâ mε      kòbε-H      ndáà tsì  
       or      1S.PST1 break-R also Ø7.interdiction  
       'Or I also broke the interdiction,'

(N223) mèé      lémbólé  
       mèé      lémbo-lε  
       1S.PRES.NEG know-NEG  
       'I don't know.'

(N224) yóò nzàmbí kí      nâ      mbúmbù  
       yóò nzàmbí kì-H      nâ      mbúmbù  
       so      Ø1.PN say-R COMP Ø1.namesake  
       'So Nzambi says: 'Namesake','

(N225) jî      sí      vâ  
       jî      sí      vâ  
       sit.IMP down here  
       'sit down here.'

(N226) nóò  
       nóò  
       EXCL  
       'No!'

(N227) béè      bùdì      bá      vúdû ndí bwáá      gyésó  
       béè      b-ùdì      bá      vúdû ndí bwáa-H      gyésɔ-H  
       2P.COP ba2-person 2:ATT one    but 2P-PRES search-R  
       mápè'è  
       H-ma-pè'è  
       OBJ.LINK-ma6-wisdom

‘You (pl) are the same people, but you are looking for wisdom.’

Aminu:

(N228) èhê  
       èhê  
       EXCL  
       ‘Exactly!’

Tata:

(N229) wè      lèmbôò      sâ bányá      màmbò  
       wε      lèmbôò      sâ H-ba-nyá      m-àmbò  
       2S.PST1 know.COMPL do OBJ.LINK-ba2-important ma6-thing  
       nâ      ká mé      lúmá wê      nláà      nâ  
       nâ      ká mε-H      lúmɔ-H wê      nláà      nâ  
       COMP if 1S-PRES send-R 2S.NSBJ Ø3.message COMP  
       ‘You know to do the important things that if I send you the message  
       that,’

(N230) mbúmbù      kòlê      mè  
       mbúmbù      kòlê      mè  
       Ø1.namesake, help.IMP 1S.NSBJ  
       ‘namesake, help me,’

(N231) é      tè      wègà      wé      njí      sâ  
       é      tè      wè-gà      wε-H      njì-H      sâ  
       LOC there 2S.SBJ-CONTR 2S-PRES come-R do  
       ‘and there you, you come to make,’

(N232) mbvúndá é      ndzǐ      vâ  
       mbvúndá é      ndzǐ      vâ  
       Ø9.trouble LOC Ø9.path here  
       ‘trouble on the way here.’

(N233) ndí wé lèmbó nâ mbvúndá nyî bvúdà nà  
ndí wε-H lèmbo-H nâ mbvúndá nyî bvúda nà  
but 2S-PRES know-R COMP Ø9.trouble 9.FUT fight COM  
mbvúndá  
mbvúndá  
Ø9.trouble

‘But you know that trouble would fight with trouble.’

(N234) nzàmbí wà nû kôò kìyà léwê  
nzàmbí wà nû kôò kìya H-le-wê  
Ø1.PN 1:ATT 1.DEM.PROX only give OBJ.LINK-le5-cry

‘This Nzambi only gives a cry.’

(N235) bààm  
bààm  
IDEO:finishing  
‘[finish].’

(N236) nzàmbí gyî̄  
nzàmbí gyî̄  
Ø1.PN cry.COMPL

‘Nzambi has cried.’

(N237) à gyî̄  
a gyî̄  
1.PST1 cry.COMPL

‘He has cried.’

(N238) lèkfúdè à nzí býò nlô péé  
le-kfúdè a nzí býo nlô pé-é  
le5-idiot 1 PROG.PST hit Ø3.head there-DIST

‘The idiot was hitting the head there.’

(N239) áà bé à bó nà màbádò nyúlè  
áà bë-H a bô-H nà ma-bádò nyúlè  
1.PST2 be-R 1.PST1 lie-R COM ma6-open.wound Ø9.body  
‘He was being lying with open wounds on the body. [Il était étant couché avec... ]’

(N240) nyè nâ yáà mé láà  
nye nâ yáà mε-H láà  
1.SBJ COMP yes[German] 1S-PRES say

‘He: ‘Yes, I say,’

- (N241) nâ      sá      wé      sá      nógá      mùdì  
       nâ      sá      wε-H      sâ-H      nó-gá      m-ùdì  
       COMP Ø7.thing 2S-PRES do-R 1-other N1-person  
       'the thing that you do to another person,'
- (N242) àà      yŷ      wê nyè  
       àà      y-ŷ      wê nyè  
       1.FUT 7-NSBJ 2S return  
       'he will return to you.'
- (N243) yóò nzàmbí wà      nû  
       yóò nzàmbí wà      nû  
       so Ø1.PN 1:ATT 1.DEM.PROX  
       'So this Nzambi,'
- (N244) sá      á      sá      nónégá  
       sá      a-H      sâ-H      n-ónégá  
       Ø7.thing 1-PRES do-R 1-other  
       'the thing that he does to the other,'
- (N245) yóò nyègà      á      nyé      nyê  
       yóò nyè-gà      a-H      nyè-H      nyê  
       so 1.SBJ-CONTR 1-PRES return-R 1.NSBJ  
       'so the other returns to him,'
- (N246) ngvùndò      nyà      tè  
       ngvùndò      nyà      tè  
       Ø9.vengeance 9:ATT there  
       'the vengeance of there.'
- (N247) é      vâ      màlýjò      má      fúgè  
       é      vâ      ma-líyò      ma-H      fúgε  
       LOC here ma6-clearing 6-PRES end  
       'Here, the clearing ends.'
- (N248) é      vâ      màkwèlò      má      fúgè  
       é      vâ      ma-kwèlò      ma-H      fúgε  
       LOC here ma6-felling 6-PRES end  
       'Here, the felling ends,'
- (N249) vèè      vâ  
       vèè      vâ  
       only here  
       'only here.'

(N250) kàndá wé ndè  
kàndá wé ndè  
Ø7.proverb ID ANA

‘The story is this.’

(N251) bàmpámbó bá líyè líyè  
ba-mpámbó ba-H líyè líyè  
ba2-ancestor 2-PRES leave leave

‘The ancestors leave [the proverbs to us],’

(N252) nâ yá tââtâ békàndá bé  
nâ ya-H tââ-tâ H-be-kàndá bé  
COMP 1P-PRES tell-tell.SBJV OBJ.LINK-be8-proverbs 8:ATT  
tè  
tè  
there

‘so that we tell the proverbs there.’

(N253) byô wé bíndè  
by-ô wé bí-ndè  
8-NSBJ ID 8.DEM-ANA

‘Those are these.’

(N254) byô bé vé bîì màpè’è  
by-ô be-H vè-H bîì ma-pè’è  
8-NSBJ 8-PRES give-R 1P.NSBJ ma6-wisdom

‘They give us wisdom.’

Aminu:

(N255) ká kééssó yí wúmbé wê dyòdè  
ká kééssó yi-H wúmbé-H wê dyòdè  
if Ø7.égal 7-PRES want-R 2S.NSBJ deceive  
‘If somebody wants to deceive you,’

(N256) wé kílòwò  
wé-H kílòwò  
2S-PRES be.vigilant  
‘you are vigilant.’

(N257) wé kí nâ éy  
wé-H kí-H nâ éy  
2S-PRES say-R COMP EXCL  
‘You say: ‘Hey!’’

Djiedjhie:

- (N258) yí        bálé        gyà  
      yi-H      bále-H      gyà  
      7-PRES surpass-R Ø7.length  
‘This is too long.’

## II.3 Conversation in the Village Ngolo

This text is a guided conversation between several speakers in the village Ngolo. It was video recorded in May 2011 and is in fact the first official conversation the DoBeS team had with the Bagyeli in Ngolo. First, the chief Nze introduces himself and the village and states that they wish to have tin roofs instead of raffia roofs. He further complains that people from NGOs come and go, but that they are not really helpful. Occasionally, Nze is interrupted by Severin in Ngumba (northern Kwasio dialect) who serves as an interpreter and loosely guides the conversation. The topic then shifts to the construction of the port and its impact on the people of Ngolo who fear that roads will be built and, as a consequence, their houses and plants will be destroyed. After Nze talks about his plans to move to his former settlement further in the forest, Severin encourages Mambi (at the beginning of his 20ies) to talk about himself. Mambi explains the problems they encounter with their Bulu neighbors. According to him, the Bulu contest their land rights, quarrel about money with them and threaten them with physical violence. Nze shortly talks about his marital status, i.e. that he is married and has two children before Mambi continues about their wish to obtain electricity in the village. The third speaker in the conversation is Mama, about 17 years old, who introduces himself as an orphan, having lost his father while his mother lives in another village. Then, Mambi and Nze talk again about the future of their village, their desire to obtain tin-roofed houses, and the problems with the Bulu.

Nze:

- (C1) mé wúmbé lè nà bɔ  
mε-H wúmbε-H lè nà bɔ  
1S-PRES want-R talk[Kwasio] COM 3P  
'I want to talk with them.'

- (C2) yí ntégèlè ò dyúwɔ́ mì  
yi-H ntégele ɔ dyúwɔ-H mì  
7-PRES disturb 2S[Kwasio] hear-R COMPL  
'It disturbs, have you understood?'

- (C3) yí ntégèlè vèdáà mé sùmbélè bê  
 yi-H ntégele vèdáà me-H sùmbelè-H bê  
 7-PRES disturb but[Bulu] 1S-PRES greet[Kwasio]-R 2P.NSBJ  
 ‘That disturbs, but I greet you.’
- (C4) mé sùmélè bê ndènáà  
 me-H sùmèlè-H bê ndènáà  
 1S-PRES greet-R 2P.NSBJ like.that  
 ‘I greet you like this.’
- (C5) jínò lé kwàdò yâ yî Ngòló  
 j-ínò lé kwàdò y-â yî Ngòló  
 le5-name 5:ATT Ø7.village 7-POSS.1S 7.COP Ø3.PN  
 ‘The name of my village is Ngolo.’
- (C6) pándè té nà té mè jínò ná Nzè  
 pánde té nà té me j-ínò ná Nzè  
 arrive Ø7.position CONJ Ø7.position 1S le5-name SIM Ø1.PN  
 ‘Having arrived immediately, my name is Nze.’
- (C7) kfúmà wà Nkóòlónj  
 kfúmà wà Nkóòlónj  
 Ø1.chief 1:ATT Ø3.PN[Bulu]  
 ‘The chief of Ngolo [= uses exonym].’
- (C8) kfúmà wà Nkóòlónj Nzè  
 kfúmà wà Nkóòlónj Nzè  
 Ø1.chief 1:ATT Ø3.PN[Bulu] Ø1.PN  
 ‘The chief of Ngolo, Nze.’

Mambi:

- (C9) nyè wé nû  
 nyε wé nû  
 1.SBJ ID 1.DEM.PROX  
 ‘This is him [= Nze].’
- (C10) á páàngó tálè sílè mè nzíí ná kè  
 a-H páàngó-H tálè sílè me nzíí ná kè  
 1-PRES do.first[Kwasio]-R begin finish 1S PROG.PRES again go  
 ‘He starts first to finish [speaking], I’m continuing again [= will then speak].’

Nze:

- (C11) áà mè nzíí                    ná làwò ná  
       áà mè nzíí                    ná làwò ná  
       yes 1S PROG.PRES still talk still  
       ‘Yes, I am still talking.’
- (C12) gyí bí yá tfúgà yá tfúgá nà gyí  
       gyí bí ya-H tfúga ya-H tfúga-H nà gyí  
       what 1P.SBJ 1P-PRES suffer 1P-PRES suffer-R COM what  
       ‘What do we suffer, we suffer from what?’
- (C13) yá tfúgá nà ngùndyá mpángì  
       ya-H tfúga-H nà ngùndyá mpángì  
       1P-PRES suffer-R COM Ø9.raffia Ø7.bamboo  
       ‘We suffer from the straw, the bamboo.’
- (C14) ká yí nyí mē mbò mpángì yí kùgá  
       ká yi-H nyî-H mē m-bò mpángì yi-H kùga-H  
       when 7-PRES enter-R 1S.NSBJ N3-arm Ø7.bamboo 7-PRES can-R  
       nâ nyî wè mbò  
       nâ nyî wè m-bò  
       COMP enter.SBJV 2S N3-arm  
       ‘When it goes into my arm... the bamboo can sting your arm.’
- (C15) yáà fúàlà bígè yâ yá vé  
       yáà fúala bígë yâ yá vë  
       1P.FUT end develop Ø7.time[Bulu] 7:ATT which  
       ‘When will we end up developing?’
- (C16) yá vyâ kë nà kwâ mángùndyá wè nà  
       ya-H vyâ-H kë nà kwâ H-ma-ngùndyá wë nà  
       1P-PRES do.but-H go CONJ cut OBJ.LINK-ma6-raffia 2S COM  
       ngvùlè kë sólègà wû nà njí kù é  
       ngvùlè kë sólega wû nà njî-H kù é  
       Ø9.strength go fall there COM come-R fall[Kwasio] LOC  
       sì  
       sì  
       Ø9.ground  
       ‘We do nothing but go and cut raffia, you are strong to go fall there  
       and come fall to the ground.’
- (C17) më bvú nâ nkwalá wúù tfundé më  
       më-H bvû-H nâ nkwalá wúù tfundë-H më  
       1S-PRES think-R COMP Ø3.machete 3.PST2 miss-R 1S.NSBJ

vâ  
vâ  
here

‘I think that the machete had missed [= injured] me here.’

- (C18) ngùndyá mé      kéké      sólègà ngùndyá dyúwò  
ngùndyá mε-H      kékε-H sólega ngùndyá dyúwò  
Ø9.raffia 1S-PRES go-R chop Ø9.raffia on.top

‘The raffia, I go to chop the raffia on top.’

- (C19) áá      bî      màndáwò      má      zì      yáà      m̄  
áá      bî      ma-ndáwò      má      zì      yáà      m̄-ó  
EXCL 1P.NSBJ ma6-house 6:ATT Ø7.tin[Bulu] 1P.FUT 6-NSBJ

fúàlā bwê      lèwùlā      lé      vé  
fúala bwê      le-wùlā      lé      vé  
end receive le5-hour 5:ATT which

‘Ah, us, tin houses, when will we receive them?’

- (C20) mà      bé      vé  
ma      bë-H vé  
6.PST1 be-R where

‘Where were they?’

- (C21) mé      bvú      nâ      bàmó      tè      yjò      wé yî  
mε-H      bvû-H nâ      bàmó      tè      y-ɔjò      wé yî  
1S-PRES think-R COMP Ø7.scar there 7-NSBJ ID 7.DEM.PROX

‘I think, the scar there is this.’

- (C22) bwà nzíí      kàlànè  
bwa nzíí      kàlanε  
2P PROG.PRES transmit

‘Are you translating?’

- (C23) yá      lí      fúàlā nà      mè lí      làwò  
ya-H      lí      fúala nà      me lí      làwɔ  
1P-PRES RETRO end CONJ 1S RETRO talk

‘We just finished and I just spoke.’

- (C24) nlâ      wá      zì      ndáwò      nyà      zì      nyî      mē      vé  
nlâ      wá      zì      ndáwò      nyà      zì      nyî      mè      vé  
Ø3.story 3:ATT Ø7.tin Ø9.house 9:ATT tin 9.COP 1S.NSBJ where

‘The problem with the tin, where is the tin (roofed) house for me?’

- (C25) fàmí wâ nyèngwésè nâ á bígéè  
fàmí w-â nyè-ngwésè nâ a-H bígéè  
Ø1.family 1-POSS.1S 9-entire COMP 1-PRES develop.SBJV  
‘My whole family, may it develop.’
- (C26) wúù vé  
wúù vé  
3.COP where  
‘Where is it [the story of the tin]?’
- (C27) Nkóòlòŋ nâ wú bígéè  
Nkóòlòŋ nâ wu-H bígéè  
Ø3.PN[Bulu] COMP 3-PRES develop.SBJV  
‘Nko’olong [name of the village], may it develop.’
- (C28) òbâj òbâj òbâj  
[straw straw straw]Bulu  
‘Straw, straw, straw.’
- (C29) mé ŋgà ké sótàn èlè yóßètè  
[1S build go jump tree top]Bulu  
‘I build and jump up on the tree.’
- (C30) fá à ŋgà bálè màvá  
[machete 3S 1S hurt here]Bulu  
‘The machete injured me here.’
- (C31) yóò mé wúmbé mándáwò má zì má  
yóò mε-H wúmbε-H H-ma-ndáwò má zì ma-H  
so 1S-PRES want-R OBJLINK-ma6-house 6:ATT Ø7.tin 6-PRES  
téwɔ́ò mē vâ ndá zì  
téwɔ́ò mε vâ ndá zì  
put.SBJV 1S.NSBJ here ATT[Bulu] Ø7.tin[Bulu]  
‘So I want tin (roofed) houses that they be put here for me, of tin.’
- (C32) má kì má yáné bî ndà zì jálé tèvá  
[1S too 1S have houses ATT tin village ATT here]Bulu  
‘Me too, I have tin (roofed) houses in the village here.’

Severin:

- (C33) làwô bágylì  
làwô H-ba-gyélì  
speak.IMP OBJLINK-2-Gyeli  
‘Speak Gyeli!’

Nze:

- (C34) mé làwó náà mändáwò má zì má  
mε-H làwɔ-H nâ ma-ndáwò má zì ma-H  
1S-PRES say-R COMP ma6-house 6:ATT Ø7.tin 6-PRES  
kùgáà mêt vâ  
kùgáà mε vâ  
be.enough.SBJV 1S.NSBJ here  
'I say that there should be enough tin (roofed) houses here for me.'
- (C35) bàgyèlì bá sô bà sîlêé bígè  
ba-gyèlì bá sô ba sîlêé bígè  
2-Gyeli 2:ATT Ø1.friend 2.PST1 finish.COMPL develop  
'The fellow Bagyeli have already all developed.'
- (C36) bí bôò yá bígé mpá'â wá vé  
bí b-ôò ya-H bígé-H mpá'â wá vé  
1P.SBJ 2-other 1P-PRES develop-R Ø3.side 3:ATT which  
'How will we others develop?'
- (C37) mé ké dvùmò nkündyá dyúwò  
mε-H kè-H dvùmɔ nkündyá dyúwò  
1S-PRES go-R fall Ø9.raffia on.top  
'I go fall from the raffia up there,'
- (C38) kè kwâ ngùndyá mbvúò nzíí nò  
kè kwâ ngùndyá mbvúò nzíí nò  
go cut Ø9.raffia Ø1.rain PROG.PRES rain  
'going cutting the raffia when it's raining.'
- (C39) ngà wé nyé nyê  
ngà wε-H nyê-H nyê  
Q(tag) 2S-PRES see-R see  
'Right, you see [that] often.'
- (C40) ngùndyá tè nyó bé nyî  
ngùndyá tè ny-ó bë-H nyî  
Ø9.raffia there 9-NSBJ be-R 9.DEM.PROX  
'The raffia there, it is that.'
- (C41) ndí mè mè yà bà fámí wâ yáà bígè  
ndí mε mε ya bà fámí w-â yáà bígè  
but 1S 1S 1P AP Ø1.family 1-POSS.1S 1P.FUT develop

y̪ɔ̄̄ yá v̄é é yâ kwád̄ó n̄â  
 y̪ɔ̄̄ yá v̄é é y-â kwád̄ó n̄â  
 Ø7 time[Bulu] 7·ATT which LOC 7·POSS 1S Ø7 village COMP

∅7.time[Bulu] 7:ATT which LOC 7-POSS.1S ∅7.village COMP

yílì      vàágò

yílì      vàágò

## 7.COP animated

‘But I, I, we, my family, what time will we develop, so my part of the village be lively?’

- (C42) mè bé ngyê Ngvùmbò  
       mè bè-H n-gyê Ngvùmbò  
       1S.PST1 be-R N1-guest Ø1.PN

'I was a guest of the Ngumba.'

- (C43) mè nyé kwádó yî Kúndukùndù  
       me nyê-H kwádó yî Kúndukùndù  
       1S.PST1 see-R Ø7.village 7.DEM.PROX Ø7.PN

'I saw this village, Kundukundu.'

- (C44) vèè màndáwò má zì m̄ nà m̄  
          vèè ma-ndáwò má zì m̄- nà m̄-  
          only ma6-house 6:ATT Ø7.tin 6-NSBJ COM 6-NSBJ

‘Only tin (roofed) houses, each and each.’

- |       |              |      |           |            |              |
|-------|--------------|------|-----------|------------|--------------|
| (C45) | mègà         | éè   | yâ        | kwádó      | yógà         |
|       | mè-gà        | éè   | y-â       | kwádó      | y-ó-gà       |
|       | 1S.SBJ-CONTR | EXCL | 7-POSS.1S | Ø7.village | 7-NSBJ-CONTR |

‘As for me, right, my [part of the] village too!’

- (C46) wègà                  wè                  njí                  dyòdè                  bùdì  
       wè-gà                  wè                  njì-H                  dyòdè                  b-ùdì  
       2S.SBJ-CONTR 2S.PST1 come-R deceive ba2-person

‘As for you, you came to deceive people.’

- (C47) míñò má bùdì mà kéé̑ máà vé  
      m-íñò má b-ùdì ma kéé̑ máà vé  
      ma6-name 6:ATT ba2-person 6.PST1 go.COMPL 6.COP where

‘The people’s names have gone, where are they? [= strangers come once, but do not return again]’

- (C48) lèbvúú lé tè lɔ́ yá bùdé lê  
     le-bvúú lé tè lɔ́ ya-H bùdε-H lê  
     le5-anger 5:ATT there 5.COP 1P-PRES have-R 5.DEM.PROX

‘The anger there it is that which we have.’

- (C49) vèè nàménó nàménó nà pámò dè  
      vèè nàménó nàménó nà pámo dè  
      only tomorrow tomorrow COM arrive today  
      ‘Only tomorrow, tomorrow, until today. [= only heard promises till today]’

Severin in Ngumba:

- (C50) bùrè bvùbvù bó sí nzì wâ  
      people many 2 PROG come here  
      ‘Are many people coming here?’

Nze:

- (C51) éè bvùbvù pílì mé làwó mpù mèé  
      éè bvùbvù pílì me-H làwó-H mpù mèé  
      yes many when 1S-PRES speak-R like.this 1S.PRES.NEG  
      válé làwò  
      vá-lé làwó  
      tolerate-NEG speak  
      ‘Yes, many. When I speak like this, I don’t tolerate to talk [= I’m not lying].’
- (C52) yî nâ báà bvùbvù  
      yî nâ báà bvùbvù  
      7.COP COMP 2.COP many  
      ‘It is that they are many.’
- (C53) bwánò békúmbé bé bà njí nà byô bé  
      b-wánò be-kúmbé bé ba njí-H nà by-ô be-H  
      ba2-child be8-tin 8:ATT 2.PST1 come-R COM 8-NSBJ 8-PRES  
      télé màbé  
      téle-H mà-bé  
      stand-R here-8  
      ‘The few tin roofs that they brought stand here.’
- (C54) màndáwò má télé màmá  
      ma-ndáwò ma-H téle-H mà-má  
      ma6-house 6-PRES stand-R here-6  
      ‘Houses stand here.’
- (C55) bèsàndyá lèwúmò nà bétánè  
      be-sàndyá lè-wúmò nà bé-tánè  
      be8-raffia.mat le5-ten CONJ 8-five  
      ‘Fifteen raffia mats,’

- (C56) byò      bé      télé      bé  
       by-ò      be-H      télε-H      (mà-)bé.  
       8-NSBJ 8-PRES stand-R 8  
       ‘They stand here.’
- (C57) bèkúmbé      báà      njì      nà      byô      nà      báà      njì      lw̩  
       be-kúmbé      báà      njì      nà      byô      nà      báà      njì      lw̩  
       be8-roof      2.FUT come COM 8      CONJ 2.FUT come build  
       mändáwò  
       H-ma-ndáwò  
       OBJ.LINK-ma6-house  
       ‘Roofs they will bring and they will come and build houses.’
- (C58) bímbú      lé      fámí      wâ      wà      mè      bùdé  
       bímbú      lé      fámí      w-â      wà      mε      bùdε-H  
       Ø5.amount 5:ATT Ø1.family 1-POSS.1S 1:ATT 1S.PST1 have  
       mà  
       mà  
       COMPL[Kwasio]  
       ‘The size of my family that I have gotten...’
- (C59) ndáwò      tè      ká      mé      lâ      tè  
       ndáwò      tè      ká      mε-H      lâ-H      tè  
       Ø9.house there when 1S-PRES pass-R there  
       ‘The house there, when I pass there...’
- (C60) é      péé      mèè      lw̩      nyá      ndáwò  
       é      pé-é      mèè      lw̩      nyá      ndáwò  
       LOC there-DIST 1S.FUT build real Ø9.house  
       ‘I will build a real house over there.’
- (C61) é      péé      mèè      jìyò  
       é      pé-é      mèè      jìyò  
       LOC there-DIST 1S.FUT stay  
       ‘I will live over there, here I heard that here it [they] will come and  
       destroy all.’
- (C62) é      vâ      mè      dyùwó      nâ      é      vâ      yî      sîlè      njì  
       é      vâ      mε      dyùwó-H nâ      é      vâ      yî      sîlε      njì  
       LOC here 1S.PST1 hear-R      COMP LOC here 7.FUT finish come  
       búlè  
       búlε  
       destroy  
       ‘Here I heard that here it will all come to be destroyed.’

- (C63) bímbú      lé      mámbòngò máà      mē      vâ  
       bímbú      lé      ma-mbòngò máà      mè      vâ  
       Ø5.amount 5:ATT ma6-plant 6.COP 1S.NSBJ here  
       'I have many plants here.'

- (C64) mé      ké      jìyò vé      yá      bà fàmí      wâ  
       mε-H      kè-H jìyɔ vé      ya-H      bà fàmí      w-â  
       1S-PRES go-R stay where 1P-PRES AP Ø1.family 1-POSS.1S  
       'Where will I live, we with my family?'

Severin in Ngumba:

- (C65) bâ      njè      bû      wáá  
       2.FUT arrive break here  
       'Will they come to destroy the place here?'

Nze:

- (C66) mé      dyúwó      nâ      mpàgó      wá      pódè      lâ      vâ  
       mε-H      dyúwɔ-H nâ      mpàgó      wá      pódè      lâ-H      vâ  
       1S-PRES hear-R      COMP Ø3.street 3:ATT Ø1.port pass-R here  
       'I hear that the road to the port passes [= will pass] here. '

- (C67) mèè      kálè      ná      bè nà      jí      é      vâ  
       mèè      kálè      ná      bè nà      jí      é      vâ  
       1S.FUT NEG.FUT still be COM Ø7.place LOC here  
       'I won't have a place here anymore.'

- (C68) mèè      jíbì nyè      mé      ké      é      pè      bùùlè  
       mèè      jíbì nyè      mε-H      kè-H é      pè      bùùlè  
       1S.FUT first return 1S-PRES go-R LOC there Ø7.old.settlement  
       'I will first return, I go over there to the old settlement.'

- (C69) é      pè      mèè      té  
       é      pè      mèè      tê-H  
       LOC there 1S.PST2 found-PST  
       'Over there I had originally settled.'

- (C70) áà      kéndé      gyà  
       áà      kéndé      (yá)      gyà  
       EXCL Ø7.walk (7:ATT) Ø7.distance  
       'Oh, it's a long walk.'

- (C71) báà tfùbò ndáà  
 báà tfùbò ndáà  
 2.FUT pierce also  
 ‘They will cut [= a road there] too,’
- (C72) báà tfùbò báà tfùbò  
 báà tfùbò báà tfùbò  
 2.FUT pierce 3P.FUT pierce  
 ‘they will cut, they will cut.’
- (C73) mpàgó wá nùmbà wúù  
 mpàgó wá nùmbà wúù  
 Ø3.road 3:ATT Ø1.logger there  
 ‘The road of the loggers there.’
- (C74) tè mèè jíbì kè lwâ tè  
 tè mèè jíbì kè lwâ tè  
 there 1S.FUT first go build there  
 ‘There, I will first go construct there.’
- (C75) àmú vâ mèé bélé nà sí é vâ  
 àmú vâ mèé bélé nà sí é vâ  
 because[Bulu] here 1S.NEG be-NEG COM Ø9.ground LOC here  
 ‘Because here I don’t have any land.’
- (C76) é vâ mèé bélé nà sí vâ  
 é vâ mèé bélé nà sí vâ  
 LOC here 1S.NEG be-NEG COM Ø9.ground here  
 ‘Here I don’t have any property.’
- (C77) wé dyúwó nâ mè nzíí kè nà kwèlò  
 wé-H dyúwó-H nâ mè nzíí kè nà kwèlò  
 2S-PRES hear-R COMP 1S PROG.PRES go CONJ fell  
 máléndí tè é vâ  
 H-ma-léndí tè é vâ  
 OBJ.LINK-6-palm.tree there LOC here  
 ‘Do you hear that I’m going to fell these palm trees here?’
- (C78) mè nzíí kè nà vúlé lévúdû nà  
 mè nzíí kè nà vúlé-H H-le-vúdû nà  
 1S PROG.PRES go CONJ take.away-R OBJ.LINK-le5-one COM  
 lèvúdû mè táálé sîlè nyùlè  
 le-vúdû mè-H táálé-H sîlè nyùlè  
 le5-one 1S-PRES begin-R finish drink

'I'm taking down one by one, I start to drink (them) up [= make palm wine out of them].'

- (C79) mìmì ndènáà lèkélè léndè lèè nâ  
 mìmì ndènáà le-kélè lé-ndè lèè nâ  
 EXCL like.this le5-word 5.DEM-ANA 5.COP COMP

'Yes, like this. The word is that...'

other speaker:

- (C80) nà mìmbàngá nà màsá nà bègyí nà  
 nà mi-mbàngá nà ma-sá nà be-gyí nà  
 CONJ mi4-coconut.tree CONJ ma6-prune CONJ be8-what CONJ  
 bègyí  
 be-gyí  
 be8-what

'both the coconut trees and the pruniers and so on and so forth,'

- (C81) byésè béè sílè ntàmànè  
 by-ésè béè sílè ntàmane  
 8-all 8.FUT finish ruin  
 'they all will be ruined.'

Nze:

- (C82) màsá mâ vâ ké nà ntàmànè nà  
 ma-sá mâ vâ kè-H nà ntàmane nà  
 ma6-prunier 6.DEM.PROX here go-R CONJ ruin CONJ  
 màb'ò tu tu tu ngù́  
 ma-b'ò tu tu tu ngù́  
 ma6-bread.fruit all[French] all[French] all[French] Ø7.sugar.cane  
 'These pruniers will be ruined and the bread fruit trees, everything,  
 the sugar cane.'

- (C83) mè bìyé làwò nâ àà bwánò bâ  
 me bìyé-H làwɔ nâ àà b-wánò b-â  
 1S in.vain? speak COMP EXCL ba2-child 2-POSS.1S

'I say in vain: 'ah, my children..."

- (C84) yóò mè jilé kwádó yî  
 yóò me jile-H kwádó yî  
 so 1S.PST1 stay-R Ø7.village 7.DEM.PROX  
 'so I stayed in this village.'

Severin in French asking about Mambi:

- (C85) C'est qui là  
it.is who there  
'Who is this there?'

Nze:

- (C86) ntémbó wâ wé nû  
ntémbó w-â wé nû  
∅1.younger.sibling 1-POSS.1S ID 1.DEM.PROX  
'This is my little brother.'

Mama:

- (C87) ntùmbà wâ wé nû  
ntùmbà w-â wé nû  
∅1.older.brother 1-POSS.1S ID 1.DEM.PROX  
'This is my big brother.'

Nze:

- (C88) mwánò wâ ndáà wé nû  
m-wánò w-â ndáà wé nû  
N1-child 1-POSS.1S also ID 1.DEM.PROX  
'This is also my child.'

Djiedjhie:

- (C89) pâ bígè  
pâ bígè.  
do.first.IMP develop  
'Speak first.'

Mambi:

- (C90) bõ mwa méé béè  
bõ mwa méé béè  
good[French] 1S.EMPH[French] 1S.COP 2P.COP  
alónzì vâ tè nà bëyá njí nyê  
alónzì vâ tè nà bëya-H njì-H nyê  
come.on[French] here there CONJ 2P-PRES come-R see  
bágylì  
H-ba-gyèlì  
OBJLINK-ba2-Gyeli  
'Good, me, I'm, you are, *allons-y*, here that you come see the Bagyeli.'

Severin in French:

- (C91) C'est toi qui  
it.is 2S who  
'Who are you?'

Mambi:

- (C92) mè jínò ná Màmbì mèé bélé nà mùdâ  
me j-íñò ná Màmbì mèé bé-lé nà m-ùdâ  
1S le5-name SIM Ø1.PN 1S.PRES.NEG be.NEG COM N1-woman  
'My name is Mambi, I don't have a wife.'

- (C93) mè pálé líí bâ  
me pálé líí bâ  
1S.PST1 NEG.PST yet marry  
'I am not yet married.'

Nze:

- (C94) à pálé líí bâ  
a pálé líí bâ  
1.PST1 NEG.PST yet married  
'He is not yet married.'

Mambi:

- (C95) mè jínò ná Màmbì Màmbì  
me j-íñò ná Màmbì Màmbì  
1S le5-name SIM Ø1.PN Ø1.PN  
'My name is Mambi, Mambi.'

Nze:

- (C96) mè bùdé bwánò bábáà  
me bùdè-H b-wánò bá-báà  
1S have-R ba2-child 2-two  
'I have two children.'

Mambi:

- (C97) pílì bèyá lí nji é vâ téè dé  
pílì bèya-H lí nji é vâ téè dé  
when 2P-PRES RETRO come LOC here now today  
'When you just arrived here now today,'

- (C98) nâ bèyá njí nyê bá-gyèlì voilà  
 nâ bèya-H njì-H nyê H-ba-gyèlì voilà  
 COMP 2P-PRES come-R see OBJ.LINK-ba2-Gyeli voila  
 ‘so that you come to see the Bagyeli, voilà.’
- (C99) bí bógà yá wúmbé ndáà mínsáyá  
 bí b-ógà ya-H wúmbé-H ndáà H-mi-nsáyá  
 1P.SBJ 2-other 1P-PRES want-R also OBJ.LINK-mi4-deed  
 mí màmbò bèyá sá bî myô kí bë  
 mí m-àmbò bèya-H sâ-H bî my-ô kí bë  
 4:ATT ma6-thing 2P-PRES do-R 1P.NSBJ 4-NSBJ NEG[Kwasio] be  
 mí mpà  
 mí mpà  
 4 :ATTgood  
 ‘Us, the others, we want also the deeds of things that you do us, they  
 are not good.’
- (C100) ká bèyá bùdé másà wùnē  
 ká bèya-H bùdè-H másà w-ùnē  
 if 2P-PRES have-R Ø1.boss 1-POSS.2P  
 ‘If you have your boss,’
- (C101) ká másà wùnē njí yá láá másà wùnē  
 ká másà w-ùnē njí ya-H láà-H másà w-ùnē  
 if Ø1.boss 1-POSS.2P come 1P-PRES tell-R Ø1.boss 1-POSS.2P  
 nâ mínsáyá mí bèyá sâ mí bélé mpà vúdû wé  
 nâ mi-nsáyá mí bèya-H sâ mi-H bé-lé mpà vúdû wé  
 COMP mi4-deed 4:ATT 2P-PRES do 4-PRES be-NEG good one ID  
 yí-ndè  
 yí-ndè  
 7.DEM-ANA  
 ‘If your boss comes we will tell him that the things that you do are  
 not good, that is the first thing.’
- (C102) yá mbàà yá mbàà yî nâ kóò mpù é  
 yá mbàà yá mbàà yî nâ kóò mpù é  
 7:ATT second 7:ATT second 7.COP COMP still like.this LOC  
 Nzìwù ló táálè làwò nâ bon  
 Nzìwù ló táálè làwò nâ bon  
 Ø1.PN RETRO begin talk COMP good[French]  
 ‘The seeond, the second is that still as Nze just began to say that,  
 good,’

- (C103) kwádó      yá      Ngòló yá      jìlé      màyì  
       kwádó      yá      Ngòló ya-H      jìlé-H      mà-yì  
       Ø7.village 7:ATT Ø3.PN 1P-PRES seat-R here-7  
       ‘The village Ngolo, we [have] place[d] it here.’
- (C104) yáà      ndáà vâ      dísù      bvúlè      bá      vélásá  
       yáà      ndáà vâ      dísù      bvúlè      ba-H      vélasa-H  
       1P.COP also here first.off[Bulu] ba2.Bulu 2-PRES contest-R  
       bû      nà      kwádó      yî  
       bû      nà      kwádó      yî  
       1P.NSBJ COM Ø7.village 7.DEM.PROX  
       ‘We are also here, first off, the Bulu contest our [ownership of] this  
       village.’
- (C105) bvúlè      bá      ntégélé      ndáà bíyè  
       bvúlè      ba-H      ntégelé-H ndáà bíyè  
       ba2.Bulu 2-PRES bother-R also 1P.NSBJ  
       ‘The Bulu bother us, too.’
- (C106) bvúlè      bà bùdé      nâ      ká wè ngyèlì      wè bùdé      tsídí  
       bvúlè      ba bùdè-H nâ      ká wè n-gyèlì      wè bùdè-H tsídí  
       ba2.Bulu 2 have-R COMP if 2S N1-Gyeli 2S have-R Ø1.animal  
       wô      bá      sèngé      nyê      sí  
       w-ô      ba-H      sèngé-H nyê      sí  
       1-POSS.2S 2-PRES lower-R 1.NSBJ down  
       ‘The Bulu say that if you, Gyeli, you have your animal, they lower  
       it [= its price].’
- (C107) bée      wè nzíí      dyúwò mê      voilà      bon  
       bée      wè nzíí      dyúwò mê      voilà      bon  
       right 2S PROG.PRES hear 1S.NSBJ ok[French] good[French]  
       ‘Right, you hear me? Ok, good...’
- (C108) yá      nà      yí      báàlá      nâ      bèdòwò      nà      bvúlè  
       yá      nà      yi-H      báàla-H nâ      bèdòwò      nà      bvúlè  
       7:ATT fourth 7-PRES repeat-R COMP hang.on? COM ba2.Bulu  
       báà      nâ      wè, sîlé      kè sâ sálé  
       báà      nâ      wè sîlé      kè sâ sálé  
       2.COP COMP 2S finish.IMP go do Ø7.work  
       ‘The forth it repeats that about the Bulu, they say that ‘you, finish  
       go do the work’.’

- (C109) ká wé sílē kè sâ sálé mais pílì wé  
 ká wε-H sílε-H kè sâ sálé mais pílì wε-H  
 if 2S-PRES finish-R go do work.7 but[French] when 2S-PRES  
 ké nâ wé ké jí mòné wô á  
 kè-H nâ wε-H kè-R jí mòné w-ô a-H  
 go-R COMP 2S-PRES go-R ask Ø1.money 1-POSS.2S 1-PRES  
 làwó wê nyùmbò  
 làwɔ-H wê nyùmbò  
 tell-R 2S Ø3.mouth  
 ‘If you go do all the work, but when you go to go ask for your money,  
 he frowns at you. [= *il te fait la gueule*]’
- (C110) nyè náà à múà wê bíyò  
 nyε nâ a múà wè bíyɔ  
 1.SBJ COMP 1 be.almost 2S.NSBJ hit  
 ‘He [says] that he is about to beat you.’
- (C111) nyè náà à múà wê bíyò dé  
 nyε nâ a múà wè bíyɔ dé  
 1.SBJ COMP 1 be.almost 2S.NSBJ hit today  
 ‘He [says] that he is about to beat you today,’
- (C112) nkàmò nà mòné wô dyúwò  
 nkàmò nà mòné w-ô dyúwò  
 Ø9.reason COM Ø1.money 1-POSS.2S on.top  
 ‘for the reason about your money.’
- (C113) pílì wé ké nâ wé ké tɔkè mwánò  
 pílì wε-H kè-H nâ wε-H kè-H tɔkε m-wánò  
 when 2S-PRES go-R COMP 2S-PRES go-R collect N1-child  
 sáyà bvúlè à bùdé lébvúú nà mē  
 sáyà bvúlè a bùdε-H H-le-bvúú nà mē  
 Ø7.thing ba2.Bulu 1 have-H OBJ.LINK-le5-anger COM 1S.NSBJ  
 ‘When you go to go gather a small thing, the Bulu is angry with me.’
- (C114) mè nzí dyâ vâ kùgúù dè màfû mábáà  
 mε nzí dyâ vâ kùgúù dè ma-fû má-báà  
 1S PROG.PST lie.down here Ø7.evening today ma6-day 6-two  
 ‘I was sleeping here the evening two days ago [= from today].’
- (C115) mè bé nà mùdâ wà mí  
 mε bè-H nà m-ùdâ wà m-í  
 1S.PST1 be-R COM N1-woman 1:ATT N1-non-Pygmy

deux milles

deux milles

two[French] thousand[French]

‘I owed a Bantu farmer woman two thousand (FCFA).’

- (C116) é vâ ndáwò vâ mùdâ wà mí àà  
é vâ ndáwò vâ m-ùdâ wà m-í àà  
LOC here Ø9.house here N1-woman 1:ATT N1-non-Pygmy 1.FUT  
njì dúwò lévúdû  
njì d-úwò lé-vúdû  
come le5-day 5-one

‘This house over here, the Bantu farmer woman will come the same day,’

- (C117) é pè njì jî mòné wéè é pè  
é pè njì jî mòné w-éè é pè  
LOC over.there come ask Ø1.money 1-POSS.3S LOC over.there  
njì jî  
njì jî  
come ask

‘there in order to come ask for her money, there to come ask.’

- (C118) yóò mé tóké mòné wè vè nyé  
yóò mε-H tókε-H mòné w-è v-è nyé  
so 1S-PRES collect-R Ø1.money 1-POSS.3S give 1.NSBJ  
‘So I collect her money [and] give [it to] her,’

- (C119) nâ ndènáà yî mpà  
nâ ndènáà yî mpà  
COMP like.this 7.COP good  
‘that like this it be good.’

- (C120) bon pílì yí báàlá nà bè ndènáà ndènáà  
bon pílì yi-H báàla-H nà bè ndènáà ndènáà  
good[French] when 7-PRES repeat-R CONJ be like.that like.that  
ndáà ná  
ndáà ná  
also still

‘So, when it continues and is still like this and like that.’

- (C121) bvúlè bà bùdé mà sá yî ná vúdû  
bvúlè ba bùdε-H mà sá yî ná vúdû  
ba2.Bulu 2 have COMPL[Kwasio] Ø7.thing 7.COP again one

‘There is one more thing about the Bulu.’

(C122) wé ké nà nyê nkɔ́wáká nyègà à  
wε-H kè-H nà nyê nkɔ́wáká nyè-gà a  
2S-PRES go COM 1.NSBJ equal.sharing 1.SBJ-CONTR 1

nzíí wê vã́áké sâ mpù  
nzíí wê vã́áké sâ mpù  
PROG.PRES 2S.NSBJ go[Bulu] do like.this

‘You go with him equally sharing, he is going to do you like this [= tries to trick you].’

(C123) pílì yí múà ndáwò nyà mànyò ndènáà  
pílì yí múà ndáwò nyà ma-nyò ndènáà  
when 7 be.almost Ø9.house 9:ATT ma6-drink like.this

‘When it is at a bar like this,’

(C124) á kí náà à múà njì bvúdà nà wê  
a-H ki-H ná a múà njì bvúda nà wê  
1-PRES say-R COMP 1 be.almost come quarrel COM 2S.NSBJ

‘he says that he is about to come quarrel with you.’

(C125) pílì mwánò bàgyèlì àà nyê kè bíyò<sup>j</sup>  
pílì m-wánò ba-gyèlì àà nyê kè bíyò<sup>j</sup>  
when N1-child ba2-Gyeli 1.FUT 1.NSBJ go hit

‘At times the Gyeli child, he will go hit it,’

(C126) kè nyê bíyò mpù  
kè nyê bíyò mpù  
go 1.NSBJ hit like.this

‘hit it like this.’

(C127) báà ná bísómònè bísómònè bé nyì  
báà ná bi-sómònè bi-sómònè be-H nyì  
2.COP COMP be8-complaint be8-complaint 8-PRES enter  
‘it is them that complaints over complaints start.’

(C128) donc pè tsíyè póné lékélè bvúlè bá  
donc pè tsíyè póné le-kélè bvúlè ba-H  
so[French] there cut Ø7.truth le5-word ba2.Bulu 2-PRES  
ntégélé bû é vâ  
ntégele-H bû é vâ  
bother-R 1P.NSBJ LOC here

‘So, to say the truth, the Bulu bother us here.’

(C129) kwádó      yá      wé      nyê yá      jìlē      mà  
       kwádó      yá      wé-H      nyê ya-H      jìlē-H      mà  
       ∅7.village 7:ATT 2S-PRES see 1P-PRES place-R COMPL[Kwasio]

wá                  yî  
  wá                  yî  
  here[Kwasio] 7

‘The village that you see, we have placed it here here.’

(C130) bvúlè      bá      ntégélé      bî      kwádó      yá      wé  
       bvúlè      ba-H      ntégele-H      bî      kwádó      yá      wé-H  
       ba2.Bulu 2-PRES bother-R 1P.NSBJ ∅7.village 7:ATT 2S-PRES  
       nyê yá      jìlē      mà                  wá                  yî  
       nyê ya-H      jìlē-H      mà                  wá                  yî  
       see 1S-PRES seat-R COMPL[Kwasio] here[Kwasio] 7

‘The Bulu bother us. The village that you see, we have placed it here here.’

Severin in Ngumba:

(C131) bùdì      bónègà bó pê      mbíè      bó      lèè náà  
       ba2-person 2-other 2 there ∅3.high 2.PRES say COMP  
       mí                  bó      kwàlé b-ùdâ      b-òò  
       2.non.Pygmy 2.PRES love      ba2-woman 2-POSS.2S  
       ‘The other people there up stream say that the Bulu love your women.’

Mambi:

(C132) voilà      wèè      njí      nà      njí      wèè      njí      nà  
       voilà      wèè      njí      nà      njí      wèè      njí      nà  
       ok[French] 2S.COP ∅9.path CONJ ∅9.path 2S.COP ∅9.path CONJ  
       njí  
       njí  
       ∅9.path  
       ‘Exactly, you are on the right track.’

(C133) donc      bèyá      lí      kè nà      bèyà nzíí      pándè  
       donc      bèya-H      lí      kè nà      bèya nzíí      pándè  
       so[French] 2P-PRES RETRO go CONJ 2P PROG.PRES arrive  
       ‘So, you just came and you are arriving,’

(C134) bèyá      nzíyè      bíyè      kfùmàlà  
       bèya-H      nzíyè      bíyè      kfùmala  
       2P-PRES come.SBJV 1P.NSBJ find  
       ‘you (pl) may come to meet us.’

(C135) bùdì      bésè bà nzíí      kè nà      ké dé      bèjíí  
b-ùdì      b-ésè ba nzíí      kè nà      kè-H dé      be-jíí  
ba2-person 2-all 2 PROG.PRES go CONJ go-R today be8-forest

dé tù  
dé tù  
LOC inside

‘All the people are going into the forest today.’

(C136) d̄      bèyá      nzíyè      bíyè      kfùmàlā  
d̄      bèya-H      nzíyè      bíyè      kfùmala  
so[French] 2P-PRES come.SBJV 1P.NSBJ find

‘So, you (pl) may come to meet us.’

(C137) bónégá báà      ná jíí      dé tù  
b-ónégá báà      ná jíí      dé tù  
2-other 2.COP still Ø7.forest LOC inside

‘The others are still in the forest.’

(C138) bèyá      nzíyè      bíyè      kfùmàlā vâ  
bèya-H      nzíyè      bíyè      kfùmala vâ  
2P-PRES come.SBJV 1P.NSBJ find      here

‘You may come to meet us here.’

(C139) donc      bí      yá      táálé      bê yàlànè      àà  
donc      bí      ya-H      táálé-H      bê yàlane      àà  
so[French] 1P.SBJ 1P-PRES begin-R 2P respond[Bulu] EXCL

‘So we start to respond to you, mhm.’

Severin in Ngumba:

(C140) wè sí      lèè náà      ò bírì bùrà      bò      nià  
2S PROG.PST say COMP 2S have ba2-woman 2:ATT how.many  
‘You said you have how many wives?’

Nze:

(C141) nà m̄  
nà m̄  
Q 1S  
‘Me?’

Mambi:

- (C142) à bùdé mà mùdâ  
       a bùdε-H mà m-ùdâ  
       1 have-R COMPL[Kwasio] N1-woman  
       ‘He already has a wife.’

Nze:

- (C143) mè bùdé mà mùdâ mvúdû  
       mε bùdε-H mà m-ùdâ m-vúdû  
       1S have-R COMPL[Kwasio] N1-woman 1-one  
       ‘I have already one wife.’

- (C144) bwánò mpù [gesture showing 2]  
       b-wánò mpù<sup>1</sup>  
       ba2-child like.this  
       ‘that many children [gesture showing 2].’

- (C145) bwánò bá bùdâ bábáà èè nà mwánò wà  
       b-wánò bá b-ùdâ bá-báà èè nà m-wánò wà  
       ba2-child 2:ATT ba2-woman 2-two EXCL CONJ N1-child 1:ATT  
       mùdâ nláálè ndáà ná  
       m-ùdâ nláálè ndáà ná  
       N1-woman three also again  
       ‘Two girls, yes, and also again a third girl.’

- (C146) mm ndí nyègà à ndáà lèbá é pè  
       mm ndí nyè-gà a ndáà le-bá é pè  
       EXCL but 1.SBJ-CONTR 1 also le5-marriage LOC there  
       ‘Mhm, but the other one has gotten also married over there.’

- (C147) à kéké bwálè nà eeehhh  
       a kéké bwálε nà eeehhh  
       1.PST1 go be.born CONJ EXCL  
       ‘She was born elsewhere and eehmmm...’

- (C148) ntémbò wà mùdâ wâ nyè wé  
       ntémbò wà m-ùdâ w-â nyε wé  
       ∅1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1.SBJ ID  
       bùdé mwánò wà mùdâ mvúdû  
       bùdε-H m-wánò wà m-ùdâ m-vúdû  
       have-R N1-child 1:ATT N1-woman 1-one  
       ‘It’s my wife’s younger sister who has one girl.’

- (C149) kwádó yáwò yâ wé yî  
 kwádó y-áwò yâ wé yî  
 Ø7.village 7-POSS.3P 7 ID 7.DEM.PROX

‘Their village is this one.’

- (C150) ká wé nyé mê jî sâ vâ nâ bá  
 ká wé-H nyé-H mê jî sâ vâ nâ ba-H  
 if 2S-PRES see-R 1S.NSBJ stay only here COMP 2-PRES

nzíyè bá nzíyè jìyò  
 nzíyè ba-H nzíyè jìyò  
 come.SBJV 2-PRES come.SBJV stay

‘When you see me just staying here, so that they come, they come to stay.’

Mambi:

- (C151) yá wúmbé ndáà náà bí bógà yá  
 ya-H wúmbé-H ndáà ná bí b-ógà ya-H  
 1P-PRES want-R also COMP 1P.SBJ 2-other 1P-PRES  
 pángó bë  
 pángó-H bë  
 do.first[Kwasio]-R be

‘We also want that we others first have..’

- (C152) nà kùrâ ndáà  
 nà kùrâ ndáà  
 COM Ø7.electricity also  
 ‘also electricity.’

- (C153) ónóò bí bógà yá pâ jî bénymè  
 ónóò bí b-ógà ya-H pâ-H jî H-be-nyámè  
 EXCL 1P.SBJ 2-other 1P-PRES do.first-R stay OBJ.LINK-be8-poor  
 ná  
 ná  
 still

‘Ohhh, we other will first stay still poor.’

- (C154) yá bélé nà kùrâ  
 ya-H bélé nà kùrâ  
 7-PRES be-NEG COM Ø7.electricity  
 ‘There is no electricity.’

- (C155) mé dyúwó ná mìntángáné mí nzíí njì  
 mε-H dyúwɔ-H ná mi-ntángáné mí nzíí njì<sup>1</sup>  
 1S-PRES hear-R COMP mi4-white.person 4 PROG.PRES come  
 mí nzíí njì  
 mí nzíí njì  
 4 PROG.PRES come  
 'I hear that white people are coming and coming.'

(C156) mìntángáné métì mí sá náà  
 mi-ntángáné mé-tì mi-H sâ-H ná  
 mi4-white.person 4-DEM[Bulu] 4-PRES do-R COMP  
 'The white people make that,'

(C157) bàmòné bá vé bô é pè só'ò wû  
 ba-mònè ba-H vè-H b-â é pè só'ò wû  
 ba2-money 2-PRES give-R 2-NSBJ LOC there before there  
 'the money they give them there [in Europe] before...'

(C158) bí bógà yá wúmbé ndáà pâ nyê sâ  
 bí bó-gà ya-H wúmbé-H ndáà pâ nyê sâ  
 1P.SBJ 2-other 1P-PRES want-R also do.first see Ø7.thing  
 bá gyíbó ngyùlè wá kùrâ  
 ba-H gyíbɔ-H ngyùlè wá kùrâ  
 2-PRES call-R Ø3.light 3:ATT Ø7.electricity[French]  
 'We others, we also want to first see the thing they call the light of electricity.'

(C159) wú bé mà bî ndáwò dé tù  
 wú bë-H mà bî ndáwò dé tù  
 3 be-R COMPL[Kwasio] 1P.NSBJ Ø9.house LOC inside  
 'That it was already in our houses!'

(C160) màndáwò má báà lwâ  
 ma-ndáwò má báà lwâ  
 ma6-houses 6:ATT 2.FUT build  
 'The houses that they will build,'

(C161) má bá lwó bî  
 má ba-H lwô-H bî  
 6:ATT 2-PRES build-R 1P  
 'that they build for us.'

- (C162) mèé                bélé                mùdì                wà                lèkélè  
             mèé                bélé                m-ùdì                wà                le-kélè  
             1S.PRES.NEG be-NEG N1-person 1:ATT le5-word  
             'I'm not a person of many words.'

Severin in Ngumba:

- (C163) wè                wé yíi                nzé gyí                ywè límbó màmbì                mó-míyà  
             2S.SBJ 2S 7.COP who what 2S know ma6.thing 6-all  
             bó                síí                sâ  
             2.PRES PROG do  
             'Who are you? What do you know about all the things they do?'

Nze to Mama:

- (C164) wé                làwó                téè  
             wé-H                làwó-H téè  
             2S-PRES talk-R now  
             'You speak now.'

Mama:

- (C165) èè mè jínò                ná Mámà  
             èè mè j-ínò                ná Mámà  
             yes 1S le5-name SIM Ø1.PN  
             'Yes, my name is Mama.'

- (C166) yíi                póné                kójò lèváá                lèvúdû nâ                bí  
             yíi                póné                kójò le-váá                lè-vúdû nâ                b-í  
             7.COP Ø7.truth still le5-thing 5-one COMP ba2-non.Bagyeli  
             bá                ntégélé                bágylé  
             ba-H                ntégelé-H H-ba-gyél  
             2-PRES bother-R OBJ.LINK-ba2-Gyeli  
             'It is true, still the same thing that the non-Bagyeli bother the Bagyeli.'

- (C167) mèè                vâ                sâ                wá                à                wé                mèè                mwánò  
             mèè                vâ                sâ                w-á                a                wé-H mèè                m-wánò  
             1S.COP here Ø1.father 1-POSS.1S 1.PST1 die-R 1S.COP N1-child  
             nyùlè  
             nyùlè  
             orphan  
             'I'm here, my father has died, I'm an orphan.'

Nze :

- (C168) èé lûngà yá sâ wéè yóò yíí  
 èé lûngà yá sâ w-éè yóò yíí  
 EXCL Ø7.grave 7:ATT Ø1.father 1-POSS.3S 7.COP 7.DEM.DIST  
 ‘Right, his father’s grave is over there.’

Mama:

- (C169) lûngà yá sâ wâ yó bé yíí  
 lûngà yá sâ w-â y-ó bë-H yíí  
 Ø7.grave 7:ATT Ø1.father 1-POSS.1S 7-NSBJ be-R 7.DEM.DIST  
 ‘My father’s grave is over there.’
- (C170) bwánò bá kálé bâ bó  
 b-wánò bá kálé b-â b-ó  
 ba2-child 2:ATT Ø1.older.sister 2-POSS.1S 2-NSBJ[Kwasio]  
 bá ké sîlè pândè  
 ba-H kë-H sîlè pândè  
 2-PRES go-R finish arrive  
 ‘The children of my older sister, they all arrive.’

Nze:

- (C171) yáà nyè wé nû  
 yáà nyε wé nû  
 EXCL 1.SBJ ID 1.DEM.PROX  
 ‘Yes, this is him.’

Mama:

- (C172) nyââ wâ nûú Ntâbètendá pè  
 nyââ w-â nûú Ntâbètendá pè  
 Ø1.mother 1-POSS.1S 1.DEM.DIST Ø3.PN there  
 ‘My mother is over there in Ntabetenda [= name of village].’
- (C173) à nzí kë létsíndá lé  
 a nzí kë H-le-tsíndá lé  
 1 PROG.PST go OBJLINK-le5-funeral.ceremony 5:ATT  
 ntùmbà wâ  
 n-tùmbà w-â  
 N1-older.brother 1-POSS.1S  
 ‘She was going to my older brother’s funeral ceremony.’

Nze:

- (C174) nógá à nzí wè wû  
 n-ógá a nzí wè wû  
 1-other 1 PROG.PST die there  
 ‘That one died over there.’

Mama:

- (C175) nónégá à nzí wè wû  
 nó-négá a nzí wè wû  
 1-other 1 PROG.PST die there  
 ‘That one died over there.’

- (C176) yóò pònè vèè mpù  
 yóò pònè vèè mpù  
 so Ø7.thruth still like.this  
 ‘It is still true like this.’

- (C177) bónégá bá lí sílè làwò nâ bvúlè bá  
 bó-négá ba-H lí sílè làwò nâ bvúlè ba-H  
 2-other 2-PRES RETRO finish speak COMP ba2.Bulu 2-PRES  
 ntéglé bágelyélí  
 ntéglé-H H-ba-gyélí  
 bother-R OBJ.LINK-ba2-Gyeli  
 ‘The others have just said that the Bulu bother the Bagyeli,’

- (C178) kè nà kwàlè bùdâ kè nà kwàlè bùdâ bá  
 kè nà kwàlè b-ùdâ kè nà kwàlè b-ùdâ bá  
 go CONJ love 2n-woman go CONJ love ba2-woman 2:ATT  
 bágelyélí  
 ba-gyélí  
 ba2-Gyeli  
 ‘coming and loving the women, coming and loving the women of  
 the Bagyeli.’

Severin in Ngumba:

- (C179) jínásá náà wà pélí lí bè nà m-ùrà  
 mean COMP 2S NEG.PST yet be COM 1-woman  
 ‘That means that you haven’t been yet with a woman?’

Nze:

- (C180) àà mwâ ntùà àà mwâ ntúà  
           àà m-wâ ntùà àà m-wâ ntúà.  
       1.COP N1-child small 1.COP N1-child small  
       ‘He is a small child, he is a small child.’

Mama:

- (C181) mèè nyá mùdì nà nyê  
          mèè nyá m-ùdì nà nyê  
          1S.COP real N1-person CONJ 1.NSBJ  
          'I'm an adult and him [= Mambi].'

- (C182)    yà pálé        bè nà        bùdâ  
           ya pálé        bè nà        b-ùdâ  
           1P NEG.PST be COM ba2-woman  
           'We did not have any women.'

Severin in Ngumba:

- (C183) ó           ké nà      lywélé b-ùdâ         bì-jìnáà  
          2S.PRES go CONJ show ba2-woman be8-finger  
          ‘You go and hit on women [lit. show women with fingers]?’

Mama:

- (C184) mè fúgēē  
           mɛ fúgēē  
       1S.PST1 finish.COMPL  
       'I have finished.'

Nze:

- (C185) á kí náà à sílé mà  
       a-H kì-H nâ a sílé-H mà  
       3S-PRES say-R COMP 1.PST1 finish COMPL[Kwasio]  
       ‘He says that he has finished.’

Mambi:

- (C187) màndáwò má zì  
 ma-ndáwò má zì  
 ma6-house 6:ATT Ø7.tin[Bulu]  
 ‘tin-roofed houses,’
- (C188) nà nà kùrâ màndáwò  
 nà nà kùrâ ma-ndáwò  
 CONJ CONJ Ø7.electricity ma6-house  
 ‘and, and electricity in the houses.’
- (C189) kí dyúwò nà bà lwó ndáwò vúdû ndí  
 kí dyúwò nà ba lwô-H ndáwò vúdû ndí  
 NEG understand COMP 2.PST1 build-R Ø9.house one but  
 màndáwò  
 ma-ndáwò  
 ma6-houses  
 ‘Without understanding that they [white people] built one house,  
 but houses,’
- (C190) mùdì nyè ngwê màndáwò  
 m-ùdì nyè ngwê ma-ndáwò  
 N1-person 1 all[Kwasio] ma6-house  
 ‘every person [their] houses.’
- (C191) nà bí bésè kój kùrâ bè dé tù  
 nà bí b-ésè kój kùrâ bè dé tù  
 COM 1P.SBJ 2-all still Ø7.electricity be LOC inside  
 ‘with all of us just electricity be inside.’
- (C192) bâ yâ màfwálá wé yíndè  
 bâ y-â ma-fwálá wé yí-ndè  
 Ø7.word 7-POSS.1S ma6-end ID 7.DEM-ANA  
 ‘My last word is this.’

Severin in Ngumba:

- (C193) býò bí lèè náà sí nyà bé-lé, dí býà lwò  
 2P.SBJ 2P.PRES say COMP Ø9.land 9 be-NEG but 2P build  
 yé  
 where  
 ‘You say that you don’t have any land, but where do you build?’

Mambi:

(C194) báà bù mpàgó pílì pòdè àà là  
báà bù mpàgó pílì pòdè àà là  
3.FUT break Ø3.road when Ø1.port 1.FUT pass

‘They will build a road when the port passes.’

(C195) à múà njì là, báà bù mpàgó  
a múà njì là báà bù mpàgó  
1 be.almost come pass 2.FUT break Ø3.road

‘It [the port] is about to come pass [= by here], they will build the road.’

(C196) báà bù mpàgó pílì pòdè àà vâ njì tsíyè vâ  
báà bù mpàgó pílì pòdè àà vâ njì tsíyè vâ  
2.FUT break Ø3.road when Ø1.port 1.COP here come cut here

‘They will build a road when the port is here, coming cross-cutting here.’

(C197) bá báà bù mpàgó  
bá báà bù mpàgó  
2.SBJ 2.FUT break Ø3.road

‘They will build a road.’

Nze:

(C198) mèè kè búùlè yâ  
mèè kè búùlè y-â  
1S.FUT go Ø7.old.camp 7-POSS.1S

‘I will go to my old settlement.’

Mambi:

(C199) èhè báà bù mpàgó nà pámò pè Kyíèngè  
èhè báà bù mpàgó nà pámo pè Kyíèngè  
EXCL 2.FUT break Ø3.road COM arrive over.there Ø7.PN  
‘Yes, they will build a road up to Kienge [= river and name for Kribi].’

(C200) bá nà ngvùlè bíyè sílè lwâ mândáwò  
bá nà ngvùlè bíyè sílè lwâ H-ma-ndáwò  
2 COM Ø9.strength 1P.NSBJ finish build OBJ.LINK-ma6-house

‘They have the strength to build us all houses.’

(C201) wè dyúwó mò  
wε dyúwɔ-H mò  
2S.PST1 hear-R COMPL

‘Have you understood?’

(C202) báà sílè bî kúmbà lwɔ̄ mánḍáwɔ̄  
báà sílε bî kúmba lwɔ̄ H-ma-ndáwɔ̄  
2.FUT finish 1P.NSBJ arrange build OBJ.LINK-ma6-house

‘They will arrange for us building houses.’

Mambi:

(C203) bá ké ndáà nà télé mákùndù má  
ba-H kè-H ndáà nà téle-H H-ma-kündù má  
2-PRES go-R also CONJ put-R OBJ.LINK-ma6-clay.house 6:ATT  
kùrâ ké ké ké ké  
kùrâ ké-ké-ké-ké-ké  
∅7.electricity IDEO:repeated.placement  
‘They also go and put clay houses with electricity, [depiction of putting the electricity poles along the road].’

(C204) wè dyúwó mò  
wε dyúwɔ-H mò  
2S.PST1 hear-R COMPL  
‘Have you understood?’

Nze:

(C205) é pè bà sílē bî lwɔ̄ mánḍáwɔ̄  
é pè ba sílε-H bî lwɔ̄ H-ma-ndáwɔ̄  
LOC there 2.PST1 finish-R 1P.NSBJ build OBJ.LINK-ma6-house  
é pè  
é pè  
LOC there  
‘There, they have finished to build us houses there.’

(C206) ò dyúwó mò  
ò dyúwɔ-H mò  
2S.PST1 [Kwasio] understand-R COMPL  
‘Have you understood?’

- (C207) mm nâ yí kádó nâ mùdì bè tí  
 mm nâ yi-H kádó-H nâ m-ùdì bè tí  
 EXCL COMP 7-PRES be.plenty-R COMP N1-person be go[?]  
 njì nà yímbò mhmm  
 njì nà yímbò mhmm  
 come CONJ visit EXCL  
 ‘Mhm, so that it be plenty so that people come for a visit [= which they don’t now because there is no electricity]. Mhm.’

- (C208) pâ mê láà tè  
 pâ mê láà tè  
 do.first.IMP 1S.NSBJ tell there  
 ‘Tell me first there! [= Tell me how they would come.]’

- (C209) bímbú lé mámbòngò mâ wè médé  
 bímbú lé ma-mbòngò mâ wè médé  
 Ø5.amount 5:ATT ma6-plant 6.DEM.PROX 2S.SBJ self  
 dígê médé  
 dígê médé  
 look.IMP self

‘The amount of these plants, yourself, look yourself,’

- (C210) nâ á dyúwó bágylì  
 nâ a-H dyúwó-H H-ba-gyélì  
 COMP 1-PRES understand-R OBJLINK-ba2-Gyeli  
 ‘so that she [Nadine] understands the Bagyeli.’

Mambi:

- (C211) bâ wé làwò bá dyúwó sâ yésè  
 bâ wé-H làwò ba-H dyúwó-H sâ y-ésè  
 Ø7.word 2S-PRES speak 2-PRES understand-R Ø7.thing 7-every  
 ‘The word that you speak, they understand everything. [= not the language, but what is promised]’

- (C212) bî bá dyúwó lékélè lé  
 bî ba-H dyúwó-H H-le-kélè lé  
 1P.SBJ 2-PRES understand OBJLINK-le5-language 5:ATT  
 wé làwò  
 wé-H làwò  
 2S-PRES speak  
 ‘We, they understand the language that you speak.’

Mama:

- (C213) wé nyé mbé yá bá njí líbélè  
wε-H nyê-H mbé yá ba-H njì-H líbelε  
2S-PRES see-R Ø7.thing 7:ATT 2-PRES come-R show  
yíndè  
yí-ndè  
7.DEM-ANA

‘You see the thing [camera] that they came to show there.’

- (C214) wé tébó númbá vúdû  
wε-H tébø-H númbá vúdû  
2S-PRES put-R Ø7.place one

‘Stay in the same place! [= don’t move because of the camera]’

Nze:

- (C215) mais mè bùdé nâ é pè  
mais me bùde-H nâ é pè  
but[French] 1S have-R COMP LOC over.there

‘But I say that over there,’

- (C216) é wû bèyá lwô kwádó yâ é  
é wû bèya-H lwô-H kwádó y-â é  
LOC there 2P[Kwasio]-PRES build-R Ø7.village 7-POSS.1S LOC  
wû  
wû  
there

‘there you (pl) build my village over there.’

- (C217) kwádó yâ màndáwò má zì  
kwádó y-â ma-ndáwò má zì  
Ø7.village 7-POSS.1S ma6-house 6:ATT Ø7.tin[Bulu]  
‘My village, tin houses.’

Délégué:

- (C218) voilà bùgù yésè  
voilà bùgù y-éssè  
voilà[French] Ø7.place 7-all

‘Voilà, all the place.’

Nze:

- (C219) mè bùdé nâ á lwóngó mêt mändáwò  
       mè bùdε-H nâ a-H lwóngɔ-H mêt ma-ndáwò  
       1S have-R COMP 1-PRES build[Kwasio]-R 1S.NSBJ ma6-house  
       ‘I say that she [Nadine] builds me houses,’
- (C220) búùlè yá Ngòló Ngòló Ngòló  
       búùlè yá Ngòló Ngòló Ngòló  
       ∅7.old.camp 7:ATT ∅3.PN ∅3.PN ∅3.PN  
       ‘at the old settlement of Ngolo, Ngolo, Ngolo.’
- (C221) mèè lwóngò mändáwò Ngòló zì  
       mèè lwóngò H-ma-ndáwò Ngòló zì  
       1S.FUT build[Kwasio] OBJ.LINK-ma6-house ∅3.PN ∅7.tin[Bulu]  
       nà zì  
       nà zì  
       COM ∅7.tin[Bulu]  
       ‘I will build houses in Ngolo, each with tin (roofs).’
- (C222) yóò mé wúmbé wû  
       y-óò mε-H wúmbε-H wû  
       7-NSBJ 1S-PRES want-R there  
       ‘That is what I want there.’
- (C223) àmú mèé bélé nà sí vâ  
       àmú mèé bé-lé nà sí vâ  
       because[Bulu] 1S.PRES.NEG be-NEG COM ∅9.ground here  
       ‘Because I don’t have any land here.’
- (C224) bà yá bwánò bá lí làwò yîñ tè  
       bà yá b-wánò ba-H lí làwɔ yîñ tè  
       ∅7.word 7:ATT ba2-child 2-PRES RETRO speak 7.COP there  
       ‘The word that the children just said is there. [= it is true]’
- (C225) mèé bélé nà sí vâ  
       mèé bé-lé nà sí vâ  
       1S.PRES.NEG be-NEG COM ∅9.ground here  
       ‘I don’t have any land here.’
- (C226) mèè vâ mpínásâ  
       mèè vâ mpínásâ  
       1S.COP here squeezed  
       ‘I’m squeezed here.’

(C227)   donc                 sí                 nyâ                 nyî     búùlè                 yá  
         donc                 sí                 ny-â                 nyî     búùlè                 yá  
         so[French]   ø9.ground 9-POSS.1S 9:COP ø7.old.camp 7:ATT  
         Ngòló  
         Ngòló  
         ø3.PN

‘So, my land is the old settlement of Ngolo.’

Mambi:

(C228)   lé                 yá                 wé                 nyê     bá                 gyíbó     ngàlé     yî  
         lé                 yá                 wé-H                 nyê ba-H     gyíbó-H     ngàlé     yî  
         ø7.tree 7:ATT 2S-PRES see 2-PRES call-R     PN     7.COP

‘The tree that you see that they call ‘ngàlé’ is that.’

(C229)   bá                 lá                 pámò     vâ     téè     bà                 kwèlɔ̄j     yò  
         ba-H                 lå-H                 pámo     vâ     téè     ba                 kwèlɔ̄j     y-ò  
         2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7-NSBJ  
         kílè                 dyúwò     tsíyà  
         kílè                 dyúwò     tsíyà  
         NEG[Kwasio] hear     ø1.question

‘They pass and arrive here now, they cut it already without hearing a question [= without asking].’

(C230)   yò                 yò                 mè                 jìlē     mà  
         y-ò                 y-ò                 me                 jìlē-H     mà  
         7-NSBJ 7-NSBJ 1S.PST1 place-R COMPL[Kwasio]  
         ‘This, this I have placed [there].’

Djiedjhie in Mabi:

(C231)   pfúmá m-í                 léé     mê     náà     bî     tí     wúmbè     sá  
         chief N1-non.Pygmy say 1S COMP 2P.SBJ NEG want do  
         bì-sálè     bò pwâ bì-dólò     bí     bíná     dólò     ywê     bí  
         be8-work 2 pay be8-money 2P refuse ø7.money 7.POSS.3S, 2P  
         wúmbé     sá     náà     líní     bí     sá     bì-sálè     bó kíyá     bî  
         want     ø7.thing COMP when 2P do bi8-work 2 give 2P  
         mà-nyùà  
         ma6-drink

‘The chief of the farmers [Bulu] told me that you don’t want to be paid money when you work, you refuse their money, you want that when you work you be given alcohol.’

Mambi:

- (C232) àà kfúmá ndè wà Nlúnzò  
àà kfúmá ndè wà Nlúnzò  
ECXL Ø1.chief ANA 1:ATT Ø1.PN  
'Ah, that chief from Nlunzo!'

Nze:

- (C233) àà á sɔ'ò  
àà a-H sɔ'ò  
EXCL 1-PRES quit  
'Ah, may he quit!'

Mambi:

- (C234) yèngè-yèngè nâ bùdì bá ndyándyá wû  
yèngè-yèngè nâ b-ùdì ba-H ndyándya-H wû  
especially COMP ba2-person 2-PRES work-R there  
kàlègà bíyè pánđè dígè bíyè vâ yà bùdé vâ  
kàlega bíyè pánđe díge bíyè vâ ya bùdë-H vâ  
stop.over 1P.NSBJ arrive watch 1P.NSBJ here 1P have-R here  
nâ pílì wé kéké bésàlé bèjówò  
nâ pílì wε-H kë-H H-be-sàlé be-jówò  
COMP when 2S-PRES go-R OBJ.LINK-be8-work be8-day.labor  
bé kùgúù nà bé lévidósí  
bé kùgúù nà bé le-vídósí  
8:ATT Ø7.evening CONJ 8:ATT le5-morning  
'Especially people who work there stop over, arrive to see us here,  
we say that when you go work as day labor in the evening and in  
the morning,'

- (C235) donc wè bùdé ná bàfû wé yàné gyàgà  
donc we bùdë-H ná ba-fû wε-H yànë-H gyàga  
so[French] 2S be-R again ba2-fish 2S-PRES must-R buy  
bô  
b-ô  
2-NSBJ  
'so, you have fish again, you have to buy them.'

- (C236) wé símásá ndáà sìgá  
wε-H símasa-H ndáà sìgá  
2S-PRES regret-R also Ø1.cigarette  
'You also regret a cigarette [= because you cannot buy it].'

- (C237) wé símásá ndáà ñwándó  
 wε-H símasa-H ndáà ñwándó  
 2S-PRES regret-R also Ø3.manioc.stick  
 ‘You also regret the manioc stick.’

- (C238) wé yàné ná gyàgà ndísì  
 wε-H yàne-H ná gyàga ndísì  
 2S-PRES must-H again buy Ø3.rice  
 ‘You must again buy rice,’

- (C239) pílì wé lèmbó ná bùdì bá ndáwò  
 pílì wε-H lèmbo-H ná b-ùdì bá ndáwò  
 when 2S-PRES know-R COMP ba2-person 2:ATT Ø9.house  
 bvùbvù  
 bvùbvù  
 many  
 ‘when you know that there are many people at home.’

Nze:

- (C240) èsé bée ndáà bèyá làwó fàlà  
 èsé bée ndáà bèya-H làwɔ-H fàlà  
 is.it[French] 2P.SBJ also 2P[Kwasio]-PRES speak-R Ø1.French  
 ‘Isn’t it, you (pl.) also, you speak French.’

- (C241) mèé láwòlè fàlà  
 mèé láwɔ-lè fàlà  
 1S.PRES.NEG speak-NEG Ø1.French  
 ‘I don’t speak French.’

- (C242) nzá núù dè nzá núù nyímè  
 nzá núù dè nzá núù nyímè  
 who 1.FUT eat who 1.FUT refuse  
 ‘Who will eat, who will refuse.’

Mambi:

- (C243) pílì wé ké gyàgà báfû bábáà  
 pílì wε-H kè-H gyàga H-ba-fû bá-báà  
 when 2S-PRES go-R buy OBJ.LINK-ba2-fish 2-two  
 ‘When you go to buy two fish...’

- (C244) ká bá      ké wê      vè bébwúyà      béká  
       ká ba-H    kë-H wê      vè H-be-bwúyà      béká  
       if 2-PRES go-R 2S.NSBJ give OBJ.LINK-be8-hundred 8-two  
       nà      màwú      mätánè  
       nà      ma-wú      má-tánè  
       CONJ ma6-ten 6-five  
       ‘If they go give you 250 (Francs),’

Nze:

- (C245) wé      sá      tè      ná  
       wé-H    sâ-H tè      ná  
       2S-PRES do-R there how  
       ‘how do you manage there? [because it’s very little money]’

- (C246) mhmm mè Nzìwù wé  
       mhmm mè Nzìwù wé  
       EXCL 1S Ø1.PN ID  
       ‘Mhm, I’m Nziwu.’

Mambi:

- (C247) wé      ná      báàlá      ná      nyé      fí      ná      wé  
       wé-H    ná      báàla-H ná      nyé-H fí      ná      wé-H  
       2S-PRES again repeat-R CONJ see-R different CONJ 2S-PRES  
       ndyándyá      ná      sálé      é      pè      ná      wé      kòlá  
       ndyándya-H ná      sálé      é      pè      ná      wé-H      kòla-H  
       work-R      again Ø7.work LOC over.there CONJ 2S-PRES add-R  
       ná      mòné      nû  
       ná      mòné      nû  
       again Ø1.money 1.DEM.PROX  
       ‘You repeat again and see differently [= find another work] and  
       you do again work there and you add again this money [= same  
       amount of 250 Francs].’

Nze:

- (C248) yóò nû      àá      láwòlè  
       yóò nû      àá      láwò-lè  
       so 1.DEM.PROX 1.PRES.NEG speak-NEG  
       ‘So this one doesn’t speak. [= teasing Délégué who is deaf-mute: he  
       doesn’t speak because he is guilty of having himself be exploited]’

- (C249) kóò nyégà á làwó ndáà  
           kóò nyé-gà a-H làwɔ-H ndáà  
           only 1.SBJ-CONTR 1-PRES speak-R also  
     ‘Only him, he would also speak. [= teasing: if he wasn’t guilty, he would also speak and protest]’

- (C250) mhm dzámé ngá nyê  
           mhm dzámé ngá nyê  
           EXCL excuse PL 1.NSBJ  
     ‘Mhm, excuse (pl) him. [= teasing: excuse him for accepting the poorly paid work]’

- (C251) bí bê yá lí làwɔ  
           bí b-ê ya-H lí làwɔ  
           1P.SBJ 2-all[Kwasio] 1P-PRES RETRO speak  
     ‘We all just spoke.’

- (C252) yà bé bùdì báláálè  
       ya bè-H b-ùdì bá-láálè  
       1P.PST1 be-R ba2-person 2-threee  
     ‘We were three people.’

Mambi:

- (C253) kóò sílè  
           kóò sílε  
           just finish  
     ‘Just finish.’

## Appendix III: Lexicon

The Gyeli — English lexicon represented here contains almost 1500 entries. It mostly includes verbs and nouns, but also other parts of speech. Lexical entries minimally yield information on the part of speech and the translation. For nouns, also the noun class and gender affiliation is indicated as well as the plural form. Verbal lexemes contain information on possible derivation forms.

In terms of notation conventions, abbreviations are listed at the beginning of the grammar. Generally, entries with a hyphen indicate the lexical stem that take a prefix. Entries without hyphens constitute prefixless, independent words. As elsewhere in the grammar, lexemes are marked for tone. If a syllable is not marked for tone, that means that it is underlyingly toneless.

A

-á d- *n.* 5/6 crab *pl.* m-á

-á lé tíndí d- *n.* 5/6 poisonous crab  
in forest *pl.* m-á má tíndí

-áá m- *n.* 6 chance, luck

àfríkà *n.* 1 Africa

-ákè d- *n.* 5/6 nest *pl.* m-ákè

-ákó n- *n.* 3/6 earwax *pl.* m-ákó

-álè bw- *n.* 8/6 canoe *pl.* m-álè

-àmbò m- *n.* 6 thing

-ámó d- *n.* 5/6 hornbill *pl.* m-ámó

ányònè *n.* 1/2 onion *pl.* ba-  
nánýònè

-áwè j- *n.* 5/6 goliath frog (*Conraua*  
*goliath*) *pl.* m-áwè

B

**-bâ** le- *n.* 5/6 spotted-necked otter  
(*Lutra maculicollis*) *pl.* ma-bâ  
**bâ** *n.* 3/4 pit, stone *pl.* mi-bâ  
**bă** *n.* 7/8 word *pl.* be-bă  
**bäääää** *ideo.* depiction of walking a long distance fast  
**-bëë** *be-n.* 8 beauty  
**-bô** le- *n.* 5/6 knee *pl.* ma-bô  
**bà** *v.* smoke (tr.) (e.g. cigarette)  
*npp.* mbàyá *recip.* bàyala *au-toc.* bàyaga  
**bâ** *v.* marry *npp.* mbánâ  
*caus.* bálesé *recip.* bánala  
**-báà** *num.* two  
**-báà** le- *n.* 5/6 stumbling *pl.* ma-báà

-bàà le- *n.* 5/6 view *pl.* ma-bàà  
**báàla nà** *v.* repeat *npp.* mbàálâ  
**báàle** *v.* protect, guard, keep  
*npp.* mbàálâ *recip.* báàla  
**bààm** *ideo.* depiction of closing or  
finishing something

-bàdà le- *n.* 5/6 ground *pl.* ma-  
bàdà

-bàdò le- *n.* 5/6 skin disease with  
blisters under skin, caused by lack  
of hygiene *pl.* ma-bàdò

-bágá le- *n.* 5/6 patch (for mending  
clothes) *pl.* ma-bágá

**bága nà** *v.* do sth. for last time,  
stop, separate *npp.* mbágâ *recip.* bá-  
gala

**bàgò** *n.* 7/8 hoe *pl.* be-bàgò

**bàke** *v.* stick, attach sth.  
*npp.* mbágá

**bàländè** *n.* 1/2 larva, caterpillar  
*pl.* ba-bàländè

**bále** *v.* surpass, overtake, conquer  
*npp.* mbálâ

**báljwô** *v.* bend down, se courber  
*npp.* mbáljwô

**bàmbèyè** *n.* 7/8 prostitution  
*pl.* be-bàmbèyè

**bámíwálé** *n.* 7/8 scorpion *pl.* be-  
bámíwálé

**bámɔ** *v.* scold *npp.* mbámâ  
*appl.* bámèle *recip.* bámala

**bàmò** *n.* 7/8 scar *pl.* be-bàmò

**bándá** *n.* 7/8 kingfisher (*Halcyon*)  
*pl.* be-bándá

-bándí lè- *n.* 5/6 protecting fetish  
(in house, not on body) *pl.* ma-bándí

<b>-bándówá</b> lé <b>mpòmbó</b> lè- <i>n.</i> 5/6 forehead <i>pl.</i> ma-bándówá má ma-mpòmbó	<b>bènɔ</b> <i>v.</i> refuse <i>npp.</i> mbèná <i>re-cip.</i> bènala
<b>bándyè</b> (wà le-kójò) <i>n.</i> 1/2 cave (of stone) <i>pl.</i> ba-bándyè	<b>béyɔ</b> <i>v.</i> ripen <i>npp.</i> mbéyâ <i>caus.</i> bélesé <i>autoc.</i> býaga
<b>-bándyì</b> lè- <i>n.</i> 5/6 slap in the face <i>pl.</i> ma-bándyì	<b>-bí</b> le- <i>n.</i> 5/6 excrements <i>pl.</i> ma-bí
<b>básí</b> <i>n.</i> 7/8 shoulder blade <i>pl.</i> be-básí	<b>-bí'ì</b> le- <i>n.</i> 5/6 leech <i>pl.</i> ma-bí'ì
<b>bábè</b> <i>n.</i> 7/6 disease <i>pl.</i> ma-bábè	<b>bíá</b> <i>n.</i> 1/2 beer <i>pl.</i> ba-bíá
<b>báwe</b> <i>v.</i> injure (oneself) <i>npp.</i> mbáwâ <i>caus.</i> báwesé <i>re-cip.</i> báwala	<b>bígε</b> <i>v.</i> become rich, develop, emerge <i>npp.</i> mbígâ <i>caus.</i> bígese
<b>bàwe</b> <i>v.</i> carry <i>npp.</i> mbàwá <i>caus.</i> báwesé <i>recip.</i> bàwala	<b>bímbú</b> <i>n.</i> 7/6 quantity <i>pl.</i> ma-bímbú
<b>bé</b> <i>n.</i> 7/8 well, pit, hole <i>pl.</i> be-bé	<b>-bìndì</b> le- <i>n.</i> 5/6 testicle <i>pl.</i> ma-bìndì
<b>bè</b> <i>v.</i> be	<b>bìnó</b> <i>n.</i> 7/8 louse <i>pl.</i> be-bìnó
<b>bè</b> <i>v.</i> sow, plant, cultivate <i>npp.</i> mbèyá <i>recip.</i> bèyala	<b>bísì nà</b> <i>v.</i> pay attention, consider
<b>bè'è</b> <i>n.</i> 7/6 shoulder <i>pl.</i> ma-bè'è	<b>bíbò</b> <i>n.</i> 7/8 thickness <i>pl.</i> be-bíbò
<b>béde</b> <i>v.</i> light <i>npp.</i> mbédâ <i>recip.</i> bé-dala <i>autoc.</i> bédega	<b>bíwò</b> <i>n.</i> 3 bad luck, malheur
<b>bédo</b> <i>v.</i> go up, mount <i>npp.</i> mbédâ <i>appl.</i> bédèle <i>caus.</i> bédese <i>recip.</i> bé-dala <i>autoc.</i> bédega ascend	<b>bíwò adj.</b> bad
<b>bédo</b> <i>v.</i> ferment <i>npp.</i> mbédálâ	<b>bíyálá</b> <i>n.</i> 7/8 awful, hysterical, terrible (positive or negative) <i>pl.</i> be-bíyálá
<b>bèlane</b> <i>v.</i> use <i>npp.</i> mbèlánê	<b>bíyɔ</b> <i>v.</i> hit, beat <i>npp.</i> mbílâ <i>appl.</i> bìyelé do sth. bad, activate sth. <i>caus.</i> bílesé <i>recip.</i> bínalá
<b>bélé</b> <i>n.</i> 7/8 handicap <i>pl.</i> be-bélé	<b>-bó</b> le- <i>n.</i> 5/6 sole, footprint, hoof <i>pl.</i> ma-bó
<b>-bélè</b> le- <i>n.</i> 5/6 breast <i>pl.</i> ma-bélè	<b>bò</b> <i>v.</i> rot <i>npp.</i> mbòyá <i>caus.</i> bòyesé
<b>-bèlé</b> le- <i>n.</i> 5/6 kola nut <i>pl.</i> ma-bèlé	<b>-bô</b> m- <i>n.</i> 3/6 arm <i>pl.</i> ma-bô
<b>bénèle</b> <i>v.</i> lift, raise <i>recip.</i> bènala <i>autoc.</i> bénega	<b>bô</b> <i>v.</i> lie down (intr) <i>npp.</i> mbúgâ <i>tr.</i> búge
<b>bèngvùdè</b> - <i>n.</i> 1/2 golden angwantiboo ( <i>Arctocebus aureus</i> ) <i>pl.</i> ba-bèngvùdè	<b>-bó'ò</b> le- <i>n.</i> 5/6 bread fruit, bread fruit tree ( <i>Treculia africana</i> ) <i>pl.</i> ma-bó'ò
<b>bénó</b> <i>n.</i> 7/8 buttock <i>pl.</i> be-bénó	<b>bódé</b> <i>n.</i> 1/2 boot <i>pl.</i> ba-bódé
	<b>bòge</b> <i>v.</i> enlarge <i>npp.</i> mbògá <i>caus.</i> bògesé <i>recip.</i> bògala

<b>bòlé</b> <i>n.</i> 7/8 mold on food <i>pl.</i> be-bòlé	<b>búò</b> <i>n.</i> 1/2 mute person <i>pl.</i> ba-búò
<b>bómele</b> <i>v.</i> wrinkle <i>npp.</i> mbómálâ <i>recip.</i> bómala	<b>búò</b> <i>n.</i> 7/8 mortar <i>pl.</i> be-búò
<b>bòndì</b> <i>n.</i> 7/8 colobus monkey <i>pl.</i> be-bòndì	<b>-bùj</b> <i>le-</i> <i>n.</i> 5/6 cripple <i>pl.</i> ma-bùj
<b>-bónđó</b> <i>le-</i> <i>n.</i> 5/6 toad <i>pl.</i> ma-bónđó	<b>búùlè</b> <i>n.</i> 7/8 old settlement <i>pl.</i> be-búùlè
<b>-bòtù</b> <i>ma-</i> <i>n.</i> 6 scalp ringworm infection ( <i>Tinea capititis</i> )	<b>-búwà</b> <i>le-</i> <i>n.</i> 5/6 lung <i>pl.</i> ma-búwà
<b>bû</b> <i>v.</i> destroy <i>npp.</i> mbúyâ <i>recip.</i> búyala	<b>búwele</b> <i>v.</i> squeeze, feel (e.g. fruit) <i>npp.</i> mbúwálâ
<b>bùábùá</b> <i>n.</i> 7/8 state of animal or fish when flesh is not yet dry during smoking process <i>pl.</i> be-bùábùá	<b>bvû</b> <i>v.</i> think, believe
<b>bùdé</b> <i>n.</i> 7/8 shell (sea, turtle, nut), skin of fruit <i>pl.</i> be-bùdé	<b>bvúala</b> <i>v.</i> believe <i>npp.</i> mbvúálâ
<b>bùgù</b> <i>n.</i> 7/8 place <i>pl.</i> be-bùgù	<b>bvúbvù</b> <i>n.</i> 9 multitude
<b>büké</b> <i>n.</i> 7/8 1) crazy person 2) tsetse fly <i>pl.</i> be-büké	<b>bvùbvù</b> <i>inv.</i> (too) many, (too) much
<b>búle</b> <i>v.</i> burst <i>npp.</i> mbúlâ	<b>bvúdà</b> <i>nà</i> <i>v.</i> quarrel <i>npp.</i> mbvúdâ <i>recip.</i> bvúdala
<b>búlo</b> <i>v.</i> fish <i>npp.</i> mbúlâ <i>recip.</i> búlala	<b>bvùdè</b> <i>n.</i> 7/6 clearing (in forest) <i>pl.</i> ma-bvùdè
<b>-búlò</b> <i>mâ</i> <i>m-</i> <i>n.</i> 1/2 fisherman <i>pl.</i> ba-búlò mâ	<b>-bvúlè</b> <i>m-</i> <i>n.</i> 1/2 Bulu person
<b>búme</b> <i>v.</i> bark <i>recip.</i> búmala	<b>bvùlé</b> <i>n.</i> 8/8 night <i>pl.</i> be-bvùlé
<b>bùmè</b> <i>v.</i> announce sth. <i>npp.</i> mbùmá <i>recip.</i> bùmala	<b>bvùmá</b> <i>n.</i> 7/8 1) fruit 2) ball <i>pl.</i> be-bvùmá
<b>-bùmè</b> <i>màpô</i> <i>m-</i> <i>n.</i> 1/2 announcer, messenger <i>pl.</i> ba-bùmè bá ma-pô	<b>bvùma</b> <i>v.</i> thunder <i>autoc.</i> bvùmaga flock of birds flys away suddenly
<b>bùmèle</b> <i>v.</i> hit (nail) <i>npp.</i> mbùmálâ <i>recip.</i> bùmala	<b>bvùmá</b> <i>yá</i> <i>lé-bélè</i> <i>n.</i> 7/8 female breast <i>pl.</i> be-bvùmá bé má-bélè
<b>búndì</b> <i>n.</i> 7/8 bride price <i>pl.</i> be-búndò	<b>bvùmá</b> <i>yá</i> <i>ngòndè</i> <i>n.</i> 7/8 full moon (ball of moon) <i>pl.</i> be-bvùmá bé ngòndè
<b>búndò</b> <i>v.</i> pay brideprice <i>npp.</i> mbúndâ <i>caus.</i> búndese <i>recip.</i> búndala	<b>bvùmba</b> <i>v.</i> surprise sb, chase sb. <i>npp.</i> mbvùmbá <i>recip.</i> bvùmbala
	<b>bvúó</b> <i>n.</i> 8/8 elephant trunk <i>pl.</i> be-bvúó
	<b>bvúò</b> <i>v.</i> break (tr.), harvest mais <i>npp.</i> mbvúgâ <i>recip.</i> bvúgala <i>intr.</i> bvúké break
	<b>-bvúú</b> <i>lè-</i> <i>n.</i> 5/6 anger, being

annoyed, unhappiness	<b>bwímò</b> <i>n.</i> 7/8 net hunting <i>pl.</i> be-bwímò
<b>bwâ</b> <i>n.</i> 8/6 medicine <i>pl.</i> ma-bwâ	<b>bwâ(bwò)</b> <i>n.</i> 7/8 brain <i>pl.</i> be-bwâ
- <b>bwâsà</b> <i>ma-</i> <i>n.</i> 6 thoughts	<b>bwúyà</b> <i>n.</i> 7/8 hundred <i>pl.</i> be-bwúyà
<b>bwâsa</b> <i>v.</i> think, remember	<b>byáàdà</b> <i>v.</i> answer, respond
<b>bwéélè</b> <i>v.</i> wait <i>recip.</i> bwââla	
- <b>bwõ</b> <i>le-</i> <i>n.</i> 5/6 beehive <i>pl.</i> ma-bwõ	
<b>bwà</b> <i>v.</i> give birth <i>npp.</i> mbwâlâ	
<i>appl.</i> bwâlê be born <i>caus.</i> bwâlesê	
<b>bwà</b> <i>v.</i> become big <i>npp.</i> mbògá	<b>D</b>
<i>recip.</i> bâgala <i>tr.</i> bâge fatten, make fat	
<b>bwá má-kí</b> <i>v.</i> lay eggs	<b>dâ</b> <i>v.</i> draw water <i>npp.</i> ndâálâ
<b>bwâà</b> <i>v.</i> become, have, be	<i>appl.</i> dââlê <i>recip.</i> dângala
<b>bwâdô</b> <i>v.</i> dress, wear <i>npp.</i> mbwâdâ	- <b>dâ lé bá-fû</b> <i>le-</i> <i>n.</i> 5/6 fish pont, source <i>pl.</i> ma-dâ má bá-fû
<i>caus.</i> bôdesê <i>recip.</i> bôdala	<b>dê</b> <i>adv.</i> today
- <b>bâwlè</b> <i>m-</i> <i>n.</i> 1/2 parent <i>pl.</i> ba-bwâlê	<b>dè</b> <i>v.</i> eat <i>npp.</i> ndiyâ <i>caus.</i> dîlesê
- <b>bwâlè</b> <i>ma-</i> <i>n.</i> 6 birth	<i>recip.</i> dîyalâ
- <b>bwâlèsè bùdâ</b> <i>m-</i> <i>n.</i> 1/2 midwife <i>pl.</i> ba-bwâlèsè bâ bùdâ	- <b>dèlémò</b> <i>le-</i> <i>n.</i> 5/6 mud wasp <i>pl.</i> ma-dèlémò
<b>bwâmo</b> <i>v.</i> 1) leave, go out 2) receive, obtain 3) become <i>npp.</i> mbwâmâ <i>recip.</i> bwâmala	<b>dénde</b> <i>v.</i> set (trap) <i>npp.</i> ndéndâ
<b>bwândo</b> <i>v.</i> peel (e.g. mais, mango) <i>npp.</i> mbwândâ <i>recip.</i> bwândala	<i>recip.</i> déndala
<b>bwândyá</b> <i>n.</i> 7/8 disdain, adultery <i>pl.</i> be-bwândyá	- <b>dewò</b> <i>be-</i> <i>n.</i> 8 food
<b>bwândya</b> <i>v.</i> despise <i>npp.</i> mbwândyá <i>recip.</i> bwândyala	- <b>dígâ</b> <i>ma-</i> <i>n.</i> 6 vision, apparition
<b>bwè</b> <i>v.</i> catch, arrest <i>npp.</i> mbùlâ <i>recip.</i> bëylâ	- <b>dìlá</b> <i>ma-</i> <i>n.</i> 6 funeral
<b>bwèdòwò</b> <i>n.</i> 7/6 taste <i>pl.</i> ma-bwèdòwò	<b>dile</b> <i>v.</i> bury <i>npp.</i> ndìlá <i>recip.</i> dìlala
<b>bwèdowò</b> <i>v.</i> be sweet, be tasty <i>caus.</i> bôdesê make sweet	<b>dísì</b> <i>n.</i> 7/8 bowl <i>pl.</i> be-dísì
- <b>bwî</b> <i>le-</i> <i>n.</i> 5/6 hyena <i>pl.</i> ma-bwî	<b>díyè</b> <i>adj.</i> expensive
	<b>dó</b> <i>n.</i> 7/8 lie <i>pl.</i> be-dó
	- <b>dò</b> <i>ma-</i> <i>n.</i> 6 negotiation for price
	<b>dò</b> <i>v.</i> negotiate (for price), discuss
	<b>dómè</b> <i>n.</i> 7/8 laziness <i>pl.</i> be-dómè
	<b>dòò</b> <i>n.</i> 7/8 puddle <i>pl.</i> be-dòò
	- <b>dówó</b> <i>be-</i> <i>n.</i> 8 sweat
	<b>dù</b> <i>n.</i> 7/6 thigh <i>pl.</i> ma-dù
	<b>dùlè</b> <i>n.</i> 7/6 bitterness <i>pl.</i> ma-dùlè

<b>dùlè mákimbó</b> <i>n.</i>	7/6 saltiness (bitterness of salt)	<i>dyà</i>
<i>pl.</i> ma-dùlè mákimbó		<b>dyâ (sí)</b> <i>v.</i> lie (down), live
<b>dúmbó</b> <i>n.</i>	7/8 package, packet	<i>npp.</i> ndyáyâ <i>recip.</i> dyáàlì have sex
<i>pl.</i> be-dúmbó		<b>dyáàlì</b> <i>v.</i> have sex
<b>dúngilà</b> <i>n.</i>	7/8 hedgehog	<i>pl.</i> be-dúngilà
		<b>dyágó</b> <i>n.</i> 7/8 sleeping place
<b>dúòdù -</b> <i>n.</i>	7/8 termite queen, carterpillar	<i>pl.</i> be-dúòdù
<b>dúù</b> <i>v.</i>	must not	<b>dyágó</b>
<b>dvě</b> <i>n.</i>	7/8 noise	<i>pl.</i> be-dvě
<b>dvűš</b> <i>n.</i>	7/8 great hornbill	<i>pl.</i> be-dvűš
<b>dvùbɔ</b> <i>v.</i>	soak, dip	<i>npp.</i> ndvùbá
	appl. dvùbelé békà weed grass with	rake
	caus. dvùbese	<i>recip.</i> dvùbala
<b>dvùdɔ</b> <i>v.</i>	drive	<i>npp.</i> ndvùdá
		<i>recip.</i> dvùdala
<b>dvúmá</b> <i>n.</i>	7/8 honour	<i>pl.</i> be-dvúmá
<b>dvúmeli</b> <i>v.</i>	praise sb.	<i>npp.</i> ndvùmálá
		<i>recip.</i> dvùmala
<b>dvúmɔ</b> <i>n.</i>	7/8 baobab tree	<i>pl.</i> be-dvúmɔ
<b>dvùmɔ</b> <i>v.</i>	fall down (tree)	<i>npp.</i> ndvùmá
		<i>caus.</i> dvùmese
		<i>recip.</i> dvùmala
<b>dvùnɔ</b> <i>v.</i>	hurt (oneself)	<i>npp.</i> ndvùgá
		<i>caus.</i> dvùgese
		<i>recip.</i> dvùgala
	<i>tr.</i> dvùge	
<b>dvùwɔ</b> <i>v.</i>	stuff sth.	
<b>dwàmbo</b> <i>v.</i>	ask for sth	<i>npp.</i> ndwàmbá
		<i>recip.</i> dwàmbala
<b>dyáâ</b> <i>v.</i>	chase, drive away	
		<i>npp.</i> ndyángâ
		<i>recip.</i> dyángala
<b>dyà</b> <i>v.</i>	sing	<i>npp.</i> ndyàyâ
		<i>recip.</i> dyàala
<b>dyà</b> <i>n.</i>	7/8 distance, length	<i>pl.</i> be-
<b>dyâ (sí)</b> <i>v.</i>	lie (down), live	
<i>npp.</i> ndyáyâ	<i>recip.</i> dyáàlì	have sex
<b>dyáàlì</b> <i>v.</i>	have sex	
<b>dyágó</b> <i>n.</i>	7/8 sleeping place	
<i>pl.</i> be-dúngilà		
<b>dyágó</b>		
<b>dyàmbo</b> <i>v.</i>	copulate	
<b>-dyê le-</b> <i>n.</i>	5/6 pincers (insect)	
<i>pl.</i> ma-dyê		
<b>dyéke</b> <i>v.</i>	lean sth, incline sth	
<i>npp.</i> ndyékâ	<i>recip.</i> dyékala	lean
		against one another
<b>dyò</b> <i>n.</i>	7/8 smile, laughter	
<i>pl.</i> be-dyò		
<b>dyò</b> <i>v.</i>	laugh, smile	<i>npp.</i> ndyòlasa
		<i>caus.</i> dyòlese
		<i>recip.</i> dyòala
<b>dyô</b> <i>n.</i>	7/8 sleep	<i>pl.</i> be-dyô
<b>dyôš</b> <i>n.</i>	7/8 bed	<i>pl.</i> be-dyôš
<b>-dyòdálà</b> <i>ma-</i> <i>n.</i>	6 deception, cheating	
<b>dyòde</b> <i>v.</i>	deceive, cheat	<i>npp.</i> ndyòdá
		<i>recip.</i> dyòdala
<b>dyù</b> <i>v.</i>	be hot	<i>npp.</i> ndyúngâ,
		<i>ndúngálâ</i> <i>appl.</i>
		dyúngelé heat, boil
		<i>sth.</i> <i>recip.</i> dyúngala (warm body
		around fire)
<b>-dyû le-</b> <i>n.</i>	5/6 heat (from sun), fever	
<i>pl.</i> ma-dyû		
<b>dyúà</b> <i>v.</i>	swim	
<b>dyúàdà</b> <i>v.</i>	feel, hear, perceive	
		sensually
<b>dyùle</b> <i>v.</i>	be bitter or salty	
		<i>npp.</i> ndyùlá
		<i>caus.</i> dyùlese
		<i>recip.</i> dyùlala
<b>dyúmɔ</b> <i>n.</i>	1/2 spouse	<i>pl.</i> ba-dyúmɔ
<b>dyùmo</b> <i>v.</i>	heal, get well	

<i>npp.</i> ndyùmá	<i>pl.</i> ba-fù'ú
<b>-dyúmù</b> ma- <i>n.</i> 6 sperm	<b>fùæse</b> <i>v.</i> shake <i>npp.</i> mfùásâ
<b>dyúná</b> <i>n.</i> 7/8 quarrel, dispute	<b>fúge</b> <i>v.</i> end <i>npp.</i> mfúgâ <i>recip.</i> fúala
<i>pl.</i> be-dyúná	<b>fúkè</b> <i>n.</i> 1/2 driver ants (Hymenoptera) <i>pl.</i> ba-fúkè
<b>dyúna</b> <i>v.</i> quarrel <i>npp.</i> ndúnâ	<b>fùlápà</b> <i>n.</i> 7/8 flower, hedge, bush
<b>dyúngúlè</b> <i>n.</i> 7/8 chameleon <i>pl.</i> be-	<i>pl.</i> be-fùlápà
dyúngúlè	<b>fùle</b> <i>v.</i> miss, escape <i>npp.</i> mfùlâ
<b>dyùù</b> <i>v.</i> kill <i>npp.</i> ndyúwâ <i>recip.</i> dyúwala	<i>caus.</i> fùlese <i>recip.</i> fùlala
<b>dyùwá</b> <i>n.</i> 7/6, 8 thorn <i>pl.</i> be-	<b>fùlɔ</b> <i>v.</i> descend, go down <i>npp.</i> mfùlâ
dyùwá, ma-dyùwá	<i>caus.</i> fùlese
<b>dyúwà</b> <i>n.</i> 5 sky	<b>fúmbélé</b> <i>n.</i> 3/4 shin <i>pl.</i> mi-fùmbélé
<b>dyúwà</b> <i>post.</i> on top, above	<b>fùmbí</b> <i>n.</i> 7/8 orange <i>pl.</i> be-fùmbí
<b>dyúwɔ</b> <i>v.</i> hear <i>npp.</i> ndyùgá	<b>-fùò</b> le- <i>n.</i> 5/6 stem, plant <i>pl.</i> ma-
<i>appl.</i> dyúwælë listen <i>caus.</i> dyúgesse	fùò
make feel <i>recip.</i> dyúwale	<b>-fúsì</b> <i>adj.</i> different
<b>dzáme</b> <i>v.</i> excuse, forgive	<b>-fwálá</b> le- <i>n.</i> 5/6 end <i>pl.</i> ma-fwálá
	<b>-fwálá</b> lé túmbó le- <i>n.</i> 5/6 border
	(between countries) <i>pl.</i> ma-fwálá
	má bé-túmbó
	<b>-fwálá</b> má nkùlé ma- <i>n.</i> 6 summit

## E

**é** *prep.* at, on, by

**é ná** *interr.* how

**é vé** *interr.* where

**-éndì** d- *n.* 5/6 courtyard *pl.* m-éndì

**èsâs** *n.* 7/8 gaz, fuel *pl.* b-esâs

**-ésè** *quant.* all, every

## F

**fàlà** *n.* 7 France

**ffàmí** *n.* 1/2 family *pl.* ba-fàmí

**fàrínì** - *n.* 1/2 flour *pl.* ba-fàrínì

**fû** *n.* 1/2 fish *pl.* ba-fû

**-fû** le- *n.* 5/6 day *pl.* ma-fû

**fù'ú** *n.* 1/2 rainy season (Aug-Nov)

## G

**gâ** *n.* 1/2 gown *pl.* ba-gâ

**gbí** *gbí* *gbí* *gbí* *gbí* *ideo.* depiction of small objects moving in space, e.g. bacteria roaming in body

**gbím** *ideo.* depiction of putting or falling down of person or object

**gíndó'ó** *n.* 7/8 Calabar angwantibo (*Arctocebus calabarensis*) *pl.* be-gíndó'ó

**gìyɔ** *v.* cry *caus.* gilesse *recip.* gilala

**gólè** *n.* 7/8 gold *pl.* be-gólè

<b>gwámbɔ</b> <i>v.</i> ask for sth., beg	<b>gyèlì</b>
<b>gwàwó</b> <i>n.</i> 7/8 civet <i>pl.</i> be-gwàwó	<b>gyémà</b> <i>n.</i> 7/8 habit, manner <i>pl.</i> be-
<b>gwémbè</b> <i>n.</i> 7/8 cloth <i>pl.</i> be-gbémbè	gyémò
<b>gyà</b> <i>v.</i> paint, draw <i>npp.</i> ngyàngâ	<b>gyèndò</b> <i>v.</i> slip <i>npp.</i> ngyèndá
<b>gyáâ</b> <i>n.</i> 1/2 side <i>pl.</i> ba-gyáâ	<b>gyésɔ</b> <i>v.</i> look for, search, lack
<b>gyâle</b> <i>v.</i> roast <i>npp.</i> ngyáâlâ	<i>npp.</i> ngyésâ <i>recip.</i> gyésala
<b>gyà</b> <i>n.</i> 7/8 music, song <i>pl.</i> be-gyà	<b>gyí</b> <i>pro.</i> what
<b>gyà</b> <i>v.</i> be long	<b>gyíbɔ</b> <i>v.</i> call <i>npp.</i> ngyíbâ <i>re-</i>
<b>-gyâ</b> <i>le- n.</i> 5/6 charcoal <i>pl.</i> ma-gyâ	<i>cip.</i> gyíbala
<b>gyá yá nyúmbù</b> <i>n.</i> 7/8 lip <i>pl.</i> be-	<b>gyìbɔ</b> <i>v.</i> sharpen <i>npp.</i> ngyìbá
gyá bé nyúmbù	<i>recip.</i> gyìbala
<b>gyàga</b> <i>v.</i> buy <i>npp.</i> ngyàgá <i>re-</i>	<b>gyìde</b> <i>v.</i> forgive <i>npp.</i> ngyìdá
<i>cip.</i> gyàgala	<b>gyíka (nà)</b> <i>v.</i> resemble
<b>-gyàgèsì bé-sâ</b> <i>n- n.</i> 1/2 merchant,	<b>gyíkε</b> <i>v.</i> learn <i>npp.</i> ngyíkâ be
vendor <i>pl.</i> ba-gyàgèsì bá bá-sâ	intelligent <i>caus.</i> gyíkεse teach
<b>gyàlé</b> <i>n.</i> 7/8 puerperium (period	<b>gyímbɔ</b> <i>v.</i> dance <i>npp.</i> ngyímbáà
after giving birth (about a month))	<i>caus.</i> gyímbεse <i>recip.</i> gyímbala
<i>pl.</i> be-gyàlé	<b>-gyìmbò</b> <i>n- n.</i> 1/2 sorcerer <i>pl.</i> ba-
<b>gyámbɔ</b> <i>v.</i> prepare, cook	gyìmbò
<i>npp.</i> ngyámbâ <i>appl.</i> gyámbεle	<b>-gyìmbò</b> <i>le- n.</i> 5/6 magic (innate to
prepare for <i>recip.</i> gyámbala	a person) <i>pl.</i> ma-gyìmbò
<b>gyángya</b> <i>v.</i> work <i>npp.</i> ngyángyâ	<b>gyíme</b> <i>v.</i> wake sb. up <i>npp.</i> ngyímâ
<i>caus.</i> gyángyεse <i>recip.</i> gyángyala	<i>caus.</i> gyímεse <i>autoc.</i> gyímaga wake
<b>-gyé</b> <i>le- n.</i> 5/6 tooth <i>pl.</i> ma-gyé	up
<b>gyê</b> <i>n.</i> 7/8 Cameroon clawless otter	<b>gyímù</b> <i>n.</i> 7/8 tongue <i>pl.</i> be-gyímù
( <i>Aonyx capensis conicus</i> ) <i>pl.</i> be-gyê	<b>-gyólé</b> <i>le- n.</i> 5/6 bushbaby ( <i>Galago</i>
<b>-gyê</b> <i>n- n.</i> 1/2 stranger, guest	<i>alleni</i> ) <i>pl.</i> ma-gyólé
<i>pl.</i> ba-gyê	
<b>gyé'è</b> <i>v.</i> block <i>npp.</i> ngyégâ <i>re-</i>	<b>H</b>
<i>cip.</i> gyégala	
<b>-gyè'élè</b> <i>ma- n.</i> 6 prayer	
<b>gyè'ele</b> <i>v.</i> pray, beg, demand	<b>hámà</b> <i>n.</i> 1/2 hammer <i>pl.</i> ba-
<i>npp.</i> ngyàálâ	hámà
<b>gyéle</b> <i>v.</i> jump, fly <i>npp.</i> ngyélâ	
<i>caus.</i> gyélesε <i>recip.</i> gyélala	<b>I</b>
<b>-gyèlì</b> <i>n- n.</i> 1/2 Gyeli person <i>pl.</i> ba-	

-í m- n.	1/2 non-Pygmy people	<i>pl.</i>	ma-jìlò
<i>pl.</i>	b-í		jìlɔ v. be heavy <i>npp.</i> njìlá
-ímbó j- n.	5/6 raffia palm	<i>pl.</i>	m-ímbó
			jìlèse
-ínò j- n.	5/6 name	<i>pl.</i>	m-ínò
-ísì d- n.	5/6 1) eye 2) kernel, seed		jímbe v. get lost <i>npp.</i> njímbâ
<i>pl.</i>	m-ísì		appl. jímbele lose sth. caus. jímbe
-ísì lé bénó d- n.	5/6 anus (lit. eye of the buttock)	<i>pl.</i>	m-ísì mí bénó
ìtálíyèn n.	7 Italy		make forget <i>recip.</i> jímbala forget each other

## J

jáà(-sa) v.	disappear suddenly (slowly)	<i>npp.</i>	njáásá <i>recip.</i> jáàla
jàngala v.	have sex		
jí n.	7/8 place (where someone stays)	<i>pl.</i>	be-jí
jí yá má-sô - n.	7/8 cemetery (place of graves)	<i>pl.</i>	be-jí bé má-sô
jì v.	open	<i>npp.</i>	njìyá <i>recip.</i> jìyala
jǐ n.	7/8 bench	<i>pl.</i>	be-jǐ
jì(yo) (sí) v.	sit (down), habiter, stay	<i>npp.</i>	njìlá <i>appl.</i> jìle seat sb., stay <i>recip.</i> jìllala
-jíbí n- n.	1/2 thief	<i>pl.</i>	ba-jíbí

jíbó v.	close	<i>npp.</i>	njìbá <i>recip.</i> jìbala
jíga v.	be angry		kâ v. wrap <i>npp.</i> nkâlá <i>recip.</i> kâála
-jíi be- n.	8 anger		-ká le- n. 5/6 leaf
jíi v.	ask (a question)		<i>pl.</i> ma-ká
jíi n.	7/8 forest, brousse	<i>pl.</i>	be-ká
jíkesé v.	make sb. angry		kâ v. catch (object in air) <i>npp.</i> nkâsá
jílo v.	be satisfied (not hungry)		appl. kâsélé light sth.
<i>npp.</i>	njílâ <i>caus.</i>		kâ'â v. role up (e.g. mattress, paper), envelop, bandage <i>npp.</i> nkâgâ
-jilò le- n.	5/6 1) weight 2) dignity		<i>recip.</i> kágala

-kà'á le- <i>n.</i>	5/6 clan, tribe, kind	stops
<i>pl.</i> ma-kà'á		
kàbà <i>n.</i>	7/8 long dress	<i>pl.</i> be-kàbà
kábálá <i>n.</i>	7/8 horse	<i>pl.</i> be-kábálá
kàbɔ̄ <i>v.</i>	share, divide, serve	<i>npp.</i> nkàbá <i>recip.</i> kàbala
kàdε <i>v.</i>	detach, unwrap (e.g. manioc stick)	<i>npp.</i> nkàdá <i>caus.</i> kàdese <i>recip.</i> kàdala <i>autoc.</i> kàdèga detach by itself
kádɔ̄ <i>v.</i>	exceed, be too much	<i>npp.</i> nkádâ <i>recip.</i> kádala
kàdó <i>n.</i>	1/2 gift, present	<i>pl.</i> ba-kàdó
kàdô <i>n.</i>	1/2 ladder	<i>pl.</i> ba-kàdô
kàgá <i>n.</i>	7/8 defect giving birth	<i>pl.</i> be-kàgá
-kàgà le- <i>n.</i>	5/6 bewitched woman	
<i>pl.</i> ma-kàgà		
-kágé le- <i>n.</i>	5/6 promise	<i>pl.</i> ma-kágé
kàgɔ̄ <i>v.</i>	promise	<i>recip.</i> kàgala
káka <i>v.</i>	shiver	
kàká <i>n.</i>	7/8 cocoa ( <i>Theobroma cacao</i> )	<i>pl.</i> be-kàká
kálá <i>n.</i>	7/8 chili paste seasoning	
<i>pl.</i> be-kálá		
-kàlà le- <i>n.</i>	5/6 doughnuts	<i>pl.</i> ma-kàlà
kàlà <i>n.</i>	7/8 strawmat	<i>pl.</i> be-kàlà
kálàdè <i>n.</i>	7/8 book	<i>pl.</i> be-kálàdè
kàlanε <i>v.</i>	transmit, translate	<i>npp.</i> nkálánê
kálé <i>n.</i>	1/2 sister (older and younger)	<i>pl.</i> ba-kálé
kàlega <i>v.</i>	stop over, go over with	
kámbè <i>n.</i>	1/2 weaver ants ( <i>Oecophylla</i> )	<i>pl.</i> ba-kámbè
kámbō <i>v.</i>	chew	<i>npp.</i> nkámbâ <i>recip.</i> kámbala
kàmbɔ̄ nà <i>v.</i>	defend	<i>npp.</i> nkàmbá <i>recip.</i> kàmbala
kàmèrún <i>n.</i>	1 Cameroon	
kánda <i>v.</i>	crack (e.g. bottle, cup, glass)	<i>npp.</i> nkándâ <i>caus.</i> kándese
kàndá <i>n.</i>	7/8 proverb	<i>pl.</i> be-kàndá
kàsà <i>n.</i>	7/8 bridge	<i>pl.</i> be-kàsà
kàsélé <i>v.</i>	light	<i>npp.</i> nkàsálâ <i>recip.</i> kàsala
kásɔ̄ <i>v.</i>	become thin	<i>npp.</i> nkásâ <i>appl.</i> kásélé <i>recip.</i> kásala <i>autoc.</i> kásëga get suddenly angry
kè <i>v.</i>	shave	<i>npp.</i> nkèngá <i>recip.</i> kèngala
-kè nlô <i>n-</i> <i>n.</i>	1/2 Tropical house gecko ( <i>Hemidactylus mabouia mabouia</i> )	<i>pl.</i> ba-kè mí-nlô
-kénó le- <i>n.</i>	5/6 blue duiker ( <i>Cephalophus monticola</i> )	<i>pl.</i> ma-kénó
ké <i>n.</i>	7/8 fish scale	<i>pl.</i> be-ké
kè <i>v.</i>	go, walk	
kè mpfúndá <i>v.</i>	run, go fast	
ké ké ké ké ké <i>ideo.</i>	depiction of placing objects in a row	
-kè'è le- <i>n.</i>	5/6 molar tooth	<i>pl.</i> ma-kè'è
ké'è (má-kí) <i>v.</i>	hatch	<i>npp.</i> nkégâ
kèdèle <i>v.</i>	gnaw, knabbern	<i>npp.</i> nkèdálâ <i>recip.</i> kédala
-kélè le- <i>n.</i>	5/6 language	<i>pl.</i> ma-kélè
kèlala <i>v.</i>	hang	<i>npp.</i> nkèlá <i>recip.</i> kèlala

<b>kèmbè</b> <i>n.</i> 7/8 phlegm <i>pl.</i> be-kèmbè	<b>kfùlɔ</b> <i>v.</i> scrape skin of porcupine (soak in hot water, then remove spikes) <i>npp.</i> nkfùlá <i>recip.</i> kfùlala <i>autoc.</i> kfùlega
<b>kèndè</b> <i>n.</i> 7/8 1) journey, traveling 2) time <i>pl.</i> be-kèndè	<b>kfúmá</b> <i>n.</i> 1/2 chief, rich person <i>pl.</i> ba-kfúmá
<b>kèndè vúdû</b> <i>n.</i> 7/8 1) once, one time 2) in one go, immediately <i>pl.</i> be-kèndè bé-báà	<b>kfùmala</b> <i>v.</i> find <i>npp.</i> nkfùmá
<b>kéésá</b> <i>n.</i> 7/8 person of equal rank, peer, neighbor <i>pl.</i> be-kéésá	<b>kfúmbó</b> <i>n.</i> 7/8 bragging, showing-off <i>pl.</i> be-kfúmbó
<b>-kfù le-</b> <i>n.</i> 5/6 owl <i>pl.</i> ma-kfù	<b>-kfùmá</b> <i>le-</i> <i>n.</i> 5/6 heap <i>pl.</i> ma-kfùmá
<b>kfùbala</b> <i>v.</i> move	<b>kfùmá</b> <i>n.</i> 7/8 stump <i>pl.</i> be-kfùmá
<b>kfùbe</b> <i>v.</i> provoke <i>npp.</i> nkfùbálâ <i>appl.</i> kfùbelé provoke <i>recip.</i> kfùbala move	<b>-kfùndè</b> <i>le-</i> <i>n.</i> 5/6 garbage <i>pl.</i> ma-kfùndè
<b>kfúbó</b> <i>n.</i> 7/8 epilepsy <i>pl.</i> be-kfúbó	<b>kfúná</b> <i>n.</i> 7/8 hornbill <i>pl.</i> be-kfúná
<b>kfúbò</b> <i>n.</i> 1/2 chicken <i>pl.</i> ba-kfúbò	<b>kfù -</b> <i>n.</i> 7/8 alstonia tree ( <i>Alstonia congensis</i> ) <i>pl.</i> be-kfù
<b>-kfúdè</b> <i>le-</i> <i>n.</i> 5/6 mad person, idiot <i>pl.</i> ma-kfúdè	<b>kfúzá</b> <i>n.</i> 7/8 fist <i>pl.</i> be-kfúzá
<b>kfúde</b> <i>v.</i> cover, put a lid <i>npp.</i> nk-fúdâ <i>recip.</i> kfúdala <i>autoc.</i> kfúdèga close oneself	<b>-kí</b> <i>le-</i> <i>n.</i> 5/6 egg <i>pl.</i> ma-kí
<b>kfúdo má-bô</b> <i>v.</i> kneel	<b>kì</b> <i>v.</i> say
<b>kfùdó yá ntélé</b> <i>n.</i> 7/8 old tissue, rag	<b>-kìkùù</b> <i>ma-</i> <i>n.</i> 6 exam
<b>kfúdòwò</b> <i>n.</i> 7/8 chest <i>pl.</i> be-kúdòwò	<b>-kílì</b> <i>be-</i> <i>n.</i> 8 slyness, cunning
<b>kfúléé</b> <i>n.</i> 7/8 raffia <i>pl.</i> be-kfúléé	<b>kílowo</b> <i>v.</i> be vigilant <i>npp.</i> nkílásâ be warned <i>caus.</i> kílesé make vigilant
<b>kfúlà</b> <i>n.</i> 7/8 two sticks in monkey trap that hold the trigger <i>pl.</i> be-kfúlà	<b>-kímbó</b> <i>ma-</i> <i>n.</i> 6 salt
<b>-kfúlé</b> <i>le-</i> <i>n.</i> 5/6 paw, sole <i>pl.</i> ma-kfúlé	<b>kímì</b> <i>n.</i> 1/2 monkey (generic) <i>pl.</i> ba-kímì
<b>kfúlè wà jíí</b> <i>n.</i> 1/2 (forest) tortoise <i>pl.</i> ba-kfúlè (bá jíí)	<b>kindá</b> <i>n.</i> 7/8 sugar ant <i>pl.</i> be-kindá
<b>kfúlè bìpèbè</b> - <i>n.</i> 1/2 sea turtle <i>pl.</i> ba-kfúlè bá bìpèbè	<b>kíngelé</b> <i>v.</i> become stiff
<b>-kfúlè</b> <i>le-</i> <i>n.</i> 5/6 hump <i>pl.</i> ma-kfúlè	<i>npp.</i> nkíngálâ
	<b>kísínì</b> <i>n.</i> 1/2 kitchen <i>pl.</i> ba-kísínì
	<b>kìya</b> <i>v.</i> give <i>npp.</i> nkìyá <i>caus.</i> kíyesé chase sb. <i>recip.</i> kiyala
	<b>kíyé</b> <i>n.</i> 7/8 iron <i>pl.</i> be-kíyé
	<b>kìye</b> <i>v.</i> 1) try 2) tempt <i>appl.</i> kíyelé taste sth. <i>recip.</i> kiyala taste each

other	kòle (mábóò) v. stumble re-cip. kòlala
<b>kó</b> n. 1/2 uncle (mother's brother)	-kóndà le- n. 5/6 sap pl. ma-kóndà
pl. ba-kó	-kóndyì le- n. 5/6 palm (of hand)
-kókò m- n. 1/2 Bakoko pl. ba-kókò	pl. ma-kóndyì
<b>kòkù</b> n. 7/8 albino pl. be-kòkù	<b>kóse</b> v. cough <i>appl.</i> kóséle make
<b>kòla</b> v. add, lengthen <i>npp.</i> nkòlá	cough recip. kósala
<i>recip.</i> kòlala	<b>kpàdà kpàdà</b> ideo. depiction of
<b>kòle</b> v. help <i>npp.</i> nkòlá <i>recip.</i> kòlala	drumming on bamboo
<b>kòyà</b> n. 7/8 rope Strick pl. be-kòyà	<b>kpèmè</b> n. 7/8 manioc leaves pl. be-kpèmè
-kó le- n. 5/6 stone pl. ma-kó	<b>kpúdùm kpúdùm</b> ideo. depiction
<b>kóò</b> adv. always	of drumming
<b>kô</b> v. gather, pluck, pick <i>npp.</i> nkóyâ	<b>kù</b> n. 1/2 rat pl. ba-kù
<i>recip.</i> kóyalá <i>autoc.</i> kóyaga	<b>kû</b> n. 1/2 leopard pl. ba-kû
-kó lé tsí le- n. 5/6 nape of neck	<b>kúdé</b> n. 7/8 skin pl. be-kúdé
pl. ma-kó má tsí	<b>kúele</b> v. mock, make fun of <i>re-</i>
<b>kò'ò</b> n. 7/8 African Jointfir ( <i>Gnetum</i>	<i>cip.</i> kúala
<i>africanum</i> ) pl. be-kò'ò	<b>kùga</b> v. spread, fit, be.enough
<b>kóbè</b> n. 1/2 cup pl. ba-kóbè	<i>npp.</i> nkùgá
<b>kóbe</b> v. violate, break (rule)	<b>kùgúù</b> n. 7/8 evening pl. be-kùgúù
<i>npp.</i> nkóbâ <i>recip.</i> kóbala	<b>kùgúù bvúò</b> n. 7 day before yester-
-kódé le- n. 5/6 bend, curve pl. ma-	day
kódé	<b>kùgúù mgbágà</b> - n. 7 day before
<b>kóde</b> v. turn sth. (with vehicle)	yesterday
<i>npp.</i> nkódâ <i>caus.</i> kódesé <i>recip.</i> kó-	<b>kukú</b> n. 7/8 mushroom pl. be-kukú
dala <i>autoc.</i> kódega turn oneself	<b>kùle</b> v. borrow <i>npp.</i> nkùlá
<b>kódò</b> n. 7/8 yam pl. be-kódò	<i>caus.</i> kùlesé lend <i>recip.</i> kùlala
<b>kòffí</b> n. 7/8 coffee pl. be-kòffí	<b>kúlí</b> n. 9/6 funeral ceremony from
<b>kóge</b> v. straighten <i>npp.</i> nkóngâ	death to burying (French <i>deuil</i> )
<i>caus.</i> kógesé <i>recip.</i> kógalá	<i>pl.</i> ma-kúlí
<b>kókó</b> n. 7/8 1) shell 2) emptiness	<b>kùli</b> n. 7/8 pimpel pl. be-kùli
<i>pl.</i> be-kókó	<b>kùmasa</b> v. prepare <i>npp.</i> nkùmásâ
<b>kókó yá nlô</b> - n. 7/8 skull pl. be-	<b>kúmbé</b> - n. 7/8 tin pl. be-kúmbé
kókó bé mí-nlô	<b>kùmbó</b> n. 7/8 womb pl. be-kùmbó
<b>kókó yá ngwálà</b> n. 7/8 snail house	<b>kùmbó</b> v. repair, reconcile,
<i>pl.</i> be-kókó bé bá-ngwálà	
<b>kôle</b> v. snore	

arrange, fix <i>npp.</i>	nkùmbá <i>re-</i>	<b>kwàndò</b> <i>n.</i> 7/8 plantain <i>pl.</i> be- kwàndò
<i>cip.</i> kùmbala		
<b>kùnàà</b> <i>inv.</i> good		<b>kwáné</b> <i>n.</i> 7/8 meeting, party
<b>kùndá</b> <i>n.</i> 7/8 shoe <i>pl.</i> be-kùndá		<i>pl.</i> be-kwáné
<b>-kúndí</b> <i>le-</i> <i>n.</i> 5/6 mat <i>pl.</i> ma-kúndí		<b>kwàne</b> <i>v.</i> sell <i>npp.</i> nkwàna
<b>-kúó</b> <i>le-</i> <i>n.</i> 5/6 Azobé tree, Iron- wood tree ( <i>lophira alata</i> ) <i>pl.</i> ma-kúó		<b>-kwásì</b> <i>ma-</i> <i>n.</i> 6 clapping (with hands)
<b>kùrâ</b> <i>n.</i> 7 electricity		<b>kwàsyó</b> <i>n.</i> 2 Kwasio people
<b>kùsì</b> <i>n.</i> 1/2 parrot <i>pl.</i> ba-kùsì		<b>kwê</b> <i>n.</i> 7/8 cough <i>pl.</i> be-kwê
<b>kùbê</b> <i>n.</i> 7/6 heritage <i>pl.</i> ma-kùbê		<b>kwê</b> <i>v.</i> fall, fail (trans.)
<b>-kúwó</b> <i>le-</i> <i>n.</i> 5/6 flea <i>pl.</i> ma-kúwó		<i>npp.</i> nkwéyâ <i>caus.</i> kùesë make fall
<b>-kwâ</b> <i>le-</i> <i>n.</i> 5/6 spear, arrow <i>pl.</i> ma-kwâ		<i>recip.</i> kwéyala
<b>kwâ</b> <i>v.</i> cut raffia leaves in tree <i>npp.</i> nkwángâ <i>recip.</i> kwángala		<b>kwêlë</b> <i>v.</i> bite <i>npp.</i> nkwáálâ <i>re-</i> <i>cip.</i> kwáala
<b>kwâ</b> <i>v.</i> betray <i>npp.</i> kwángâ <i>caus.</i> kwángesë <i>recip.</i> kwángala		<b>kwèlɔ</b> <i>v.</i> 1) cut down 2) injure some- one <i>npp.</i> nkwèlá <i>recip.</i> kwèlala <i>autoc.</i> kwèlega
<b>kwââle</b> <i>v.</i> spy <i>npp.</i> nkwâálâ <i>recip.</i> kwâlala		<b>kyàle</b> <i>v.</i> start an engine <i>npp.</i> nkyàlá
<b>kwî</b> <i>n.</i> 7/8 Peter's duiker ( <i>Cephalo-</i> <i>phus callipygus</i> ) <i>pl.</i> be-kwî		<b>kyégè</b> <i>n.</i> 7/8 Basaa <i>pl.</i> be-kyégè
<b>kwâ</b> <i>v.</i> grind (with stone), hollow out canoe <i>npp.</i> nkwâgá <i>recip.</i> kwâ- gala		<b>kyèlega</b> <i>v.</i> fall from tree when branch breaks <i>npp.</i> nkyèlégâ <i>re-</i> <i>cip.</i> kyèlala
<b>kwâdó</b> <i>n.</i> 7/6 village <i>pl.</i> ma-kwâdó		<b>kyèlí</b> <i>n.</i> 7/8 bird trap <i>pl.</i> be-kyèlí
<b>kwâdó</b> <i>písè</i> <i>n.</i> 7/6 countryside, rural area <i>pl.</i> ma-kwâdó písè		
<b>kwâdô</b> <i>v.</i> twist, bend <i>npp.</i> nkwâdâ <i>autoc.</i> kwâdega		<b>L</b>
<b>kwâlè</b> <i>n.</i> 7/8 1) love, desire 2) partridge <i>pl.</i> be-kwâlè		<b>lâ</b> <i>v.</i> pass, overtake, pass by <i>npp.</i> nlàngâ <i>appl.</i> làngelë let pass, time <i>recip.</i> làngala
<b>kwâle</b> <i>v.</i> love, like <i>npp.</i> nkwâlá <i>recip.</i> kwâlala		<b>lâ</b> <i>v.</i> read, count <i>npp.</i> nlángâ <i>recip.</i> lángala
<b>-kwâlówó</b> <i>le-</i> <i>n.</i> 5/6 knuckle (hand, foot) <i>pl.</i> ma-kwâlówó		<b>lâ (yá nyúà)</b> <i>n.</i> 7/8 green mamba <i>pl.</i> be-lâ (bé nyúà)
<b>kwâmó</b> <i>n.</i> 9/6 bag <i>pl.</i> ma-kwâmô		<b>lâ mímbvû</b> <i>n.</i> 1/2 larvae on a tree <i>pl.</i> ba-lâ mímbvû

<b>-lá</b> le- <i>n.</i> 5/6 fish trap <i>pl.</i> ma-lá	<b>lèmbo</b> <i>v.</i> 1) know 2) flee, escape
<b>-là</b> ma- <i>n.</i> 6 1) meaning 2) support (material, financial) 3) importance	<i>npp.</i> nlèmbá <i>caus.</i> lèmbese <i>re-</i> <i>cip.</i> lèmbala
<b>-lâ</b> le- <i>n.</i> 5/6 antenna <i>pl.</i> ma-lâ	<b>-léndé</b> le- <i>n.</i> 5/6 palm tree <i>pl.</i> ma-
<b>lâ</b> <i>v.</i> harvest, collect honey	lândé
<i>npp.</i> nláyâ <i>recip.</i> léyala <i>au-</i> <i>toc.</i> léyega	<b>lèndo</b> <i>v.</i> flow <i>npp.</i> nlèndá <i>caus.</i> lèndese <i>autoc.</i> lèndega
<b>láà</b> <i>v.</i> tell <i>npp.</i> nláwâ <i>recip.</i> láàla	<b>lénè</b> <i>n.</i> 7/8 offer <i>pl.</i> be-lénè
<b>láálè</b> <i>num.</i> three	<b>léngò</b> <i>n.</i> 7/8 fun, amusement, joke
<b>làdo nà</b> <i>v.</i> meet <i>npp.</i> nlàdá <i>caus.</i> làdesé <i>recip.</i> làdala	<i>pl.</i> be-léngò
<b>lága</b> <i>v.</i> contaminate sth. (e.g. disease) <i>npp.</i> nlágâ <i>caus.</i> légesé <i>recip.</i> légala	<b>líbela</b> <i>v.</i> show up, appear (e.g. moon) <i>npp.</i> nlíbálâ
<b>-lámbò</b> le- <i>n.</i> 5/6 trap <i>pl.</i> ma-lámbò	<b>líbelé</b> <i>v.</i> show <i>npp.</i> nlíbálâ <i>re-</i> <i>cip.</i> líbala
<b>lámbò</b> <i>n.</i> 7/6 lamp <i>pl.</i> ma-lámbò	<b>líf</b> <i>v.</i> leave (to sb), cede, let
<b>lámbò</b> <i>v.</i> trap <i>npp.</i> nlámbâ <i>re-</i> <i>cip.</i> lámbala	<i>npp.</i> nlígâ <i>recip.</i> lígala
<b>lána</b> <i>v.</i> distribute, unlimited offer	<b>límà</b> <i>n.</i> 7/8 stupidity <i>pl.</i> be-límà
<i>npp.</i> nlánâ <i>recip.</i> lánala	<b>límbe</b> <i>v.</i> pull <i>npp.</i> nlímbâ <i>re-</i> <i>cip.</i> límbala <i>autoc.</i> límbega
<b>lándè</b> <i>n.</i> 7/6 Sea almond tree ( <i>Terminalia catappa</i> ) <i>pl.</i> ma-lándè	<b>línâ</b> <i>inv.</i> since
<b>lábè</b> <i>n.</i> 1/2 big rainy season <i>pl.</i> ba- lábè	<b>líndè</b> <i>inv.</i> when
<b>lé</b> <i>n.</i> 7/8 tree, bush <i>pl.</i> be-lé	<b>-líbélá (má ngóndé)</b> ma- <i>n.</i> 6 rising, apparition (of moon)
<b>lé</b> <i>n.</i> 7/8 glass <i>pl.</i> be-lé	<b>livré</b> <i>n.</i> 1/2 book <i>pl.</i> ba-livré
<b>lê</b> <i>v.</i> offer <i>npp.</i> nléyâ <i>recip.</i> léyala	<b>líyelé</b> <i>v.</i> accompany <i>npp.</i> nlíyálâ <i>recip.</i> líyala
<b>lè</b> <i>v.</i> pour into <i>npp.</i> nlèngá <i>re-</i> <i>cip.</i> lèngala	<b>líyo</b> <i>v.</i> clear land <i>npp.</i> nléyâ <i>recip.</i> líyàlà <i>autoc.</i> líyaga
<b>lèbèle</b> <i>v.</i> follow, chase <i>npp.</i> nlèbálâ <i>recip.</i> lèbala	<b>lò</b> <i>v.</i> sew, weave, weave nest
<b>lèbvùá</b> <i>inv.</i> nine	<i>npp.</i> nlòyá <i>caus.</i> lòyessé <i>recip.</i> lòyala
<b>lèè</b> . uproot, disroot <i>npp.</i> nlèyá <i>recip.</i> lèyala	<b>-lô</b> le- <i>n.</i> 5/6 ear <i>pl.</i> ma-lô
<b>lége</b> <i>v.</i> singe <i>npp.</i> nlégâ <i>caus.</i> légesé <i>recip.</i> légala <i>autoc.</i> légega	<b>lòá</b> <i>n.</i> 7/8 slave, servant <i>pl.</i> be-lòá
	<b>lògò</b> <i>n.</i> 7/8 curse <i>pl.</i> be-lògò
	<b>-lílè mí-nkòlè</b> n- <i>n.</i> 1/2 weaver, taylor <i>pl.</i> ba-lílè bá mí-nkòlè
	<b>lòlò</b> <i>n.</i> 7/8 duck <i>pl.</i> be-lòlò

<b>lòmbì</b> <i>inv.</i> eight	<b>lvúmò</b> <i>n.</i> 7/8 maggot <i>pl.</i> be-lvúmò
<b>lòndó</b> <i>n.</i> 7/8 ring <i>pl.</i> be-lòndó	<b>lvúmò</b> <i>v.</i> sting <i>npp.</i> nlvúmâ
<b>lóngá</b> <i>n.</i> 7/8 group, swarm, flock <i>pl.</i> be-lóngá	<i>caus.</i> lvúmese <i>recip.</i> lvúmala fight in war
<b>-lò́</b> <i>le-</i> <i>n.</i> 5/6 dew <i>pl.</i> ma-lò́	<b>lvùúgɔ</b> <i>v.</i> animate, excite
<b>-lù́</b> <i>ma-</i> <i>n.</i> 6 sexual intercourse	
<b>-lû́</b> <i>le-</i> <i>n.</i> 5/6 insult <i>pl.</i> ma-lû́	
<b>lû́</b> <i>v.</i> insult <i>npp.</i> nlúngâ <i>recip.</i> lún-gala and lúwala	
<b>lùà</b> <i>v.</i> curse <i>npp.</i> nlògá <i>caus.</i> lògese <i>recip.</i> lògala	<b>mâ</b> - <i>n.</i> 6 sea
<b>lúà</b> <i>v.</i> whistle <i>npp.</i> nlóngâ <i>re-cip.</i> lóngala scream <i>tr.</i> lónge yélè whistle with whistle	<b>má’à</b> <i>v.</i> accuse <i>npp.</i> mágâ <i>appl.</i> mándele <i>recip.</i> mágala
<b>lúme</b> <i>v.</i> send <i>npp.</i> nlúmâ, nlúmálâ <i>appl.</i> lúmèle <i>recip.</i> lúmala	<b>-máá</b> <i>le-</i> <i>n.</i> 5/6 cheek <i>pl.</i> ma-máá
<b>lùmò</b> <i>n.</i> 7/8 yellow fever mosquito ( <i>Aedes aegypti</i> ) <i>pl.</i> be-lùmò	<b>màbè</b> <i>n.</i> 6 Mabi people
<b>lündá</b> <i>n.</i> 7/8 small forest, grove between villages and houses (French <i>bosquet</i> ) <i>pl.</i> be-lündá	<b>màbùnzò</b> <i>n.</i> 1/2 lion (Kwasio word) <i>pl.</i> ba-mábùnzò
<b>lündé</b> <i>n.</i> 7/8 apa tree ( <i>Afzelia bipedensis</i> ) <i>pl.</i> be-lündé	<b>màkítì</b> <i>n.</i> 6 market
<b>lúndo</b> <i>v.</i> fill oneself (with food) <i>npp.</i> nlúndá <i>appl.</i> lúndele fill sth. <i>caus.</i> lúndese <i>recip.</i> lúndala	<b>mámé</b> <i>n.</i> 1/2 aunt (father's sister) <i>pl.</i> ba-mámé
<b>lùnga</b> <i>v.</i> grow <i>npp.</i> nlùngá <i>caus.</i> lùngese	<b>mándele</b> <i>v.</i> accuse (interchangeable with má’à) <i>recip.</i> mán-dala accuse each other
<b>lùngèle</b> <i>v.</i> aim (at) <i>npp.</i> nlùngálâ <i>recip.</i> lùngala	<b>mándò</b> <i>v.</i> stuff mouth <i>npp.</i> mán-dâ <i>appl.</i> mándele <i>recip.</i> mán-dala <i>pass.</i> mán-da
<b>lúwɔ</b> <i>v.</i> bite <i>npp.</i> nlùwá <i>caus.</i> lúwese <i>recip.</i> lúwala	<b>-màngóló</b> <i>le-</i> <i>n.</i> 5/6 ankle <i>pl.</i> ma- màngóló
<b>lúñò</b> <i>v.</i> build, construct <i>npp.</i> nlúngâ <i>caus.</i> lúngese <i>recip.</i> lúngala	<b>mànjímò</b> <i>inv.</i> whole, entire
<b>-lvùgà</b> <i>mà-</i> <i>n.</i> 0/6 animation, liveliness	<b>mânù</b> <i>n.</i> 6 junction, crossroad
	<b>másà</b> <i>n.</i> 1/2 boss <i>pl.</i> bmásà
	<b>máségá</b> <i>adv.</i> suddenly, unexpect-edly
	<b>màtèlà</b> <i>n.</i> 1/2 mattress <i>pl.</i> ba- màtèlà
	<b>mátsà</b> <i>màtsà</i> <i>ideo.</i> depiction of eating in little bits

<b>màtúà</b> <i>n.</i> 1/2 car <i>pl.</i> ba-màtúà	<b>mòné</b> <i>n.</i> 1/2 money <i>pl.</i> ba-mòné
<b>méèle</b> <i>v.</i> accept, respond, reply	<b>-móngò</b> <i>le-</i> <i>n.</i> 5/6 male driver ant ( <i>Dorylinae</i> ) <i>pl.</i> ma-móngò
<i>npp.</i> méélâ <i>recip.</i> méala	
<b>mémédé wà be-sâ</b> <i>n.</i> 1/2 owner	<b>mpá</b> <i>n.</i> 3/4 island <i>pl.</i> mi-mpá
<i>pl.</i> bébédé bá bé-sâ	
<b>mèmɔ</b> <i>v.</i> admit <i>npp.</i> mèmá <i>re-</i>	<b>mpà</b> <i>n.</i> 1/2 1) Thomas' bushbaby
<i>cip.</i> mèmala	( <i>Galago thomasi</i> ) 2) virgin <i>pl.</i> ba-
<b>ménó</b> <i>n.</i> 7/8 morning <i>pl.</i> be-ménó	mpà
<b>mèsò</b> <i>v.</i> wave (greeting) <i>npp.</i> mèsá	<b>mpà'à</b> <i>n.</i> 9 vapor, fog
<i>recip.</i> mèsala	<b>mpá'à wá nyúlè</b> <i>n.</i> 3/4 side of the
<b>mèvâ</b> - <i>n.</i> 7 pride	body <i>pl.</i> mi-mpá 'à mí nyúlè
<b>mfû</b> <i>n.</i> 3/4 poison <i>pl.</i> mi-mfû	<b>mpà(mpà)</b> <i>adj.</i> good
<b>mfùlè</b> <i>n.</i> 3/4 fart <i>pl.</i> mi-mfùlè	<b>mpàálé</b> <i>n.</i> 9/6 news <i>pl.</i> ma-mpàálé
<b>mgbâ</b> <i>n.</i> 7/8 crow <i>pl.</i> be-mgbâ	<b>mpàgó</b> <i>n.</i> 3/4 road <i>pl.</i> mi-mpàgó
<b>-mgbámàlà</b> <i>ma-</i> <i>n.</i> 6 acidity	<b>mpàmbìlì</b> <i>n.</i> 3/4 plunge, fall
<b>mgbámala</b> <i>v.</i> be sour	<i>pl.</i> mi-mpàmbìlì
<b>mgbásá</b> <i>n.</i> 7/8 hunting with spear	<b>mpàndà</b> <i>n.</i> 1/2 bug (all larger,
and dogs <i>pl.</i> be-mgbásá	rounder insects) <i>pl.</i> ba-mpàndà
<b>mgbèmgbèmè</b> - <i>n.</i> 7/8 lion <i>pl.</i> be-	<b>mpàndyè</b> <i>n.</i> 7/8 bamboo <i>pl.</i> be-
<b>mgbèmgbèmè</b>	mpàndyè
<b>mgbísì</b> <i>n.</i> 3/4 freshness, rawness,	<b>mpàndyì</b> <i>n.</i> 7/6 rib <i>pl.</i> ma-
living <i>pl.</i> mi-mgbísì	mpàndyì
<b>mímbà</b> <i>v.</i> brag <i>recip.</i> mímbala	<b>mpèlè</b> <i>n.</i> 1/2 eagle <i>pl.</i> ba-mpèlè
<b>mìnki</b> <i>n.</i> 1/2 pot, casserole <i>pl.</i> ba-	<b>mpèndè</b> <i>n.</i> 3/4 root <i>pl.</i> mi-mpèndè
mìnki	<b>mpèwó</b> <i>n.</i> 3/4 wind <i>pl.</i> mi-mpèwó
<b>mìnò</b> <i>v.</i> swallow <i>npp.</i> mìná	<b>mpfùmbò</b> <i>n.</i> 3/4 dead tree (without
<i>caus.</i> mìnese <i>recip.</i> mìnala	leaves) <i>pl.</i> mi-mpfùmbò
<b>míntùlí</b> <i>n.</i> 1/2 mouse <i>pl.</i> ba-	<b>mpfùmò</b> <i>n.</i> 3/4 midnight <i>pl.</i> mi-
míntùlí	mpfùmò
<b>-mìnú</b> <i>le-</i> <i>n.</i> 5/6 gill <i>pl.</i> ma-mìnú	<b>mpfúndó</b> <i>n.</i> 3/4 running, race
<b>míyù</b> <i>n.</i> 1/2 brother, cousin, close	<i>pl.</i> mi-mpfúndó
friend (younger or same age) <i>pl.</i> ba-	<b>mpfùngyá'à</b> <i>n.</i> 3/4 dust <i>pl.</i> mi-
míyù	mpfùngyá'à
<b>mkpámá</b> <i>n.</i> 3/4 novelty <i>pl.</i> mi-	<b>mpfùò</b> <i>n.</i> 3/4 last meal with
mkpámá	medicine in a healing session <i>pl.</i> mi-
<b>mò</b> <i>n.</i> 3/4 stomach <i>pl.</i> mi-mò	mpfùò
	<b>mpí'ìdì</b> <i>n.</i> 9/6 heat (from fire, pot,

people) <i>pl.</i>	ma-mpí’ìdì	from water, salt, and chili) <i>pl.</i>	mi-
<b>mpíñi</b> <i>n.</i>	3/4 kidney <i>pl.</i>	mpwá	mpwá
<b>mpímbá</b> <i>n.</i>	7/8 pancreas <i>pl.</i>	<b>mtsà</b> <b>mtsà</b> <b>mtsà</b> <i>ideo.</i>	depiction
mpímbá		of picky eating (only taking certain	
<b>mpìnàgà</b> <i>n.</i>	3/4 obligation, duty	items off the plate)	
<i>pl.</i>	mi-mpìnàgà	<b>múele</b> <i>v.</i>	nibble <i>npp.</i>
<b>mpíndá</b> <i>n.</i>	9/6 law, prohibition	<i>múálâ</i>	<i>caus.</i>
<i>pl.</i>	ma-mpíndá	<i>múesé recip.</i>	<i>múala</i>
<b>mpíndí</b> <i>n.</i>	3/4 non-ripeness <i>pl.</i>	<b>-múngè</b> <i>le-</i> <i>n.</i>	5/6 beetle ( <i>Buprestidae</i> ) <i>pl.</i>
mpíndí	mi-mpíndí	ma-múngè	
<b>mpíndì</b> <i>n.</i>	9/6 dirt <i>pl.</i>	<b>músó</b> <i>n.</i>	7/8 midday, noon <i>pl.</i>
mpíndì	ma-mpíndì	be-	músó
<b>mpíndyá</b> <i>n.</i>	3/4 trigger in trap	<b>mvébé</b> <i>n.</i>	7/8 hedgehog <i>pl.</i>
<i>pl.</i>	mi-mpíndyá	be-	mvébé
<b>mpíngá</b> <i>n.</i>	3/4 sweet cassava	<b>mvíndó</b> <i>n.</i>	3/4 sweet water turtle
<i>pl.</i>	mi-mpíngá	<i>pl.</i>	mi-mvíndó
<b>mpó</b> <i>n.</i>	1/2 sun squirrel ( <i>Heliosciurus gambianus</i> ) <i>pl.</i>	<b>mwádékâ</b> <i>n.</i>	7/8 other side <i>pl.</i>
mpó	ba-mpó	be-	mwádékâ
<b>mpò - n.</b>	3/4 tooth gap <i>pl.</i>	<b>mwálé</b> <i>n.</i>	3/4 female <i>pl.</i>
mpò	mi-mpò	mi-mwálé	
<b>mpóndó</b> <i>n.</i>	3/4 shirt <i>pl.</i>	<b>-mwàngóló</b> <i>le-</i> <i>n.</i>	5/6 joint <i>pl.</i>
mpóndó	mi-mpóndó	ma-	mwàngóló
<b>mpòngóló</b> <i>n.</i>	7/8 ginger plant	<b>mwàsò</b> <i>n.</i>	3/4 long bendable stick
( <i>Aframomum</i> ) <i>pl.</i>	be-mpòngóló	in trap that holds animal <i>pl.</i>	mi-
<b>mpù</b> ?.	like (this)	mwàsò	mwàsò
<b>mpû</b> <i>n.</i>	3/4 payment <i>pl.</i>	<b>mwàsɔ</b> <i>v.</i>	throw <i>npp.</i>
mpû	mi-mpû	<i>recip.</i>	mwàsá
<b>mpúbélè</b> <i>n.</i>	1/2 current, rip tide	<b>mwé</b> <i>n.</i>	3/4 dam, barrage <i>pl.</i>
<i>pl.</i>	ba-mpúbélè	mi-	mwé
<b>mpúdé</b> <i>n.</i>	3/4 mais <i>pl.</i>	<b>myàke</b> <i>v.</i>	sprinkle <i>npp.</i>
mpúdé	mi-mpúdé	<i>caus.</i>	myàká
<b>mpúèrè</b> <i>inv.</i>	seven	<i>myàkese recip.</i>	myàkala
<b>mpùlé</b> <i>n.</i>	3/4 1) African whitewood	<b>myámata</b> <i>v.</i>	be narrow, narrow sth.
( <i>Enantia chlorantha</i> ) 2) yellow color	<i>npp.</i>	myámátâ	
<i>pl.</i>	mìmpùlé	<b>myámɔ</b> <i>v.</i>	knead, press (dough
<b>mpúmbú</b> <i>n.</i>	3/4 calf <i>pl.</i>	or fruit), press between fingers	
mpúmbú	mi-	<i>recip.</i>	myámala
<b>mpwá</b> <i>n.</i>	3/4 bouillon, stock (made	<b>myángálè</b> <i>n.</i>	3/4 rust <i>pl.</i>
mpwá	mi-	myángálè	

**myé** *n.* 4 fur

## MB

**mbááló** *n.* 3/4 jaw *pl.* mi-**mbááló**  
**mbàdó** *n.* 3/4 lake *pl.* mi-**mbàdó**  
**mbàfùmbò** *n.* 3/4 shrew *pl.* mi-  
mbàfùmbò  
**mbágò** *n.* 3/4 package, envelop  
*pl.* mi-**mbágò**  
**mbàmbà** *n.* 3/4 co-wife *pl.* mi-  
mbàmbà  
**mbámbé** *n.* 1/2 grand-parent,  
ancestor *pl.* ba-**mbámbé**  
**mbàmbìlì** *n.* 1/2 father-in-law  
*pl.* ba-**mbàmbìlì**  
**mbàngá** *n.* 3/4 nut, pit, stone  
*pl.* mi-**mbàngá**  
**mbàngá lé-léndé** - *n.* 3/4 coconut  
*pl.* mi-**mbàngá mí má-léndé**  
**mbè** *n.* 1/2 flood *pl.* ba-**mbè**  
**mbènè** *n.* 9/6 bad sign, omen  
*pl.* ma-**mbènè**  
**mbéwò** *n.* 3/4 selfishness, sin  
*pl.* mi-**mbéwò**  
**mbè** *n.* 3/4 drum *pl.* mi-**mbè**  
**mbê** *n.* 3/4 door *pl.* mi-**mbê**  
**mbéé** *n.* 3/4 metal oven *pl.* mi-  
mbéé  
**mbèlè** *n.* 3/4 African Padauk,  
African Coralwood (*Pterocarpus*  
*soyauxii*) *pl.* mi-**mbèlè**  
**-mbì** le- *n.* 5/6 pillar *pl.* ma-**mbì**  
**mbìmbó** *n.* 3/4 corps *pl.* mi-  
mbìmbó

**mbómò** *n.* 3/4 eldest (in village)  
*pl.* mi-**mbómò**  
**mbóndí** *n.* 3/4 oil (for cooking)  
*pl.* mi-**mbóndí**  
**mbòlè** *n.* 3/4 okra *pl.* mi-**mbòlè**  
**mbòlé kfúnó** *n.* 7/8 slime *pl.* be-  
mbòlé kfúnó  
**mbòmbó** *n.* 9/6 face *pl.* ma-  
mbòmbó  
**mbòmbó** *n.* 3/4 daughter-in-law  
*pl.* mi-**mbòmbó**  
**mbòngò** *n.* 7/6 plant *pl.* be-**mbòngò**  
**mbòò** *n.* 3/4 fatness *pl.* mi-**mbòò**  
**mbòsàwà** *n.* 3/4 wetness *pl.* mi-  
mbòsàwà  
**mbù** *n.* 7/8 bullfrog *pl.* be-**mbù**  
**mbúlá** *n.* 7/6 debt *pl.* ma-**mbúlá**  
**mbúlè wá sí** *n.* 3/4 blister *pl.* mi-  
mbúlè mí sí  
**mbúlò** *n.* 3/4 migratory locust  
(*Locusta migratoria*) *pl.* mi-**mbúlò**  
**mbúmbá** *n.* 3/4 wrinkledness (e.g.  
of clothes) *pl.* mi-**mbúmbá**  
**mbúmbù** *n.* 1/2 namesake *pl.* ba-  
mbúmbù  
**mbùngá** *n.* 7/8 earring *pl.* be-  
mbùngá  
**mbùngù** *n.* 2 Yassa  
**mbvú** *n.* 3 white/grey hair  
**mbvû** *n.* 3/4 year *pl.* mi-**mbvû**  
**mbvùlè** *n.* 7/8 bushbuck (*Tragela-*  
*phus scriptus*) *pl.* be-**mbvùlè**  
**mbvúlè sýè** *n.* 7/8 soot *pl.* be-  
mbvúlè bé sýè  
**mbvúndá** *n.* 9/6 trouble, error,  
mistake *pl.* ma-**mbvúndá**

<b>-mbvúndyè</b> le- <i>n.</i> 5/6 leafy debris to hide traps) <i>pl.</i> ma-mbvúndyè	<b>nábúnjâ</b> <i>n.</i> 1/2 bed bug <i>pl.</i> ba-nábúnjâ
<b>mbvúò</b> <i>n.</i> 1/2 rain <i>pl.</i> ba-mbvúò	<b>nágylé</b> <i>n.</i> 1/2 breastfeeding woman <i>pl.</i> ba-nágylé
<b>mbvúò wà mbvú</b> <i>n.</i> 1/2 drizzle (lit. rain of white hair) <i>pl.</i> ba-mbvúò bá mbvú	<b>nákúlúú</b> <i>n.</i> 1/2 forest tortoise ( <i>Kinixys homeana</i> ) <i>pl.</i> ba-nákúlúú
<b>mbvúò wà nénè</b> <i>n.</i> 1/2 strong rain <i>pl.</i> ba-mbvúò bá nénè	<b>námángò(mángò)</b> <i>n.</i> 1/2 male Agama lizard ( <i>Agama agama</i> ) <i>pl.</i> ba-námángò(mángò)
<b>mbwâ</b> <i>n.</i> 3/4 tuber, bulb <i>pl.</i> mi-mbwâ	<b>námínsògè</b> <i>n.</i> 1/2 palm rat <i>pl.</i> ba-námínsògè
<b>mbwàmbò</b> <i>n.</i> 3/4 bundle, package <i>pl.</i> mi-mbwàmbò	<b>námbàmbàlà(mbàmbàlà)</b>
<b>mbwàmò</b> <i>n.</i> 3/4 staying with woman in other compound, adultery <i>pl.</i> mi-mbwàmò	<i>adj.</i> white
<b>mbwàmò</b> <i>n.</i> 1/2 python <i>pl.</i> ba-mbwàmò	<b>nánkyàálé</b> <i>n.</i> 1/2 termite mound <i>pl.</i> ba-nánkyàálé
<b>mbwě</b> <i>n.</i> 1/2 dog <i>pl.</i> ba-mbwě	<b>nápfû(pfû)</b> <i>adj.</i> darkened color
<b>mbyê</b> <i>n.</i> 3/4 high, up-stream <i>pl.</i> mi-mbyê	<b>návyû(vyû)</b> <i>adj.</i> black
	<b>náyê(yê)</b> <i>adj.</i> brightened color
	<b>náyûyû</b> <i>n.</i> 1/2 vertigo <i>pl.</i> ba-náyûyû
	<b>nátî</b> <i>adj.</i> straight
	<b>-nángá</b> le- <i>n.</i> 5/6 star <i>pl.</i> ma-nángá
	<b>nénè</b> <i>adj.</i> big
	<b>níè</b> <i>v.</i> be beautiful <i>caus.</i> níngese
	<b>níí</b> <i>n.</i> 7/8 vagina <i>pl.</i> be-níí
	<b>níndyà</b> <i>v.</i> urinate <i>caus.</i> níndyesε recip. níndyala
	<b>níyè</b> <i>inv.</i> how many

## N

<b>nâ</b> <i>num.</i> four	
<b>ná</b> <i>adv.</i> still, again	
<b>nà</b> <i>com.</i> and, with	
<b>nâ</b> <i>comp.</i> that	
<b>nàkùgúù</b> <i>adv.</i> yesterday	<b>njì</b> <i>v.</i> come <i>pp.</i> njìyá
<b>nàménj</b> <i>adv.</i> tomorrow	<b>njí</b> <i>nà v.</i> bring (come with)
<b>náàtâ</b> <b>nà</b> <i>v.</i> stick (sth.), be sticky	<b>njímbà</b> <i>n.</i> 3/4 ignorance <i>pl.</i> mi-njímbá
<i>npp.</i> nátâ	
<b>nábànkúdí</b> <i>n.</i> 1/2 female Agama lizard ( <i>Agama agama</i> ) <i>pl.</i> ba-nábànkúdí	<b>njímí</b> <i>n.</i> 1/2 blind person <i>pl.</i> ba-njímí
<b>nábè(bè)</b> <i>adj.</i> red	<b>njìmò</b> <i>n.</i> 3/4 some, someone, any

<i>pl.</i> mi-njìmò (mí b-ùdì)	<b>nkàndé</b> <i>n.</i> 1/2 African dwarf crocodile ( <i>Osteolaemus tetraspis</i> )
<b>njá'ò</b> <i>n.</i> 1/2 elephant <i>pl.</i> ba-njá'ò	<b>pl.</b> ba-nkàndé
<b>njú</b> <i>n.</i> 7/8 gap between incisor teeth <i>pl.</i> be-njú	<b>nkándò</b> <i>n.</i> 3/4 beer <i>pl.</i> mi-nkándò
<b>-njù</b> <i>le-</i> <i>n.</i> 5/6 sweet banana <i>pl.</i> ma-njù	<b>nkângà</b> <i>n.</i> 1/2 weaver bird <i>pl.</i> ba-nkângà
<b>njû</b> <i>n.</i> 7/8 gall bladder, gall <i>pl.</i> be-njû	<b>nkázá</b> <i>n.</i> 3/4 whip <i>pl.</i> mi-nkázá
<b>-njwâ</b> <i>le-</i> <i>n.</i> 5/6 eggplant <i>pl.</i> ma-njwâ	<b>nké'é</b> <i>n.</i> 7/8 scream <i>pl.</i> be-nké'é
<b>nkâ</b> <i>n.</i> 3/4 guinea fowl <i>pl.</i> mi-nâ	<b>nkè</b> <i>n.</i> 3/4 low, down-stream <i>pl.</i> mi-nkè
<b>nkô</b> <i>n.</i> 3/4 back <i>pl.</i> mi-nkô	<b>nké'é</b> <i>n.</i> 3/4 jaw <i>pl.</i> mi-nké'é
<b>nkûñò</b> <i>n.</i> 3/4 betrayal <i>pl.</i> mi-nkûñò	<b>nkè'è</b> <i>n.</i> 3/4 chin <i>pl.</i> mi-nkè'è
<b>nkûñò b-ùdì</b> <i>-n.</i> 1/2 traitor <i>pl.</i> ba-kûñò bá b-ùdì	<b>-nkédé</b> <i>le-</i> <i>n.</i> 5/6 hip, waist <i>pl.</i> ma-nkédé
<b>nká</b> <i>n.</i> 3/4 line, row <i>pl.</i> mi-nká	<b>nkédé</b> <i>n.</i> 9/6 courage <i>pl.</i> ma-nkédé
<b>nká'à</b> <i>n.</i> 3/4 western red colobus ( <i>Procolobus badius</i> ) <i>pl.</i> mi-nkâ	<b>nkèlè yá d-ísì</b> <i>n.</i> 7/8 eyebrow <i>pl.</i> be-nkèlè bé m-ísì
<b>nkáálè</b> <i>n.</i> 3/4 vertebrate <i>pl.</i> mi-nkáálè	<b>nkfù lé lâ</b> <i>n.</i> 3/4 whole in ear <i>pl.</i> mi-nkù mí ma-lâ
<b>nkááló</b> <i>n.</i> 3/4 fence <i>pl.</i> mi-nkááló	<b>nkfúdé</b> <i>n.</i> 7/8 cloud, fog <i>pl.</i> be-nkfúdé
<b>nkááló</b> <i>n.</i> 3/4 African/Guinea pepper tree ( <i>Xylopia aethiopica</i> ) <i>pl.</i> mi-nkááló	<b>nkfündé</b> <i>n.</i> 3/4 barren woman <i>pl.</i> mi-nkfündé
<b>nkábé</b> <i>n.</i> 9/6 paddle <i>pl.</i> ma-nkábé	<b>nkfùbó</b> <i>n.</i> 3/4 trunk (body) <i>pl.</i> mi-nkfùbó
<b>nkàdè</b> <i>n.</i> 3/4 provocation <i>pl.</i> mi-nkàdè	<b>nkfúù</b> <i>n.</i> 3/4 ghost <i>pl.</i> mi-nkfúù
<b>nkágá</b> <i>n.</i> 3/4 side of an animal <i>pl.</i> mi-nkágá	<b>nkfùwó</b> <i>n.</i> 3/4 torso <i>pl.</i> mi-nkvùwó
<b>nkámbílí</b> <i>n.</i> 3/4 chewed up (fish) bones that are spat out when eating <i>pl.</i> mi-nkámbílí	<b>nkìngù</b> <i>n.</i> 3/4 1) edge 2) edge <i>pl.</i> mi-nkìngù
<b>nkàmè</b> <i>n.</i> 3/4 sticky sap (from vein, used for birdlime) <i>pl.</i> mi-nkàmè	<b>nkìyó</b> <i>n.</i> 3/4 wave <i>pl.</i> mi-nkìyó
<b>nkàmò</b> <i>n.</i> 9 reason	<b>nkòlé</b> <i>n.</i> 3/4 vein, rope, line <i>pl.</i> mi-nkòlé
<b>nkándâ</b> <i>n.</i> 3/4 crack <i>pl.</i> mi-nkándâ	<b>nkólò</b> <i>n.</i> 3/4 watch, clock <i>pl.</i> mi-nkólò
	<b>nkóngó</b> <i>n.</i> 3/4 frog (general term) <i>pl.</i> mi-nkóngó

<b>nkósâ</b> <i>n.</i>	3/4 manner of coughing	nkwálá		
<i>pl.</i>	mi-nkósâ	<b>nkwàñò</b> <i>n.</i>	3/4 honey <i>pl.</i>	mi-
<b>nkózì</b> <i>n.</i>	7/8 part of throat of animal that gets removed after killing	nkwàñò		
<i>pl.</i>	be-nkózì	<b>nkwásá</b> <i>n.</i>	3/4 fishing pole <i>pl.</i>	mi-
<b>nkù</b> <i>n.</i>	3/4 hole, animal den <i>pl.</i>	nkwásá		
mi-nkù		<b>nkwě</b> <i>n.</i>	3/4 basket <i>pl.</i>	mi-nkwě
<b>nkû</b> <i>n.</i>	1/2 Gambian pouched rat ( <i>Cricetomys gambianus</i> )	<b>nkyā</b> <i>n.</i>	3/4 shrimp <i>pl.</i>	mi-nkyā
<i>pl.</i>	ba-nkû	<b>nkyâ</b> <i>n.</i>	3/4 scabies <i>pl.</i>	mi-nkyâ
<b>nkû</b> <i>n.</i>	3/4 leg, foot <i>pl.</i>	<b>nlâ</b> <i>n.</i>	3/4 anus <i>pl.</i>	mi-nlâ
<b>nkùá</b> <i>n.</i>	3/4 tree trunk <i>pl.</i>	<b>nlâ</b> <i>n.</i>	3/4 story, tale, problem <i>pl.</i>	mi-nlâ
<b>nkùlé</b> <i>n.</i>	3/4 hill, mountain <i>pl.</i>	<b>nlàà</b> <i>n.</i>	3/4 antenna, horn <i>pl.</i>	mi-nlàà
mi-nkùlé		<b>nlàwó</b> <i>n.</i>	3/84 branch <i>pl.</i>	mi-nlàwó
<b>nkúló</b> <i>n.</i>	3/4 “dead” (rainy) season (May-Aug)	<b>nlémò</b> <i>n.</i>	3/4 heart <i>pl.</i>	mi-nlémò
<i>pl.</i>	mi-nkúló	<b>nlô</b> <i>n.</i>	3/4 head <i>pl.</i>	mi-nlô
<b>nkùmàsà</b> <i>n.</i>	3/4 preparation <i>pl.</i>	<b>nlùdè</b> <i>n.</i>	3/4 scale (for weighing) <i>pl.</i>	mi-nlùdè
mi-nkùmàsà		<b>nlùngá</b> <i>n.</i>	3/4 bucket <i>pl.</i>	mi-nlùngá
<b>nkùmbó</b> <i>n.</i>	1/2 African brush-tailed porcupine ( <i>Atherurus africanus</i> )	<b>nlvúmá</b> <i>n.</i>	3/4 fork <i>pl.</i>	mi-nlvúmá
<i>pl.</i>	ba-nkùmbó	<b>nòòné</b> <i>n.</i>	7/8 bird (generic term) <i>pl.</i>	be-nòòné
<b>nkùmbò</b> <i>n.</i>	3/4 Nile crocodile ( <i>Crocodylus niloticus</i> )	<b>nóó</b> <i>n.</i>	1/2 deaf person <i>pl.</i>	ba-nóó
<i>pl.</i>	mi-nkùmbò	<b>nòò</b> <i>v.</i>	take <i>npp.</i>	nòngá recip.
<b>nkùmbó wá d-úú</b> <i>n.</i>	3/4 nasal wing	<b>nòò</b> <i>gala</i>	nòò	nòò
<i>pl.</i>	mi-nkùmbó mí m-úú	<b>nsî</b> <i>n.</i>	3/4 African linsang ( <i>Poiana richardsonii</i> )	nsî
<b>nkúmbòló</b> <i>n.</i>	3/4 diarrhea <i>pl.</i>	<b>nsô</b> <i>n.</i>	3/4 (intestinal) worm <i>pl.</i>	mi-nsô
mi-nkúmbòló		<b>nsô</b> <i>n.</i>	3/4 beak <i>pl.</i>	mi-nsô
<b>nkùmù</b> <i>n.</i>	3/4 prison <i>pl.</i>	<b>nsá</b> <i>n.</i>	3/4 shore <i>pl.</i>	mi-nsá
mi-nkùmù		<b>nsá wá mâ</b> <i>n.</i>	3/4 beach, shore (bord de la mer) <i>pl.</i>	mi-nsá mí mâ
<b>nkündé</b> <i>n.</i>	3/4 tail <i>pl.</i>	<b>nsá’â</b> <i>n.</i>	3/4 shrub, bush (e.g. banana tree) <i>pl.</i>	mi-nsá’â
<b>nkúnkúmbé</b> <i>n.</i>	3/4 bow <i>pl.</i>	<b>nsà’â</b> <i>n.</i>	3/4 mantled guereza	nsà’â
mi-nkúnkúmbé				
<b>nkùù</b> <i>n.</i>	3/4 evil spirit <i>pl.</i>			
-nkùzó - <i>n.</i>	3/4 widow/er <i>pl.</i>			
mìnkùzó				
<b>nkwáàlè b-ùdì</b> <i>n.</i>	1/2 spy <i>pl.</i>			
ba-kwáàlè bá b-ùdì				
<b>nkwálá</b> <i>n.</i>	3/4 machete <i>pl.</i>			
mi-nkwaná				

( <i>Colobus guereza</i> ) <i>pl.</i>	<i>mi-nsà'á</i>	<i>ntàmbè</i>
<b>nsá'àwà</b> <i>n.</i>	3/4 flouncing, repeated movement (e.g. leaves) <i>pl.</i>	<i>mi-nsá'àwà</i> <i>ntàmbê</i> <i>n.</i> 1/2 stick <i>pl.</i> <i>ba-ntàmbê</i>
<b>nsàlá</b> <i>n.</i>	3/4 crevice, fissure <i>pl.</i>	<i>mi-nsàlá</i> <i>ntàngànè</i> <i>n.</i> 3/4 white person <i>pl.</i> <i>mi-ntàngànè</i>
<b>-sálè mànkê</b> <i>n-</i> <i>n.</i>	1/2 farmer <i>pl.</i> <i>ba-sálè bá má-nkê</i>	<i>ntányá</i> <i>n.</i> 3/4 cleanliness <i>pl.</i> <i>mi-ntányá</i>
<b>nsámbò</b> <i>n.</i>	3/4 penis <i>pl.</i>	<i>mi-nsámbò</i> <i>nté</i> <i>n.</i> 3/4 tallness, size <i>pl.</i> <i>mi-nté</i>
<b>nsé</b> <i>n.</i>	3/4 sand <i>pl.</i>	<i>mi-nsé</i> <i>ntègá</i> <i>n.</i> 3/4 weakness, softness <i>pl.</i> <i>mi-ntègá</i>
<b>nsélá</b> <i>n.</i>	3/4 plant with thorns <i>pl.</i>	<i>mi-nsélá</i> <i>ntégalè</i> <i>v.</i> threaten, annoy, disturb <i>npp.</i> <i>ntégálâ recip.</i> <i>ntégala</i>
<b>nsíngó</b> <i>n.</i>	3/4 fastness, speed <i>pl.</i>	<i>mi-nsíngó</i> <i>ntélé</i> <i>n.</i> 7/8 clothing, fabric <i>pl.</i> <i>be-ntélé</i>
<b>nsínó</b> <i>n.</i>	3/4 color, paint <i>pl.</i>	<i>mi-nsínó</i> <i>ntèmbó</i> <i>n.</i> 1/2 younger siblings and cousins <i>pl.</i> <i>ba-ntèmbó</i>
<b>nsísó</b> <i>n.</i>	3/4 vein <i>pl.</i>	<i>mi-nsísó</i> <i>-ntèmbwà</i> <i>le-</i> <i>n.</i> 5/6 wrinkle (in skin) <i>pl.</i> <i>ma-ntèmbwá</i>
<b>nsìyè</b> <i>n.</i>	3/4 string <i>pl.</i>	<i>mi-nsìyè</i> <i>ntèndá</i> <i>n.</i> 3/4 tear, rip <i>pl.</i> <i>mi-ntèndá</i>
<b>nsô wá d-ísì</b> <i>n.</i>	3/4 pupil <i>pl.</i>	<i>mi-nsô</i> <i>mí m-ísì</i> <i>-ntèndì</i> <i>le-</i> <i>n.</i> 5/6 saliva, drool <i>pl.</i> <i>ma-ntèndì</i>
<b>nsónsó</b> <i>n.</i>	3/4 bone marrow <i>pl.</i>	<i>mi-nsónsó</i> <i>ntfùgà</i> <i>n.</i> 7/8 lid (of bottle) <i>pl.</i> <i>be-ntfùgà</i>
<b>nsùlè</b> <i>n.</i>	3/4 ripeness <i>pl.</i>	<i>mi-nsùlè</i> <i>ntfúmò</i> <i>n.</i> 3/4 knife <i>pl.</i> <i>mi-ntfúmò</i>
<b>nsùmbó</b> <i>n.</i>	3/4 hunt (with dogs and spears) <i>pl.</i>	<i>mi-nsùmbó</i> <i>ntògò</i> <i>n.</i> 7/8 sweet potato <i>pl.</i> <i>be-ntògò</i>
<b>ntáå</b> <i>v.</i>	climb over, overcome, succeed <i>npp.</i> <i>ntàngá caus.</i> <i>ntàngese recip.</i> <i>ntàngala</i>	<i>ntòndògè</i> <i>n.</i> 7/8 needle <i>pl.</i> <i>be-ntòndògè</i>
<b>ntá</b> <i>n.</i>	3/4 niece, nephew (children of the sister, i.e. children who do not belong to the house, but have their father elsewhere) <i>pl.</i>	<i>mi-ntá</i> <i>ntòndòm</i> <i>ideo.</i> depiction of monkeys jumping in trees
<b>ntà</b> <i>n.</i>	1/2 grand-child <i>pl.</i>	<i>ba-ntà</i> <i>ntòngè</i> <i>n.</i> 1/2 hornet, wasp, mantispid <i>pl.</i> <i>ba-ntòngè</i>
<b>ntámane</b> <i>v.</i>	ruin, destroy, be ruined	<i>ntámane</i> <i>ntsántsùgè</i> <i>n.</i> 3/4 dragon fly ( <i>Odonata</i> ) <i>pl.</i> <i>mi-ntsántsùgè</i>
<b>ntàmbè</b> <i>n.</i>	1/2 rubber <i>pl.</i>	<i>ba-ntàmbè</i> <i>ntúà</i> <i>n.</i> 7/6 mango (fruit), mango tree, wild mango ( <i>Irvingia gabonensis</i> )

<i>sis</i> <i>pl.</i> ma-ntúà	<b>nyàmá</b> <i>n.</i> 3/4 broken thing <i>pl.</i> mi-nyàmá
<b>-ntúdégá</b> <i>le-</i> <i>n.</i> 5/6 bruise <i>pl.</i> ma-ntúdégá	<b>nyámbá</b> <i>n.</i> 9/6 armpit <i>pl.</i> ma-nyámbá
<b>ntúlé</b> <i>n.</i> 3/4 old person <i>pl.</i> mi-ntúlé	<b>nyàmè</b> <i>n.</i> 7/8 poverty <i>pl.</i> be-nyàmè
<b>ntúmé</b> <i>n.</i> 3/4 walking stick <i>pl.</i> mi-ntúmé	<b>nyàmo</b> <i>v.</i> get ruined, spoil (e.g. house, fruit) <i>npp.</i> nyàmá <i>caus.</i> nyàmese <i>recip.</i> nyàmala
<b>ntúmò</b> <i>n.</i> 2 Mvai people (Campo, Guinea, Mbam)	<b>nyánè</b> <i>n.</i> 7/8 war <i>pl.</i> be-nyánè
<b>ntùngù</b> <i>n.</i> 3/4 manner, behavior <i>pl.</i> mi-ntùngù	<b>-nyánò</b> <i>ma-</i> <i>n.</i> 6 pain
<b>ntùó</b> <i>inv.</i> six	<b>nyàno</b> <i>v.</i> hurt
<b>ntúbí</b> <i>n.</i> 3/4 savannah <i>pl.</i> mi-ntúbí	<b>nyè</b> <i>v.</i> return <i>npp.</i> nyìgá <i>recip.</i> nyì-gala
<b>númbá</b> <i>n.</i> 7/8 place <i>pl.</i> be-númbá	<b>nyê</b> <i>v.</i> see, look <i>recip.</i> nyénala
<b>nùmbà</b> <i>n.</i> 1/2 logger <i>pl.</i> ba-nùmbà	<b>nyèmbé</b> <i>n.</i> 7/8 gun <i>pl.</i> be-nyèmbé
<b>nvèwò</b> <i>n.</i> 3/4 breath <i>pl.</i> mi-nvèwò	<b>nyèsélé</b> <i>v.</i> press down on sth., deepen <i>npp.</i> nyèsá lowered
<b>ŋwándó</b> <i>n.</i> 3/4 bitter manioc <i>pl.</i> mi-ŋwándó	<b>nyî</b> <i>v.</i> enter <i>npp.</i> nyíngâ <i>appl.</i> nyíngelé <i>recip.</i> nyíngala
<b>ŋwándó</b> <i>n.</i> 9/6 manioc stick <i>pl.</i> ma-ŋwándó	<b>nyígé</b> <i>v.</i> beg
<b>nyâ</b> <i>n.</i> 1/2 mother <i>pl.</i> ba-nyâ	<b>nyìkà (yá m-bô)</b> - <i>n.</i> 7/8 crook of the arm <i>pl.</i> be-nyìkà bé má-bô
<b>nyá</b> <i>inv.</i> really	<b>nyíme</b> <i>v.</i> refuse <i>npp.</i> nyímâ <i>caus.</i> nyímese <i>recip.</i> nyímala
<b>nyâ</b> <i>n.</i> 7/8 nail (finger, toe), claw <i>pl.</i> be-nyâ	<b>nyímele</b> <i>v.</i> tighten <i>npp.</i> nyímálâ <i>recip.</i> nyímala
<b>-nyâ</b> <i>ma-</i> <i>n.</i> 6 milk	<b>nyòmbélé</b> <i>v.</i> tickle <i>recip.</i> nyòmbala
<b>nyâ</b> <i>v.</i> lick, suckle (babies) <i>npp.</i> nyángâ <i>caus.</i> nyángese <i>recip.</i> nyángala	<b>nyónyô</b> <i>n.</i> 7/8 yawn <i>pl.</i> be-nyónyô
<b>nyàà</b> <i>v.</i> defecate <i>npp.</i> nyàgâ <i>caus.</i> nyàgese <i>recip.</i> nyàgala	<b>-nyôò</b> <i>ma-</i> <i>n.</i> 6 wine, general term for alcohol
<b>nyáàlè</b> <i>n.</i> 1/2 beggar <i>pl.</i> ba-nyáàlè	<b>-nyôò má léndé</b> <i>ma-</i> <i>n.</i> 6 palm wine
<b>nyádè</b> <i>n.</i> 1/2 buffalo <i>pl.</i> ba-nyádè	<b>nyú</b> ( <b>wá nkwanò</b> ) <i>n.</i> 1/2 bee <i>pl.</i> ba-nyú (bá nkwanò)
<b>nyàgà</b> <i>n.</i> 7/8 cow <i>pl.</i> be-nyágà	<b>nyúúlé</b> <i>n.</i> 7/8 insect <i>pl.</i> be-nyúúlé
<b>nyàlé</b> <i>n.</i> 1/2 son/brother -in-law <i>pl.</i> ba-nyàlé	<b>nyûâ</b> <i>n.</i> 1/2 snake <i>pl.</i> ba-nyûâ
<b>nyàlé</b> <i>v.</i> scratch <i>npp.</i> nyàlá <i>recip.</i> nyàlala	<b>nyúlé</b> <i>n.</i> 3/4 orphan <i>pl.</i> mi-nyúlé

- nyúlè** *n.* 9/6 body *pl.* ma-nyúlè
- nyùlè** *n.* 3/4 flame *pl.* mi-nyùlè
- nyùlè** *v.* drink *npp.* nyùlá  
*caus.* nyùlesse *recip.* nyùlala
- nyùmbò** *n.* 3/4 mouth *pl.* mi-nyùmbò
- nyùmbò** *v.* smell intr. (good or bad) *npp.* nyùmbá *appl.* nyùmbelé smell sth. *caus.* nyùmbesè *recip.* nyùmbala
- nyùngù** *n.* 1/2 rainbow *pl.* ba-nyùngù
- nyùnlè** *n.* 1/2 mosquito *pl.* ba-nyùnlè
- nywâi** *adv.* early (in the day, before sunset)
- nzââ** *n.* 7 appetite for meat or fish
- nzá** *pro.* who
- nzá le-** *n.* 5/6 dead leaves in water *pl.* ma-nzá
- nzálè** *ma- n.* 6 urine
- nzàmbí** *n.* 1/2 god, good spirit *pl.* ba-nzàmbí
- nzàmbò** *n.* 7/8 marsh *pl.* be-nzàmbò
- nzámù** *n.* 1/2 appetite *pl.* ba-nzámù
- nzèlè** *n.* 7/8 beard *pl.* be-nzèlè
- nzí nzálè** *n.* 7/8 bladder (place of urine) *pl.* be-nzí nzálè
- nzìlû** *n.* 7/8 swallow *pl.* be-nzìlû
- nzímò le-** *n.* 5/6 termite (*Isoptera*) *pl.* ma-nzímò
- nzòmé** *n.* 7/8 splinter *pl.* be-nzòmé
- ndééééé** *ideo.* depiction of staring
- ndà** *v.* cross *npp.* ndàngá *re-cip.* ndàngala
- ndáà** *adv.* also, too
- ndàlò** *n.* 1/2 tobacco *pl.* ba-ndàlò
- ndáwò** *n.* 9/6 house *pl.* ma-ndáwò
- ndè -** *n.* 3/4 bait *pl.* mi-ndè
- ndémó** *n.* 9/6 dream *pl.* ma-ntémó
- ndéndibù** *n.* 1/2 spider, spider web *pl.* ba-ndéndibù
- ndísì** *n.* 3/4 rice *pl.* mi-ndísì
- ndúá** *n.* 7/8 clitoris *pl.* be-ndúá
- ndùwó** *n.* 3/4 roof *pl.* mi-ndùwó
- ndvùj** *n.* 7/8 suffering, difficulty *pl.* be-ndvùj
- ndvùù** *n.* 3/4 bad luck, bad event *pl.* mi-ndvùù
- ndwàmbèlè** *n.* 3/4 exaggerated request *pl.* mi-ndwàmbèlè
- ndyándyà (wá m-údí) -** *n.* 3/4 giant, tall person *pl.* mi-ndyándyà (mí b-údí)
- ndyàwò** *n.* 7/6 chisel *pl.* ma-ndyàwò
- ndyúà** *n.* 3/4 swimming *pl.* mi-ndyúà
- ndzâ** *n.* 9/6 dance *pl.* ma-ndzâ
- ndzí** *n.* 9/6 jealousy, envy *pl.* ma-ndzí
- ndzi** *n.* 1/2 fly *pl.* ba-ndzi
- ndzà** *n.* 9/6 hunger *pl.* ma-ndzà
- ndzààlè** *n.* 1/2 tree pangolin (*Manis tricuspis*) *pl.* ba-ndzààlè
- ndzámbò** *n.* 7/6 upper arm *pl.* ma-ndzámbò

## ND

<b>ndzàmbò</b> <i>n.</i> 7/8 mud <i>pl.</i> be-	<b>ngè'è</b> <i>n.</i> 7/8 eyebrow <i>pl.</i> ba-nkè'è
ndzàmbò	ngèlénè <i>n.</i> 1/2 English person
<b>ndzé</b> <i>n.</i> 1/2 panther, leopard <i>pl.</i> ba-ndzé	pl. ba-ngèlénè
<b>ndzélì (yá m-ísì)</b> <i>n.</i> 7/8 hair in face (beard, around eyes) <i>pl.</i> be-ndzélì (bé m-ísì)	<b>ngò</b> <i>n.</i> 9/6 grinding stone plate <i>pl.</i> ma-ngò
<b>ndzí</b> <i>n.</i> 9/6 path <i>pl.</i> ma-ndzí	<b>ngõ</b> <i>n.</i> 1/2 pig <i>pl.</i> ba-ngõ
<b>ndzìè</b> <i>n.</i> 1/2 gorilla <i>pl.</i> ba-ndzìè	<b>ngõ wà jíí</b> <i>n.</i> 1/2 bush pig ( <i>Potamochoerus porcus</i> ) <i>pl.</i> ba-ngõ bá jíí
<b>ndzìlì</b> <i>n.</i> 1/2 guard <i>pl.</i> ba-ndzìlì	<b>ngókòbé</b> <i>n.</i> 7/8 bracelet <i>pl.</i> be-
<b>ndzílí yá m-bô</b> <i>n.</i> 7/8 elbow <i>pl.</i> be-ndzílí ma-bô	ngókòbé
<b>ndzìmózó</b> <i>n.</i> 1/2 guard <i>pl.</i> ba-	<b>ngòmbáà</b> <i>n.</i> 1/2 lemon <i>pl.</i> ba-
ndzìmózó	ngòmbáà
<b>ndziwò</b> <i>n.</i> 1/2 yellow-backed duiker ( <i>Cephalophus silvicultor</i> ) <i>pl.</i> ba-ndziwò	<b>ngòmbò</b> <i>n.</i> 9/6 tam tam (small drum) <i>pl.</i> ma-ngòmbò
<b>-ndzólè le-</b> <i>n.</i> 5/6 tear <i>pl.</i> ma-ndzólè	<b>ngòndè</b> <i>n.</i> 1/2 moon, month <i>pl.</i> ba-
	ngòndè
	<b>ngòngòlè</b> <i>n.</i> 7 sadness (about lack), compassion
	<b>ngóvinà</b> <i>n.</i> 1/2 government <i>pl.</i> ba-
	ngóvinà
	<b>ngùlá</b> <i>n.</i> 3/4 headscarf <i>pl.</i> mi-ngùlá
	<b>ngùndyá</b> <i>n.</i> 9/6 raffia leaf when used for weaving <i>pl.</i> ma-ngùndyá
	<b>ngùó</b> <i>n.</i> 7/8 sugar (cane) <i>pl.</i> be-
	ngùó
	<b>ngvúñò</b> <i>n.</i> 1/2 storm, tornado <i>pl.</i> ba-ngvúñò
	<b>ngvù</b> <i>n.</i> 1/2 flying squirrel ( <i>Idiurus zenkeri</i> ) <i>pl.</i> ba-ngvù
	<b>ngvùbó</b> <i>n.</i> 1/2 hippopotamus <i>pl.</i> ba-ngvùbó
	<b>ngvúlè</b> <i>n.</i> 9/6 strength, force <i>pl.</i> ma-ngvúlè
	<b>ngvúmà</b> <i>n.</i> 1/2 some, someone (un-

## NG

<b>ngà(ngå)</b> <i>n.</i> 1/2 healer <i>pl.</i> ba-	<b>ngùlá</b> <i>n.</i> 3/4 headscarf <i>pl.</i> mi-ngùlá
ngå(ngå)	ngùndyá <i>n.</i> 9/6 raffia leaf when used for weaving <i>pl.</i> ma-ngùndyá
<b>ngê</b> <i>n.</i> 9/6 field, garden <i>pl.</i> ma-ngê	<b>ngùó</b> <i>n.</i> 7/8 sugar (cane) <i>pl.</i> be-
<b>ngòlíngòlí</b> <i>n.</i> 7/8 throat, larynx <i>pl.</i> be-ndzílì	ngùó
<b>ngùñò</b> <i>n.</i> 7/8 tomato <i>pl.</i> be-ndzílì	<b>ngvúñò</b> <i>n.</i> 1/2 storm, tornado <i>pl.</i> ba-ndzílì
<b>ngálè</b> <i>n.</i> 1/2 thunder, lightning, melmel <i>pl.</i> ba-ndzílì	<b>ngvù</b> <i>n.</i> 1/2 flying squirrel ( <i>Idiurus zenkeri</i> ) <i>pl.</i> ba-ndzílì
<b>ngàmbàlà</b> <i>n.</i> 7/6 rarity, difficulty <i>pl.</i> ma-ndzílì	<b>ngvùbó</b> <i>n.</i> 1/2 hippopotamus <i>pl.</i> ba-ndzílì
<b>ngámbé</b> <i>n.</i> 7/6 vision, oracle <i>pl.</i> ma-ndzílì	<b>ngvúlè</b> <i>n.</i> 9/6 strength, force <i>pl.</i> ma-ndzílì
<b>ngàtà</b> <i>n.</i> 9/6 bandage, wrapping <i>pl.</i> ma-ndzílì	<b>ngvúmà</b> <i>n.</i> 1/2 some, someone (un-

specified, unknown) <i>pl.</i>	ba- <i>ngvúmà</i>	<b>ngyésá</b> <i>n.</i> 7/8 cake <i>pl.</i>	be- <i>ngyésá</i>
<b>-ngvúmbò</b> <i>ma-</i> <i>n.</i>	6 flirt, attention seeking	<b>ngyówò</b> <i>n.</i> 3/4 hook <i>pl.</i>	mi- <i>ngyówò</i>
<b>ngvùmbò</b> <i>n.</i>	2 Ngumba people	<b>ngyùlè</b> <i>n.</i> 3/4 light <i>pl.</i>	mi- <i>ngyùlè</i>
<b>ngvùndè</b> <i>n.</i>	7/8 mask <i>pl.</i>	<b>ngyùlè wá vísó</b> <i>n.</i> 3/4 sunlight <i>pl.</i>	mi- <i>ngyùlè mí vísó</i>
<b>ngvùndè</b>			
<b>ngvùndò</b> <i>n.</i>	9/6 vengeance <i>pl.</i>		
<b>ngvúú</b> <i>n.</i>	7/8 shyness <i>pl.</i>	<b>O</b>	
<b>ngwě</b> <i>n.</i>	1/2 millipede <i>pl.</i>	<b>ó(né)gá</b> <i>mod.</i> (an)other	
<b>ngwálà</b> <i>n.</i>	1/2 snail <i>pl.</i>	<b>P</b>	
<b>ngwálò</b> <i>n.</i>	7/6 side, next, corner <i>pl.</i>	<b>pâ</b> <i>v.</i> do first (only as auxiliary)	
<b>ngwámé</b> <i>n.</i>	7 danger	<b>pâ</b> <i>v.</i> reign, govern, command	
<b>ngwàndó</b> <i>n.</i>	3/4 melon seed ( <i>pis-tache</i> ) <i>pl.</i>	<b>npp.</b> mpángâ <i>recip.</i> pángala	
<b>ngwáwà</b> <i>n.</i>	7/8 guava <i>pl.</i>	<b>pé</b> <i>n.</i> 9/6 injury <i>pl.</i>	ma- <i>pé</i>
<b>ngwáwà</b>		<b>pô</b> <i>n.</i> 2 Fang	
<b>ngwáwò</b> <i>v.</i>	bend (only animate), bow <i>npp.</i>	<b>-pà</b> <i>le-</i> <i>n.</i> 5/6 paw <i>pl.</i>	ma- <i>pà</i>
<b>ngwáwâ</b> <i>caus.</i>	ngwàngese	<b>pá’á</b> <i>n.</i> 7/8 1) bark (tree) 2) coin <i>pl.</i>	ba- <i>pá’á</i>
<b>ngwélè</b> <i>n.</i>	9/6 witchcraft <i>pl.</i>	<b>pá’à</b> <i>v.</i> dig, hollow out (e.g. drum) <i>npp.</i>	mpágâ recip. pángala
<b>ngwélè</b>		<b>pà’à</b> <i>v.</i> grow (plants) <i>npp.</i>	mpàgá recip. págala
<b>ngyê</b> <i>n.</i>	3/4 visit <i>pl.</i>	<b>páàlà</b> <i>n.</i> 9/6 valley <i>pl.</i>	ma-páàlà
<b>ngyà</b> <i>n.</i>	3/4 intestines <i>pl.</i>	<b>pádô</b> <i>v.</i> 1) pluck (e.g. prunes, chili), 2) wring out <i>npp.</i>	mpádâ recip. pádala
<b>ngyà wá lètlè</b> <i>n.</i>	3/4 hernia <i>pl.</i>	<b>pálaba</b> <i>v.</i> blink (eye)	
<b>ngyámànè</b> <i>n.</i>	7 Germany	<b>pálô</b> <i>v.</i> sort <i>npp.</i>	mpálâ recip. pálala
<b>ngyàngó</b> <i>n.</i>	7/8 hunt (with gun) <i>pl.</i>	<b>-pámó</b> <i>ma-</i> <i>n.</i> 6 rise, arrival	
<b>ngyàngó</b>		<b>pámo</b> <i>v.</i> appear <i>npp.</i>	mpámâ recip. pámala
<b>-ngyě</b> <i>mi-</i> <i>n.</i>	4 hunting rats (in holes)	<b>pàmpélè</b> <i>n.</i> 7/8 grapefruit <i>pl.</i>	be-
<b>ngyémò</b> <i>n.</i>	3/4 fruit bat <i>pl.</i>		
<b>ngyémò</b>			

pàmpélè	pfû n. 7/8 colobus monkey <i>pl.</i> be-
pánde v. arrive <i>npp.</i> mpándâ <i>recip.</i> pándala	pfû
pándyì n. 1/2 plate <i>pl.</i> ba-pándyì	pfáááá <i>ideo.</i> depiction of flinging a
pándyì wà dô - <i>n.</i> 1/2 deep plate	long object or slinging
páne v. hang up <i>npp.</i> mpánâ <i>caus.</i> pánesé <i>recip.</i> pánala	pfùdé n. 9/6 mold <i>pl.</i> ma-pfùdé
pàno v. shine (e.g. sun, fire- flies, stars, moon, light, lamp)	pfùdó n. 7/8 abandonment <i>pl.</i> be-
<i>npp.</i> mpàná	kfùdó
pê v. choose <i>npp.</i> mpéyâ <i>re-</i> <i>cip.</i> péyala	pfúele v. crunch <i>npp.</i> mpfúálâ <i>recip.</i> pfúala
pè'è n. 9/6 wisdom <i>pl.</i> ma-pè'è	pfùmbé v. pull out (groundnuts)
-pébà le- <i>n.</i> 5/6 fin (fish) <i>pl.</i> ma- pébà	<i>npp.</i> mpfùmbá <i>recip.</i> pfùmbala
péè n. 7/8 avocado (tree and fruit) <i>pl.</i> be-péè	pfúndɔ v. be frightened <i>caus.</i> pfúndese <i>recip.</i> pfún- dala
pèè n. 9/6 conscience <i>pl.</i> ma-pèè	pfÙngà n. 7/8 lid (pot, eye) <i>pl.</i> be-
péépéè n. 1/2 cockroach <i>pl.</i> ba- péépéè	pfÙngà
pélè n. 7/8 side <i>pl.</i> be-pélè	pfúbáné n. 3/4 cleanliness <i>pl.</i> mi-
-pélè bé bénó be- <i>n.</i> 8 buttocks	pfúbáné
pémbó n. 7/8 clay, bread <i>pl.</i> be- pémbó	pfùbelé v. blow (tr), blow down <i>npp.</i> mpfúbálâ <i>recip.</i> pfùbala
pèndele v. lick out with finger <i>npp.</i> mpèndálâ <i>recip.</i> pèndala	pfùtùm <i>ideo.</i> depiction of sound when jumping into water
péndɔ v. braid <i>npp.</i> mpéndâ <i>recip.</i> pèndala	pfùwɔ v. dust <i>npp.</i> mpfùwâ <i>recip.</i> pfùwala
pépé n. 1/2 leaf-hopper bug ( <i>Ci-</i> <i>cadellidae</i> ) <i>pl.</i> ba-pépé	-pfùyá be- <i>n.</i> 8 ashes, powder
-pébá le- <i>n.</i> 5/6 wing <i>pl.</i> ma-pébá	pùpù n. 1/2 butterfly, moth <i>pl.</i> ba- pùpù
péwó n. 7/8 scar <i>pl.</i> be-péwó	-pílá ngàndé be- <i>n.</i> 8 overbite (teeth) (ngàndé as in crocodile)
péyà v. booze, get drunk <i>caus.</i> péyesé <i>recip.</i> péyala	pílì n. 7/6 moment, season <i>pl.</i> ma- pílì
-pfò ba- <i>n.</i> 2 Bapoko (Kwasio loan word)	pílò adv. when
	pímáá n. 7/8 wall <i>pl.</i> be-pímáá
	pímbé v. wipe <i>npp.</i> mpímbâ <i>recip.</i> pímbala
	pímù n. 9/6 force, power <i>pl.</i> ma-

pímù	pwápwâ <i>n.</i> 1/2 truth, honesty <i>pl.</i> ba-pwápwâ
píndyó <i>n.</i> 7/8 piece, part that is broken off <i>pl.</i> be-píndyó	pwàsɔwɔ <i>v.</i> stretch (animal with sticks for smoke), stretch oneself <i>npp.</i> mpwàsá <i>recip.</i> pwàsala
pínesé <i>v.</i> squeeze <i>npp.</i> mpínâ <i>recip.</i> pínala	pwèdà <i>n.</i> 1/2 grass <i>pl.</i> ba-pwèdà
písè <i>adv., post.</i> last, late	pyàgá <i>n.</i> 7/6 paper <i>pl.</i> ma-pyàgá
písè <i>n.</i> 7/8 back (spatial) <i>pl.</i> be-písè	sá <i>n.</i> 1/2 father, male <i>pl.</i> ba-sá
píyò <i>adj.</i> small, thin	
pìyù-pìyù <i>n.</i> 1/2 small rain, small rainy season (Mar - May) <i>pl.</i> ba-pìyù-pìyù	
pó <i>n.</i> 9/6 news, prophecy <i>pl.</i> ma-pó	-sâ <i>ma- n.</i> 6 game (playing)
pódè <i>n.</i> 1/2 port, harbour <i>pl.</i> ba-pódè	sâ <i>v.</i> vomit <i>npp.</i> nsángâ <i>caus.</i> ságese <i>recip.</i> ságala
póm <i>n.</i> 1/2 potato <i>pl.</i> ba-póm	sá wà kfúbò <i>n.</i> 1/2 rooster (male of chicken) <i>pl.</i> ba-sá bá kfúbò
póndese <i>v.</i> punish <i>npp.</i> mpóndásâ	sââsa <i>v.</i> mix <i>npp.</i> nsââsâ
póné <i>n.</i> 7 truth	sîi <i>v.</i> approach (tr.) <i>npp.</i> nsíngâ <i>appl.</i> síselé <i>recip.</i> síngala
pòpó <i>n.</i> 7/8 papaya <i>pl.</i> be-pòpó	sá <i>n.</i> 1/2 earth worm <i>pl.</i> ba-sá
pòtò <i>n.</i> 7/8 clay (for building houses) <i>pl.</i> be-pòtò	-sá le- <i>n.</i> 5/6 prune (fruit of <i>Cannarium schweinfurthii</i> tree) <i>pl.</i> ma-sá
pówàlâ <i>adj.</i> tranquille, calm	sà <i>n.</i> 7/8 hut <i>pl.</i> be-sà
púš <i>v.</i> pay <i>npp.</i> mpúngâ <i>recip.</i> pún-gala	sâ <i>n.</i> 7/8 thing <i>pl.</i> be-sâ
pùdùm <i>ideo.</i> depiction of falling into mud or throwing stone into water	-sâ le- <i>n.</i> 5/6 feather <i>pl.</i> ma-sâ
púndí <i>n.</i> 1/2 guenon ( <i>Cercopithecus preussi</i> ) <i>pl.</i> ba-púndí	sâ <i>v.</i> do <i>npp.</i> nsáyâ <i>recip.</i> sáala
púndi <i>v.</i> polish <i>npp.</i> mpúndâ <i>recip.</i> púndala	sá'âwà <i>v.</i> move repeatedly
pùse <i>v.</i> push <i>npp.</i> mpùsá <i>recip.</i> pùsala	sáálé <i>n.</i> 7/8 work <i>pl.</i> be-sáálé
púsí <i>n.</i> 7/8 bottle <i>pl.</i> be-púsí	sàga <i>v.</i> shock, scare, be surprised
púù <i>n.</i> 7 1) reason 2) púù + ATT/GEN for, because	npp. nsàgá <i>recip.</i> sàgala
pùúlí <i>n.</i> 7/8 hat <i>pl.</i> be-pùúlí	ságóságó <i>n.</i> 1/2 comb <i>pl.</i> ba-ságóságó
	-sálá (má kúlí) <i>ma- n.</i> 6 ceremony months after a funeral ending the deuil

<b>sàlágà</b> <i>n.</i> 7/8 ditch <i>pl.</i> be-sàlágà	<i>caus.</i> sèndesè <i>recip.</i> sèndala
<b>sàle</b> <i>v.</i> crack intr. (e.g. wood, wall)	<b>sèngé</b> <i>v.</i> lower <i>npp.</i> nsèngá <i>re-</i> <i>cip.</i> sèngala
<b>-sálè bàmbèyè</b> <i>n- n.</i> 1/2 prostitute	<b>sí</b> <i>n.</i> 9/6 ground, soil, world
<i>pl.</i> ba-sálè bá be-bàmbèyè	<i>pl.</i> ma-sí
<b>-sálè màngámbé</b> <i>n- n.</i> 1/2 di-	<b>sí post.</b> under
viner, fortune-teller <i>pl.</i> ba-sálè bá	<b>síawa</b> <i>v.</i> have a hiccup
mángámbé	<b>sígá</b> <i>n.</i> 1/2 cigarette <i>pl.</i> ba-sígá
<b>-sálè ngyàngó</b> <i>n- n.</i> 1/2 hunter	<b>-sìlá</b> <i>le- n.</i> 5/6 mole-cricket
<i>pl.</i> ba-sálè bá bé-nygàngó	( <i>Gryllotalpa africana</i> ), tiger beetle
<b>sálɔ</b> <i>v.</i> become lots <i>npp.</i> nsálâ	( <i>Megacephala</i> ) <i>pl.</i> ma-sìlá
<b>sàlɔ</b> <i>v.</i> cut lengthways <i>npp.</i> nsàlá	<b>síle</b> <i>v.</i> finish, end, use up, kill
<i>recip.</i> sàlala	<i>npp.</i> nsálâ <i>caus.</i> sílesè <i>recip.</i> sílala
<b>sàmbèsè</b> <i>n.</i> 7 rape	<b>silega</b> <i>v.</i> descend, fade <i>npp.</i> nsìlá
<b>sàndyá</b> <i>n.</i> 7/8 raffia mat for house	<i>caus.</i> silese <i>recip.</i> sìlala
building <i>pl.</i> be-sàndyá	<b>sílí</b> <i>n.</i> 7/8 1) hair 2) spark (bé býí)
<b>sàndyà</b> <i>n.</i> 1/2 fabric ( <i>pagne</i> ) <i>pl.</i> ba-	<i>pl.</i> be-sílí
sàndyà	<b>sílífázì</b> <i>n.</i> 1/2 sandal <i>pl.</i> ba-sílífázì
<b>sáne</b> <i>v.</i> decide <i>npp.</i> nsánâ <i>recip.</i> sá-	<b>sílo</b> <i>v.</i> rub, smear, paint <i>npp.</i> nsílá
nala	<i>recip.</i> sílala
<b>sàsàmbé (yá mwánò)</b> <i>n.</i> 7/8	<b>símasa</b> <i>v.</i> regret <i>npp.</i> nsímásâ
miscarriage <i>pl.</i> be-sàsàmbé	<b>símbɔ</b> <i>v.</i> drag <i>npp.</i> nsímbá <i>re-</i> <i>cip.</i> sìmbala
 <b>-s̩è</b> <i>le- n.</i> 5/6 small canoe,	<b>síme</b> <i>v.</i> respect <i>npp.</i> nsímâ <i>re-</i> <i>cip.</i> símala
dugout <i>pl.</i> ma-s̩è	<b>símul</b> <i>n.</i> 7/8 liquid sauce <i>pl.</i> be-
<b>-s̩è</b> <i>le- n.</i> 5/6 umbrella tree ( <i>Mu-</i>	símul
<i>sanga cecropioides</i> ) <i>pl.</i> ma-s̩è	<b>síndya</b> <i>v.</i> change, exchange
<b>sé'è</b> <i>n.</i> 7/8 liver <i>pl.</i> be-sé'è	<i>npp.</i> nsíndyâ <i>recip.</i> síndyala
<b>sé'è</b> <i>n.</i> 7/8 mandrill ( <i>Mandrillus</i>	<b>síngí</b> <i>n.</i> 7/8 squirrel (generic term)
<i>sphinx</i> ) <i>pl.</i> be-sé'è	<i>pl.</i> be-síngí
<b>sègèsè</b> <i>n.</i> 7/8 sieve <i>pl.</i> be-sègèsè	<b>síngì</b> <i>n.</i> 7/8 cat <i>pl.</i> be-síngì
<b>sègesè</b> <i>v.</i> sieve <i>npp.</i> nsègásâ	<b>síngì</b> <i>n.</i> 7/8 soul, spirit <i>pl.</i> be-síngì
<b>sékè</b> <i>n.</i> 1/2 termite <i>pl.</i> ba-sékè	<b>sísà</b> <i>n.</i> 3/4 Aidan fruit and tree
<b>sélo</b> <i>v.</i> shell, skin, husk <i>npp.</i> nsélâ	( <i>Tetrapleura tetrapterata</i> ) <i>pl.</i> mi-nsísâ
<i>recip.</i> sélala	<b>sísele</b> <i>v.</i> scare sb. <i>npp.</i> nsísâ
<b>sémbɔ</b> <i>v.</i> arrive, land	
<b>sènde</b> <i>v.</i> slip <i>npp.</i> msèndá	

<i>recip.</i>	sísala	<i>autoc.</i>	sísega	<i>npp.</i>	nsólégâ
<b>sísímù</b>	<i>n.</i>	7/8 shadow (of person)		<b>sòmònè</b>	<i>n.</i> 7 complaint
<i>pl.</i>	be-sísímù			<b>sóndò</b>	<i>n.</i> 1/2 week <i>pl.</i> ba-sóndò
<b>sísɔ</b>	<i>v.</i>	approach (intr.)	<i>npp.</i> nsísâ	<b>sóndya</b>	<i>v.</i> bring to point, sharpen
<i>recip.</i>	sísala			<i>npp.</i> nsóndyà	<i>recip.</i> sóndyala
<b>sísɔ</b>	<i>v.</i>	be happy	<i>recip.</i> sísala	<b>sónì</b>	<i>n.</i> 7 shame
<b>sísùù</b>	<i>n.</i>	7/8 apparition	<i>pl.</i> be-sísùù	<b>sóò</b>	<i>post.</i> before, in front
<b>-síyá</b>	<i>be-</i>	<i>n.</i> 8 imitation		<b>sóò</b>	<i>n.</i> 7 front (spatial)
<b>síya</b>	<i>v.</i>	wash, bathe	<i>npp.</i> nsìyá	<b>sósélé</b>	<i>v.</i> smoke (fish or animal)
<i>recip.</i>	síyala			<i>npp.</i> nsósálâ	
<b>síyè</b>	<i>n.</i>	7/8 fire (Kwasio loan word)		<b>-sòsí</b>	<i>ma-</i>
<i>pl.</i>	be-síyè			<b>sóbá</b>	<i>n.</i> 7/8 mud
<b>síyε</b>	<i>v.</i>	saw	<i>npp.</i> nsíyâ	<i>pl.</i> be-sóbá	
<b>síyεsε</b>	<i>v.</i>	swing, shake	<i>npp.</i> nsíyàsâ	<b>sóbì</b>	<i>n.</i> 7/8 soap
<b>síyò</b>	<i>n.</i>	7/8 dry season (Nov-Mar)		<b>sòkìndá</b>	<i>n.</i> 1/2 biting ants
<i>pl.</i>	be-síyò			<i>pl.</i> ba-sòkìndá	
<b>-síyò</b>	<i>le-</i>	<i>n.</i> 5/6 elephant tusk		<b>sótì</b>	<i>n.</i> 1/2 trousers
<i>pl.</i>	ma-síyò			<b>-sù</b>	<i>le-</i>
<b>só</b>	<i>n.</i>	1/2 friend	<i>pl.</i> ba-só	<i>n.</i> 5/6 jigger	
<b>sò</b>	<i>n.</i>	7/8 saw	<i>pl.</i> be-sò	<i>n.</i> ma-sù	
<b>sô</b>	<i>n.</i>	9/6 grave, tomb	<i>pl.</i> ma-sô	<b>sù'ù</b>	<i>n.</i> 7/8 putty-nosed monkey
<i>só'ò</i>	<i>v.</i>	continue	<i>npp.</i> nsósala	<i>(Cercopithecus nictitans)</i>	<i>pl.</i> be-sù'ù
<i>appl.</i>	sósélé			<b>-sù'ù</b>	<i>le-</i>
<b>só'ò</b>	<i>n.</i>	7/8 cynocephalus monkey		<i>n.</i> 5/6 waterfall	
<i>pl.</i>	be-só'ò			<i>pl.</i> ma-sù'ù	
<b>sòbala</b>	<i>v.</i>	accumulate, coagulate		<b>sùbe</b>	<i>v.</i> pour out, turn over
<i>npp.</i>	nsòbálâ			<i>npp.</i> nsùbá	<i>appl.</i> sùbelé
<b>sògá</b>	<i>n.</i>	7/8 secret	<i>pl.</i> be-sògá	<i>caus.</i>	ejaculate
<b>sóle</b>	<i>v.</i>	undress, take off (clothes)		<b>sùbesè</b>	<i>turn sth over</i>
<i>npp.</i>	nsólâ	<i>caus.</i>		<i>recip.</i>	sùbala
<b>sòle</b>	<i>v.</i>	hide sth.	<i>npp.</i> nsólá	<b>súbì</b>	<i>n.</i> 7/8 sauce, soup
<i>recip.</i>	sòlala			<b>sùmbò</b>	<i>pl.</i> be-súbì
<b>sólé yá gólè</b>	<i>n.</i>	7/8 Northern double-collared sunbird ( <i>Cinnyris reichenowi</i> )		<i>npp.</i> nsùmbá	<i>die in a mystical way</i>
<i>pl.</i>	be-sólé	bé gólè		<b>súmele</b>	<i>recip.</i> sùmbala
<b>sóléga</b>	<i>v.</i>	fall, take a tumble		<i>npp.</i> nsúmálâ	<i>recip.</i> súmala
				<b>-sùné</b>	<i>n-</i>
				<i>n.</i> 3/4 flesh	<i>pl.</i> mi-sùné
				<b>súngú</b>	<i>n.</i> 7/8 drinking cup made
				<i>of leaves (for water or medicine)</i>	<i>pl.</i> be-súngú
				<b>sùngù</b>	<i>n.</i> 7/8 war
				<i>pl.</i> be-sùngù	<i>pl.</i>
				<b>-súnó</b>	<i>le-</i>
				<i>n.</i> 5/6 doubt	<i>pl.</i> ma-súnó

<b>súwálá</b> <i>n.</i> 7/8 meeting, conference <i>pl.</i> be-súwálá	<b>-tángà</b> <i>ba-</i> <i>n.</i> 2 Batanga (Banua and Bapoko)
<b>sùwɔ</b> <i>v.</i> spill <i>appl.</i> sùwεlε pour sth.	<b>-tàngò</b> <i>ma-</i> <i>n.</i> 6 palm wine (areal term)
<b>swáálè</b> <i>n.</i> 1/2 bone marrow <i>pl.</i> ba-swáálè	<b>tàtànós</b> <i>n.</i> 1/2 mantis <i>pl.</i> ba-tàtànós
<b>-swàmbò</b> <i>le-</i> <i>n.</i> 5/6 going out (for hunting) <i>pl.</i> ma-swàmbò	<b>tátɔ</b> <i>v.</i> take care of, guard <i>npp.</i> ntátâ <i>recip.</i> tátala
<b>swásɔ</b> <i>v.</i> dry (intr.) <i>npp.</i> nswásâ <i>appl.</i> swáselε <i>recip.</i> swásala	<b>tàtɔ</b> <i>v.</i> squeak, scream <i>npp.</i> ntàdá <i>caus.</i> tàdese <i>recip.</i> tátala
<b>swàwɔ</b> <i>v.</i> hide (intr.) <i>npp.</i> nswàwá	<b>tàwò</b> <i>n.</i> 7/8 goat, sheep <i>pl.</i> be-tàwò
<b>-swî</b> <i>le-</i> <i>n.</i> 5/6 death <i>pl.</i> ma-swî	<b>té</b> <i>n.</i> 7/8 posture, position <i>pl.</i> be-té
<b>syê syê</b> <i>ideo.</i> depiction of sneaking	<b>tèèè</b> <i>ideo.</i> depiction of waiting
<b>T</b>	<b>tè'ètè</b> <i>n.</i> 7/8 tenderness <i>pl.</i> be-tè'ètè
	<b>tê</b> <i>adv.</i> now
	<b>tê</b> <i>v.</i> create, invent, found <i>npp.</i> ntéyâ <i>recip.</i> téyala
	<b>tê</b> <i>v.</i> limp <i>recip.</i> téngala
	<b>tèè</b> <i>v.</i> abandon <i>npp.</i> ntèngá <i>recip.</i> tèngala
	<b>-té'é</b> <i>le-</i> <i>n.</i> 5/6 fatigue <i>pl.</i> ma-té'é
	<b>té'è</b> <i>v.</i> be soft, be weak <i>npp.</i> ntégâ <i>tr.</i> tége soften, make soft
	<b>tèbé</b> <i>n.</i> 7/8 beach, shore <i>pl.</i> be-tèbé
	<b>tébɔ</b> <i>v.</i> get up, rise, stop, stand <i>npp.</i> ntélâ <i>appl.</i> téle place sth. upright <i>recip.</i> ntélala place each other
	<b>tége</b> <i>v.</i> make tired <i>npp.</i> ntégâ <i>caus.</i> tégesε <i>recip.</i> tégala
	<b>-télè</b> <i>ma-</i> <i>n.</i> 6 saliva (spit)
	<b>tèmbɔwɔ</b> <i>v.</i> set, go down (only for sun) <i>npp.</i> ntèmbá <i>caus.</i> ntèmbese
	<b>tèmbówɔ</b> <i>má vísó</i> <i>ma-</i> <i>n.</i> 6 sunset
	<b>-tèndáà</b> <i>le-</i> <i>n.</i> 5/6 ground cricket <i>pl.</i> ma-tèndáà
<b>tánè</b> <i>mod.</i> five	

<b>tèndo</b> <i>v.</i>	tear <i>npp.</i>	ntèndá	tódyínì
<i>caus.</i>	tèndese <i>recip.</i>	tèndala	tóke <i>v.</i> take, pick up <i>npp.</i>
<b>tètèkè</b> <i>n.</i>	7/8 frogs that fall from sky with rain <i>pl.</i>	be-tètèkè	ntókâ <i>caus.</i> tókesé <i>recip.</i> tókala
<b>tfúada</b> <i>v.</i>	be late, tarder		-tólè le- <i>n.</i> 5/6 navel <i>pl.</i> ma-tólè
<b>tfùbó</b> <i>n.</i>	7/8 black mamba <i>pl.</i>	be- tfùbó	tômbó <i>n.</i> 7/8 problem <i>pl.</i> be-tômbó
<b>tfùbo</b> <i>v.</i>	1) pierce 2) rape <i>npp.</i>	nt- fúbâ <i>recip.</i>	-tóndí le- <i>n.</i> 5/6 friend/lover <i>pl.</i> ma-tóndí
<b>tfùdáà</b> <i>n.</i>	7/8 pinch <i>pl.</i>	be-tfùdáà	<b>tòndò</b> <i>n.</i> 1/2 nail <i>pl.</i> ba-tòndò
<b>tfúdé</b> <i>n.</i>	7/8 bump <i>pl.</i>	be-kfúdé	<b>tòntsá</b> <i>n.</i> 7/8 mistletoe plant ( <i>Age-</i> <i>lanthus djurensis</i> ) <i>pl.</i> be-tòntsá
<b>tfùdó</b> <i>v.</i>	pinch <i>npp.</i>	ntfùdá <i>re-</i> <i>cip.</i>	<b>tóle</b> <i>v.</i> guide, direct
<b>tfúgà</b> <i>n.</i>	7/8 suffering <i>pl.</i>	be-tfúgà	<b>tòsâ</b> <i>adv.</i> no, never, nothing
<b>tfúga</b> <i>v.</i>	suffer <i>npp.</i>	ntfúgâ	<b>tówá</b> <i>inv.</i> all (used with time only, whole time/night/day/hour)
<i>caus.</i>	tfúgesé <i>recip.</i>	tfúgala	<b>tówa</b> <i>v.</i> drip, leak <i>npp.</i> ntówâ
<b>-tfùlè</b> <i>ma- n.</i>	6 smell		<b>trésì</b> <i>n.</i> 1/2 thread <i>pl.</i> ba-trésì
<b>tfúmbó</b> <i>v.</i>	fold, wrinkle <i>npp.</i>	nt- fúmbâ <i>caus.</i>	<b>tù</b> <i>post.</i> inside
		tfúmbesé <i>recip.</i>	<b>túù</b> <i>n.</i> 7/8 axe <i>pl.</i> be-túù
		tfúmbala <i>autoc.</i>	<b>túà</b> <i>v.</i> move places/houses
<b>tfùnè</b> <i>n.</i>	7/8 strap (made of bark or veins), scarf for carrying babies <i>pl.</i>	be-tfùnè	<i>npp.</i> ntógâ <i>caus.</i> tógesé <i>re-</i> <i>cip.</i> tógala
<b>-tié</b> le- <i>n.</i>	5/6 knot <i>pl.</i>	ma-tié	<b>túdè</b> <i>n.</i> 7/8 tumor <i>pl.</i> be-túdè
<b>tî</b> <i>v.</i>	start walking, displace oneself <i>npp.</i>	ntiyâ <i>recip.</i>	<b>-túmbà</b> <i>n- n.</i> 1/2 older brother, cousin, close friend <i>pl.</i> ba-túmbà
<b>tìnɔ</b> <i>v.</i>	tear out, harvest (tubers) <i>npp.</i>	ntiná <i>appl.</i>	<b>túmbó</b> <i>n.</i> 7/8 country <i>pl.</i> be-túmbó
		tíle <i>recip.</i>	<b>tùnde</b> <i>v.</i> miss <i>npp.</i> ntùndá <i>re-</i> <i>cip.</i>
<b>tísònì</b> <i>n.</i>	7/8 town <i>pl.</i>	tínala	tùndala
<b>títímó</b> <i>n.</i>	7/8 middle <i>pl.</i>	be-títímó	<b>túnɔwɔ</b> <i>v.</i> float
<b>-tó</b> le- <i>n.</i>	5/6 drop <i>pl.</i>	ma-tó	<b>túù</b> <i>n.</i> 7/8 spoon <i>pl.</i> be-túù
<b>tò</b> <i>inv.</i>	any		<b>túwane</b> <i>nà v.</i> meet (on appointment) <i>npp.</i> ntúwánê <i>recip.</i> túwala
<b>tòà</b> <i>v.</i>	boil (intr.) <i>npp.</i>	ntògá	<b>twálɔ</b> <i>v.</i> peck <i>npp.</i> ntwálâ <i>re-</i> <i>cip.</i>
		recip.	twálala
<b>tòdè</b> <i>n.</i>	7/8 roundness <i>pl.</i>	be-tòdè	<b>TS</b>
<b>tódyínì</b> <i>n.</i>	1/2 thousand <i>pl.</i>	ba-	

<b>tsàmè</b> <i>v.</i> spit <i>npp.</i> ntsàmá <i>recip.</i> tsàmala	<b>tsílì yá ndáwò</b> <i>n.</i> 7/8 room <i>pl.</i> be-tsílì má-ndáwò
<b>tsí</b> <i>n.</i> 9/6 1) neck 2) voice <i>pl.</i> ma-tsí	<b>tsílì yá sótì</b> <i>n.</i> 7/8 pants <i>pl.</i> be-tsílì bé sótì
<b>tsî</b> <i>v.</i> untie, unwrap, loosen <i>npp.</i> ntsíngâ <i>recip.</i> tsíngala	<b>tsílɔ</b> <i>v.</i> write <i>npp.</i> ntsílå <i>caus.</i> tsílese <i>recip.</i> tsílala
-tsì <i>n- n.</i> 1/2 in-law <i>pl.</i> ba-tsì	<b>tsímbé</b> <i>n.</i> 7/8 plank <i>pl.</i> be-tsímbé
<b>tsì</b> <i>n.</i> 7/8 interdiction <i>pl.</i> be-tsì	<b>tsímelé</b> <i>v.</i> sneeze <i>caus.</i> tsímesé <i>recip.</i> tsímalala
<b>-tsí wà m-ùdâ</b> <i>n- n.</i> 1/2 mother/sister-in-law <i>pl.</i> ba-tsí bá b-ùdâ	<b>tsíndí</b> <i>n.</i> 9/6 riverside, shore <i>pl.</i> ma-tsíndí
<b>tsíbø</b> <i>v.</i> grind, trample (in mortar) <i>npp.</i> ntsíbâ <i>recip.</i> tsíbala	-tsíndí ( <i>lé nkú</i> ) <i>le- n.</i> 5/6 heel (of the foot) <i>pl.</i> ma-tsíndí má nkú
<b>tsídèdè</b> <i>n.</i> 1/2 honesty <i>pl.</i> ba-tsídèdè	-tsíndá ( <i>le-</i> ) <i>n.</i> 5/6 1) party, festival 2) <i>neuvène</i> ceremony nine days after funeral <i>pl.</i> ma-tsíndá
<b>tsídí</b> <i>n.</i> 1/2 animal, meat <i>pl.</i> ba-tsídí	<b>tsíndo</b> <i>v.</i> push lightly, shove <i>npp.</i> ntsíndâ <i>recip.</i> tsíndala
<b>tsíè</b> <i>n.</i> 9/6 blood <i>pl.</i> ma-tsíè	<b>tsíyà</b> <i>n.</i> 1/2 question <i>pl.</i> ba-tsíyà
<b>tsíè</b> <i>v.</i> cut <i>npp.</i> ntsíyâ <i>recip.</i> tsíyala	-tsíyé <i>le- n.</i> 5/6 knot <i>pl.</i> ma-tsíyé
<b>tsìè</b> <i>v.</i> live, be well <i>npp.</i> ntsìgá	<b>tsùk tsùk tsùk tsùk</b> <i>ideo.</i> depiction of noise that mice make
<b>-tsìè be-nyàgà</b> <i>n- n.</i> 1/2 butcher (cow slaughterer) <i>pl.</i> ba-tsìè bá bé-nyàgà	<b>tsòp tsòp tsòp</b> <i>ideo.</i> depiction of dripping sound or sound walking in mud
<b>tsíele</b> <i>v.</i> make a knod, bind, tie <i>npp.</i> ntsíyálâ <i>recip.</i> tsíyala	
<b>tsíèsámè</b> <i>n.</i> 1/2 circumcision <i>pl.</i> ba-tsíèsámè	<b>U</b>
<b>tsíge</b> <i>v.</i> take off, start going (only with plural subject)	
<b>tsî</b> <i>n.</i> 7/8 life <i>pl.</i> be-tsî	<b>-ù d-</b> <i>n.</i> 5/6 oven, hearth <i>pl.</i> m-ù
<b>tsílì</b> <i>n.</i> 7/8 smallness, part, shortness, half <i>pl.</i> be-tsílì	<b>-ùdâ</b> <i>m- n.</i> 1/2 woman, wife <i>pl.</i> b-ùdâ
<b>tsílì yá kàbà</b> <i>n.</i> 7/8 short skirt <i>pl.</i> be-tsílì bá kàbà	<b>-ùdû</b> <i>m- n.</i> 1/2 man, husband <i>pl.</i> b-ùdû
<b>tsílì yá m-ùdì</b> <i>n.</i> 7/8 dwarf (small person) <i>pl.</i> be-tsílì bá b-ùdì	<b>-ùdì</b> <i>m- n.</i> 1/2 person <i>pl.</i> b-ùdì
	<b>-ùdì wà wóngó</b> <i>m- n.</i> 1/2 soldier

<i>pl.</i> b-ùdì bá bé-wóngó	<i>ithecus) pl.</i> ma-vémbó
<b>ùf</b> <i>ideo.</i> depiction of sound when something catches fire	<b>vémbó (kèmbè)</b> <i>v.</i> blow nose (phlegm) <i>npp.</i> mvémbâ <i>recip.</i> vém-bala
<b>-úgó</b> <i>dv-</i> <i>n.</i> 5/6 toilet <i>pl.</i> m-úgó	<b>vésɔ</b> <i>v.</i> have desire <i>npp.</i> mvésâ <i>recip.</i> vésala
<b>-úmbó</b> <i>d-</i> <i>n.</i> 5/6 wrap <i>pl.</i> m-úmbó	<b>-véwò</b> <i>le-</i> <i>n.</i> 5/6 cold, malaria <i>pl.</i> ma-véwò
<b>-úmbó lé ká d-</b> <i>n.</i> 5/6 fish or meat wrapped and prepared in leaf <i>pl.</i> m-úmbó má ká	<b>vèwɔ</b> <i>v.</i> breathe
<b>-úmbó lé nkê d-</b> <i>n.</i> 5/6 fish or meat prepared in pot, dish with fish in lemon sauce <i>pl.</i> m-úmbó má nkê	<b>vèyε</b> <i>v.</i> mesure <i>npp.</i> mvèyá <i>recip.</i> vèyala
<b>-úndò</b> <i>d-</i> <i>n.</i> 5/6 galago <i>pl.</i> m-úndò	<b>ví</b> <i>n.</i> 7/8 wooden part in trap hiding the hole in the ground <i>pl.</i> be-ví
<b>-úú</b> <i>d-</i> <i>n.</i> 5/6 nose <i>pl.</i> m-úú	<b>vìde</b> <i>v.</i> turn, return, roll sth. <i>npp.</i> mvìdá and mvìdálâ <i>appl.</i> vìdele turn sth. <i>recip.</i> vìdala <i>autoc.</i> vìdega
<b>-ùwò</b> <i>d-</i> <i>n.</i> 5/6 daytime <i>pl.</i> m-ùwò	<b>vídélè</b> <i>n.</i> 7/8 smoke <i>pl.</i> be-vídélè
<b>V</b>	
<b>-váá</b> <i>le-</i> <i>n.</i> 5 thing	<b>-vídósí</b> <i>le-</i> <i>n.</i> 5/6 dawn, early morning <i>pl.</i> ma-vídósí
<b>vàà</b> <i>v.</i> praise, be proud <i>npp.</i> mvàgá <i>recip.</i> vågala	<b>-vídú</b> <i>le-</i> <i>n.</i> 5/6 darkness <i>pl.</i> ma-vídú
<b>váïvái</b> <i>n.</i> 7/8 generosity <i>pl.</i> be-váïvái	<b>-vìlè</b> <i>le-</i> <i>n.</i> 5/6 ginger species ( <i>Aframomum</i> ) <i>pl.</i> ma-vìlè
<b>váló</b> <i>n.</i> 7/8 polygamy <i>pl.</i> be-váló	<b>vímala</b> <i>v.</i> groan <i>npp.</i> mvímálâ
<b>vàmo kwè</b> <i>v.</i> knock over	<b>vímù</b> <i>n.</i> 7/8 giant pangolin ( <i>Manis gigantea</i> ) <i>pl.</i> be-vímù
<b>vásε</b> <i>v.</i> rise (dough) <i>npp.</i> mvásâ <i>appl.</i> váselé (caus. meaning)	<b>víndo</b> <i>v.</i> hate <i>npp.</i> mvíndâ <i>recip.</i> víndala
<b>vé</b> <i>inv.</i> which	<b>-vínó</b> <i>ma-</i> <i>n.</i> 6 pus
<b>vê</b> <i>v.</i> give <i>npp.</i> mvéyâ <i>recip.</i> veyala	<b>vìnó</b> <i>n.</i> 7/8 finger <i>pl.</i> be-vìnó
<b>vè'è</b> <i>v.</i> try on (clothes) <i>npp.</i> mvègá <i>appl.</i> vè'ele (caus. meaning) <i>recip.</i> vègala	<b>vìnó yá sá</b> <i>n.</i> 7/8 thumb (main finger) <i>pl.</i> be-vìnó bé sá
<b>véèlá</b> <i>n.</i> 7/8 decoration <i>pl.</i> be-véèlá	<b>vísó</b> <i>n.</i> 8 sun
<b>vèkò</b> <i>n.</i> 7/8 drawing, painting <i>pl.</i> be-vèkò	<b>vísɔ</b> <i>v.</i> cover <i>npp.</i> mvísâ and mvísálâ <i>appl.</i> víselé <i>recip.</i> vísala
<b>-vémbó</b> <i>le-</i> <i>n.</i> 5/6 guenon ( <i>Cercop-</i>	<b>vísó</b> <i>n.</i> 7/8 bone, skeleton, fish

bone <i>pl.</i> be-vìsó	-vúsí le- <i>n.</i> 5/6 hole <i>pl.</i> ma-vúsí
vìsó yá nkáàlè <i>n.</i> 7/8 backbone	-vútò ma- <i>n.</i> 6 oil (for body)
<i>pl.</i> be-vìsó bé mí-nkáàlè	vùvùlè <i>n.</i> 7/8 baked bread or baguette <i>pl.</i> be-vùvùlè
víwɔ v. suck <i>npp.</i> mvíwâ <i>recip.</i> víwala	vùzí <i>n.</i> 7/8 abdomen <i>pl.</i> be-vúzì
víyàsa v. be light <i>npp.</i> mvíyásâ	vyámbélé <i>v.</i> surround <i>npp.</i> mvyám-bálâ
víyala v. touch <i>npp.</i> mvíyálâ	vyè v. draw <i>npp.</i> mvyègá <i>recip.</i> vyègala
vìyó <i>n.</i> 8 fire	
vô v. 1) be calm 2) be cold	
<i>npp.</i> mvóyâ <i>caus.</i> vólesé calm sb. down <i>recip.</i> vólala	
-vòdá le- <i>n.</i> 5/6 rest, vacation	<b>W</b>
<i>pl.</i> ma-vòdá	
vòda v. rest, relax <i>npp.</i> mvòdá	-wă le- <i>n.</i> 5/6 twin <i>pl.</i> ma-wă
<i>recip.</i> vòdala	-wâ ma- <i>n.</i> 6 fat
-vòlè be- <i>n.</i> 8 grief (after sb.'s departure/death)	-wâ ntúà m- <i>n.</i> 1/2 young woman
vóle v. help <i>npp.</i> mvólâ <i>recip.</i> vólala	<i>pl.</i> b-wâ bá túà
vóvòlè <i>n.</i> 7 freshness, peace, tranquillity	wàà <i>n.</i> 1/2 chimpanzee, bonobo
vòwa v. wake (up) <i>npp.</i> mvòwâ	<i>pl.</i> ba-wàà
<i>caus.</i> vòlesé <i>recip.</i> vòwala <i>auto.</i> vòlega wake up	wáadó <i>n.</i> 7/6 net <i>pl.</i> ma-wáadó
vû v. leave <i>npp.</i> mvúyâ <i>appl.</i> vúle	wàlè <i>n.</i> 7/8 bitter kola (fruit and tree) ( <i>Garcinia kola</i> ) <i>pl.</i> be-wàlè
get rid of, take away <i>recip.</i> vúyalâ	wáme v. hurry
vùù v. worry, be excited	wámiyé <i>adv.</i> fast
vúba nà v. hug sb.	-wánò m- <i>n.</i> 1/2 1) child, baby 2) small, few <i>pl.</i> b-wánò
vúdù <i>num.</i> one	-wánò (wà) m-údâ m- <i>n.</i> 1/2 girl (female child), daughter <i>pl.</i> b-wánò b-údâ
vúele v. blow (with mouth, e.g. into fire) <i>npp.</i> mvúálâ	-wánò (wà) mûdû m- <i>n.</i> 1/2 boy (male child), son <i>pl.</i> b-wánò b-údû
-vúlò ma- <i>n.</i> 6 cutting edge (of e.g. knife or machete)	-wánò nláwó m- <i>n.</i> 3/4 twig (child of branch) <i>pl.</i> b-wánò mí-nláwó
vúlo v. be sharp <i>npp.</i> mvúlâ	-wányè le- <i>n.</i> 5/6 young man
-vúlù le- <i>n.</i> 5/6 foam <i>pl.</i> ma-vúlù	<i>pl.</i> ma-wányè
vùlùngù <i>n.</i> 7/8 noose in trap	wàwe v. spread (out) <i>npp.</i> mwàwá
<i>pl.</i> be-vùlùngù	

<i>recip.</i> wàwala <i>autoc.</i> wàwega	wùndè <i>n.</i> 7/8 groundnut <i>pl.</i> be-wùndè
wáwo <i>v.</i> crawl	wúngala <i>v.</i> wander, dangle
wáyà <i>n.</i> 7/8 wire <i>pl.</i> be-wáyà	wúnjò <i>n.</i> 2 Ewondo people
-wê le- <i>n.</i> 5/6 cry <i>pl.</i> ma-wê	wùsà <i>n.</i> 7/8 dry banana leaf
wè <i>v.</i> die <i>npp.</i> mwèyá	<i>pl.</i> be-wùsà
wéé <i>v.</i> skin (animals with fur; burn the fur, then scratch fur off)	wùsa <i>v.</i> forget <i>npp.</i> mwùsá <i>recip.</i> wùsala
<i>npp.</i> ngwéngâ <i>recip.</i> wéngala	wúsè <i>n.</i> 7/8 drought <i>pl.</i> be-wúsè
wómbele <i>v.</i> sweep <i>npp.</i> mwómbálâ	wùù wúú wùù wúú <i>ideo.</i> depiction of sound of bees
<i>recip.</i> wómbala	wùùùù <i>ideo.</i> depiction of pouring liquids or granulars
-wò le- <i>n.</i> 5/6 taro, cocoyam	wùwù <i>n.</i> 7/8 small bat <i>pl.</i> be-wùwù
<i>pl.</i> ma-wò	
wó’ò <i>n.</i> 7/8 broom <i>pl.</i> be-wó’ò	
wólè <i>n.</i> 7/8 hawk <i>pl.</i> be-wólè	
wòm <i>ideo.</i> depiction of (sudden) silence	
wóngó <i>n.</i> 7/8 helmet <i>pl.</i> be-wóngó	
wóóóó <i>ide.</i> depiction of moving by foot or motorbike	
-wùdè le- <i>n.</i> 5/6 cooking stone	yákú <i>n.</i> 7/8 fire fly <i>pl.</i> be-yákú
<i>pl.</i> ma-wùdè	yàlane <i>v.</i> respond
-wùlà le- <i>n.</i> 5/6 time, hour <i>pl.</i> ma-wùlà	yándó <i>n.</i> 7/8 trace <i>pl.</i> be-yándó
-wúmbé le- <i>n.</i> 5/6 wish, desire, want <i>pl.</i> ma-wúmbé	yàne <i>v.</i> must
wúmbé <i>v.</i> want, wish, need	yâyâ - <i>n.</i> 1/2 pan <i>pl.</i> ba-yâyâ
<i>npp.</i> mwúmbâ <i>recip.</i> wúmbala	yé <i>n.</i> 7/8 mushroom <i>pl.</i> be-yé
want each other's things, desire each other	yé’é <i>n.</i> 7/8 thirst, desire, envie
-wùmbó le- <i>n.</i> 5/6 cotton <i>pl.</i> ma-wùmbó	<i>pl.</i> be-yé’é
wùmè (kfúbò) <i>v.</i> pluck (chicken)	yédélè <i>n.</i> 7/8 star (also used in Kwasio) <i>pl.</i> be-yédélè
<i>npp.</i> mwùmá <i>recip.</i> wùmala	yélè <i>n.</i> 7/8 whistle (both with mouth and whistle) <i>pl.</i> be-yélè
-wúmò le- <i>n.</i> 5/6 ten <i>pl.</i> ma-wúmò	yémède <i>v.</i> tighten <i>npp.</i> myémâ
wúndè <i>n.</i> 1/2 window <i>pl.</i> ba-wúndè	<i>recip.</i> yémàlâ
	yéngè <i>n.</i> 7/8 yodel at wedding
	<i>pl.</i> be-yéngè
	yèyè yá m-ùdì - <i>n.</i> 7/8 retarded person <i>pl.</i> be-yèyè bé b-ùdì

**yí** *n.* 7/8 wood, firewood, fire

*pl.* be-yí

**yíè** *v.* avoid, dodge *npp.* nyéyâ

*recip.* yéala

**yílè** *n.* 7/6 viper *pl.* ma-yílè

**yìmbá** *n.* 7/8 age *pl.* be-yìmbá

**-yímbálî** *le-* *n.* 5/6 entrance *pl.* ma-yímbálî

**yímbɔ** *v.* go for a walk, visit

*npp.* yímbâ *recip.* yímbala

**yúlè** *n.* 1/2 decedent, deceaed

person *pl.* ba-yúlè

**yúngú** *n.* 7/8 sea eagle *pl.* be-yúngú

## Z

**(m-ùdì wà) zìmbà** *n.* 1/2 soldier

*pl.* (b-ùdì bá) ba-zìmbà

**zíngj** *n.* 7/8 short dress *pl.* be-

zíngj

**zìbí** *n.* 7/8 tsetse fly (*Glossina*)

*pl.* be-zìbí

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