A Grammar of Gyeli

Dissertation
zur Erlangung des akademischen Grades

doctor philosophiae
(Dr. phil.)

eingereicht an
der Kultur-, Sozial- und Bildungswissenschaftlichen Fakultät der Humboldt-Universität zu Berlin

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Tag der mündlichen Prüfung:

Table of Contents

List of Tables

List of Figures

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	COMP	complement clause
( )	element in brackets is optional	COMPL	absolute completive
-	morpheme boundary	COND	conditional clause
∅	prefixless noun class	CONTR	contrastive marker
1-9	agreement class 1-9	COP	SCOP copula
1-3P	first-third person plural	DEM	demonstrative
1-3S	first-third person singular	DIST	distal
ADV	adverbial clause	EMPH	emphatic pronoun
adv.	adverb	EXCL	exclamation
AGR	agreement	FUT	future
ANA	anaphoric marker	H	high tone
AP	associative plural	HAB	habitual
appl.	applicative	HL	falling contour tone
ATT	attributive marker	HORT	hortative
autoc.	autocausative	HTS	high tone spreading
AUX	auxiliary	ID	identificational marker
ba	*ba-* noun class	IDEO	ideophone
be	*be-* noun class	IMP	imperative
caus.	causative	INCH	inchoative
cl.	agreement class	INF	infinitival clause
COM	comitative marker	intr.	intransitive

inv.	invariable	PROSP	prospective
L	low tone	PROX	proximal
le	*le-* noun class	PST1	recent past
LH	raising contour tone	PST2	remote past
LOC	locative	Q	question particle
ma	*ma-* noun class	QI	quotative index
mi	*mi-* noun class	Q(tag)	question tag
N	nasal; *N-* noun class	qual.	qualifier
n.	noun	R	realis mood
NCA	non-complete accomplishment	RD	reported discourse
NEG	negation	recip.	reciprocal
NP	noun phrase	REL	relative clause
num.	numeral	RETRO	retrospective
O	onset	SBJ	subject
OBJ	object	SCOP	subject clause operator
OBJ.LINK	object linker	SEQU	sequential marker
pass.	passive	S	singular
PL	plural marker	SBJV	subjunctive
pl.	plural	sg.	singular
PN	proper name	stat.	stative
POS	part of speech	TBU	tone bearing unit
posit.	positional	TM	tense-mood
POSS	possessive	tr.	transitive
PRES	present	v.	verb
PRF	perfect	VOT	voice onset time
PRED	predicate	X	oblique
PRIOR	priorative		
PROG	progressive		

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 dissertation advisors Tom Güldemann and Maarten Mous for their numerous helpful suggestions throughout the course of writing this dissertation. I have discussed many aspects of this grammar with various people over the last years. I particularly thank 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.

In order to give a framework to the grammatical description, I will provide extra-linguistic and methodological information in this introductory chapter. 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' on which I base my linguistic description.

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.[1]

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

[1] 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.

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*.[2]

Another pattern, apart from a name with or without a prefix, is the similarities 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 being 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).[3] There is, however, an alternate exonym used by all local Bantu gneighbors, 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

[2]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.

[3]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 respresented 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'.

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.

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).

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

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 languages 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.[4] He then further subdivides each zone into smaller parts which he labels by decimals.

[4]The figure is taken from https://en.wikipedia.org/wiki/Guthrie_classification_of_Bantu_languages, accessed on July 15th, 2015.

For instance, the Bantu zone A is divided into the sub-zones A10, A20, A30, A40, A50, A60, A70, A80, and A90.

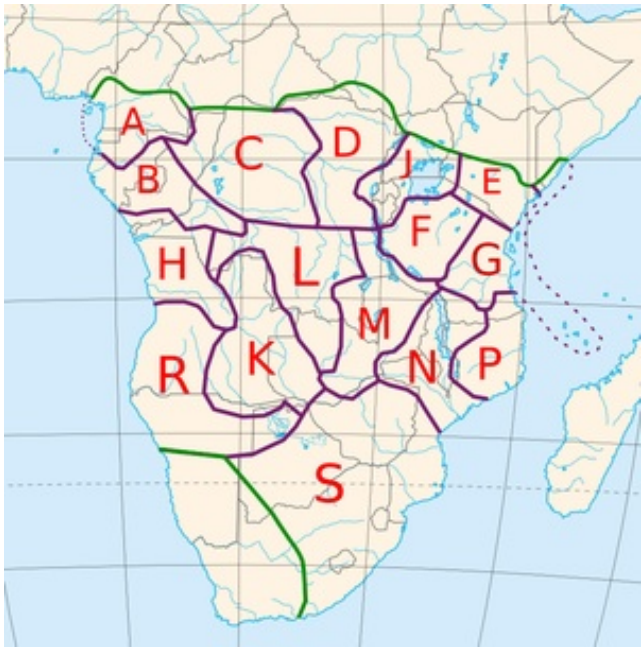


Figure 1.3: Bantu zones

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.

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	ISO code	Name(s)
A801	**gyi**	**Gyele, Bagyeli, Bakola**
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)

Guthrie code as updated by Maho (2009).[5] 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.[6]

Gyeli receives the Guthrie code A801 and the ISO code ISO 639-3: gyi. As the three-digit Guthrie code shows, the language was not represented in the original classification, but added later by Maho. According to Maho (2001: 46), 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.

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 have lived in symbiosis with sedentary Bantu farmer communities over a long period of time. Ruhlen (1994: 154) expresses a widely held view:

[5]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.

[6]A valuable discussion of the geographic distribution of Bantu A80 languages, including maps, is given in Cheucle (2014).

"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 classifiying a language.

Another reason for Gyeli's unclear status within the A80 group in Maho's (2009) classification may be due to the problematic differenciation 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 being 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 all together 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.

It is characteristic for this part of Cameroon that languages are geographically quite interspersed. Usually, there is no clear-cut area that only con-

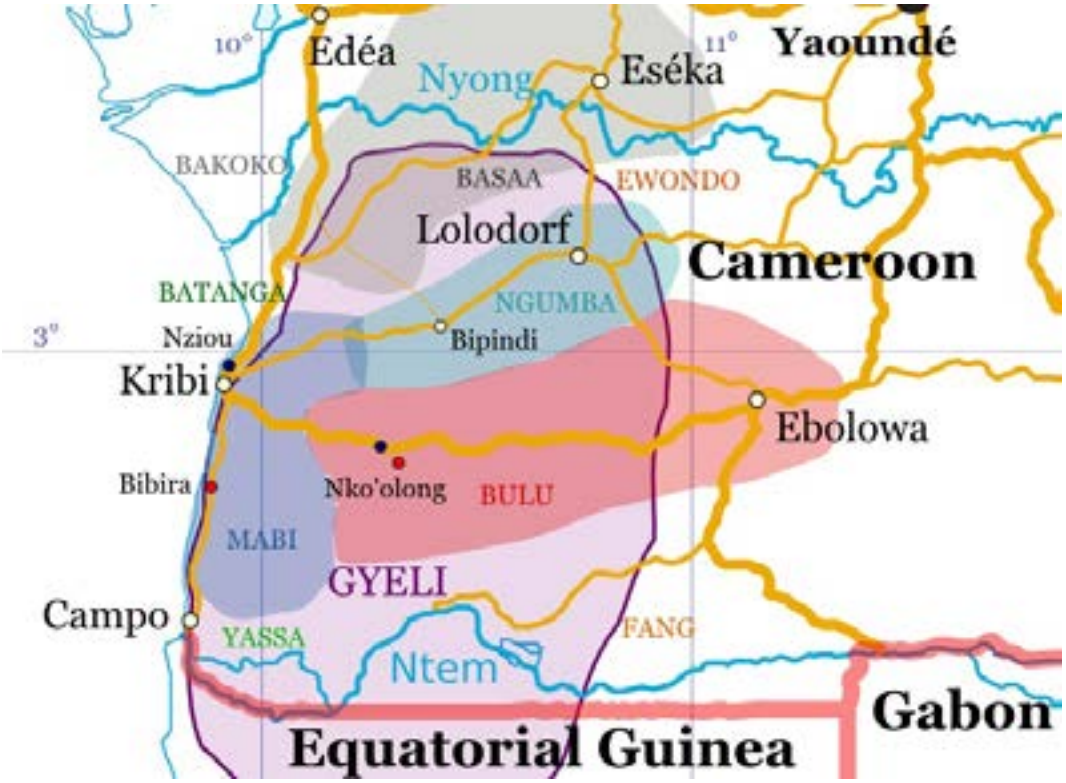


Figure 1.4: Map of the Gyeli language area and its neighboring languages

tains 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^2. Therefore, the map in Figure 1.4 is best understood as an approximation rather than the represention 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.[7]

The nature of contact and thus the linguistic closeness between the Bagyeli and speakers of these eight different farmer groups differs depending on the socio-economic relations in play. The Bagyeli have closer relations to some

[7]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

farming groups than to others. Contact to the Yassa, for instance, who are traditonally 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 historic 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 though, information presented here are based on statements by my informants, both Bagyeli and farmers, on socio-linguistic 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 interethnic 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.

Multilinguism 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. Nontheless, 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 mulitlingual. 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 understate 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 ideolect 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.[8] He further states that both varieties are mutually intelligible and not bound to any specific geographic distribution.

While it is true that Gyeli varieties are mutually intelligible, there seems

[8]This generalization is based on only 221 lexical items. It is also not quite clear what the innovative versus conservative features are specifically.

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.[9] 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 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

[9] 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.

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 of whether dialectal differentiation started already before the Bagyeli became sedentary as of the 1960ies.[10]

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 bilinguism 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 though. 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 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 lan-

[10]This date is given by Renaud (1976: 25).

guages 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 progressively 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 backwardedness, "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 backwardedness. Instead, speaking a Bantu farmer language shows a higher level of education and distances the speaker less from the other Cameroonians. 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 labiovelar /mgb/. Sounds that are usually analyzed as implosives in neighboring languages are realized as pre-glottalized and prevoiced stops in Gyeli.

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 clostest argument to the verb.

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 (2013) 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 leser studied extensions, distingushing for example autocausatives and positionals.

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

The language has a multitude of ways to express non-verbal predicates, using three different non-verbal copulas and three verbal forms. The choice of the form depends both on the tense-mood category of the phrase and the type of relation between the subject and the non-verbal predicate.

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 'Bajɛle' by Renaud (1976) from the 1970ies. This work is quite valuable and detailed in many respects. It is, however, restricted to the phonology and nominal morphology to 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 extents 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. Besides, Letouzey (1995) provides an ethnobotanic perspective on the language by comparing Gyeli tree names with other languages of the region.

Early publications on the Bagyeli comes 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 have been published even before the turn into the 21st 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 is 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. From March through June follows 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 fro 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.[11] 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.

[11]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 most likely outdated, though 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.

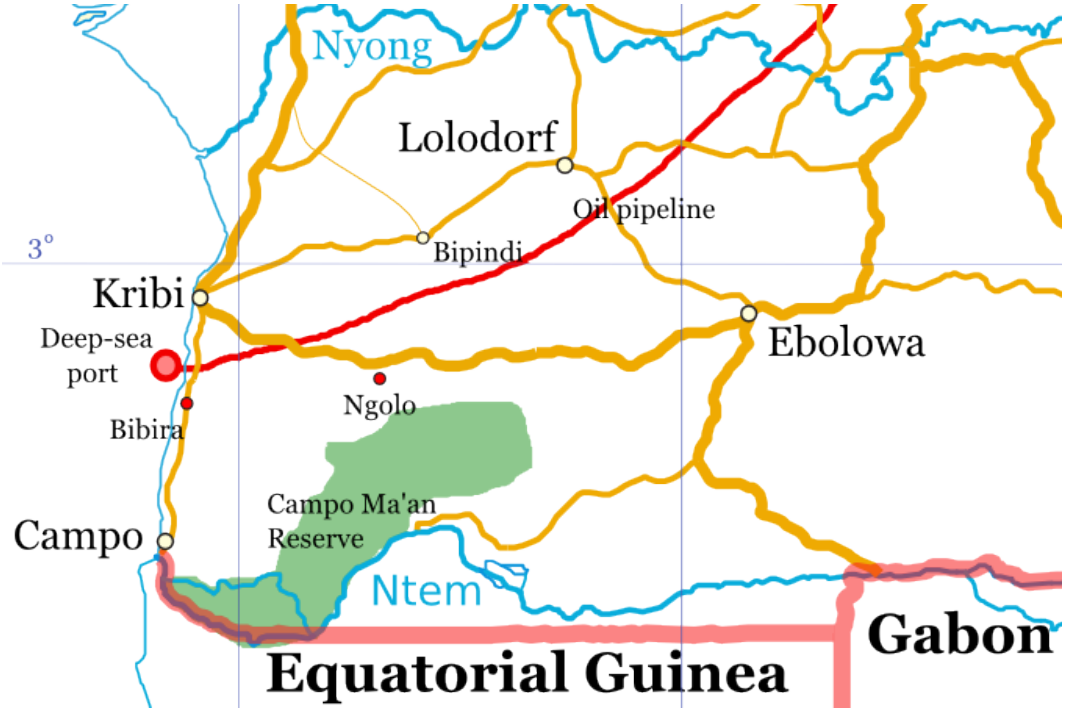


Figure 1.5: Map of landscape changes in the Gyeli area

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 antilopes 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 passtime, 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 though 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 sedentarized over the past decades[12] 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. Additonally, 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

[12]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 communties 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 where not described though). 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 frame work of the DoBeS (Documentation of Endagered Languages) project on the Bakola/Bagyeli language from March 2010 till February 2012 and during an extended project phase from March 2013 till 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 respresented 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 multilinguism 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 multilinguism. As such, idiolects may differ quite a lot from speaker to speaker, even within the same village, depending on their individual language exposure of 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.[13]

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 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. As part of a language documentation

[13]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.

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.[14]

The text corpus that specifically serves as the empirical basis for the description of the Ngolo variety is comprised of 540 intonation phrases of high-quality annotation, distributed over three text genres, namely a folktale, a conversation between multiple speakers, and an autobiographical narrative. The annotated texts can be found in Appendix II. In addition to these thorough annotations, more natural text has 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 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 questionnaires 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.

[14] A selection of audio and video material and their annotations can be found in the DoBeS archive. At present, 133 audio and 52 video recordings from different dialect areas are uploaded into the archive, 69 of which are annotated.

Elicitations were carried out with one consultant 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[15] to elders of about 60 years.

1.4 Structure of the Grammar

This grammar is divided into seven 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.

In chapter 3, I explore grammatical phenomena in the noun phrase, starting out with the gender and agreement system. As such, I investigate modifiers of the noun and invariable elements found in the noun phrase. Adpositions are also discussed in this chapter as well as other types of noun phrases, fir instance noun + noun constructions.

Chapter 4 deals with the verb phrase. I first outline the verb structure and verbal derivation suffixes. Then, I discuss adverbs and ideophones. The inflectional level of the verb phrase, namely tense, aspect, and mood as well as negation, is described separately in chapter 5.

The last two chapters are reserved for clause types. In chapter 6, I investigate simple clauses, including both verbal and non-verbal predicates. I lay out the grammatical relations found in Gyeli and discuss basic word

[15] 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.

order as well as special word order constructions, for instance within the domain of information structure and questions. Also complex predicates and sentential modification are described. Chapter 7 deals with complex clauses including different types of both coordination and subordination, e.g. relative and adverbial clauses.

The seven main chapters are supplemented by a tripartite appendix. 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 recur to 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 a typical Bantu notation. 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 typical 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 Bantu orthography concerns 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 *dj* in the orthography. 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 predicatble 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 voiceless stops *p, *t, *k and voiced stops *b, *d, *g.[1] *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, *ɲ. Gyeli has developed in addition

[1]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).

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*	*ʔ*
Fricatives		*f, v*	*s, z*			
Affricates				*ʧ, ʤ*		
Nasal	*m*		*n*	*ɲ*		
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 of the proposed phoneme by contrast of (near-)minimal pairs.

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

(1) **p**ɔ́ ‘news, message’ vs. **b**ɔ̀ ‘rot’
pɛ́mbɔ́ ‘clay, bread’ vs. **v**ɛ́mbɔ ‘blow nose’
pɛ́lɛ̀ ‘moment’ vs. **t**ɛ́lɛ ‘place sth. upright’

púù ‘reason’ vs. **f**úù ‘driver ant’
pê ‘choose’ vs. **k**è ‘walk (v.)’

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

(2) pɛ́**p**ɛ́ ‘clay, bread’ vs. pɛ́**l**è ‘side’

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

(3) **b**úɔ̀ ‘mortar’ vs. **p**ùɔ́ ‘pay’
bè ‘sow, cultivate’ vs. **p**ê ‘choose’
bàwɛ ‘carry’ vs. **w**àwɛ ‘spread out’
bíwɔ̀ ‘bad luck’ vs. **v**íwɔ ‘suck’
bílɛ ‘being beat’ vs. **s**ílɛ ‘finish’

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

(4) kfú**b**ɔ́ ‘chicken’ vs. kfù**m**ɔ́ ‘stump’
tsí**b**ɔ ‘grind, trample’ vs. tsì**l**ɔ ‘write’
dvù**b**ɔ ‘soak, dip’ vs. dvù**d**ɔ ‘drive’

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

(5) **t**úmbɔ́ ‘country’ vs. **d**úmbɔ́ ‘package’
tándɔ́ ‘womb’ vs. **j**ándɔ́ ‘trace’
-**t**ánɛ̀ ‘five’ vs. **s**ánɛ ‘decide’
tɔ̀ndɔ̀ ‘nail’ vs. **l**ɔ̀ndɔ́ ‘ring’
tàmɛ ‘spit’ vs. **w**ámɛ ‘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 areally widespread.

(6) pɔ̀**t**ɔ̀ ‘clay’ vs. pɔ̀**p**ɔ́ ‘papaya’
sɔ́**t**ì ‘trousers’ vs. sɔ́**n**ì ‘shame’
tà**t**ɔ ‘squeak’ vs. tà**w**ɔ̀ ‘goat’

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

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

(7) **d**ɔ̀ 'negotiate' vs. **t**ɔ̀ 'any'
dìlɛ 'bury' vs. **s**ílɛ 'finish'
dè 'eat' vs. **l**é 'tree'
dɛ̀̃ 'draw water' vs. **m**ɛ̃́ 'sea'
díjɛ̀ 'expensive' vs. **j**íjɛ 'dodge'

(8) bé**d**ò 'ferment' vs. bé**n**ó 'buttock'
kú**d**ɛ́ 'skin' vs. kù**l**ɛ 'borrow'
vò**d**à 'rest' vs. vò**w**a 'wake up'

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

(9) **k**ɔ̀lɛ 'stumble' vs. **g**ɔ́lɛ̀ 'gold'
kìja 'give' vs. **s**ìja 'wash'
kù 'rat' vs. **d**ù 'oven'
kɛ̀lɛ 'hang' vs. **j**ɛ́lɛ 'whistle'
kámbɔ 'chew' vs. **l**ámbɔ̀ '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) bú**k**ɛ 'smoke (tr. v.)' vs. bú**g**ɛ 'put down lengthwise'
fú**k**ɛ̀ 'driver ant' vs. fú**g**ɛ 'end (v.)'
bvú**k**ɛ 'break (tr.)' vs. bvù**l**ɛ́ '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 though, 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) **g**ɛ̃́ 'gown' vs. **k**ɛ̃́ 'wrap'
gìjɔ 'cry (v.) vs. **b**ìjɔ 'hit (v.)'

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

(12) kà**g**á 'defect giving birth' vs. ká**k**a 'shiver'
le-kà**g**à 'bewitched woman' vs. le-kà**ʔ**á 'clan'
le-kà**g**à 'bewitched woman' vs. le-kà**l**à 'doughnut'
nká**g**á 'side of animal' vs. nká**z**á 'whip (n.)'

/ʔ/ The glottal stop /ʔ/ only occurs in stem medial positions, but never stem initially. Since /ʔ/ 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**ʔ**è 'liver' vs. sɛ́**k**è 'termite'
nká**ʔ**à 'colobus monkey' vs. nká**g**á 'side of animal'
nké**ʔ**é 'jaw' vs. nké**d**ɛ́ '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) **f**û 'fish' vs. **v**û 'leave'
fúkɛ̀ 'driver ant' vs. **b**úkɛ́ 'crazy person'
fúlɛ 'escape (v.)' vs. **d**ùlɛ 'be bitter'
fùlɔ 'descend' vs. **b**úlɔ 'fish (v.)'
-**f**úsì 'different' vs. **p**úsí 'bottle'

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

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

(15) **v**úlɔ 'slice (v.)' vs. **f**ùlɔ 'descend'
vìnɔ́ 'finger' vs. **b**ìnɔ́ 'louse'
vísɔ́ 'sun' vs. **s**ìsɔ 'be happy'
vìjɔ́ 'fire' vs. **p**íjɔ̀ 'small'
vàà vs. 'praise' **w**àà '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) **s**íjɔ̀ 'dry season' vs. **p**íjɔ̀ 'small'
sɔ́ndɔ̀ 'week' vs. **t**ɔ̀ndɔ̀ 'nail'
sâ 'do' vs. **b**â 'marry'
súmɛlɛ 'greet' vs. **l**úmɛlɛ 'send'
sɔ́ 'friend' vs. **d**ɔ̀ 'negotiate'

While /s/ also occurs intervocalically within a stem, there is no opposition of voiced and voiceless alveolar fricatives.

(17) vì**s**ɔ́ 'bone' vs. vì**j**ɔ́ 'fire'
kà**s**à 'bridge' vs. kà**l**à 'strawmat'
kɔ́**s**ɛ 'cough' vs. kɔ́**b**ɛ̀ '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 *zìβí* '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) **z**ìmbà 'soldier' vs. **j**ìmbá 'age'
zíŋgɔ́ 'short dress' vs. **ns**íŋgɔ́ 'fast speed'

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

(19) nká**z**á 'whip (n.)' vs. nkwá**s**á 'fishing pole'
nkù**z**ɔ́ 'widow/er' vs. nkú**l**ɔ́ "dead' season (May-Aug)'
kfú**z**á 'fist' vs. kfú**m**á '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 though, 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) **ts**ìì ‘live’ vs. **t**íì ‘get going’
tsíì ‘life’ vs. **dʒ**ìí ‘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) **dʒ**íyɛ ‘burn (intr.)’ vs. **d**íyɛ̀ ‘expensive’
dʒíwɔ́ ‘river’ vs. **b**íwɔ̀ ‘bad luck’

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

(22) **m**â ‘accuse’ vs. **n**â ‘that (COMP)’
mɔ̀ ‘stomach’ vs. **b**ɔ̀ ‘rot’
mɑ̂ ‘sea’ vs. **l**ɑ̂ ‘read, count’
míjù ‘brother, cousin’ vs. **p**ìjù (pìjù) ‘drizzle rain’

(23) pá**m**o ‘appear’ vs. pà**n**o ‘shine’
kwá**m**ɔ́ ‘bag’ vs. kwá**d**ɔ́ ‘village’
djú**m**ɔ̀ ‘spouse’ vs. djú**w**ɔ ‘hear’

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

(24) **n**ɔ̀ɔ̀ ‘take’ vs. **d**ɔ̀ɔ̀ ‘puddle’
níndja ‘urinate’ vs. **s**índja ‘exchange’
níí ‘vagina’ vs. **t**íì ‘get going’
níjɛ̀ ‘how many’ vs. **j**íjɛ ‘dodge’
nâ ‘that(COMP)’ vs. **m**â ‘accuse’

(25) dʒí**n**ɔ̀ ‘name’ vs. dʒí**m**ɔ̀ ‘be deep’
vì**n**ɔ́ ‘finger’ vs. vì**s**ɔ́ ‘bone’
kwà**n**ɛ ‘sell’ vs. kwà**l**ɛ ‘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) **ɲ**úlɛ̀ 'body' vs. **j**úlɛ̀ 'decedent'
ɲâ 'finger/toe nail' vs. **l**â 'harvest'
ɲàgà 'cow' vs. **s**àga 'be surprised'
ɲá 'really' vs. **n**á 'still'
ɲú 'bee' vs. **ndʒ**ú '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) **l**é 'tree' vs. **t**é 'posture, position'
lɛ̃̂ 'read, count' vs. **d**ɛ̃̂ 'draw water'
lúmɛlɛ 'send' vs. **s**úmɛlɛ 'greet'
lâ 'harvest' vs. **n**â 'that (COMP)'
lùndá "*bosquet*' (bush area between villages)' vs. **k**ùndá 'shoe'

(28) nkɛ̀**l**ɛ̀ (já dísì) 'eyebrow' vs. nké**d**é 'courage'
kwà**l**ɛ 'love (v.)' vs. kwà**n**ɛ 'sell'
jí**l**ɛ̀ 'viper' vs. jí**j**ɛ '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) **w**àà 'chimpanzee' vs. **v**àà 'praise'
wàwɛ 'spread' vs. **b**àwɛ 'carry'
wùndɛ̀ 'groundnut' vs. **t**ùndɛ 'fail'
wɔ́lɛ̀ 'hawk' vs. **l**ɔ́lɛ̀ 'weaver'
wúsɛ̀ 'drought' vs. **p**ùsɛ 'push'

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

(30) dʒí**w**ɔ ‘steal’ vs. dʒì**b**ɔ ‘close’
djú**w**ɔ ‘hear’ vs. djú**m**ɔ̀ ‘spouse’
tà**w**ɔ̀ ‘goat’ vs. tà**t**ɔ ‘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) **j**í ‘wood’ vs. **ɲ**î ‘enter’
jílɛ̀ ‘viper’ vs. **s**ílɛ ‘finish’
jándɔ́ ‘trace’ vs. **t**ándɔ́ ‘womb’
jíjɛ ‘dodge’ vs. **k**ìjɛ ‘try’
júlɛ̀ ‘decendent’ vs. **f**úlɛ ‘escape’

(32) vì**j**ɔ́ ‘fire’ vs. vì**n**ɔ́ ‘finger’
kò**j**à ‘rope’ vs. kò**l**a ‘add’
sí**j**ɛ̀ ‘saw’ vs. sí**m**ɛ ‘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) **mb**ámbɛ́ ‘ancestor’ vs. **ŋg**ámbɛ́ ‘vision, oracle’
mbɛ̀ ‘drum’ vs. **nd**ɛ̀ ‘bait’
mbɛ̂ ‘door’ vs. **m**ɛ̂ ‘1S (OBJ)’
mbàŋgá ‘nut’ vs. **k**àŋgá ‘proverb’
mbɔ̀ɔ̀ ‘fatness’ vs. **d**ɔ̀ɔ̀ ‘puddle’

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

(34) ɲá**mb**á ‘armpit’ vs. ɲà**m**á ‘broken thing’
pɛ́**mb**ɔ́ ‘bread’ vs. pɛ́**w**ɔ́ ‘scar’
ŋkù**mb**ɔ́ ‘porcupine’ vs. ŋkù**z**ɔ́ ‘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) **nd**áwɔ̀ 'house' vs. **t**àwɔ̀ 'goat, sheep'
ndà 'cross (v.)' vs. **n**à 'and, with'
ndísì 'rice' vs. **d**ísì 'bowl'
ndɛ̀ 'bait' vs. **w**ɛ̀ 'die'

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

(36) pá**nd**ɛ 'arrive' vs. pa**n**ɛ 'hang up'
sɔ́**nd**ɔ̀ 'week' vs. sɔ́**ʔ**ɔ̀ 'continue'
wù**nd**ɛ̀ 'ground nut' vs. wù**m**ɛ 'pluck'
bú**nd**ɔ̀ 'bride price' vs. bú**l**ɔ '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) **ŋg**ɔ̀ 'grinding stone plate' vs. **d**ɔ̀ 'negotiate, discuss'
ŋgɛ̀ɛ̀ 'eyebrow' vs. **b**ɛ̀ɛ̀ 'shoulder'
ŋgàmbàlà 'difficulty' vs. **k**àmbala 'defend'
ŋgálɛ̀ 'thunder, lightning' vs. **b**álɛ 'surpass'
ŋgùŋgù 'log' vs. **s**ùŋgù 'war'

(38) mpì**ŋg**á 'sweet cassava' vs. mpì**mb**á 'pancreas'
lù**ŋg**a 'grow' vs. lù**nd**á "it bosquet' (bush area between villages)'
ŋkɔ́**ŋg**ɔ́ 'frog' vs. ŋkɔ́**l**ɔ̀ '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.[2] The phonemes are in bold contrasting the other sounds of non-phonemic status which are either allophones or

[2]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

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

Table 2.2: Phonetic inventory - major consonants

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 *kpɛ̀mɛ̀* '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) **mgb**ɛ̀ŋ**mgb**ɛ̀mɛ̀ 'lion'
mgbásá 'hunting with spears and dogs'
mgbɑ̃̀ 'crow'
mbgísì 'rawness, freshness'
mgbámàlà 'be sour' ma-**mgb**ámàlà '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 *mgbɛ̀ŋmgbɛ̀mɛ̀* 'lion' is very typical Gyeli (which most likely means that it is no innovation, but rather older), while the Mabi would rather use *màbùnzɔ̀* 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/ though. This phoneme, in contrast, can be realized as a tap intervocalically, 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.[3]

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

[3]In stem or word initial position, /b/ is pre-glottalized (see section 2.1.2.3).

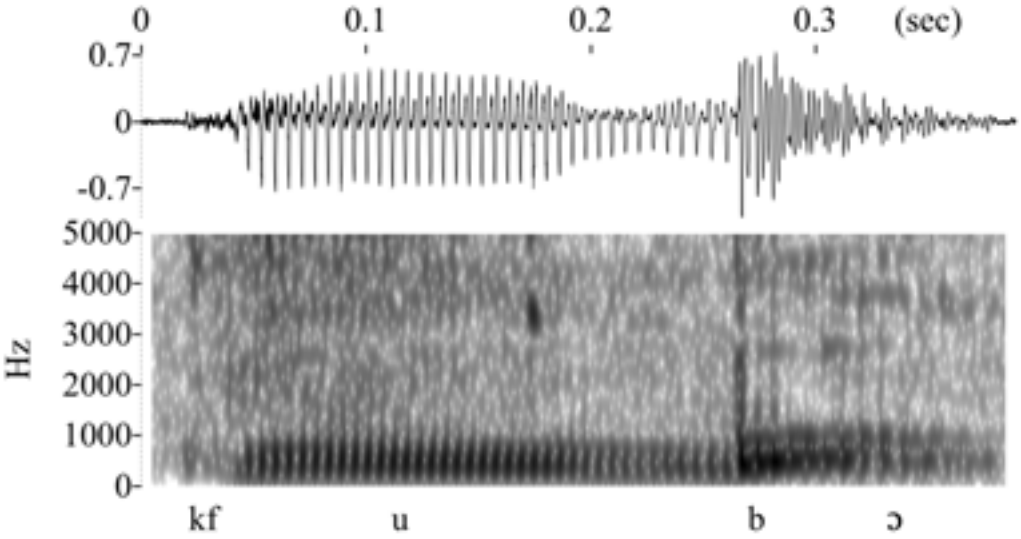


Figure 2.1: Intervocalic [b] in */kfúbɔ̀/* 'chicken'

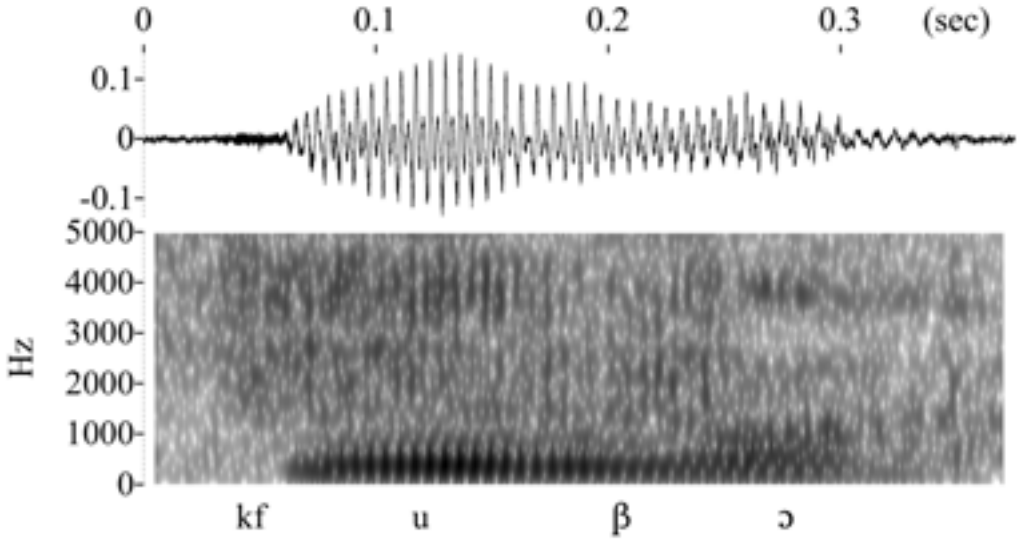


Figure 2.2: Intervocalic [β] in */kfúbɔ̀/* 'chicken'

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

Further, just like word initial /b/, inital /d/ is pre-glottalized and pronounced with a relatively long VOT (see section 2.1.2.3 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 phonotactics. 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 pre-voicing which is discussed in section 2.1.2.3.

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: A nasal that precedes another consonant, forming a nasal-consonant cluster, assimilates to the place of articulation of the following consonant. This is illustrated in the rule below and some examples in (40).

Nasal Place Assimilation

[4] It is not clear, however, whether [ɾ] occurred as an allophone since allophony is not discussed by Cheucle (2014).

$$\begin{bmatrix} +\text{nasal} \\ +\text{consonant} \end{bmatrix} \longrightarrow \begin{bmatrix} +\text{nasal} \\ +\text{consonant} \\ +\text{articulation place x} \end{bmatrix} / \underline{\quad} \begin{bmatrix} -\text{nasal} \\ +\text{consonant} \\ +\text{place x} \end{bmatrix}$$

(40)
	/N + bɔ̂/	→	[**m**bɔ̂] ‘arm’
	/N + túmbà/	→	[**n**túmbà] ‘older brother’
	/N + gjɛ̂̃/	→	[**ŋ**gjɛ̂̃] ‘stranger’

In contrast to other nasal consonants, [ŋ] has no phonemic status in Gyeli because it’s occurrence is predictable from a following velar obstruent. There is one exception, namely with the noun *ŋwándɔ́* ‘cassava stick’ that contrast with *ŋgwàndɔ́* ‘melon seed’. While the latter noun takes a velar nasal as expected from the following velar stop, there is no velar stop in *ŋwándɔ́* ‘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 a sequences of nasal + velar consonant, but never on its own, I do not consider it a phoneme.

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

2.1.2.3 Pre-glottalization 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 neighbouring 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 voice onset time.

In stem initial position, labial and alveolar stops /b/ and /d/ are realized with pre-glottalization and a relatively long voice onset time (VOT). This combination sounds very different from Indo-European [b] and [d] and can perceptually easily be mistaken for an implosive [ɓ], especially since the occurrence of implosives is expected in the area. On closer inspection, claims for implosives in neighbouring 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.[5]

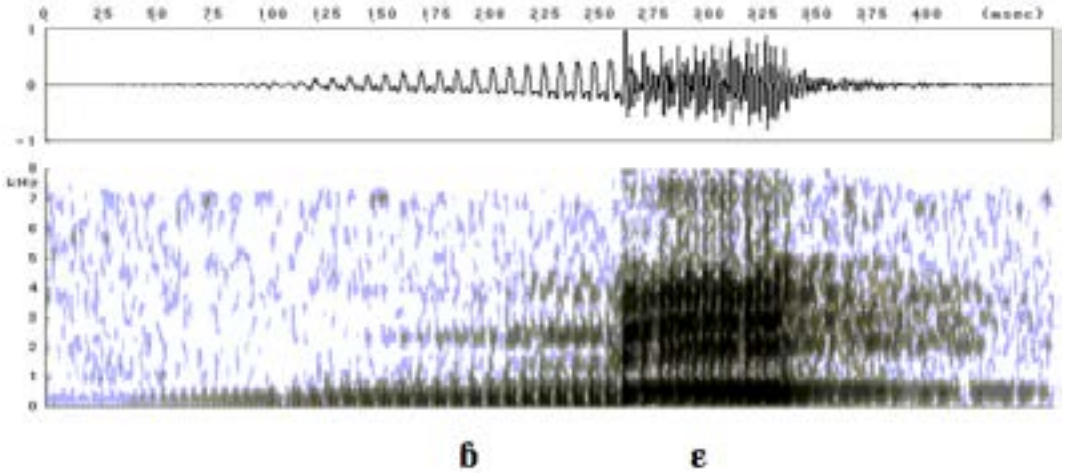


Figure 2.3: Implosive [ɓ] in Mpiemo (Thornell & Nagano-Madsen (2004: 172))

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

[5]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 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.]

> "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].

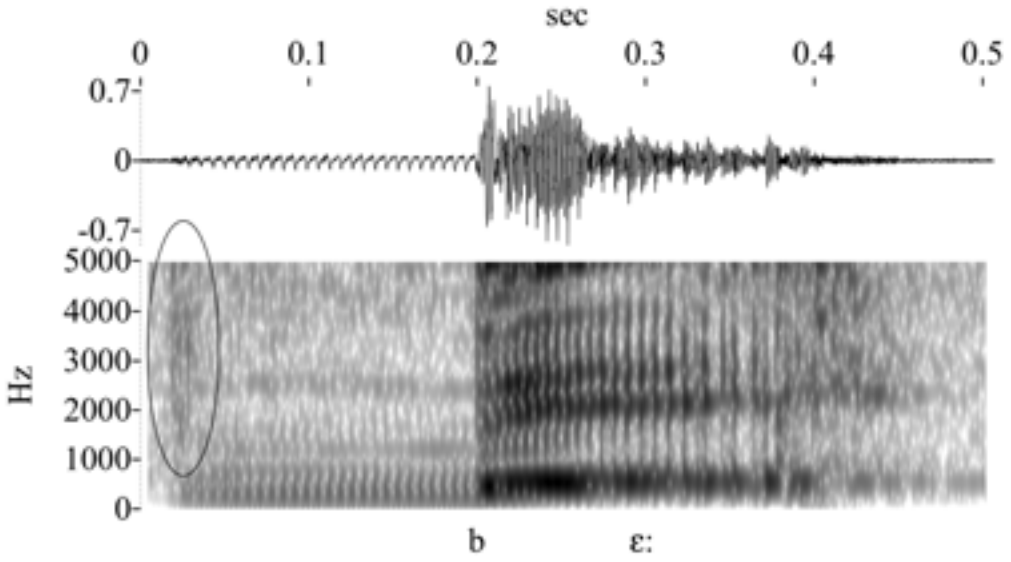


Figure 2.4: Preglottalized and prevoiced [b] in Gyeli, speaker 1

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 movement of the glottis producing different kinds of airstreams. While in implosives the glottis moves downwards which causes an ingressive airstream, the airstream in Gyeli is always egressive with the glottis moving upwards.

The increase of airstream pressure in the oral cavity varies among speakers, as shown in Figure 2.5. Here, the pre-voicing 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.

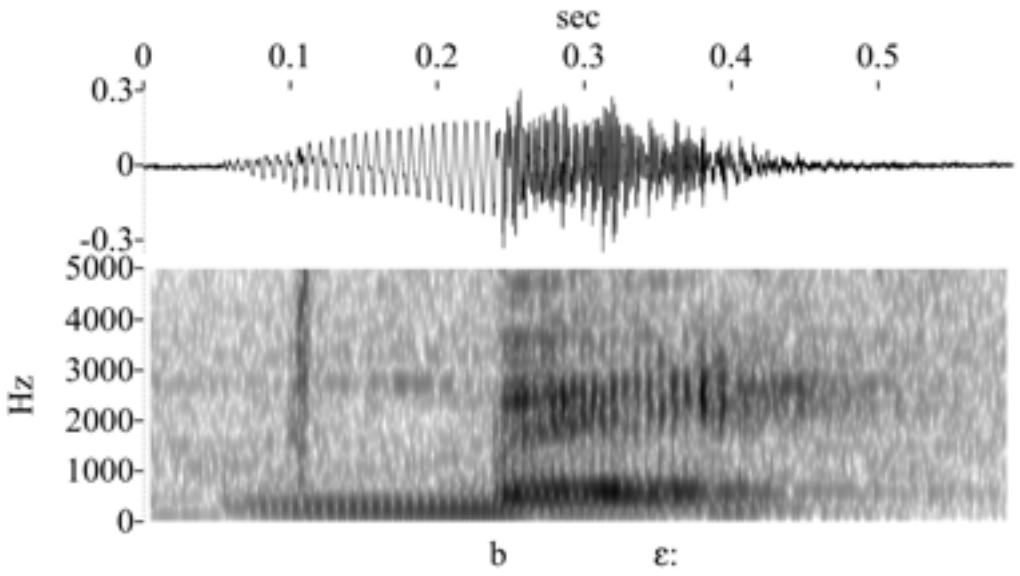


Figure 2.5: Preglottalized and prevoiced [b] in Gyeli, speaker 2

In summary, the perceived particularity in the production of stem initial [b] and [d] is related to pre-glottalization followed by a long VOT. Speaker 1, for instance, has a pre-voicing of 182ms in *bɛ̀ɛ̀* 'shoulder' in Figure 2.4, speaker 2 has a pre-voicing 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. The strong burst may then again be misleading to assume that the stop is realized as an implosive.

Investigating stem initial /b/ (as representative for both labial and alveolar voiced stops) in other environments, i.e. preceding vowels of different vowel quality, showed that the voicing time between glottal closure and labial/alveolar release differ depending on the vowel that follows. (41) gives pre-voicing times of word initial /b/ followed by different vowels, decreasing in vowel height. For future work, it would be good to look at a larger sample of tokens, but for the time being, (41) gives a good impression. With the exception of the vowel [e], there is a tendency that high vowels such as [i] and [u] have a short VOT. This may reflect Thornell's and Nagano-Madsen's findings for Mpiemo that these vowels (and [b] after nasals) surface as egressive plosives. All instances in (41) were taken

in isolation. In context, for instance when verbs are preceded by a subject marker or nouns by a plural class prefix, VOTs are shorter. The same is true for tokens that occur after a nasal or within a stem.

(41)

bìjɔ 'hit'	→	[b] = 130ms
búlɔ 'fish (v.)'	→	[b] = 130ms
bé 'pit'	→	[b] = 81ms
bógɛsɛ 'enlarge'	→	[b] = 157ms
bɛ̀ 'sow'	→	[b] = 145ms
bɔ̀ndì 'black colobus monkey'	→	[b] = 137ms
báβɛ̀ 'disease'	→	[b] = 151ms

Also /g/ is pre-voiced 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 *gɔ́lɛ̀* 'gold', for instance, the VOT amounts to 120ms. Again, impressionistically, it is shorter if /g/ is followed by a high vowel.

There are several ways to interpret these findings in relation to other Bantu A80 languages. Either, pre-glottalization followed by pre-voicing 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-glottalized 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 community members with whom the individual may have spent some time with e.g. the Basaa.

2.1.2.4 Voicing and Devoicing of Stops

The voicing of stops is subject to variation depending on the stops' phonetic environment. While stops are clearly distinguishable in terms of voicing in word or stem initial position, their voicing status is less clear when they follow a nasal or occur intervocalically. Both cases are discussed in turn.

Devoicing of Stops after Nasals Phonologically, both voiced and voiceless stops occur after nasals. Perceptually, their voicing status when prenasalized is, however, sometimes hard to distinguish. Even though postnasal voicing seems to be the more common process cross-linguistically, I argue that in Gyeli the rarer case of postnasal devoicing also occurs as allophonic variation, especially with labial and alveolar stops. This unusual behavior seems to be linked to pre-glottalization as discussed in section 2.1.2.3. Pre-glottalization in prenasalized environments is assimilated from an underlying /n'd/ to either a double plosive /ntd/ or an aspirated voiced plosive /ndh/. As a next assimilation step, postnasal stops are voiceless altogether.

As discussed in the previous section, voiced stops in stem or word initial position tend to be pre-glottalized and show a relatively long VOT, while they are clearly voiced in a non-aspirated way. In environments where they are prenasalized, pre-glottalization of the stop is assimilated and surfaces as one of various allophonic forms. One allophonic form is a double plosive which is the realization of /n'd/ $\rightarrow$ /ntd/. An example is given in Figure 2.6 where an unaspirated voiced stop after a nasal involves a double closure after the nasal, first producing a voiceless and then a voiced stop. Instead of a glottal and then an alveolar closure, both stops are alveolar though due to assimilation of the place of articulation. This happens within milliseconds though and is acoustically not perceivable, but very clear from the wave sound in Figure 2.6.[6]

The result of this assimilation is that on the surface, prenasalized voiced plosives undergo devoicing. If postnasal stops were subject to voicing rather than devoicing, one would expect that the distribution of the two stops were the inverse, namely the first stop being voiced and the second voiceless. The double stop in Figure 2.6 with the voiceless plosive preceding the voiced one is an argument in support of the devoicing hypothesis.

Other allophonic forms of prenasalized voiced stops surface in the range of a voiced aspirated or devoiced, i.e. voiceless stop. These two possibilities occur in free variation and are represented for the lexeme */ndɛ̀mɔ́/* 'dream (n.)' in Figures 2.7 and 2.8. Both tokens were produced by the same speaker.

[6]Even though such examples are so rare in Gyeli that it is not clear whether a double closure after a nasal is contrastive, these instances are no recording or speech mistakes either. Speakers were consistent in their pronounciation and produce the double closure in every occurrence of the lexeme.

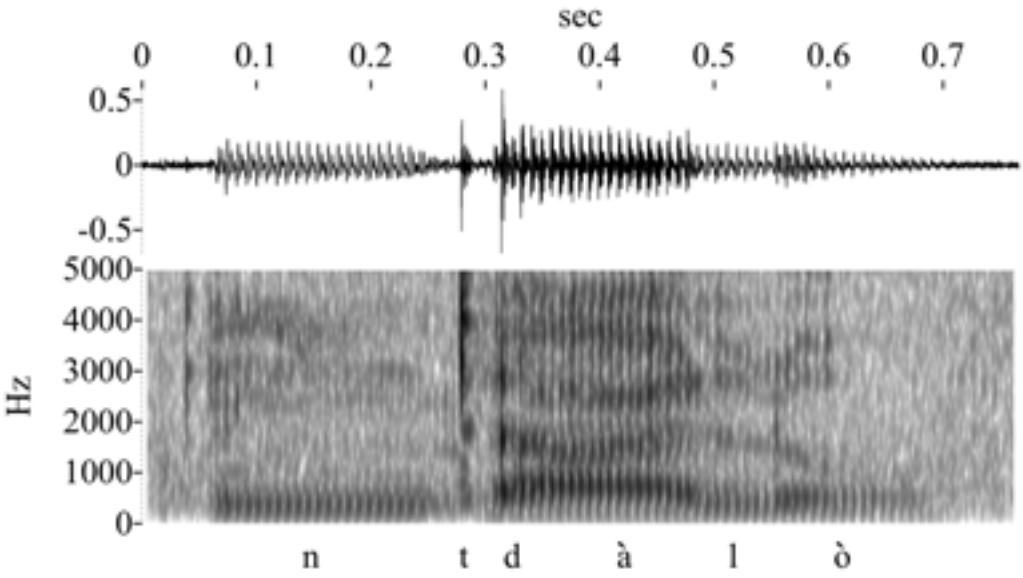


Figure 2.6: Double plosive in */ntdàlò/* 'tobacco'

In Figure 2.7, the postnasal /d/ is aspirated so that voicing is interrupted between /d/ and the following vowel as seen in the fundamental frequency. Aspiration lasts for an average of 20ms comparable to voiceless stem or word intial stops. At the same time, the VOT is much shorter than in non-prenasalized voiced stops.

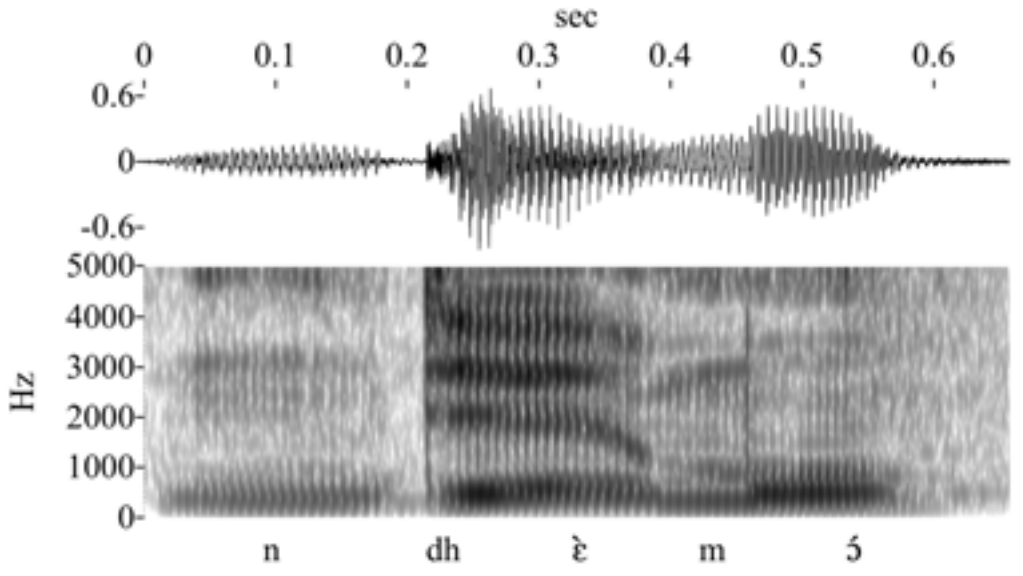


Figure 2.7: Postnasal [d] with aspiration in */ndɛ̀mɔ́/* 'dream (n.)'

In contrast, in Figure 2.8, the lack of voicing during the stop release is clearly

seen in the spectrogram.

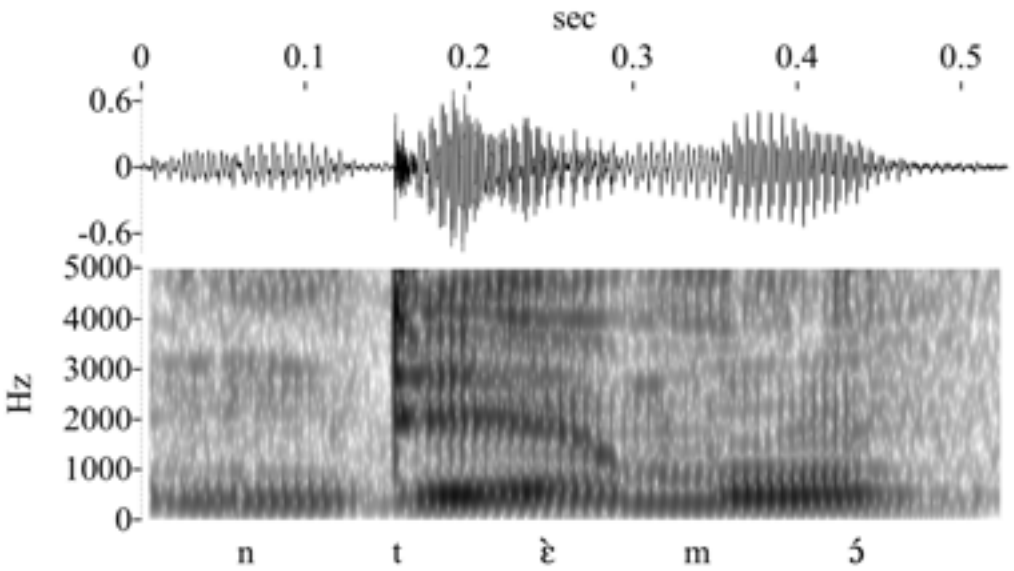


Figure 2.8: Devoiced postnasal [d] in */ndɛ̀mɔ́/* 'dream (n.)'

In summary, voiced stops that occur with prenasalization undergo assimilation and surface as one of three allophonic variants which reflect different stages of assimilatory development:

$$/n'd/ \rightarrow /ntd/ \rightarrow /ndh/ \rightarrow /nt/$$

Underlying pre-glottalization and pre-voicing surface either as a double closure, as an aspirated voiced stop or as a voiceless stop under prenasalization. This assimilation chain ulitmately has the effect of stop devoicing after a nasal. The decisive argument supporting the surface devoicing hypothesis rather than assuming that voiceless stops acquire voicing features from the preceding nasal is the following: In many cases, the underlying phonological form of a postnasal stop is known, i.e. whether the stop is underlyingly voiced or voiceless. Deverbal nominalization from verbs starting with a voiced plosive is a good test. In nominalization, the verb stem is preceded by a homorganic nasal. It becomes clear then that while a verb stem initial voiced stop is not aspirated, it is aspirated or even devoiced as a deverbal noun with aspiration being a feature of voiceless stops.

Intervocalic stops In intervocalic position, voiceless stops such as [p, t, k] are slightly voiced in fast speech. Thus, here the inverse to the devoicing of

postnasal stops is the case, which is certainly more expected. For instance, the noun */ŋgàtà/* 'tied bundle' may surface as [*ŋgàdà*] just as */fúkɛ̀/* 'driver ant' may be pronounced as [*fúgɛ̀*] (which then becomes a homonym with */fúgɛ̀/* '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. Basically every oral consonant in Gyeli that occurs stem-initially can be prenasalized. Table 2.3 does not include the prenasalized palatal glide because it is difficult to distinguish it from the palatal nasal [ɲ]. This does not mean that there is no prenasalized palatal glide, but for consistency, I subsume potential prenasalized palatal glides under palatal nasals.

	BL	LD	AL	PL	VL	LV
Stops	*mp,* **mb**		*nt,* **nd**		*ŋk,* **ŋg**	*mgb*
Fricatives			*ns, nz*			
Lateral approximant			*nl*			
Glides	*mw*					

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 (42) and (43) show.[7]

(42)
mɛ̀ '1S'	→	[m] = 133ms
bɛ́ɛ̀ 'shoulder'	→	[b] = 184ms
mbɛ̂ 'door'	→	[mb] = 255ms

Longer duration of prenasalized in comparison to plain obstruents is more evident in prenasalized voiceless stops, as shown in (43) since they lack the relatively long VOT of voiced stops, as discussed in section 2.1.2.2.

(43)
ná 'still (adv)'	→	[n] = 181ms
kà 'catch'	→	[k] = 21ms
ŋká 'line'	→	[ŋk] = 200ms

[7] Both (42) and (43) 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.

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: *mbáálɔ́* 'jaw' retains the /m/ in the plural class 4 *mimbáálɔ́* '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 *nlémɔ̀* 'heart', *minlémɔ̀* '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.[8]

[8]Consonants in codas almost never occur since they are exclusively nasal and tend to be deleted while nasality is spread onto the preceding vowel.

The numbers under O1, O2 and so on give total numbers of all NC sequences in this position. For instance, for O1 in nouns, 178 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 6 of them are prenasalized stops. The number of consonantal slots in O2 and O3 are decreasing because obviously they cannot be filled in mono- or disyllabic stems.

	Nouns			**Verbs**		
NC	**O1**	**O2**	**O3**	**O1**	**O2**	**O3**
	178/855	168/650	4/88	6/377	54/274	-/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	-	-	-	-	-
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. Synchronically, 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 *ntégèlɛ̀* 'disturb'. They are restricted though, 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 (and exceptionally in O3 of nouns). They are restricted to voiced prenasalized stops.[9] These occurrences cannot be explained by diachronic noun class morphol-

[9]Instances of voiceless nasal stops in O2 of nouns can be explained by reduplications.

ogy, 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 homorganicity 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. (44) lists noun stems that start with /bw/, providing examples of different vowel heights. These examples contrast with (45) 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.[10]

(44) /bw/ noun stem initial

a. bwímɔ̀ 'net hunting'

b. bwújà 'hundred'

c. bwèdɔ̀wɔ̀ 'taste'

[10] 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 though. Introducing a third category rather moves the decision between unit and cluster analysis to another level.

d. bwɔ̂ ‘brain’
e. bwàndjá ‘disdain, adultery’

(45) /b/ noun stem initial
a. bíá ‘beer’
b. búgɛ́ ‘tse tse fly (Glossina)’
c. bé ‘well’
d. bɔ́ndí ‘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/, /iɛ/ (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 /ɛ/. This is clearly not the case since these coarticulated consonants occur in front of any vowel, as shown already above. Second, speakers pronounce diphthongs and labialized stops distinctly. This can be nicely illustrated with the minimal pair *bwɔ̂* ‘brain’ vs. *búɔ̀* ‘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 (46) for labial glides and in (47) for palatal glides.

(46) **bw**à ‘give birth’ vs. **b**â ‘marry’
kwà ‘grind’ vs. **k**à ‘catch’
swáál̀ɛ ‘bone marrow’ vs. **s**áál̀ɛ ‘work (n.)’

(47) **dj**ɔ̀ ‘laugh’ vs. **d**ɔ̀ ‘negotiate’
kjàlɛ ‘start an engine’ vs. **k**álɛ́ ‘sister’
lè-**gj**ɔ́lɛ́ ‘bushbaby (*galago alleni*)’ vs. **g**ɔ́lɛ̀ ‘gold’

Labialized and palatalized obstruents basically only occur stem initially, as shown in Table 2.5. Exceptions in O2 in nouns are due to reducplication 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
labialized obstr.						
pw	2	1	-	1	-	-
bw	12	-	-	10	-	-
kw	10	-	-	9	-	-
gw	2	-	-	-	-	-
sw	3	-	-	2	-	-
palatalized stops						
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		
pren. palat. stops			
ndj	2	13	
nkj	3		
ngj	8	1	

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

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

(48) **mp**á ‘island’ vs. **mpw**á ‘bouillon’
ndáwɔ̀ ‘house’ vs. **ndj**àwɔ̀ ‘chisel’
nkə̂ ‘guinea fowl’ vs. **nkj**ə̂ ‘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 artifically 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	**O2**	**O3**	**O1**	**O2**	**O3**
	40/855	1/650	-/94	27/377	-/275	-/76
pf	6	-	-	5	-	-
bv	6	1	-	6	-	-
tf	6	-	-	5	-	-
dv	4	-	-	5	-	-
kf	16	-	-	4	-	-
lv	2	-	-	2	-	-
pren. stop-fric.	**24**					
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.[11] 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 (49) show.

(49) **bv**úlɛ̀ 'Bulu person' vs. **b**úlɛ 'burst'
tfúdɛ́ 'bump' vs. **t**údɛ̀ 'tumor'
kfúdɛ 'cover' vs. **k**údɛ́ 'skin'
lvúmɔ́ 'maggot' vs. **l**ùmɔ́ '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

[11] 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 correspondance 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.[12]

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 *èsə̂s* '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

[12]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 *-ɛlɛ*, 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 4.1.

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

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

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] is subsumed unter 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/, /ɲ/ 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)
Stops	**129 (32.6%)**	**66 (24.1%)**	**9 (11.8%)**
p	20	-	-
b	34	17	1
t	22	4	1
d	7	19	3
k	39	7	-
g	1	16	4
’	-	3	-
Affricates	**22 (5.8%)**	-	-
tʃ	9	-	-
dʒ	13	-	-
Fricatives	**65 (17.2%)**	**20 (7.3%)**	**10 (13.2%)**
f	4	-	-
v	24	-	-
s	37	20	10
z	-	-	-
Nasals	**26 (6.9%)**	**51 (18.6%)**	**5 (6.6%)**
m	8	37	-
n	4	14	5
ɲ	14	-	-
Glides	**45 (11.9%)**	**82 (29.9%)**	**51 (67.1%)**
l	31	48	44
w	10	17	7
j	4	17	-
Pren. stops	**2 (.5%)**	**54 (19.7%)**	-
mb	-	25	-
nd	1	23	-
ŋg	1	6	-
Total	**74.9%**	**99.6%**	**98.7%**

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.[13]

[13]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, /ɲ/ is only found in in O1 in verb stems which is also generally true for nouns. The four occurrences of /ɲ/ 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 distrubution 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 found 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 and

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

O2[14], contrasting noun and verb stems. Since detailed information were already given in the respective discussions of single consonant cluster types, I only list types of sequences here.[15]

	Nouns (855 total)		**Verbs** (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%)	-
Total	**35.9%**	**1.2%**	**22.3%**	-

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 disposes of a range of diphthongs, as well as contrastive vowel length and nasalized

[14]Consonant clusters do generally not occur in O3 or O4.

[15]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, note that labial velars are subsumed under prenasalized obstruents since their only occurrence is in a cluster [mgb].

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

2.2.1 Plain Vowels

Figure 2.9 shows the seven plain vowels /i/, /u/, /e/, /o/, /ɛ/, /ɔ/, /a/.

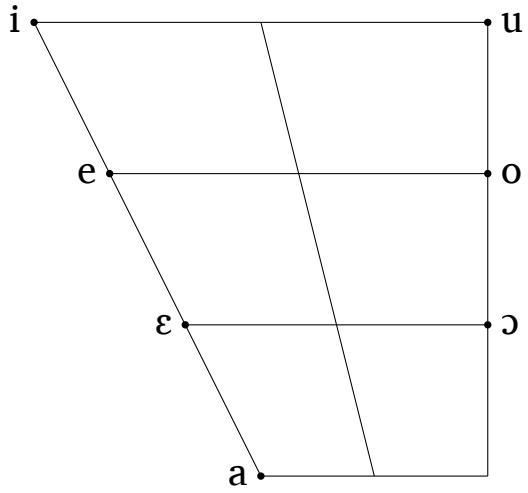


Figure 2.9: Plain vowels in Gyeli

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

	/i/ vs. /u/	/k**ì**ndá/ 'sugar ant'	vs.	/k**ù**ndá/ 'shoe'
	/u/ vs. /o/	/k**ù**lɛ/ 'borrow'	vs.	/k**ò**lɛ/ 'help'
	/e/ vs. /ɛ/	/l**é**/ 'tree'	vs.	/l**ɛ́**/ 'glass'
	/o/ vs. /ɛ/	/k**ò**lɛ/ 'help'	vs.	/k**è**lɛ/ 'hang'
(50)	**/ɛ/ vs. /i/**	/l**è**bɛlɛ/ 'follow'	vs.	/l**í**bɛlɛ/ 'show'
	/ɔ/ vs. /ɛ/	/kámb**ɔ**/ 'chew'	vs.	/kámb**è**/ 'weaver ant'
	/a/ vs. /ɛ/	/kìj**a**/ 'give'	vs.	/kìy**ɛ**/ 'try'
	/o/ vs. /ɔ/	/béd**o**/ 'ferment'	vs.	/béd**ɔ**/ 'go up'
	/i/ vs. /a/	/wùs**i**/ 'sprout'	vs.	/wùs**a**/ 'forget'

Vowel space The Gyeli vowel system is the same as what Cheucle (2014: 389) reconstructs for Proto-A80. Synchronically, 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, ɛ, 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 /ɛ/ and /ɔ/, respectively. This special status of /e/ and /o/ is also seen in Gyeli. Even though these two vowels have a constrastive function as shown in (50) 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 2.10 shows that both /e/ and /o/ are cramped between /i/ and /ɛ/ and /u/ and /ɔ/, respectively.[16]

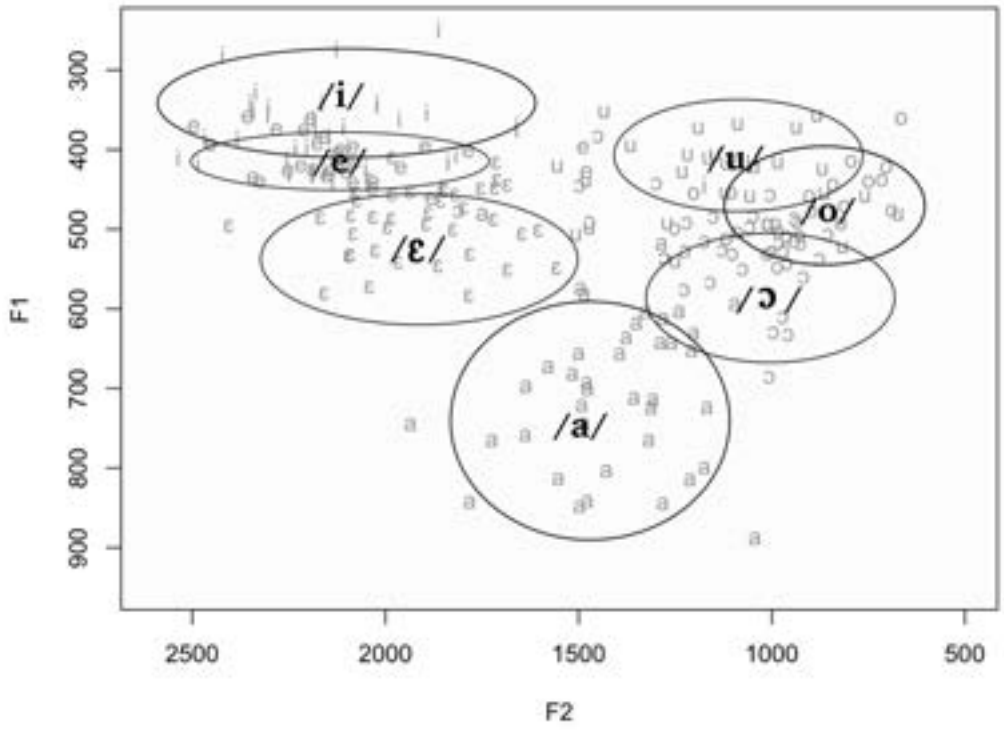


Figure 2.10: Vowel plot

While a 7-vowel system is the norm in Bantu languages, the Gyeli vowel space differs from what is generally expected for Bantu languages. Maddieson (2003: 18) notes that

[16]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.

> "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. In comparison to 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/ lay 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.

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. Note that this concerns only plain vowels and does not represent general syllable distribution. This, in turn, is discussed in section 2.3.

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

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

Disyllabic 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 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%)	-
ɛ	18 (16.6%)	11 (28.2%)
ɔ	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.[17] Also, in both noun and verb stems, the most frequent plain vowel is /a/ with over 30%.

Comparing plain vowel distribution in disyllabic 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.[18]

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% 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 /ɛ, ɔ/ occur in the first and second syllable, but are significantly more frequent in second syllables. This holds

[17]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.

[18]The two instances of /i/ in the second verb stem syllable shown in Table 2.14 are most likely loan words.

$\sigma 1 \downarrow$ \ $\sigma 2 \rightarrow$	i	u	e	o	ɛ	ɔ	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)
ɛ	6	-	-	1	30	12	7	56	(11.0)
ɔ	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 disyllabic noun stems

for both noun and verb stems, while, again, this tendency is even stronger in verb stems. Here, 10.2% of first syllables contain /ɛ/ and 6.8% /ɔ/, but /ɛ/ occurs in 35.6% of verb stem second syllables and /ɔ/ 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 /ɛ/ and 27.2% for /ɔ/.

$\sigma 1 \downarrow$ \ $\sigma 2 \rightarrow$	i	u	e	o	ɛ	ɔ	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)
ɛ	-	-	-	-	9	12	-	21	(10.2)
ɔ	-	-	-	-	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 disyllabic 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 syllabes, 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 sylla-

ble 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 σ3 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/, though. 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 ocurrence 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 off, 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 a few 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 (51); the dot represents the syllabic unit.[19]

(51) djúà. 'swim'
ŋgùɔ́. 'sugar (cane)'
tsíɛ̀. 'blood'
tɔ̀à. '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 disyllabic vowel sequences which are always subject to hiatus resolution by means of glides, as shown in (52).

(52) djù.wá 'thorn'
nkfù.wɔ́ 'torso'
kí.yɛ́ 'iron'
tɔ́.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 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 /iɛ/. The diphthong /ɔa/ is the least frequent in both noun and verb stems.

[19] In terms of tonal representation, note that 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 *tɔ̀à* 'boil', the syllable has one long L tone comparable to syllables with long vowels, as discussed in section 2.2.3.

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 though. 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 disyllabic 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 disyllabic stems with intervocalic consonants. Rather, Gyeli has all three types: disyllabic stems with an intervocalic /b/ as in Njem, e.g. *kfúbɔ̀* 'chicken', disyllabic stems with an intervocalic glide /w/ as in Makaa, e.g. *djúwɔ̀* 'sky', and diphthongs, e.g. *búɔ̀* '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 lention to /w/ up to a complete omission resulting in diphthongs. Rather than a phonological rule though, it seems to be lexically specified to which of these three stages a noun or verb stem belongs. The same is true for higher vowels and diphthongs; is it lexically specified that certain stems are monosyllabic with a diphthong such as *tsíɛ̀* 'blood' while others are disyllabic with an intervocalic glide such as *nsìjɛ̀* '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.][20]

For Gyeli, there are numerous (near-)minimal pairs showing the contrastive function of vowel length. Some examples are given in (53). All plain (oral, short) vowels have a long counterpart except for /o/. /e/ does occur sometimes as a long vowel, but the frequency is so low that I did not find any minimal pairs.

(53) ts**íì** 'life' vs ts**ì** 'interdiction'
nk**ùù** 'evil spirit' vs. nk**ù** 'animal den'
mb**éé** 'metal oven' vs. mb**ê** 'door'
d**ɔ̀ɔ̀** 'puddle' vs. d**ɔ̀** 'negotiate'
mp**àà** 'fog, vapor' vs. mp**à** 'bushbaby (*galago thomasi*)'

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 [aa] in *nzáàlɛ̀* 'beggar' is about 100ms longer than the short [a] in *nyàlɛ́* 'son/brother-in-law'. In the second example, the long vowel [uu] in *knùù* '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.

[20] Cheucle (2014: 327) assumes that vowel length is currently developing phonemic status in Kwasio and Mpiemo.

(54)
ɲáàlɛ̀ ‘beggar’	→	[aa] = 235ms
ɲàlɛ́ ‘son/brother-in-law’	→	[a] = 135ms
nkùù ‘evil spirit’	→	[uu] = 430ms
nkù ‘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 monosyllabic 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/, /ee/, and /oo/ are rather rare or even absent in verb stems.

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 (and third) syllables only occur in noun stems though and are so rare that I did not find any minimal pairs. Nevertheless, (56) shows a few examples while Table 2.18 shows the distribution of long vowels other than in monosyllabic stems.

(55) ɲ**ùù**lɛ̀ ‘mosquito’ vs. ɲ**ù**lɛ̀ ‘flame’
k**áà**sa ‘imitate’ vs. k**à**sà ‘bridge
ɲ**áà**lɛ̀ ‘beggar’ vs. ɲ**à**lɛ́ ‘son/brother-in-law’

(56) sìsùù ‘apparition’
ŋgòmbáà ‘lemon’
nákúlúú ‘forest tortoise (*Kinixys homeana*)’

Position	Noun stems	Verb stems
disyllabic, VV in σ1	20 (3.6%)	4 (1.9%)
disyllabic, VV in σ2	10 (1.8%)	-
disyllabic, VV in σ1 and σ2	2 (0.4%)	-
trisyllabic, VV in σ3	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 disyllabic 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 disyllabic stems. In disyllabic 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 disyllabic 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-dèlɛ́mɔ́ɔ̀* ‘mud wasp’.

As to the origin and development of long vowels, it is possible that (some) long vowels developed, just like diphthongs, from disyllabic stems where an 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 disyllabic stems with intervocalic or syllable final /b/ or glide in other languages. These correspondances are, however, by no means regular. Also, this scenario does not account for all instances of long vowels though because if long vowels originated solely from intervocalic loss, that would not explain long vowels in disyllabic 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) ndz**ǐ̃** 'jealousy' vs. ndz**ǐ** 'path'
k**ů̃** 'leopard' vs. k**ù** 'rat'
p**é̃** 'injury' vs. p**éè** 'avocado'
t**ɛ̃̂** 'limp' vs. t**ɛ̂** 'create, invent'
l**ẫ** 'read, count' vs. l**â** '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 /ũ/ in noun stems. /ɔ̃/ is completely absent in verb stems while other mid and also high vowels are generally rare.

Nasal vowel	Noun stems (total 223)	Verb stems (total 88)
ĩ	5 (2.2%)	1 (1.1%)
ũ	10 (4.5%)	2 (2.3%)
ẽ	3 (1.3%)	1 (1.1%)
õ	-	-
ɛ̃	4 (1.8%)	2 (2.3%)
ɔ̃	6 (2.7%)	-
ã	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

There are a few cases where nasal vowels show up in disyllabic 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

Position	Noun stems	Verb stems
disyllabic, VV in σ1	2 (0.4%)	5 (5.2%)
disyllabic, VV in σ2	9 (1.6%)	-
disyllabic, VV in σ1 and σ2	2 (0.4%)	-
trisyllabic, VV in σ1 and σ2	-	1 (1.0%)
trisyllabic, VV in σ2 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-bw**ɑ́̃**sà ‘thoughts’
m-ùd**ɑ̃̂** ‘woman’
le-ts**ɪ̀̃**j**ɛ́̃** ‘knot’
ŋg**ɑ̃̀**ŋg**ɑ́̃** ‘healer’
gj**ɑ̃̂**lɛ ‘roast’
s**ɑ́̃ɑ̃̀**sa ‘mix’
víj**ɑ̃̀**sa ‘be bright’

Also long vowels and diphthongs can be nasalized, as shown in (59) for long vowels and in (60) for diphthongs.[21]

(59) s**ĩ̂ĩ̀** ‘approach sth.’
t**ṹũ̀** ‘axe’
be-b**ɛ́̃ɛ̃̀** ‘beauty’
t**ɛ̀̃ɛ̃̀** ‘abandon’
dj**ɑ́̃ɑ̃̀** ‘chase, drive away’

Nasalized long vowels and diphthongs are quite rare though. 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) ŋk**ṹɔ̀̃** ‘treason, treachery’
ɲ**ṹɑ̃̀** ‘snake’

[21] It is remarkable that most nasalized long vowels and diphthongs carry a HL tone, even though there are also exceptions.

lűɔ̃̀ ‘build’
lűã̀ ‘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 correspondance of velar nasal codas in the other languages. Nasal vowels with phonemic status in Makaa are, however, restricted to /ɛ̃/ and /õ/. Further, also 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 at all 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 disposing of phonemic /ĩ/, /ũ/, /ẽ/, /ɔ̃/, and /ã/ (but not /õ/, 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 approch 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*.[22] Other instances of syllable reduplication are often lexical rather than morphological, for example in the nouns *sà.sà.mbɛ́* 'miscarriage' or *nkú.nkú.mbɛ́* '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,[23] 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 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.)

[22] The first syllable *ná-* stems most likely from a similative marker 'like'; see also section 3.5.1 on qualifiers.

[23] 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.

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 2.11 for the German word *Traum* 'dream', adopted from Blevins (1995: 213).[24]

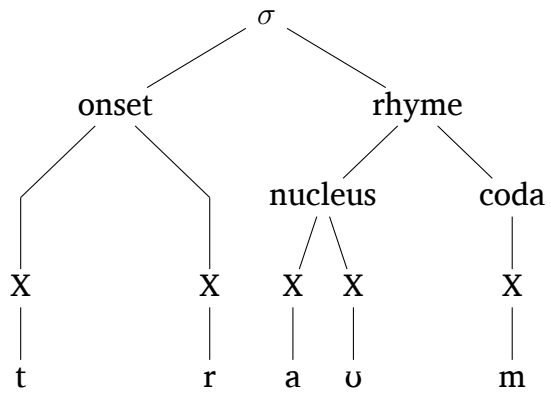


Figure 2.11: Binary branching model with rhyme

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-clause-operators (SCOPs) and noun and verb stems.

[24]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.

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 exception occuring in subject-clause-operators (SCOPs) which are portmanteau morphemes marking person and time.

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):[25]

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

[25] 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.

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		
	á	‘s/he, it (1 PRES)’
V:		
	àá	‘s/he, it (1 INCH)’
CV		
	vì.lɛ̀	‘ginger species (aframomum)’
	tɛ́.gɛ	‘make tired’
CV:		
	kɔ̀ɔ̀	‘plant species (gnetum africanum)’
	dùù	‘nose’
CVV		
	túà	‘move places’
	pùɔ́	‘pay’
PFV		
	pfù.dé	‘mold’
	tsí.dí	‘animal’
PFV:		
	tsìì	‘be well, live’
	le-**bvúú**	‘anger’
PFVV		
	bvúɔ̀	‘break (intr.)’
	tsíɛ̀	‘blood’
NCV		
	le-**nkɛ́.**dɛ́	‘hip’
	mbì.mbó	‘corps’
NCV:		
	mbáá.lɔ́	‘jaw’
	ŋgɛ̀ɛ̀	‘eyebrow’

NCVV

nkùá	‘tree trunk’
ntùɔ́	‘six’

CGV

gwà.wɔ́	‘civet’
gjí.mù	‘tongue’

CGV:

djùù	‘kill’
bwàà	‘become’

CGVV

djúà	‘swim’

NCGV

ŋgjà	‘intestines’
mbwɛ̌	‘dog’

NCGV:

ŋgjɛ́ɛ̀	‘block sth.’
ná.**nkyàá.**lɛ́	‘termite mound’

NCGVV

ndjúà	‘swimming’

NPFV

nkfù.wɔ́	‘torso’
mbvû	‘year’

NPFV:

ndzàà.lɛ́	‘tree pangolin (Manis tricuspis)’
nkfúù	‘ghost’

NPFVV

ndvùɔ́	‘suffering, difficulty’
mpfùɔ́	‘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 prefixes, portmanteau morphemes that code person and tense which I call subject-clause-operators (SCOPs), 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 section 3.2.2). Nasal prefixes such as in (61) are, however, not syllabic.

(61) **n**-sùnɛ́ 'flesh' → mi-sùnɛ́ 'types of flesh'
n-túmbà 'older brother' → ba-túmbà 'older brothers'
n-gjɛ̀lì 'Gyeli person' → ba-gjɛ̀lì '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.[26]

2.3.3.2 Syllables in SCOPs

Subject-clause-operators function as subject markers and tense encoding morphemes at the same time, as discussed in section 5.2.1. Nearly all of them have a CV shape just like plural noun class prefixes. There is one exception though for class 1 (i.e. third person singular) which lacks an onset and thus is V-initial *a*. In the present tense, this SCOP comes as a short vowel while for future and remote past, the vowel is legthened.

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 while syllabic nominal prefixes and SCOPs do not. 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.[27]

[26]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.

[27]There are a few noun stems comprising four syllables, but their number is negligible.

Syllable length	Number of occurrences/Frequency	
σ	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, obviously. 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.[28] 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,[29] followed by CCV. Generally, frequency descreases 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, i.e. CV.CCV, is another commonly found pattern, as well as CCV.CCV. More complex onset types including three con-

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

[28]For more information on occurrences and frequency of various consonant clusters, see section 2.1.3.

[29]Note that 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

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

$\sigma 2 \rightarrow$ / $\sigma 1 \downarrow$	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 on the table. Generally, 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	
σ	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 it 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 permit 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, not allowing heavy syllables in this position. Also, bisyllabic verb stems do not feature diphthongs in any position, which is another difference to noun stems.

$\sigma 2 \rightarrow$ / $\sigma 1 \downarrow$	CV	CCV	CCCV	Total $\sigma 1$	%
CV	**111**	29	3	**143**	**(67.1)**
CV:	5			5	(2.3)
CCV	**49**	12	2	**63**	**(29.5)**
CCV:	1			1	(0.5)
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 disyllabic 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 positions, 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 one exception,—CV:.CV.CV—trisyllabic verb stems do not 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 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

Syllable type	Frequency	
CV CV CV	**4**	**(56.7%)**
CV CCV CV	9	(11.8%)
CV CV CCV	1	(1.3%)
CV: CV CV	1	(1.3%)
CCV CV CV	**20**	**(26.3%)**
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

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."[30]

Tone (i.e. pitch modulation) 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. tsì 'interdiction'
tsìì 'live, be well'

[30]This definition also subsumes accentual languages under tone languages.

b. dʒǐ ‘bench’
dʒìí ‘forest’

c. fû ‘fish’
fùú ‘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 either 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 are not permitted, though.

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 its 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. Note for the

time being that a TBU marked with a L here is thus phonologically L (while toneless TBUs will not be marked for tone in glosses of underlying forms).

In terms of their distribution, level tones are significantly more frequent than contour tones in nouns and the only tones occuring in verbs which do not take contour tones underlyingly. Table 2.29 shows the distribution of level tones in noun stems. The table is divided into three horizontal blocks each of which represent different syllable lengths. The number in the syllable rows indicate how many occurrences of level tones are found in this specific syllable length. 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.[31]

Tonal pattern	Frequency		Example	
σ	(119/224)	(53.1%)		
L	57	(47.9%)	*ndɛ̀*	'bait'
H	62	(52.1%)	*nká*	'line, row'
$\sigma\sigma$	(518/555)	(93.3%)		
L L	115	(22.2%)	*ntɔ̀ŋgɛ̀*	'hornet, wasp'
H H	148	(28.6%)	*ndʒímí*	'blind person'
L H	106	(20.5%)	*vìnɔ́*	'finger'
H L	150	(29%)	*dʒínɔ̀*	'name'
$\sigma\sigma\sigma$	(86/90)	(95.6%)		
L L L	26	(29.1%)	*bèŋgvùdɛ̀*	'golden angwantibo'
H H H	14	(17.4%)	*títímɔ́*	'middle'
L H H	6	(7.0%)	*ndzìmɔ́zɔ́*	'guard'
H L L	13	(15.1%)	*mpíˀìdì*	'heat (from fire)'
L H L	10	(11.6%)	*sìsímù*	'shadow (of person)'
H L H	3	(3.5%)	*nkúmbɔ̀lɔ́*	'diarrhea'
L L H	5	(5.8%)	*mìntùlí*	'mouse'
H H L	9	(10.5%)	*djúŋgúlɛ̀*	'chameleon'

Table 2.29: Distribution of level tones in noun stems

[31]Note that 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.

Generally, level tones occur in more than 90% of di- 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 binary distribution of H and L allows, with two possibilities in monosyllabic stem (H and L), four patterns in disyllabic stems (H H, L L, H L, L H), and eight in trisyllabic stems (see Table 2.29). L and H tones are relatively evenly distributed over mono- and disyllabic noun stems. Both range around 50% in monosyllabic stems with a slight preference for H tones. In disyllabic 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 toned 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 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).

Tonal pattern	Frequency		Example	
σ	(88)			
L	39	(44.3%)	*kɛ̀*	‘go’
H [HL]	49	(55.7%)	*nyɛ̂*	‘see’
$\sigma\sigma$	(213)			
L ∅	92	(45.2%)	*sɛ̀ŋgɛ*	‘lower’
H ∅	121	(56.8%)	*gjíbɔ*	‘call’
$\sigma\sigma\sigma$	(76)			
L ∅ ∅	26	(34.2%)	*kàsɛlɛ*	‘light’
H ∅ ∅	50	(65.8%)	*dzímɛsɛ*	‘extinguish’

Table 2.30: Tonal distribution in verb stems

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 though. Just like with 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' ⇔ sá 'hut'
b. le-lâ 'antenna, horn' ⇔ le-lá fish 'trap'
c. le-báà 'stumbling' ⇔ le-bàà 'view'
d. mbɛ̂ 'door' ⇔ mbɛ̀ 'drum'

(65) a. dʒǐ 'bench' ⇔ dʒí 'place'
b. bwǎ 'swell' ⇔ bwà 'give birth'
c. be-dʒìí 'forests' ⇔ be-dʒíî '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. 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. Bisyllabic stems ending in a HL tone frequently constitute instances of deverbal nouns where the final HL is part of the derivation rule, along with the initial nasal. Other examples can be explained by compounding.

Tonal pattern	Frequency		Example	
σ	(105/224)	(46.9%)		
HL	82	(78.1%)	*sâ*	'thing'
LH	23	(21.9%)	*mbwɛ̌*	'dog'
$\sigma\sigma$	(36/555)	(6.5%)		
Contour Level	12	(33.3%)		
HL H	4	(33.3%)	*kândá*	'proverb'
HL L	6	(50%)	*nkâŋgà*	'weaver bird'
LH H	1	(8.3%)	*ná-nkjàálɛ́*	'termite mound'
LH L	1	(8.3%)	*pùúlì*	'hat'
Contour Contour	5	(13.9%)		
HL HL	4	(80%)	*pîpîpî*	'butterfly'
LH LH	1	(20%)	*bùábùá*	'non-dry meat/fish'
Level Contour	19	(52.8%)		
L HL	13	(68.4%)	*mɛ̀vâ*	'pride'
H HL	6	(31.6%)	*nkándâ*	'crack'
$\sigma\sigma\sigma$	(4/90)	(4.4%)		
Contour Level Level	1	(25%)		
HL H L	1	(25%)	*tsíɛ̀sámɛ̀*	'circumcision'
Level Level Contour	3	(75%)		
H H HL	1	(25%)	*le-jímbálî*	'entrance'
L H HL	1	(25%)	*le-dèlémɔ́ɔ̀*	'mud wasp'
H L HL	1	(25%)	*mwádɛ̀kâ̂*	'other side'

Table 2.31: Distribution of contour tones in noun stems

tsíɛ̀sámɛ̀ 'circumcision', for example, includes the verb *tsíɛ̀* 'cut'. (*sámɛ̀* does not seem to be a Gyeli lexeme, but may either be a loan word from Mabi or a contracted form of *nsámbò* 'penis'.)[32]

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.[33] 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 ver-

[32]Another explanation for unusual contour tone patterns is most likely borrowing. Examples such as *le-jímbáli* 'entrance' do not look like Gyeli words, but their source is not known.

[33]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 'neuter 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.

bal 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, so called subject-clause-operators (SCOPs), i.e. portemanteau morphemes that encode subject marking and tense-mood information, are toneless and take different tonal patterns depending on the tense they encode. Their various tonal patterns are described in chapter 5.2.2.

There are many Bantu languages that have a two-way distinction of privative 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 ∅. 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 ∅? 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' or 'unmarked.' Based on his criteria, L is a marked tone in Gyeli because in languages with privative H as opposed to ∅, one would not expect to find contour tones. The reason for this, according to Hyman (2001: 240), is that "the combination of [H] and [∅] could only be pronounced [H]." Since Gyeli has contour tones, as shown in section 2.4.1.2 though, 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 metatonic object linking (see section 5 for more precise information). In leftward HTS in the verbal domain, it is the final syllable in disyllabic 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 noun class prefixes while noun stems are specified for H and L tones. This is not surprising, 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 as verbal extension morphemes, noun class prefixes are subject to HTS, for instance when preceded by an attributive (ATT) marker in a N_1 + N_2 construction (see section 2.4.2.1). If class prefixes were underlyingly marked L rather than just surfacing phonetically as L in isolation, one would expect a H stem in N_2 to be downstepped, as Hyman & Lionnet (2011: 175) discuss for Abo.[34] 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 gets by with just a few tonal rules, the most important of which is high tone spreading (HTS). HTS differs in the nominal domain compared to the

[34]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 though, suggesting that the L of a prefix is deleted in these contexts, and then followed by HTS.

verbal domain in that HTS goes to the right in the nominal, but to the left in the verbal domain. I will explain both in turn.

2.4.2.1 High Tone Spreading To The Right

HTS to the right occurs when a toneless noun class prefix is preceded by a H tone within a grammatically cohesive unit of an intonation phrase. The preceding H may, for instance, be a metatonic H (see section 5.2.3) or a past H tone which spreads from verb final TBUs onto following nominal objects, as shown in (66).[35]

(66) a. mɛ́ d**é** **má**-ntúà
mɛ-H dè-H ma-ntúà
1S-PRES eat-R ma6-mango
'I eat mangos.'

b. mɛ̀ gyá**mbɔ́** **bé**-déwɔ̀
mɛ gyámbɔ-H be-déwɔ̀
1S.PST1 prepare-R be8-food
'I cooked food.'

Further, HTS occurs in N + N attributive constructions. In (67a),[36] the attributive (ATT) marker has a L tone. Thus, the following underlyingly toneless noun class prefix of the second nominal constituent surfaces L since it is underlyingly toneless and there is no H that could attach to it. In (67b), the attributive marker is H and this H tone spreads onto the following noun class prefix.

(67) a. sɔ́ **wà** **bà**-tí
sɔ́ wà ba-tí
∅1.friend 1:ATT ba2-in.law
'the friend of the in-laws'

b. bà-sɔ́ **bá** **bá**-tí
ba-sɔ́ bá ba-tí
ba2-friend 2:ATT ba2-in.law

[35]The 'R' in the glosses stands for 'realis' since metatonic H tones seem to cut across a realis/irrealis distinction in Gyeli, which I discuss in more detail in section 6. In past tenses, the metatonic H and the past H cannot be told apart. For consistency, I label the H tone as 'R'; tense information is carried also by the tonal pattern of the subject-clause-operator (SCOP).

[36]The first line of the glosses represents the surface form, the second line shows the underlying form.

‘the friends of the in-laws’

(68) gives an autosegmental representation of (67b). 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.

(68) $b\,a \quad ba-t\,i \quad \rightarrow \quad b\,a \quad ba-t\,i$

$\quad\; H \qquad\;\; H \qquad\qquad\;\; H \qquad\;\; H$

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 2.12. Just as in (67b), *mà-fwálá má bé-túmbɔ́* ‘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 2.12 shows that there is neiter downstep nor downdrift, but the pitch stays at the same level throughout the utterance.[37]

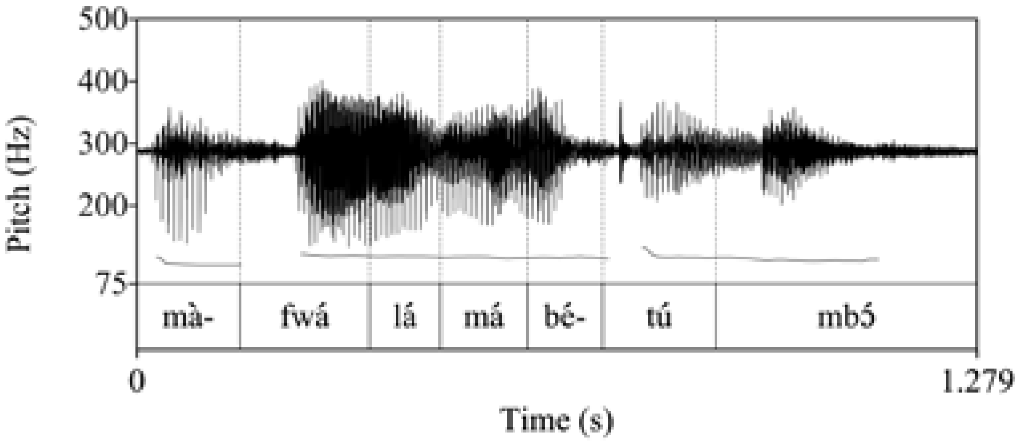


Figure 2.12: Pitch in HTS within the nominal domain

H tone lowering may occur towards stem final positions if a H is preceded by a L, as shown in Figure 2.13. The final H in the N + N construction *bà-bwálɛ̀ bá bá-ntɛ̀mbɔ́* ‘the parents of the younger siblings’ is lower than the H tones on all other H syllables.

[37]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.

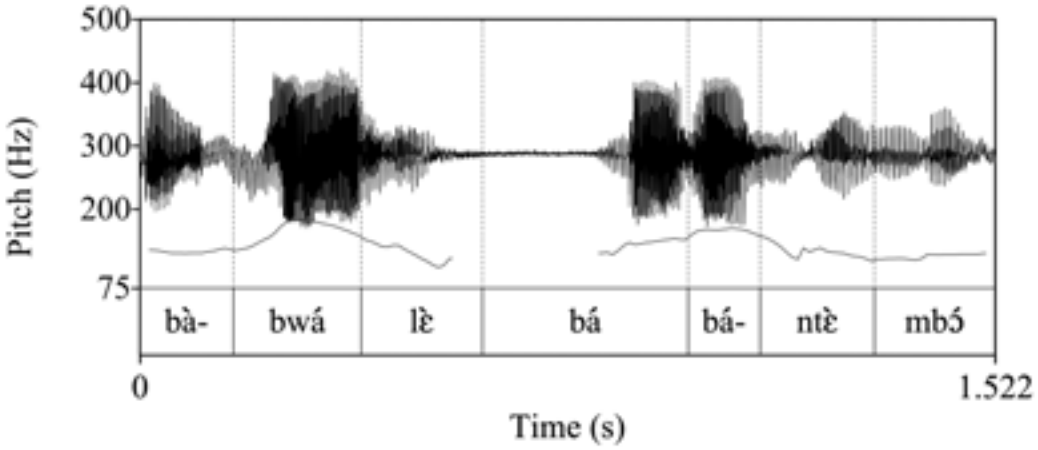


Figure 2.13: Phonetic pitch lowering of final H after L

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.

2.4.2.2 High Tone Spreading To The Left

HTS in the verbal domain differs from HTS in the nominal domain in that the spreading goes to the left rather than to the right. Also, there is a difference in the origin of the spreading H tone. While in the nominal domain the H tone which spreads comes from a segmental element, e.g. a verb or attributive marker, spreading H tones in the verbal domain are floating grammatical tones which are otherwise not attached to any segment until they attach to the verb. Therefore, HTS in the verbal domain always requires a previous attachment of a floating H to the verb before it spreads.

There are two circumstances under which a H tone will attach to the right of a verb stem and spread to the left onto all toneless extension morphemes. First, a H tone marks both past tenses—recent and remote past—, and second, a metatonic H tone links the finite verb to a following nominal object in realis mood (see section 6 for more information on metatony). (69) provides an example of HTS in the context of past tense expression.[38] (69a) contrasts the present tense form without HTS to (69b) in the recent past

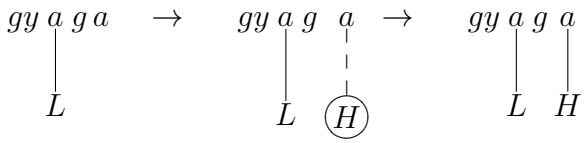
[38]Spreading of a metatonic tone happens exactly the same way, just that an object has to follow.

with HTS. Note that the second gloss line shows underlying tone patterns making clear which TBUs are toneless.

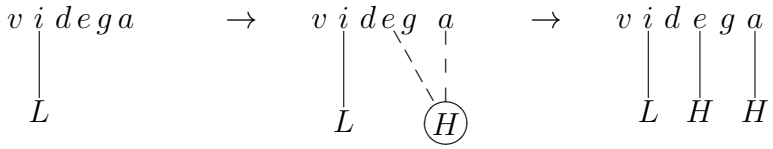
(69) a. mɛ́ lɔ̀ŋg**àlà**
mɛ-H lɔ̀ŋgala
1S-PRES scream
'I scream.'

b. mɛ̀ lɔ̀ŋg**álá**
mɛ lɔ̀ŋgala-H
1S.PST1 scream-PST
'I screamed.'

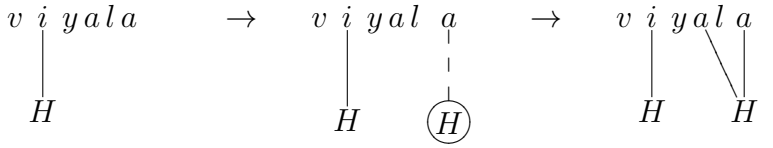
Besides a change in the tonal pattern of the SCOP (subject-clause operator encoding subject and tense), the main means to express past versus non-past in Gyeli involves modification of the tonal pattern on the verb. In the present, the toneless extension morphemes on the verb surface L in (69a). In the past, in contrast, a H tone attaches to the right of the verb and spreads across all toneless TBUs to the left, as (69b) shows. Since the first syllable of a verb stem is specified for tone, either H or L, the HTS does not affect this first syllable. Thus, the first TBU in (69b) stays L.

(70) 

An autosegmental representation of HTS is provided for first syllable L verb stems, in (70) for a bisyllabic stem and in (71) for a trisyllabic stem.

(71) 

The above examples all include a L first syllable in the verb stems. If this first syllable is H, though, the surface tonal pattern ends up with a sequence of H tones, as illustrated in (72).

(72) 

Just as in the nominal domain, there is no OCP rule prohibiting such sequences of H tones. In a phrase such as in (73), for instance, H spreads onto three underlyingly toneless morphemes, both in the verbal and in the nominal domain. Comparable to the illustration in (72), a H attaches to the right of the verb stem and spreads across the toneless morphemes of the verb as well as to the right onto the following toneless noun class prefix, comparable to the illustration in (68). There are H tones preceding and following the sequence of HTS, resulting in five juxtaposed H.

(73) à swásɛ́lɛ́ bápándyɛ̀
a swásɛlɛ-H ba-pándyɛ̀
1.PST1 dry-R ba2-plate
'S/he dried the plates.'

As Figure 2.14 shows, all five H tones are at the same pitch level throughout the utterance so that potential downstep phenomena can be ruled out.

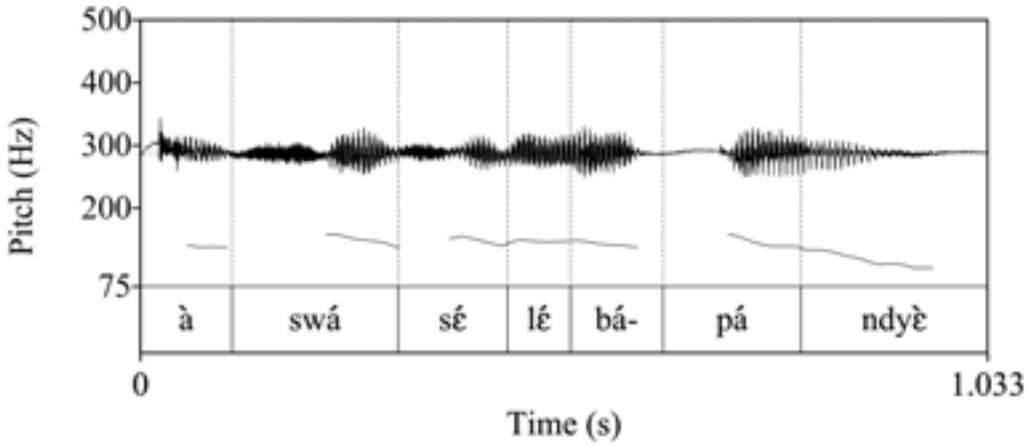


Figure 2.14: Pitch level of H sequence

2.4.2.3 L Tone Detachment in Monosyllabic L Verb Stems

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 H could attach and/or spread. Nevertheless, the language has special rules for these cases in order to tonally distinguish monosyllabic verb stems

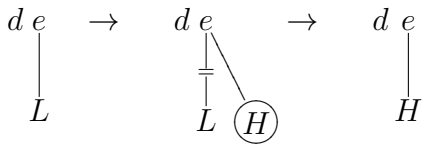
in, for instance, past as opposed to present forms. These rules differ for monosyllabic L and H stems.

Monosyllabic L verb stems take a H in past and metatonic contexts, as shown in (74) which compares present and past monosyllabic stems.

(74) a. mɛ́ **dè**
mɛ-H dè
1S-PRES eat
'I eat.'

b. mɛ̀ **dé**
mɛ dè-H
1S.PST1 eat-PST
'I ate.'

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 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 (75), and then a past or metatonic H tone attaches to it.

(75) 

2.4.2.4 H Tone Lowering in Monosyllabic H Verb Stems

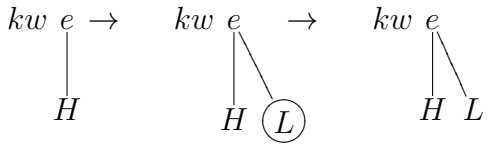
In underlyingly H monosyllabic verb stems, it is the present form rather than the past or metatonic form that gets changed in order to distinguish the two. In present or infinitival forms, the underlying H gets lowered to a falling HL tone, an example of which is given in (76). This is the reason why there are no monosyllabic H infinitival verb forms, they all surface as HL.[39]

(76) a. mɛ́ **kwê**
mɛ-H kwé-L
1S-PRES fall
'I fall.'

[39]See the distribution of level and contour tones in sections 2.4.1.1 and 2.4.1.2.

b. mɛ̀ kw**é**
mɛ kwé
1S.PST1 fall
'I fell.'

(77) shows the autosegmental representation of the final H lowering in infinitival and present monosyllabic verb stems. A lowering L attaches to an underlying monosyllabic H verb stem, resulting in a HL surface form.

(77) 

Renaud (1976: 230) addresses this phenomenon, subsuming it under a general rule of / ˊ/ → / ˆ/ at the end of a syntagm. This rule, however, is not context sensitive, neglecting cases of syntagm final H, for instance for final past verb forms.

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.[40] 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). It's main difference concerns

[40]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.

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.[41] 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_2 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, 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 /ɲ/. 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 prenasalized voiced and voiceless obstruents, except for Kwasio and Shiwa which are otherwise most similar to Gyeli in other charateristics.

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,

[41] Cheucle (2014: 335) classifies /tʃ/ or /ts/ as well as /dy/ or /dʒ/ in the literature as palatal /c/ and /ɟ/. In Gyeli, they correspond to the affricates /ts/ and /dʒ/.

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, as discussed by Cheucle (2014: 324-325), support this assumption further since most of them have lost a phonemic vowel in comparison to 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 Mpiemo, Kwasio, and Shiwa which constitute languages apparently more closely related to Gyeli, vowel length has not been analyzed as being phonemic by the authors though, as Cheucle (2014: 327) points out. In Proto-A80, vowel length is not distinctive. 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 /ɛ̃/ 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 though.

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. 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 Kisseberth & 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

The Noun Phrase

3.1 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 extend, 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.[1]

[1]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 6.3 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 6.

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 appoach 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.

Dryer (2007b: 151) distinguishes three types of noun phrases for a typological discussion of noun phrases across languages:

1. simple noun phrases, which contain only pronouns or nouns plus simple modifiers like articles, adjectives, demonstratives, or numerals

2. complex noun phrases, which contain more complex sorts of modifiers, like genitive or possessive modifiers and relative clauses

3. various sorts of noun phrases which lack a head noun

I will adopt a similar structure for this chapter. Since agreement based on gender plays such a central role in Bantu languages, especially in the noun phrase, I will discuss this aspect first. Then, after introducing the Gyeli noun, I will describe simple noun phrases in the section on modifiers of the noun. In the following, I will turn to a description of invariable words in the noun phrase. Further, I will lay out more complex noun phrases such as attributive constructions before turning to headless noun phrases. I will conclude this chapter with a discussion of word order in the noun phrase.

3.2 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'.[2] I label agreement classes in Gyeli following the traditional Bantu numbering.

The difference between agreement class and gender can be illustrated with an example from Gyeli.[3] A nominal root such as *-kɔ́ndyì* 'hand' comes in two forms, namely as *le-kɔ́ndyì* in the singular and *ma-kɔ́ndyì* in the plural.

[2]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 relates exclusively to one way of agreement pattern on the agreement targets and is not determined by number.

[3]The provided example is parallel to one that Güldemann (2000: 13) quotes from Nichols (1992: 125) on Luganda.

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 *-kɔ́ndyì* 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-kɔ́ndyì* 'hand', is identical in form with most agreement targets such as subject marking, demonstratives, or the attributive marker (as shown in Table 3.1). 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.

3.2.1 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 3.1. Parts of speech that agree with the agreement triggering noun include subject marking[4] and object pronouns, demonstratives,[5] attributive markers, possessive pronouns, quantifiers, deictic modifiers, and numerals.[6] Table 3.1 represents a simplified

[4]Subject marking is achieved by subject-clause operators 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 (see section 5.2.1).

[5]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 paradigm.

[6]Quantifiers that agree with a noun show various patterns; variation can to some degree be explained by phonological constraints (see section 3.4.8). The agreement pattern of 'numerals' include the numbers from '2' through '5'. Since these are inherently plural, only

version of the agreement system in some respects in order to make it more reader-friendly for a first glance. Each agreement target will be discussed in detail in section 3.4 on modifiers of the noun.

	Monomorphemic words				Agreement prefixes		
					AGR- V	AGR(L)- C	AGR(H)- C
AGR class	SCOP	DEM	ATT	OBJ	POSS, QUANT, DEIC	DEIC	GEN, NUM
1	a/nyɛ	nû	wà	nyɛ̂	w-/n-	m-	-
2	ba	bâ	bá	bɔ̂	b-	bà-	bá-
3	wu	wɔ̂	wá	wɔ̂	w-	m-/∅-	-
4	mi	mî	mí	myɔ̂	m(y)-	mì-	mí-
5	le	lê	lé	lɔ̂	l-	l-/lè-	-
6	ma	mâ	má	mɔ̂	m-	mà-	má-
7	yi	yî	yá	yɔ̂	y-	∅-	-
8	bi	bî	bí	byɔ̂	b(y)-	bì̀-	bí-
9	nyi	nyî	nyà	nyɔ̂	ny-	m-/∅-	-

Table 3.1: Agreement classes and their target POS in Gyeli

The middle column including SCOP, demonstrative, attributive marker, and object pronoun shows grammatical words which cannot be split up into further morphemes while the right column shows agreement prefixes for possessive pronouns, quantifiers, deictics, genitives, and numerals. 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.[7]

The first sub-column of the agreement prefixes, including possessive pronouns, quantifiers, and deictics, shows prefixes as they occur if the stem

plural agreement classes are represented since they would not show up in singular classes.

[7]I categorize the agreement markers for genitive and numerals als prefixes and not particles, in contrast to e.g. attributive markers, based on prosodic cues and speaker intuition. Prosodically, agreement prefixes belong to the word, while attributive markers from a different prosodic unit from the word they precede. Speakers mark this my a pause in careful speech.

starts with a vowel. It is not clear whether one could classify them as belonging to one of the other of the consonant stem inital types because i) differences in consonantal prefix shape may be conditioned by phonological rules which cannot be tested for and ii) prefixes before a vowel do not constitute a TBU so that it is impossible to group them either with the L or the H tone prefixes. Therefore, I prefer to classify them as a type apart.

Strictly speaking, one would need to split the AGR-V agreement targets up into more columns, i.e. agreement patterns, because of differing forms in cl. 1. Thus, while for the possessives and the 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 3.2 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. 837

AGR class	Frequency	
1	164	(9.8%)
2	162	(9.7%)
3	170	(10.2%)
4	167	(10%)
5	137	(8.2%)
6	241	(14.4%)
7	306	(18.3%)
8	284	(17%)
9	43	(2.6%)
Total	1674	

Table 3.2: Frequency of agreement classes

Table 3.2 reflects the agreement class distribution in a total of 1674 nomi-

nal 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.[8] It is thus worthwhile not to only show the frequency of the various genders as provided in section 3.2.3, 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.

3.2.2 Noun Classes

Gyeli has seven formal head noun classes as defined by their prefix. Table 3.3 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.[9]

[8] In the singular, 51 nouns in the database have no singular form, while only 21 have no plural form.

[9] 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.

Head noun class	AGR class	Example
N	1	m-ùdì ‘person’
	3	n-vèwɔ̀ ‘breath’
ba, (b-)	2	ba-kálɛ́ ‘sisters’, b-ùdì ‘people’
∅	1	kálɛ́ ‘sister’
	3	mbɛ̀ ‘drum’
	7	síŋgì ‘cat’
	8	bwálɛ̀ ‘canoe’
	9	tsɨ́ ‘neck’
mi	4	mi-vèwɔ̀ ‘breaths’
le, (d-)	5	le-máá ‘cheek’, d-úú ‘nose’
ma, (m-)	6	ma-máá ‘cheeks’, m-úú ‘noses’
be	8	be-síŋgì ‘cats’

Table 3.3: Noun classes and their corresponding agreement classes

In glosses, I distinguish head noun and agreement classes. Head nouns are thus glossed with their head noun and agreement class. For instance, *le-máá* would be represented as ‘le5-cheek’ and *síŋgì* as ‘∅7.cat’.

Phonologically conditioned variants The ‘ba’, ‘le, and ‘ma’ head noun classes have a variant which is phonologigally conditioned in all cases. The vowel in their prefix is deleted if they precede a vowel initial stem. Thus, as (78) shows for agreement classes 2 and 6, the noun class prefix takes a CV shape when it precedes a consonant initial stem.

(78) CV- prefix

a. bà-mbámbɛ́ ‘ancestors’, cl. 2

b. bà-nyúə̃ ‘snakes’, cl. 2

c. mà-lɛ́ndí ‘palm trees’, cl. 6

d. mà-gyɛ́ ‘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 (79).

(79) C- prefix

a. b-ùdə̃ ‘men’, cl. 2

b. b-wánɔ̀ ‘children’, cl. 2
c. m-ɛ́ndì ‘courtyards’, cl. 6
d. m-ù ‘ovens’, cl. 6

In the ‘le’ class, there is further a consonantal change from /l/ to /d/. (80) provides again examples of the CV- prefix when the stem is consonant initial.

(80) CV- prefix
a. le-lɛ́ndí ‘palm tree’, cl. 5
b. le-gyɛ́ ‘tooth’, cl. 5
c. le-bɛ́lɛ̀ ‘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 (81).

(81) C- prefix
a. d-ísì ‘eye’, cl. 5
b. d-ù ‘oven’, cl. 5
c. d-ɛ́ndì ‘courtyard’, cl.5
d. d-á ‘crab’, cl. 5

The variants for vowel initial stems are marked in parantheses while the general name of the head noun class is marked in bold in Table 3.3.

Noun class alternation 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 (82).[10]

(82) a. sə́ > ba-sə́ 'father'
b. kálɛ́ > ba-kálɛ́ 'sister'
c. kó > ba-kó 'uncle (mother's brother)'
d. sɔ́ > ba-sɔ́ 'friend'
e. kúmá > ba-kúmá 'chief'
f. tsídí > ba-tsídí 'animal'
g. kfúbɔ̀ > ba-kfúbɔ̀ 'chicken'
h. kímì > ba-kímì 'monkey (generic)'
i. fû > ba-fû '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 (83).[11]

(83) no prefix (nasal retainment)
a. **n**tɛ̀mbɔ́ > ba-**n**tɛ̀mbɔ́ 'younger sibling', cl. 1/2
b. **n**djɔ́'ɔ̀ > ba-**n**djɔ́'ɔ̀ 'elephant', cl. 1/2
c. **m**bámbɛ́ > ba-**m**bámbɛ́ 'ancestor', cl. 1/2
d. **m**ámɛ́ > ba-**m**ámɛ́ 'aunt (father's sister)', cl. 1/2
e. **n**lô > mi-**n**lô 'head', cl. 3/4
f. **n**kùzɔ́ > mi-**n**kùzɔ́ 'widow/er', cl. 3/4
g. **m**pàgó > mi-**m**pàgó 'road', cl. 3/4

[10]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.

[11] 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 known from other languages, for instance from the Grassfield language Oku as described by Blood (1999: 3).

h. **m**bvû > mi-**m**bvû ‘year’, cl. 3/4

Some nouns such as in (84), 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 though. (83) and (84) 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/.

(84) 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-gyɛ̰̂ > ba-gyɛ̰̂ ‘stranger’, cl. 1/2
d. n-jíbí > ba-jíbí ‘thief’, cl. 1/2
e. m-ùdɑ̰̂ > b-ùdɑ̰̂ ‘woman’, cl. 1/2
f. m-ùdì > b-ùdì ‘person’, cl. 1/2
g. m-ùdʊ̰̂ > b-ùdʊ̰̂ ‘man’, cl. 1/2
h. m-wánɔ > b-wánɔ ‘child’, cl. 1/2
i. m-bwálɛ̀ > ba-bwálɛ̀ ‘parent’, cl. 1/2
j. n-sùné > mi-sùné ‘calf’, cl. 3/4
k. n-vɛ̀wɔ > mi-vɛ̀wɔ ‘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 *ntèmbɔ́* ‘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 (82) without a noun class prefix (and initial nasal consonant), for instance, have a velar /k/ as stem-intial consonant while many examples in (83) and (84) show an NC-cluster where C is a labial or alveolar obstruent. This may raise the question whether the occurence 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 *kfúbɔ̀* 'chicken' or with a preceding nasal as in the near minimal pair *nkùzɔ́* 'widow/er'. The same is true for alveolar fricatives as in *sə́̃* '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, *mámɛ́* 'aunt' forms its plural with a CV- shape prefix *ba-mámɛ́*, the initial nasal being part of the stem (instead of **m-ámɛ́ > *b-ámɛ́*). 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.

Synchronically, 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 then a nasal prefix. About three quarters of class 9 nouns have a stem-initial NC cluster which is retained in plural formation.

3.2.3 The Gyeli Gender System

The nine agreement classes in Gyeli form six major genders, as illustrated in Figure 3.1. 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 3.3.1.

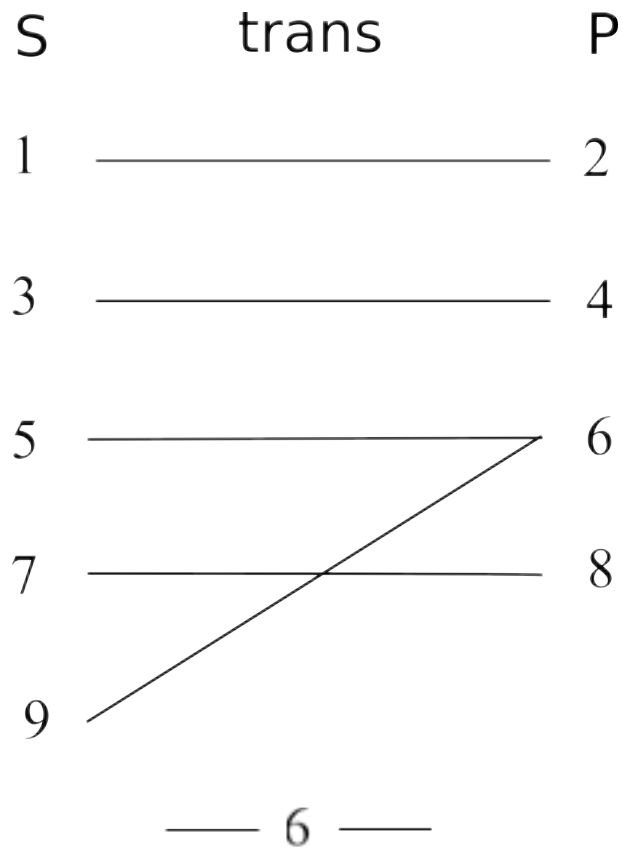


Figure 3.1: Major genders in Gyeli

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.[12]

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 though) in gender 7/8. Other patterns, if there are any, are less obvious though.

Gender size The various genders differ in size, i.e. the number of members they have. Table 3.4 shows the distribution of the 875 lexemes in the nominal database across different genders, distinguishing major and inquorate genders.[13]

[12]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.

[13]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	
Major genders	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%)
Inquorate genders	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 3.4: 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 differenciating, for instance, ‘the physical world’, ‘kinship’, ‘animals’, ‘body’, ‘food and drink’, clothing’,

'house', 'vegetation', 'technology', or 'time'.[14]

3.2.3.1 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 (85) and (86). In comparison to other genders containing human nouns, however, gender 1/2 contains the vast majority.

(85) kin relations
   a. sə́/ba-sə́ 'father'
   b. nyə̂/ba-nyə̂ 'mother'
   c. n-túmbà/ba-túmbà 'older male relative'
   d. ntɛ̀mbɔ́/ba-ntɛ̀mbɔ́ 'younger sibling'
   e. kálɛ́/ba-kálɛ́ 'older sister'

(86) social relations
   a. sɔ́/ba-sɔ́ 'friend'
   b. n-gyɛ̂/ba-gyɛ̂ 'stranger'
   c. kfúmá/ba-kfúmá 'chief'
   d. mbúmbù/ba-mbúmbù 'person with the same name'
   e. ŋgə̂ŋgə̂/ba-ŋgə̂ŋgə̂ 'healer'

39% of the gender's nouns belong to the semantic field of animals, both bigger and smaller, as illustrated in (87).

(87) animals
   a. tsídí/ba-tsídí 'animal, meat'
   b. kímì/ba-kímì 'monkey'
   c. nyû/ba-nyû 'bee'
   d. fû/ba-fû 'fish'

[14]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 (88). They designate most often recently introduced items in the area of clothing, food, and the modern world.

(88) loan words

a. sɔ́tì/ba-sɔ́tì ‘trousers (> English: shorts)’

b. fàrínì/ba-fàrínì ‘flour (> French: *farine*)’

c. mɔ̀nɛ́/ba-mɔ̀nɛ́ ‘money’

d. màtèlà/ba-màtèlà ‘mattress’

e. ŋgóvìnà/ba-ŋgóvìnà ‘government’

Finally, the absence of a semantic field may be remarkable as well. While ‘body’ nouns[15] 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’, *búɔ̀/ba-búɔ̀* ‘mute person’, and *nɔ́ɔ́/ba-nɔ́ɔ́* ‘deaf person’. Body parts, however, are completely absent in this gender.

3.2.3.2 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 (89).

(89) body

a. nlô/mi-nlô ‘head’

b. d-ìsì/m-ìsì ‘eye’

c. nyùmbù/mi-nyùmbù ‘mouth’

[15]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. mɔ̀/mi-mɔ̀ ‘stomach’
e. n-sùnɛ̀/mi-sùnɛ̀ ‘calf’

Examples in (90) represent the next biggest semantic field in gender 3/4 with about 14% of nouns designating objects in the ‘physical world’.

(90) physical world
a. nsá/mi-nsá ‘shore’
b. nkìyɔ́/mi-nkìyɔ́ ‘wave’
c. mpá/mi-mpá ‘island’
d. nsɛ́/mi-nsɛ́ ‘sand’
e. nkúdɛ́/mi-nkúdɛ́ ‘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 (91).

(91) technology
a. ntúmɛ́/mi-ntúmɛ́ ‘walking stick’
b. ntúmɔ̀/mi-ntúmɔ̀ ‘knife’
c. nkwɛ̌/mi-nkwɛ̌ ‘basket’
d. ŋkúŋkúmbɛ́/mi-ŋkúŋkúmbɛ́ ‘bow’
e. nkwálá/mi-nkwálá ‘machete’

Animals are also represented in this gender with more than 8%; (92) gives examples of some of them.

(92) animals
a. ntsə̂ntsúgɛ́/mi-ntsə̂ntúgɛ́ ‘dragon fly’
b. nsɪ̂/mi-nsɪ̂ ‘mangoost’
c. nkâ/mi-nkâ ‘colobus monkey’
d. nkwúlɔ́/mi-nkwúlɔ́ ‘cricket’
e. mbúlɔ̀/mi-mbúlɔ̀ ‘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 (93), just to mention a few.

(93) others

a. ŋkwànɔ̀/mi-ŋkwànɔ̀ ‘honey’

b. mbàmbà/mi-mbàmbà ‘co-wife’

c. mbɛ̂/mi-mbɛ̂ ‘door’

d. mpìŋgá/mi-mpìŋgá ‘cassava’

e. nlâ/mi-nlə̂ ‘story’

f. mbû/mi-mbvû ‘year’

3.2.3.3 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 (94), 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 descernible.

(94) body

a. d-úú/m-úú ‘nose’

b. le-lɔ̂/ma-lɔ̂ ‘ear’

c. le-nkɛ́dɛ́/ma-nkɛ́dɛ́ ‘hip’

d. le-tɔ́lɛ̀/ma-tɔ́lɛ̀ ‘navel’

e. le-bɛ́lɛ̀/ma-bɛ́lɛ̀ ‘breast’

Further, gender 5/6 contains roughly 19% animal nouns. Judging from examples such as in (95), 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.

(95) animals

a. le-bóndó/ma-bóndó ‘frog’

b. d-á/m-á ‘crab’

c. le-bwǐ/ma-bwǐ ‘hyena’

d. le-kénó/ma-kénó ‘duiker’

e. d-áwɛ̀/m-áwɛ̀ ‘goliath frog’

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). (96).

Taking these different categories together, human nouns make up 9% of gender 5/6.

(96) humans
   a. le-wă/ma-wă ‘twin’
   b. le-wányɛ̀/ma-wányɛ̀ ‘young man’
   c. le-kàgà/ma-kàgà ‘bewitched woman’
   d. le-tɔ́ndí/ma-tɔ́ndí ‘lover’
   e. le-bùɔ́/ma-bùɔ́ ‘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 (97) and (98) respectively.

(97) house
   a. le-wùdɛ̀/ma-wùdɛ̀ ‘cooking stone’
   b. d-ù/m-ù ‘oven’
   c. d-ɛ́ndɛ̀/m-ɛ́ndɛ̀ ‘courtyard’
   d. d-úgó/m-úgó ‘toilet’
   e. le-yímbálî/ma-yímbálî ‘entrance’

(98) physical world
   a. le-náŋgá/ma-náŋgá ‘star’
   b. le-bàdà/ma-bàdà ‘ground’
   c. le-kɔ́/ma-kɔ́ ‘stone’
   d. le-lɔ̀ɔ́/ma-lɔ̀ɔ́ ‘dew’
   e. le-tɔ́/ma-tɔ́ ‘drop’

The remaining quarter of gender 5/6 nouns is spread across semantic fields such as ‘vegetation’, ‘technology’, ‘quantity’, ‘time’, ‘language’, and ‘hunting’. (99) gives a few examples.

(99) other
   a. le-lɛ́ndɛ́/ma-lɛ́ndɛ́ ‘palm tree’
   b. le-kúndí/ma-kúndí ‘mat’
   c. le-wúmɔ̀/ma-wúmɔ̀ ‘ten’

d. le-wùlá/ma-wùlá ‘hour, time’
e. le-kɛ́lɛ́/ma-kɛ́lɛ́ ‘language’
f. le-lámbɔ̀/ma-lámbɔ̀ ‘trap’

Finally, gender 5/6 contains a number of deverbal nouns which are discussed in section 3.3.2.

3.2.3.4 Gender 7/8

Gender 7/8a is the largest gender in terms of its affiliated nouns with 270 members. ‘Body’ (100) and ‘animal’ (101) nouns constitute the majority with both around 20%.

(100) body
a. vìnɔ́/be-vìnɔ́ ‘finger’
b. dò/be-dò ‘thigh’
c. sɛ́/be-sɛ́ ‘liver’
d. kúdɛ́/be-kúdɛ́ ‘skin’
e. gímù/be-gímù ‘tonge’

(101) animals
a. nɔ̀nɛ́/be-nɔ̀nɛ́ ‘bird’
b. tàwɔ̀/be-tàwɔ̀ ‘goat’
c. mgbɛ̀mgbɛ̀mɛ̀/be-mgbɛ̀mgbɛ̀mɛ̀ ‘lion’
d. sɛ́’ɛ̀/be-sɛ́’ɛ̀ ‘baboon’
e. síŋgì/be-síŋgì ‘cat’

Around 10% each is taken up by clothing vocabulary as in (102) and ‘food’ terms as exemplified in (103).

(102) clothes
a. zíŋgɔ́/be-zíŋgɔ́ ‘short dress’
b. túnɛ̀/be-túnɛ̀ ‘scarf for carrying babies’
c. kàβà/b̀e-kàβà ‘long dress’
d. tsílì/be-tsílì ‘long skirt’
e. póòlì/be-póòlì ‘hat’

(103) food

a. kálá/be-kálá ‘spice’
b. kwàndɔ̀/be-kwàndɔ̀ ‘plantain’
c. dísì/be-dísì ‘bowl’
d. ŋgùɔ́/be-ŋgùɔ́ ‘sugar cane’
e. búɔ̀/be-búɔ̀ ‘mortar’

Another semantic field that is represented in gender 7/8 is ‘vegetation’ as in (104), however, only with around 6%.

(104) vegetation

a. mpànyè/be-mpànyè ‘bamboo’
b. lé/be-lé ‘tree’
c. làwɔ́/be-làwɔ́ ‘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 (105).

(105) other

a. bə̂/be-bə̂ ‘word’
b. nkúdɛ́/be-nkúdɛ́ ‘fog’
c. tű̂ŭ̂/be-tű̂ŭ̂ ‘axe’
d. pìmáá/be-pìmáá ‘wall’
e. bwímɔ̀/be-bwímɔ̀ ‘net hunt’
f. mɛ́nɔ́/be-mɛ́nɔ́ ‘day’
g. túmbɔ́/be-túmbɔ́ ‘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 (106). Compared to gender 1/2, loan words are, however, much less numerous in gender 7/8.

(106) loan words

a. sɔ́βì/be-sɔ́βì ‘soap’

b. fùláwà/be-fùláwà ‘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, *sɔ́βì* ‘soap’ (gender 7/8) forms a minimal pair with the loan words *sɔ́tì* ‘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: *fùláwà* ‘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 *fùláwà* ‘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.

3.2.3.5 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 3.2.4, 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 (107).

(107) body

a. nyúlɛ̂/ma-nyúlɛ̂ 'body'

b. mbɔ̀mbɔ́/ma-mbɔ̀mbɔ́ 'face'

c. mbvű̀ɔ̀/ma-mbvű̀ɔ̀ 'hair'

d. tsɨ́/ma-tsɨ́ 'neck'

e. ndzílíkɔ̂/ma-ndzílíkɔ̂ 'elbow'

Further, a relatively big part (14%) of gender 9/6 nouns belongs to the semantic field of 'language and speech' as illustrated in (108).

(108) language

a. ŋgɔ̀mɔ̀/ma-ŋgɔ̀mɔ̀ 'little drum (tam tam)'

b. pɔ́/ma-pɔ́ 'news'

c. tsɨ̂/ma-tsɨ̂ 'voice'

d. mpàálé/ma-mpàálé 'message'

Both, the physical world and 'house' vocabulary is represented with about 9% each and exemplified in (109) and (110) respectively.

(109) physical world

a. mbí'ìlì/ma-mbí'ìlì 'charcoal'

b. sí/ma-sí 'ground'

c. pfùdí/ma-pfùdí 'mold'

(110) house

a. ndáwɔ̀/ma-ndáwɔ̀ 'house'

b. ntábò/ma-ntábò 'washing place'

c. ŋgə̂̃/ma-ŋgə̂̃ ‘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 (111).

(111) others
a. ndzà/ma-ndzà ‘hunger’
b. ŋkábɛ́/ma-ŋkábɛ́ ‘paddle’
c. ndzì/ma-ndzì ‘path’
d. ŋkwàló/ma-ŋkwàló ‘edge’
e. mpìndá/ma-mpìndá ‘prohibition’
f. ŋkwɛ́lɛ̀/ma-ŋkwɛ́lɛ̀ ‘witchcraft’

3.2.3.6 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 (112).

(112) a. ma-jíwɔ́ ‘water’
b. ma-wə̂̃ ‘fat’
c. ma-nyɔ́ɔ̀ ‘drink, wine’
d. ma-nyálɛ̀ ‘urine’
e. ma-dyúmù ‘sperm’

Other instances of nouns in this gender cover deverbal eventive nouns, as shown in (113).

(113) a. ma-dìlá ‘funeral’ → dìlɛ ‘bury’
b. ma-dígà ‘vision’ → dígɛ ‘watch’
c. ma-bwálɛ́ ‘birth’ → bwálɛ ‘be born’

3.2.4 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 than 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 3.4 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'. (114) provides some examples.

(114) a. bɛ̀/ma-bɛ̀ 'shoulder'
b. ntúà/ma-ntúà 'mango'
c. kwádɔ́/ma-kwádɔ́ 'village'
d. yílì/ma-yílì 'viper'
e. wáádɔ́/ma-wáádɔ́ '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 *bɛ̀* '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 *kwádɔ́* '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 (115).

(115) a. sɔ́nì 'shame'

b. mɛ̀vâ ‘pride’
c. sɔ̀mɔ̀nɛ̀ ‘complaint’
d. ŋgɔ̀ŋgɔ̀lɛ̀ ‘sadness’
e. pɔ́nɛ́ ‘truth’
f. ŋgwámɛ́ ‘danger’

Other nouns that only have a singular form in agreement class 7 are country names, as shown in (116).

(116) a. fàlà ‘France’
b. ŋgyàmànɛ̀ ‘Germany’
c. ìtálíyɛ̀n ‘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 (117).

(117) a. be-bɛ̂ɛ̂ ‘beauty’
b. be-síyá ‘imitation’
c. be-djíì ‘anger’
d. be-kílì ‘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 (118).

(118) a. vìyɔ́ ‘fire’
b. vísɔ́ ‘sun’

Gender 9 Also agreement class 9 constitutes a transnumeral gender with three members. They are listed in (119).

(119) a. ŋgwɛ́lɛ̀ ‘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 (120).

(120) a. m-bɔ́/mà-bɔ́ 'arm'
b. n-ákɔ́/m-ákɔ́ 'earwax'

This lexeme *-bɔ́* 'arm' may be reconstructed to PB **-bóko* 'arm' which belonged to gender 15/6 according to Meeussen (1967: 102).[16]

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.[17] 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 though in Gyeli. I only found two examples which are given in (121).

(121) a. bwə̂/ma-bwə̂ 'medicine'
b. bw-álɛ̀/m-álɛ̀ '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 (122).

(122) a. bvùlɛ́/be-bvùlɛ́ 'night'
b. bírɛ̀lɛ̀/be-bírɛ̀lɛ̀ 'smoke'

[16]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, is 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.

[17]There is one exception where a singular agreement class 8 noun takes a a prefix of the shape *bw-*, a remnant of a former class 14. Since this is the only example though, 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 of plural counterpart. For classes 1, 3, 4, and 5, this is very rare though with only one or two examples each. (123) shows the two examples found for agreement class 4.

(123) a. mi-ŋgyɛ̌ 'hunting rats (digging out their dens)'
b. my-ɛ́ '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 (124).

(124) a. kàmɛ̀rún '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 (125).

(125) a. bíwɔ̀ 'bad luck'
b. mbvú 'white/grey hair'

Agreement class 5 only has one instance which lacks a plural counterpart, as shown in (126).

(126) dyúwɔ̀ 'sky'

3.3 The Noun

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 concensus 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 dispose of 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 semantically, morphologically, and syntactically. 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 morpho-syntactic 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." Therefore, I will provide in the following a kind of check list for the Gyeli noun by describing its most common properties. 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.

A typical Gyeli noun has the following properties that characterize a word as a noun:

- affiliation to a gender and noun class (see section 3.2)

- serves as agreement trigger

- can be modified by agreeing as well as invariable modifiers

- may serve as head of a noun phrase

These features serve as diagnostics to determine whether a word is a noun. Thus, in turn, if a word is not affiliated to a gender and noun class, if it does not trigger agreement on dependent parts of speech and cannot be modified by word classes such as possessives or attributive markers, and if a word cannot function as the head of a noun phrase, that word is most likely not a noun.

Nouns in Gyeli are not a unified class, but have further subclasses which show different morpho-syntactic 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).”

This is also true for Gyeli. Proper nouns, subsequently referred to as ‘proper names’, show a different behavior in terms of genitive indicating devices (see section 3.7.1.2).

Structure of Gyeli nouns Structurally, the Gyeli noun consists of a nominal root which typically consists of one or two (open) syllables which ususally have a consonantal onset. For more details on the phonological shape of nominal roots see section 2.3.3.3.

The nominal root may either take a noun class prefix as in *lè-kàá* ‘clan’ or may have no noun class prefix as ∅-*tsídí* ‘animal’. A detailed description of the structure of noun class perfixes is provided in section 3.2.2. Further

information as well as an explanation of terminological distinctions of 'noun class', 'agreement class' and 'gender' are provided in section 3.2.

In the following, I will concentrate on three aspects concerning noun morphology. First, I will investigate mass nouns and countability, second, I will provide a brief discussion on generics, and third, I will explore noun derivation.

3.3.1 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.

Nouns that only have a plural form are often (liquid) mass nouns as in (127) or deverbal event nouns as in (128) (see section 3.3.2.2 for the latter) which are assigned to noun class 6.

(127) Liquid mass nouns
   a. ma-jíwɔ́ 'water'
   b. ma-vúdɔ́ 'oil'
   c. ma-tàŋgò 'palm wine'
   d. ma-vínó 'pus'
   e. ma-nzálɛ̀ 'urine'
   f. ma-dyúmù 'sperm'

(128) Deverbal event nouns
   a. ma-nyû 'drink (n.)' > nyùlɛ 'drink (v.)'
   b. ma-bwə̂sà 'thoughts' > bwə̂sa 'think'
   c. ma-bwàlɛ̀ 'birth' > bwàlɛ 'be born'
   d. ma-sâ 'game (playing) > sâ 'do'
   e. ma-tálá 'beginning' > tálɛ 'begin'
   f. ma-dìlá 'funeral' > dìlɛ 'bury'

There are other mass nouns with only a plural form in other noun 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-sìŋgì* 'spirits'. They also include deverbal nouns such as *bè-déwɔ̀* 'food' which is derived from *dè* 'eat'.

Then there are nouns that only have a singular form. While most class 8 nouns come with the noun class prefix *bè-* (class 8a), there are those class 8b nouns which have a singular meaning and pair usually with class 6 in the plural (see sections 3.2.1 and 3.2.2). There are, however, exceptions with class 8b nouns that do not have a plural counterpart. These are *vísɔ́* 'sun' and *vìyɔ́* 'fire'.

Other nouns that only have a singular form are very often abstract nouns. Most of them are assigned to class 7, as illustrated in (129).

(129) Abstract nouns
- a. dú 'lie'
- b. sɔ̀mɔ̀nɛ̀ 'complaint'
- c. ŋgɔ̀ŋgɔ̀lɛ́ 'sadness, compassion'
- d. pɔ́nɛ̀ 'truth'
- e. sɔ́nɛ̀ 'shame'
- f. mɛ̀vâ 'pride'

There are a few other singular nouns without a plural form in other noun classes. Semantically, they describe mass entities which have a rather unspecified shape and lack clear-cut boundaries such as *pfùdɛ́* 'mold' (cl. 9) or *dùwɔ́* 'sky' (cl. 5). *bíwɔ̀* 'bad luck' (cl. 3) is another example of an abstract noun.

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 *nsɛ́/mì-nsɛ́* 'sand' or *ndísì/mì-ndísì* 'rice'. In their singular form, they behave like other uncountable nouns, for instance liquids, just that they occur in the singular. This becomes especially obvious when modified by quantifiers (see section 3.7.1.4). 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.

3.3.2 Nominalization

The most frequent source of derived nouns in Gyeli are verbs. Deverbal nouns are assigned to different genders which seem to correlate with the type of noun, for instance agentive nouns in contrast to result or event nouns. Thus, deverbal agentive nouns describing the agent of an action are assigned to gender 1/2. Deverbal result nouns usually go into gender 7/8 while deverbal event nouns are assigned to gender 6 lacking a singular form. Each of them are described in detail in the following. For more information on genders, see section 3.2.3.

3.3.2.1 Agentive Nominalization of Gender 1/2

Agentive nouns typically describe the 'doer' of an action. This type of nominalization is the most frequent one found in Gyeli since it applies to a wide range of verbs. Nominalized verbs that allow for agentive nominalization are affiliated to the human/animate gender 1/2.[18]

As nouns of classes 1 and 2, deverbal agentive nouns take the respective noun class prefixes which is nasal prefix for class 1 and and the prefix *bà-* for class 2. The type of nasal prefix in class 1 depends on the phonological properties of the noun's stem-initial consonant. If the stem starts with a bilabial consonant, the nasal will be a labial nasal /m/ as in (130). On the other hand, if the consonant is an alveolar consonant, it will be an alveolar nasal /n/ as in (131). Finally, if the consonant is a velar as in (132), the nasal will be a velar nasal /ŋ/.

(130) m- prefix

a. m-bɛ́dɔ̀ 'climber' > bédɔ 'climb'

(131) n- prefix

a. n-dìlɛ̀ 'undertaker' > dìlɛ 'bury'

b. n-sálɛ̀ 'maker' > sâ 'make'

(132) ŋ- prefix

a. ŋ-gyàgà 'buyer' > gyàga 'buy'

[18]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.

b. ŋ-kòlɛ̀ ‘helper’ > kòlɛ ‘help’

c. ŋ-gyímbɛ̀dɛ̀ ‘danser’ > gyímbɔ ‘dance’

In terms of the stem structure, there are different patterns a noun can be derived from a verb form: i) monosyllabic verb roots can be expanded with what seems generally to be a transitivizing applicative suffix as in (133). In some cases, the function of this verb extension is not transparent anymore, for instance, with *kɛ̀* → *kɛ̀lɛ̀* ‘walk’.[19]

(133) verb extension with monosyllabic verb extensions

a. sâ ‘make’ > sálɛ ‘make (tr.)’ > n-sálɛ̀ ‘maker’

b. dè ‘eat’ > dèlɛ ‘eat (?)’ > n-dèlɛ̀ ‘eater’

c. kɛ̀ ‘walk’ > kɛ̀lɛ̀ ‘walk (?)’ > n-kɛ̀lɛ̀ ‘walker’

ii) Verbs stay as they are and only take the noun class prefix. This is even true for monosyllabic nouns; not all monosyllabic verbs require an extension suffix in order to be nominalized as in (133), but can occur as in (134).

(134) no verb extension with monosyllabic verb stems

a. djì ‘open’ > n-djì ‘opener’

The same is definitely true for bisyllabic verbs as shown in (135).

(135) simple N- prefixing with bisyllabic nominalizations

a. gyàga ‘buy’ > ŋ-gyàgà ‘buyer’

b. kòlɛ ‘help’ > ŋ-kòlɛ̀ ‘helper’

c. tsìlɔ ‘write’ > n-tsìlɔ̀ ‘writer’

iii) In addition to prefixing a N-, some verbs that end in *-bɔ̀* delete the final vowel and attach the morpheme *-ɛ̀dɛ̀* as in (136). In terms of tone, the first mora of the deverbal noun takes a H tone, even though the verb form would have a L tone as in *gyìmbɔ* ‘dance’.

(136) -ɛ̀dɛ̀ suffix replacing -ɔ ending

a. gyámbɔ ‘cook’ > ŋ-gyámbɛ̀dɛ̀ ‘cook (n.)’

b. gyìmbɔ ‘dance’ > ŋ-gyímbɛ̀dɛ̀ ‘danser’

[19]For more information of verb extensions, see chapter 4.1.2.

This, however, does not seem to be a strict phonological rule because other verbs ending in *-bɔ̀* do not take the *-ɛ̀dɛ̀* suffix, but are nominalized without a stem change as shown in (137). It should rather be assumed therefore that the replacement of a verbal *-ɔ* ending by *-ɛ̀dɛ̀* in nominalization is lexically specified.

(137) retention of -bɔ̀ ending

a. djìbɔ ‘close’ > n-djíbɔ̀ ‘sb. who closes’

b. lìmbɔ ‘know’ > n-límbɔ́ mámbɔ̀ ‘connaisseur of things’

Again, the tone of the first mora in a deverbal noun is H. In (137b), the nominalized verb further needs a specification/argument *mámbɔ̀* ‘thing’ and cannot stand alone.

3.3.2.2 Event Nouns of Class 6

A vast number of deverbal nouns is assigned to the transnumeral gender 6. They are uncountable and lack a singular counterpart in class 5. These nouns usually represent an event noun, examples of which are provided in (138). All these nouns take the noun class prefix *ma-*. Other changes both tonal or related to the final vowel may apply, but need to be investigated more.

(138) deverbal event nouns

a. sâ ‘make, do’ > ma-sâ ‘game’

b. dìlɛ ‘bury’ > ma-dìlá ‘funeral’

c. bwà ‘give birth’ > bwàlɛ ‘be born’ > ma-bwálɛ̀ ‘birth’

d. bwə̂sa ‘think’ > ma-bwə̂sà ‘thoughts’

e. tálɛ ‘begin’ > ma-tálà ‘beginning’

f. sɔ̀si ‘be happy’ > ma-sɔ̀sí ‘joy’

3.4 Agreement Targets of the Noun

Agreement targets of the noun are those parts of speech in the noun phrase that agree with the head noun they modify, as explained above in section 3.2. In this section, I will describe in turn all parts of speech in the noun

phrase that are marked for agreement with the noun. Invariable, i.e. non-agreeing modifiers of the noun are discussed in section 3.5.

3.4.1 Subject Pronouns

In Gyeli, only non-speech act participants (non-SAP), i.e. third person singular and plural, agree with the head noun. For completeness, Table 3.5 also provides the pronouns of speech act participants (SAP), i.e. first and second person in both singular and plural.

	Singular	Plural
Speech Act Participants	1S *mɛ*	1P *ya*
	2S *wɛ*	2P *bwa*
Non-Speech Act Participants	cl.1 *a*	cl.2 *ba*
(3rd person)	cl.3 *wu*	cl.4 *mi*
	cl.5 *li*	cl.6 *ma*
	cl.7 *yi*	cl.8 *be*
	cl.9 *nyi*	

Table 3.5: Subject pronouns

The pronouns in Table 3.5 are not marked for tone because they receive their tonal specification depending on tense and aspect marking in the phrase as discussed in chapter 5. The status of these pronouns in terms of subject agreement within a phrase is laid out in more detail in the 'Clause' chapter in section 6.2.1.1.

3.4.2 Non-Subject Pronouns

The second set of pronouns in Gyeli concerns all non-subject pronouns, including object and emphatic pronouns as well as pronouns used in oblique phrases. For convenience, I gloss these pronouns as 'OBJ' pronouns, but it has to be kept in mind that these pronouns also occur in other contexts than the syntactic object.

As shown in Table 3.6, non-subject pronouns for singular SAPs have the same forms as their subject pronoun counterparts. All the other pronouns, namely plural SAPs and all non-SAPs have their own form which differs from

that of subject pronouns. Non-subject pronoun forms of non-SAPs, except for cl. 1 *nyɛ*, have a root *-ɔ* that takes an agreement prefix.

	Singular	Plural
Speech Act Participants	1S *mɛ*	1P *bi*
	2S *wɛ*	2P *be*
Non-Speech Act Participants	cl.1 *nyɛ*	cl.2 *b-ɔ*
	cl.3 *w-ɔ*	cl.4 *my-ɔ*
	cl.5 *l-ɔ*	cl.6 *m-ɔ*
	cl.7 *y-ɔ*	cl.8 *by-ɔ*
	cl.9 *ny-ɔ*	

Table 3.6: Object pronouns

The tonal specification of object pronouns depends on their syntactic position (phrase medial or phrase final).

3.4.3 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 (139) and (140), respectively. In (139), the interrogative replaces the subject NP *m-ùdû̌* 'man' while, in (140), the interrogative *gyí* replaces the object NP *má-jíwɔ́* 'water'. In that sense, they behave like personal pronouns. Both interrogatives can be used to ask for a subject NP and an object NP.

(139) a. [mùdû̌] à nyɛ́ mùdâ̌.
m-ùdû̌ a nyɛ̂-H m-ùdâ̌.
N1-man 1.PST1 see-R N1-woman
'The/a man saw the/a woman.'

b. **nzá** à nyɛ́ mùdâ̌?
nzá a nyɛ̂-H m-ùdâ̌
who 1.PST1 see-R N1-woman
'Who saw the/a woman?'

(140) a. mùdû̌ á nyùlɛ́ [májíwɔ́].
m-ùdû̌ a-H nyùlɛ-H H-ma-jíwɔ́
N1-man 1-PRES drink-R OBJ.LINK-ma6-water

‘The/a man drinks water.’

b. **gyí** mùdṵ̂ á nyùlɛ̀?
gyí m-ùdṵ̂ a-H nyùlɛ
what N1-man 1-PRES drink
‘What does the man drink?’

Interrogative pronouns can also occur in oblique phrases with the comitative marker *nà*, as shown in (141) and (142).

(141) a. mùdṵ̂ à kɛ́ màkítì [nà Àdà].
m-ùdṵ̂ a kɛ̀-H m-àkítì nà Àdà
N1-man 1.PST1 go-R ma6-market COM PN
‘The/a man went to the market with Ada.’

b. **nà nzá** mùdṵ̂ à kɛ́ màkítì?
nà nzá m-ùdṵ̂ a kɛ̀-H m-àkítì
COM who N1-man 1.PST1 go-R ma6-market
‘With whom did the man go to the market?’

(142) a. mùdṵ̂ à kɛ́ màkítì [nà tűṳ̀].
m-ùdṵ̂ a kɛ̀-H m-àkítì nà tűṳ̀
N1-man 1.PST1 go-R ma6-market COM ∅7.axe
‘The/a man went to the market with an axe.’

b. **nà gyí** mùdṵ̂ à kɛ́ màkítì?
nà gyí m-ùdṵ̂ a kɛ̀-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 (143). 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.

(143) a. mùdṵ̂ à kɛ́ màkítì [nà Àdà nà Màmbì]
m-ùdṵ̂ a kɛ̀-H m-àkítì nà Àdà nà Màmbì
N1-man 1.PST1 go-R ma6-market COM PN COM PN
‘The/a man went to the market with Ada and Mambi.’

b. **nà bànzá** mùdṵ̂ à kɛ́ màkítì?
nà bà-nzá m-ùdṵ̂ a kɛ̀-H m-àkítì
COM 2-who ba1-man 1.PST1 go-R ma6-market

'With whom did the man go to the market?'

3.4.4 Demonstratives

Gyeli has two sets of demonstrative pronouns 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 3.7 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	*nû*	*núú*
2	*bâ*	*báá*
3	*wɔ̂*	*wɔ́ɔ́*
4	*mî*	*míí*
5	*lɛ̂*	*lɛ́ɛ́*
6	*mâ*	*máá*
7	*yî*	*yíí*
8	*bê*	*béé*
9	*nyî*	*nyíí*

Table 3.7: Gyeli demonstratives

Both proximal and distal demonstratives follow the noun they modify in a noun phrase as shown in (144).

(144) 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 6.1.

3.4.5 Possessor Pronouns

Possessor pronouns in Gyeli consist of a root indicating the possessor and a prefix that agrees with the possessee, as shown in (145).

(145) a. m-ùdì w-ɔ̂
N1-man 1-2S.POSS
'your (SG) man'

b. mì-nkwɛ́ my-áwɔ́
mi4-basket 4-3P.POSS
'their baskets'

Possessor roots Table 3.8 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	*-ã̀*	*-isi (-usi)*
2	*-ɔ*	*-inɛ (-unɛ)*
3	*-ɛ*	*-awɔ*

Table 3.8: 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 (146).

(146) a. gyà y-ísí
7.music 7-1P
'our music'

b. m-wánɔ̀ w-**ù**sí
N1-child 1-1P
'our child'

The agreement class that the possessor root takes also determines the tonal pattern of the root. The tonal pattern of 1S and 2S are the same in every agreement class, as shown in Table 3.9. 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.

	Basic tonal pattern		Exceptions: cl. 1 and 9	
Person	Singular	Plural	Singular	Plural
1	-ə̂̀	-ísí (-úsí)	-ə̂̀	**-ìsí** (**-ùsí**)
2	-ɔ̂	-ínɛ́ (-únɛ́)	-ɔ̂	**-ìnɛ́** (**-ùnɛ́**)
3	-ɛ́	-áwɔ́	**-ɛ̂**	**-àwɔ́**

Table 3.9: Tonal patterns of possessor pronouns

Possessee agreement prefixes Agreement of possessor pronouns is marked by agreement prefixes which are listed in Table 3.10 for the various agreement classes.

AGR class	AGR prefix
1	w-
2	b-
3	w-
4	mi-
5	l-
6	m-
7	y-
8	bi-
9	ny-

Table 3.10: 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 (*-ísí* and *-ínɛ́*), the vowel of the prefix is deleted:

class 4:

mi-	+	*-ísí*	→	*mísí*	‘our’
mi-	+	*-ínɛ́*	→	*mínɛ*	‘your (PL)’

class 8:

bi-	+	*-ísí*	→	*bísí*	‘our’
bi-	+	*-ínɛ́*	→	*bínɛ*	‘your (PL)’

For the other roots starting in different vowels, the prefix vowel is assimilated and becomes a glide:

class 4:

mi-	+	*-ə̂̄*	→	*myə̂̄*	‘my’
mi-	+	*-ɔ̂*	→	*myɔ̂*	‘your (SG)’
mi-	+	*-ɛ́*	→	*myɛ́*	‘his/her’
mi-	+	*-áwɔ́*	→	*myáwɔ́*	‘their’

class 8:

bi-	+	*-ə̂̄*	→	*byə̂̄*	‘my’
bi-	+	*-ɔ̂*	→	*byɔ̂*	‘your (SG)’
bi-	+	*-ɛ́*	→	*byɛ́*	‘his/her’
bi-	+	*-áwɔ́*	→	*byáwɔ́*	‘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.

3.4.6 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' markers.

Genitive markers are different from attributive markers both in their form and their occurrence. They only show up when the possessor is expressed by a proper name, as in (147a), and thus forms a true genitive in this language. In contrast, if the possessor is expressed by a noun, as in (147b), the attributive paradigm will be used. Genitive linkers are described in more detail in section 3.4.7.

(147) a. síŋgì **ŋgá** Àdà
∅7.cat GEN PN
'Ada's cat'

b. síŋgì **yá** m-ùdû̂
∅7.cat 7:ATT ∅1-man
'the man's cat'

Attributive markers serve as a linking element between a noun and typically another noun, as shown in (148). Attributive markers also link a noun to a verb, a qualifier, or an interrogative. The different constructions and their constituents are discussed in section 3.4.7 on attributive constructions. At this point, I will only present the agreement target, namely the attributive marker itself.

(148) a. síŋgì **yá** djí
∅7.cat 7:ATT ∅7.forest
'forest cat'

b. lè-lɔ̂ **lé** síŋgì
le5-ear 5:ATT ∅7.cat
'the cat's ear'

Attributive markers are also used in relative clauses, as exemplified in (149) and discussed in detail in chapter 7.2.2.

(149) a. síŋgì yá yí kwè
∅7.cat 7:ATT 7.PRES fall

‘the cat that falls’

b. síŋgì yá mɛ́ nyɛ̂
∅7.cat 7:ATT 1S.PRES see
‘the cat that I see’

Meeussen (1967), and later Van de Velde (2013: 219), posits 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 though in classes 4, 5, and 8 which come with high and mid vowel roots rather than with -*a*, as shown in Table 3.11. 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 3.11: Attributives in the different agreement classes

3.4.7 Genitive Markers

Genitive markers are used instead of attributives if the second constituent in a noun + noun construction is a proper name, as illustrated in (150).

(150) a. ndáwɔ̀ **ŋgá** Àdà
∅9.house GEN PN
‘Ada’s house’

b. ndáwɔ̀ **nyá** m-bvùlè
∅9.house 9:ATT N1-Bulu
‘the Bulu[20] man’s house’

[20]Bulu describes a neighboring ethnic group to the Bagyeli as well as their language which is classified as Bantu A74.

Further, the genitive marker is used in the question word *pú'ù ŋgá 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 is particular in its agreement behavior since it only takes an agreement marker if the preceding possessee noun occurs in the plural. If it is singular, however, the genitive marker takes a default form *ŋgá*. Table 3.12 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	ŋgá	cl. 2	bá-ŋgá
cl. 3	ŋgá	cl. 4	mí-ŋgá
cl. 5	ŋgá	cl. 6	má-ŋgá
cl. 7	ŋgá	cl. 8	bé-ŋgá
cl. 9	ŋgá		

Table 3.12: Agreement marking of genitive markers

The agreement prefix, though it seems to be identical with the attributive marker, belongs prosodically to the genitive word *ŋgá*. 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 gentitive markers.

Agreement prefixes of the genitive marker are remarkable in terms of their H tone which is comparable to agreement prefixes of agreeing numerals (section 3.4.8.1), while most other agreement prefixes, such as those used for *-vúdû* 'same, one' or *-fúsì* 'different', are toneless (see section 3.4.9) and surface usually with a L tone (if there is no H tone spreading from the left to the right). Logically, there are two possibilities how to analyze this: either, the agreement prefixes are specified for a H tone or they are also toneless, but take the H tone through spreading from the *-ŋgá* root.

I analyze these prefixes as being specified for a H tone rather than being subject to H tone spreading for two reasons. First, H 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 *-ŋgá* 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 (*-ŋgá* and the numerals '2' though '5') start with a H or HL mora, but never with a L.

3.4.8 Agreeing Quantifiers

I distinguish between two kinds of agreeing quantifiers, namely those that are numerals and thus describe an exact number of entities, and those quantifiers that are non-numeral. Non-numeral quantifiers give an idea of quantity, such as 'some', 'many', or 'all', but in contrast to numerals they are not exact. I will start out with describing numeral quantifiers and then move on to the only non-numeral quantifier that agrees with the noun: *-ésɛ̀* 'all'.[21]

3.4.8.1 Agreeing 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 (in contrast to enumeratives which are discussed in section 3.5.2.1) are used attributively with nouns when counting items.[22]

[21] Of course, Gyeli has more quantifiers than 'all', but they do not constitute agreement target and are therefore discussed in other sections.

[22] Gyeli numerals do not belong to one uniform category. There are monomorphemic (simplex) and polymorphemic (complex) numerals. Even simplex numerals do not belong to one category in terms of parts of speech, but can be classified into three types: i) modifiers, ii) uninflected (invariable) words, and iii) nouns. Complex numerals constitute either a coordination construction or a noun + modifier NP or a combination of the two.

Numerals '2', '3', '4', and '5' The (cardinal) numerals *-báà* '2', *-láálɛ̀* '3', *-nɑ̂̀* '4', and *-tánɛ̀* '5' agree with their head noun. The agreement prefixes of modifier numerals and some examples are listed in Table 3.13.[23]

AGR class	AGR prefix	Example	Gloss
2	**bá-**	*b-ùdì bá-báà*	'two people'
4	**mí-**	*mi-nkwɛ̂ mí-báà*	'two baskets'
6	**má-**	*ma-kí má-báà*	'two eggs'
8	**bé-**	*be-síŋgì bé-báà*	'two cats'

Table 3.13: Agreement prefixes of modifying numerals

All agreement prefixes on the agreeing numerals come with H tones, in contrast to noun class prefixes and agreement prefixes of some other modifiers (see section 3.4.9) which are toneless and thus often surface as L toned.

One could argue that these agreement prefixes may not be analyzed as such, but may rather constitute attributive markers which have the same shape as these prefixes. This is unlikely, however, because enumeratives, as discussed in section 3.5.2.1, 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 (see section 3.4.7 for more information on H tone marking of prefixes).

The cardinal numerals from '2' through '5' invariably follow the head noun, as shown in (151).

(151)

a. b-ùdɑ̂̀ **bá**-báà
ba2-woman 2-two
'two women'

b. b-ùdɑ̂̀ **bá**-láálɛ̀
ba2-woman 2-three
'three women'

c. b-ùdɑ̂̀ **bá**-nɑ̂̀
ba2-woman 2-four
'four women'

d. b-ùdɑ̂̀ **bá**-tánɛ̀
ba2-woman 2-five
'five women'

[23]Since all the numerals that take agreement markers are inherently plural, singular class prefixes are never used.

3.4.8.2 Non-Numeral Quantifier *-ésɛ̀* 'all'

Non-numeral quantifiers can semantically be distinguished as intersective, universal, or proportionality quantifiers in the nominal domain (D- quantifiers). 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." *Intersective* quantifiers are, for instance, 'many', 'several', 'few', 'a certain/other', 'some' or 'no'. The authors state that most intersective quantifiers in Bantu languages agree with their head noun. As I will show below, this is not true for Gyeli which often prefers nominal genitive constructions (see section 3.7.1.4) in order to express quantifiers such as 'many' or 'few'. *Universal* quantifiers express totality and contain items such as 'all' and 'every' (Zerbian & Krifka 2008: 394). Finally, *proportionality* quantifiers such as 'most', 'half of', or 'many of' relate a given quantity to a set of entities. Zerbian & Krifka (2008: 398) propose that Bantu languages generally use complex morphosyntactic constructions to express these.

Investigating Gyeli quantifiers show, however, that just like in many other languages these semantic distinctions do not map onto distinct construction types. Rather, Gyeli distinguishes four types of quantifiers which do not correspond with the semantic groupings presented above. Gyeli quantifiers can either be expressed as a nominal genitive construction parallel to the English expression 'a multitude of x'. This construction type is the most frequent one and discussed in section 3.7.1.4. Then, Also, there are invariable quantifiers (see section 3.5.3) that either precede or follow the noun, but they do not agree with it. Further, the 'all' quantifier *-ésɛ̀* is a modifier and agrees with its head noun as shown in this section. Finally, reduplication is a means of expressing 'each' in a distributive sense as decribed in section 3.6.1.

The universal quantifier 'all' consists of a root which takes an agreement marker that agrees with the noun in class according to the scheme AGR-*ésɛ̀*. Table 3.14 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**-ésè	'all (the parts of) the person'
cl. 2	bùdì	**b**-ésè	'all people'
cl. 3	nkwě	**w**-ésè	'all (the parts of) the basket'
cl. 4	mi-nkwě	**my**-ésè	'all baskets'
cl. 5	le-dùndá	**l**-ésè	'all (the parts of) the sparrow'
cl. 6	ma-dùndà	**m**-ésè	'all sparrows'
cl. 7	síŋgì	**y**-ésè	'all (the parts of) the cat'
cl. 8	be-síŋgì	**by**-ésè	'all cats'
cl. 9	ndáwɔ̀	**ny**-ésè	'all the house'

Table 3.14: AGR-*ésè* 'all' in various agreement classes

In Gyeli, just as in English, 'all' is typically used with plural nouns. Unlike English, though, the singular counterparts can, in a specific context, be modified by *-ésè* 'all' as well which is also shown in Table 3.14. 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, *síŋgì yésè* '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 'the whole cat', though, which would mean that a cat is taken in its entirety withuout being cut up. (152) illustrates the difference between 'all' and 'whole' (as discussed in section 3.5.3.2 on invariable quantifiers following the noun).

(152) a. síŋgì y-ésè
∅7.cat 7-all
'all (the parts of) the cat'

b. síŋgì màndjìmɔ̀
∅7.cat whole
'the whole cat (in its entirety)'

3.4.9 Deictic Modifiers

Another set of modifiers that take agreement prefixes as shown in Table 3.1 in section 3.2.1 are the deictic modifiers[24] *-ɔ́(né)gá* '(an)other', *-vúdû* 'one,

[24]Deictic modifiers could be argued to constitute adjectives on the basis of their morphosyntactic behavior of modifying nouns. 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." These words describing properties of nouns in Gyeli

same', and *-fúsì* 'different'. They agree with their head noun which they follow, as shown in (153).

(153) a. m-ùdì n-ɔ́(nɛ́)gá
N1-person 1-other
'a/the other person'

b. m-ùdì m-vúdṹ
N1-person 1-same
'the same person'

c. m-ùdì m-fúsì
N1-person 1-different
'a different person'

Deictic modifiers do not constitute, however, a uniform category, but display different agreement prefix patterns, as summarized in Table 3.15. The agreement prefixes used for deictic modifiers are similar to noun class prefixes.

-ɔ́(nɛ́)gá	-vúdṹ	-fúsì
n-	m-	m-
b-	bà-	bà-
w-	m-	-
my-	mì-	mì-
l-	lè-	lè-
m-	mà-	mà-
y-	-	-
by-	bì-	bì-
ny-	m-	-

Table 3.15: Agreement prefixes of deictic modifiers

-ɔ́(nɛ́)gá 'other' differs from the other two deictic modifiers for the reason that its stem starts with a vowel, as discussed in section 3.2.1 on agreement classes. The other two modifiers have both consonant initial stems and their CV- shape prefixes surface with L tones. Still, they differ in cl. 3 and 9: *-vúdṹ* 'one, same' has a prefix *m-* in these classes while *-fúsì* 'different' does

are uninflected and discussed in section 3.5.1 on 'qualifiers'. A more detailed discussion of the status of qualifiers versus adjectives is given there, too.

not have any agreement prefixes in these classes. In the following, I will provide examples of each of the modifiers in the various agreement classes.

-ɔ́(né)gá **'(an)other'** The full form 'other' in careful speech is *-ɔ́négá*. In fast speech, however, a shortened form AGR-*ɔ́gá* is used where *né* is omitted. The option to omit *né* is indicated by the brackets in Table 3.16.

cl. 1	mùdì	**n**-ɔ́	(né) gá	'another person'
cl. 2	bùdì	**b**-ɔ́	(né) gá	'other people'
cl. 3	nkɛ̌	**w**-ɔ́	(né) gá	'another basket'
cl. 4	mi-nkwɛ̌	**my**-ɔ́	(né) gá	'other baskets'
cl. 5	le-dùndà	**l**-ɔ́	(né) gá	'another sparrow'
cl. 6	ma-dùndà	**m**-ɔ́	(né) gá	'other sparrows'
cl. 7	síŋgì	**y**-ɔ́	(né) gá	'another cat'
cl. 8	be-síŋgì	**by**-ɔ́	(né) gá	'other cats'
cl. 9	ndáwɔ̀	**ny**-ɔ́	(né) gá	'another house'

Table 3.16: AGR-*ɔ́ (né) gá* 'other' in various agreement classes

-vúdɰ̂ **'one, same'** *-vúdɰ̂* can denote both the cardinal numeral '1' and the deictic modifier meaning 'same'. It is classified here with the deictic modifiers rather than with the numeral modifiers from '2' through '5' because the numerals differ in their agreement pattern in that their agreement prefixes carry a H tone while deictic modifier CV- agreement prefixes come with a L tone.

As the cardinal numeral '1', *-vúdɰ̂* logically only occurs with singular entities it modifies. If it is used in order to express identity of entities, however, *-vúdɰ̂* also takes an agreement prefix for plural classes, as shown in Table 3.17.

cl. 1	mùdì	**m**-vúdṹ	‘one/same person’
cl. 2	bùdì	**bà**-vúdṹ	‘same people’
cl. 3	nkɛ̌	**m**-vúdṹ	‘one/same basket’
cl. 4	mi-nkwɛ̌	**mì**-vúdṹ	‘same baskets’
cl. 5	le-dùndà	**lè**-vúdṹ	‘one/same sparrow’
cl. 6	ma-dùndà	**mà**-vúdṹ	‘same sparrows’
cl. 7	síŋgì	∅-vúdṹ	‘one/same cat’
cl. 8	be-síŋgì	**bè**-vúdṹ	‘same cats’
cl. 9	ndáwɔ̀	**m**-vúdṹ	‘one/same house’

Table 3.17: AGR-*vúdṹ* ‘one/same’ in various agreement classes

-fúsì **‘different’** *-fúsì* ‘different’ follows the noun it modifies just as the other deictic modifiers. It has, however, yet another pattern of agreement prefixes that even differs from -vúdṹ ‘same’ even though both of them start with a labiodental fricative. While -vúdṹ ‘same’ takes the nasal *m-* as agreement prefix for classes 3 and 9, *-fúsì* ‘different’ does not take any agreement prefixes for these classes. Examples for *fúsì* ‘different’ in different agreement classes are provided in Table 3.18.

cl. 1	mùdì	**m**-fúsì	‘a different person’
cl. 2	bùdì	**bà**-fúsì	‘different people’
cl. 3	nkɛ̌	∅-fúsì	‘a different basket’
cl. 4	mi-nkwɛ̌	**mì**-fúsì	‘different baskets’
cl. 5	le-dùndà	**lè**-fúsì	‘a different sparrow’
cl. 6	ma-dùndà	**mà**-fúsì	‘different sparrows’
cl. 7	síŋgì	∅-fúsì	‘a different cat’
cl. 8	be-síŋgì	**bè**-fúsì	‘different cats’
cl. 9	ndáwɔ̀	∅-fúsì	‘a different house’

Table 3.18: AGR-*fúsì* ‘different’ in various agreement classes

3.5 Invariable Modifiers in the Noun Phrase

The noun phrase in Gyeli also contains invariable modifiers which do not agree with the head noun. These include qualifiers, numeral and non-

numeral quantifiers, question words, and locative adpositions which are presented in this section.

3.5.1 Qualifiers

Gyeli has a small set of words which I call 'qualifiers'. They denote properties of the noun such as value and color. In other (Bantu) languages, such properties are often expressed by word classes that are viewed as adjectives. Gyeli, however, does not have an adjective category. Qualifiers in Gyeli cannot be classified as adjectives because they lack the defining criteria of agreement with the noun (see for instance Bhat (1994) and Bhat & Pustet (2000: 757) for a detailed definition of 'adjectives'). Typical adjectives denoting properties such as 'good', 'bad', 'big', 'small', 'young', or 'old' are either expressed by uninflected words, namely qualifiers, or nouns while modifiers which do agree with the noun, fall rather into a category of non-content words, e.g. quantifiers or deictic modifiers.

Qualifiers in Gyeli can also not be classified as nouns because they do not exhibit 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 demonstratives or possessive pronouns. Third, they can generally not serve as the head of a noun + noun genitive construction. Qualifiers may at best be viewed as defective nouns which lack the above listed properties of typical nouns. In this grammar, I treat them as a category on their own.

Table 3.19 provides a list of Gyeli qualifiers. They describe properties such as value, size and color.[25] Other properties such as 'tall' or 'old' are expressed by nouns in noun + noun constructions as described in section 3.7.1.3. When denoting properties of a noun, qualifiers enter a genitive construction with a noun as the dependent element as discussed in section 3.7.2.

[25]In Bulu, the closest contact language, Alexandre (1955: 21) classifies similar lexemes to Gyeli 'good' and 'bad', which in Bulu are *mba* 'good' and *mbia*, as nouns with an adjectival use ("emploi de noms comme adjectifs").

value	mpà	'good'
	bíwɔ̀	'bad'
size	píyɔ̀	'small'
	nɛ́nɛ̀	'big'
color	námbàmbàlà	'white'
	návyûvyû	'black'
	nábèbè	'red'
	nápfûpfû	'darkened color'
	náyɛ̂yɛ̂	'brightened color'

Table 3.19: Qualifiers

Strikingly, all color terms start with *ná-*. This *ná-* might be a grammaticalized similative marker while the remainder of the lexeme used to be a verb. There is evidence that, historically, color terms of at least some related languages of the area were verbs, for instance in Bulu,[26] even though they may have developped into other parts of speech than in Gyeli. It is likely that such color verbs were grammaticalized, together with the *ná* similative marker, into a synchronic uninflected element of the noun phrase.

Another argument in favor of grammaticalized verbs with a similative marker comes from the atypical terms *nápfûpfû* and *náyɛ̂yɛ* which rather describe the change of color than a specific hue. When asked for the meaning of these atypical colors, speakers would give a verbal explanation, namely that a more prototypical color such as 'black', 'white', or 'red' has changed by either having become darker (*nápfûpfû*) or brighter, being 'bleached out' (*náyɛ̂yɛ*). In contrast, other colors are referred to by French adjectives in explanations.

According to traditional color theories, these two special color terms are rather 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 *nápfûpfû* and *náyɛ̂yɛ* as color terms because they do

[26]Synchronically, the Bulu basic color terms are nouns: *évìndì* 'black', *évèlè* 'red', and *éfùmùlù* 'white'. 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-ì* '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.

have a morpho-syntactic structure that is reserved to basic color terms (I have not come across other derived verbs that are preceded by or have merged with a similative marker). Further, they only show up in discourse when talking about colors.

Generally, for a Bantu language one would expect only three basic color words, namely 'black', 'red', and 'white'. Gyeli has more color terms than those, for instance *màká* 'green' which is a noun and also means 'leaves'. Those other color terms are, however, recently acquired and differ in their morpho-syntactic status in that they are nouns rather than qualifiers. More information on colors and color perception including a comparison across Bagyeli and Bantu farmer communities is given in Borchardt (to appear).

Syntactically, qualifiers modify nouns in two different constructions. Either, the qualifier directly follows the head noun or an attributive marker that agrees with the head noun occurs between head and qualifier.

1) [HEAD QUAL] 2) [HEAD ATT QUAL]

Examples of both construction types are given in (154) and (155), respectively.

(154) a. nkɔ́lɔ̀ mpà
Ø-watch good
'a/the good watch'

b. nkɔ́lɔ̀ nɛ́nɛ̀
Ø-watch big
'a/the big watch'

c. nkɔ́lɔ̀ nábèbè
Ø-watch red
'a/the red watch'

(155) a. nkɔ́lɔ̀ wá mpà
Ø-watch 3:ATT good
'a/the good watch'

b. nkɔ́lɔ̀ wá nɛ́nɛ̀
Ø-watch 3:ATT big
'a/the big watch'

c. nkɔ́lɔ̀ wá nábèbè
Ø-watch 3:ATT red
'a/the red watch'

Constructions that either take or optionally omit the attributive marker are discussed in section 3.7.

3.5.2 Invariable Numerals

Gyeli has simplex cardinal numerals which follow the noun just like modifier numerals discussed in section 3.4.8.1, but which do not agree with the noun, as shown in (156). In contrast to qualifiers, they never occur in a construction involving an attributive marker.

(156)

a. b-ùdə̂ ntùɔ́
ba2-woman six
'six women'

b. b-ùdə̂ mpúɛ̀rɛ́
ba2-woman seven
'seven women'

c. b-ùdə̂ lɔ̀mbì
ba2-woman eight
'eight women'

d. b-ùdə̂ rèbvùá
ba2-woman nine
'nine women'

3.5.2.1 Enumeratives

Enumeratives are not strictly speaking invariable words within a noun phrase. Since they are, however, invariable, I will discuss them here. Presenting the enumeratives, I will also explain the mathematical structures used in forming Gyeli numerals after providing some enthnographic 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.[27]

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.

Arthmetic 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 (sections 3.4.8.1 and 3.5.2), ordinals (section 3.7.5), or distributives (section 3.6.2).

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

[27]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.

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 serves 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 (see section 3.7.1.4) while the other simplex numerals are not. The numerals from '2' through '5' are clearly modifiers (see section 3.4.8.1) which take agreement prefixes. '1' has a special status as a quantifier and deictic modifier at the same time and is discussed in section 3.4.9. The numerals from '6' though' '9' (section 3.5.2) 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’	vúdṵ̃	wúrɛ̀
‘2’	bí-báà	bá
‘3’	bí-láálɛ̀	bí-lá
‘4’	bí-nã̂	bí-ná
‘5’	bí-tánɛ̀	bí-tán
‘6’	ntùɔ́	ntùɔ́
‘7’	mpúɛ̀rɛ́	mbúɛ̀rɛ́
‘8’	lɔ̀mbì	lɔ̀mbì
‘9’	rèbvùá	rèbvùá
‘10’	lè-wúmɔ̀	wúm
’100’	bwúyà	búyà
’1000’	tɔ́dyíní	tɔ́gíní

Table 3.20: 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. Neverthess, the simplex numerals from ‘2’ through ‘5’ require a prefix even as enumeratives, as shown in Table 3.20. 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-wúmɔ̀* ‘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 *tɔ́dyíní* ‘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-wúmɔ̀ ná vúdɰ̃̀	‘20’	mà-wúmɔ̀ má-báà
‘12’	lè-wúmɔ̀ ná bí-báà	‘30’	mà-wúmɔ̀ má-láálɛ̀
‘13’	lè-wúmɔ̀ ná bí-láálɛ̀	‘40’	mà-wúmɔ̀ má-nɰ̃̂
‘14’	lè-wúmɔ̀ ná bí-nɰ̃̂	‘50’	mà-wúmɔ̀ má-tánɛ̀
‘15’	lè-wúmɔ̀ ná bí-tánɛ̀	‘60’	mà-wúmɔ̀ ntùɔ́
‘16’	lè-wúmɔ̀ ná ntùɔ́	‘70’	mà-wúmɔ̀ mpúɛ̀rɛ́
‘17’	lè-wúmɔ̀ ná mpúɛ̀rɛ́	‘80’	mà-wúmɔ̀ lɔ̀mbì
‘18’	lè-wúmɔ̀ ná lɔ̀mbì	‘90’	mà-wúmɔ̀ rèbvùá
‘19’	lè-wúmɔ̀ ná rèbvùá	‘200’	bì-bwúyà bí-báà
		‘2000’	bà-tɔ́dyínì bá-báà

Table 3.21: 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 3.21. 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.[28] 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

[28]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 *tɔ́dyínì* '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 3.22, 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-wúmɔ̀	má-báà	ná bí-láálɛ̀	'23' (10 x 2 + 3)
mà-wúmɔ̀	má-tánɛ̀	ná lɔ̀mbì	'58' (10 x 5 + 8)
mà-wúmɔ̀	mpúɛ̀rɛ	ná bí-nã̀	'74' (10 x 7 + 4)
mà-wúmɔ̀	rèbvùá	ná vúdũ	'91' (10 x 9 + 1)

Table 3.22: 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 *bwúyà* '100' or *tɔ́dyínì* '1000' while the addend may be more complex, including for instance a product as shown in Table 3.23.

Augend	**Addend**		
	Multiplicand	**Multiplier**	
bwúyà ná	mà-wúmɔ̀	má-báà	‘120’ (100 + 10 x 2)
bwúyà ná	mà-wúmɔ̀	ntùɔ́	‘160’ (100 + 10 x 6)
tɔ́dyínì ná	mà-wúmɔ̀	má-tánɛ̀	‘1050’ (1000 + 10 x 5)
tɔ́dyínì ná	bì-bwúyà	bí-tánɛ̀	‘1500’ (1000 + 100 x 5)

Table 3.23: 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 (157). 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.

(157) bà-tɔ́dyínì bá-tánɛ̀ ná bè-bwúyà bé-báà ná mà-wúmɔ̀
ba2-thousand 2-five COM be8-hundred 7-two COM ma6-ten
má-láálɛ̀ ná lɔ̀mbì
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 3.24. The inverse, however, where a Gyeli numeral consists of multiple multiplication operations without involving addition is not possible.

Addition only				
	bwúyà ná	lè-wúmɔ̀ ná	bí-báà	‘112’ (100 + 10 + 2)
tɔ́dyínì ná		lè-wúmɔ̀ ná	bí-báà	‘1012’ (100 + 10 + 2)
tɔ́dyínì ná	bwúyà ná	lè-wúmɔ̀ ná	bí-báà	‘1112’ (100 + 100 + 10 + 2)

Table 3.24: Multiple addition operations

3.5.3 Invariable Quantifiers

There are a few quantifiers in Gyeli that are invariable and thus do not count as modifiers of the noun. There are invariable quantifiers that precede the noun and those that follow it.

3.5.3.1 Prenominal Invariable Quantifiers

tɔ̀ **'any'** The quantifier *tɔ̀* 'any' is invariable and precedes the quantified noun as in (158a). The use of *tɔ̀* in negated sentences is grammatically not obligatory, as shown in (158b), where the same sentence occurs without the quantifier under negation. Semantically, however, there is a difference in that no person at all is seen in (158a), while (158b) negates a specific, known person.

(158) a. mɛ̀ɛ́ nyɛ́-lɛ́ **tɔ̀** m-ùdì
1S see-NEG **any** N1-person
'I don't see any person.'

b. mɛ̀ɛ́ nyɛ́-lɛ́ m-ùdì
1S see-NEG N1-person
'I don't see the person.'

3.5.3.2 Postnominal Invariable Quantifiers

bvùbvù **'many, much'** While 'many, much' can be used in a noun + noun genitive construction as shown in section 3.7.1.4, the same lexeme can also occur as an invariable quantifier following the quantified noun as shown in (159). In contrast to the nominal quantifier *bvúbvù nyà*, the invariable one changes in the tonal pattern to L L *bvùbvù*. The nominal quantifier seems to be the more marked form which occurs less frequently. Possible meaning differences are subtle; speakers claim that both mean the same and can be used in the same contexts.

(159) a. b-ùdì bvùbvù
ba2-people many
'many people'

b. mà-jíwɔ́ bvùbvù
ma6-water much
'much water'

Just like the nominal variant, *bvùbvù* 'many, much' is not sensitive to a mass/count distinction and occurs both with countable and uncountable nouns alike as shown in (159a) and (159b).

màndjìmɔ̀ **'whole, entire'** *màndjìmɔ̀* 'whole, entire' is another invariable quantifier that follows the quantified noun as in (160). Despite the similarity to the nominal modifier *ndjìmɔ̀ wá* 'a certain' plus something that looks like a class 6 prefix, *màndjìmɔ̀* 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 N + N genitive construction as the head.

(160) a. púsí màndjìmɔ̀
∅7.bottle whole
'the whole bottle'

b. ndáwɔ̀ màndjìmɔ
∅9.house whole
'the entire house'

c. bè-síŋgì màndjìmɔ
be8-cat whole
'the entire cats'

màndjìmɔ̀ is sensitive to a mass/count distinction in that it does not appear with uncountable nouns, neither liquids nor granular aggregates, as shown in (161). Using *màndjìmɔ̀* with mass nouns requires a specification of the physical entity, for instance a bottle as in (161c).

(161) a. *mà-tàŋgɔ̀ màndjìmɔ̀
ma6-palm.wine whole
'the whole palm wine'

b. *ndísì màndjìmɔ
∅3.rice whole
'the entire rice'

c. púsí (yá) má-vúdɔ̀ màndjìmɔ̀
∅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 *màndjìmɔ̀*, their plural counterpart allows for its use as

in (162). 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.

(162) mì-ndísì màndjìmɔ̀
mi4-rice whole
'the whole rice (= all its types or packages)'

3.5.4 Locative Adpositions

Gyeli has only a few locative adpositions, one of which precedes the noun, the other following it. Generally, Gyeli has a limited range of locative adpositions. In many contexts where English, for instance, requires a locative preposition, such as in 'I go **to** town.', Gyeli does not use any locative marker or preposition at all, as shown in (163). There are two options of saying 'I go to town.', differing in the noun used for the landmark.

(163) a. mɛ́ kɛ́ m-ɑ̂̃
1S.PRES go ma6.sea
'I go to town[29].'

b. mɛ́ kɛ́ tísɔ̀nì
1S.PRES go ∅7.town
'I go to town.'

Other directionals that are usually employed in English where they typically include prepositions, such as 'go up', 'go down', or 'go around', are expressed by verbs in Gyeli, as illustrated in (164). Therefore, they do not include further adpositions.

(164) a. mɛ́ bédégá nkùlɛ́
1S.PRES ascend ∅3.hill
'I go up the hill.'

b. mɛ́ sìlégá nkùlɛ́
1S.PRES descend ∅3.hill
'I go down the hill.'

[29]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.

c. mɛ́ kɛ́ vyàmbɛ̀lɛ̀ nkùlɛ́
1S.PRES go surround ∅3.hill
'I go aound the hill.'

In the following, I will discuss the Gyeli preposition *ɛ́* and postposition *dé* in turn.

3.5.4.1 Prenominal *ɛ́*

The preposition *ɛ́*[30] is most frequently used to accompany a locative adverb as discussed in section 4.2.1 and listed in (165).

(165) a. ɛ́ vâ 'here'
b. ɛ́ wû 'there (MID)'
c. ɛ́ pɛ̀ 'there (DIST)'
d. ɛ́ bà 'to, at'

Further, the preposition *ɛ́* can precede a noun in a locative context as in (166).

(166) a. ɛ́ tísɔ̀nì 'in town'
b. ɛ́ nkɔ̀lɛ́ 'on the line'

Semantically, *ɛ́* is used as a locative preposition when the described location is about is about any spatial relation except containment. Spatial containment relations are expressed by the postposition *dé* as discussed in section 3.5.4.2.

3.5.4.2 Postnominal *dé*

The locative postposition *dé* is used when a spatial relation of CONTAINMENT is referred to. Most often, it is followed by *tù* 'inside', but the latter is not obligatory. (167) provides some examples.

(167) a. ndáwɔ̀ dé (tù) 'in the house'
b. djí dé (tù) 'in the forest'

Also, *dé* can describe spatial relations of CONTACT as in (168).

[30]The corresponding preposition in Mabi is *ɔ́*.

(168) nsɔ́ wɔ̀ɔ̀ wɛ̀ nyúlɛ̀ dé
∅3.worm 3.? 2S ∅9.body LOC
'The worm is on your body.'

Spatial relations are often described by noun + noun attributive constructions. These are described in section 3.7.1.5.

3.5.4.3 Other Locative Postpositions

Typically, specific locations are expressed by noun + noun constructions as outlined in section 3.7.1.5. Some of the locative nouns described there can also be used as locative postpositions. They behave like the postposition *dé* as explained in section 3.5.4.2, but differ in their degree of grammaticalization. *dé* is so far grammaticalized that an original meaning cannot be discerned anymore. In contrast, these other locative postpositions are also clearly used as nouns and as such their meaning is obvious. (169) lists the various nouns that can be also used as postpositions.

(169) a. ndáwɔ̀ **dyúwɔ̀** 'on top/over the house' > dyúwɔ̀ 'top'
b. ndáwɔ̀ **sí** 'under the house' > sí 'ground'
c. ndáwɔ̀ **písɛ̀** 'behind the basket' > písɛ̀ 'back'
d. ndáwɔ̀ **sɔ̀** 'in front of the house' > sɔ́ 'front'

3.6 Distributive Constructions

Gyeli makes use of constructional iteration in the nominal domain to express distributivity both for the quantifier 'each' and for distributive numerals. Both instances are discussed in turn.

3.6.1 Distributive Construction with *náà*

In order to express 'each', a (countable) noun is iterated while *náà* is inserted to link the two nouns. The status of *náà* is not entirely clear. It does not seem to be a comitative marker judging from the tones since they come with a L tone. *náà* rather resembles the adverb *nâ* 'still, again', which, however, has a short vowel instead of a long one.

The quantified noun can come both in the singular or in the plural as shown in (170). The use of plural nouns as in (170b) implies a distribution over a set of entities.

(170) 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 (171). 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 (171c).

(171) a. *ma-jíwɔ́ náà ma-jíwɔ́
ma6-water by? ma6-water
'each water'

b. *ndísì náà ndísì
∅3.rice by? nc3.rice
'each rice'

c. mi-ndísì náà mi-ndísì
mi4-rice by? nc4-rice
'each set of packages of rice'

3.6.2 Distributive Numerals

Distributives form series of numerals which are expressed by repetition of the numeral. They serve the purpose of disambiguating sentences such as in (172) which can have either a collective or a distributive reading.

(172) 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 (172) are, however, ambiguous and allow for both interpretations.

Some languages have means to regularly disambiguating 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. (173) illustrates how distributives may be used in Gyeli.

(173) b-wánɔ̀ bà dé !mí-mbàŋgá **mí-mbáà mí-mbáà**
ba2-child 2:PST1 eat.PST1 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 3.25 lists Gyeli distributives using the noun *mbàŋgá* 'nut' of gender 3/4 as an example.

Examples of distributive numerals		Gloss
mbàŋgá	*mvúdṹ mvúdṹ*	'one nut each'
mi-mbàŋgá	*mí-mbáà mí-mbáà*	'two nuts each'
mi-mbàŋgá	*mí-nláálɛ̀ mí-nláálɛ̀*	'three nuts each'
mi-mbàŋgá	*mí-nɑ̃́ mí-nɑ̃́*	'four nuts each'
mi-mbàŋgá	*mí-ntánɛ̀ mí-ntánɛ̀*	'five nuts each'
mi-mbàŋgá	*ntùɔ́ ntùɔ́*	'six nuts each'
mi-mbàŋgá	*mpúɛ̀rɛ́ mpúɛ̀rɛ́*	'seven nuts each'
mi-mbàŋgá	*lɔ̀mbì lɔ̀mbì*	'eight nuts each'
mi-mbàŋgá	*rèbvùá rèbvùá*	'nine nuts each'
mi-mbàŋgá	*le-wúmɔ̀ le-wúmɔ̀*	'ten nuts each'
mi-mbàŋgá	*le-wúmɔ̀ ná mí-báà le-wúmɔ̀ ná mí-báà*	'twelve nuts each'
mi-mbàŋgá	*ma-wúmɔ̀ má-báà ma-wúmɔ̀ má-báà*	'twenty nuts each'
mi-mbàŋgá	*bwúyà bwúyà*	'a hundred nuts each'
mi-mbàŋgá	*tɔ́dyínì tɔ́dyínì*	'a thousand nuts each'

Table 3.25: Distributive numerals

3.7 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, canoncially, a 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 (174).

(174) Kagulu (Bantu G12)

m-eji$_{R1}$ g-a$_{REL}$ mu-nyu$_{R2}$
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 3.4.6 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 qualifiers, 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.

3.7.1 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.

3.7.1.1 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 (175). In some special cases, however, the attributive is obligatorily, as in (176).[31]

(175) m-ínɔ̀ (má) bá-sɔ́
ma6-name 6:ATT ba2-friend
'the friends' names'

[31]Note that attributive markers in parentheses are optional while those without brackets cannot be omitted, but must obligatorily appear.

(176) dj-ínɔ̀ lé sɔ́
le5-name 5:ATT ∅1.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 a 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 a attributive marker spreads on to a CV- noun class prefix of the dependent noun as shown in (177) 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_2, the tonal process might mark the dependency relation and an overt attributive marker is not necessary as in (177a), 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 (177b).

(177) 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, though. (178) counterexemplifies the tonal hypothesis because in (178a), there is no high tone spreading, but the use of the attributive marker is still optional while in (178b) there is high tone spreading, but the use of the attributive marker is still obligatory.

(178) a. m-páà (wà) nlàmbɔ́
N1-president 1:ATT ∅3.country
'president of the country'

b. bà-páà bá nlàmbɔ́
ba2-president 2:ATT ∅3.country
'presidents of the country'

Phonological factors: syllable length There is a tendency for monosyllabic dependent nouns R_2 to require a attributive marker rather than allowing for its omission as in (179) compared to bisyllabic dependent nouns R_2 in (180). A bit more than half of the elicited attributive constructions with monosyllabic R_2 behave this way.

(179) a. sɔ́ wà n-tí
∅1.friend 1:ATT N1-in.law
'the friend of the in-law'

b. bà-sɔ́ bá n-tí
ba2-friend 2:ATT N1-in.law
'the friends of the in-law'

(180) a. sɔ́ (wà) bà-tí
∅1.friend 1:ATT ba2-in.law
'the friend of the in-laws'

b. bà-sɔ́ (bá) bá-tí
ba2-friend 2:ATT ba2-in.law
'friends of the in-laws'

There are, however, many exceptions as in (181) where the dependent noun R_2 is monosyllabic, but the use of the attributive marker is still optional.

(181) a. ndzí (nyà) nsɛ́
∅9.path 9:ATT ∅3.sand
'path of sand'

b. dj-ìnɔ́ (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 (182a). 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 (182b), the use of the attributive is mostly optional.

(182) a. ndzí nyà táwɔ̀
∅9.path 9:ATT ∅7.goat
'path of the goat'

b. ndzí (nyà) bè-táwɔ̀
∅9.path 9:ATT be8-goat
'path of the goats'

Again, there are examples, such as in (183), where the inverse is the case.

(183) a. dj-ìnɔ́ (lé) d-á'á
le5-name 5:ATT le5-crab
'name of the crab'

b. dj-ìnɔ́ 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),[32] by Beavon (2006) for Njyem (A84)[33] and by Heath (2003) for Makaa (A83).[34] For Gyeli, however, this

[32]Henson (2007: 113) points out for Kol that "For most singular nouns, the 'basic' associative marker is either zero or a tonal marker".

[33]Beavon (2006: 118) shows that head nouns of classes 1, 9, and 10 in Njyem occur without associative markers.

[34]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

does not seem to be the case for either the head nor the dependent noun. Changing the noun class of R_1 in (184) gives both optional omission of the attributive as in (184a) and obligatory use of the attributive marker as in (184b).

(184) a. sɔ́ (wà) ŋ-gyɛ̂̂
∅1.friend 1:ATT N1-stranger
'friend of the stranger'

b. ndzí nyà ŋ-gyɛ̂̂
∅9.path 9:ATT N1-stranger
'path of the stranger'

The same is true for the dependent noun R_2 in (185): (185a) shows a case where the attributive can be omitted while it cannot in (185b).

(185) a. sɔ́ (wà) m-ùdə̂̂
friend.1 1:ATT N1-woman
'friend of the woman'

b. sɔ́ wà nkwànò
∅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 (186), all constituents belong to noun class 7. In (C71), the use of the attributive is obligatory while in (C72) its use is optional.

(186) a. vɛ́ɛ̀lá yá yí
∅7.decoration 7:ATT ∅7.wood
'decoration of the wood'

b. vɛ́ɛ̀lá (yá) táwɔ̀
∅7.decoration 7:ATT ∅7.goat
'decoration of the goat'

Morphological factors: overt noun class marking of R_2 There is a tendency to omit the attributive marker when the dependent noun R_2 has a syllabic noun class prefix as seen for instance in (177a) or (180a). This is true for more than 80% of the elicited attributive construction examples.

Heath (2003: 341).

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 (187). In more than 90% of these cases, speakers prefer to omit the attributive.

(187) a. bà-sɔ́ (bá) bá-tí
ba2-friend 2:ATT ba2-in.law
'the friends of the in-laws'

b. dj-ìnɔ́ (lé) lé-kă
le5-name 5:ATT le5-clan
'the name of the clan'

Nevertheless, there are again counterexamples as in (188).

(188) 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 (189) and colors in (190).

(189) kwádɔ́ (yá) Ngòló
∅7.village 7:ATT PN
'the village of Ngolo'

(190) nsínó (wá) nábèbè
∅3.color 3:ATT red
'the color red'

Also numeral head nouns are always followed by an optional attributive marker as shown in (191).

(191) a. lè-wúmɔ̀ (lé) bá-sɔ́
le5-ten 5:ATT ba2-friend
'ten friends'

b. bwúyà (yá) bá-sɔ́
∅7.hundred 7:ATT ba2-friend
'hundred friends'

c. tɔ́gyínì (wà) bà-sɔ́
∅1.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 (192a) and (193a). In these cases, the second noun rather serves as a modifying noun to the head. In contrast, (192b) and (193b) which require the attributive marker, are attributive possession constructions.

(192) a. sɔ́ m-ùdə̂
∅1.friend N1-woman
'the female friend'

b. sɔ́ wà m-ùdə̂
∅1.friend 1:ATT N1-woman
'the friend of the woman'

(193) a. kfúbɔ̀ dyá
∅1.chicken ∅7.length
'the tall chicken'

b. kfúbɔ̀ wà dyá
∅1.chicken 1:ATT ∅7.length
'the chicken that is far away' (poulet eloigné)

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 (194), for instance, it seems that speakers natuarlly think of a country usually having only one president. In this case (194a), the attributive can be omitted. If, however, speakers talk about several presidents as in (194a), for instance historically successive presidents, this is the more marked form and there the use of the attributive is obligatory.

(194) a. m-páà (wà) nlàmbɔ́
N1-president 1:ATT ∅3.country
'president of the country'

b. bà-páà bá nlàmbɔ́
ba2-president 2:ATT ∅3.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.

3.7.1.2 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 (195), where the head noun changes noun class. The head noun expresses the possessee while the dependent noun expresses the possessor.

(195) a. m-ùdə̂ wà m-ùdì
N1-woman 1:ATT N1-person
'the person's wife'

b. b-ùdə̂ 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 (196). No matter whether the possessee is a kin (196a), body part (196b), or material possession (196c), the attributive marker always agrees in class with the head noun (possessee).

(196) a. nyə̂ **wà** m-wánɔ̀
∅1.mother 1:ATT N1-child
'the child's mother'

b. d-úú **lé** m-wánɔ̀
le5-nose 5:ATT N1-child
'the child's nose'

c. nkwálá **wá** m-wánɔ̀
∅3.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 as discussed in section 3.4.7 and exemplified again in (197). In (197a), the possessor is expressed by a proper name, thus it is preceded by a genitive marker. In contrast, a parallel construction in (197b) where the possessor is not a proper name, but the noun *mùdə̂* 'woman', the construction occurs with a attributive marker instead.

(197) a. m-ùdû **ŋgá** Nándtùngù
N1-man GEN PN
'Nandtoungou's husband'

b. m-ùdə̂ **wà** m-ùdə̂
N1-man 1:ATT N1-person
'the woman's husband'

c. mà-kwámɔ́ **má-ŋgá** Nándtùngù
ma6-bag 6-GEN 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 (197c).[35] Therefore, the attributive marker between two nouns is conditioned both by the head and the dependent noun. The dependent possessor noun determines whether a attributive or a genitive marker is used (depending whether it is a proper noun). The head possessee noun determines number/agreement class marking.

3.7.1.3 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 (198).

(198) a. sɔ́ wà ntúlɛ́
∅1.friend 1:ATT 3.oldness
'old friend'

b. b-ùdɑ̂̃ bá bé-bɛ̃́
ba2-woman 2:ATT be8-beauty
'beautiful women'

c. m-ùdì wà ŋgvùlɛ́
N1-person 1:ATT ∅9.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 (199).

[35] See section 3.4.7.

(199) a. m-ùdṵ̂ wà tílì
N1-man 1:ATT ∅7.smallness
'small man'

b. tílì yá m-ùdṵ̂
∅7.smallness 7:ATT N1-man
'small man/smallness of man'

(199a) exhibits the unmarked order which can literally be translated as 'man of smallness'. In contrast, the order of the nouns is reverse in (199b). 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.

3.7.1.4 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 quantifiy 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'.[36] In fact, the majority of quantifiers are nominal and discussed in the following.

Numerals Some simplex numerals in Gyeli constitute nouns. As discussed in section 3.5.2.1 on enumeratives, these are the bases of the system, namely *le-wúmɔ̀* '10' (cl. 5), *bwúyà* '100' (cl. 7), and *tɔ́dyínì* '1000' (cl. 1). Being nouns themselves, they do not agree with the noun they quantify. Instead, they can become the head of a N + N genitive construction of which the nominal numeral is the head as exemplified in (200). The two nouns are linked by a attributive marker that can optionally be omitted.

(200) a. lè-wúmɔ̀ (lé) bá-sɔ́
5cl-ten 5:ATT ba2-friend
'ten friends'

[36]For an introduction to quantifiers from a semantic perspective, see section 3.4.8.2.

b. bwúyà (yá) bá-sɔ́
7.hundred 7:ATT ba2-friend
'hundred friends'

c. tɔ́dyínì (wà) bà-sɔ́
1.thousand 1:ATT ba2-friend
'thousand friends'

The N + N construction with a 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 (201). The two nouns are then juxtaposed without any attributive marker, thus copying the syntax of noun + modifier numeral noun phrases.

(201) a. bà-sɔ́ lè-wúmɔ̀
ba2-friend le5-ten
'ten friends'

b. bà-sɔ́ bwúyà
ba2-friend 7.hundred
'hundred friends'

c. bà-sɔ́ tɔ́dyínì
ba2-friend 1.thousand
'thousand friends'

Complex numerals There are two construction types of complex numerals which have been laid out in more detail in section 3.5.2.1 on enumeratives:

1. $[\text{N} + \text{Num}]_{\text{NP}}$
2. N + Num coordination

In the context of cardinal numerals, these numerals become even more complex since the noun that they quantify needs to be included into the construction. If a noun is quantified by a $[N + Num]_{\text{NP}}$ multiplication construction, the numeral NP takes the position of a modifying numeral, namely it follows the quantified noun as in (202a). It is not possible to have the NP precede the quantified noun, shown in (202b), as one might expect from the word order in constructions with simplex nominal numerals as in (200).

(202) a. b-ùdì [mà-wúmɔ̀ má-báà]
ba2-person ma6-ten 6-two
'twenty people'

b. *[mà-wúmɔ̀ má-báà] b-ùdì
ma6-ten 6-two ba2-person
'twenty people'

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 a attributive marker. The addend then follows the quantified noun as shown in (203). 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 (203b).

(203) a. [[lè-wúmɔ̀ lé b-ùdì] ná vúdṹ]
le5-ten 5:ATT ba2-person COM one
'eleven people'

b. [[lè-wúmɔ̀ lé b-ùdì] ná bá-báà]
le5-ten 5:ATT ba2-person COM 2-two
'twelve people'

The other option as to the postion of the quantified noun is to appear at the beginning, as shown in (204). 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 (204b).

(204) a. [b-ùdì [lè-wúmɔ̀ ná vúdṹ]]
ba2-person le5-ten COM one
'eleven people'

b. [b-ùdì [lè-wúmɔ̀ 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 preferrably 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 (205a). If the first constituent is a product while the other is not, the quantified noun will enter the second constituent, as in (205b). If both constituents are complex, the quantified noun precedes the whole construction, as in (205c). Having the quantified numeral in the initial position is an option in any case.

(205) a. [[bwúyà yá b-ùdì] ná [mà-wúmɔ̀ má-tánɛ̀]]
7.hundred 7:ATT ba2-person COM ma6-ten 6-five
'one hundred-fifty people'

b. [[mà-wúmɔ̀ má-báà] ná [b-ùdì bá-báà]]
ma6-ten 6-two COM ba2-person 2-two
'twenty-two people'

c. [b-ùdì [[bì-bwúyà bé-tánɛ̀] ná [mà-wúmɔ̀ má-nɑ̂]]]
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.

'many, lots' Many quantifiers in Gyeli are expressed by a N + N genitive construction as described in section 3.4.7. In these cases, a quantifying noun serves as head of the construction, the quantified noun is linked by a conncetive marker that agrees with the head noun as in (206).

(206) bvúbvù nyà b-ùdì
∅9.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. (207) provides examples of quantified nouns which sematically 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 3.4.8.2) for 'many, lots' as countable nouns.

(207) a. bvúbvù nyà mà-jíwɔ́
∅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-nsɛ́
∅9.multitude 9:ATT mi4-sand
'lots of (types of) sand'

'few, little' The counterpart to *bvúbvù* 'many, lots' is *mwánɔ̀* 'little' and *bwánɔ̀* 'few'. The primary lexical meaning of *mwánɔ̀/bwánɔ̀* is 'child/children'. In a compound with a (countable) noun, however, it also has the meaning of 'small (in size)', as shown in (208a). This is quite typical for many Bantu languages. Used in a N + N genitive construction (with a attributive marker for countable nouns) as in (208b), one gets the quantifying interpretation of smallness in number rather than size.

(208) a. b-wánɔ̀ bá-kɔ́bɛ̀
ba2-small ba2-cup
'small cups'

b. b-wánɔ̀ bá bá-kɔ́bɛ̀
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 (209).

(209) a. b-wánɔ̀ bá má-ntúà
ba2-small 2:ATT ma6-mango
'few mangos'

b. b-wánɔ̀ má-ntúà
ba2-small ma6-mango
'few mangoes'

This feeds into the issue of a possible attributive marker omission discussed in section 3.4.6. 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 or *píyɔ̀* 'small' for mangoes as in (210). It is not clear what semantically selects for either *píyɔ̀* or *mwánɔ̀* when talking about smallness in size and more research is in order to understand the distribution.

(210) mà-ntúà má píyɔ̀
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 *bwánɔ̀* is used as in (208b) since 'few' is inherently plural. For uncountable nouns, however, the singular form *mwánɔ̀* 'little' is used in a compound construction with a singular non-countable noun, as in (211). Note also that this construction is a compound rather than a N + N genitive construction since using a attributive marker, as in (211c), is prohibited. So, this construction is parallel to the one in (208a).

(211) a. m-wánɔ̀ nsɛ́
N1-small ∅3.sand
'little sand'

b. m-wánɔ̀ ndísì
N1-small ∅3.rice
'little rice'

c. *m-wánɔ̀ wà nsɛ́
N1-small 1:ATT ∅3.sand
'little sand'

It is possible to use the plural of uncountable nouns as in (212). 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 a 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'.

(212) a. b-wánɔ̀ mì-nsɛ́
ba2-small mi4-sand
'little sand'

b. b-wánɔ̀ 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 usually only have a plural form in class 6 without any singular counterpart. They behave morphosyntactically differently because unlike in (212), this plural class does not require the plural form of the quantifier noun, but its singular form. Thus, it is not the case that a plural uncountable noun requires necessarily a plural quantifier noun to be grammatically correct. (213) illustrates that this would even be ungrammatical for liquid mass nouns.

(213) a. m-wánɔ̀ mà-jíwɔ́
N1-small ma6-water
'little water'

b. *b-wánɔ̀ mà-jíwɔ́
ba2-small ma6-water
'little water'

Countable nouns usually occur with the plural form *bwánɔ̀* in a N + N 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 *mwánɔ̀* for singular nouns and the plural form *bwánɔ̀* for plural nouns. They differ from countable nouns in that they never seem to come with a 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, though, but the singular form *mwánɔ̀* while, parallel to granular aggregates, they do not come with a 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*.

'any/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: *ndjìmɔ̀ 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.

ndjìmɔ̀ wá is used with both singular and plural nouns (214), as well as countable and uncountable nouns (215), while the quantifying head noun is invariable and does not take, in contrast to *mwánɔ̀/bwánɔ̀* 'few, little', singular or plural forms depending on the quantified noun.

(214) a. ndjìmɔ̀ wá m-ùdì
∅3.certain 3:ATT N1-person
'a certain person'

b. ndjìmɔ̀ wá b-ùdì
∅3.certain 3:ATT ba2-people
'certain people'

(215) a. ndjìmɔ̀ wá mà-jíwɔ́
∅3.certain ma6-water
'certain water'

b. ndjìmɔ̀ wá mí-nsɛ́
∅3.certain 3:ATT mi4-sand
'certain sands'

'some' Another quantifier that expresses unspecificity is *bímbú yá* 'a quantity of'. In contrast to *ndjìmɔ̀ 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 N + N construction and links the quantified noun with a attributive marker that agrees with the head noun, as in (216). Also, both countable and uncountable nouns can be used with *bímbú yá*, i.e. this quantifier is not sensitive to the mass/count distinction.

(216) a. bímbú yá b-ùdì
∅7.quantity 7:ATT ba2-people
'a certain quantity of people (some people)'

b. bímbú yá mà-jíwɔ́
∅7.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 *mwánɔ̀/bwánɔ̀* 'few' as shown in (217). Just like unspecific uses of *bímbú* as in (216), these constructions are not sensitive to a mass/count distinction as it is with *mwánɔ̀/bwánɔ̀* 'few'.

(217) a. m-wánɔ̀ bímbú yá b-ùdì
N1-small ∅7.quantity 7:ATT ba2-people
'a small quantity of people'

b. m-wánɔ̀ bímbú yá ndísì
N1-small ∅7.quantity 7:ATT ∅3.rice
'a small quantity of rice'

'half' Gyeli only has few proportionality quantifiers, one of which is *tsílɛ̀ 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. *tsílɛ̀* '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.

(218) a. tsílɛ̀ yá b-ùdì
∅7.half 7:ATT ba2-people
'the half of people (their bodies)'

b. tsílɛ̀ yá tə̃̀ yá b-ùdì
∅7.half 7:ATT ∅7.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 (219).

(219) tsílɛ̀ yá má-jíwɔ̀
∅7.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 (220).

(220) ndjìmɔ̀ wá mpá'à wá tsílɛ̀
∅3.certain 3:ATT ∅3.part 3:ATT half
'a certain part of half'

3.7.1.5 Nominal Locatives

Another function of noun + noun constructions is to express location that is more specific than just the locative preposition *ɛ́* as discussed in section 3.5.4.1. Examples (221) through (227) list (rather exhaustively) the different locative noun + noun constructions.

(221) on top/over

(ɛ́) dy-úwɔ̀ lé ndáwɔ̀
LOC le5-behind 5:ATT ∅9.house
'on top/over the house'

(222) under

(ɛ́) sí yá ndáwɔ̀
LOC ∅7.ground 7:ATT ∅9.house
'under the house'

(223) behind

(ɛ́) písɛ̀ yá ndáwɔ̀
LOC ∅7.behind 7:ATT ∅9.house
'behind the house'

(224) in front

(ɛ́) (mbɔ́mbɔ́) sɔ̀ yá ndáwɔ̀
LOC ∅9.face ∅7.front 7:ATT ∅9.house
'in front of the house'

(225) next to

(ɛ́) ŋgwálɔ̀ yá ndáwɔ̀
LOC ∅7.side 7:ATT ∅9.house
'next to the house'

(226) opposite

(ɛ́) mwádèkɑ́ yá ndáwɔ̀
LOC ∅7.other.side 7:ATT ∅9.house
'opposite of the house'

(227) in the middle

(ɛ́) títímɔ́ yá ndáwɔ̀
LOC ∅7.middle 7:ATT ∅9.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 *dyúwɔ̀* 'top' (French *haut*) which is also the word for 'sky' or *sí* 'ground'. Also *písɛ̀* 'back/behind' differs from the body part 'back' which is *ŋkɔ̀ŋ*.

For expressing CONTAINMENT as with 'inside', the postposition *dé* (see also section 3.5.4.2) has to be obligatorily used as shown in (228). This, however, is not a noun + noun construction, but behaves very differently in that the landmark (the house) is just followed by a postposition *dé* while in the noun + noun locative constructions the landmark noun is the dependent noun while the locative noun is the head noun.

(228) inside

(ɛ́) ndáwɔ̀ dé (tù)
LOC ∅9.house LOC inside
'in the house'

Some of the locative nouns can also be used postnominally and in that case behave grammatically more like locative adpositions as discussed in section 3.5.4.3.

3.7.2 Noun + Qualifier

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. Qualifiers, for instance, as discussed in section 3.5.1, enter a attributive construction when combined with a noun, as shown for qualifiers of value in (229) and (230). Both examples show the change in number/class of the head noun while the qualifier is invariable.

(229) a. m-wánɔ̀ wà **mpà**
N1-child 1:ATT good
'good child'

b. b-wánɔ̀ bá **mpà**
ba2-child 2:ATT good
'good children'

(230) a. m-wánɔ̀ wà **bíwɔ̀**
N1-child 1:ATT bad
'bad child'

b. b-wánɔ̀ bá **bíwɔ̀**
ba2-child 2:ATT bad
'bad children'

These constructions are parallel to noun + noun constructions of properties as described in section 3.7.1.3. The head noun is, so to speak, the possessor of a property which is expressed either by a dependent noun or by a qualifier. The same is true for properties describing size as in (231) or colors as in (232).

(231) a. m-wánɔ̀ wà **píyɔ̀**
N1-child 1:ATT small
'small child'

b. m-wánɔ̀ wà **nɛ́nɛ̀**
N1-child 1:ATT big
'big child'

(232) a. nsɛ́ wá **nábèbè**
∅3.sand 3:ATT red
'red sand'

b. nsɛ́ wá **návyûvyû**
∅3.sand 3:ATT black
'black sand'

3.7.3 Noun + Verb

Though less frequently, also verbs can be used in a noun + attributive construction as for instance in (233). Van de Velde (2013: 224) describes such constructions as deviations from the canonical dependent constituent R_2 which are apparently found frequently in other Bantu languages such as Mongo or Ruwund.

(233) sá yá **dè**
∅7.thing 7:ATT eat
'something to eat'

3.7.4 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 *vɛ́* 'which' and *níyɛ̀* 'how many' and finally turn to constructions involving *púù* 'reason'.

3.7.4.1 *vɛ́* 'which'

The interrogative word *vɛ́* 'which' is used as a second constituent in a noun - attributive - interrogative construction as shown in Table 3.26.

AGR class	Noun	ATT marker	INTERR	Gloss
1	m-ùdì	wà	vɛ́	‘which person?’
2	b-ùdì	bá	vɛ́	‘which people?’
3	nkwě	wá	vɛ́	‘which basket?’
4	mi-nkwě	mí	vɛ́	‘which baskets?’
5	le-lá	lé	vɛ́	‘which fish trap?’
6	ma-má	má	vɛ́	‘which fish traps?’
7	síŋgì	yá	vɛ́	‘which cat?’
8	be-síŋgì	bé	vɛ́	‘which cats?’
9	ndáwɔ̀	nyà	vɛ́	‘which house?’

Table 3.26: Interrogative word ‘which’ in the different agreement classes

Temporal interrogative constructions with *vɛ́* Further, *vɛ́* ‘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 vɛ́ ‘when (which time/hour)’

dúβɔ̀ lé vɛ́ ‘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 *vɛ́* 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 (234).

(234) lè-kà lé kálàdɛ̀ yá vɛ́?
le5-kind 5:ATT ∅7.kalade 7:ATT which
‘which kind of book?’

In these cases, the interrogative word *vɛ́* still enters a attributive construction with the noun *kálàdɛ̀* ‘book’ rather than with *kà* ‘type’ while *kálàdɛ̀* ‘book’ serves as second constituent in the first attributive construction which has *kà* ‘type’ as head noun.

3.7.4.2 *níyɛ̀* ‘how many’

The interrogative word *níyɛ̀* ‘how many’ behaves similar to *vɛ́* ‘which’. Semantically, however, the use of ‘how many’ is restricted to plural noun classes, which are listed in Table 3.27.

AGR class	Noun	ATT marker	INTERR	Gloss
2	b-ùdì	bá	níyɛ̀	‘how many people?’
4	mì-nkwě	mí	níyɛ̀	‘how many baskets?’
6	mà-má	má	níyɛ̀	‘how many fish traps?’
8	bè-síŋgì	bé	níyɛ̀	‘how many cats?’

Table 3.27: Interrogative word ‘how many’ in the different agreement classes

níyɛ̀ ‘how many’ can also be used when asking for temporal adjuncts as shown in (235).

(235) a. à kɛ́ [mà-wùlà má-láálɛ̀]
3S.PST1 go ma6-hour 3-three
‘I walked for three hours’

b. à kɛ́ **mà-wùlà má níyɛ̀**?
3S.PST1 go ma6-hour 6:ATT how.many
‘For how many hours did he walk?’

3.7.4.3 *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 *vɛ́* ‘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 vɛ́ ‘why (which cause)’
púù ŋgá 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

(236).

(236) púù yá gyí wɛ́ gyàgá kálàdɛ̀ yî?
∅7.cause 7:ATT what 2S.PRES buy ∅7.book 7.DEM.PROX
'Why do you buy this book?'

gyí can also be substituted by *vɛ́* 'which' for the same question as shown in (237). The use of *gyí* as in (236) is, however, preferred.

(237) púù yá vɛ́ wɛ́ gyàgá kálàdɛ̀ yî?
∅7.cause 7:ATT which 2S.PRES buy ∅7.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 constitueny as shown in (238). Further, since the expected answer possibly entails a proper name, the question word 'for whom' always has to be formed with the genitive marker *ŋgá* rather than a attributive marker.[37]

(238) púù ŋgá nzá wɛ́ gyámbɔ́ bé-déwɔ̀?
∅7.cause GEN who 2S.PRES cook be8-food
'For whom do you cook food?'

Finally, more complex interrogative constructions can be formed with a double attributive construction as in (239). In this example, *púù* 'cause' serves again as head noun of a 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 *níyɛ̀* 'how many' as second constituent.

(239) púù yá b-ùdì bá níyɛ̀ wɛ́ gyámbɔ́
∅7.cause 7:ATT ba2-person 2:ATT how.many 2S.PRES cook
bé-déwɔ̀?
be8-food
'For how many people do you cook food?'

[37]The different paradigms for genitive and attributive markers are discussed in sections 3.4.6 and 3.4.7.

3.7.5 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 Borchardt (2011: 111). Stolz & 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.

In Gyeli, ordinals generally take the numeral root that is found also in cardinals and enumeratives, as shown in Table 3.28. 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 a attributive marker. (For more information of genitive constructions and attributives in particular, see sections 3.4.7 and 3.4.6 respectively.)

Examples of ordinal numerals		Gloss
kùsì wà	**m**-*vúdṹ or mà-tálá*	'the first parrot'
kùsì wà	**m**-*báà*	'the second parrot'
kùsì wà	**n**-*láálɛ̀*	'the third parrot'
kùsì wà	*nɑ̃̂*	'the forth parrot'
kùsì wà	**n**-*tánɛ̀*	'the fifth parrot'
kùsì wà	*ntùɔ́*	'the sixth parrot'
kùsì wà	*mpúɛ̀rɛ́*	'the seventh parrot'
kùsì wà	*lɔ̀mbì*	'the eighth parrot'
kùsì wà	*rèbvùá*	'the ninth parrot'
kùsì wà	*le-wúmɔ̀*	'the tenth parrot'
kùsì wà	*le-wúmɔ̀ ná vúdṹ*	'the eleventh parrot'
kùsì wà	*ma-wúmɔ̀ má-báà*	'the twentieth parrot'
kùsì wà	*bwúyà*	'the hundredth parrot'
kùsì wà	*tɔ́dyínì*	'the thousandth parrot'

Table 3.28: 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 *-wúrũ̂*, or it can take a suppletive form *mà-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.[38] 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. (240) through (243) give examples of ordinals modifying nouns of different noun classes. (240) contrasts the noun classes which trigger a nasal on *vúdû* and those that don't giving examples from all possble noun classes. Concerning (241), I only provide noun class examples for classes 1 and 7 since then the ordinal root does not change anymore. (241) illustrates a construction where the ordinal modifier takes a nasal prefix while it does not in (242). Finally, (243) exemplifies that nominal numerals are integrated into the gentitive construction exactly the same way modifier numerals are.

(240) a. sɔ́ wà **m**vúdû
Ø1.friend 1:ATT one
'the first friend'

b. mbɛ̂ wá **m**vúdũ
Ø3.door 3:ATT one
'the first door'

c. lè-kí lí vúdû
le5-egg 5:ATT one
'the first egg'

d. sâ yá vúdû
Ø7.thing 7:ATT one
'the first thing'

e. ntɛ́mò nyà **m**vúdû
Ø9.dream 9:ATT one
'the first dream'

(241) a. sɔ́ wà **n**lɑ́ɑ́lɛ̀
Ø1.friend 1:ATT three

[38]The nasal does not surface in *-nâ* since this root starts with a nasal itself so that the prefix nasal gets assimilated.

‘the third friend’

b. sâ yá **n**láálɛ̀
∅7.thing 7:ATT three
‘the third thing’

(242) a. sɔ́ wà ntùɔ́
∅1.friend 1:ATT six
‘the sixth friend’

b. sâ yá ntùɔ́
∅7.thing 7:ATT six
‘the sixth thing’

(243) a. sɔ́ wà lè-wúmɔ̀
∅1.friend 1:ATT le5-ten
‘the tenth friend’

b. sâ yá lè-wúmɔ̀
∅7.thing 7:ATT le5-ten
‘the tenth thing’

Chapter 4

The Verb Phrase

This chapter deals with the lexical level of the Gyeli verb phrase. I first lay out the structure of the Gyeli verb in contrast to the verb structure which is more typical among the Savannah Bantu languages. I will then discuss verb extensions and finally, I will look at the more extended verb phrase and describe adverbs and ideophones. For readability, I postpone the discussion of inflectional elements, namely tense, aspect, mood, and negation until chapter 5.

4.1 The Verb

Verb as a word class 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. Vice versa, 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.

Bantu verb structure The typical verb structure in Bantu languages has a verb root with slots to both its left and its right, as shown in Table (4.1), which is an adaptation from Nurse (2008: 40) and ultimately Meeussen (1967: 108).

Slot	Pre-initial	Initial	Post-initial	Pre-radical	**Radical**	Prefinal	Final	Post-final
Function	TAM, NEG, clause type	Subject concord	TAM, NEG, clause type	Object concord	**Root**	TAM, valence change	TAM	participant, NEG, clause type

Table 4.1: The typical Bantu verb structure

A typical Bantu verb may or may not start with TAM, negation or clause type marking in the so-called pre-initial slot. In contrast, the initial slot marking subject concord is usually obligatory in eastern and southern Bantu languages. Also obligatory is TAM (or negation or clause type) marking in the post-initial slot. Object concord is marked in the pre-radical slot and is closest to the radical. Further, many Bantu languages mark multiple objects in this position, typically in a ditransitive phrase. The verb root in the radical slot is followed by the prefinal which marks TAM and/or valence change. Valence change refers to Bantu typical verb extensions such as, for instance, applicatives, causatives, and reciprocals. In Savannah Bantu languages, verbs often end in a vowel in the final slot which is indicative of TAM. Thus, in Swahili (Bantu G42), for example, the final vowel is *-a* in assertive verbs while it changes to *-i* in negation and to *-e* in the optative.

Finally, there is a post-final slot that carries information on negation, clause type or participant. "Participant" marking refers typically to marking the plural when addressing several people, for instance in plural imperatives.

The root plus suffixes plus final vowel is typically designated as the verb stem (Hyman 1993: 3). According to Good (2007: 206),

> "The Bantu verb stem can be described with respect to both its morphosyntactic and its morphophonological properties. In general, these two sets of properties will coincide in a given morphological form."

For more (theoretical) discussions on the Bantu verb stem, including both morphosyntactic and morphophonological, see for instance Downing (1999), Hyman (1993), or Marten (2003).

4.1.1 Verb Structure

In comparison to the Savannah Bantu languages of eastern and southern Africa, northwestern Bantu languages such as Gyeli are significantly more isolating. The Gyeli verb structure is more reduced than the widely spread structure presented above. In Gyeli, the verb starts with the radical slot, i.e. the verb root. There are no other slots preceding the verb root, not even subject concord or tense marking. Subject marking is not part of the verb. Instead, a non-nominal subject is expressed in a subject clause operator (SCOP) portemanteau morpheme that also carries tense-mood information (see chapter 5.2.1).

Slot	**Radical**	Prefinal
Function	**Root**	valence change

Table 4.2: The Gyeli verb structure

There is only one slot following the Gyeli verb root, namely the prefinal slot that marks valence change.

Stem final vowel Gyeli does not have a typical Bantu final vowel which, in other languages, serves as tense, aspect and/or mood inflection. Due

to a canonical CV syllable structure, Gyeli verbs always end in a vowel, but they are by no means comparable to the typical final vowels found in Bantu languages such as Shona or Swahili where a specific vowel is tied to a specific tense, aspect, or mood category. In contrast, Gyeli final vowels are rather restricted by the stem's syllable length. In monosyllabic stems, any of the seven vowels, except for /o/, can occur in a stem final position, while disyllabic verbs only allow four vowels in this position, /o/, /ɛ/, /ɔ/, /a/, as discussed in chapter 2.2.1.

Another argument not to consider Gyeli stem final vowels as occupying the final slot within a typical 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'. This is not the case in Gyeli, as I will show for each extension morpheme in the following sections. Extension morphemes in Gyeli come with their own final vowels and override a stem final vowel of an underived form as in *djílɔ* 'be satisfied' → *djíl-ɛsɛ* 'make satisfied'.

The question is then, how to analzye the final /ɔ/ in *djílɔ*. Is it part of the root or not? In other eastern and southern Bantu languages, the root would be *djíl-* which together with the final vowel would form the stem. And given that verb extension morphemes in Gyeli largely attach to the root's final consonant (at least in bisyllabic stems), it is tempting to assume that the Gyeli verb root also ends in a consonant. I propose, however, to count a stem final vowel in a Gyeli underived verb form as being part of the root which may get deleted and replaced under derivational processes. The main reason for this analysis is that the quality of a root final vowel is not predictable and is thus lexically determined. This is especially true for monosyllabic stems which show a higher degree of freedom in terms of which vowels are allowed in comparison to di- or trisyllabic stems.

Having established that stem final vowels of underived verb forms are part of the root, two phonological processes are needed in order to extend verb stems with derivation morphemes: i) vowel deletion and ii) consonant epenthesis. The two processes are complementarily distributed over bi- and monosyllabic stems. The first one, vowel deletion, concerns bisyllabic stems, as shown for *djílɔ* 'be satisfied' where the final vowel /ɔ/ is

deleted if the form takes the causative extension morpheme *-ɛsɛ*, forming *djílɛsɛ* 'make satisfied'.[1] There are many underived verb forms which end in a final vowel /ɛ/ so that one could propose that the extension morpheme is actually only *-ɛs* while a following *-ɛ* is the regular final vowel. But again, this is lexically determined, and, of course it is preferrable to have only one rule for all verbs.

Extension morphemes attaching to monosyllabic underived verbs usually require an epenthetic consonant which gets inserted between the root final vowel and the vowel of the extension morpheme. The quality of this epenthetic consonant differs, though, and is in most cases not predictable. Further, in a few cases, the same underived monosyllabic verb form may take different epenthetic consonants with different extension morphemes. This is, however, again unpredictable and irregular so that no rule can be stated for the insertion of epenthetic consonants. Table 4.3 lists the various consonants that may serve as epenthetic consonants in verbal derivation as well as their frequency. This is based in 85 underived monosyllabic verbs which take extension morphemes.[2]

Consonant	Frequency	Example		
/ŋg/	27	sə̂ 'vomit'	→	sá**ŋg**ala 'vomit together'
/y/	26	bà 'smoke'	→	bà**y**aga 'smoke (by itself)'
/g/	20	dvùɔ̀ 'hurt'	→	dvù**g**ɛsɛ 'make hurt'
/l/	11	bû 'destroy'	→	bú**l**a 'be destroyed'
-	7	dyâ 'lie down'	→	dyáala 'lie down together'
/s/	3	sɔ́ɔ̀ 'continue'	→	sɔ́**s**ɛlɛ 'continue with'
/n/	2	bâ 'marry'	→	bá**n**ala 'marry one another'
/w/	2	dyû 'kill'	→	dyú**w**ala 'kill one another'
/ʔ/	1	vèè 'try on'	→	vè**ʔ**ɛlɛ 'make try on'
/β/	1	dè 'eat'	→	dí**β**a 'be eaten'

Table 4.3: Epenthetic consonants in verb derivation

Table 4.3 also shows that there are a few cases where no epenthetic consonant is inserted, as shown in (244). The general rule that adjacent

[1] As discussed in the section on syllables, there are also trisyllabic verb stems. They do not, however, undergo verb derivation because they all comprise already a derivational morpheme. Nevertheless, I need to count them as trisyllabic verb stems since they do not have any (synchronic) underived form.

[2] As discussed in chapter 2.3.3.4, there are 88 monosyllabic verb stems in my database. Not all of them undergo derivation, though. *dɔ̀* 'negotiate', for instance, does not seem to have any derived forms.

vowels across syllables is prohibited, thus has a few exceptions.

(244)

dyâ	'lie down'	→	dyáala	'lie down together'
bvû	'think'	→	bvúala	'think together'
kwê	'fall'	→	kúɛsɛ	'make fall'
láà	'tell'	→	láala	'tell each other'

The synchronic unpredictability of epenthetic consonants most likely has a historic explanation. At least some underived monosyllabic verb stems used to be bisyllabic before they lost segmental material including second syllable onset consonants and were reduced to one syllable. These lost consonants may be reflected in derived verb foms where they show up again.

This also explains why we find certain tendencies as to which consonants get inserted in specific environments. Monosyllabic stems ending in nasal vowels, for instance, almost exclusively take /ŋg/, as exemplified in (245). /ŋg/ is consonant cluster that was lost together with the second syllable, while nasality survived on the vowel of the first syllable.

(245)

lə̃̂	'pass'	→	là**ŋg**ɛlɛ	'let pass, spend time'
kə̀̃	'shave'	→	kè**ŋg**ala	'shave one another'
sə̃̂	'vomit'	→	sá**ŋg**ɛsɛ	'make vomit'
dyə̃̂	'be hot'	→	dyú**ŋg**ɛlɛ	'heat sth.'

Another tendency is found with monosyllabic verbs containing a diphthong. They almost exclusively use /g/ as epenthetic consonant, as shown in (246), with a few exceptions concerning the diphthong /iɛ/ which sometimes may also take /y/.

(246)

dvùɔ̀	'hurt (intr.)'	→	dvù**g**ala	'hurt one another'
lùà	'curse'	→	lɔ̀**g**a	'be cursed'
tɔ̀à	'boil (intr.)'	→	tɔ̀**g**ala	'boil together'
líɛ̀	'cede, let'	→	lí**g**ala	'let to one another'

4.1.2 Verbal Derivation

Bantu languages are known for their multitude of productive verb extensions, also known under the term of 'verbal derivation'. These suffixes in the prefinal verb slot 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 verb derivation morphemes in Gyeli, including both extensions and expansions, while Table 4.5 gives examples for them. In Nurse's (2008) definition, extensions are 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*, 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	-ala	RECIPROCAL	270
	-a	PASSIVE	105
	-ɛsɛ	CAUSATIVE	89
	-ɛlɛ	APPLICATIVE	34
	-ɛga	AUTOCAUSATIVE MIDDLE VOICE	28
	-ɔwɔ	POSITIONAL MIDDLE VOICE	5
expansions	-kɛ	???	10
	-lɛ	???	6
	-bɔ	REVERSIVE	1

Table 4.4: Summary of verb 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.

Canonically, multiple extension morphemes are allowed within the Bantu verb structure. This is not the case in Gyeli where a verb stem cannot exceed three syllables. This, however, is expected for northwestern Bantu languages since, according to Güldemann (2011: 122-123),

> "the highly productive MULTIPLE stacking of suffixes in most but not all of Bantu is the result of LOSING different degrees of prosodic stem restrictions observed in its northwestern sphere and the adjacent zone in the Macro-Sudan belt, thereby building up extreme verb-stem complexity from an earlier moderate one."

Gyeli verb roots generally only take one derivation morpheme. There are a few exceptions, though. Within the limits of a maximum 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 4.1.2.2). Another exception to the trend of allowing only one derivation morpheme concerns the causative that may show (remnants of) a combination with the applicative, (247), or the expansion morpheme *-lɛ*, (248), respecting the three syllable maximum of the verb stem. Examples such as in (247) are rare. Likewise, /s/t as an epenthetic consonant is rare, as I showed in Table 4.3. It is possible that all of these instances stem from an original causative morpheme, but synchronically that 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).

(247) kà-s-ɛlɛ
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 (248). Synchronically, it is not clear what this expansion does or what its semantic function is, as I discuss in more detail in section 4.1.2.7. In (248), *-lɛ* may indicate a perfective reading: *bwà* 'give birth' → *bwà-lɛ* 'be born' → *bwà-l-ɛsɛ* 'make give birth'.

(248) bwà-l-ɛsɛ
catch-le-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 *bálɛ*). In verb forms that take two different epenthetic consonants with different derivation morphemes, one of the consonants is often /l/, which may have its origin in the expansion morpheme *-lɛ*. Extensions derived from the -lɛ form include passive and applicative, for example in *bû* 'destroy' → *búl-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 their number, which may have different reasons. While categories such as causative or applicative seem to have become reduced, other extensions such as *-ɔwɔ* and *-ɛga* are restricted semantically. *-ɔwɔ* 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	lúnd-ala	'fill one another'	→	lúndɔ	'fill oneself'
PASSIVE	lúnd-a	'be filled'	→	lúndɔ	'fill oneself'
CAUSATIVE	lúnd-ɛsɛ	'make sth. full'	→	lúndɔ	'fill oneself'
APPLICATIVE	lúnd-ɛlɛ	'fill sth.'	→	lúndɔ	'fill oneself'
AUTOCAUSATIVE	vìd-ɛga	'turn (by itself)'	→	vìdɛ	'turn sth.'
POSITIONAL	kɛ̀l-ɔwɔ	'assume hanging position'	→	kɛ̀lɛ	'hang sth.'
-KƐ	djí-kɛ	'burn sth.'	→	djíyɛ	'burn (intr.)'
-LƐ	bwà-lɛ	'be born'	→	bwà	'give birth'
-BƆ/WƆ	djì-bɔ	'close'	→	djì	'open'

Table 4.5: Examples of verb 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. Synchronically, it is not possible to determine whether this *-kɛ* 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 the single derivation morphemes and their 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.

4.1.2.1 Reciprocal *-ala*

The verb extension *-ala* is by far the most frequently occurring one 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 (249) show which express 'mutuality'.

(249)

dvùɔ̀	'hurt (intr.)'	→	dvùg-ala	'hurt one another'
dyúwɔ	'hear'	→	dyúw-ala	'understand each other'
gyíwɔ	'call'	→	gyíw-ala	'call each other'
kwàlɛ	'love'	→	kwàl-ala	'love each other'
tsíndɔ	'push'	→	tsínd-ala	'push each other'
bâ	'marry'	→	bán-ala	'marry each other'
kɛ̃̀	'shave'	→	kèŋg-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 (250).

(250)

nyùlɛ	'drink'	→	nyùl-àlà	'drink together'
kɔ́sɛ	'cough'	→	kɔ́s-ala	'cough together'
pámɔ	'show up'	→	pám-ala	'show up together'
tɛ́βɔ	'get up'	→	tɛ́b-ala	'get up together'
bwà	'become big'	→	bɔ̀g-ala	'become big together'
kwê	'fall'	→	kwéy-ala	'fall together'
nyî	'enter'	→	nyíŋg-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.

4.1.2.2 Passive *-a*

I will discuss the contrast between active and passive constructions following Siewierska's (2013) defining criteria for passive constructions. (251a)

is the active, while (251b) 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 (251a). Another characteristic of passive constructions is that their subjects correspond to the direct object in the active counterpart, as with *bèkálàdɛ̀* '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.

(251) a. bùdì bá tsìlɔ́ békálàdɛ̀.
b-ùdì ba-H tsìlɔ-H H-be-kálàdɛ̀
ba2-person 2-PRES write-R OBJ.LINK-be8-book
'People write books.'

b. bèkálàdɛ̀ bé tsìl**á** (nà bùdì).
be-kálàdɛ̀ be-H tsìl-a-H nà b-ùdì
be8-book 8-PRES write-**PASS**-R COM ba2-person
'Books are written (by people).'

Generally, passive forms are far less frequent than reciprocals, with only 105 attested instances, equaling 27.9% of the verbs in the database. 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 stems differ from trisyllabic ones. I will discuss both in turn.

Passive formation from mono- and bisyllabic stems 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, as shown in (252).

(252)

kwàlɛ	'love'	→	kwàl-a	'be loved'
bvúɔ̀	'break sth.'	→	bvúg-a	'be broken'
djì	'open'	→	djìy-a	'be open'
dyû	'kill'	→	dyúw-a	'be killed'
djíwɔ	'steal'	→	djíy-a	'be stolen'
vìdɛ	'turn sth.'	→	vìd-a	'be turned'
bàwɛ	'carry sth.'	→	bàw-a	'be carried'

All these instances have an underived form. There are, however, 36 other bisyllabic verb stems ending in *-a* which are underived, non-passive forms. Examples are given in (253). In fact, these verbs cannot be passivized nor do they have a passive meaning. Expressing passive meaning as in (252) is not possible for them since their ending is identical with the passive suffix.

(253)

gyàga	'buy'
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. Semantically, they imply some unaccusative reading. The examples in (254) can be thought of as having a non-specified agent while the subject takes the semantic role of an experiencer.

(254)

vòwa	'wake up'
wùsa	'forget'
káka	'shiver'
kánda	'crack (intr.; e.g. bottle or glass)'
sìya	'wash, bathe sb./oneself'

Note that the passive form is formally related to the formation of the nominalized passive form. Nominalized passives also take a final *-a* which receives a H or HL tone and, in addition, an initial homorganic nasal. Nominalized passive forms are significantly more frequent than non-nominalized passive forms, though, with 327 forms found in the database (86.7%). It seems that the only restriction for a verb not to have a nominalized passive form is semantic in nature and includes verbs of saying or intransitive verbs such as *dyúà* 'swim' or *sìsɔ* 'be happy'.

The difference between non-nominalized passive and nominalized passive is both structural and semantic. The passive verb form is preceded by a SCOP, as in (255), while the nominalized passive requires the SCOP copula (as discussed in chapter 6.1.1) that agrees with the subject, as shown in (256). 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.[3]

(255) yí kɛ̀là
yi-H kɛ̀l-a
7-PRES hang-PASS
'It is being hung.'

(256) yîì nkɛ̀lá
yîì n-kɛ̀l-a-H
COP NOM-hang-PASS-NOM
'It has been hung.'

Finally, a few bisyllabic passive forms take a final *-ɛ* rather than the usual passive *-a* extension, as shown in (257) which lists all known instances.

	bwè	'catch'	→	bùl-ɛ	'be caught'
(257)	sàlɔ	'cut lengthwise'	→	sàl-ɛ	'be cut lengthwise'
	tìnɔ	'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 (258).[4] Note that 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 portemanteau morpheme, encoding both the passive via the vowels /a/ and the positional via the consonant /w/.

[3]The English translation does not do these constructions justice in terms of their tense marking which is both present. The German translation gets closer to the tense translation, opposing 'Es wird aufgehängt.' for the passive form and 'Es ist aufgehängt.' for the nominalized form. Nominalized passive forms are labeled as statives in the lexicon.

[4]Note that the passive forms that are derived from applicatives *-ɛlɛ* are identical with the reciprocal forms.

	bál-ɔwɔ	'bend down'	→	bálawa	'be bent down'
	bén-ɛlɛ	'raise, lift sth.'	→	bénala	'be lifted (lift each other)'
(258)	bùm-ɛlɛ	'hit (nail)'	→	bùmala	'be hit (hit each other)'
	dyɔ̀l-ɛsɛ	'make laugh'	→	dyɔ̀lasa	'be made to laugh'
	pín-ɛsɛ	'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 in natural language.[5] In natural speech, the Bagyeli prefer to use an active construction with a class 2 (3rd person plural) subject as an agent which remains semantically unspecified, as in (259).

(259) bá gyàgá má-ntúà
ba-H gyàga-H H-ma-ntúà
2-PRES buy-R OBJ.LINK-ma6-mango
'They buy the mangos (= the mangos are bought).'

See also chapter 6.3 on information structure for a more detailed discussion.

4.1.2.3 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."

[5]The passive forms discussed in this section stem mainly from elicitations.

This definition becomes clearer when looking at (260) 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.

(260) Màmbì á gyíkésé Àdà ŋgèlénè
Màmbì a-H gyík-ɛsɛ-H Àdà ŋgèlénè
PN 1-PRES learn-CAUS-R PN ∅1.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 and is widely spread across Bantu languages. Note, however, that the morphological causative is not the only causative construction found in Gyeli. Also syntactic causatives using the verb *sâ* 'make' plus the complementizer *nâ*, are quite common, as exemplified in (261).

(261) mé nzíí sâ nâ wé dyɔ̀
mɛ-H nzíî-H sâ nâ wɛ-H dyɔ̀
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 have a causative suffix, which corresponds to 23.6%. Further, there are another 6 verbs with a causative ending which do not, however, have an underived form. Examples of causatives are provided in (262).

(262)

gìyɔ	'cry'	→	gìl-ɛsɛ	'make cry'
gyímbɔ	'dance'	→	gyímb-ɛsɛ	'make dance'
dyúwɔ	'hear, perceive'	→	dyúg-ɛsɛ	'make feel'
nyâ	'suckle, lick'	→	nyáŋg-ɛsɛ	'breast-feed'
mìno	'swallow'	→	mìn-ɛsɛ	'make swallow'
djíyɔ	'burn (intr.)'	→	djíg-ɛsɛ	'make angry'
lùŋga	'grow (intr.)'	→	lùŋg-ɛsɛ	'raise, make grow'
gyíkɛ	'learn'	→	gyík-ɛsɛ	'teach'

Note that some medial consonants of underived verb forms are subject to change in verb 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 stems, as discussed in section 4.1.1 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'. This verb takes both an applicative and a causative suffix. The applicative form, however, comes with a special lexical meaning 'weed grass with a rake' and is therefore not used in typical applicative contexts. For these, both the underived verb can be used, as in (263a), or the causative, as in (263b).

(263) a. mɛ́ dvùbɔ́ pɛ̀mbɔ̀ ɛ́ kɔ̀fí
mɛ-H dvùbɔ-H pɛ̀mbɔ̀ ɛ́ kɔ̀fí
1S-PRES dip-R ∅1.bread LOC ∅7.coffee
'I dip the bread in coffee.'

b. mɛ́ dvùbɛ́sɛ́ wɛ̂ màjíwɔ́
mɛ-H dvùb-ɛsɛ-H wɛ̂ ma-jíwɔ́
1S-PRES dip-CAUS-R 2S ma6-water
'I dip you in water.'

The distribution and use 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.

4.1.2.4 Applicative *-ɛlɛ*

-ɛlɛ extensions in Gyeli are significantly rarer than causative *-ɛsɛ* suffixes, with only 34 instances in the database, which equals to 9%. Further, there are no verbs ending in *-ɛlɛ* that have no underived form. I refer to the *-ɛlɛ* 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 (264) and transitive (265) verbs, which seems to be the typical case in Bantu languages, according to Polinsky (2013).

(264)

nyùmbɔ	'smell (intr.)'	→	nyùmb-ɛlɛ	'smell sth.'
swásɔ	'dry (intr.)'	→	swás-ɛlɛ	'dry sth.'
bédɔ	'go up'	→	béd-ɛlɛ	'mount sth.'
lúndɔ	'fill oneself'	→	lúnd-ɛlɛ	'fill sth.'
sɔ́'ɔ̀	'continue'	→	sɔ́s-ɛlɛ	'continue with sth.'
djímbɛ	'get lost'	→	djímb-ɛlɛ	'lose sth.'
bámɔ	'scold (intr.)'	→	bám-ɛlɛ	'scold sb.'
dyŭ̂	'be hot'	→	dyúŋg-ɛlɛ	'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 (265) for *gyámbɔ* 'prepare'. In these cases, a second object is added which often takes the role of a benefactive or also of an instrumental. On the other hand, applicatives which are derived from intransitive verbs typically do not have a benefactive reading since valency increases only by one. The one object argument that is added to the construction tends to rather take the semantic role of a patient.

(265)

lúmɛ	'send'	→	lúm-ɛlɛ	'send to sb.'
gyámbɔ	'prepare'	→	gyámb-ɛlɛ	'prepare for sb.'
dyúwɔ	'hear, perceive'	→	dyúw-ɛlɛ	'listen'
vísɔ	'cover'	→	vís-ɛlɛ	'cover sth. + INSTR/BEN'
kfùbɛ	'provoke'	→	kfùb-ɛlɛ	'provoke sb. + INSTR/BEN'
vídɛ	'turn sth.'	→	víd-ɛlɛ	'turn sth. + INSTR/BEN'

Currently, the applicative and the causative seem to be merging into one category, with the applicative as the category that is most likely going to be 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 only found 5 instances of two forms. In the majority, a verb has a causative, but no applicative form. Further, some applicative forms have a causative meaning as (266).

	vásɛ	'rise (dough)'	→	vás-ɛlɛ	'make (dough) rise'
(266)	vè'è	'try on clothes'	→	vè'-ɛlɛ	'make sb. try clothes on'
	kɔ́sɛ	'cough'	→	kɔ́s-ɛlɛ	'make cough'

It is not surprising that these two categories are merging since, semantically, there is some overlap between them. For instance, the applicative form of *nyî* 'enter', *nyíŋgɛlɛ*, 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 *dyúŋg-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'.[6]

Just like the causative, also the applicative extension has a periphrastic alternative to convey the same, or at least similar, meaning, as shown in (267).

(267)	mɛ́	gyá	gyá	mpá'à	wɔ̂
	mɛ-H	gyâ-H	gyá	mpá'à	w-ɔ̂
	1S-PRES	sing-R	∅7.song	∅3.side	3-2S.POSS
	'I sing a song for you.'				

4.1.2.5 Autocausative Middle Voice *-ɛga/-aga*

The extension *-ɛga/-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, however, have no synchronic underived form.

In contrast to other extensions, this derivation has two variant suffixes: *-ɛga* 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 *-ɛga* appears after these consonants. Given that their form is very similar while the function is the same, I consider

[6]Bostoen & Mundeke (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.

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 *-ɛga* is used for some and *-aga* for other verbs and how the existing distribution comes about. In terms of frequency, *-ɛga* is found more often than its variant *-aga*, the latter appearing only nine times in contrast to *-ɛga* with 19 times.

The suffix variants *-ɛga* and *-aga* constitute one of two middle voice categories in Gyeli. I distinguish, in terms of terminology, the autocausative middle voice extension *-ɛga/-aga* from the 'positional' middle voice suffix *-ɔwɔ*, as discussed in the following section. 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).[7] In Gyeli, the autocausative middle voice typically denotes one-participant events, requiring only one argument (the subject) and in that has a valency decreasing effect. The autocausative, as exemplified in (268), 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'.

(268)

vìdɛ	'turn (tr.)'	→	vìd-ɛga	'turn (by itself)'
wàwɛ	'spread sth.'	→	wàw-ɛga	'spread (by itself)'
djìna	'dive'	→	djìn-ɛga	'sink (intr), melt (intr)'
kfúdɛ	'cover sth.'	→	kfúd-ɛga	'cover (by itself)'
lɛ̀ndo	'flow'	→	lɛ̀nd-ɛga	'flow (by itself)
lɛ́gɛ	'singe'	→	lɛ́g-ɛga	'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. Kemmer (1993) assumes even that middle marking evolves from reflexive constructions. Speakers indeed tend to translate auto-

[7] 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 I consider middle voice categories in Gyeli as formal categories which map onto certain functions.

causative middle voice forms with a French reflexive construction involving *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 *-íi̯- (-jii̯-? -jiii̯-?) for Proto-Bantu. Such a prefix is not found in Gyeli. Reflexivity in Gyeli is rather expressed by object pronouns plus *mɛ́dɛ̀* 'self' as in (269) or, in other cases, carry reflexive meaning lexically as in *síya* 'wash (oneself)'.

(269) mɛ́ nyɛ́ mɛ̂ mɛ́dɛ̀
mɛ-H nyɛ̂-H mɛ̂ mɛ́dɛ̀
1S-PRES see-R 1S.OBJ self
'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. At this point, however, it can only be speculated which one is derived from the other.

4.1.2.6 Positional Middle Voice *-ɔwɔ*

The extension *-ɔwɔ* constitutes the second category of middle voice in Gyeli. *-ɔwɔ* 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 while the other five instances do not.

I label this category as 'positional middle voice' since almost[8] all verbs with this extension describe the event of assuming a position, as illustrated in (270).

[8]One exception to posture reference is the verb *bwèd-ɔwɔ* 'be tasty/sweet'.

	kɛ̀lɛ	'hang sth.'	→	kɛ̀l-ɔwɔ	'assume a hanging position'
	kfúdɛ	'cover sth.'	→	kfúd-ɔwɔ	'lay down by covering head with arms'
(270)	kwádɔ	'twist sth.'	→	kwád-ɔwɔ	'assume a crooked position'
	ŋgwáwɔ	'bend sth.'	→	ŋgwáŋg-ɔwɔ	'bend (intr.)'
	pwásɔ	'flatten sth.'	→	pwás-ɔwɔ	'assume a flatened 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 (271).

	bál-ɔwɔ	'bend down'
	kwàŋg-ɔwɔ	'lie down on side'
(271)	gyí-ɔwɔ	'lean back'
	pwàŋgy-ɔwɔ	'lie down stretched out (allonger)'
	sɛ̀ŋgy-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 *-*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 *-*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 though that passive forms are more related to the autocausative middle voice category, as described in section 4.1.2.5.

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 (272).[9]

[9]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.

(272)

bál-ɔwɔ	'bend down'	→	bál-awa	'be bent down'
pwàs-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, though, subjects of autocausative verb forms are inanimate, given that they incorporate the role of an undergoer which for many transitive verbs such as *kfúdɛ* 'cover' or *lɛ́gɛ* 'singe' is typically inanimate.

In terms of semantics, the agent in autocausative forms is underspecified, implying a certain self-causation which is not necessarily real. For instance, when using the form *wàw-ɛga* 'spread (by itself)' with a subject such as 'seeds', this is generally understood as 'the seeds spread by themselves'. In all reality though, they are probably spread by the wind or some other agent such as animals which is not salient that it deserves mentioning. Thus, the subject is treated as the agent, even though this might not be the case in the external 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-ɛga* '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' which shows that whole range of the possible spectrum of agent specification in Gyeli, as illustrated in Table (4.6).

Transitive →	Positional →	Autocausative →	Passive
two participants	agent = subject	agent implied	agent not specified
kwádɔ 'twist sth.'	kwádɔwɔ 'assume twisted position'	kwádɛga 'get twisted'	kwáda 'be twisted'

Table 4.6: Scale of decreasing participants

4.1.2.7 Expansions

Expansions, in contrast to extensions, are not productive. They are low in frequency and do not have an obvious core function, at least not one that applies to all instances of their occurrence. 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 suffix ending, all of which are transitive verbs which do not, however, have an underived intrasitive form.

This suffix has different effects for different verbs which is lexically specified. In most instances, the suffix *-kɛ* is valency inceasing, turning an intransitive verb into a transitive one, as shown in (273).[10]

(273)

bwà	'become big'	→	bɔ̀-kɛ	'make sth. big'
kàgɔ	'promise (intr.)'	→	kà-gɛ	'promise (tr.)'
lű̀ã̀	'whistle'	→	lɔ̃̀ŋ-gɛ	'whistle sth.'
tɛ́'ɛ̀	'be soft'	→	tɛ́-gɛ	'soften sth.'
tɔ̀à	'boil (intr.)'	→	tɔ̀-kɛ	'boil sth.'
bô	'lie down (intr.)'	→	bú-gɛ	'lie sth. down'

In another case, the inverse happens and the expansion *-kɛ* serves as a valency decreasing suffix, as in (274). This may be an exception, though.

(274) bvúɔ̀ 'break sth.' → bvú-kɛ 'break (intr.)'

For the majority of instances where the suffix *-kɛ* has a valency increasing effect, one might assume that this may be linked to a causative meaning, especially in examples such as *bɔ̀-kɛ* 'make big' or *tɛ́-gɛ* 'soften sth.'. The *-kɛ* expansion is, however, distinct from the standard causative *-ɛsɛ*, and not an allomorph, as cases of verbs show which have both suffixes. For instance, the verb *djíyɛ* 'burn (intr.)', as shown in (275), allows *-kɛ* as a valency increasing expansion *djígɛ* 'burn sth'. Also, the causative form *djíg-ɛsɛ* is found with the figurative meaning 'make sb. angry'.

[10]Note that 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 *bɔ̀kɛ* '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-lɛ* 'be born'.

(275)

djíyɛ	'burn (intr.)'	→	djí-gɛ	'burn sth.'
		→	djíg-ɛsɛ	'make angry'
dvùɔ̀	'hurt (intr.)'	→	dvù-gɛ	'hurt sb.'
		→	dvùg-ɛsɛ	'make sb. hurt'

The base final consonant of the causative forms in (275) could actually be traces of the *-kɛ/gɛ* expansion, also in other extension forms (see discussion on alternating epenthetic consonants in section 4.1.1.)

-lɛ Another non-productive suffix is *-lɛ* with only 6 derived forms in the database. *-lɛ* is a frequent ending of bisyllabic verbs though; 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 *-kɛ/gɛ*, it is difficult to pinpoint *-lɛ*'s function. Often, it seems to be valency increasing, transitivizing an intransitive verb form, as in (276).

(276)

vû	'leave'	→	vú-lɛ	'get rid of sth.'
djí(yɔ)	'sit, live'	→	djí-lɛ	'seat sb.'
tɛ́bɔ	'rise'	→	tɛ́-lɛ	'place sth.'

In other cases, however, the *-lɛ* suffix more seems to have a passivizing function, as in (277). 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.

(277)

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 though. This, again, makes it difficult to make generalizations about its function. It is tempting to assume a reversive category when considering (278).

(278) djì 'open sth.' → djì-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 (279).[11]

	sɔ̀-lɛ	'hide sth.'	→	swà-wɔ	'hide (intr.)'
(279)	tɛ́-lɛ	'place sth.'	→	tɛ́-bɔ	'rise'
	láà	'tell sth.'	→	là-wɔ	'speak'

4.2 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 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 4.3, or by nouns in complement position, as in (280).

(280) màlɛ́ndí máà vɛ̀ɛ̀ kwè mípìndí
ma-lɛ́ndí máà vɛ̀ɛ̀ 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

[11] In the two first cases, it is hard to specifiy 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.

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 five subclasses as described by their most salient characteristics:

Group 1: adverbs optionally combining with LOC preposition *ɛ́*
Group 2: adverbs that can occur in noun + attributive constructions
Group 3: adverbial lexemes that can act as nominal modifiers in NPs
Group 4: adverbial lexemes that occur as nouns in NPs
Group 5: adverb that does not exhibit any of the above mentioned properties

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 4.7. Group 1 consists entirely of deictic adverbs which include locative and manner deictics. Group 2 hosts temporal adverbs. Group 3 contains manner adverbs, and group 4 locative and directional adverbs. Group 5 only has one member, namely an anaphoric adverb.

Nevertheless, the defining criteria for adverbial subclasses in Gyeli are four morphosyntactic properties as listed in the column names of Table 4.7: i) the potential combination with the locative *ɛ́*, ii) use of a lexeme as both adverb modifying a verb and qualifier/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. Since this is not a morphosyntactic property though, it does not determine adverbial classification.

The distinctive characteristic of group 1 adverbs is their potential combination with the locative preposition *ɛ́* 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 and 4 adverbs have in common that they are the only

Group	Semantic core	LOC *ɛ́*	QUAL / 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	QUAL/QUANT
4	locative	—	—	—	x	denominal
5	anaphoric	—	—	—	—	*ndɛ̀* + *ná*

Table 4.7: Criteria for adverb classification

ones to be restricted to a phrase final position only while all other adverbs can also occur at the beginning of a phrase. Group 3 and 4 adverbs differ though with respect to nominal modification: lexemes occurring in group 3 can also be used as qualifiers or quantifiers to modify nouns. In contrast, lexemes in group 4 cannot be used in nominal modification, but they can be used as nouns in noun phrases. Finally, the anaphoric adverb of group 5 is defined by the absence of all four morphosyntactic properties.

In the following, I will describe each adverb subclass in more detail. In order to be consistent with the structure of this grammar, I will only discuss adverbs that modify verbs in this section. Note that I treat words such as 'also', 'still', and 'only' separately in chapter 6.2.4 since they behave as modifiers on a clausal level and, as such, show greater positional variability.

4.2.1 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 4.8 provides a summary of deictic adverbs in Gyeli as well as their numeric frequency in the Gyeli text corpus.[12] 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. This is further discussed below on 'Formal commonalities'. Chapter 3.5.4.1 provides more information on the locative *ɛ́*.

[12]Obviously, this is a very limited corpus, but it shows some tendency as to which adverb gets used more frequently.

Deictic element	Gloss	Frequency	
		with verb	with noun
(ɛ́) vâ	'here'	41	2
(ɛ́) pɛ̀	'over there'	21	0
(ɛ́) wû	'there'	12	3
(ɛ́) tè	'there'	8	13
(ɛ́) mpù	'like this'	14	0

Table 4.8: Deictic adverbs

Formal commonalities I view deictic adverbs as a category, based on formal similarity and their potential co-occurrence with the locative marker *ɛ́*, 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 and 4 adverbs. Some of them may, however, also be used to modify nouns rather than a verbs, namely as the second constituent in noun + attributive marker constructions, as discussed in chapter 3.7. The distribution of deictic adverbs as modifying verbs as opposed to nouns is illustrated in Table 4.8 under 'Frequency'. (281) gives an example of a deictic element as nominal modifier while the examples in the remainder of this section show deictic adverbs modifying verbs.

(281) mɛ̀gà mɛ́ɛ̀ dyúwɔ́ nzɑ́ɑ̀ [dúwɔ̀ lé **tè**].
mɛ-gà mɛ́ɛ̀ dyúwɔ-H nzɑ́ɑ̀ d-úwɔ̀ lé tè
1S-CONTR 1S.PST2 feel-R ∅7.appetite le5-day 5:ATT there
'As of 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. Vice versa, 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.

The manner deictic *(ɛ́) mpù* never occurs as nominal modifier. It generally serves to introduce gestures and ideophones, as for instance in (282). In this example, the first occurrence of *mpù* frames the ideophone while the

second refers to a gesture that may actually be made or not, i.e. the gesture is most likely implied, but not necessarily made.

(282) yɔ̀ɔ̀ nzàmbí njí **mpù** bə̂ə̂ə̂ə̂, njì dígɛ̀ **mpù**.
yɔ̀ɔ̀ nzàmbí njî-H mpù bə̂ə̂ə̂ə̂, njì dígɛ̀ mpù
so PN.PRES come-R like.this IDEO come look like.this
'So Nzambi comes like this [depiction of walking a long distance], comes looking like this.'

Also, *mpù* is used in comparison constructions as in (283). In these cases, *mpù* is translated as 'like, than' rather than 'like this'.

(283) Màmá à ndáà gyà ntɛ̀ **mpù** Màmbì.
Màmá a ndáà gyà ntɛ̀ mpù Màmbì.
PN 1.have also ∅7.length ∅3.size like PN
'Mama is as tall as Mambi.'

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 (284) through (286).

(284) mɛ́ bvú nâ nkwálá wúù tfùndɛ́ mɛ̀ **vâ**.
mɛ-H bvû-H nâ nkwálá wúù tfùndɛ-H mɛ̀ vâ
1S-PRES think-R COMP ∅3.machete 3.PST2 miss-R 1S here
'I think that the machete missed [= injured] me here.'

(285) mɛ́ pə̂́ ná kɛ̀ dígɛ̀ mùdì wà nû **ɛ́**
mɛ-H pə̂̀-H ná kɛ̀ dígɛ m-ùdì wà nû ɛ́
1S.PRES try-R again go see N1-person 1:ATT 1.DEM.PROX LOC
pɛ́.
pɛ́
there
'I try again and go see that person there.'

(286) yɔ̀ɔ̀ nzàmbí dígɛ́ mísì **ɛ́** **mpù**.
yɔ̀ɔ̀ nzàmbí dígɛ-H m-ísì ɛ́ mpù
so PN look-R ma6-eye LOC like.this
'So Nzambi looks with the eyes like this.'

In contrast to groups 3 and 4, group 1 adverbs also pervasively appear in phrase initial positions, as in (287) through (289). This position is clearly

correlated with information structure, moving the deictic adverb into a focus position.[13] While also group 2 (temporal) and group 5 (anaphoric) adverbs can occur in this initial focus position, deictic adverbs are significantly more frequently focussed in the Gyeli text corpus.

(287) **ɛ́ vâ** mɛ̀ dyùwɔ́ nâ **ɛ́ vâ** yîì sílɛ̀
ɛ́ vâ mɛ dyùwɔ-H nâ ɛ́ vâ yîì sílɛ̀
LOC here 1S.PST1 hear-R COMP LOC here 7.FUT finish.FUT
njì búlɛ̀.
njì búlɛ
come destroy
'Here I heard that here it will all come to be destroyed.'

(288) **ɛ́ pɛ́-ɛ́** mɛ̀ɛ̀ lwɔ̂ nyà ndáwɔ̀.
ɛ́ pɛ́-ɛ́ mɛ̀ɛ̀ lwɔ̂ nyà ndáwɔ̀
LOC there-DIST 1S.FUT build real ∅9.house
'Over there, I will build a real house.'

(289) **ɛ́ mpù** bá kí nâ djíwɔ́ mbyɛ̂ nà djíwɔ́
ɛ́ mpù ba-H ki-H nâ djíwɔ́ mbyɛ̂ nà djíwɔ́
LOC like.this 2-PRES say-R COMP ∅7.river ∅3.high COM ∅7.river
nkɛ̀.
nkɛ̀
∅3.low
'Like this they say that up the river and down the river.'

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 (290) and (291).

(290) **ɛ́ pɛ̀** bà sílɛ́ bî lwɔ̂ mándáwɔ̀
ɛ́ pɛ̀ ba sílɛ-H bî lwɔ̂ H-ma-ndáwɔ̀
LOC there 2.PST1 finish-R 1P.OBJ build OBJ.LINK-ma6-house
ɛ́ pɛ̀.
ɛ́ pɛ̀
LOC there
'There, they have finished to build us houses there.'

(291) **ɛ́ wû** bèyá lwɔ̋ kwádɔ́ yɔ̂ **ɛ́ wû**.
ɛ́ wû bèyá lwɔ̂-H kwádɔ́ y-ɔ̂ ɛ́ wû
LOC there 2P[Kwasio] build-R ∅7.village 7-POSS.1S LOC there
'Over there you (pl) build my village over there.'

[13] See chapter 6.3 on information structure for a more detailed discussion.

The use of the locative *ɛ́* 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 *ɛ́* omission when the deictic adverb occurs phrase finally might be phonologically conditioned. Phrase finally, the locative *ɛ́* usually follows a vowel either from a preceding verb or noun and may undergo deletion in fast speech. When asked, speakers state though that the use of the locative *ɛ́* is possible in both phrase initial and phrase final positions. It is less clear at this point whether the co-occurrence of the locative *ɛ́* with a deictic adverb is generally optional, comparable to the optional use or omission of the attributive marker as discussed in chapter 3.7.1.1 or whether the locative *ɛ́* 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 *pɛ̀* 'over there', which denotes the place furthest away. In French, *pɛ̀* 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 *pɛ̀* '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 (292) illustrates. In this example, *tè* is more existential than about distance.

(292) bə̂ yɔ́ɔ̀ yíì **tè**
bə̂ y-ɔ́ɔ̀ yíì tè
∅7.word 7-2S.POSS 7.ID there
'Your word is there [= you are understood].'

Also in (293), the use of *tè* is not primarily locative, but more anaphoric to the circumstances of earning only 250 Francs CFA.

(293) ká bá kɛ́ wɛ̂ vɛ̀ bé-bwúyà bébáà nà
ká ba-H kɛ̀-H wɛ̂ vɛ̀ H-be-bwúyà bé-báà nà
if 2-PRES go-R 2S.OBJ give OBJ.LINK-be8-hundred 8-two COM
mà-wú mátánɛ̀, wɛ́ sá **tè** ná?
ma-wú má-tánɛ̀, wɛ-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 (294), *tè* is place-denoting just like the other deictic adverbs. Speakers state that, in this example, *tè* can also be replaced by *pɛ̀* or *wû*.

(294) **tè** mɛ̀ɛ̀ djíbì kɛ̀ lwə̂ **tè**
tè mɛ̀ɛ̀ djíbi kɛ̀ lwə̂ 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 (295) and in (288) above.

(295) lèkfúdɛ̀ à nzí bíyɔ̀ nlô **pɛ́ɛ́**
le-kfúdɛ̀ a nzí bíyɔ nlô pɛ́-ɛ́
le5-idiot 1 PROG.PST hit ∅3.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 *pɛ̀* and *wû*. An example for the latter is given in (296). This does not seem to be possible with *tè* though which indicates again that *tè* behaves differently from the other more purely locative deictic elements.[14]

[14] *vâ* '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.

(296) báà tfùbɔ̀, báà tfùbɔ̀. mpàgó wá nùmbà **wúú**.
báà tfùbɔ̀, báà tfùbɔ̀. mpàgó wá nùmbà wú-ú
2.FUT pierce 3P.FUT pierce ∅3.road 3:ATT ∅1.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 (297), but not with *tè* nor any other deictic element.

(297) mùdì kí tàtɔ̀ **wúó**!
m-ùdì kí tàtɔ wú-o-H
N1-person NEG scream there-VOC-DIST
'Nobody scream over there!'

In summary, it seems that *vâ* 'here', *wû* 'there' and *pɛ̀* '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 4.9.

Deictic	Gloss	LOC *ɛ́*	mostly modifying	DIST marking	Vocative *-o*
vâ	'here'	x	verbal	—	—
wû	'there'	x	verbal	x	x
pɛ̀	'over there'	x	verbal	x	—
tè	'there'	x	nominal	—	—

Table 4.9: Morphosyntactic properties of locative deictics

4.2.2 Group 2 Adverbs: Temporal

Adverbs of group 2 have four members which are all temporal and listed in Table 4.10. While group 2 adverbs form a unitary morphosyntactic category, they differ in their derivational source. While *tɛ́ɛ̀* 'now' and *dɛ̂̀* 'today' seem to be underived lexemes, the other two adverbs in the group are clearly derived from nouns: *nàkùgúù* 'yesterday' is derived from *kùgúù* 'evening' and *nàménɔ́* 'tomorrow' from *ménɔ́* 'morning'.
Historically, the *nà-* morpheme in the denominal group 2 adverbs is most likely a similative marker that is also found in basic color terms (see chap-

Adverb	Gloss	Derivational source
tɛ́ɛ̀	'now'	underived
dɛ̂	'today'	underived
nàkùgúù	'yesterday'	denominal
nàmɛ́nɔ́	'tomorrow'	denominal

Table 4.10: Group 2 adverbs

ter 3.5.1).[15] Synchronically, speakers clearly perceive these adverbs as one word that cannot be parsed into further meaningful units.

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 (298).

(298) a. bèdéwɔ̀ bé **dɛ̂**
be-déwɔ̀ bé dɛ̂
be8-food 8:ATT today
'food of today.'

b. nlɑ̂ wá **nàkùgúù**
nlɑ̂ wá nàkùgúù
∅3.story 3:ATT yesterday
'yesterday's story.'

While some group 1 adverbs exhibit the same property, deictic adverbs also combine with the locative *ɛ́*, unlike group 2 temporal adverbs.

All group 2 adverbs occur phrase finally as a default position. Examples are given in (299) through (301).

(299) wɛ́ làwɔ́ **tɛ́ɛ̀**.
wɛ-H làwɔ-H tɛ́ɛ̀
2S-PRES talk-R now
'You speak now.'

(300) nyɛ̀ náà à múà wɛ̀ bíyɔ̀ **dɛ́**.
nyɛ náà à múà wɛ̀ bíyɔ̀ dɛ́
1 COMP 1 PROSP 2S.OBJ hit today
'He [says] that he is about to beat you today.'

[15]Note though that the tone on *na-* for group 3 adverbs and color terms are not the same. The morpheme receives a L tone in adverbs and a H tone in color terms.

(301) mɛ̀ nzí kɛ̀ jí **nàkùgúù**.
mɛ nzí kɛ̀ jí nàkùgúù
1S PROG.PST go ∅7.forest yesterday
'I was going to the forest yesterday.'

They can all also occur phrase initially, as shown in (302). In these cases, they are in focus, as discussed for group 1 adverbs and in chapter 6.3 on information structure. In (302), 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.

(302) àà **nàmɛ́nɔ́** bwáà dè, **nàmɛ́nɔ́**.
àà nàmɛ́nɔ́ bwáà dè, nàmɛ́nɔ́
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.

4.2.3 Group 3 Adverbs: Manner

Group 3 adverbs are defined by their lexemes' double affiliation to the part of speech of qualifiers or quantifiers when modifying nouns. Semantically, they map onto manner adverbs. Manner adverbs are rare in Gyeli, both in terms of number and occurrence. Table 4.11 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 4.3.

Manner adverb	Gloss	Affiliation to other POS
mpà	good	invariable qualifier
bíwɔ̀	bad	invariable qualifier
fí	different	deictic modifier (→ short form of -fúsì)
bvùbvù	a lot	invariable quantifier

Table 4.11: Manner adverbs and their affiliated parts-of-speech

All of these manner adverbs are also found as nominal modifiers where they differ though in their behavior, as shown in chapter 3.4 and 3.5. Most

of them such as *mpà* 'good', *bíwɔ̀* 'bad', and *bvùbvù* 'much' are invariable also in noun phrases. Only *-fí* 'different', the short form of *-fúsì* used as a deictic modifier, agrees with its head noun. In the verbal domain, however, all of them are invariable.

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 (303) and (304).

(303) wɛ̀ nzíí bàlɛ̀ **mpà**
wɛ nzíî-H bàlɛ mpà
2S PROG.PRES-R keep good
'You are keeping [the words] well.'

(304) wɛ́ ná báàla nà nyɛ́ **fí** nà wɛ́
wɛ-H ná báàla-H nà nyɛ̂-H fí nà wɛ-H
2S-PRES again repeat-R COM see-R different COM 2S-PRES
ndyándyá ná sálɛ́ ɛ́ pɛ̂
ndyándya-H ná sálɛ-H ɛ́ pɛ̂
work-R again ∅7.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 (305) and (306).

(305) á sìmbɔ́ màtúà **bíwɔ̀**
a-H sìmbɔ-H màtúà bíwɔ̀
1-PRES drive-R ∅1.car bad
'He drives the car poorly.'

(306) mɛ̀ɛ́ djí-lɛ́ wɛ̂ **bvùbvù**
mɛ̀ɛ́ djí-lɛ́ wɛ̂ bvùbvù
1S.PRES.NEG ask-NEG 2S much
'I don't ask you [for] much.'

In contrast to adverb groups 1, 2, and 5, manner adverbs cannot be used in a phrase initial focus position.

4.2.4 Group 4 Adverbs: Locative/directional

Just like group 3, group 4 adverbs also have a double affiliation to two parts of speech. In contrast to group 3, however, group 4 adverbs do not serve

as nominal modifiers, but are nouns themselves when they occur in a noun phrase. In fact, these adverbs are zero-derived from their corresponding referential nouns. Table 4.12 shows the lexemes and their meaning both in adverbial and in nominal use.

Lexeme	Adverbial use	Nominal use
sí	'under, down'	'ground'
dyúwɔ̀	'up, about'	'sky'
tɛ́mɔ́	'between'	'middle'
písɛ̀	'behind'	'behind, back (n.)'
sɔ̂	'in front, before'	'front (n.)'

Table 4.12: Locative/directional adverbs and their source nouns

Semantically, group 4 adverbs map onto locative and directional adverbs. The same adverb can be used both in a locative and directional way, as for instance *sí* which can mean both 'under' and 'down'.

Given that these lexemes also have a use as nouns in noun phrases, one could argue that group 4 adverbs should not be analyzed as adverbs at all, but rather as oblique nouns. Syntactic and distributional differences show, however, that in Gyeli, group 4 adverbs belong to a different part of speech than their related nouns. First, when referential nouns are used as locations in a phrase, they are preceded by the locative preposition *ɛ́*, as shown in (307).

(307) mɛ̀ lɛ̀bɛ́lɛ́ wɛ̀ **ɛ́** **tísònì** nàkùgúù
mɛ lɛ̀bɛlɛ-H wɛ̀ ɛ́ tísònì nàkùgúù
1S.PST follow-R 2S.OBJ LOC ∅7.town yesterday
'I followed you to town yesterday.'

In contrast, locative adverbs never co-occur with the locative *ɛ́*, as exemplified in (308).

(308) mɛ̀ búgɛ́ wɛ̀ **sí** nàkùgúù
mɛ búgɛ-H wɛ̀ sí nàkùgúù
1S.PST put.down-R 2S.OBJ down yesterday
'I put you down yesterday.'

Second, locatives in adverbial use do not exhibit typical noun characteristics such as triggering agreement. The use of locative adverbs is invariable in (309), i.e. the adverbial cannot be extended by, for instance, an attributive construction.

(309) nsə́ wɔ̀ɔ̀ mɛ̀ **sí/písɛ̀/sɔ̂**.
nsə́ wɔ̀ɔ̀ mɛ̀ sí/písɛ̀/sɔ̂
∅3.worm 3:ID 1S.OBJ under/behind/in.front
'The worm is under/behind/in front of me.'

The minimal pair to this phrase in (310) shows that also nouns can be used in this phrase, but in that case, the syntactic structure changes. The locative noun is followed by an attributive marker which agrees with the noun and thus clearly marks it as a noun. Further, the object *mɛ̀* '1S' that precedes the adverbial locative follows the nominal locative.

(310) nsə́ wɔ̀ɔ̀ **sí/písɛ̀/sɔ̂** **yá** mɛ̀.
nsə́ wɔ̀ɔ̀ sí/písɛ̀/sɔ̂ yá mɛ̀
∅3.worm 3:ID under/behind/in.front 7:ATT 1S.OBJ
'The worm is under/behind/in front of me.'

Comparable to group 3 manner adverbs, group 4 adverbs occur only phrase finally, as shown in (308), (309), and (311). They do not appear in the phrase initial focus position.

(311) à kɛ́ɛ̀̀ nyî pɛ̀ **dyúwɔ̀**, à dígɛ́ɛ̀ à
a kɛ́ɛ̀̀ nyî pɛ̀ dyúwɔ̀ a dígɛ́ɛ̀ a
1.PST1 go.PRF enter there on.top 1.PST1 watch.PRF 1.PST1
díg-â dígɛ́ɛ̀.
díg-â dígɛ́ɛ̀.
watch-1.PST1 watch.PRF
'He had gone and entered there on top, and watched and watched and watched.'

Finally, group 4 adverbs can also modify phrases rather than verbs, as shown in (312).

(312) mbúmbù wâ̰ wɛ́ kúmbɔ́ mɛ̂ sá
mbúmbù w-â̰ wɛ-H kúmbɔ-H mɛ̂ sá
∅1.namesake 1-POSS.1S 2S-PRES arrange-R 1S.OBJ ∅7.thing
mpù. ɛ́ mwánɔ̀ wâ̰ **dyúwɔ̀**.
mpù. ɛ́ m-wánɔ̀ wâ̰ dyúwɔ̀.
like.this EXCL N1-child 1-POSS.1S on
'My namesake, you do a thing to me like this. Hey, about [concerning] my child!'

4.2.5 Group 5 Adverbs: Anaphoric

The fifth adverbial sublass is exceptional in that it is basically defined by negative values concerning the defining morphosyntactic features: it does not combine with the locative *ɛ́*, it does not have a double affiliation to another part of speech nor is it used as nominal modifier, and it is not restricted to a phrase final position. Group 5 only has one member which is *ndɛ̀náà* 'like this'.

ndɛ̀náà 'like this' is derived from the anaphoric marker *ndɛ̀* plus the interrogative *ná* 'how'. Phonologically and following speaker intuition, this adverb is considered as one word though. The inclusion of the anaphoric marker hints at the difference to the manner deictic *mpù* of adverb group 1 which receives the same translation. Instead of framing gestures and ideophones like *mpù*, *ndɛ̀náà* mainly serves as an anaphoric adverb, summarizing in some sense the previous discourse.[16] This is illustrated in (313) through (315). For example, in (313), *ndɛ̀náà* refers to the event chain of collecting money and giving it to the person the money is owed to.

(313) yɔ́ɔ̀ mɛ́ tɔ́kɛ́ mɔ̀nɛ́ wɛ̀ vɛ̀ nyɛ̂, nâ
yɔ́ɔ̀ mɛ-H tɔ́kɛ-H mɔ̀nɛ́ w-ɛ̀ vɛ̀ nyɛ̂, nâ
so 1S-PRES collect-R ∅1.money 1-POSS.3S give 1.OBJ COMP
ndɛ̀náà yíì mpà.
ndɛ̀náà yíì mpà
like.this 7.ID good
'So I collect her money [and] give [it to] her, so that like this it be good.'

In (314), the anaphoric adverb summarizes the previous events of leaving her child to the person *Nzambi* in exchange for food and thus returning home and arriving at the river bank 'like this', i.e. without the child.

(314) **ndɛ̀náà** pámò lé-bû̂ àá gyì.
ndɛ̀náà pámo H-le-bû̂ 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.'

ndɛ̀náà can also occur relatively independently in its own intonation phrase, as in (315), referring to the previous discourse.

[16] *mpù* is significantly more frequent in natural texts with 23 occurrences in the Gyeli corpus, contrasting with only 4 occurrences of *ndɛ̀náà*.

(315) m̀m̀ **ndɛ̀náà**. lèkɛ́lɛ̀ lɛ́ndɛ̀ lɛ́ɛ̀ nâ...
m̀m̀ ndɛ́náà. le-kɛ́lɛ̀ lɛ́-ndɛ̀ lɛ́ɛ̀ nâ...
EXCL like.this le5-word 5-ANA 5.ID COMP
'Yes, like this. The word is that...'

4.2.6 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 (316) and (317), as well as above in (311).

(316) pílì bèyá lɔ́ njì **ɛ̀ vá tɛ́ɛ̀ dɛ́̃**,
when 2P RETRO come LOC here now today
'When you just arrived here now today,'

(317) mɛ̀ nzí dyá **vâ kùgúù** [**dɛ̀̃** màfú mábáà].
mɛ̀ nzí dyá vâ kùgúù dɛ̃̀ ma-fú má-báà.
1S PROG.PST1 lie.down here ∅7.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 is closer to the center or the periphery of the clause require more investigation. This is most likely also correlated with information structure factors.

4.3 Ideophones

Ideophones are widely attested in the literature on African languages (see, for instance, 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 pecularities 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, i.e. describing the meaning of single ideophones consistently.[17] 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 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. As I will show below, Gyeli ideophones 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. Therefore, I discuss them in detail in the verb chapter, while they are also cross-referenced in chapter 6 on clauses, depending on their syntactic construction type. Generally, Gyeli ideophones structurally stand out from other words in terms of their phonological shape and their syntactic integration into a phrase. I will discuss both aspects in turn.

4.3.1 Phonological Shape of Ideophones

Ideophones in Gyeli are phonologically marked by various means, including reduplication or a repetitive character, final vowel lengthening, and special

[17] Ideophones seem further to be consistently used in 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.

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 usually not occur with final vowel lengthening while closed syllable ideophones may also be reduplicated. I will discuss each of these three features in more depth in the following.

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 remain steady in their tonal melody and those that change their tonal melody. In (318), for instance, the ideophones involve repeated monosyllabic words each carrying the same tone.

(318)

ʃyê ʃyê	‘depiction of sneaking’
tʃɔ̀p tʃɔ̀p tʃɔ̀p	‘depiction of dripping sound or sound walking in mud’
mtʃà mtʃà mtʃà	‘depiction of picky eating (only taking certain items off a plate)’
ké 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 (319) 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 the monosyllabic word.

(319)	gbĩ́ gbĩ̀ gbĩ́ gbĩ̀ gbĩ́	'depiction of small objects moving in space (e.g. bacteria roaming in a body)'
	wùù wúú wùù wúú	'depiction of sound of bees'

There are a few instances where the word is bisyllabic and again, it is the word that gets reduplicated, as shown in (320). In contrast to monosyllabic ideophone words, bisyllabic ones are only subject to reduplication, but usually do not get repeated more than twice.

(320)	kpúdùm kpúdùm	'depiction of drumming'
	kpàdà kpàdà	'depiction of drumming on bamboo pipes'
	mátʃà màtʃà	'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 (321). All of them occur as monosyllabic words only.

(321)	ndɛ̃́ɛ̃́ɛ̃́ɛ̃́	'depiction of staring'
	wɔ́ɔ́ɔ́ɔ́ɔ́	'depiction of moving by foot or motorbike'
	bâ̂â̂â̂â̂	'depiction of walking a long distance fast'
	wùùùù	'depiction of pouring liquids or granulars'
	pfáááá	'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 though. For instance, *wùùùù* '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 Another aspect of ideophones' phonological markedness concerns their syllable structure. As outlines in chapter 2.3, the Gyeli syllable is open with a typical CV structure. Exceptions to this generalization are found in ideophones though which exhibit both closed syllables and syllables that only consist of a consonant.

Closed syllables in ideophones frequently end in /m/, but also voiceless obstruents such as /f/ or /k/. Most of them are monosyllabic, as in (322).

(322)
wɔ̀m	'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 (323).

(323)
pfùtùm	'depiction of sound when jumping into water'
pùdùm	'depiction of falling into mud or throwing stone into water'
ntɔ̀ndɔ̀m	'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 (324). Note that the voiceless bilabial in *p p p p* 'depiction of smoking pipe' is produced with an ingressive airstream, imitating the inhaling when smoking.

(324)
ḿ m̀ m̀ m̀ ḿ	'depiction of someone mumbling to himself'
p p p p	'depiction of smoking pipe'

4.3.2 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 are closest to the class of adverbs in their morphosyntactic behavior, but differ from them in terms of syntactic freedom. 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 (325) and (326). 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.

(325) yɔ́ɔ̀ mùdầ dígɛ́ mísì **ndɛ́ɛ́ɛ́.**
yɔ́ɔ̀ m-ùdầ dígɛ-H m-ísì ndɛ́ɛ́ɛ́
so 1N-woman watch-R ma6-eye IDEO
'So the woman looks with her eyes [depiction of staring].'

(326) bá kɛ́ ndáà nà tɛ́lɛ́ mákùndù má
ba-H kɛ-H ndáà nà tɛ́lɛ-H H-ma-kùndù má
2-PRES go-R also COM put-R OBJ.LINK-6ma-clay.house 6:ATT
kùrầ **kɛ́ kɛ́ kɛ́ kɛ́ kɛ́.**
kùrầ kɛ́ kɛ́ kɛ́ kɛ́ kɛ́
∅7.electricity IDEO IDEO IDEO IDEO IDEO
'They also go and put clay houses with electricity, [depiction of putting the electricity poles along the road].'

In contrast to adverbs though, ideophones also occur in constructions with the deictic element *mpù* 'like this', as shown in (327).

(327) yɔ́ɔ̀ nzàmbí ndjí mpù **bâ̂â̂â̂â̂**, njì dígɛ̀ mpù.
yɔ́ɔ̀ nzàmbí ndji-H mpù bâ̂â̂â̂â̂, njì dígɛ̀ mpù
so PN come-R like.this IDEO 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 frames the verbal depiction.

Ideophones as *nâ* complements Similarly, the same sort of framing happens when ideophones are used as complements in *nâ* clauses, as illustrated in (328).

(328) nzàmbí, màbɔ́ɔ̀ nkwɛ́ɛ̀ dé nâ **vɔ́sì**.
nzàmbí ma-bɔ́ɔ̀ nkwɛ́ɛ̀ dé nâ vɔ́sì
PN ma6-bread.fruit ∅3.basket LOC COMP IDEO
'Nzambi, the bread fruits in the basket [depiction of pouring]'

This type of construction is parallel to reported speech, as discussed in Güldemann (2008). For more information on Gyeli complement constructions and reported speech, see chapter 7.2.5.

Syntactic independence of ideophones Very often, 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 (329), 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, indicated by a comma in the gloss.

(329) **gbǐ́ gbì̀ gbǐ́ gbì̀ gbǐ́**, à múà nà báβɛ̀ tí
gbǐ́ gbì̀ gbǐ́ gbì̀ gbǐ́ a múà nà báβɛ̀ tí
IDEO IDEO IDEO IDEO IDEO 1S.PST1 PROSP COM ∅7.illness NEG
wúmbɛ́ wɛ̀
wúmbɛ-H wɛ̀
want-R 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 (330).

(330) wɛ́ dyúwɔ́ mpù bàmìntùlɛ̀ bɔ́gá bá tsígɛ̀
wɛ-H dyúwɔ-H mpù ba-mìntùlɛ̀ bɔ́-gá ba-H tsígɛ̀
2S-PRES hear-R like.this ba2-mouse 2-other 2-PRES take.off
tsùk tsùk tsùk.
tsùk tsùk tsùk
IDEO IDEO IDEO

> ‘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 (330), it is the L tone on *tsígɛ̀* ‘take’ off which shows the end on the intonation phrase. If the ideophone was part of the same intonation phrase, the final tone on *tsígɛ̀* would be H.

Having discussed the Gyeli verb structure and its derivation system, as well as verbal modifiers such as the different adverbial classes and ideophones, I turn to the inflectional level of the verb phrase in the next chapter.

Chapter 5

Tense, Aspect, Mood and Negation

5.1 Introduction

In this chapter, I describe the inflectional level of the verb phrase, including tense, aspect, mood, and negation. 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. In Gyeli, tense and mood information is coded together while there is a basic formal distinction between tense-mood and aspect. Information concerning tense-mood is encoded by tonal processes on both the subject clause operator (SCOP) and the verb stem. In contrast, making statements about the internal constituency of an event involves typically periphrastic constructions using a range of aspectual verbs and markers. Before describing the particular tense-mood-aspect system in Gyeli, I first introduce the terminology that I use.

Tense, mood, and aspect 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. Aspects, on the other hand, are 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".

While tense and aspect are mostly, to varying degrees, delimited from one another, there are also approaches that deliberately do not distinguish the two at all. Thus, both Dahl (1985) and Bybee et al. (1994: 3) 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 FUTURE or SUBJUNCTIVE. In contrast to Dahl and Bybee, however, I suggest that these categories can be grouped into tense-mood and into aspect categories.

As seen in the previous definitions of tense and aspect, these two categories are traditionally viewed as being closely related. As I will show for Gyeli, tense and mood are more related than tense and aspect. Timberlake (2007: 326) views grammatical systems of mood as "modality crystallized as morphology" while modality "is consideration of alternative realities mediated by an authority" (p. 315). Common mood categories include 'realis' versus 'irrealis', 'indicative' versus 'non-indicative', and also 'imperative'. In Gyeli, the basic mood distinction is between 'realis' and 'irrealis' where IMPERATIVE and SUBJUNCTIVE are subsumed under the general 'irrealis' mood.

Diagnostics for tense, mood, and aspect categorization in Gyeli The diagnostics for delimiting tense, mood, and aspect in Gyeli are formal-structural. As a basic distinction, tense and mood are primarily expressed through tonal processes. In contrast, aspect marking is mainly achieved through lexical-segmental material. The tonal processes that determine specific tense-mood (TM) categories are described in detail in section 5.2. They involve tonal modification of i) the subject-clause-operator (SCOP), ii) the final verb tone in phrase final position, and iii) the final verb tone in non-phrase final position.

Gyeli as a 'tense' language In that sense, Gyeli is more of a tense language since TM (tense-mood) marking is in several respects more prominent. First, aspect marking is not obligatory, but tense has always to be marked. Second, no aspect distinction is relevant in every tense. In fact, most aspect categories are restricted to a specific TM category in which they can occur, but not in others. 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 TM categories and not by aspectual categories.

The tense-aspect-mood system in Gyeli is an interlocking system where no single category can be described on its own. The combination of different grammatical phenomena leads to the interpretation of semantic categories such as tense, aspect, and mood. Therefore, instead of structuring this chapter in terms of these semantic categories, I rather describe the various diagnostics which cross-cut with semantic categories. First, I discuss the grammatical expression of tense and mood which is achieved through tonal patterns of the SCOP, the verb stem final tone, and a syntactic (metatonic) H tone. I then turn to aspectual marking and, in the subsequent section, to negation. I conclude this chapter with a discussion of how grammatical phenomena map onto semantic categories.

5.2 Grammatical Expression of Tense and Mood

In many languages, there is a one-to-one mapping of a morpheme to a tense category, as shown for Swahili in (331). The prefix *-ta-* indicates future tense.

(331) Swahili (Bantu G42)

ni-**ta**-kul-a
1S-FUT-eat-FV

'I will eat.'

It is very common though for northwestern Bantu languages that tense, aspect, and/or mood categories do not neatly map onto a single segmental

morpheme as in Swahili. Instead, expression of tense-aspect categories usually involve both segmental material and tonal change on the verb and possibly the subject marker.[1]

Gyeli is special within the northwestern Bantu languages in its segmental minimality in tense expression. Instead of segmental morphemes, Gyeli only uses tonal changes (and vowel lengthening) in order to express tense and mood distinctions. Consider the surface forms of the minimal pair in (332).

(332) a. mɛ́ dè
1S eat
'I eat.'

b. mɛ̀ dé
1S ate
'I ate.'

In the present tense in (332a), the subject marker, in the following called subject-clause-operator (SCOP), has a H tone while the tone on the verb stem is L. In contrast, in (332b), the past tense form is characterized by a L tone on the SCOP and a H tone on the verb. Interpreting the tense of a clause cannot be done with only the SCOP or the verb tone, but as a combination of both.

In Gyeli, there are three grammatical parameters that determine both tense and mood of a phrase. These are:

1. The pattern of the SCOP
2. The verb's final tone (in phrase final position)
3. A syntactic H tone (in non-phrase final position)

As I will show in the following sections, the combination of the SCOP pattern and the verb final tone in phrase final position define single tense-mood (TM) categories, comparable to Dahl's (1985) *grams*, such as PRESENT, RECENT PAST, REMOTE PAST, or FUTURE. Generally, the shape of the verb tone holds more coarse-grained information about the basic distinction between PAST and NON-PAST, while the shape of the SCOP holds more fine-grained information about further sub-distinctions within these two categories, for

[1] Compare for instance Makasso (2012) for Basaa (A43) and Beavon (1991) for Kɔɔzime (A842).

example PST1 (recent past) versus PST2 (remote past) within the general PAST category.

In certain contexts, the construction of paradigms is straightforward. For instance, in environments without aspectual and/or negation marking where the verb is phrase final, one arrives clearly at the above mentioned TM categories. It becomes, however, more complicated in other environments. When, for instance, the verb is not phrase final, but followed by an object or adverb, a syntactic H tone attaches to the right of the verb in certain categories. Whether a category will take this syntactic H tone or not cross-cuts the mood distinction into realis and irrealis.

Further, as I will show in section 5.3, aspectual marking 'interferes' with the shape of the SCOP, and thus with basic tense marking, since aspect markers take over the role of tense specification in a different way. Finally, different negation patterns are found for different TM categories. Some TM categories have their own lexical or morphological negation marker while others can only be negated in embedded sentences. In the next section, I will first present the different patterns of the SCOP that serve at establishing the various TM categories.

5.2.1 Patterns of the SCOP

The subject-clause-operator (SCOP) is a portemanteau morpheme marking the subject as well as encoding information on tense and mood. At the same time, it is subject to further change in negation and aspect marking contexts; we will return to that later. As discussed below in section 5.2.1.2 on SCOP omission and in chapter 4.1.1 on the Gyeli verb structure, the SCOP is a free morpheme that, unlike the Swahili subject prefix, is not part of the verb. In contrast to, for example, the Swahili subject concord prefix, the Gyeli SCOP can be omitted when a nominal subject is present.

The shape of the SCOP changes across different TM categories. Changes concern both tonal melodies and a distinction between long and short vowels of the SCOP, as exemplified in Table 5.1 with the SCOP of agreement class 2.

The table shows four different surface shapes of the SCOP, exploiting all tonal possibilities of the language: i) H, ii) L, iii) HL, and iv) LH. If the SCOP has a contour tone, HL or LH, the vowel is lengthened. SCOPs with

TM category	SCOP	Verb stem	Gloss
PRESENT	**bá**	*dè*	'they eat'
INCHOATIVE	**bàá**	*dè*	'they are at the beginning of eating'
FUTURE	**báà**	*dè*	'they will eat'
PAST 1	**bà**	*dé*	'they ate (recently)'
PAST 2	**báà**	*dé*	'they ate (a long time ago)'
IMPERATIVE		*dê*	'eat! (sg.)'
SUBJUNCTIVE	**bá**	*déè*	'may they eat'

Table 5.1: Surface patterns of the SCOP in different TM categories

H tones occur in two TM categories, namely PRES and SBJV, and the HL pattern is found in two TM categories as well, namely in the FUT and the PST2 categories. In the IMP category, no SCOP is used at all, but only the specific verb form.

For a better overview, Table 5.2 lists the SCOPs and its surface tones for all agreement classes in all TM 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 2P 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.

TM CAT	1S	2S	1P	2P	1	2	3	4	5	6	7	8	9
PRES	mɛ́	wɛ́	yá	bwá(á)	á/ nyɛ́/ nú	bá	wú	mí	lé	má	yí	bé	nyí
INCH	mɛ̀ɛ́	wɛ̀ɛ́	yàá	bwàá	àá	bàá	wùú	mìí	lèé	màá	yìí	bèé	nyìí
FUT	**mɛ̀ɛ̀**	**wɛ̀ɛ̀**	yáà	bwáà	**àà/ nyɛ̀ɛ̀/ nùù**	báà	wúù	mîì	léè	máà	yîì	béè	nyîì
PST1	mɛ	wɛ	ya	bwa(a)	a/ nyɛ/ nu	ba	wu	mi	le	ma	yi	be	nyi
PST2	mɛ́ɛ̀	wɛ́ɛ̀	yáà	bwáà	áà/ nyɛ́ɛ̀/ núù	báà	wúù	mîì	léè	máà	yîì	béè	nyîì
IMP	—	—	—	—	—	—	—	—	—	—	—	—	—
SBJV	mɛ́	wɛ́	yá	bwá(á)	á/ nyɛ́/ nú	bá	wú	mí	lé	má	yí	bé	nyí

Table 5.2: Patterns of the SCOP in different AGR classes and TM categories

Class 1 has *a* as a basic form and an alternate form *nyɛ* which is probably

the result from influence from Kwasio. At the same time, *nyɛ* is identical with the object pronoun of class 1 in Gyeli. Both forms are equally used and speakers state that both are part of the Gyeli language, while they are quite aware of loan words in general, though the *a* form is more frequently found in texts. Also, class 1 has a third alternate form, namely *nu* which is identical with the class 1 demonstrative. It can, however, also be used as SCOP with the specific tonal pattern for each TM category. In this, the class 1 SCOP is exceptional because demonstratives of other agreement classes cannot function as SCOP.

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 TM categories when these are combined with aspectual markers (see section 5.3). 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 SCOPs are represented as being toneless in the underlying line. PRES SCOP forms are underlyingly represented as toneless SCOPs which receive a H tone, characterizing this category.

Tone pattern in the FUTURE category In the FUTURE category, the SCOP differs in its shape even within the same TM category, depending on the agreement class that the SCOP encodes. While for the other TM categories, the tonal and vowel length pattern is the same for each agreement class for the FUTURE, the first and second person singular as well as the SCOP encoding class 1 deviate from the usual FUTURE pattern. As shown in Table 5.1, the general pattern for the FUTURE is a long vowel with a HL tonal melody. The exceptional three categories, however, have a long vowel with a L tonal melody, as listed in (333).

(333) a. mɛ̀ɛ̀ dè ‘I will eat’
b. wɛ̀ɛ̀ dè ‘you will eat’
c. àà/nyɛ̀ɛ̀ dè ‘s/he will eat’

5.2.1.1 SCOP Assimilation

In careful, slow speech, the SCOP usually surfaces. In fast speech, however, the SCOP can be subject to assimilation and omission. Both cases are outlined in turn. Depending on the morphophonological shape of the SCOP, the SCOP can undergo assimilation with preceding vocalic material in fast speech. This applies mainly to the class 1 SCOP whose segmental material consists of the vowel *a*. Given that it is not preceded by a consonant, unlike the SCOPs of all other agreement classes, it can assimilate with the final vowel of a preceding verb or noun.

An example of SCOP assimilation with both preceding verbs and nouns is provided in (334). In the first instance, the SCOP assimilates to the verb *njì* 'come' of the preceding phrase. Thus, SCOP assimilation in fast speech is not restricted to in-phrase assimilation, but can also cross phrase boundaries.

(334)

à	nj**â**	dyùmɔ́	bùd**àà**	dyùmɔ́	bùd**àà**	dyùmɔ́	
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	

bùd**àà**	dyùmɔ́	bùdì.	
b-ùdì	a	dyùmɔ-H	b-ùdì
ba2-person	1S.PST1	heal-R	ba2-person

'He came, he was healing people (4x).'

In the other assimilation instances in (334), the SCOP assimilates to the nominal object *bùdì* 'people', also of the previous phrase. In both cases, the first vowel is elided while the vowel of the SCOP 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 SCOP, both tone and vowel length survive, surfacing in a long vowel: [bùdì + à] → /bùdàà/.

SCOP assimilation with proper names As seen in the previous example, in SCOP assimilation it is usually the preceding vocalic material of a noun or verb that is deleted. This is different for SCOP assimilation with proper names. Proper names do not change their vowel quality, but assimilate tonally to the class 1 SCOP whose vocalic material is being elided, as shown in (335).

(335) a. Màmbì á kwè → /Màmb**í** kwè/
Màmbì a-H kwè
PN 1-PRES fall
'Mambi falls.'

b. Màmbì àá kwè → /Màmb**ìí** kwè/
Màmbì àá kwè
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. The fact that proper names receive special morphosyntactic treatment in Gyeli also appears in the split genitive system discusses in chapter 3.4.6).

If the proper name's final tone and the SCOP's tone are identical, there is no tonal or vocalic surface change, but the SCOP simply is elided, as shown in (336a) for the proper name *Màmbì* ending in a L tone and a following L SCOP and, in (336b), the proper name *Bìyǎ́* ending in a H tone in combination with a PRES H tone SCOP.[2]

(336) a. Màmbì à kwé → /Màmbì kwé/
Màmbì a kwè-H
PN 1.PST1 fall-PST
'Mambi fell.'

b. Bìyǎ́ á sàgà → /Bìyǎ́ sàgà/
Bìyǎ́ a-H sàga
PN 1-PRES frighten
'Biyang is frightened.'

These cases are thus rather instances of SCOP omission than SCOP assimilation, which leads to the next section on SCOP omisson.

5.2.1.2 SCOP Omission

Under certain circumstances, the SCOP can be elided rather than assimilated, as seen in the previous section. There are two general scenarios under which the SCOP may be omitted in fast, non-careful speech:

1. SCOP omission when a nominal subject/noun phrase is present

[2]Note that the underlying tonal form of the verb is explained in section 5.2.2.

2. Subject ellipsis as dramatic effect in story telling

I will describe both scenarios in turn.

SCOP omission with nominal subject Unlike SCOP assimilation, SCOP omission with a nominal subject present is not conditioned by the phonological shape of the SCOP, but can occur in all agreement classes. There are, however, other restrictions on whether the SCOP has to surface also in fast speech or whether it can be elided. These restrictions concern the TM category of the SCOP and the morphophonological properties of the nominal subject's noun class marking.

Generally, only the PRES and the PST1 categories allow for SCOP omission while FUT, PST2, INCH, and SBJV always exclude SCOP omission with nominal subjects (with the exception for INCH with proper names, as seen in the previous section), as shown in (337).[3] The parentheses indicate that the use of the SCOP is optional while a lack of parentheses indicates that the SCOP has to be used obligatorily.

(337) a. kálɛ́ (nú) kwè → /kálɛ́ kwè/
kálɛ́ nu-H kwè
∅1.sister 1-PRES fall
'The sister falls.'

b. kálɛ́ (nù) kwé → /kálɛ́ kwé/
kálɛ́ nu kwé
∅1.sister 1.PST1 fall
'The sister fell (recently).'

c. kálɛ́ núù kwé → /kálɛ́ núù kwé/
kálɛ́ núù kwè-H
∅1.sister 1.PST2 fall-PST
'The sister fell (a long time ago).'

d. kálɛ́ nùù kwè → /kálɛ́ nùù kwè/
kálɛ́ nùù kwè
∅1.sister 1.FUT fall
'The sister will fall.'

e. kálɛ́ nùú kwè → /kálɛ́ nùú kwè/
kálɛ́ nùú kwè
∅1.sister 1.INCH fall

[3] In this example, the class 1 SCOP takes the alternate shape of the demonstrative rather than the default shape *a*.

'The sister starts to fall.'

SCOP omission in the presence of a nominal subject is also conditioned morphophonologically and depends on the shape of the nominal subject's noun class prefix. This is parallel to the potential omission of the attributive marker discussed in chapter 3.7.1.1, and the conditioning factors seem to be similar, too. If a nominal subject has a CV- noun class prefix, the omission of the SCOP is never allowed. This is generally the case for all plural noun classes and class 5. Prefixless subjects always allow for SCOP omission in the PRESENT and PAST 1 TM categories.

Potential SCOP 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, with the difference that the singular noun in (338) has a CV shape noun class prefix, while the one in (339) does not.[4] Comparing both examples shows in the case of the singular class 5 that the potential omission of the SCOP depends on the CV- shape noun class prefix: in (338a), the noun does have a CV prefix. Consequently, SCOP omission is not allowed. In contrast, the singular class 5 noun in (339a) does not have a CV- prefix and there, SCOP omission is allowed.

(338) a. lèndzólɛ̀ lé kwè → /lèndzólɛ̀ lé kwè/
le-ndzólɛ̀ le-H kwè
le5-tear 5-PRES fall
'The tear falls.'

b. màndzólɛ̀ má kwè → /màndzólɛ̀ má kwè/
ma-ndzólɛ̀ ma-H kwè
ma6-tear 6-PRES fall
'The tears fall.'

(339) a. jáwɛ̀ (lé) kwè → / jáwɛ̀ kwè/
j-áwɛ̀ le-H kwè
le5-goliath.frog 5-PRES fall
'The goliath frog falls.'

b. máwɛ̀ má kwè → /máwɛ̀ má kwè/
m-áwɛ̀ ma-H kwè
ma6-goliath.frog 6-PRES fall

[4]While these examples only account for the PRESENT TM category, the same holds for PAST 1.

'The goliath frogs fall.'

The shape of the prefix is, however, not the only conditioning factor. Comparing the plural classes in (338b) and (339b), the first with and the second without CV- prefix, SCOP omission is never allowed for these plural classes. 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.

SCOP omission with different noun phrase types The SCOP can be elided not only if a single noun is present, as described above with data from elicitation and shown with an example from natural speech in (340), but it can also be omitted if other noun phrase types constitute the subject. The subject noun phrase is indicated by square brackets in the following examples while the SCOP that would follow in careful speech is absent.

(340) àá gyì, àá gyì, [dyúmò]$_{NP}$ njì nyɛ̂ nɔ̀ɔ̀.
àá gyì, àá gyì, dyúmò njì nyɛ̂ nɔ̀ɔ̀
1.INCH cry 1.INCH cry ∅1.spouse come 1.OBJ take
'She's at the beginning of crying, she's at the beginning of crying, the husband comes to fetch her.'

Examples from the Gyeli corpus show that the SCOP can be elided if the subject noun phrase is an interrogative pronoun, as in (341).

(341) [nzá]$_{NP}$ nzíí mɛ̂ nyɛ̂?
nzá nzíí mɛ̂ nyɛ̂
who PROG.PRES 1S.OBJ see
'Who is seeing me?'

More complex noun phrases such as noun + possessive constructions allow for SCOP omission, as shown in (342).

(342) nyɛ̀ nâ [sɔ́ wɔ́ɔ̀]$_{NP}$ nɔ̀ɔ́ mɔ̀ mwánɔ̀.
nyɛ nâ sɔ́ w-ɔ́ɔ̀ nɔ̀ɔ̀-H mɔ̀ m-wánɔ̀
1 COMP ∅1.friend 1-POSS.2S take-R PRF 1-child
'She [says] 'Your friend has taken the child."

Finally, there are also examples in the corpus showing that noun + noun attributive constructions may occur without a SCOP, as in (343).

(343) mɛ́ dyúwɔ́ nâ [mpàgó wá pɔ́dɛ̀]$_{NP}$ lā́ vâ.
mɛ-H dyúwɔ-H nâ mpàgó wá pɔ́dɛ̀ lā̀-H vâ
1S-PRES hear-R COMP ∅3.street 3:ATT ∅1.port pass-R here
'I hear that the road to the port passes [= will pass] here. '

Subject ellipsis In a few cases, it is not only the SCOP that is omitted, but the subject, as illustrated in the second phrase in (N1).

(N1) à kɛ́ɛ̀ɛ̀ nyî pɛ̀ dyúwɔ̀ à dígɛ́ɛ̀ à
a kɛ́ɛ̀ɛ̀ nyî pɛ̀ dyúwɔ̀ a dígɛ́ɛ̀ a
1.PST1 go.PRF enter there on.top 1.PST1 watch.PRF 1.PST1
díg-â dígɛ́ɛ̀. kì nâ nzá nyɛ́ mɛ̂?
dígɛ́ɛ̀ a dígɛ́ɛ̀ kì nâ nzá nyɛ̂-H mɛ̂
watch.PRF 1.PST1 watch.PRF say COMP who see-R 1S.OBJ
'He went inside there on top and watched and watched and watched.
[He] says: 'Who sees me?'

There are a few comparable examples in the corpus which all seem to entail some dramatic effect in story-telling. Consequently, this type of ellipsis is more often found in narratives than in conversations.

Distribution of SCOP occurrence/omission in the corpus The Gyeli text corpus shows clearly that the most common case involves the occurrence of the SCOP rather than its omission. Table 5.3 summarizes the variation in the presence of the SCOP. It shows that in 412 instances, out of a total of 472,[5] the SCOP is present. This number includes both cases where the SCOP is the subject of the clause and cases where the SCOP is preceded by more noun phrase material such as nouns, noun + possessive constructions, and so forth.

While SCOP assimilation as discussed in section 5.2.1.1 and complete subject ellipsis are rather rare, the omission of the SCOP when a noun phrase is present occurs in 9.9% of the cases. Imperatives are listed in the table as well because their category is characterized by the absence of a SCOP.

[5]Identificational markers agreeing with the subject and constituting the predicate at the same time were not counted since they do not classify as SCOPs. Also special constructions of quotative indexes where the SCOP is present, but no verb, were not taken into consideration. A third case that was excluded concerns imperatives since imperatives never take a SCOP and thus do not show any variation.

SCOP present	412	(87.3%)
Assimilation	6	(1.3%)
Omission with NP	47	(9.9%)
Subject ellipsis	7	(1.5%)
Total	472	

Table 5.3: Variation of SCOP presence in the text corpus

5.2.2 Patterns of the Verb Stem

Having discussed the different patterns of the SCOP across the various TM categories, I now turn to the patterns of the verb which are also subject to modification, depending on the category it encodes. The verbal tone patterns as a diagnostic for TM categories is restricted to phrase final positions of the verb. Tonal verb patterns in contexts where the verb is followed by some other element are discussed in section 5.2.3. Further, this section excludes aspectual and negation marking since these represent special environments where the rules here discussed do not apply.

The tonal pattern on the verb in phrase final position, in combination with the shape of the SCOP, characterizes the single TM categories, as shown in Table 5.4. Since a few SCOPs share the same form, the combination with different verb tone patterns is in fact necessary in order to disambiguate TM categories. For instance, the SCOP of the FUTURE and the PAST 2 category both have a long vowel with a HL pattern. The difference between the two categories is, however, clear from the tonal pattern on the verb: while the FUTURE category has a verb ending in a L tone, the PAST 2 verb has a H tone.

Basic distinction	TM category	SCOP	Verb stem	Gloss
NON-PST	PRES	*bá*	**dè**	'they eat'
	INCH	*bàá*	**dè**	'they are at the beginning of eating'
	FUT	*báà*	**dè**	'they will eat'
PST	PST1	*bà*	**dé**	'they ate (recently)'
	PST2	*báà*	**dé**	'they ate (a long time ago)'
other	IMP		**dê**	'eat! (sg.)'
	SBJV	*bá*	**déè**	'may they eat'

Table 5.4: Tone patterns of the verb stem in different TM categories

There are three types of verb patterns in Gyeli TM categories: i) verbs with final L, ii) verbs with final H, and iii) verbs with a special form. The

special forms include the IMPERATIVE and the SUBJUNCTIVE which are both tenseless mood categories. As illustrated in Table 5.4 in the first column, the tonal variation between a final L or H cross-cuts with a basic distinction between PAST and NON-PAST. PAST categories include the recent past PAST 1 and the remote past PAST 2. NON-PAST categories involve the PRESENT, the FUTURE, and the INCHOATIVE.

As described in chapter 2 on phonology, verb stems have one, two, or three syllables while only the first syllable is specified for tone. In contrast, second and third syllables are underlyingly toneless. The verb *dè* 'eat' used as an example in Table 5.4 thus only represents one tonal-phonological set of verbs, namely the monosyllabic ones specified with a L tone. For clarification, I will provide examples in different TM categories also for the other tonal-phonological verb sets. The tonal rules that apply when, for instance, a PAST H tone attaches to the verb, are described in detail with an autosegmental analysis in chapter 2.4.2.

Monosyllabic verb stems Monosyllabic verb stems are underlyingly either specified with a L or a H tone. An example for each is given in Table 5.5. While surface tones for both underlyingly L and H tone verbs are identical in PAST and 'other' categories, the rules to derive this surface pattern differ. As shown in chapter 2.4.2.3, the L tone is detached and replaced with a H tone in the PAST categories. In contrast, monosyllabic H tone verbs are subject to H tone lowering in the NON-PAST categories, resulting in a falling HL tone in these categories, as discussed in chapter 2.4.2.4.

Basic distinction	TM category	SCOP	L verb *kɛ̀* 'go'	H verb *nyɛ́* 'see'
NON-PST	PRES	*bá*	**kɛ̀**	**nyɛ̂**
	INCH	*bàá*	**kɛ̀**	**nyɛ̂**
	FUT	*báà*	**kɛ̀**	**nyɛ̂**
PST	PST1	*bà*	**kɛ́**	**nyɛ́**
	PST2	*báà*	**kɛ́**	**nyɛ́**
other	IMP		**kɛ̂**	**nyɛ̂**
	SBJV	*bá*	**kɛ́ɛ̀**	**nyɛ́ɛ̀**

Table 5.5: Surface tone patterns of monosyllabic verb stems in different TM categories

For underlyingly monosyllabic H tone verbs, the tonal pattern on NON-PAST

categories and the IMPERATIVE are identical, they surface both as HL. In comparison, monosyllabic L tone verbs have a L tone for the NON-PAST categories and a HL pattern for the IMPERATIVE.

Bisyllabic verb stems In bisyllabic verb stems, the first syllable is specified for either H or L while the second syllable is underlyingly toneless. When the verb is in a phrase final position in the NON-PAST categories, the second syllable will then surface with a phonetically L tone, as shown in Table 5.6.

Basic distinction	TM category	SCOP	L ∅ verb *gyàga* 'buy'	H ∅ verb *gyíbɔ* 'call'
NON-PST	PRES	*bá*	**gyàgà**	**gyíbɔ̀**
	INCH	*bàá*	**gyàgà**	**gyíbɔ̀**
	FUT	*báà*	**gyàgà**	**gyíbɔ̀**
PST	PST1	*bà*	**gyàgá**	**gyíbɔ́**
	PST2	*báà*	**gyàgá**	**gyíbɔ́**
other	IMP		**gyàgâ**	**gyíbɔ̂**
	SBJV	*bá*	**gyàgáà**	**gyíbɔ́ɔ̀**

Table 5.6: Surface tone patterns of bisyllabic verb stems in different TM categories

In the PAST categories, a H tone attaches to the right of the verb to the underlyingly toneless syllable, as discussed for High Tone Spreading (HTS) to the left in chapter 2.4.2.2. The special HL pattern of the IMPERATIVE is realized on the second syllable while the first remains as underlyingly specified, L or H, respectively. The same is true for the SUBJUNCTIVE: while the first syllable surfaces as underlyingly specified, the second syllable takes a special form by lengthening the final vowel which carries a HL tone.

Trisyllabic verb stems Trisyllabic verbs are similar to bisyllabic ones in terms of the tonal rule of HTS that applies in the PAST categories. The difference is that trisyllabic verbs have two toneless syllables. Thus, in NON-PAST categories, the last two syllables surface L, while in PAST categories, the last two syllables take a H tone. As shown in Table 5.7, the first syllable does not change in different TM categories.
In the special categories of IMPERATIVE and SUBJUNCTIVE, the last syllable carries the HL tone that is characteristic of thee categories while the second

Basic distinction	TM category	SCOP	L ∅ ∅ verb *vìdɛga* 'turn'	H ∅ ∅ verb *lúmɛlɛ* 'send'
NON-PST	PRES	*bá*	**vìdègà**	**lúmèlè**
	INCH	*bàá*	**vìdègà**	**lúmèlè**
	FUT	*báà*	**vìdègà**	**lúmèlè**
PST	PST1	*bà*	**vìdégá**	**lúmélé**
	PST2	*báà*	**vìdégá**	**lúmélé**
other	IMP		**vìdégâ**	**lúmélê**
	SBJV	*bá*	**vìdégáà**	**lúméléè**

Table 5.7: Surface tone patterns of trisyllabic verb stems in different TM categories

syllable is subject to high tone spreading as in the PAST.

I have shown that the combination of different SCOP and (phrase final) verb stem patterns constitute seven TM categories: PRESENT, INCHOATIVE, FUTURE, PAST 1, PAST 2, IMPERATIVE, and SUBJUNCTIVE. While the classification as tense categories such as PRESENT or PAST1 is intuitively clear, classification as mood categories still needs to be explained. This is done in the next section.

5.2.3 The Metatonic H Tone

The third grammatical phenomenon that characterizes TM categories is a syntactic H tone that attaches to non-phrase final verbs in certain TM categories, but not in others. I classify categories that take this syntactic H tone as realis moods while those that do not as irrealis moods. The syntactic H tone is also known as *metatony* in the literature. I will explain the term, the phenomena and previous approaches to it in this section.

Consider (344) where the expected tone on *gyámbɔ* 'cook' would be L in the PRESENT in phrase final position. If, however, the verb is followed by, for instance, a nominal object such as *be-kwàndɔ̀* 'plantains' in the example, the verb takes a H tone.

(344) mɛ́ gyám**bɔ́** **bɛ́**kwàndɔ̀
mɛ-H gyámbɔ-H H-be-kwàndɔ̀
1S-PRES cook-R OBJ.LINK-be8-plantain
'I cook plantains.'

I argue that the H tones on the verb and the object are two distinct tones.

While one could assume that the underlyingly toneless noun class prefix of *be-kwàndɔ̀* acquires its surface tone through HTS in (344), there are reasons to view the two tones as distinct: the H tone on the prefix of the object also occurs in irrealis moods where the verb ends in a L tone. Also, in aspectual constructions as discussed in section 5.3, the verb following an aspectual marker end L while the prefix of the object would be H. I consider the H tone on the object noun class prefix an 'object linking H tone' which I mark as 'OBJ.LINK' in the glosses. The object linking H tone is described in more detail in chapter 6.2.1.2. In contrast, I view the H tone on the verb as a metatonic H tone that correlates with a realis/irrealis distinction.

Metatony in the literature Metatony has been discussed in the Bantu literature, mainly trying to explain the origins of this H tone variation. It has been viewed, for instance, as a remnant of a former grammatical morpheme whose segments were lost, but whose tone survived. Dimmendaal (1995) and Angenot (1971), for example, trace metatonic H tones back to a former connective or augment. On this assumption, an infinitive was followed by a connective 'of' (or attributive marker as discussed for Gyeli). The connective was deleted in non-infinitival verb forms, but the H tone survived. But as Hyman & Lionnet (2011: 169) point out, there is no evidence that a connective was ever present in non-infinitival metatonic verb forms since the object normally follows without marking. They further rule out the assumption that metatonic tones have their origin in an 'article-like' augment **ú-* that was deleted, but whose tone survived (p. 170). This scenario would not explain the occurrence of metatonic tone with word classes other than a noun such as pronouns, adverbs, or prepositions. The augment would only appear with the noun, but metatonic tone also occurs with these other word classes in Gyeli and other Bantu languages.

In comparison, Hyman & Lionnet (2011) provide a purely phonological account of metatony in Abo (A42), proposing different underlying suffix tones for verbs in different TAM categories. It is not clear, though, why some TAM categories have metatony while others do not.

There are also some functional explanations in the literature. Schadeberg (1995) and Hadermann (2005), for example, view metatony as marking a somewhat special relation between verb and the element that follows. In Gyeli, this analysis is unlikely since the function of marking the relation

between verb and object is already taken over by the object linking H tone discussed in chapter 6.2.1.2. Even if one assumes that this function is doubly marked, it does not explain why object linking would be marked in some TM categories, but not in others.

Other authors such as Costa & Kula (2008), Makasso (2012) and Nurse (2008) describe metatony rather as a conjoint/disjoint distinction that relates to focus marking. Hyman (2013: 7), for instance, shows in Figure 5.1 for Tonga (M64) that a change in focus leads to a change in tone. This is a valid explanation for many Savannah Bantu languages. For Gyeli, however, also this explanation has to be ruled out. First, in Gyeli, there is no choice within a TM category whether to use a metatonic H tone or not which depends on focus. Second, focus marking in Gyeli is achieved by means of cleft constructions and movement, as shown in chapter 6.3, but not by single H tones. Third, while in many Savannah Bantu languages no H tone can occur in 'unfocussed' relative or subordinated clauses, in Gyeli there is no restriction of metatonic H tones to certain clause types.

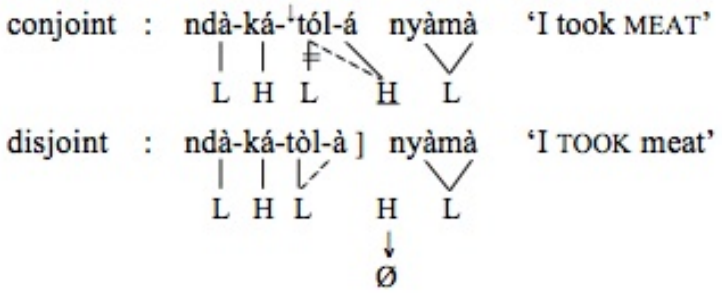


Figure 5.1: Conjoint/disjoint distinction in Tonga (M64)

Metatony in Gyeli While in Gyeli the origin of the metatonic H tone is not clear, its synchronic funtion is more obvious. The presence and absence of metatony correlates to grammatical TM categories which are realis and irrealis, respectively, as Table 5.8 shows.

TM categories that occur with a metatonic H tone include PRESENT, INCHOATIVE, PAST 1, and PAST 2. In contrast, irrealis moods, namely FUTURE, IMPERATIVE, and SUBJUNCTIVE, do not take a metatonic H tone. (345) provides examples for all metatonic TM categories, where the realis (R in the gloss) marking metatonic H tone is marked in bold.

Metatony → Realis	No Metatony → Irrealis
PRESENT	FUTURE
INCHOATIVE	IMPERATIVE
RECENT PAST	SUBJUNCTIVE
REMOTE PAST	

Table 5.8: Realis/irrealis axis in Gyeli

(345) a. mɛ́ wúmb**ɛ́** békwàndɔ̀
mɛ-H wúmbɛ-H H-be-kwàndɔ̀
1S-PRES want-R OBJ.LINK-be8-plantain
'I want plantains.'

b. mɛ̀ɛ́ wúmb**ɛ́** békwàndɔ̀
mɛ̀ɛ́ wúmbɛ-H H-be-kwàndɔ̀
1S.INCH want-R OBJ.LINK-be8-plantain
'I'm at the beginning of wanting plantains.'

c. mɛ̀ wúmb**ɛ́** békwàndɔ̀
mɛ wúmbɛ-H H-be-kwàndɔ̀
1S.PST1 want-R OBJ.LINK-be8-plantain
'I wanted plantains (recently).'

d. mɛ́ɛ̀ wúmb**ɛ́** békwàndɔ̀
mɛ́ɛ̀ wúmbɛ-H H-be-kwàndɔ̀
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. As a reminder, these categories are specified for a final H tone also in verb final positions. Nevertheless, I view them as realis categories as well, based on comparison with closely related languages. In Abo (A42), for instance, PAST also belongs to the metatonic tenses, according to Hyman & Lionnet (2011: 171).[6] In terms of glossing examples, I thus mark phrase final H tones on PAST verbs as -'PST', as in (346a). In non-phrase final position, however, H tones in PAST categories are marked as -'R', as in (346b). With this, I rather emphasize the mood distinction, even though the H tone collapses both tense and mood information.

[6]In Abo, the metatonic H tone is realized on the verb's first mora though, while in Gyeli, it seems to have shifted to the last.

(346) a. mɛ̀ gyámbɔ́
mɛ gyámbɔ-H
1S.PST1 cook-PST
'I cooked.'

b. mɛ̀ gyámbɔ́ békwàndɔ̀
mɛ gyámbɔ-H H-be-kwàndɔ̀
1S.PST1 cook-R OBJ.LINK-be8-plantain
'I cooked plantains.'

In contrast to realis TM categories, the irrealis ones do not take metatonic H tones, as shown in (347) for the FUTURE, IMPERATIVE, and SUBJUNCTIVE categories.

(347) a. mɛ̀ɛ̀ gyámbɔ̀ békwàndɔ̀
mɛ̀ɛ̀ gyámbɔ H-be-kwàndɔ̀
1S.FUT cook OBJ.LINK-be8-plantain
'I will/might cook plantain.'

b. gyámbɔ̂ békwàndɔ̀
gyámbô H-be-kwàndɔ̀
cook.IMP OBJ.LINK-be8-plantain
'Cook plantains!'

c. mɛ́ wúmbɛ́ nâ wɛ́ gyámbɔ́ɔ̀
mɛ-H wúmbɛ-H nâ wɛ-H gyámbɔ́ɔ̀
1S-PRES want-R COMP 2S-PRES cook.SBJV
békwàndɔ̀
H-be-kwàndɔ̀
OBJ.LINK-be8-plantain
'I want you to cook plantain.'

In the realis categories which do take the metatonic H tone, all parts of speech that follow the verb trigger the appearance of the H tone, as (348) shows. Thus, the decisive criterion is not the restriction to certain parts of speech, but that the verb is not intonation phrase final.

(348)

a.	mɛ́ gyámbɔ̀	'I cook'	
b.	mɛ́ gyámbɔ́ bé-kwàndɔ̀	'I cook plantains'	__N
c.	mɛ́ gyámbɔ́ byɔ̂	'I cook it'	__PRO
d.	mɛ́ gyámbɔ́ ndáà	'I cook today'	__ADV
e.	mɛ́ gyámbɔ́ ɛ́ kìsíní dé tù	'I cook in the kitchen'	__PREP
f.	mɛ́ gyámbɔ́ nà wɔ́mbɛ̀lɛ̀	'I cook and sweep'	__CONJ

Type	Mood category	
Ability/dynamic (can)	expressed by realis	→ with metatony
Deontic (must)	expressed by realis	→ with metatony
Possibility	expressed by irrealis (FUT)	→ no metatony
Bouletic	expressed by irrealis (SBJV)	→ no metatony

Table 5.9: Modality expression and mood

As listed in (348), the phrase final verb *gyámbɔ* 'cook' surfaces with a L tone. If it is followed though by a noun, pronoun, adverb, preposition, or conjunction, the verb takes a final H tone. The same is true for multiple verbs, as illustrated in (349). Again, if the verb *wúmbɛ* 'want' occurs phrase finally, it surfaces L. If it is followed by another element, in this case the verb *gyámbɔ* 'cook', it takes a final H tone.

(349)
a. bá wúmbɛ̀ 'they want'
b. bá wúmb**ɛ́** gyámbɔ̀ 'they want to cook' __verb

It is, however, only the first, 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 (350). In this example, the modal verb *wúmbɛ* 'want' takes the metatonic H tone that indicates the realis category. The final tone on *gyámbɔ* 'cook' surfaces L.

(350) bá wúmb**ɛ́** gyámb**ɔ̀** békwàndɔ̀.
ba-H wúmbɛ-H gyámbɔ H-be-kwàndɔ̀
2-PRES want-R cook OBJ.LINK-be8-plantain
'They want to cook plantains.'

The correlation of metatony to grammatical TM categories only applies to these grammatical TM categories, but not to modals in general. Table 5.9 gives an overview of the expression of different types of modality.
Different modals are expressed in different mood categories. While ability or dynamic modals such as *kùga* 'can' in (351) and deontic modals such as *yànɛ* 'must' in (352) behave like non-modal verbs, i.e. they can occur in any TM category with the realis mood, possibility and bouletic modality is rather expressed with the irrealis.

(351) ká yí nyí mɛ̂ mbɔ̀... mpáŋgì yí kùg**á**
ká yi-H nyî-H mɛ̂ m-bɔ̀ mpáŋgì yi-H kùga-H
when 7-PRES enter-R 1S N3-arm ∅7.bamboo 7.PRES can-R

nâ nyíì wɛ̂ mbɔ̀.
nâ nyíì wɛ̂ m-bɔ̀
COMP enter.SBJV 2S N3-arm
'When it goes into my arm... the bamboo can sting your arm.'

(352) donc wɛ̀ bùdɛ́ nà bàfû, wɛ́ yàn**ɛ́** gyàgà bɔ̂.
donc wɛ bùdɛ-H nà ba-fû wɛ-H yànɛ-H gyàga bɔ̂
so[French] 2S be-R COM ba2-fish 2S-PRES must-R buy 2.OBJ
'So, you have fish, you have to buy them.'

Possibility generally is realized with the FUTURE category, as shown in (353). In this example, the use of the FUTURE TM category has more of a possibility reading than it is related to actual tense.

(353) ndí wɛ́ lèmbó nâ mbvúndá **nyíì** bvúdà nà
ndí wɛ-H lèmbo-H nâ mbvúndá nyíì bvúda nà
but 2S-PRES know-R COMP ∅9.trouble 9.FUT fight COM
mbvúndá.
mbvúndá
∅9.trouble
'But you know that trouble would fight with trouble.'

Bouletic modality as in (354) is expressed with the SUBJUNCTIVE in subordinated clauses.

(354) mɛ́ làwɔ́ nâà màndáwɔ̀ má zì má
mɛ-H làwɔ-H nâ ma-ndáwɔ̀ má zì ma-H
1S-PRES say-R COMP ma6-house 6:ATT ∅7.tin 6-PRES
kùg**áà** mɛ̀ vâ.
kùgáà mɛ̀ vâ
be.enough.SBJV 1S.OBJ here
'I say that there should be enough tin (roofed) houses here for me.'

5.2.4 Tense-Mood Categories

As I have established in the previous three sections, Gyeli has seven different TM categories which are each characterized by a particular combination of SCOP and phrase final verb tone patterns. In addition to that, the ability of certain TM categories to take a metatonic H tone in non phrase final positions determines whether a specific category is classified as realis or irrealis mood. In this section, I briefly discuss the distribution of the different TM

categories within the Gyeli corpus. I then summarize the characteristics of each TM category and provide examples in the following subsections.

Table 5.10 both summarizes the affiliation of each TM category to either realis or irrealis mood and shows the frequency of each TM category in the Gyeli corpus. The numbers in the frequency column are comprised of all examples in the corpus that are not marked for aspect and negation, but just show bare tense-mood marking. I consider aspectual and negation marking separately in the respective sections. There are 369 instances of bare TM marking in the corpus, 58.8 % of which are covered by the PRESENT category.

Basic distinction	TM category	Mood	Frequency	
NON-PST	PRES	realis	217	(58.8%)
	INCH	realis	5	(1.4%)
	FUT	irrealis	40	(10.8%)
PST	PST1	realis	69	(18.7%)
	PST2	realis	8	(2.2%)
other	IMP	irrealis	13	(3.5%)
	SBJV	irrealis	17	(4.6%)
Total			369	

Table 5.10: Frequency of TM categories in corpus

The second most used TM category is the recent PAST 1 with 18.7% and then FUTURE with 10.8%. The other TM categories, SUBJUNCTIVE, IMPERATIVE, PAST 2, and INCHOATIVE, in order of decreasing frequency, are rarely found in the corpus. The following discussion of each TM category will elucidate this distribution further by explaining the semantics of each category.

5.2.4.1 PRESENT

The PRESENT is characterized by a short vowel, H tone SCOP and a phrase final L verb tone. A metatonic H tone in non-phrase final position indicates its affiliation to the realis mood. The PRESENT is the most frequently found TM category in the corpus in all text genres. The PRESENT can be viewed as a default TM category in narrations. Even in the autobiographic narrative in Appendix II.1, the narrator switches to the PRESENT in the tenth intonation phrase, after having started out in the PAST 1.

Semantically, the PRESENT primarily relates to a time that is relatively

identical to speech time. Thus, the sentence in (355), out of context, refers to the time of utterance.

(355) mɛ́ gyámbɔ́ bédéwɔ̀.
mɛ-H gyámbɔ-H H-be-déwɔ̀
1S-PRES cook-R OBJ.LINK-be8-food
'I cook food.'

Within a specific context though that is common knowledge for the speech act participants, the sentence in (355) 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 though, 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 (356), the grammatical PRESENT form can extend into the future for several days.

(356) **mɛ́** kɛ́ djì ɛ́ Ngòló sɔ́ndɔ̀ nɔ́nɛ́gá.
mɛ-H kɛ̀-H djì ɛ́ Ngòló sɔ́ndɔ̀ n-ɔ́nɛ́gá
1S-PRES go-R stay LOC PN ∅1.week 1-other
'I will stay in Ngolo next week.'

The PRESENT tense form can also be used for imperative meanings, as in (357).[7] While IMPERATIVE is an irrealis mood that does not take metatonic H tones, the aspectual verb *pâ̰* is clearly marked with a realis indicating metatonic H tone.

(357) wɛ̀ mɛ́dɛ́ **pá̰** lígɛ̀, yá nà nyɛ̀ yá kɛ́
wɛ mɛ́dɛ́ pâ̰-H lígɛ ya-H nà nyɛ ya-H kɛ̀-H
2S.EMPH self start-R stay 1P-PRES COM 1 1P-PRES go-R
mánkɛ̰̂.
H-ma-nkɛ̰̂
OBJ.LINK-6-field
'You [= his wife] stay first, we and her, we go to the field.'

The PRESENT TM category is further used in contexts of genericity or states that persist as in (358). Here, the speaker talks about a general prob-

[7] As a reminder, the tense information here is encoded by the metatonic H tone on the aspectual verb *pâ̰* while the typical PRESENT H tone of the SCOP is not present since the SCOP itself is omitted; only the emphatic pronoun and *mɛ́dɛ́* 'self' is used, but these elements do not take the PRESENT H tone.

lem that applies to the time of uttterance, but also extends to an unbounded time before and after time of utterance.

(358) y**á** tfúg**á** nà ngùndyá, mpáŋgì.
ya-H tfúga-H nà ngùndyá mpáŋgì
1P-PRES suffer-R COM ∅9.raffia ∅7.bamboo
'We suffer from the straw, the bamboo.'

While the use of the PRESENT TM 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 (355) cannot be interpreted, under any circumstances, as having happened already. With a special construction using the RETROSPECTIVE aspect marker *lɔ́*, however, events that have happened shortly before the time of utterance are expressed with the PRESENT tonal pattern, as shown in (359).

(359) áh gyí w**ɛ́** l**ɔ́** njì gyɛ́sɔ̀?
áh gyí wɛ-H lɔ́ njì gyɛ́sɔ
EXCL what 2S-PRES RETRO come look.for
'Ah, what have you just come to look for?'

This construction is parallel to the French construction *venir de* and is exactly translated as such. It may even be a loan construction from French since Gyeli does not have a way of expressing this construction with its own lexemes. Instead, *lɔ́* 'come' is a loan word from Basaa (A43).

5.2.4.2 INCHOATIVE

The INCHOATIVE is marked by a long vowel, rising tone SCOP and a phrase final L verb tone. Just like the PRESENT, the INCHOATIVE belongs to the realis mood and is a subcategory of the NON-PAST. In contrast to the PRESENT though, the INCHOATIVE occurs rarely in the corpus (only 1.4% of all bare TM occurrences).

The inchoative indicates the entry into a state or beginning of an event. In the literature, the inchoative is generally assumed to be an aspectual category, which differs depending on the language: The inchoative has been observed as part of the viewpoint aspectual system (ASPECT$_1$ in Sasse's (2002) terms) for example by Melchert (1980) and Wichaya (2013: 50) who gives an example for Fengshun Hakka in (360).

(360) Fengshun Hakka; Sinitic

ŋai^{11} min^{11}phak^{55} liau^{42}
1SG understand INCH

'I have understood.'

The inchoative has also been related to the Aktionsart of a verb (Sasse's ASPECT$_2$) by, for instance, Botne (1983), Klein (1995), and Talmy (2007). An example is given for Russian in (361) by Braginsky (2008: 226).

(361) Russian; Slavic

zvezda za-sverkala^{PRF} na nebe
star INCH-twinkled on sky

'The star started twinkling in the sky.'

The inchoative in Gyeli is different. Here, the inchoative is expressed as a tense-mood category: it is formally marked by tone and combines with aspect markers in embedded constructions (see section 5.5). Gyeli thus contrasts with better-known languages with grammatical inchoative marking, e.g. Lithuanian, where the inchoative is purely viewpoint aspectual and tense is encoded separately, as described by Arkadiev (2013). 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). In (362), the situation is that Nzambi's wife (see Appendix II.2) has just given up her child in return for food. So she returns home without the child. Before having reached her house, she arrives at the river bank. At this point, she has just started to cry, i.e. she is at the beginning of crying.

(362) ndɛ̀náà pámò lébû̂ **àá** gyì.
ndɛ̀náà pámo H-le-bû̂ 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.'

Even though the inchoative is inherently bounded at the beginning of an event, i.e. it refers internally to the time just after the beginning of an event or state, the event can additionally be bounded at the endpoint as well by means of temporal adverbials and the like, as shown in (363).

(363) **àá** bámál**á** tɔ́bá mpfùmɔ̀ nà pámò mɛ́nɔ́.
àá bámala-H tɔ́bá mpfùmɔ̀ nà pámo mɛ́nɔ́
1.INCH scold-R since ∅3.midnight COM arrive ∅7.morning
'He is at the beginning of scolding from midnight until the morning.'

Just like the PRESENT TM category, also the INCHOATIVE has the ability to extend to a time after speech time, as shown in (364). Here, the event of arriving, *pándɛ*, is perceived as a non-punctual event that has internal duration. The inchoative refers to the first moment where 'he' is just showing up at home.

(364) pílɔ̀ **àá** pándɛ̀ àà kfùmàlà bédéwɔ̀ bè
pílɔ̀ àá pándɛ àà kfùmala bédéwɔ̀ be
when 1.INCH arrive 1.FUT find OBJ.LINK-be8-food 8
sílɛ́ɛ̀̀.
sílɛ́ɛ̀̀
finish.COMPL
'When he is (at the beginning of) arriving, he will find that the food is finished.'

Since the occurrence of the Gyeli inchoative is rare in natural speech, further investigation is required to find out about the exact type of verbs that can occur with this category (e.g types of events and states) or whether restrictions apply, for instance to verbs that do not have any internal duration.

5.2.4.3 FUTURE

The FUTURE is formally expressed by a long vowel of the SCOP which, as a default, takes a HL tone and, in some exceptional agreement classes, a L tone. As part of the NON-PAST categories, it has a final L tone on the verb if the verb occurs phrase finally, just like PRESENT and INCHOATIVE. The FUTURE belongs to the irrealis mood which is marked by the absence of a metatonic H tone when the verb is not phrase final. It represents 10.8% of the bare TM occurrences in the corpus.

The use of the FUTURE category primarily relates to a time some point after speech time, i.e. the future. Often, it is accompanied by temporal adverbials, as in (365) where Nzambi tells the mice that they will eat the bones of the burned bodies the next day.

(365) àà nàmɛ́nɔ́ bw**áà** dè, nàmɛ́nɔ́.
àà nàmɛ́nɔ́ bwáà dè nàmɛ́nɔ́
EXCL tomorrow 2P.FUT eat tomorrow
'Ah, tomorrow you will eat, tomorrow.'

The FUTURE category can also relate to intented acts, as in (366).

(366) pílɔ̀ **mɛ̀è** **bɛ̀** nyá mùdì **mɛ̀è** **tɛ̀lɛ̀** mùdà ndáwɔ̀.
pílɔ̀ mɛ̀è bɛ̀ nyá m-ùdì mɛ̀è tɛ̀lɛ mùdà ndáwɔ̀
when 1S.FUT be big N1-person 1S.FUT place great ∅9.house
'When I will be grown up, I will build a great house.'

The same is true for promises, as in (367).

(367) mɛ́ kàkɛ́ wɛ̀ nâ **mɛ̀è** **njì** nàmɛ́nɔ́.
mɛ-H kàkɛ-H wɛ̀ nâ mɛ̀è njì nàmɛ́nɔ́
1S-PRES promise-R 2S.OBJ COMP 1S.FUT come tomorrow
'I promise you that I will come tomorrow.'

Apart from factual temporal reference, the FUTURE also expresses possibility, as in (368). 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.

(368) ká wɛ́ kíyá lékɔ́'ɔ̀ kwámɔ́ dè kwámɔ́ **nyîì**
ká wɛ-H kíya-H H-le-kɔ́'ɔ̀ kwámɔ́ dè kwámɔ́ nyîì
if 2S-PRES put-R OBJ.LINK-le5-stone ∅9.bag LOC ∅9.bag 9.FUT
búlɛ̀.
búlɛ
break
'If you put the stone into the bag, the bag will/might break.'

5.2.4.4 RECENT PAST (PST1)

The recent past PAST 1 is the default past category and occurs significantly more frequently in the corpus (18.7%) than the remote past PAST 2 (2.2%). The recent past is characterized by a short vowel with a surface L tone on the SCOP and final H tone on the verb, also when the verb is phrase final. As a realis mood, it keeps this H tone in metatony environments, i.e. in non-phrase final positions.

The recent past refers to situations that happened before speech time, as in (369) where time is further specified by a temporal adverb.

(369) mɛ̀ gyámbɔ́ bédéwɔ̀ nàkùgúù.
mɛ gyámbɔ-H H-be-déwɔ̀ 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 (370), 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.

(370) mɛ̀ bɛ́ ngyɛ̰̂ Ngvùmbɔ̀.
mɛ bɛ̀-H n-gyɛ̰̂ Ngvùmbɔ̀
1S.PST1 be-R N1-guest 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 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 because 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 (371). 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.

(371) yɔ́ɔ̀ ŋgə̀ nû à bɛ́ ŋgə̀̂,
yɔ́ɔ̀ ŋgə̀ nû a bɛ̀-H ŋgə̂̀
so ∅1.healer 1.DEM.PROX 1.PST1 be-R ∅1.healer
'So, this healer was a healer.'

Finally, PAST 1 is the only TM category used with the ABSOLUTE COMPLETIVE aspect marker *mɔ̀/-Ṽ*, as in 372. As described in section 5.3, most aspect markers are restricted to certain TM categories. While most aspect categories restricted to the past can combine with both recent and remote past, the ABSOLUTE COMPLETIVE is restricted to the PAST 1.

(372) mɛ̀ dyúwɔ́ mɔ̀.
mɛ dyúwɔ-H mɔ̀
1S.PST1 understand-R COMPL
'I have understood.'

5.2.4.5 REMOTE PAST (PST2)

The remote past is expressed with a long HL vowel on the SCOP and a final H tone on the verb. Just like the PAST 1, also PAST 2 belongs to the realis mood. The remote past is the more marked form of the two past categories and is thus less frequent with only 2.2% of the TM occurrences in the corpus.

As explained above for the recent past in section 5.2.4.4, past tense distinctions are based on relative speaker attitude rather than objective parameters. A remote past phrase such as *mɛ́ɛ̀ dé* 'I ate (a long time ago') is generally translated by speakers with the *plus-que-parfait* into French: *'j'avais mangé*'. From contexts and further explanations by speakers though, it is clear that no posteriority is involved, but that PAST 2 refers to a relatively more distant past. In (373), 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.

(373) mɛ́ bvú nâ nkwálá **wúù** tfùndɛ́ mɛ̀ vâ.
mɛ-H bvû-H nâ nkwálá wúù tfùndɛ-H mɛ̀ vâ
1S-PRES think-R COMP ∅3.machete 3.PST2 miss-R 1S.OBJ here
'I think that the machete had missed [= injured] me here.'

The same is true for his statement in (374). 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.

(374) ɛ́ pɛ̀ **méɛ̀** tɛ́.
ɛ́ pɛ̀ méɛ̀ tɛ̂-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 (375) where the three sentences appear in the same order in the story. (375a) starts out in the PRESENT, (375b) shows a temporal rupture using the remote past, and in (375c), the speaker switches back to the general PRESENT.

(375) a. yɔ́ɔ̀ nzàmbí wà núú nìyɛ̀.
yɔ́ɔ̀ nzàmbí wà núú nìyɛ
so PN 1:ATT 1.DEM.DIST return
'So that Nzambi returns [home].'

b. ɛ́kɛ̀! nzàmbí wà nú **áà** sàlɛ́ bɛ̀ nà
ɛ́kɛ̀! nzàmbí wà nú áà sàlɛ́ bɛ̀ nà
EXCL PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM
bə̂ líná-á pámò.
bə̂ líná a-H pámo
∅7.word when 1-PRES arrive
'Oh! That Nzambi had no words when he arrives.'

c. nyɛ̀ nâ álè.
nyɛ 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 TM category, the remote past in this case.

Another example of PAST 2 in the folktale is in direct reported speech where one Nzambi asks 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 safe his child.

(376) wɛ́ɛ̀ dé mwánɔ̀, nɔ́ɔ̀?
wɛ́ɛ̀ dè-H m-wánɔ̀, nɔ́ɔ̀
2.PST2 eat-R N1-child no
'You ate the child, didn't you?'

In summary, the choice between the use of recent or remote past is based on the speaker's attitude towards a situation and the situation's impact on the current speech time.

5.2.4.6 IMPERATIVE

The IMPERATIVE is an irrealis mood which is characterized by the absence of the SCOP and a special tonal pattern on the verb, namely a final short HL vowel.

(377) provides examples of singular imperative forms, marked by an exclamation sign, and shows at the same time the infinitival form. The examples cover all syllable lengths and tonal patterns found for verbs. They show that the characteristic HL pattern for the IMPERATIVE is only found on the last syllable.

(377) a. dê! > dè 'eat!'
b. nyɛ̂! > nyɛ̂ 'see!'
c. gyàgâ! > gyàga 'buy!'
d. gyámbɔ̂! > gyámbɔ 'cook!'
e. vìdɛ̀gâ! > vìdɛga 'turn!'
f. lúmɛ̀lɛ̂! > lúmɛlɛ 'send!'

In monosyllabic verb stems, the verb takes a HL pattern, no matter whether it is specified with a L or underlying H tone (which surfaces as HL due to H tone lowering). As the examples for bisyllabic verbs show, the tone of the first syllable remains the same while the toneless second syllable takes the IMPERATIVE HL tone. In trisyllabic verbs, the same is true. The second syllable remains toneless and surfaces L, thus HTS does not apply here.

If the IMPERATIVE form is not phrase final, but is followed by another element, such as a nominal object, the verb form keeps its HL final tone instead of taking a metatonic H tone. This tonal behavior assigns the IMPERATIVE to the irrealis mood. Examples of non-phrase final IMPERATIVE forms are given in (378).[8]

(378) a. dê mántúà! 'eat mangoes!'
b. nyê mè! > nyê 'see me!'
c. gyàgâ mántúà! 'buy mangoes'
d. gyámbô bédéwɔ̀! 'cook food!'
e. vìdègâ wámíyè! 'turn fast'
f. lúmèlê békálàdè! 'send books!'

IMPERATIVES constitute one of the lower frequency TM categories in the corpus with only 3.5 %. IMPERATIVE forms, expressing orders, are naturally restricted since they only occur in direct speech. Thus, they mainly occur in conversations, as in (379).

(379) bímbú lɛ́ mámbòŋgò mâ, wɛ̀ mɛ́dɛ́ dígɛ̂
bímbú lɛ́ ma-mbòŋgò mâ wɛ mɛ́dɛ́ dígɛ̂
∅5.amount 5:ATT ma6-plant 6.DEM.PROX 2S self look.IMP
mɛ́dɛ́,
mɛ́dɛ́
self
'The amount of these plants, yourself, look yourself,'

They are, however, also frequently found in narratives, namely in the form of reported direct speech, as in (380).

(380) bàmbɛ́, kɛ̂ djíì mbúmbù mwánɔ̀ sá yí dè.
bàmbɛ́ kɛ̂ djíì mbúmbù m-wánɔ̀ sá yí dè
sorry go.IMP ask ∅1.namesake N1-child ∅7.thing 7:ATT eat
'Excuse me, go and ask the namesake [the other Nzambi] for a little to eat.'

Plural imperative If the addressee of an order is comprised of more than one person, the plural particle *ga*, or its variant *ŋga*, is used, following the IMPERATIVE verb form, as in (381).

[8] In the case of nominal objects with CV- noun class prefix, the object linking H tone still applies.

(381) a. dê gà! ‘don’t (pl.) eat’
b. gyàgâ ŋgà! ‘don’t (pl.) buy’

The choice and distribution of the *ga* versus *ŋga* is not yet fully understood. It seems that *ga* is the default case that is used with most verbs. *ŋga*, in contrast, appears definitely when a monosyllabic verb ends in a nasal vowel as it is the case with *lə̂̃* ‘read, count’ where the plural IMPERATIVE is *lə̂̃ ŋgà!* Nasal vowels are, however, not the only factor that triggers the plural particle to surface with a nasal since *ŋga* is also found with bi- and trisyllabic verbs which do not end in a nasal vowel, as shown in (381) with *gyàgâ ŋgà!* There also seems to be a certain degree of free variation since both *ga* and *ŋga* can occur with the same verb form, as in (382).

(382) a. dê **gà**! ‘don’t (pl.) eat’
b. dé **ŋgá** wámíyɛ̀! ‘don’t (pl.) eat fast’

In terms of its part of speech, I consider *ga/ŋga* as a particle rather than a suffix that is bound to the IMPERATIVE verb form. Reasons for this are both syntactic and tonal. Syntactically, *ga/ŋga* does not always appear after the verb, but may also occur before the verb. This is the case in negated plural IMPERATIVES, as shown in (383). It is therefore not attached to the verb as it is the case, for instance, with the plural marker *-ni* in Swahili.

(383) tí **ŋgá** dè wámíyɛ̀.
tí ŋga dè wámíyɛ̀
NEG PL eat fast
‘Don’t eat fast.’

Also, tonally *ga/ŋga* does not behave like a suffix. The particle is underlyingly toneless, just like extension morphemes, but tonally, it behaves more like toneless CV- shape noun class prefixes. This is shown in (384). Phrase finally, *ga/ŋga* surfaces L. If a nominal object follows, *ŋga* takes the object linking H tone which *ma-ntúà* ‘mangoes’ would take if the plural particle was not there. With the plural particle, however, *ma-ntúà* surfaces with a L tone on the prefix. The same is true when the particle is followed by *wámíyɛ̀* ‘quickly’.

(384) a. dê ŋg**à**! ‘eat (pl.)!
b. dê ŋg**á** m**à**ntúà! ‘eat (pl.) mangoes!’

c. dê ŋg**á** wámíyè! ‘eat (pl.) quickly!’

Plural IMPERATIVES are less frequent than their singular counterparts in the corpus. There are some examples though, given in (385) and (386).

(385) nyáà **ŋgà**, sílɛ́ nyî ndáwɔ̀ dé tù.
nyáà ŋgà sílɛ́-H nyî ndáwɔ̀ dé tù
shit.IMP PL finish-R enter ∅9.house LOC inside
‘*Faites chier*, go all into the house.’

(386) sílɛ̂ **ŋgà** nyî vâ.
sílɛ̂ ŋgà nyî vâ
finish.IMP PL enter here
‘Enter all here.’

Cohortative The cohortative describes a wish directed towards the first person plural and can be translated into English as *let’s*. It is a subclass of the IMPERATIVE and is formed with the same IMPERATIVE verb form and the plural particle *ga/ŋga*. In addition, the cohortative also takes the first person plural SCOP with a H tone pattern, as shown in (387).

(387) a. yá dê gà! ‘Let’s eat!’
b. yá gyàgâ ŋgà! ‘Let’s buy!’

This H tone pattern on the SCOP is not identical with the PRESENT H tone since the PRESENT TM category belongs to the realis mood and as such would show a metatonic H tone on the verb. This, however, is not the case with the cohortative that behaves as expected for the IMPERATIVE category and thus has a final HL tone on the verb.

Also when the verb is not phrase final, the construction is tonally parallel to plural imperatives. As (388) shows, the verb keeps the non-metatonic HL tone while the plural particle takes the object linking H tone and thus the nominal object *mantúà* ‘mangoes’ surfaces L on its noun class prefix.

(388) a. yá dê gá màntúà! ‘Let’s eat mangoes!’
b. yá gyàgâ ŋgá màntúà! ‘Let’s buy mangoes!’

In summary, the category of IMPERATIVES is characterized by a HL tonal pattern on its ultimate syllable. There are three subgroups of IMPERATIVES: i) singular forms that have no SCOP, but only the bare IMPERATIVE verb

form, ii) plural forms which have no SCOP either, but a plural particle following the IMPERATIVE verb form, and iii) cohortative forms which are almost identical to plural IMPERATIVES with the exception that a first person plural SCOP with a H tone precedes the verb form. Cohortative forms are not represented in the corpus, but stem solely from elicitation.

5.2.4.7 SUBJUNCTIVE

The SUBJUNCTIVE TM category in Gyeli is an irrealis mood that is characterized by a H tone SCOP and a special tonal pattern on the verb, as shown in (389).

(389) a. á dé'è > dè 'he eat'
b. á nyɛ́'ɛ̀ > nyɛ̂ 'he see'
c. á gyàgá'à > gyàga 'he buy'
d. á gyámbɔ́'ɔ̀ > gyámbɔ 'he cook'
e. á vìdɛ́gáà > vìdɛga 'he turn'
f. á gyíkɛ́sɛ́'ɛ̀ > gyíkɛsɛ 'he teach'

The verb ends in a HL tonal pattern. In contrast to the IMPERATIVE which also has a final HL, the SUBJUNCTIVE has a lengthened vowel. In addition, the long vowel may occur with a glottal stop, as indicated by the apostrophe in the transcription, or as a phraryngealized 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.

Another difference between IMPERATIVE and SUBJUNCTIVE verb forms concerns High Tone Spreading 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 (389).

As an irrealis mood, the SUBJUNCTIVE keeps its final HL tone on the verb even when the verb is not phrase final. When followed by a nominal object, for instance, only the object CV- prefix takes the object linking H tone, but the verb does not take a metatonic H, as shown in (390).

(390) a. á gyàgá'à mántúà 'he buy mangoes'
b. á nyùlɛ́'ɛ̀ májíwɔ́ 'he drink water'

c. á gyámbɔ́'ɔ̀ bédéwɔ̀ 'he cook food'

d. á dyíkɛ́'ɛ̀ mándáwɔ̀ 'he burn the houses'

e. á gyíkɛ́sɛ́'ɛ̀ bábwálɛ̀ fàlà 'he teach the parents French'

As to its distribution and meaning, the SUBJUNCTIVE in Gyeli is used in order to express wishes or orders. Subjunctive forms often occur in subordinate clauses which involve i) wishes expressed in reported speech (391a), ii) obligations (391b) or iii) prohibition (391c).

(391) a. á lɑ́ɑ́ mɛ̀ nâ mɛ́ **vɛ́'ɛ̀** bwánɔ̀
a-H lɑ́ɑ̀̂-H mɛ̀ nâ mɛ-H vɛ́'ɛ̀ b-wánɔ̀
3S-PRES tell-R 1S.OBJ COMP 1S-PRES give.SBJV ba2-child
bèfùmbí.
be-fùmbí
be8-orange
'He tells me that I should give the children oranges.'

b. yîì mpìnàgà nâ wɛ́ **kɛ́'ɛ̀** sùkúlì.
yîì mpìnàgà nâ wɛ-H kɛ́'ɛ̀ sùkúlì
7 ∅3.obligation COMP 2S-PRES go.SBJV ∅7.school
'It's an obligation that you go to school.'

c. yîì mpìndá nâ wɛ́ djíw**ɔ́'ɔ̀**
yîì mpìndá nâ wɛ-H djíwɔ́'ɔ̀
7 ∅9.prohibition COMP 2S-PRES steal.SBJV
bésâ.
H-be-sâ
OBJ.LINK-be8-thing
'It's forbidden that you steal things.'

Wishes and intentions can not only be expressed by an animate agent, but also inanimate objects are treated as having intentions. This is exemplified in (391) where the straw is said to have the intention to sting people's arms. When translating these phrases, speakers consistently use the French verb *vouloir* 'want'. The example further shows that the SCOP usually preceding the SUBJUNCTIVE form can be elided.

(392) ká yí nyí mɛ̂ mbɔ̀... mpáŋgì yí kùgá
ká yi-H nyî-H mɛ̂ m-bɔ̀ mpáŋgì yi-H kùga-H
when 7-PRES enter-R 1S N3-arm ∅7.bamboo 7-PRES can-R
nâ **nyîì** wɛ̀ mbɔ̀.
nâ nyîì wɛ̀ m-bɔ̀
COMP enter.SBJV 2S N3-arm

'When it goes into my arm... the bamboo can sting your arm.'

SUBJUNCTIVE forms occur more frequently in the corpus than IMPERATIVES, 4.6% in comparison to only 3.5%. The reason for this may be that SUBJUNCTIVES are considered more polite. At the same time, as shown in section 5.2.4.1 on the PRESENT TM category, also the PRESENT can take over the function of IMPERATIVES while it usually does not take over the function of SUBJUNCTIVES. (393) and (394) provide further SUBJUNCTIVE examples from the corpus.

(393) á lèmbó nâ bùdì báà bà múà
a-H lèmbo-H nâ b-ùdì báà ba múà
1S-PRES know-R COMP ba2-person 2.DEM.PROX 2 PROSP
búɛ̀lɛ̀ nâ bá dy**úù** nyɛ̀.
búɛlɛ̀ nâ ba-H dyúù nyɛ̀
fish COMP 2-PRES kill.SBJV 1.OBJ
'He knows that these people are about to fish [= look for him] in order to kill him.'

While most SUBJUNCTIVE forms occur in a subordinate complement clause involving the complementizer *nâ*, SUBJUNCTIVES can also occur in subordinate clauses without complementizer *nâ*, as in (394).

(394) yɔ́ɔ̀ mɛ́ wúmbɛ́ mándáwɔ̀ má zì má
yɔ́ɔ̀ mɛ-H wúmbɛ-H H-ma-ndáwɔ̀ má zì ma-H
so 1S-PRES want-R OBJ.LINK-ma6-house 6:ATT ∅7.tin 6-PRES
tɛ́w**ɔ́'ɔ̀** mɛ̀ vâ, ndá zì.
tɛ́wɔ̀ɔ̀ mɛ̀ vâ ndá zì
put.SBJV 1S.OBJ here ATT[Bulu] ∅7.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 (395).

(395) bɛ̀yá nz**íyɛ̀** bíyɛ̀ kfùmàlà.
bɛ̀ya-H nzíyɛ̀ bíyɛ̀ kfùmala
2P-PRES come.SBJV 1P.OBJ find
'You (pl) may come to meet us.'

5.3 Aspectual Markers

While tense-mood marking in Gyeli is obligatory since every SCOP and verb has to surface with a certain tonal pattern that characterizes the single categories, aspect marking is optional. At the same time, aspect marking is significantly less frequent in the corpus with 122 occurrences than utterances with tense-mood marking only (369 occurrences). Another difference between tense-mood and aspect marking concerns their form. While tense-mood is mainly expressed tonally on the SCOP and verb, aspect marking is achieved through segmental material. This includes mainly aspectual verbs which are more or less grammaticalized as well as postverbal morphemes.

In this section, I first present the different aspect forms, explaining their morphosyntactic properties and the tonal patterns of the SCOP that are specific to aspectual markers as well as restrictions to certain TM categories. I then discuss the frequency of the single aspect markers in the corpus and combinations of multiple aspect markers. In the following subsections, I investigate the functions and meaning of single aspect forms, providing more details and examples.

Gyeli has ten aspect markers which are presented in Table 5.11.[9] The table holds information on the morphosyntactic status of each aspect marker, its form, the tonal pattern of its SCOP, represented by the class 2 SCOP *ba*, TM restriction, and its function with which it is also glossed in examples and texts.

Morphosyntactic properties of aspect markers Most aspect markers in Gyeli are verbs. They function as finite verbs which are tonally inflected for mood distinctions. At the same time, they precede a non-finite verb which carries lexical information of the event in the clause. The difference between finite and non-finite verbs in Gyeli is that finite verbs potentially take metatonic tones, depending on the mood category, while non-finite

[9]The abbreviations used in the table and in glosses are the following:
COMPL: absolute completive
HAB: habitual
NCA: non-complete accomplishment
PRF: experiential perfect
PROG: progressive
PROSP: prospective
RETRO: retrospective

Status	Aspect marker	SCOP	TM restriction	Function
Grammaticalized verbs	**nzíí**	bà	PRES	PROG
	nzí	bà, báà	PST	PROG
	nzɛ́ɛ́	bà	subordinate	PROG
	pɑ́	various	none	PRIOR
Transparent verbs	**lɔ́** 'come'	bá	PRES	RETRO
	bwàá 'have'	bà, báà	PST	PRF
	múà 'be'	mixed	FUT	PROSP
	sílɛ̀ 'finish'	various	none	NCA
Reduplication	**STEM-STEM**	bá	PRES	HAB
Postverbal	**mɔ̀/-Ṽ**	bà	PST1	COMPL

Table 5.11: Gyeli aspect markers

verbs are not inflected for mood. Finite verbs occupy the first position in a chain of multiple verbs. Every verb following a finite verb is automatically non-finite. In (396), for instance, the PRESENT PROGRESSIVE marker *nzíí* precedes the non-finite verb *gyámbɔ* 'cook', carrying a metatonic H tone which assigns *nzíí* to the realis moods. I will get back to aspect and mood below.

(396) mɛ̀ nzíí gyámbɔ̀ bédéwɔ̀.
mɛ nzíí́ gyámbɔ H-be-déwɔ̀
1S PROG.PRES.R cook OBJ.LINK-be8-food
'I am cooking food.'

Verbal aspect markers differ in their degree of grammaticalization. In Table 5.11, I distinguish highly grammaticalized from less grammaticalized transparent verbs. Grammaticalized aspectual verbs cannot occur by themselves as a verb nor can they be translated into any (verbal) meaning by speakers. The set of grammaticalized aspect verbs include the three progressive markers *nzíí* for the PRESENT, *nzí* for the PAST, and *nzɛ́ɛ́* for subordinate clauses, and *pɑ́*. The latter is consistently translated as *d'abord* 'first' in French which suggests that speakers do not recognize any verbal character. In terms of tonal patterns and phrase position and distribution, however, *pɑ́* behaves just like the other verbal aspect markers.

Other aspectual verbs are more transparent in their meaning and can be used in non-aspectual contexts as well. When used as aspectual markers though, they are restricted to certain TM categories. In this, they differ from

other verb types, for instance modals such as *wúmbɛ* 'want' or *yànɛ* 'must' or deictic motion verbs such as *kɛ̀* 'go' or it njì 'come'. These are not restricted to specific TM categories. The RETROSPECTIVE marker *lɔ́*, for instance, is a loan word from Basaa (A43) and means 'come'. It is never used as such in Gyeli, however, since the language has its own lexeme *njì*. Nevertheless, speakers are aware of the origin. *lɔ́* is further restricted to the PRESENT and never found in any other TM category, unlike the Gyeli lexeme *njì* 'come'.

In contrast to the more grammaticalized aspect verbs and the RETROSPECTIVE marker *lɔ́*, the other transparent aspect verbs can occur by themselves without another verb following them. This is, for instance, the case with the PERFECT marker *bwàá* which can oocur without another verb when it expresses identity relations, as shown in (397).

(397) yɔ́ɔ̀ bànzàmbí bá tè bà **bwàá** sɔ́,
yɔ́ɔ̀ ba-nzàmbí bá tè ba bwàà-H sɔ́,
so 2-PN 2:ATT there 2.PST1 PRF-R ∅1.friend
'So, the Nzambis there had been friends,'

At the same time, *bwàá* can also occur with another verb, as in (398).[10]

(398) à **bwàá** yɛ́ɛ́ kɛ́ djì mpù.
a bwàà-H yɛ́ɛ́ kɛ̀-H djì mpù
1.PST1 PRF-R then? go-R stay like.this
'He [the other Nzambi] had gone and stood like this.'

Also, the PROSPECTIVE marker *múà* 'be' can occur both independently on its own as in (399), or in conjunction with another verb, as in (400).

(399) mɛ̀ **múà** tísɔ̀nì
mɛ múà tísɔ̀nì
1S PROSP ∅7.town
'I'm about to be in town.'

(400) nyɛ̀ náà à **múà** wɛ̀ bíyɔ̀ dɛ́,
nyɛ nâ a múà wɛ̀ bíyɔ dɛ́
1 COMP 1 PROSP 2S.OBJ hit today
'He [says] that he is about to beat you today,'

[10]Speakers translate this example as *Il est depuis allé rester comme ça.* into Cameroonian French.

The transparent aspectual verb *sílɛ* 'finish' marking NON-COMPLETE ACCOMPLISHMENT is special in that it is not restricted to certain TM categories and is, at the same time, clearly recognized as a verb by speakers (in contrast to *pɑ́*). As such, it represents the least grammaticalized of all aspect verbs. One could argue that *sílɛ* 'finish' may then not constitute a real aspect marker, but should be considered as a semi-auxiliary as, for instance, *táalɛ* 'begin'. In contrast to semi-auxiliaries, however, *sílɛ* is subject to distributional restrictions which clearly indicate aspectual character, as illustrated in (401) and (402). Semi-auxiliaries such as *táalɛ* 'begin' can be used with all kinds of participants.

(401) a. bà táálɛ́ kɛ̀.
ba táalɛ-H kɛ̀
2.PST1 begin-R go
'They began to walk.'

b. à táálɛ́ kɛ̀.
a táalɛ-H kɛ̀
1.PST1 finish-R go
'He began to walk.'

(402) a. bà sílɛ́ kɛ̀.
ba sílɛ-H kɛ̀
2.PST1 finish-R go
'They have all gone.'

b. *à sílɛ́ kɛ̀.
a sílɛ-H kɛ̀
1.PST1 finish-R go
'*He has all gone.'

In contrast to the semi-auxiliary *táalɛ* 'begin', the aspect verb *sílɛ* can only be used with plural subjects in certain contexts, as in (402a), where the event distributes over the different participants, while singular subjects as in (402b) are thus ungrammatical. The functions and meaning of *sílɛ* 'finish' as well as its functional label are discussed in more detail in section 5.3.7.

There are two aspectual categories that are not expressed by aspectual verbs, but by other means. The HABITUAL is marked by verb stem reduplication, for instance, in *mɛ́ nyɛ́ nyɛ̂* 'I (often, usually) see' or *mɛ́ pándɛ̀ pàndɛ̀* 'I (often, usually) arrive'. Tonal patterns on the reduplicated verb stems may change though; this is described in section 5.3.8.

The second non-verbal aspect marker is the ABSOLUTE COMPLETIVE and is expressed by a postverbal morpheme that comes in different variations. It either surfaces as the morpheme *mɔ̀* or as a lengthened and nasalized final verb vowel with a HL tonal pattern. This is further discussed in section 5.3.6

Aspect and SCOP For some aspectual markers, the tonal patterns of the SCOP differ from the shape as discussed for the TM categories without aspectual marking. This is true for the PRESENT PROGRESSIVE marker *nzíí* and the PROSPECTIVE marker *múà*. The other aspect marker SCOPs take the same tonal patterns as the respective TM category SCOPs without aspect marking. While Table 5.11 lists surface SCOP patterns according to the different aspect categories, Table 5.12 sorts aspect markers by their SCOP shape.

SCOP surface shape	SCOP example	Aspect marker	TM restriction	Function
short vowel L tone	bà	**nzíí**	PRES	PROG
	bà	**nzéé**	subordinate	PROG
	bà	**mɔ̀/-Ṽ**	PST1	COMPL
short vowel H tone	bá	**lɔ́** 'come'	PRES	RETRO
	bá	**STEM-STEM**	PRES	HAB
two patterns bà and báà	bà, báà	**nzí**	PST	PROG
	bà, báà	**bwàá** 'have'	PST	PRF
mixed	mɛ̀, bá	**múà** 'be'	FUT	PROSP
various		**pɑ́**	none	PRIOR
		sílɛ̀ 'finish'	none	NCA

Table 5.12: SCOPs for different aspect markers

There are five SCOP groups for aspect markers: those with i) short vowels surfacing in a L tone (which I analyze as underlyingly toneless), ii) short vowels with a H tone, iii) aspect markers which take two different patterns depending on the two PAST categories they are restricted to, namely the short L vowel PAST 1 and the long HL vowel for PAST 2, iv) a mixed category, and v) a category allowing various SCOP patterns. The latter group is comprised of the aspect markers which are not restricted to any TM categories. For this reason, their SCOP can occur in various shapes, depending on the TM category in which the aspect marker is used.

While most aspect markers occur with a SCOP that takes the same shape as in non-aspectual marking, two exceptions deserve further mention. The

first one is the progressive marker *nzíí* in the PRESENT which combines with a L tone SCOP, even though PRESENT is marked with a H tone SCOP when aspect markers are not present. It would, however, be wrong to classify *nzíí* as restricted to PAST categories, according to the L tone SCOP pattern, because in terms of meaning, the PRESENT and PAST PROGRESSIVE forms provide clear minimal pairs, as shown in (403). In fact, for the PROGRESSIVE, it is the aspectual marker itself that encodes tense information, distinguishing PRESENT and PAST. The SCOPs for PRESENT and PAST 1 are identical for the PROGRESSIVE. Only for PAST 2 does the SCOP change according to its usual PAST 2 shape, as shown in (403c).

(403) a. mɛ̀ nzíí dè
mɛ nzíí dè
1S PROG.PRES.R eat
'I am eating.'

b. mɛ̀ nzí dè
mɛ nzí de
1S.PST1 PROG.PST.R eat
'I was eating [= recently].'

c. méɛ̀ nzí dè
méɛ̀ nzi-H de
1S.PST2 PROG.PST eat
'I was eating [= a long time ago].'

The second SCOP exception concerns the PROSPECTIVE marker *múà*. Here, the SCOP pattern is comparable to the FUTURE where some SCOPs have an exceptional tonal pattern from the others. The first and second person singular as well as the class 1 SCOP are different from the other agreement classes. The actual shape, however, differs between PROSPECTIVE and FUTURE SCOPs. In the FUTURE, SCOPs have a long vowel which are all L for the exceptional cases and HL for the majority. In contrast, PROSPECTIVE SCOPs have all short vowels with a L tone for the exceptional and H tones for the majority classes. This is also illutsrated in Table 5.13 which provides the SCOPs for all participants and agreement classes for the different aspect categories.[11] Aspect categories which are not restricted to certain TM cate-

[11]The class 1 SCOP *a* has, as in the general TM categories, two variants *nyɛ* and *nu*. They can also occur with aspect markers, but for better readability of the table, I do not represent them here.

gories are not represented since they take their SCOPs according to the TM category they occur in.

Aspect	1S	2S	1P	2P	1	2	3	4	5	6	7	8	9
nzíí	mɛ	wɛ	ya	bwa(a)	a	ba	wu	mi	le	ma	yi	be	nyi
nzéé	mɛ	wɛ	ya	bwa(a)	a	ba	wu	mi	le	ma	yi	be	nyi
mɔ̀/-Ṽ	mɛ	wɛ	ya	bwa(a)	a	ba	wu	mi	le	ma	yi	be	nyi
lɔ́	mé	wé	yá	bwá(á)	á	bá	wú	mí	lé	má	yí	bé	nyí
HAB	mé	wé	yá	bwá(á)	á	bá	wú	mí	lé	má	yí	bé	nyí
nzí	mɛ	wɛ	ya	bwa(a)	a	ba	wu	mi	le	ma	yi	be	nyi
	méɛ̀	wéɛ̀	yáà	bwáà	áà	báà	wúù	mîì	léè	máà	yîì	béè	nyîì
bwàá	mɛ	wɛ	ya	bwa(a)	a	ba	wu	mi	le	ma	yi	be	nyi
	méɛ̀	wéɛ̀	yáà	bwáà	áà	báà	wúù	mîì	léè	máà	yîì	béè	nyîì
múà	**mɛ**	**wɛ**	yá	bwá(á)	**a**	bá	wú	mí	lé	má	yí	bé	nyí

Table 5.13: Patterns of the SCOP in different AGR classes and aspect categories

Tense-mood restrictions As stated before, most aspect markers are restricted to certain tense-mood categories which distinguishes them from modal or deictic motion verbs. Aspect markers vary in the number of TM categories they are restricted to. Three out of nine markers are restricted to the PRESENT, namely the PRESENT PROGRESSIVE marker *nzíí*, the RETROSPECTIVE marker *lɔ́*, and the HABITUAL which is expressed by verb stem reduplication.

The same amount of aspect markers is restricted to the PAST. While some PAST aspect markers can occur in both the recent PAST 1 and the remote PAST 2, others only appear in the recent PAST 1. The PROGRESSIVE marker *nzí* and the PERFECT marker *bwàá* are restricted to PAST in general, i.e. they occur in both PAST categories. They are marked by 'PAST' in the TM restrictions column of Table 5.11. In contrast, the table specifies for the ABSOLUTE COMPLETIVE marker *mɔ̀/-Ṽ* that this postverbal marker only occurs in PAST 1.

The PROSPECTIVE marker *múà* can be assigned to the FUTURE TM category. It takes the tonal pattern of the irrealis for the verb *múà* in non phrase final position, namely a final L tone. And even though its SCOP differs from the general FUTURE SCOP in non-aspect marking contexts, it shows the same category internal variation: first and second person singular as well as the SCOP of class 1 have a different shape in comparison to all other participants and agreement classes, as shown in Table 5.13.

Finally, there are two aspect categories which are not restricted to any TM category: *pā́* 'first' and the NON-COMPLETE ACCOMPLISHMENT marker *sílɛ* 'finish'. Examples for both are given below in the subsections on the single aspect markers.

Aspect and mood Each aspect category also cross-cuts with at least one mood category. As Table 5.14 shows, most aspect markers belong to the realis mood, while only one marker, namely the PROSPECTIVE *múà*, belongs to the irrealis category. Aspect markers that are not restricted to a specific TM category can occur in both realis and irrealis mood.

Mood	Aspect marker	TM restriction	Function
REALIS	**nzíí**	PRES	PROG
	nzí	PST	PROG
	nzéé	subordinate	PROG
	lɔ́ 'come'	PRES	RETRO
	bwàá 'have'	PST	PRF
	mɔ̀/-Ṽ	PST1	COMPL
	STEM-STEM	PRES	HAB
IRREALIS	**múà** 'be'	FUT	PROSP
both	**pā́**	none	PRIOR
	sílɛ̀ 'finish'	none	NCA

Table 5.14: Mood categories of aspect markers

Affiliation to realis mood is determined by the presence of a metatonic H tone, as described in section 5.2.3. This also holds for aspect marking. With aspect marking though, there is variation where the metatonic H tone shows up. For verbal aspect markers, it is the aspect marker that carries the metatonic tone, as illustrated in (404). (404a) shows the position of the metatonic H tone without aspect marking and (404b) with aspect marking.

(404) a. á sɛ́lɔ́ bɛ́ntɔ̀gɔ̀ byɛ́sɛ̀.
a-H sɛ́lɔ-H H-be-ntɔ̀gɔ̀ by-ɛ́sɛ̀
1-PRES peel-R OBJ.LINK-be8-sweet.potato 8-all
'He peels all the sweet potatos.'

b. à nzíí sɛ́lɔ̀ bɛ́ntɔ̀gɔ̀ byɛ́sɛ̀.
a nzíí sɛ́lɔ H-be-ntɔ̀gɔ̀ by-ɛ́sɛ̀
1S PROG.PRES.R peel OBJ.LINK-be8-sweet.potato 8-all
'He is peeling all the sweet potatos.'

Since these verbal aspect markers never occur phrase finally—they are always followed by a verb or sometimes, in the case of *bwàá*, by a nominal—it is not possible to prove their underlying tonal pattern. For example, judging from other PRESENT monosyllabic verb forms that end in a long vowel, one would assume that the underlying form for *nzíí* is *nzîˋ* and for *bwàá* it should be *bwàà*. Given the lack of evidence though, I use the default surface form *nzíí* and *bwàá* as quotation forms and mark the metatonic tone as being inherent to this aspect form.

Non-verbal aspect markers that belong to the realis mood mark their metatonic H tone on the finite verb, as expected, except that the finite verb here is not the aspect marker. In the case of the postverbal ABSOLUTE COMPLETIVE marker *mɔ̀/-Ṽ*, the preceding finite verb carries the metatonic H tone. In (405a), the metatonic H tone thus appears on the final vowel of *gyámbɔ* 'cook'. The more grammaticalized variant in (405b) also carries the H tone. Here, the verb and the COMPLETIVE marker *mɔ̀* have fused, resulting in a long final vowel that is nasalized and that reflects the tonal pattern of the *mɔ̀* variant: first a metatonic H tone and then the L tone of the postverbal aspect marker, surfacing as a long HL vowel.

(405) a. mɛ̀ gyámb**ɔ́** mɔ̀ bédéwɔ̀.
mɛ gyámbɔ-H mɔ̀ H-be-déwɔ̀
1S cook-R COMPL OBJ.LINK-be8-food
'I have cooked the food.'

b. mɛ̀ gyámb**ɔ́ɔ̃̀** bédéwɔ̀
mɛ gyámb**ɔ́ɔ̃̀** H-be-déwɔ̀
1S cook:R:PRF OBJ.LINK-be8-food
'I have cooked the food.'

In the case of verb stem reduplication in the HABITUAL aspect, metatonic H tones are also used when the reduplicated form is not phrase final. The reduplicated verb stem does not count as an element following the verb, but as part of the verb itself. Therefore, no metatonic tone occurs on the final vowel of the first verb, as shown in (406). This is also why I consider reduplicated HABITUAL forms as one word rather than two. In contrast, the ABSOLUTE COMPLETIVE marker *mɔ̀* has to be considered a free morpheme since it triggers a metatonic H tone which only applies across word boundaries.

(406) mɛ́ nyùlɛ̀nyùlɛ̀
mɛ-H nyùlɛ-nyùlɛ
1S-PRES drink-drink
'I often drink.'

Further, reduplications come with special tonal patterns, preferring all L tones on the reduplicated second verb, even though the verb form itself may be specified with a H tone on the first syllable. This is shown in (407) where the verb *pándɛ* 'arrive' has a H tone in its first syllable. In the verb copy, however, this tone is overridden and surfaces L.

(407) mɛ́ pándɛ̀pàndɛ̀
mɛ-H pándɛ-pandɛ
1S-PRES arrive-arrive
'I often arrive.'

If a reduplicated HABITUAL form is followed by, for instance a noun, metatonic H tones occur on both verb stems, as in (408). The metatonic H tone spreads across all underlyingly toneless syllables which includes the whole verb copy and the extension morphemes of the first verb.

(408) mɛ́ díléśɛ́díléśɛ́ bwánɔ̀
mɛ-H dílɛsɛ-dilɛsɛ-H b-wánɔ̀
1S-PRES feed-feed-R ba2-child
'I often give food to the children.'

While aspect markers majoritarily belong to the realis mood, there is also a clear case of irrealis aspect. This is the case for the PROSPECTIVE marker *múà*. *múà* does not take a metatonic H tone, as shown in (409).

(409) mɛ̀ múà gyámbɔ̀ bédéwɔ̀.
mɛ múà gyámbɔ H-be-déwɔ̀
1S PROSP cook OBJ.LINK-be8-food
'I'm about to cook food.'

Finally, aspect markers that are not restricted to certain TM categories can be used in both realis and irrealis moods. In (410), for instance, *pə̂* appears with a metatonic tone in the realis PRESENT category.

(410) wɛ̀ mɛ́dɛ́ **pa̋** lígɛ̀ yá nà nyɛ̀ yá kɛ́
wɛ mɛ́dɛ́ pa̋-H lígɛ ya-H nà nyɛ ya-H kɛ̀-H
2S self start-R stay 1P-PRES COM 1 1P-PRES go-R
mánkɛ̰̂.
H-ma-nkɛ̰̂
OBJ.LINK-6-field
'You [= his wife] stay first, we and her, we go to the field.'

In contrast, in (411), *pâ̰* is used in the irrealis IMPERATIVE category without metatonic tone.

(411) **pâ̰** mɛ̂ láà tè!
pâ̰ mɛ̂ láà tè
start.IMP1S.OBJ tell there
'Tell me first there! [= Tell me how they would come.]'

The same distribution is found for the NON-COMPLETE ACCOMPLISHMENT marker *sílɛ*. Examples are provided below in section 5.3.7.

Frequency of aspect markers in corpus As mentioned, aspect markers are significantly less frequent in the corpus than constructions that use tense-mood marking only. They present a total of 122 occurrences, as shown in Table 5.15, while tense-mood marking only is represented 369 times in the corpus.

Status	Aspect marker	TM restriction	Function	Frequency	
Grammaticalized verbs	**nzíí**	PRES	PROG	17	(13.9 %)
	nzí	PST	PROG	10	(8.2 %)
	nzɛ́ɛ́	subordinate	PROG	0	(0 %)
	pa̋	none	PRIOR	11	(9 %)
Transparent verbs	**lɔ́** 'come'	PRES	RETRO	17	(13.9 %)
	bwàá 'have'	PST	PRF	3	(2.5 %)
	múà 'be'	FUT	PROSP	14	(11.5 %)
	sílɛ̀ 'finish'	none	NCA	20	(16.4 %)
Reduplication	**STEM-STEM**	PRES	HAB	1	(0.8 %)
Postverbal	**mɔ̀/-Ṽ**	PST1	COMPL	29	(23.8 %)
Total				122	

Table 5.15: Frequency of aspect markers in corpus

Not all aspect markers occur equally frequently. The most used one is the postverbal ABSOLUTE COMPLETIVE marker *mɔ̀/-Ṽ* which constitutes almost

a quarter of all aspect markers in the corpus. The NON-COMPLETE ACCOMPLISHMENT marker *sílɛ* (16.4 %), the PRESENT PROGRESSIVE *nzíí* and RETROSPECTIVE marker *lɔ́*, both 13.9 %, as well as the PROSPECTIVE marker *múà* (11.5 %) range in the middle in terms of frequency among aspect markers. The PROGRESSIVE marker *nzéé* for subordinate clauses and the HABITUAL both do not occur at all or only very rarely in the corpus. Data for these categories stem from elicitation and questionnaires.

Aspect marker combinations Just like the co-occurrence of more than one TM category is prohibited, also combinations of several aspect markers seems to be generally ruled out. I found one exception though where the PROGRESSIVE can co-occur with the ABSOLUTE COMPLETIVE, as in (412). Instead of using the bare progressive form with the verb *sílɛ* 'finish', the speaker marks *sílɛ* with the ABSOLUTE COMPLETIVE morpheme, expressing that the field of palm fruit is in the process of having run out of food.

(412) nkɛ̀ nyì **nzí** sílɛ́ɛ̀̃ bédéwò.
nkɛ̀ nyi nzí sílɛ́ɛ̀̃ H-be-déwò.
∅9.field 9 PROG.PST finish.COMPL OBJ.LINK-be8-food
'This field was already running out of food.'

There are instances where the verb *sílɛ*, which is also the marker for the NON-COMPLETE ACCOMPLISHMENT aspect, co-occurs with aspect markers. In these cases, however, I suggest that *sílɛ* be rather considered as the verb 'finish' instead of the aspect marker. *sílɛ* is the least grammaticalized aspect marker in Gyeli. This non-grammaticalized status allows for co-occurrences following other aspect markers, as in (413) where *sílɛ* follows the RETROSPECTIVE marker *lɔ́* as a non-finite verb form.

(413) bɔ́nɛ́gá bá **lɔ́** **sílɛ̀** làwɔ̀ nâ bvúlɛ̀ bá
bɔ́-nɛ́gá ba-H lɔ́ sílɛ làwɔ nâ bvúlɛ̀ ba-H
2-other 2-PRES RETRO finish speak COMP ba2.Bulu 2-PRES
ntɛ́gɛ́lɛ́ bágyɛ̀lì,
ntɛ́gɛlɛ-H H-ba-gyɛ̀lì
bother-R OBJ.LINK-ba2-Gyeli
'The others have just said that the Bulu bother the Bagyeli,'

Another example is found with the PROSPECTIVE marker *múà* in (414).

(414) mɛ̀ **múà** **sílɛ̀** dè.
mɛ múà sílɛ dè
1S PROSP finish eat
'I'm about to be done eating.'

In contrast, combinations of other more grammaticalized aspect markers are not possible.

Aspect markers and negation Aspect markers cannot be used with negation. Negated forms only take the bare TM categories without aspect marking. Thus, a sentence that would appear with, for instance, the PROGRESSIVE in an affirmative context, would lose its aspect marking under negation and just take the negation form of the specific TM form, as discussed in section 5.4 on negation. A contrastive example is already given here in (415). As (415c) shows, the PROGRESSIVE marker cannot be used under negation.

(415) a. mɛ̀ **nzíí** dè.
mɛ nzíí dè
1S PROG.PRES eat
'I'm eating.'

b. mɛ̀ɛ́ délɛ́
mɛ̀ɛ́ de-lɛ́
1S.NEG eat-NEG.PRES
'I don't eat.'

c. *mɛ̀ nzíí délɛ́
mɛ nzíí de-lɛ́
1S PROG.PRES eat-NEG.PRES
'I'm not eating.'

In the remainder of this section, I will present the single aspect categories in more detail, providing more examples and describing each marker's meaning.

5.3.1 PROGRESSIVE *nzíí, nzí, and nzɛ́ɛ́*

The PROGRESSIVE aspect category has three suppletive forms for different TM categories: *nzíí* for the PRESENT, *nzí* for the general PAST, i.e. both recent and remote, and *nzɛ́ɛ́* in subordinate clauses. The PROGRESSIVE is a frequently found aspect category with 27 occurrences in the corpus which

is 22.1 % of all aspect markers. The PRESENT form is significantly more represented than the PAST form while the subordinate PROGRESSIVE form *nzéɛ́* was only found in elicitations and questionnaires, but not in the corpus.

The PROGRESSIVE forms for the PRESENT and PAST are distributed alike, as shown in (403). In (403a), the PRESENT form is used and a deictic adverb that refers to speech time. In (403b), the PAST form is used with the temporal adverb *nàkùgúù* 'yesterday'.

(416) a. mɛ̀ **nzíí** gyámbɔ̀ tɛ́ɛ̀.
mɛ nzíí gyámbɔ tɛ́ɛ̀
1S PROG.PRES.R cook now
'I'm cooking now.'

b. mɛ̀ **nzí** gyámbɔ̀ nàkùgúù.
mɛ nzí gyámbɔ nàkùgúù
1S PROG.PST.R cook yesterday
'I was cooking yesterday.'

In contrast, the form *nzéɛ́* only occurs in subordinate clauses, indicated by square brackets in the examples, as in (417) and (418). Since *nzéɛ́* is not specified for a certain tense, tense-mood information has to be coded in the matrix clause.

(417) ká wɛ́ pámó màwùlà lɔ̀mbì, wɛ́ kfùmàlà [mɛ̀
ká wɛ-H pámo-H ma-wùlà lɔ̀mbì wɛ-H kfùmàlà mɛ
if 2S-PRES arrive-R ma6-hour eight 2S-PRES find 1S
nzéɛ́ gyámbɔ̀.]
nzéɛ́ gyámbɔ
PROG.SUB.R cook
'If you arrive at eight o'clock, you find that I am cooking.'

In (417), the matrix clause occurs in the PRESENT while the one in (418) occurs in the FUTURE. Even though the FUTURE category belongs to the irrealis mood which does not take metatonic H tones, this does not affect the subordinate PROGRESSIVE *nzéɛ́*: it always occurs with a metatonic H tone, irrespective of the TM category in the matrix clause.

(418) mɛ̀ɛ̀ bɛ̀ [mɛ̀ **nzéɛ́** kɛ̀.]
mɛ̀ɛ̀ bɛ̀ mɛ nzéɛ́ kɛ̀
1S.FUT be 1S PROG.SUB.R go
'I will be going.'

In terms of its meaning, the PROGRESSIVE describes situations as ongoing and unbounded, as shown in (419b). It is semantically distinct from the unmarked tense-mood form in (419a) which seems to carry some imperfective meaning. Thus, also in the non-aspectual form, there are no endpoints of the situation implied (this depends, of course, also on the verb type). The emphasis of the PROGRESSIVE form, however, is specifically on the duration of the situation. 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'.

(419) a. mɛ́ dè.
mɛ-H dè
1S-PRES eat
'I eat.'

b. mɛ̀ **nzíí** dè.
mɛ nzíí dè
1S PROG.PRES.R eat
'I'm eating.'

The PROGRESSIVE in Gyeli differs in a few respects from its distribution in, for instance, English. For example, this aspect form is especially found in questions, as in (420). While the unmarked, bare tense-mood form is also grammatically correct in questions, the PROGRESSIVE form is definitely preferred and much more frequent.[12]

(420) nzá **nzíí** mɛ̂ nyɛ̂?
nzá nzíí mɛ̂ nyɛ̂
who PROG.PRES 1S.OBJ see
'Who is seeing me?'

Another difference with regard to English is that the Gyeli PROGRESSIVE aspect does not seem to be restricted to certain verb classes. While English, for instance, disprefers PROGRESSIVES with verbs expressing states, in Gyeli all kinds of verbs can occur with the PROGRESSIVE. This is illustrated in (421) for a stative verb and in (422) for a (desiderative) modal verb.

[12]For more information on questions, see chapter 6.4.1

(421) kó mbúmbù, nyɛ̀ **nzí** **lèmbò** dyùù bɔ̂ fàmîì
kó mbúmbù nyɛ nzí lèmbo dyùù bɔ̂ fàmîì
EXCL ∅1.namesake 1.PST1 PROG know kill 2.OBJ ∅1.family
bá bùdì ná?
bá b-ùdì ná
2:ATT ba2-person how
'Oh namesake, how could he kill them, the family of people?'

(422) mɛ̀ **nzí** **wúmbɛ̀** nâ bwánɔ̀ bâ̂ bá
mɛ nzí wúmbɛ nâ b-wánɔ̀ b-â̂ ba-H
1S.PST1 PROG want COMP ba2-child 2-POSS.1S 2-PRES
bwámóò ɛ́ mpù mìntáŋgánɛ́ békúdɛ́
bwámóò ɛ́ mpù mi-ntáŋgánɛ́ H-be-kúdɛ́
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.'

In addition to describing a situation as ongoing and unbounded, the PROGRESSIVE is also used for backgrounding information, as shown in (423) which presents three chronological utterances by a speaker talking about his mother. The phrase in (423a) 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 (423b) that she went there for his brother's funeral. In (423c), this is supplemented with further background information, namely that the brother had died there.

(423) a. nyáầ wâ̂ núú Ntàbɛ̀tɛ́ndá pɛ̀.
nyáầ w-â̂ núú Ntàbɛ̀tɛ́ndá pɛ̀
∅1.mother 1-POSS.1S 1.DEM.DIST PN there
'My mother is over there in Ntabɛtɛnda [= name of village].'

b. à **nzí** kɛ̀ lètʃíndɔ́ lé
a nzí kɛ̀ le-tsíndɔ́ lé
1 PROG.PST1 go le5-funeral.ceremony 5:ATT
ntùmbà wâ̂.
n-tùmbà w-â̂
N1-older.brother 1-POSS.1S
'She was going to my older brother's funeral ceremony.'

c. nɔ́gá à **nzí** wɛ̀ wû.
nɔ́-gá a nzí wɛ̀ wû
1-CONTR 1 PROG.PST1 die there
'That one died over there.'

Especially the phrase in (423c) shows that in these instances, the PROGRESSIVE form is most likely not concerned with an unbounded, ongoing situation since the verb *wɛ̀* 'die' is typically punctual rather than ongoing and unbounded.

5.3.2 PRIORATIVE *pə̂* 'first'

The opaque priorative marker *pə̂* is consistently translated as *d'abord* 'first' into French. From its distribution and tonal behavior, however, it is clear that this lexeme is an aspectual verb rather than an adverb, contrary to what the translation suggests. It is always used with a main verb and thus does not occur as a verb in its own right though.

pə̂ is, unlike most other aspect markers, not restricted to any TM category. In (424), for instance, it occurs with the PRESENT and thus takes a metatonic H tone.

(424) yîì pɛ̀'ɛ̀ nyà mwánɔ̀ mùdə̂, mɛ́ **pə́ə́** ná
yîì pɛ̀'ɛ̀ nyà m-wánɔ̀ m-ùdə̂ mɛ-H pə́ə̀-H ná
7.ID ∅9.memory 9:ATT N1-child N1-male 1S-PRES PRIOR-H again
nyɔ̂ vɛ̀.
nyɔ̂ vɛ̀
9.OBJ give
'This is the memory of a boy [= talks about himself], I first give it [to him]. [= pay the other Nzambi back]'

In contrast, in (425), the aspectual verb occurs in the FUTURE and therefore does not take a metatonic H tone.

(425) bwáà **pə́ə̀** ŋgâ dyà nà pówàlà wû.
bwáà pə́ə̀ ŋgâ dyà nà pówàlà wû
2P.FUT PRIOR PL sleep COM ∅7.calm there
'You (pl.) will first sleep quietly there.'

The marker *pə̂* has also been observed to occur in the IMPERATIVE form, as in (426) where, due to the irrealis mood, a metatonic H tone is absent.

(426) **pə̂̀** bígɛ̀.
pə̂̀ bígɛ̀.
PRIOR.IMP develop
'Speak first.'

While it seems generally possible to use *pə̂̀* in any TM category, the corpus only yields examples where this aspect marker has a present or future orientation, but no past orientation. This may, however, have semantic/pragmatic reasons.

5.3.3 PROSPECTIVE *múà*

The PROSPECTIVE marker *múà* is the only aspect that belongs to the irrealis mood in Gyeli which is characterized by the absence of a metatonic H tone on the aspectual verb, as shown in (427). It is further similar to the FUTURE irrealis category in that the SCOPs of the first and second person singular as well as the class 1 SCOP show a different tonal pattern from the other agreement classes, as contrasted in the same example.

(427) a. **à múà** dè.
a múà dè
1 PROSP eat
'S/he is about to eat.'

b. **bá múà** dè.
ba-H múà dè
2-PRES PROSP eat
'They are about to eat.'

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 state of being about to do something." Speakers usually translate the use of this aspect marker in (427a) as *Je veux/vais déjà manger* into Cameroonian French, meaning 'I want/will already eat.' In a detailed description of the situation in (427a), 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 (427a) will indeed start to eat, consider (428).

(428) mɛ̀ **múà** wɛ̀ nà nzà.
mɛ múà wɛ̀ nà nzà
1S PROSP die COM ∅9.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 PROSPECTIVE shows a mid-range frequency in the corpus, constituting 11.5 % of the aspect markers. Just like the PROGRESSIVE aspect, also 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 (429) where the speaker is talking about the port that is about to affect also the village of Ngolo.

(429) à **múà** njì lɛ̃̀, báà bù mpàgó.
a múà njì lɛ̃̀ báà bù mpàgó
1 PROSP come pass 2.FUT break ∅3.road
'It [the port] is about to come pass [= by here], they will build the road.'

5.3.4 RETROSPECTIVE *lɔ́* 'come'

The RETROSPECTIVE aspect is the counterpart to the PROSPECTIVE on the time line, looking back at situations. It is most likely a loan construction from French *venir de faire quelque chose* 'just having done something', while the lexeme *lɔ́* 'come' is a loan word from Basaa (A42). The retrospective is restricted to the PRESENT (unlike French, where it can also be used in other tenses). Accordingly, SCOPs carry the PRESENT H tone, as shown in (430), while the verb *lɔ́* always occurs with a metatonic H tone.[13] Unlike the PROSPECTIVE, all SCOPs carry the same tone in this aspect category, as (430a) and (430b) show.

[13]Since *lɔ́* never occurs phrase finally in Gyeli, there is no proof of any underlying tone. I therefore gloss *lɔ́* with a H tone also in the underlying form which inherently carries the metatonic H.

(430) a. **á** lɔ́ dè.
a-H lɔ́ dè
1-PRES RETRO.R eat
'He just ate [*Il vient de manger.*]'

b. **bá** lɔ́ dè.
ba-H lɔ́ dè
2-PRES RETRO.R eat
'They just ate.'

The RETROSPECTIVE is slightly more frequent in the corpus with 13.9 % of the aspect markers than its counterpart, the PROSPECTIVE (11.5 %). In contrast to PROSPECTIVE though, the RETROSPECTIVE has only been observed to occur with eventive verbs and animate subjects in the corpus.

The distance between speech time and the situation that is looked at retrospectively is relative. In (431), 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.

(431) áh, gyí wɛ́ **lɔ́** njì gyɛ́sɔ̀?
áh, gyí wɛ-H lɔ́ njì gyɛ́sɔ
EXCL what 2S-PRES RETRO.R come look.for
'Ah, what have you just come to look for?'

In contrast, in (432), the retrospect situation is already finished which is clearly marked by the verb *fwála* '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.

(432) yá **lɔ́** fwálà nà mɛ́ **lɔ́** láwɔ̀.
ya-H lɔ́ fwála nà mɛ-H lɔ́ láwɔ
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 (433), 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 though (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.

(433) yɔ́ɔ̀ á **lɔ́** kì náà: ɛ́ mpù wɛ̀ɛ́
yɔ́ɔ̀ a-H lɔ́ kì náà ɛ́ mpù wɛ̀ɛ́
so 1-PRES RETRO say COMP LOC like.this 2S.PRES.NEG
gyáŋgyálɛ́ bédéwɔ̀.
gyáŋgya-lɛ́ H-be-déwɔ̀
work-NEG OBJ.LINK-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 (433) 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 the next subsection.

5.3.5 PERFECT *bwàà* 'have'

The PERFECT in Gyeli is expressed by the verb *bwàà* 'have'. This aspect is restricted to the past TM categories and can occur in both recent and remote PAST, as shown in (434).

(434) a. **mɛ̀ bwàá** dè.
mɛ bwàà-H dè
1S PRF-R eat
'I have eaten (recently).'

b. **méɛ̀ bwàá** dè.
méɛ̀ bwàá dè
1S.PST2 PRF eat
'I have eaten (long ago).'

The PERFECT is rather rare in the corpus with only 2.5 %. 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, ABSOLUTE COMPLETIVE, and NON-COMPLETE ACCOMPLISHMENT 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 *depuis* which means 'a long time ago.' Thus, the phrase in (435) is consistently translated as *Il est depuis allé rester comme ça.*

(435) à **bwàá** yɛ́ɛ́ kɛ́ djì mpù.
a bwàà-H yɛ́ɛ́ kɛ̀-H djì mpù
1 PRF-R then? go-R stay like.this
'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. (436) 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 (436a), *bwàà* is used; speakers explain that the baby has woken up already a while ago. In contrast, the use of the ABSOLUTE COMPLETIVE in (436b) hints at the fact that he has only woken up recently.

(436) a. à **bwàá** vòbà.
a bwàà-H vòba
1S PRF-R wake
'He has woken up already (a while ago).'

b. à vòbá **mɔ̀**.
a vòba-H mɔ̀
1S wake-R COMPL
'He has woken up already (recently).'

Given that the PERFECT can occur in both PAST 1 and PAST 2 TM 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 (437) where speech time and the situation are more immediate.

(437) yɔ́ɔ̀ nzàmbí kí náà mɛ̀ **bwàá** wɛ̀ tʃíyɛ̀ lèkɛ́lɛ̀
yɔ́ɔ̀ nzàmbí kì-H náà mɛ bwàà-H wɛ̀ tʃíyɛ le-kɛ́lɛ̀
so PN say-R COMP 1S.PST1 PRF-R 2S.OBJ cut le5-speech
dɛ́ nâ mɛ́ lígɛ́ dè mwánɔ̀ wɔ́ɔ̀,
dɛ́ nâ mɛ-H lígɛ-H dè m-wánɔ̀ w-ɔ́ɔ̀
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 (see next section). The reason for this preference of *bwàà* over other aspect forms in this context is not clear.

5.3.6 ABSOLUTE COMPLETIVE *-mɔ̀/-Ṽ*

The only aspect marker that follows the verb is the ABSOLUTE COMPLETIVE *mɔ̀/-Ṽ*. It comes in two forms: a postverbal morpheme *mɔ̀*, as in (438a), and a nasalized vowel with a falling HL tone (438b). The latter is said to be more typical Gyeli, but *mɔ̀* is also productively used. It can be excluded that *mɔ̀* is a loan form from Mabi since the cognate form in Mabi is *mà*. 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).

(438) a. mɛ̀ lùŋgá mɔ̀.
mɛ̀ lùŋgá mɔ̀
1S grow COMPL
'I have (already) grown.'

b. mɛ̀ lùŋgɑ́ɑ̀.
mɛ̀ lùŋgɑ́ɑ̀
1S grow:COMPL
'I have (already) grown.'

I consider *mɔ̀* a free morpheme rather than a verbal suffix since it triggers a metatonic H tone on the preceding verb. If *mɔ̀* was a suffix, it would be the suffix (and the preceding toneless verbal derivation morphemes) that would take the metatonic H tone in non final position. This, however, is not the case, as (439) shows.

(439) mɛ̀ lùŋg**á** **mɔ̀** bvùbvù.
mɛ lùŋga-H mɔ̀ bvùbvù
1S grow-R COMPL lots
'I have (already) grown lots.'

The second form with the final lengthened and nasalized vowel in (438b) is the contracted form of *mɔ̀*. The segmental nasal has been deleted, but

nasality survived on the lengthened vowel. Also, the tonal pattern of the metatonic H plus the L tone *mɔ̀* is maintained.

While there are some verbs as in (438) which can take both the *mɔ̀* form and the contracted form, other verbs can only take one or the other. *lámbɔ* 'trap', for instance, can only take the contracted form as in (440a), while the non-contracted form in (440b) is judged as ungrammatical. It seems to be lexically determined whether a verb takes one or the other or both forms.

(440) a. mɛ̀ lámbɔ́ɔ̀̃ kù.
mɛ lámbɔ́ɔ̀̃ kù
1S trap.R.COMPL ∅1.rat
'I have (already) trapped the rat.'

b. *mɛ̀ lámbɔ́ mɔ̀ kù.
mɛ̀ lámbɔ-H mɔ̀ kù
1S trap-R COMPL ∅1.rat
'I have (already) trapped the rat.'

Both forms, contracted and non-contracted, are restricted to the recent PAST. Unlike other aspectual categories such as the PAST PROGRESSIVE form *nzí* or the PERFECT *bwàà* which allow both PAST TM categories, the use of PAST 2 is prohibited for the ABSOLUTE COMPLETIVE.

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 (441) through (443).

(441) mínɔ̀ má bùdì mà kɛ́ɛ̃̀ɛ̃̀, máà vé?
m-ínɔ̀ má b-ùdì ma kɛ́ɛ̃̀ɛ̃̀ 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]'

(442) bon, mpɔ̀ŋgɔ̀ síl**ɛ́ɛ̃̀ɛ̃̀**,
bon, mpɔ̀ŋgɔ̀ sílɛ́ɛ̃̀ɛ̃̀
OK[French] ∅7.generation finish.COMPL
'OK, the generation has been wiped out,'

(443) wɛ̀ dyúwɔ́ **mɔ̀**?
wɛ dyúwɔ-H mɔ̀
2S.PST1 hear-R COMPL

‘Have you understood?’

While stative verbs rarely take this aspect marker, it is still possible, as (444) shows.

(444) wɛ̀ lèmb**ɔ́ɔ̀** sâ bányá màmbò
wɛ lèmbɔ́ɔ̀ sâ H-ba-nyá m-àmbò
2S.PST1 know.COMPL do OBJ.LINK-ba2-important ma6-thing
nâ ká mɛ́ lúmɔ́ wɛ̂ nlɑ́à nâ,
nâ ká mɛ-H lúmɔ-H wɛ̂ nlɑ́à nâ
COMP if 1S-PRES send-R 2S.OBJ ∅3.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 (441), the people have completely left, in (442), the generation has completely been wiped out, and in (443), 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 (445). This example compares the ABSOLUTE COMPLETIVE with the NON-COMPLETE ACCOMPLISHMENT and the PERFECT.

(445) a. mɛ̀ lá **mɔ̀** kálàdɛ̀ yíndɛ̀.
mɛ lâ-H mɔ̀ kálàdɛ̀ yí-ndɛ̀
1S.PST1 read-R COMPL ∅7.book 7-ANA
‘I have read this book [= entirely, all of it].’

b. mɛ̀ **sílɛ́** lâ kálàdɛ̀ yíndɛ̀.
mɛ sílɛ-H lâ kálàdɛ̀ yí-ndɛ̀
1S.PST1 finish-R read ∅7.book 7-ANA
‘I’m done reading this book. [= but not necessarily the whole book]’

c. mɛ̀ **bwàá** lâ kálàdɛ̀ yí-ndɛ̀.
mɛ bwàà-H lâ kálàdɛ̀ yí-ndɛ̀
1S PRF-R read ∅7.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 *mɔ̀* is used, the interpretation is that the book has been read

entirely. Therefore, I call this aspect category ABSOLUTE COMPLETIVE. In comparison, the aspect marker *sílɛ* 'finish', which is discussed in more detail in the next section, also carries a completive meaning in that the subject is done reading the book. The use of *sílɛ*, however, does not entail that the book has been read in its entirety, just that the subject is done reading (parts of) it. Therefore, I label this aspect as NON-COMPLETE ACCOMPLISHMENT. For the PERFECT use in (445c), speakers provide a more vague translation, suggesting that the PERFECT has a more general and maybe experiential meaning.

In that, the PERFECT would then also have some semantic overlap with the ABSOLUTE COMPLETIVE since typical experiential meaning is also expressed by *mɔ̀*, as shown in (446).

(446) wɛ̀ làdtɔ́ mɔ̀ nà káliyâ?
wɛ làdtɔ-H mɔ̀ nà káliyâ
2S.PST1 meet-R COMPL COM ∅1.sister:1S.POSS
'Have you (already, ever) met my sister?'

Finally, the ABSOLUTE COMPLETIVE is also used in more figurative and idiomatic ways. In (447), for instance, Nzambi's wife states that she has died from hunger, even though, obviously, she is still alive.

(447) nyɛ̀ náà mùdì wɑ́ɑ̀, mɛ̀ wɛ́ɛ̀ nà nzà.
nyɛ náà m-ùdì w-ɑ́ɑ̀ mɛ wɛ́ɛ̀ nà nzà.
1 COMP N1-person 1-POSS.1S 1S die.COMPL COM ∅9.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 (448), while, literally, they have not left yet.

(448) yɔ́ɔ̀ nzàmbí kí nâ bon mɛ̀ nìyɛ́ **mɔ̀**.
yɔ́ɔ̀ nzàmbí kì-H nâ bon mɛ nìyɛ-H mɔ̀
so PN say-R COMP good[French] 1S.PST1 return-H COMPL
'So Nzambi says: Good, I am returning home.'

In summary, the ABSOLUTE COMPLETIVE has a wide range of applications. It would be worthwhile for future research to investigate this more.

5.3.7 NON-COMPLETE ACCOMPLISHMENT *sílɛ̀* 'finish'

The verb *sílɛ̀* 'finish' occurs frequently in the corpus with 16.4 %. It is the least grammaticalized of all aspectual verbs. Like *pɑ̂*, it is not restricted to

any TM categories and thus can also occur in both realis or irrealis mood form. In contrast to all other aspectual verbs though, *sílɛ* is further not restricted to the first, finite verb position in a chain of verbs, as (449) shows.

(449) mɛ̀ nzíí kɛ̀ nà vúlɛ̀ lévúdṹ nà
mɛ nzíí kɛ̀ nà vúlɛ H-le-vúdṹ nà
1S PROG.PRES go COM take.away OBJ.LINK-le5-one COM
lèvúdṹ, mɛ́ táálɛ́ **sílɛ̀** nyùlɛ̀.
le-vúdṹ mɛ-H táálɛ-H sílɛ nyùlɛ
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).'

The category label NON-COMPLETE ACCOMPLISHMENT has been explained in the previous section in comparison with the ABSOLUTE COMPLETIVE *mɔ̀/-Ṽ*. Example (445) shows that, while *mɔ̀/-Ṽ* implies absolute completeness of an event, as in the case of reading a book, *sílɛ* 'finish' only expresses that a subject is over with an event, but not necessarily that the event has been completed. Similarly, in (450), the question is interpreted as to whether the addressee is done sweeping, but not, if they have swept everything (the whole house or yard).

(450) nà wɛ̀ **sílɛ́** wɔ̀mbɛ̀lɛ̀?
nà wɛ sílɛ-H wɔ̀mbɛlɛ
Q 2S finish-R sweep
'Have you finished sweeping?'

Besides this non-complete accomplishment implication, one of the core functions of *sílɛ̀* is to express distributivity of an event or kind. In the case of the palm wine in (449), 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 a 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 (450) where the event of sweeping is comprised of many episodes of moving the broom over the ground.

A similar effect can be observed for distributivity over kinds. (451) shows that the aspect marker can, in certain contexts, only be used with

plural participants. Here, the event of leaving distributes over several people. In contrast, a singular participant is ungrammatical because *sílɛ* cannot distribute over different kinds or events in this case.

(451) bà **sílɛ́** kɛ̀ → *à **sílɛ́** kɛ̀
ba sílɛ-H kɛ̀ → a sílɛ-H kɛ̀
3P.PST1 COMPL-R go → 1.PST1 COMPL-R go
'They have all left. → *He has all left.'

A singular participant is, however, grammatical if there are several events that the aspect marker can distribute over. (452) shows a coordinated clause where the first constituent is almost identical to the non-grammatical phrase in (451). The second constituent adds another event though over which *sílɛ* can distribute which makes (452) perfectly acceptable.

(452) áà **sílɛ́** kɛ̀ nà dvùwɔ́ dyúwɔ̀,
áà sílɛ-H kɛ̀ nà dvùwɔ-H dyúwɔ
1.PST2 finish-R go COM stuff-R ∅7.top
'He has gone and stuffed the top [= with straw],'

Other examples of *sílɛ* as distributing over kinds are given in (453) and (454). In (453), Nzambi of the story in Appendix II.2 forces the whole family of his friend to enter a house. The NON-COMPLETE ACCOMPLISHMENT marker *sílɛ* refers to the single people who have to enter one after the other.

(453) nyáà ŋgà, **sílɛ́** nyî ndáwɔ̀ dé tù.
nyáà ŋgà sílɛ́-H nyî ndáwɔ̀ dé tù
shit.IMP PL finish-R enter ∅9.house LOC inside
'*Faites chier*, go all into the house.'

In (454), 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, *sílɛ* 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.

(454) byɛ́sɛ̀ béè **sílɛ̀** ntàmànɛ̀.
by-ɛ́sɛ̀ béè sílɛ ntàmanɛ
8-all 8.FUT finish ruin
'they all will be ruined.'

5.3.8 HABITUAL by Verb Reduplication

While, impressionistically from observing conversations, the HABITUAL aspect, expressed by a reduplicated verb, is very frequent, it is barely found in the corpus. From elicitation, however, it is clear that the HABITUAL is restricted to the PRESENT TM category and thus its SCOP always takes a H tone while the verb in non phrase final position takes a metatonic H tone. This is shown in (455). For the analysis of HABITUAL forms as a word rather than two and its tonal patterns, see the discussion on 'aspect and mood' above as well as examples (406) through (408).

(455) mɛ́ **gyámbɔ́gyámbɔ́** bédéwɔ̀
mɛ-H gyámbɔ-gyambɔ-H H-be-déwɔ̀
1S-PRES prepare-prepare-R OBJ.LINK-8-food
'I usually, regularly prepare food.'

In terms of its meaning, the HABITUAL relates to events that occur regularly or usually. (456) illustrates this when the narrator of the Nzambi story comments that these stories are left to them by their ancestors their ancestors so that the present generation tells these stories. Both verbs *líyɛ* 'leave' and *tà* 'tell (a story)' occur in the HABITUAL reduplicated form, indicating that both events happen habitually.

(456) bàmpámbó bá **líyɛ̀lìyɛ̀**, nâ yá
ba-mpámbó ba-H líyɛ-liyɛ nâ ya-H
ba2-ancestor 2-PRES leave-leave.HAB COMP 1P-PRES
tɑ́ɑ̀tà békàndá bé tè.
tɑ́ɑ̀-tà H-be-kàndá bé tè
tell.SBJV-HAB OBJ.LINK-be8-proverbs 8:ATT there
'The ancestors leave [the proverbs to us], so that we tell the proverbs there.'

(456) also shows that the HABITUAL can simultaneously occur with the SUBJUNCTIVE form while the subjunctive will show on the first part of the verb (*tɑ́ɑ̀-*), while the copy (*-tà*) is not affected.

5.4 Negation

Gyeli uses different negation strategies for different tense-mood categories. These are summarized in Table 5.16. In PRESENT negation, a negation suffix

-lɛ is used, while PAST and FUTURE use negation verbs that precede the negated verb, similar to aspectual verbs. There is also a negation verb, *tí* or its Kwasio variant *kí*, which occurs in the PRESENT and with IMPERATIVES, but also in infinitival negation.

Negation marker	Status	Function	Frequency	
-lɛ	verbal suffix	PRES	23	(62.2 %)
sàlɛ́/pàlɛ́	negation verb	PST	4	(10.8 %)
kálɛ̀	negation verb	FUT	3	(8.1 %)
tí	negation verb	PRES, IMP, infinitival	7	(18.9 %)
Total			37	

Table 5.16: Negation markers

As the function column in the table shows, most TM categories have their own special negation marking. Only the INCHOATIVE and the SUBJUNCTIVE are missing in this list. The INCHOATIVE cannot be negated directly, but requires an embedding construction, as shown in section 5.5. As for the SUBJUNCTIVE, this TM category is systematically negated lexically with the verb *dúù* 'should/must not'. As in the affirmative SUBJUNCTIVE forms, the SCOP takes a H tone and the verb *dúù* lacks a metatonic H tone, as expected for this TM category. Examples are given in (457) and in (458) from the corpus.

(457) a. á dúù dɛ̀ 'He shouldn't eat.'
b. á dúù kɛ̀ 'He shouldn't go.'
c. á dúù gyàgà 'He shouldn't buy.'
d. á dúù nyùlɛ̀ 'He shouldn't drink.'
e. á dúù gyámbɔ̀ 'He shouldn't cook.'
f. á dúù gyíkɛ̀sɛ̀ 'He shouln't teach.'
g. á dúù vìdɛ̀gà 'He shouldn't turn.'

(458) kálɛ̀ mɛ̀ báà kì nâ bá **dúù** bɛ̀ bédéwɔ̀.
kálɛ̀ mɛ̀ báà kì nâ ba-H dúù bɛ̀ H-be-déwɔ̀
NEG 1S 2.FUT say COMP 2-PRES must.not.SBJV grow be8-food
'It's not me, they [= who] will say that they must not grow food.'

As (459) shows, a metatonic H tone is also missing when the non-finite verb is followed by an object or adverb. This is expected for the irrealis mood to which the SUBJUNCTIVE belongs.

(459) a. á dúù dè mántúà ‘He shouldn’t eat mangoes.’
b. á dúù kɛ̀ tísɔ̀nì ‘He shouldn’t go to town.’
c. á dúù gyàgà békálàdɛ̀ ‘He shouldn’t buy books.’
d. á dúù nyùlɛ̀ májíwɔ́ ‘He shouldn’t drink water.’
e. á dúù gyámbɔ̀ bédéwɔ̀ ‘He shouldn’t cook food.’
f. á dúù gyíkɛ̀sɛ̀ bábwálɛ̀ fàlà ‘He shouln’t teach the parents French.’
g. á dúù vìdɛ̀gà tɛ̀ ‘He shouldn’t turn now.’

Table 5.16 also provides information on the frequency of each negation strategy in the corpus. With only 37 instances of negation marking, these figures are not representative and can just give a tendential impression. Not surprisingly, PRESENT negation marking is the most frequently found with over 60%, followed by the negation verb *tí* which is relatively frequent due to its various usage environments. Negation verbs for the PAST and FUTURE both have a lower frequency of roughly 10% in the corpus. In the following, I will discuss each negation marking strategy in turn.

5.4.1 Negation with *-lɛ* in the PRESENT

In the PRESENT TM category, the verbal suffix *-lɛ* is used in negation. I consider this suffix as toneless, its surface tones depending on the verb stems tonal specification.

Tonal patterns of the negated verb In general, the first mora of a verb stem, i.e. the first verb syllable, determines the tonal pattern of a verb negated with the suffix *-lɛ*. In monosyllabic verb stems, the stem always changes to a H tone which then also spreads onto the negation suffix. (460) gives examples for underlyingly L tone verb stems and (461) for monosyllabic verb stems which surface as HL in isolation.[14]

(460) L → H
a. dè ‘eat’ > dé-lɛ́
b. kɛ̀ ‘go’ > kɛ́-lɛ́

(461) HL → H

[14]For convenience, I do not consider subject concord until later.

a. nyê ‘see’ > nyé-lɛ́
b. pê ‘choose’ > pé-lɛ́

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 (462).

(462) H Ø → H H
a. síndya ‘change’ > síndyá-lɛ́
b. símɛ ‘respect’ > símɛ́-lɛ́
c. dzímbɛ ‘get lost’ > dzímbɛ́-lɛ́
d. ŋgwáwɔ ‘bend’ > ŋgwáwɔ́-lɛ́

The same is true for trisyllabic verbs where the first mora is specified H and the two following morphemes are toneless. (463) shows that, again, the H tone from the first mora spreads to the right, all the way to the negation suffix.

(463) H Ø Ø → H H H
a. gyíkɛsɛ ‘teach’ > gyíkɛ́sɛ́-lɛ́
b. líyɛlɛ ‘show’ > líyɛ́lɛ́-lɛ́
c. lúmɛlɛ ‘send’ > lúmɛ́lɛ́-lɛ́
d. súmɛlɛ ‘greet’ > súmɛ́lɛ́-lɛ́

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 (464) for bisyllabic and in (465) for trisyllabic verbs.

(464) L Ø → H L
a. gy**à**ga ‘buy’ > gy**á**gà-lɛ̀
b. v**ɔ̀**wa ‘wake up’ > v**ɔ́**wà-lɛ̀
c. l**ù**ŋga ‘grow’ > l**ú**ŋgà-lɛ̀
d. ts**ì**lɔ ‘write’ > ts**í**lɔ̀-lɛ̀

(465) L Ø Ø → H L L

a. kf**ù**bala ‘move’ > kf**ú**βàlà-lɛ̀
b. v**ì**dɛga ‘turn’ > v**í**dɛ̀gà-lɛ̀
c. k**à**mbala ‘defend’ > k**á**mbàlà-lɛ̀
d. djì**n**ɛsɛ ‘make sth. sink’ > djí**n**ɛ̀sɛ̀-lɛ̀

Patterns of the SCOP in PRESENT negation As described above and illustrated in entire phrases in (466), the PRESENT negation suffix *-lɛ* is attached to the finite verb.

(466) a. bá kɛ́lɛ́.
ba-H kɛ́-lɛ
2-PRES go-NEG
‘They do not go.’

b. bá wúmbɛ́lɛ́ kɛ̀.
ba-H wúmbɛ-lɛ kɛ̀
2-PRES want-NEG go
‘They do not want to go.’

As a default, the SCOP under PRESENT negation has the same pattern as the non-negated form. As with FUTURE non-negated SCOPs, however, there are a few exceptions in certain agreement classes. The SCOPs 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 (467). All other SCOPs take a H tone SCOP, as in (466).

(467) a. **mèɛ́** kɛ́lɛ́.
mèɛ́ kɛ́-lɛ
1S.PRES.NEG go-NEG
‘I do not go.’

b. **mèɛ́** wúmbɛ́lɛ́ kɛ̀.
mèɛ́ wúmbɛ-lɛ kɛ̀
1S.PRES.NEG want-NEG go
‘I do not want to go.’

Just like the non-negated forms, the SCOP can also be omitted with negated forms, for instance when a more complex subject noun phrase is present, as with *mùdì nú* ‘that person’ in (468).

(468) mùdì nú bɛ́lɛ́.
m-ùdì nú bɛ́-lɛ́
N1-person 1.DEM.DIST be-NEG
'Nobody is there.'

Other PRESENT negation examples from the corpus are provided in (469) and (470).

(469) **má dvúmɔ́lɛ́** mbvú mbì mbvû.
ma-H dvúmɔ́-lɛ́ mbvú mbì mbvû
6-PRES produce-NEG ∅3.year like[Kwasio] ∅3.year
'They [the palm trees] don't produce [fruit] every year.'

(470) **mèɛ́** djílɛ́ wɛ̀ bvúbvû.
mèɛ́ djí-lɛ́ wɛ̀ bvúbvû
1S.PRES.NEG ask-NEG 2S.OBJ much
'I don't ask you for much.'

PRESENT negation and realis mood While the PRESENT TM category is a realis mood which is characterized by a metatonic H tone on the verb if the verb is not phrase final, the metatonic H tone does not apply to negated forms in the PRESENT. Negation with *-lɛ* does not take metatonic tones. Instead, the tonal pattern of the negated verb plus suffix is specified by negation and *-lɛ* surfaces either H or L, depending on the tone of the verb's first mora. Thus, if a nominal object, for instance, follows the negated verb form, the negation tonal pattern remains unchanged, as shown in (471).

If an noun with a CV shape prefix follows the negated verb, the toneless noun prefix takes a linking H tone, no matter whether the preceding negation suffix is specified H or L as shown in (471).

(471) a. àá délɛ́ mántúà.
àá dè-lɛ H-ma-ntúà
1.PRES.NEG eat-NEG OBJ.LINK-ma6-mango
'He does not eat mangoes.'

b. àá gyág**àlɛ̀** békáládɛ̀.
àá gyàga-lɛ H-be-káládɛ̀
1.PRES.NEG buy-NEG OBJ.LINK-be8-book
'He does not buy books.'

In (471a), the negated verb surfaces with a H tone anyway so that one could assume that the H tone has merged with the metatonic H tone. (471b)

shows, however, that this is not the case. Even in non-phrase final position, the toneless TBUs of the verb plus negation suffix remain all L also in this context. I consider this an excepetional tonal pattern in terms of realis marking. As I will show for the verbal negation words in PAST and FUTURE, these negation verbs cross-cut tonally with the realis/irrealis distinction.

5.4.2 Negation with *sàlɛ́/pálɛ́* in the PAST

Negating PAST tense-mood forms involves the negation verbs *sàlɛ́* or *pálɛ́* which seem to be interchangeably used. 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. They can be used in both the recent PAST and the remote PAST. In (472), for instance, the remote PAST is used.

(472) ɛ́kɛ̀! nzàmbí wà nú áà **sàlɛ́** bɛ̀ nà
ɛ́kɛ̀! nzàmbí wà nú áà sàlɛ́ bɛ̀ nà
EXCL PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM
bɑ̂ líná-á pámò.
bɑ̂ líná a-H pámo
∅7.word when 1-PRES arrive
'Oh! That Nzambi had no words as soon as he arrives.'

In (473) and (474), the negation verb occurs with a recent PAST SCOP which surfaces with a L tone. The SCOPs for both PAST categories take the same pattern under negation as in non-negated forms, unlike the PRESENT.

(473) à **pálɛ́** lìí bâ.
a pálɛ́ lìí bâ
1.PST1 NEG.PST yet married
'He is not yet married.'

(474) yà **pálɛ́** bɛ̀ nà bùdɑ̂.
ya pálɛ́ bɛ̀ nà b-ùdɑ̂
1P.PST1 NEG.PST be COM ba2-woman
'We did not have any women.'

sàlɛ́ and *pálɛ́* are verbs, even though synchronically their meaning, apart from negation, is opaque. They have to be considered as verbs, however, because of their distribution, the suffix *-lɛ* and their tonal pattern. In terms of distribution, they occur just like aspectual verbs before the non-finite, negated verb. For instance, in (474), *pálɛ́* precedes the verb *bɛ̀* 'be'.

Both *sàlɛ́* and *pálɛ́* end in-*lɛ*, the negation suffix used also in the PRESENT TM category. Since they meaning of *sà-* and *pá-* is unknown synchronically, though, I do not gloss *-lɛ* separately as a negation suffix, but treat the whole verb as negation marker.

Also, it seems that these negation verbs are more grammaticalized than the PRESENT forms in terms of their tonal behavior. Unlike the special tonal patterns in the PRESENT, the PAST negation verbs all surface with a final metatonic H tone, as seen in the previous examples.

5.4.3 Negation with *kálɛ̀* in the FUTURE

Just like the PAST negation verbs, also the FUTURE uses the same means of expressing negation, namely with the negation verb *kálɛ̀*. Again, the suffix *-lɛ* is used in a verb whose synchronic meaning is opaque. Also the FUTURE negation verb *kálɛ̀* occurs with a SCOP that is identical to the non-negated FUTURE. For the first and second person singular and class 1, the SCOP has a long vowel with a L tone pattern, as in (475), while all other agreements classes have a long vowel with a HL pattern, as exemplified in (476).

(475) **mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ.**
mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ
1S.FUT NEG.FUT anymore be COM ∅7.place LOC here
'I won't have a place here anymore.'

(476) ká wɛ́ kíyá lékɔ́'ɔ̀ ɛ́ kwámɔ́, kwámɔ́
ká wɛ-H kíya-H H-le-kɔ́'ɔ̀ ɛ́ kwámɔ́, kwámɔ́
if 2S-PRES put-R OBJ.LINK-le5-stone LOC ∅9.bag ∅9.bag
nyîì kálɛ̀ búlɛ̀.
nyîì kálɛ̀ búlɛ
9.FUT NEG.FUT break
'If you put the stone in the bag, the bag will not break.'

In contrast to the PAST negation verbs, *kálɛ̀* always ends in a L tone, also when it is not phrase final. This is in accordance with the irrealis mood of the FUTURE which is characterized by the absence of a metatonic H tone.

kálɛ̀ has also been observed to negate cleft sentences, as in (477).

(477) **kálɛ̀** mɛ̀ báà kì nâ bá dúù bɛ̀
kálɛ̀ mɛ̀ báà kì nâ ba-H dúù bɛ̀
NEG 1S 2.FUT say COMP 2-PRES must.not.SBJV grow
bédéwɔ̀.
H-be-déwɔ̀
OBJ.LINK-be8-food
'It's not me, they [= who] will say that they must not grow food.'

5.4.4 Negation with *tí*

Negation of IMPERATIVES and infinitives is achieved with the highly grammaticalized negation verb *tí*. *tí* can also be used for negation with a present time reference, as shown in (478a). This contrasts with the specific PRESENT negation in (478b), as discussed in section 5.4.1.

(478) a. mɛ̀ **tí** ná dè.
mɛ tí ná dè
1S NEG anymore eat
'I don't eat anymore.'

b. mɛ̀ɛ́ dé**lɛ́** ná.
mɛ̀ɛ́ dé-lɛ́ ná
1S.PRES.NEG eat-NEG anymore
'I don't eat anymore.'

Negation with *tí* with present tense reference often comes in combination with the adverb *ná* 'still', which then means 'not anymore'. Impressionistically, in this context of 'not anymore', *tí* is preferrably used since this is the first spontaneous answer speakers give. When asked, they state, however, that also the suffix *-lɛ* is correct and equally used, as shown in (478b). The exact distribution and semantic difference between present negation with *tí* in contrast to negation with with the suffix *-lɛ* still requires a more thorough investigation.

Tonally, *tí* behaves like an aspectual verb: the SCOP surfaces with a L tone, comparable to SCOPs with the PRESENT PROGRESSIVE marker *nzíí*, as shown in (479a). Also, the following verb comes in its non-finite tonal pattern. When an object follows, as in (479b), and the negated verb is not phrase final, it still does not take a metatonic H tone. This is the same tonal pattern found for aspectual verbs.

(479) a. mɛ̀ tí gyàgà.
mɛ tí gyàga
1S NEG buy
'I don't buy.'

b. mɛ̀ tí gyàgà mántúà.
mɛ tí gyàga H-ma-ntúà
1S NEG buy OBJ.LINK-6ma-mango
'I don't buy mangoes.'

tí seems to be a highly grammaticalized negation verb which, historically, also had a negation suffix *-lɛ* like the other negation verbs. Evidence for this comes from Mabi where the regular correspondance is *kí*. The Mabi negation verb is frequently used in Gyeli texts in code-switching, as shown in (480).

(480) mɛ̀ **kí** bɛ̀ nà tsídí.
mɛ kí bɛ̀ nà tsídí
1S.PST1 NEG[Kwasio] be COM ∅1.meat
'I didn't have any meat.'

kí seems to be the shortened form of *kílɛ̀* which occurs in (481).

(481) bá lɑ́ pámò vâ tɛ́ɛ̀ bà kwɛ̀lɔ́ɔ̃̀ yɔ̀
ba-H lɑ̃̀-H pámo vâ tɛ́ɛ̀ ba kwɛ̀lɔ́ɔ̃̀ yɔ̀
2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7.OBJ
kílɛ̀ dyúwɔ̀ tsíyà.
kílɛ̀ dyúwɔ̀ tsíyà
NEG[Kwasio] hear ∅1.question
'They pass and arrive here now, they cut it already without hearing a question [= without asking].'

It thus seems that *kí* in Mabi has lost its negation suffix. It is very likely that the same happened in Gyeli, even though the exact grammaticalization path is unknown. It is not clear, for instance, whether Gyeli ever had a form *tílɛ̀* where the negation suffix was lost or whether Gyeli borrowed the grammaticalized Mabi *kí* form which then became *tí*.

While the PRESENT TM category has a choice of negation strategies, i.e. with the suffix *-lɛ* or the grammaticalized negation verb *tí*, other TM categories do not have this choice. IMPERATIVES and SUBJUNCTIVES are always negated with *tí*. The same is true for infinitives.

Negation of IMPERATIVES Negative singular imperatives, i.e. prohibitions, are expressed by the negation verb *tí*. *tí* precedes the negated verb, as shown in (482). The negated verb takes the tonal pattern of an infinitive, i.e. it is non-finite rather than taking the tonal pattern of the (affirmative) IMPERATIVE as outlined in section 5.2.4.6.

(482) a. tí dè! 'Don't (sg.) eat!'
b. tí gyàgà! 'Don't (sg.) buy!'
c. tí nyúlɛ̀! 'Don't (sg.) drink!'
d. tí vìdɛ̀gà! 'Don't (sg.) turn!'

If the non-finite, negated verb is not phrase final, but followed, for instance, by a nominal object, the non-finite verb surfaces with a final L tone, as expected (and does not take a metatonic H tone). This is shown in (378).

(483) a. tí dè mántúà! 'Don't (sg.) eat mangoes'
b. tí gyàgà mántúà! 'Don't (sg.) buy mangoes!'
c. tí nyúlɛ̀ májíwɔ́! 'Don't (sg.) drink water!'
d. tí vìdɛ̀gà wámíyɛ̀!̀ 'Don't (sg.) turn fast!'

When the addressee of an imperative form is a plural entity, the plural particle *ŋga* is used, as for the affirmative forms. As (484) shows, the plural particle follows the negation verb *tí*, but precedes the negated, non-finite verb form. Here, the toneless plural particle *ŋga* gets its tonal specification from the preceding negation verb *tí* and thus surfaces with a H tone.

(484) a. tí ŋgá dè! 'Don't (pl.) eat!'
b. tí ŋgá gyàgà! 'Don't (pl.) buy!'
c. tí ŋgá nyúlɛ̀! 'Don't (pl.) drink!'
d. tí ŋgá vìdègà! 'Don't (pl) turn!'

Again, even when the negated verb is not phrase final, it will not take a metatonic H tone, since it is non-finite, but surfaces with a L tone. A nominal object with CV- shape prefix, however, takes a linking object H tone, as shown in (485).

(485) a. tí ŋgá dè mántúà! 'Don't (pl.) eat mangoes'
b. tí ŋgá gyàgà mántúà! 'Don't (pl.) buy mangoes!'

c. tí ŋgá nyúlɛ̀ májíwɔ́! 'Don't (pl.) drink water!'

d. tí ŋgá vìdɛ̀gà wámíyɛ̀! 'Don't (pl) turn fast!'

The third construction subsumed under IMPERATIVES, besides singular and plural ones, concerns cohortative constructions, as described for affirmative forms in section 5.2.4.6. As for the affirmative IMPERATIVE forms, the first person plural SCOP *yá* is used with a PRESENT H tone pattern also with the negation verb *tí*, as shown in (486). Thus, the structure for negated cohortatives is: SCOP - negation verb - plural particle - non-finite verb.

(486) a. yá tí ŋgá dè! 'Let's eat!'

b. yá tí ŋgá gyàgà! 'Let's buy!'

c. yá tí ŋgá nyúlɛ̀! 'Let's drink!'

d. yá tí ŋgá vìdɛ̀gà! 'Let's turn!'

Negated cohortative forms which not only involve a non-finite negated verb, but also an object or adjunct, are parallel to the other respective forms of the IMPERATIVES, as illustrated in (487).

(487) a. yá tí ŋgá dè mántúà! 'Let's not eat mangoes'

b. yá tí ŋgá gyàgà mántúà! 'Let's not buy mangoes!'

c. yá tí ŋgá nyúlɛ̀ májíwɔ́! 'Let's not drink water!'

d. yá tí ŋgá vìdɛ̀gà wámíyɛ̀!̀ 'Let's not turn fast!'

Negation of infinitives A common use of the negation verb *tí* concerns the negation of infinitives. It is characteristic of these constructions that the negated verb appears in its infinitival tonal pattern, i.e. without tense-mood and/or metatonic marking. Also, the negation verb *tí* is not preceded by a SCOP in these constructions, as (488) and (489) show.

(488) gbɪ́ gbɪ̀ gbɪ́ gbɪ̀ gbɪ́ à múà nà bábɛ̀ **tí**
gbɪ́ gbɪ̀ gbɪ́ gbɪ̀ gbɪ́ a múà nà bábɛ̀ tí
IDEO IDEO IDEO IDEO IDEO 1 PROSP COM ∅7.illness NEG
wúmbɛ̀ wɛ̀.
wúmbɛ wɛ̀
want-R die
'[depiction of disease roaming in his body] He was about to be sick, without wanting to die.'

(489) nà kɛ́ djìí dé tù nà ndzǐ pámò dɛ̂, **tí**
nà kɛ̀-H djìí dé tù nà ndzǐ pámò dɛ̃ tí
COM go-R ∅7.forest LOC inside COM ∅9.path arrive today NEG
nyɛ̂ nyɛ̀.
nyɛ̂ nyɛ
see 1.OBJ
'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 a subordinate clause, where the subject is elided. This, however, only applies for contexts where the subject of the main clause and the elided subject of the subordinate clause are co-referential.

I have shown the different negation strategies in Gyeli which mostly depend on the TM category in which they are used. The most common strategy is a negation suffix *-lɛ* which either appears in the negated verb in the PRESENT or on special negation verbs in other categories. Each of these negation verbs are grammaticallized in a sense that their synchronic meaning is opaque. The most grammaticalized negation verb is *tí* which most likely has lost the negation suffix *-lɛ*.

5.5 Embedding

As seen in the previous sections of this chapters, Gyeli has restrictions on combinations of, for instance, certain TM categories and aspect markers. Thus, the INCHOATIVE, for example, cannot directly combine with any aspect marker. The same is true for aspect and negation which never co-occur directly. The language has, however, means to allow for different tense-mood, aspect, and negation combination via embedding in framing constructions as discussed in chapter 7.2.1.2. In these constructions, a main clause with the auxiliary verb *bɛ̀* 'be' expresses basic tense-mood and possibly negation distinctions while a subordinated clause is specified for tense-mood or aspect marking. 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 embedding 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 In non-embedded sentences, the tense(-mood) interpretation is relative to speech time. Thus, the FUTURE use in (490), entails that the situation of cooking will happen sometime after speech time.

(490) mèè gyámbɔ̀ bédéwɔ̀
mèè gyámbɔ H-be-déwɔ̀
1S.FUT cook OBJ.LINK-be8-food
'I will cook food.'

In embedded constructions relating to TMA expression, speech time is anchored at the time of the main clause, while the time of the subordinate clause, indicated by square brackets, is then relative to the time anchor of the main clause. In (491), for instance, speech time is moved to the FUTURE in the main clause. From this perspective, the PRESENT of the subordinate clause indicates temporal identity between the newly anchored speech time and the situation described by the subordinate clause.

(491) mèè bɛ̀ [mɛ́ gyámbɔ́ bédéwɔ̀.]$_{PRES}$ [FUT - PRES]
mèè bɛ̀ mɛ-H gyámbɔ-H H-be-déwɔ̀
1S.FUT be 1S-PRES cook-R OBJ.LINK-be8-food
'I will be cooking food.'

As a minimal pair, (492) shows that a change of the TM category in the subordinate clause entails a change in the relation between newly anchored time and the situation. While the main clause still anchors speech time in the future, from this future perspective, the situation of cooking will have been completed in the remote PAST.

(492) mèè bɛ̀ [mɛ́è gyámbɔ́ bédéwɔ̀.]$_{PST2}$ [FUT - PST2]
mèè bɛ̀ mɛ́è gyámbɔ-H H-be-déwɔ̀
1S.FUT be 1S.PST2 cook-R OBJ.LINK-be8-food
'I will have cooked food.'

In contrast, changing the TM category in the main clause simply anchors speech time at that particular reference time. In (493), the embedded clause occurs in the INCHOATIVE. The TM category of the main clause changes though. In (493a), the main clause is encoded for FUTURE while it is encoded for the recent PAST in (493b).

(493) a. àà bɛ̀ [àá gyì]$_{INCH}$ nàmɛ́nɔ́. [FUT - INCH]
àà bɛ̀ àá gyì nàmɛ́nɔ́
1.FUT be-PST 1.INCH cry tomorrow
'She will be at the beginning of crying tomorrow.'

b. à bɛ́ [àá gyì]$_{INCH}$ nàkùgúù. [PST1 - INCH]
a bɛ̀-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 TM categories can be combined. (494), taken from the corpus, shows that even the two PAST categories can be combined via embedding, a combination that might appear semantically or contextually unlikely.[15] Here, the main clause is encoded for the remote PAST. The subordinate clause appears in the recent PAST. Speech time is thus anchored in the remote PAST, while the situation happened in the recent PAST, relative to the new time anchor.

(494) áà bɛ́ [à bó nà màbádò nyúlɛ̀.]$_{PST1}$
áà bɛ̀-H a bô-H nà ma-bádò nyúlɛ̀
1.PST2 be-R 1.PST1 lie-R COM ma6-open.wound ∅9.body
'He was being lying with open wounds on the body.'

Whether there are actually any restrictions on TM category combination in embedding constructions requires further research.

Tense-mood combinations with aspect marking Just as two TM categories can be combined via embedding, aspect marking can be achieved for any TM category. Anchoring speech time at a certain reference point is done in the main clause while aspect marking of the described situation is bound to the subordinate clause. (495) illustrates this for the PROGRESSIVE aspect which, in (495a), is anchored in the FUTURE and in (495b) in the INCHOATIVE.

(495) a. mɛ̀ɛ̀ bɛ̀ [mɛ̀ nzɛ́ɛ́ dɛ̀.]$_{PROG}$ [FUT - PROG]
mɛ̀ɛ̀ bɛ̀ mɛ nzɛ́ɛ́ dɛ̀
1S.FUT be 1S PROG.SUB eat
'I will be eating.'

[15]Speakers translate this construction with *Il était étant couché...* into Cameroonian French.

b. mèé bè [mè nzéé dè.]$_{PROG}$ [INCH - PROG]
mèé bè mɛ nzéé dè
1S.INCH be 1S PROG.SUB eat
'I'm at the beginning of being eating.'

The progressive aspect is the only aspect marker that has a suppletive form for subordinate causes. All the other aspect markers can also occur in such a construction, but with the same form that also occurs in non-embedded constructions. This is shown for other aspect markers in (496).

(496) a. mèè bè [mè lùŋgá mɔ̀.]$_{PROG}$ [FUT - COMPL]
mèè bè mɛ lùŋga-H mɔ̀
1S.FUT be 1S grow-R COMPL
'I will have grown up.'

b. méè bé [mè múà dè.]$_{PROG}$ [PST2 - PROSP]
méè bè-H mɛ múà dè
1S.PST2 be 1S PROSP eat
'I'm at the beginning of being eating.'

c. méè bé [mé gyámbɔ̀gyàmbɔ̀.]$_{PROG}$ [PST2 - HAB]
méè bè-H mɛ-H gyámbɔ-gyambɔ
1S.PST2 be 1S-PRES cook-cook
'I used to cook (a long time a go).'

Again, these embedded constructions that serve to express aspect at a different reference time are rather rare and do not occur often in the corpus. A larger corpus and a more thorough investigation is needed to further explore all possible combinations.

Negation with aspect marking As pointed out in the section on aspect marking, aspectual markers cannot directly combine with negation. Embedding constructions serve as a means to combine negation and aspect marking indirectly, though. As shown for tense-mood combinations and tense-mood combinations with aspect, the same distribution of main and subordinate clause is used for negation and aspect combinations. Here, negation is specified in the main clause for the reference time while aspect is marked in the subordinate clause, as shown in (497) for different reference times.

(497) a. mèé bélé [mè nzéé dè.]$_{PROG}$ [PRES - PROG]
mèé bé-lɛ mɛ nzéé dè
1S.NEG.PRES be-NEG 1S PROG.SUB eat

‘I am not eating.’

b. mɛ̀ sàlɛ́ bɛ̀ [mɛ̀ nzɛ́ɛ́ dè.]$_{PROG}$ [PST1 - PROG]
mɛ sàlɛ́ bɛ̀ mɛ nzɛ́ɛ́ dè
1S.PST1 NEG.PST be 1S PROG.SUB eat
‘I was not eating.’

c. mɛɛ̀̀ kálɛ̀ bɛ̀ [mɛ̀ nzɛ́ɛ́ dè.]$_{PROG}$ [FUT - PROG]
mɛ̀ɛ̀ kálɛ̀ bɛ̀ mɛ nzɛ́ɛ́ 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.

In this chapter, I have outlined the tense-mood-aspect system and how it connects to negation. Tense, mood, aspect, and negation as the inflectional level of the verb phrase represent the intersection between verb phrase and clause level. While TMA and negation in other Bantu languages such as Swahili are expressed in the verbal morphology, Gyeli expresses these semantic categories on the tonal, morphological, and syntactic level. This is the case, for instance, with tonal patterns of the SCOP as well as metatonic tones whose appearance not only depend on a specific mood category, but also on elements following the verb, such as nouns, pronouns, or adverbs. I now turn to the description of different clause types in the next chapter.

Chapter 6

Simple Clauses

In this chapter, I describe the different types of simple clauses in Gyeli. I first outline non-verbal clauses including different copula constructions in section 6.1. I then discuss verbal clauses, grammatical relations, and basic clause types in section 6.2 along with complex auxiliary predictes and sentential modification. Section 6.3 is dedicated to information structure phenomena. In section 6.4, I discuss special clause types, including questions, possessor raising, and comparison constructions.

The discussion of simple clauses distinguishes different clause types in Gyeli based on their internal structure, which mainly concerns different types of predicates. Along with Dryer (2007a), I distinguish clauses that are non-verbal from the ones that include a verb.

6.1 Non-Verbal Predicates

Clauses with non-verbal predicates are also refered to as copula constructions. They are typically comprised of a subject, a copula, and a predicate which is sometimes called a 'copula complement'. In (498), for instance, *John* is the subject, *is* the copula, and *tall* the predicate.

(498) John is tall.

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)

Copula constructions differ structurally and cross-linguistically in different respects. First, the grammatical status of the copula can differ, even within the same language. Dryer (2007a: 225-227) gives examples from several languages where the copula is either verbal or non-verbal. 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 constructions encode two different types of relations which are, according to Curnow (2001: 1-2), identity relations and classifications, as exemplified in (499).

(499) 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 qualifier/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 6.1. The most frequent copula in the corpus is the SCOP copula that is expressed by a special SCOP 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 *wɛ́* 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 TM category. If other TM categories are to be encoded, as well as negation, the verbal copula *bɛ̀* 'be' is used.

Two of the verbal copulas are forms of 'be' . One is the more general and more frequent *bɛ̀* (24.1% of all copula constructions in the corpus) and one

Status	Copula element	Label	Corpus frequency	
non-verbal	SCOP form	SCOP copula (COP)	49	(43.7%)
	wɛ́	identificational (ID)	13	(11.6%)
	∅-copula		0	
verbal	**bɛ̀** 'be'		27	(24.1%)
	múà 'be'		6	(5.4%)
	bùdɛ́ 'have'		17	(15.2%)
Total			112	

Table 6.1: Copula types

is *múà* (5.4%) which is also used as the aspectual PROSPECTIVE marker, as discussed in chapter 5.3.3. *bùdɛ́* 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.

6.1.1 SCOP Copula

The SCOP copula (COP) takes a special form of the SCOP which is identical to the SCOP of the FUTURE TM category, as discussed in chapter 5.2.4.3. 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 SCOP copula agrees with the subject in gender. The SCOP copula can link a nominal subject to different predicatation types. In (500), the predicate is nominal, expressing a classification relation: Ada is a member of the set of teachers.

(500) Àdà **àà** ŋgèlɛ́nɛ̀. [nominal]
Àdà àà ŋgèlɛ́nɛ̀
PN 1.COP ∅1.teacher
'Ada is a teacher.'

(501) and (502) provide examples where the predicate is a qualifier.

(501) Àdà **àà** mpà. [qualifier]
Àdà àà mpà
PN 1.COP good
'Ada is good.'

(502) bon, mpɔ̀ŋgɔ̀ síl̋ɛ̋ɛ̀, nà **béè**
bon, mpɔ̀ŋgɔ̀ síl̋ɛ̋ɛ̀ nà béè
good[French] ∅7.generation finish.COMPL COM 2P.COP
bànáyɛ̂yɛ̂. [qualifier]
ba-náyɛ̂yɛ̂
2-bleached.out
'Good, the generation has been wiped out, and you are bleached out [= white].'

In (503) and (504), the predicate is a locative noun phrase.

(503) Àdà **àà** ndáwɔ̀ dé tù. [locative]
Àdà áà ndáwɔ̀ dé tù
PN 1.COP ∅9.house LOC inside
'Ada is inside the house.'

(504) bɔ́nɛ́gá **báà** ná djìí dé tù. [locative]
b-ɔ́nɛ́gá báà ná djìí 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 SCOP copula in Gyeli can also be used with locative interrogative words as in (505) and with deictic elements, as in (506).

(505) ɛ́ nà! mwánɔ̀ **nùù** vɛ́? [interrogative]
ɛ́ nà m-wánɔ̀ nùù vɛ́
LOC how N1-child 1.COP where
'What! Where is the child?'

(506) bǎ́ yɔ́ɔ̀ **yíì** tè. [deictic]
bǎ́ y-ɔ́ɔ̀ yíì tè
∅7.word 7-POSS.2S 7.COP there
'Your word is there [= I understand you].'

Finally, the SCOP copula can also introduce reported speech. Thus, in (507), the SCOP copula *báà* serves as quotative index to the direct reported speech in the copula complement, marked by square brackets.

(507) **báà** [nâ wɛ̀, sílɛ̂ kɛ̀ sâ sálɛ́.] [complement]
báà nâ wɛ sílɛ̂ kɛ̀ sâ sálɛ́
2.COP COMP 2S finish.IMP go do ∅7.work
'They are like 'you, finish go do the work'.'

SCOP copula as the predicate In the vast majority of cases, the SCOP copula functions as element linking the subject to the predicate. In a few special cases, however, there is no copula complement and the SCOP serves as predicate, as in (508) and (509) 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*.

(508) bèsá bíndɛ̀ byɛ́sɛ̀ **béè** ndáà.
be-sá bí-ndɛ̀ by-ɛ́sɛ̀ béè ndáà
be8-thing 8-ANA 8-all 8.ID also
'There are also all these things. [= way of introducing a problem]'

(509) lé [yá wɛ́ nyɛ̂]$_{REL}$ [bá gyíbɔ́ ngàlɛ́]$_{REL}$ **yîì**.
lé yá wɛ-H nyɛ̂ ba-H gyíbɔ-H ngàlɛ́ yíì
∅7.tree 7:ATT 2S-PRES see 2-PRES call-R PN 7.COP
'There is the tree that you see that they call *ngàlɛ́*.'

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 (505) and (509), the subject is expressed nominally while the subject noun phrase in (508) is more complex, including two modifiers. The SCOP 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 (510).

(510) mɛ̀ɛ́ lémbòlɛ̀ ɛ́ mpù **báà** ndáwɔ̀ dé tù
mɛ̀ɛ́ lémbo-lɛ̀ ɛ́ mpù báà ndáwɔ̀ dé tù
1S.PRES.NEG know-NEG LOC like.this 2.COP ∅9.house LOC inside
dénè.
dénè
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 (511).

(511) **yîì** mpà yɔ́ɔ̰̀ wɛ́ kɑ́ yɔ̀ dúmbɔ́.
yîì mpà yɔ́ɔ̰̀ wɛ-H kɑ̂-H yɔ̀ dúmbɔ́
7.COP good ∅7.time 2S-PRES wrap-R 7.OBJ ∅7.package
'It is good when you wrap it in a (leaf) package.'

The *yîì* SCOP copula is also used in cleft sentences, as shown in section 6.3.2.3.

Semantic range of SCOP copula Having described the structural properties of subjects and predicates involved in copula constructions with the SCOP copula, I now turn to presenting examples of the SCOP copula's uses from a semantic perspective. As pointed out above in (508) and (509), the SCOP copula is used in existential clauses. This is also the case, when the predicate is a deictic element as in (512) and (513). Both examples can be interpreted as existential or locative, depending on the context.

(512) bèkɔ́kɔ́ bé nlô bé tè **béè** tè.
be-kɔ́kɔ́ bé nlô bé tè béè tè
be8-hollowness 8:ATT ∅3.head 8:ATT there 8.COP there
'The skulls there are there.'

(513) **yáà** ndáà vâ.
yáà ndáà vâ
1P.COP also here
'We are also here.'

Also, the SCOP copula expresses equational relations, as in (514). Dryer (2007a: 233) notes that true equational clauses are those where the subject and predicate can be reversed, which is true for (514).

(514) djínɔ̀ lɛ́ kwàdɔ̀ yâ̂ **yíì** Ngòló.
dj-ínɔ̀ lɛ́ kwàdɔ̀ y-â̂ yíì ngòló
le5-name 5:ATT ∅7.village 7-POSS.1S 7.COP PN
'The name of my village is Ngolo.'

In contrast, clauses where subject and (nominal) predicate cannot be reversed, are termed 'true nominal predicates' by Dryer. (515) provides an example of such a clause.

(515) **béè** bùdì bá vúdû̂ ndí bwáá gyɛ́sɔ́
béè b-ùdì bá vúdû̂ ndí bwáa-H gyɛ́sɔ-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.'

Finally, the SCOP copula can also express predicate possession, as in (516). In this example, the possessor *mbúmbù* precedes the possessee *lèbvúú* which serves as the subject. The SCOP copula agrees as expected with the subject in gender and is followed by the predicate which is a locative in this case.

(516) mbúmbù lèbvúú **lɛ́è** nlémò dé.
mbúmbù le-bvúú lɛ́è nlémò dé
1n.namesake le5-anger 5.COP ∅3.heart LOC
'The namesake is anger in the heart (he is angry).'

6.1.2 Identificational Marker *wɛ́*

The identificational marker *wɛ́* 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 (517).

(517) ntɛ́mbɔ́ wâ̂ **wɛ́** nû.
ntɛ́mbɔ́ w-â̂ wɛ́ nû
∅1.younger.brother 1-POSS.1S ID 1.DEM.PROX
'My younger brother is this.'

In contrast to the SCOP copula, however, *wɛ́* links a subject only to demonstratives and anaphoric markers. This is why I label *wɛ́* 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 *wɛ́* as an identificational marker since it takes over the same function, namely identifying people, places, and the location of things. In (517), the speaker identifies his younger brother by using a deictic demonstrative, at the same time pointing to the person in question. In (518), the chief of Ngolo talks about a scar on his forehead, identifying its location and again pointing to it.

(518) mɛ́ bvú nâ bàmó tè yɔ́ɔ̀ **wɛ́** yî.
mɛ-H bvû-H nâ bàmó tè yɔ́ɔ̀ wɛ́ yî
1S-PRES think-R COMP ∅7.scar there 7.EMPH ID 7.DEM.PROX
'I think, the scar there is this.'

Apart from demonstratives, anaphoric elements may also occur with the identificational marker *wɛ́*. This can be the bare anaphoric marker *ndɛ́* as in (519) which does not take an agreement prefix.

(519) kàndá **wɛ́** ndɛ̀.
kàndá wɛ́ ndɛ̀
∅7.proverb ID ANA
'The story is this.'

Also, the anaphoric marker with an agreement prefix occurs in identificational constructions, as shown in (520).

(520) bâ̂ yâ̂ màfwálá **wɛ́** yíndɛ̀.
bâ̂ y-â̂ ma-fwálá wɛ́ yí-ndɛ̀
∅7.word 7-POSS.1S ma6-end ID 7-ANA
'This is my last word.'

The second type of construction where *wɛ́* is used in one without a predicate. In (521), the parentheses indicate that the use of the demonstrative is optional. Often, the demonstrative is not expressed, so that only the subject and *wɛ́* surface. In that sense, *wɛ́* 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 *wɛ́* is used phrase-finally, i.e. without demonstrative or anaphoric marker, are usually those where the subject is a personal pronoun as in (521).

(521) nyɛ̀ **wɛ́** (nû).
nyɛ wɛ́ (nû)
1 ID (1.DEM.PROX)
'It's him.'

Such identificational constructions show a particular structure when they involve a proper name, as in (522). Here, the personal pronoun is followed by the proper name and the identificational marker *wɛ́* occurs phrase-finally. They differ from the above examples in that *wɛ́* is not a linking element, but rather functions as a deictic itself. In this view, it is not surprising that proper name constructions with *wɛ́* do not involve demonstratives or anaphorics.

(522) mhm, mɛ̀ Nzìwù **wɛ̂**.
mhm mɛ Nzìwù wɛ́
EXCL 1S PN ID
'Mhm, I'm Nziwu.'

Finally, *wɛ́* is also used in cleft constructions, as shown in (523). The structure of the identificational clause is parallel to the one in (521) without a demonstrative predicate, namely *nyɛ̀ wɛ́*, except that the subject is more complex, specifying who *nyɛ̀* 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.[1]

(523) ntɛ́mbɔ̀ wà mùdə̂ wə̂ nyɛ̀ **wɛ́** [bùdɛ́
ntɛ́mbɔ̀ wà m-ùdə̂ w-ə̂ nyɛ wɛ́ bùdɛ-H
∅1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1 ID have-R
mwánɔ̀ wà mùdə̂ mvúdə̰̂.]$_{REL}$
m-wánɔ̀ wà m-ùdə̂ m-vúdə̰̂
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 *wɛ́* is restricted to the PRESENT TM category.

6.1.3 Optional ∅-Copula

In a few environments, a copula can be optionally omitted. Copula omission in Gyeli is grammatically optional and not grammatically conditioned,

[1]For more information on relative clauses, see section 7.2.2.

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 (524) and (525). Both examples differ though. In (524), 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 SCOP copula: *núù mwánɔ̀ wə̂́*. Since examples of copula omission are rare, the sample is not sufficient to make any generalizations about the difference between the use of a SCOP 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 (524), could thus introduce a new topic, while the SCOP copula may suggest that the topic is already known.[2]

(524) nû [mwánɔ̀ wə̂́.]$_{\text{PRED}}$
nû m-wánɔ̀ w-ã
1.DEM.PROX N1-child 1-1S.POSS
'This is my child.'

In contrast to (524), the predicate in (525) 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 SCOP copula *wúù* of agreement class 3, which is deleted in fast speech.

(525) nkwànɔ̀ wɔ̂ [wə̂́.]$_{\text{PRED}}$
nkwànɔ̀ wɔ̂ w-ə̂́
∅3.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 (526).

(526) mɛ̀ [nsálɛ̀ gyàŋgó.]$_{\text{PRED}}$
mɛ n-sálɛ̀ gyàŋgó
1 N1-doer ∅7.hunt
'I'm a hunter.'

[2]It is also possible to use the identificational marker *wɛ́* for (524), but in that case, subject and predicate would need to be reversed, making the predicate *mwánɔ̀ wə̂́* the subject and *nû* the predicate. This construction then differs also in terms of information structure, moving the demonstrative into focus position.

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.

6.1.4 Verbal Copula *bɛ̀* 'be'

The non-verbal copula types presented so far can only be used in affirmative clauses which occur in the PRESENT. To express copular clauses in other tense-mood categories or to negate them, the verbal copula *bɛ̀* 'be' is used. Additionally, *bɛ̀* is used in expressing predicate possession by adding the comitative marker *nà*. Each of these uses is illustrated below.

Tense expression with *bɛ̀* The verbal copula *bɛ̀* can be used in all tense-mood categories. Even though for the PRESENT TM category, usually non-verbal copula types are used, also *bɛ̀* can serve as copula in the PRESENT. This seems to mainly occur when the subject is an emphatic pronoun, as in (527) and (528).

(527) lûŋgà yá sɑ́ wɑ̂ yɔ́ **bɛ́** yíí.
lûŋgà yá sɑ́ w-ɑ̂ yɔ́ bɛ̀-H yíí.
∅7.grave 7:ATT ∅1.father 1-POSS.1S 7.EMPH be-R 7.DEM.DIST
'My father's grave is over there.'

(528) ngùndyá tè nyɔ́ **bɛ́** nyî.
ngùndyá tè nyɔ́ bɛ̀-H nyî
∅9.raffia there 9.EMPH be-R 9.DEM.PROX
'The raffia there, it is that.'

Also, special construction types can trigger the use of *bɛ̀* as copula in the PRESENT. For instance, the copula *bɛ̀* can occur as second constituent in a coordination of verbs, as in (529). 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.

(529) bon pílì yí báàlá nà **bɛ̀** ndɛ̀náà ndɛ̀náà
bon pílì yi-H báàla-H nà bɛ̀ ndɛ̀náà ndɛ̀náà
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 (530). Certain sentential modifiers such as *kɔ́ɔ̀* 'still' require an infinitival construction, as further discussed in section 6.2.4.

(530) nà bí bésɛ̀ kɔ́ɔ̀ kùrɑ̂ **bɛ̀** dé tù.
nà bí b-ésɛ̀ kɔ́ɔ̀ kùrɑ̂ bɛ̀ dé tù
COM 1P.EMPH 2-all still ∅7.electricity be LOC inside
'with all of us just electricity be inside.'

Besides these special cases in the PRESENT, the verbal copula *bɛ̀* is used in other TM categories. This is shown for the RECENT PAST in (531) and (532). (531) represents a nominal predicate, while (532) gives an example where the predicate is an interrogative pronoun.

(531) yɔ́ɔ̀ ŋgɑ̃̀ nû à **bɛ́** ŋgɑ̃̀,
yɔ́ɔ̀ ŋgɑ̃̀ nû a bɛ̀-H ŋgɑ̃̂
so ∅1.healer 1.DEM.PROX 1.PST1 be-R ∅1.healer
'So, this healer was a healer.'

(532) mà **bɛ́** vɛ́?
ma bɛ̀-H vɛ́
6.PST1 be-R where
'Where were they [= the houses]?'

Similarly, *bɛ̀* can be used in the REMOTE PAST, as shown in (533).

(533) yɔ́ɔ̀ nzàmbí nɔ́gá núù **bɛ́** nzàmbí wà gyí?
yɔ́ɔ̀ nzàmbí nɔ́-gá núù bɛ̀-H nzàmbí wà gyí?
so PN 1-other 1.PST2 be-R PN 1:ATT what
'So this other Nzambi was which Nzambi?'

Finally, the verbal copula *bɛ̀* can even take the ABSOLUTE COMPLETIVE aspect marker *mà*, as shown in (534). 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 *mɔ̀*.

(534) wú **bɛ́ mà** bî ndáwɔ̀ dé tù!
wú bɛ̀-H mà bî ndáwɔ̀ dé tù
3 be-R COMPL[Kwasio] 1P.OBJ ∅9.house LOC inside
'That it was already in our houses!'

Negation with *bɛ̀* *bɛ̀* is the only copula type that can be used in negated copula constructions. This holds for all predication types as well as for all TM categories, including the PRESENT. Thus, the negated form *bɛ́lɛ́* is used in the PRESENT, for instance with a nominal predicate, as in (535).

(535) mɛ̀ɛ́ **bɛ́lɛ́** mùdì wà lèkɛ́lɛ̀.
mɛ̀ɛ́ bɛ́-lɛ́ m-ùdì wà le-kɛ́lɛ̀
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 qualifier predicates, as in (536).

(536) nkwànò wú **bɛ́lɛ́** mpà.
nkwànò wu-H bɛ̀-lɛ mpà
∅3.honey 3-PRES be-NEG good
'The honey is not good.'

Also deictic predicates have been found with a negated copula *bɛ́lɛ́*, as in (537).

(537) nyɛ̀ nâ mɛ̀ɛ́ **bɛ́lɛ́** wû.
nyɛ nâ mɛ̀ɛ́ bɛ̀-lɛ 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 SCOP copula in section 6.1.1. In (538), 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 (537) is optional. In (538), the deictic does not appear so that the negated form of 'be' serves as predicate in this case.

(538) mùdì nú **bɛ́lɛ́**.
m-ùdì nú bɛ́-lɛ́
N1-person 1.DEM.DIST be-NEG
'This person is not there.'

Predicate possession with *bɛ̀ nà* The verbal copula *bɛ̀* 'be' in conjunction with the comitative marker *nà* express predicate possession. Typically, the predicate is nominal in these cases. Predicate possession with *bɛ̀ nà* can be used in all tense-mood categories. I provide examples for some of them in (539), namely for the PRESENT, the RECENT PAST, and the FUTURE.

(539) a. mɛ́ **bɛ́ nà** nkwànò.
mɛ-H bɛ̀-H nà nkwànò
1-PRES be-R COM ∅3.honey
'I have honey.'

b. mɛ̀ **bɛ́ nà** nkwànò.
mɛ bɛ̀-H nà nkwànò
1.PST1 be-R COM ∅3.honey
'I had honey.'

c. mɛ̀ɛ̀ **bɛ̀ nà** nkwànò.
mɛ̀ɛ̀ bɛ̀ nà nkwànò
1.FUT be COM ∅3.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 (539a) is one option, the copula can also be omitted in the PRESENT so that only the comitative marker surfaces, as in (540).

(540) mɛ́ **nà** nkwànò.
mɛ-H nà nkwànò
1-PRES COM ∅3.honey
'I have honey.'

Further, another verbal copula, *bùdɛ́*, can be used, as discussed in section 6.1.6.

bɛ̀ nà can be used for affirmative clauses, but also in negation, thus expressing negative possession. Negation of *bɛ̀ nà* constructions is achieved by regular negation patterns for the different tense-mood categories as discussed in chapter 5.4. In the PRESENT, two construction types are possible. One involves the neagtion suffix *-lɛ*, as in (541).

(541) mɛ̀ɛ́ **bɛ́lɛ́ nà** nkwànò.
mɛ̀ɛ́ bɛ̀-lɛ nà nkwànò
1S.PRES.NEG be-NEG COM ∅3.honey

'I don't have any honey.'

The second possible negation construction involves the negation particle *tí*, or, as in (542), the Mabi form *kí* which is often used in code-switching.

(542) mɛ̀ **kí** **bɛ̀ nà** tsídí.
mɛ kí bɛ̀ nà tsídí
1S NEG[Kwasio] be COM ∅1.meat
'I don't have any meat.'

Also for PAST negation, both negation words, *sàlɛ́* and *pálɛ́* can be used, as (543) and (544) show. The negation words precede *bɛ̀ nà* as they would with any other verb.

(543) ɛ́kɛ̀! nzàmbí wà nú áà **sàlɛ́** **bɛ̀ nà**
ɛ́kɛ̀! nzàmbí wà nú áà sàlɛ́ bɛ̀ nà
EXCL PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM
bɑ̂ líná-á pámò.
bɑ̂ líná a-H pámo
∅7.word when 1-PRES arrive
'Oh! That Nzambi had no words as soon as he arrives.'

(544) yà **pálɛ́** **bɛ̀ nà** bùdɑ̂.
ya pálɛ́ bɛ̀ nà b-ùdɑ̂
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 *kálɛ̀*, as shown in (545).

(545) mɛ̀ɛ̀ **kálɛ̀** ná **bɛ̀ nà** djí ɛ́ vâ.
mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ
1S.FUT NEG.FUT anymore be COM ∅7.place LOC here
'I won't have a place here anymore.'

6.1.5 Verbal Copula *múà* 'be'

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 *bɛ̀* 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 *bɛ̀* while other speakers only used *múà* as PROSPECTIVE marker (see chapter 5.3.3). Therefore, in all copular clauses with *múà*, *múà* could be replaced by the more general verbal copula *bɛ̀*. Examples from the corpus with *múà* as copula are given in (546) and (547).

(546) à **múà** mɛ́dɛ́ nyá mùdì.
a múà mɛ́dɛ́ nyá m-ùdì
1S be self real N1-person
'He was about to be a real (old) man.'

(547) mɛ̀ **múà** pɔ́nɛ́ wá yìmbá ntɛ́ wû.
mɛ múà pɔ́nɛ́ wá yìmbá ntɛ́ wû
1S be ∅7.truth 3:ATT ∅7.age ∅3.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 *bɛ̀* in that is 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 (548) shows.

(548) gbɨ́ gbɨ̀ gbɨ́ gbɨ̀ gbɨ́ à **múà** **nà** bábɛ̀ tí
gbɨ́ gbɨ̀ gbɨ́ gbɨ̀ gbɨ́ a múà nà bábɛ̀ tí
IDEO IDEO IDEO IDEO IDEO 1S PROSP COM ∅7.illness NEG
wúmbɛ̀ wɛ̀.
wúmbɛ wɛ̀
want-R die
'[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 *sàlɛ́* or *pálɛ́* as in (543) and (544).

6.1.6 Verbal Copula *bùdɛ́* 'have'

The verbal copula *bùdɛ́* 'have' only expresses predicate possession. It is interchangeable with *bɛ̀* plus comitative marker *nà*, as (549) shows.

(549) a. bá **bɛ́ nà** bvúbvù.
ba-H bɛ̀-H nà bvúbvù
2-PRES be-R COM lots
'They have lots.'

b. bá **bùdɛ́** bvúbvù.
ba-H bùdɛ́ bvúbvù
2-PRES have.R lots
'They have lots.'

bùdɛ́ occurs 17 times in the corpus which equals 15.2% of all copula occurrences. Out of 27 instances of *bɛ̀* as a copula, 10 occur with the comitative marker *nà*. Thus, *bɛ̀ nà* constructions only constitute 11.2% of the copula constructions and are thus less frequent than predicate possession constructions with *bùdɛ́*. 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.

bùdɛ́ differs from other verbs including the copula *bɛ̀* in its tonal behavior on the SCOP. Comparable to, for instance, the FUTURE TM category, the first and second person singular and the SCOP of class 1 have a different tonal pattern, namely a L tone, than the SCOPs of the other agreement classes which have a H tone, as in (549b). As to the tonal shape of the verb *bùdɛ́*, it always ends in a H tone which suggests that it belongs to the realis mood, as discussed in chapter 5.2.3. Since *bùdɛ́* never occurs phrase-finally though, it is not possible to prove that its final TBU is underlyingly L. I therefore gloss the metatonic realis H tone as being inherent to the verb.

The predicates in constructions with *bùdɛ́* are all nominal or extended nominal noun phrases, as examples (550) though (552) show. In (550), the predicate is a noun plus a numeral.

(550) mɛ̀ **bùdɛ́** bwánɔ̀ bábáà.
mɛ bùdɛ́ b-wánɔ̀ bá-báà
1S have.R ba2-child 2-two
'I have two children.'

In (551), the predicate is nominal as well, followed by a comitative construction which literally translates as 'the Bulu has anger with me.'

(551) pílì wɛ́ kɛ́ nâ wɛ́ kɛ́ tɔ́kɛ̀ mwánɔ̀ sáyà,
pílì wɛ-H kɛ̀-H nâ wɛ-H kɛ̀-H tɔ́kɛ m-wánɔ̀ sáyà
when 2S-PRES go-R COMP 2S-PRES go-R collect N1-child ∅7.thing
bvúlɛ̀ à **bùdɛ́** lébvúú nà mɛ̂.
bvúlɛ̀ a bùdɛ́ H-le-bvúú nà mɛ̂
ba2.Bulu 1 have.R OBJ.LINK-le5-anger COM 1S.OBJ
'When you go to go gather a small thing, the Bulu is angry with me.'

bùdɛ́ can also occur in relative clauses, as (552) shows. Here, the relative clause modifies the object noun phrase *mwánɔ̀ wɔ́ɔ̀*. The demonstrative following *bùdɛ́* is coreferential with this object noun phrase.

(552) vɛ̂ mɛ̀ sâ mwánɔ̀ wɔ́ɔ̀ [wà wɛ̀ **bùdɛ́**
vɛ̂ mɛ̀ sâ m-wánɔ̀ w-ɔ́ɔ̀ wà wɛ bùdɛ́
give.IMP 1S.OBJ only N1-child 1-POSS.2S 1:ATT 2S have.R
nû.]$_{\text{REL}}$
nû
1:DEM.PROX
'Give me only your child that you have here.'

The distribution of *bùdɛ́* seems to be restricted to the PRESENT TM category. Given the special tonal pattern of the SCOP which differs from the general PRESENT tonal pattern, TM category affiliation cannot be determined by the default tonal shape. Speakers consistently translate clauses with *bùdɛ́* with the PRESENT though. The same is true for the special construction involving the Kwasio loan form of the ABSOLUTE COMPLETIVE marker *mà*. As discussed in chapter 5.3.6, the Gyeli completive marker *mɔ̀/-Ṽ* is restricted to the RECENT PAST. In (553), however, it occurs with *bùdɛ́* and speakers translate the sentence in the PRESENT into French as *Il a déjà une femme.*

(553) à **bùdɛ́** **mà** mùdɑ̂.
a bùdɛ́ mà m-ùdɑ̂.
1 have.R COMPL[Kwasio] N1-woman
'He already has a wife.'

Two explanations are possible. One could propose that *bùdɛ́* does not belong to the PRESENT TM 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 *bùdɛ́* belongs to the

PRESENT TM category, despite the special tonal pattern of the SCOP. 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 *bùdɛ́* only co-occurs with the Kwasio loan form of *mà*, but never with its own ABSOLUTE COMPLETIVE marker *mɔ̀/-Ṽ*. 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, *bùdɛ́* is also used in the quotative index of reported speech (see chapter 7.3 for more information), as shown in (554) and (555). Generally, there seems to be a tendency that *bùdɛ́* as verb in a quotative index indicates some kind of wish or order, as both examples illustrate.

(554) mais mɛ̀ **bùdɛ́** nâ ɛ́ pɛ̀, ɛ́ wû
mais mɛ bùdɛ́ nâ ɛ́ pɛ̀ ɛ́ wû
but[French] 1S have.R COMP LOC over.there LOC there
bèyá lwɔ́ kwádɔ́ yấ ɛ́ wû.
bèya-H lwɔ̂-H kwádɔ́ y-ấ ɛ́ 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.'

(555) mɛ̀ **bùdɛ́** nâ á lwɔ́ŋgɔ́ mɛ̂ màndáwɔ̀,
mɛ bùdɛ́ nâ a-H lwɔ́ŋgɔ-H mɛ̂ ma-ndáwɔ̀
1S have.R COMP 1-PRES build[Kwasio]-R 1S.OBJ 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.

6.2 Verbal Clauses and Grammatical Relations

Clauses with verbal predicates are more complex than non-verbal ones for they may involve more grammatical relations. I first discuss the different grammatical relations found in Gyeli first before I describe basic clause types. Other topics addressed in this section are complex predicates and sentential modifiers.

6.2.1 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.

6.2.1.1 Subjects

Subjects in Gyeli are formally characterized by their preverbal position in basic word order, as shown in (556) and (557), and by agreement of the SCOP, a portemanteau morpheme encoding subject agreement and other clause information such as tense-mood and negation (see chapter 5.2.1 for more information on the SCOP). Also, pronouns can serve as a subject diagnostic since subject pronouns differ in their shape from non-subject pronouns.

(556) yɔ́ɔ̀ [mùdə̂]$_{SBJ}$ á kɛ̀. [intransitive]
yɔ́ɔ̀ m-ùdə̂ a-H kɛ̀
so N1-woman 1-PRES go
'So the woman goes.'

(557) [nzàmbí]$_{SBJ}$ à bwə̀ə́ mwánɔ̀. [transitive]
nzàmbí a bwə̀ə̃-H m-wánɔ̀
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 SCOP, *á* in (556) and *à* in (557), is a free grammatical morpheme rather than a prefix since it can optionally be omitted in certain contexts, as explained in chapter 5.2.1. Despite this optional SCOP omission, the SCOP is a valid diagnostic for subjecthood since it can always be added to

a nominal subject. The SCOP as agreement suffices as subject expression in cases where the subject noun phrase is not expressed, i.e. when a phrase is subjectless, as shown in (558) and (559) for intrasitive and transitive verbs, respectively.

(558) yɔ̀ɔ̀ á kɛ̀. [intransitive]
yɔ̀ɔ̀ a-H kɛ̀
so 1-PRES go
'So she goes.'

(559) à bwɛ̀ɛ́ mwánɔ̀. [transitive]
a bwɛ̀ɛ̃-H m-wánɔ̀
1.PST1 give.birth-R N1-child
'He has given birth to a child.'

The only exceptional environment where the SCOP is consistently not used concerns IMPERATIVES, as shown in chapter 5.2.4.6. IMPERATIVES are characterized by the absence of a SCOP.

Another subject diagnostic is the form of the SCOP which differs from non-subject pronouns. SCOP portemanteau morphemes never occur with other grammatical relations than the subject. Thus, the SCOP, functioning as subject pronoun, differs clearly in its shape from non-subject pronouns, as illustrated in (560) with the SCOP and non-subject pronouns for agreement class 6.

(560) a. [**má**]$_{SBJ}$ kwé mímpìndí. [subject]
ma-H kwè-H H-mi-pìndí
6-PRES fall-R OBJ.LINK-mi4-non.ripe
'They [= the bread fruit] fall non ripe.'

b. mɛ́ nyɛ́ [**mɔ̂**]$_{OBJ}$. [object]
mɛ-H nyɛ̂-H mɔ̂
1S-PRES see-R 6.NSBJ
'I see them [= the bread fruit].'

c. mɛ́ njí [nà **mɔ̂**]$_{OBL}$. [oblique]
mɛ-H njì-H nà mɔ̂
1S-PRES come-R COM 6.NSBJ
'I bring them [= the bread fruit].'

(560a) shows the SCOP of agreement class 6 which takes the form *má*, the H tone encoding PRESENT tense-mood. In (560b), the agreement class 6

pronoun is in object position and takes the shape *mɔ̂*. This is the same form as the pronoun takes in obliques with the comitative marker *nà*, as in (560c). The complete paradigm for SCOP forms in the different agreement classes is given in chapter 3.4.1 (and chapter 5.2.1 where different tonal patterns are explained). In contrast, the complete paradigm for non-subject pronouns is listed in chapter 3.4.2.

6.2.1.2 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 correponds 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. Many Bantu languages cross-reference the object on the verb by a prefix, as in Swahili in (561).

(561) Swahili

ni-na-**m**-piga **Hamisi**
1S.SBJ-PRES-3S.OBJ-beat PN

'I beat Hamisi.'

In contrast, in Gyeli, objects are generally not cross-referenced on verbs. (562) 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 (562a), or a pronoun, as in (562b).

(562) Gyeli

a. mɛ́ bìyɔ́ **Màmbì** S V O_N
mɛ-H bìyɔ-H Màmbì
1S-PRES beat-R PN
'I beat Mambi.'

b. mɛ́ bìyɔ́ **nyɛ̂** S V O_{PRO}
mɛ-H bìyɔ-H nyɛ̂
1S-PRES beat-R 3S.OBJ
'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 an artificial 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 (563) yield the expected results. As described in chapter 4.1.2.2, the object of an active construction as in (563a) corresponds to the subject of a passive construction as in (563b), while the subject of an active construction can optionally be expressed as an oblique in the passive construction.

(563) a. [bùdì bá]$_{SBJ}$ tsìlɔ́ [békálàdɛ̀.]$_{OBJ}$
b-ùdì ba-H tsìlɔ-H H-be-kálàdɛ̀
ba2-person 2-PRES write-R OBJ.LINK-be8-book
'People write books.'

b. [bèkálàdɛ̀ bé]$_{SBJ}$ tsìl**á** [(nà bùdì).]$_{OBL}$
be-kálàdɛ̀ be-H tsìl-a-H nà b-ùdì
be8-book 8-PRES write-PASS-R COM ba2-person
'Books are written (by people).'

The caveat of passivization as object diagnostic in Gyeli is that, 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 SCOP *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 TBUs of the object noun, namely to CV- noun class prefixes. I gloss this object linking H tone as "OBJ.LINK." Thus, in (564), the object receives a H tone, attaching to the noun class prefix which is underlyingly toneless.

(564) wɛ̀ nzíí bàlɛ̀ [**bé**bɑ́ɑ̀.]$_{OBJ}$
wɛ nzíí bàlɛ H-be-bɑ́ɑ̀
2S PROG.PRES keep OBJ.LINK-be8-word
'You are keeping the words.'

In contrast, in (565), the noun phrase following the verb is not marked with a H tone, indicating its status as an oblique.

(565) mɛ̀ pàlɛ́ kɛ̀ dyɔ̂ [**mà**fú málálɛ̀.]$_{OBL}$
mɛ pàlɛ́ kɛ̀ dyɔ̂ ma-fú má-lálɛ̀
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 CV- shape 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.

Before investigating double object constructions and multiple post-verbal noun phrases, I first turn to discussing the origin of the object linking H tone and its appearance in related languages of the area. A H tone on the object's noun class prefix also occurs in other languages of the area, for instance in Abo (A42). In Abo, however, the H tone on the lexical object noun phrase is phonologically conditioned as a result of HTS. As Hyman & Lionnet (2011: 171) show, the tone on the object prefix is tied to metatony. Thus, the object prefix following a verb which takes a metatonic H tone also surface H, as in (566a). In contrast, if the verb occurs without metatony, as in (566b), the object prefix surfaces L.[3]

(566) Abo (A42)

a. ă pɔ̀ŋ**ɔ́** **bí**-támbé. (with metatony)
3S make be8-shoe
'He is making shoes.'

b. à káà pɔ̀ŋ**ɔ̀** **bì**-támbé. (without metatony)
3S FUT make be8-shoe
'He will make shoes.'

In Gyeli, I argue for two distinct tones, a metatonic tone on the verb as described in chapter 5.2.3, 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 HTS from a metatonic H tone on the verb, synchronically, these two tones are distinct, as (567) shows. The object linking H tone shows up with metatony, as in (567a), but also without metatony, as in (567b). The latter case makes clear that HTS is not an explanation for the H tone on the object.

(567) a. mɛ́ gyám**bɔ́** **bé**lɔ̀lɔ̀. (with metatony)
mɛ-H gyámbɔ-H H-be-lɔ̀lɔ
1S-PRES cook-R OBJ.LINK-be8-duck
'I cook ducks.'

[3]There are special TM categories where the verb ends in a H tone, but HTS is blocked and the object surfaces with a L tone prefix. This is the case for imperatives, statives, and subjunctives.

b. mɛ̀ɛ̀ gyám**bɔ̀ bé**lɔ̀lɔ̀. (without metatony)
mɛ̀ɛ̀ gyámbɔ H-be-lɔ̀lɔ
1S.FUT cook OBJ.LINK-be8-duck
'I will cook ducks.'

Other evidence that the H tone on the object prefix cannot stem from HTS comes from examples where multiple verbs occur between the metatonic H tone and the object H tone, as in (568).

(568) à nzíí tálɛ̀ sélɔ̀ [**bé**ntùgú.]$_{OBJ}$
a nzíí tálɛ sélɔ H-be-ntùgú
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 main verb and the object, as for instance adverbs in (569).

(569) mé kwà**lɛ́** kɔ́ɔ̀ [**bá**bwálɛ̀ bɑ́ɑ̀.]$_{OBJ}$
mɛ-H kwàlɛ-H kɔ́ɔ̀ H-ba-bwálɛ̀ b-ɑ́ɑ̀
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 (570) 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. (570b) illustrates that also the direct object can precede the indirect object. The labelling as indirect and direct object here follows crosslinguistic and semantic assumptions. In Gyeli, there are no formal criteria though 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.

(570) a. mɛ́ vɛ́ **bá**bwálɛ̀ bèfùmbí S V O_1 O_2
mɛ-H vɛ̂-H H-ba-bwálɛ̀ be-fùmbí
1S-PRES give-R OBJ.LINK-ba2-parent be8-orange
'I give the parents oranges.'

b. mɛ́ vɛ́ **bé**fùmbí bàbwálɛ̀. S V O_1 O_2
mɛ-H vɛ̂-H H-be-fùmbí ba-bwálɛ̀
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 (565) 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_1 O_2 X_n. 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 two objects is free. Similarly, also adjuncts are 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 (571).

(571) a. mɛ̀ vɛ́ [**bá**bwálɛ̀]$_{OBJ1}$ [bèfùmbí]$_{OBJ2}$ [màfú
mɛ vɛ̂-H H-ba-bwálɛ̀ be-fùmbí ma-fú
1S.PST1 give-R OBJ.LINK-ba2-parent be8-orange ma6-day
málálɛ̀ dɛ̂]$_{X1}$ [ɛ́ tísònì.]$_{X2}$
má-lálɛ̀ dɛ̂ ɛ́ tísònì
6-three today LOC ∅7.town
'I gave the parents oranges three days ago in town.'

b. mɛ́ vɛ́ [**bé**fùmbí]$_{OBJ1}$ [bàbwálɛ̀]$_{OBJ2}$ [ɛ́
mɛ-H vɛ̂-H H-be-fùmbí ba-bwálɛ̀ ɛ́
1S-PRES give-R OBJ.LINK-be8-orange ba2-parent LOC
tísònì]$_{X1}$ [màfú málálɛ̀ dɛ̂.]$_{X2}$
tísònì ma-fú má-lálɛ̀ dɛ̂
∅7.town ma6-day 6-three today

‘I gave oranges to the parents in town three days ago.’

c. *mɛ̀ vɛ́ [**bá**bwálɛ̀]$_{OBJ1}$ [màfú málálɛ̀ dɛ̂]$_{X1}$
mɛ vɛ̂-H H-ba-bwálɛ̀ ma-fú má-lálɛ̀ dɛ̂
1S.PST1 give-R OBJ.LINK-ba2-parent ma6-day 6-three today
[bèfùmbí]$_{OBJ2}$ [é tísònì]$_{X2}$
be-fùmbí é tísònì
be8-orange LOC ∅7.town
‘I gave the parents three days ago oranges in town.’

In (571a) and (571b), 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, as in (571c), is prohibited. Thus, word order principles characterize a second object such as *bèfùmbí* ‘oranges’ in (571a) as an object in comparison to the following oblique noun phrase *màfú málálɛ̀* ‘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.

Locative objects Bare noun phrases expressing location and/or direction can also serve as objects.[4] In (572), the verb *kɛ̀* ‘go’, which is mostly intransitive, takes an object argument *mánkɛ̂̌* ‘fields’. It is clear that the noun phrase *mánkɛ̂̌* has object rather than oblique status because of the characteristic object linking H tone.

(572) wɛ̀ mɛ́dɛ́ pɛ̂́ lígɛ̀ yá nà nyɛ̀ yá kɛ́
wɛ mɛ́dɛ́ pɛ̂́-H lígɛ ya-H nà nyɛ ya-H kɛ̀-H
2S.EMPH self start-R stay 1P-PRES COM 1 1P-PRES go-R
[**má**nkɛ̂̌.]$_{OBJ}$
H-ma-nkɛ̂̌
OBJ.LINK-6-field
‘You [= his wife] stay first, we and her, we go to the fields.’

Nevertheless, locative objects are special in their word order behavior in contrast to non-locative objects in that they can occur in oblique position

[4]Alternately, one could propose that the linking H tone generally picks out arguments, i.e. constituents that are required by the verb’s valency, in contrast to adjuncts. Since arguments other than objects are rare in Gyeli, however, and those that allow a potential H tone to surface on a CV- prefix are even rarer, this is difficult to prove at the moment.

while maintaining the object H tone, as shown in (573). In this example, the oblique comitative phrase *nà nyɛ̀* 'with him' directly follows the verb, preceding the object noun phrase *mánkɛ̂̀* 'fields'.

(573) mùdɑ̂ kɛ́ [nà nyɛ̀]$_{OBL}$ [mánkɛ̂̀,]$_{OBJ}$
m-ùdɑ̂ kɛ̀-H nà nyɛ̀ H-ma-nkɛ̂̀
N1-woman go-R COM 1 OBJ.LINK-ma6-field
'The woman [his wife] shall go with him to the fields,'

Locative objects thus share word order properties with obliques in that they can occur in oblique position, which has not been observed for non-locative objects.

6.2.1.3 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."

(574) 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.

(574) S V O X1 X2 X3

[bùdì bɔ́gà bá]$_{SBJ}$ gyámbó [bédéwɔ̀]$_{OBJ}$
b-ùdì bɔ́-gà ba-H gyámbɔ-H H-be-déwɔ̀
ba2-person 2-other 2P-PRES prepare-R OBJ.LINK-be8-food
[púù yá bwánɔ̀]$_{X1}$ [kìsínì dé tù]$_{X2}$ [nà màsɔ̀sí.]$_{X3}$
púù yá b-wánɔ̀ kìsínì dé tù nà ma-sɔ̀sí
∅7.reason 7:ATT ba2-child ∅7.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 a 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. An example of a bare noun phrase oblique was given in (565) for a temporal oblique. A similar example of a temporal oblique is given in (575).

(575) mègà méɛ̀ dyúwɔ́ nzɑ́ɑ̀ [dúwɔ̀ lé tè.]$_{X}$
mɛ-gà méɛ̀ dyúwɔ-H nzɑ́ɑ̀ d-úwɔ̀ lé tè
1S-CONTR 1S.PST2 feel-R ∅7.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 (576). Here, the first oblique, *bàgyɛ̂̀* 'guest', serves as a secondary predication relating to the subject. The second oblique is introduced by the associative plural marker and discussed below.

(576) mɛ́ lɔ́ njì [**bàgyɛ̂̀**]$_{X1}$ [bà wɛ̂.]$_{X2}$
mɛ-H lɔ́ njì ba-gyɛ̂̀ bà wɛ̂
1S-PRES RETRO come ba2-guest AP 2S
'I just came as a guest to you.'

The oblique nouns in both (565) and (576) 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 (577).

(577) á gyàgá mántúà [**púù** yá bwánɔ̀.]$_{X}$
a-H gyàga-H H-ma-ntúà púù yá b-wánɔ̀
1-PRES buy-R OBJ.LINK-ma6-mango ∅7.reason 7:ATT ba2-child
'He buys mangoes for the children.'

púù yá obliques also express purpose, as illustrated in (578).

(578) mɛ́ lɔ́ nɔ́ɔ̀ mwánɔ̀ [**púù** yá mábɔ́'ɔ̀
mɛ-H lɔ́ nɔ́ɔ̀ m-wánɔ̀ púù yá ma-bɔ́'ɔ̀
1S-PRES RETRO take N1-child ∅7.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 (579) shows.

(579) á gyàgá mántúà [**mpá'à** wá bwánɔ̀.]$_X$
a-H gyàga-H H-ma-ntúà mpá'à wá b-wánɔ̀
1-PRES buy-R OBJ.LINK-ma6-mango ∅3.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 (580), even though also pronominal benefactors are allowed with *púù* 'reason'.

(580) á gyàgá mántúà [**mpá'à** wâ̰.]$_X$
a-H gyàga-H H-ma-ntúà mpá'à w-â̰
1-PRES buy-R OBJ.LINK-ma6-mango ∅3.side 3-POSS.1S
'He buys mangoes for me.'

Further, *mpá'à* 'side' is used in manner obliques, as in (581).

(581) bí bɔ́ɔ̀ yá bígɛ́ [**mpá'à** wá vɛ́?]$_X$
bí b-ɔ́ɔ̀ ya-H bígɛ-H mpá'à wá vɛ́
1P.EMPH 2-other 1P-PRES develop-R ∅3.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 expresses usually location, as in (582) and (583).[5]

[5]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.

(582) bèdéwò béndɛ̀ byɔ̀ mɛ́ lɔ́ njì lɛ́bɛ̀lɛ̀ bédéwò
be-déwò bé-ndɛ̀ byɔ̀ mɛ-H lɔ́ njì lɛ́bɛlɛ H-be-déwò
be8-food 8-ANA 8.EMPH 1-PRES RETRO come follow be8-food
[**bà** wɛ̀.]$_X$
bà wɛ̀
AP 2S.OBJ
'It is that food that I have come to look for at your place.'

(583) mùdì á sɔ́mɔ́nɛ́ mùdâ̂ [**bà** kfúmá wà
m-ùdì a-H sɔ́mɔnɛ-H m-ùdâ̂ [**bà** kfúmá wà
N1-person 1-PRES complain-R N1-woman AP ∅1.chief 1:ATT
kwádɔ́.]$_X$
kwádɔ́
∅7.village
'The person complains about the woman at the chief of the village.'

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 *ɛ́* and ii) the postposition *dé*, as described in chapter 3.5.4.1 and 3.5.4.2, respectively. The oblique including the preposition *ɛ́* in (584) refers to some general location, corresponding to *at* in English.

(584) nyàá sùbɔ̀ èsâ̂s [**ɛ́** dyúwɔ̀.]$_X$
nyàá sùbɔ èsâ̂s ɛ́ dyúwɔ̀
1.INCH pour ∅1.fuel LOC ∅7.top
'He starts pouring fuel on top.'

In contrast, the postpositional oblique in (585) rather refers to containment, i.e. a location inside the locative noun.

(585) bùdì bésɛ̀ bà nzíí kɛ̀ nà kɛ̀ dɛ́ [bèdjìí **dé**
b-ùdì b-ésɛ̀ ba nzíí kɛ̀ nà kɛ̀ dɛ́ be-djìí dé
ba2-person 2-all 2 PROG.PRES go COM go today be8-forest LOC
tù.]$_X$
tù
inside
'All the people are going into the forest today.'

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 (586) and (587). In (586), the intransitive verb *njì* 'come' is followed by the comitative phrase. This construction of 'come with' is systematically used to express 'bring' in English.

(586) ɛ́ pɛ̀ nâ á njíyɛ̀ mɛ̀ [**nà** yɔ̂.]$_X$
ɛ́ pɛ̀ nâ a-H njíyɛ mɛ̀ nà yɔ̂
LOC there COMP 1-PRES come.SBJV 1S.OBJ COM 7.OBJ
'So that she bring me that [food].'

In (587), the comitative oblique *nà màbɔ́ɔ̀* 'with bread fruit' is the accompaniment to the verb *dè* 'eat'.

(587) nyɛ̀ nâ mɛ́ɛ̀ dé pɔ́nɛ́ [**nà** màbɔ́'ɔ̀.]$_X$
nyɛ nâ mɛ́ɛ̀ dè-H pɔ́nɛ́ nà ma-bɔ́'ɔ̀
1 COMP 1S.PST2 eat-R ∅7.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 (588).

(588) á kɛ́ sɔ́lɛ̀gà ngùndyá [**nà** nkwálá.]$_X$
a-H kɛ̀-H sɔ́lɛga ngùndyá nà nkwálá
1-PRES go-R chop ∅9.raffia COM ∅3.machete
'He goes to cut the raffia with the machete.'

Instrumental meaning can extend to contexts which are expressed by locatives in English. In (589), the speaker chooses to employ a comitative oblique rather than a locative oblique with the preposition *ɛ́*. This gives more of an instrumental than locative reading.

(589) á kɛ́ djìí dé tù [**nà** ndzǐ gyâ.]$_X$
a-H kɛ̀-H djìí dé tù nà ndzǐ gyâ
1-PRES go-R ∅7.forest LOC inside COM ∅9.path ∅7.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 (590).

(590) lé yí lèyá [**nà** mpèwɔ́.]$_X$
lé yi-H lèya-H nà mpèwɔ́
∅7.tree 7-PRES uproot:PASS-R COM ∅3.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*.[6] In these instances, the oblique expresses some kind of source which is usually encoded by a prepositional phrase with *from* in English. In (591), the source of the suffering is the raffia and bamboo.

(591) yá tfúgá [**nà** ngùndyá, mpáŋgì.]$_X$
ya-H tfúga-H nà ngùndyá mpáŋgì
1P-PRES suffer-R COM ∅9.raffia ∅7.bamboo
'We suffer from the straw, the bamboo.'

In (592), the source of death is hunger.

(592) mɛ̀ múà wɛ̀ [**nà** nzà.]$_X$
mɛ múà wɛ̀ nà nzà
1S PROSP die COM ∅9.hunger
'I'm about to die from hunger.'

Another example where the comitative oblique expresses the source is given in (593).

(593) nyɛ̀gà váà nyɛ̀gá tsíyɛ́ sáà [**nà** màlɛ́ndí,]$_X$
nyɛ-gà váà nyɛ-gá tsíyɛ́ sáà nà ma-lɛ́ndí,
3S-CONTR here 3S-CONTR live-R only COM 6-palm.tree
màlɛ́ndí máà mɔ́gà.
ma-lɛ́ndí máà mɔ́-gà
6-palm.tree 6:DEM 6-CONTR
'Him here, he lives only from palm trees, these palm trees.'

Certain verbs such as *dílɛsɛ* 'feed' in (594), also require a comitative oblique phrase rather than expressing its noun as an object. In such instances, one can think of the comitative's function either as manner or instrumental.

[6]See chapter 4.1.2.2 for more information on passive formation.

(594) Màmbì à nzí dílɛ̀sɛ̀ Àdà [**nà** ntúà.]$_X$
Màmbì a nzí dílɛsɛ Àdà nà ntúà
PN 1 PROG.PST feed PN COM ∅7.mango
'Mambi feeds Ada a mango.'

Comitative obliques may encode a stimulus, as in (595) where the snake causes fear.

(595) Àdà á sàgá [**nà** nyùà.]$_X$
Àdà a-H sàga nà nyùà
PN 1-PRES be.scared-R COM ∅1.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.

6.2.2 Basic Clause Types

Based on the grammatical relations that I established for Gyeli in the previous section, I now discuss basic clause types in this language, including word order under varying verb valency.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 6.3, are naturally less frequent. As to possible restrictions in distribution, we will see in chapter 7 that Gyeli generally keeps the basic word order of simple, main clauses also in dependent clauses.

Table 6.2 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. *Per definitionem*, 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 SCOP or pronominal objects.

Basic word order	S V (X_n)	104	(48.8%)
	S V O (X_n)	74	(34.7%)
	S V O_1 O_2 (X_n)	3	(1.4%)
Imperatives	∅ V (X_n)	5	(2.3%)
	∅ 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 6.2: Word order in simple clauses

As Table 6.2 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.[7] Every construction type can be followed by one or more oblique phrases. As outlined in section 6.2.1.3, 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 *kɛ̀* 'go' where a comitative oblique can precede the object noun phrase expressing a goal or direction.

Imperatives and special object positions in Table 6.2 list exceptional patterns. First, imperative forms lack subject 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 6.2.1.2,

[7]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 6.2.3.

only works with locative objects. Object fronting and left dislocation are pragmatically non-neutral constructions and relate to information structure. Both are discussed in more detail in section 6.3. 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 6.3 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.[8] 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 verb 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 6.3: Order of dual grammatical relations

In 100% of the cases, the subject precedes the verb. In relations between the verb and the object, there are two options for the relative order though. In verb - object relations, the verb canonically precedes the object.

[8]This number can also be deducted from Table 6.2 where every construction type involves a subject and an object except for the imperative constructions.

This is the case for 77.9% or all verb - object relations. There are a few exceptions though where the object precedes the verb. This is the case in left dislocation 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 can not 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 O. Note that obliques have been discussed in section 6.2.1.3 and will not be subject to further investigation here.

6.2.2.1 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 (596), the clause minimally consists of a subject SCOP and a verb.

(596) [á]$_S$ [vòdà.]$_V$
a-H vòda
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 (597), appears postverbally.

(597) [bànzàmbí bá tè bá]$_S$ [djìlɛ́ mà.]$_V$
ba-nzàmbí bá tè ba-H djìlɛ-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 (598), the oblique is a bare locative noun phrase. In addition to the oblique, the

verb is also followed by the sentential modifier *sâ* 'only'.[9]

(598) [à]$_S$ [tɛ́lɛ́]$_V$ sâ [dɛ́ndì témɔ́.]$_X$
a tɛ́lɛ-H sâ d-ɛ́ndì témɔ́
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, as in (599).[10] In this example, the predicate consists of the RETROSPECTIVE aspectual verb *lɔ́* 'come' and the non-finite verb *njì* 'come'.

(599) [mɛ́]$_S$ [lɔ́ njì]$_V$ [bàgyɛ̂̃]$_{X1}$ [bà wɛ̂.]$_{X2}$
mɛ-H lɔ́ njì ba-gyɛ̂̃ bà wɛ̂
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*.

6.2.2.2 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 (600) represents a relatively simple case with a lexical subject noun phrase, including the SCOP, a simple predicate, and a lexical object noun phrase.

(600) [Màmbì à]$_S$ [dé]$_V$ [mántúà.]$_O$
Màmbì à dè-H H-ma-ntúà
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 (601), the subject is only expressed by the SCOP and the object by a pronoun.

(601) [bwáá]$_S$ [lɑ́̃]$_V$ [bɔ̂!]$_O$
bwáa-H lɑ̃-H bɔ̂
2P-PRES tell-R 2.OBJ
'You tell them!'

[9]Sentential modification is discussed in section 6.2.4.
[10]Auxiliary constructions are described in section 6.2.3.

(602) represents an example of a complex object noun phrase, containing a noun + noun genitive construction with a possessive pronoun.

(602) [à]$_S$ [nzí kɛ̀]$_V$ [létʃíndɔ́ lé
a nzí kɛ̀ H-le-tsíndɔ́ lé
1 PROG.PST1 go OBJ.LINK-le5-funeral.ceremony 5:ATT
ntùmbà wâ̰.]$_O$
n-tùmbà w-â̰
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 (603), the verb is preceded by a PROGRESSIVE aspect.

(603) [wɛ̀]$_S$ [nzíí bàlɛ̀]$_V$ [bébɑ́à̰.]$_O$
wɛ nzíi-H bàlɛ H-be-bɑ́à̰
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 (604).

(604) [mɛ̀gà mɛ́]$_S$ [lígɛ́ dɛ̀]$_V$ [mwánɔ̀ wɔ́ɔ̀]$_O$ [nà
mɛ-gà mɛ-H lígɛ-H dɛ̀ m-wánɔ̀ w-ɔ́ɔ̀ nà
1-CONTR 1S-PRES stay-R eat N1-child 1-POSS.2S COM
màbɔ́'ɔ̀.]$_X$
ma-bɔ́'ɔ̀
ma6-bread.fruit
'As for me, I stay and eat your child with bread fruit.'

6.2.2.3 S V O O Word Order

Double object constructions are rather rare in the corpus with only three instances. As outlined in section 6.2.1.2, however, each object in a double object construction can occur as first or as second object. This is illustrated in example (605).

(605) a. [Àdà á]$_S$ [líbɛ́lɛ́]$_V$ [Màmbì]$_{O1}$ [màtúà.]$_{O2}$
Àdà à-H líbɛlɛ-H Màmbì màtúà
PN 1S-PRES show-R PN ∅1.car
'Ada shows Mambi A/THE CAR.'

b. [Àdà á]$_S$ [líbɛ́lɛ́]$_V$ [màtúà]$_{O1}$ [Màmbì.]$_{O2}$
Àdà à-H líbɛlɛ-H màtúà Màmbì
PN 1S-PRES show-R ∅1.car 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 (605a), *màtúà* 'car' is in focus, while in (605b) it is the animate object *Màmbì*.[11]

Just as lexical object noun phrases can appear in both object positions, as in (606), also pronominal objects can occur either in the first or second object position, depending on which object is in focus.

(606) a. [mɛ̀]$_S$ [vɛ́]$_V$ [**bá**bwálɛ̀]$_{O1}$ [bèfùmbí.]$_{O2}$
mɛ vɛ̂-H H-ba-bwálɛ̀ be-fùmbí
1S.PST1 give-R OBJ.LINK-ba2-parent be8-orange
'I gave the parents ORANGES.'

b. [mɛ́]$_S$ [vɛ́]$_V$ [**bé**fùmbí]$_{O1}$ [bàbwálɛ̀.]$_{O2}$
mɛ-H vɛ̂-H H-be-fùmbí ba-bwálɛ̀
1S-PRES give-R OBJ.LINK-be8-orange ba2-parent
'I gave THE PARENTS oranges.'

In (607), the lexical object noun phrases of (606) 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.

(607) a. [mɛ̀]$_S$ [vɛ́]$_V$ [bɔ̂]$_{O1}$ [byɔ̂.]$_{O2}$
mɛ vɛ̂-H bɔ̂ byɔ̂
1S.PST1 give-R 2.OBJ 8.OBJ
'I gave them [the parents] THEM [the oranges].'

b. [mɛ́]$_S$ [vɛ́]$_V$ [byɔ̂]$_{O1}$ [bɔ̂.]$_{O2}$
mɛ-H vɛ̂-H byɔ̂ bɔ̂
1S-PRES give-R 8.OBJ 2.OBJ
'I gave THEM [the parents] them [the oranges].'

[11] 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 6.2.1.2, 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.

6.2.3 Complex Predicates: Auxiliaries

Verbal predicates in Gyeli can be complex and be comprised of multiple verbs. I consider a predicate as complex when a simple monoclausal construction contains more that one verb. Practically, this is two or three verbs, three verbs being the upper limit. In these multi-verb constructions, only the first verb, the auxiliary, is inflected tonally for tense-mood while the following verbs occur in their infinitival form. The last verb is semantically the main verb. As we shall see below, multi-verb constructions with three verbs contain two auxiliaries and one main verb. According to Dryer (2007c: 90), the general order of the auxiliary (AUX) preceding the main verb is to be expected in V O languages.

Auxiliary verbs in Gyeli belong to different verb classes, namely:

1. Aspectual verbs (*lɔ́* 'come', *sílɛ* 'finish', *múà* 'be', *táalɛ* 'begin')
2. Deictic motion/posture verbs (*kɛ̀* 'go', *njì* 'come', *lígɛ* 'stay')
3. Modal verbs (*lèmbɔ* 'can/know', *yánɛ* 'must', *dúù* 'must not', *kwàlɛ* 'like')

Complex predicate constructions with these auxiliary verbs are pervasive in the corpus and constitute 25.8% of all simple verbal clauses (55 complex predicates out of 213 simple clauses). Auxiliary constructions can be distinguished based on the number of verbs they contain and on whether they are directly juxtaposed or separated by sentential modifiers or object pronouns. Table 6.4 shows the distribution of these two aspects.

Feature	Frequency	
two-verb constructions	42	(76.4%)
three-verb constructions	13	(23.6%)
juxtaposed	35	(63.6%)
separated	20	(36.4%)
Total	55	

Table 6.4: Features of complex predicates

More than three quarters of the complex predicate constructions found in the corpus contain two verbs and only less than a quarter contain three verbs. Similarly, directly juxtaposed auxiliary and main verbs are significantly more frequent than those constructions where the multiple verbs are

separated by sentential modifiers or object pronouns. I will discuss both cases of juxtaposed versus separated complex predicates in turn while providing examples for the different auxiliary verb classes first as well as examples for two-verb and three-verb constructions.

Directly juxtaposed verbs In the majority of cases, an auxiliary verb directly precedes the main verb, as it is the case with the following two-verb constructions. Almost all auxiliary verbs can appear in simple predicate constructions as verbs in their own right. The only exceptions are more grammaticalized aspect markers with verbal character, e.g. the PROGRESSIVE markers, which never occur on their own.[12]

(608) and (609) provide examples of aspectual auxiliary verbs. In (608), the auxiliary verb *lɔ́* 'come' marks RETROSPECTIVE aspect. It is inherently inflected for the realis mood and thus always carries a H tone. In contrast, the main verb *nɔ́ɔ̀* 'take' appears in its infinitival form and is not inflected tonally for tense-mood.

(608) mɛ́ **lɔ́** **nɔ́ɔ̀** mwánɔ̀ púù yá mábɔ́'ɔ̀
mɛ-H lɔ́ nɔ́ɔ̀ m-wánɔ̀ púù yá ma-bɔ́'ɔ̀
1S-PRES RETRO take N1-child ∅7.reason 7:ATT ma6-bread.fruit
mâ.
mâ
6.DEM.PROX
'I have just taken the child for these bread fruit.'

In (609), the auxiliary verb *sílɛ* 'finish' is further inflected for ABSOLUTE COMPLETIVE aspect, while, again, the following main verb surfaces as an infinitive.

(609) kɛ́ mbúmbù, bwánɔ̀ bà **sílɛ́ɛ̀̃** **kɛ̀** vɛ́?
kɛ́ mbúmbù b-wánɔ̀ ba sílɛ́ɛ̀̃ kɛ̀ vɛ́
EXCL ∅1.namesake ba2-child 2.PST1 finish.COMPL go where
'Ey namesake, where have all the children gone to?'

In addition to aspectual verbs, also deictic motion or posture verbs can serve as auxiliaries, as shown in (610) through (613). The most pervasive aspectual deictic motion verbs are *kɛ̀* 'go' and *njì* 'come'. *kɛ̀*, as in (610), always has an allocative meaning, i.e. the event expressed in the main verb

[12]Verbal aspect markers are discussed in more detail in chapter 5.3.

takes place at another location than where the speaker is at the point of utterance.

(610) ngùndyá, mɛ́ **kɛ́ sɔ́lɛ̀gà** ngùndyá dyúwɔ̀.
ngùndyá mɛ-H kɛ̀-H sɔ́lɛga ngùndyá dyúwɔ̀
∅9.raffia 1S-PRES go-R chop ∅9.raffia on.top
'The raffia, I go to chop the raffia on top.'

njì 'come' naturally constitutes the counterpart to this allocative function. Thus, it expresses that the event of the main verb takes place at or towards the speaker's location, as shown in (611).

(611) ɛ́ tè wɛ̀gà wɛ́ **njí** **sâ** mbvúndá ɛ́ ndzǐ
ɛ́ tè wɛ̀-gà wɛ-H njì-H sâ mbvúndá ɛ́ ndzǐ
LOC there 2S-CONTR 2S-PRES come-R do ∅9.trouble LOC ∅9.path
vâ.
vâ.
here
'There you, you come to make trouble on the way here.'

Other motion verbs than those two canonical ones can also serve as auxiliaries, as is the case with *lɑ̃̀* 'pass' in (612).

(612) bá **lɑ́̃** **pámò** vâ tɛ́ɛ̀ bà kwɛ̀lɔ́ɔ̃̀ yɔ̀
ba-H lɑ̀̃-H pámo vâ tɛ́ɛ̀ ba kwɛ̀lɔ́ɔ̃̀ yɔ̀
2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7.OBJ
kílɛ̀ dyúwɔ̀ tsíyà.
kílɛ̀ dyúwɔ̀ tsíyà
NEG[Kwasio] hear ∅1.question
'They pass and arrive here now, they cut it already without hearing a question [= without asking].'

Finally, posture verbs such as *lígɛ* 'stay' can take the function of an auxiliary, as shown in (613).

(613) mɛ̀gà mɛ́ **lígɛ́** **dè** mwánɔ̀ wɔ́ɔ̀,
mɛ-gà mɛ-H lígɛ-H dè m-wánɔ̀ w-ɔ́ɔ̀
1-CONTR 1S-PRES stay-R eat N1-child 1-POSS.2S
'As for me, I stay and eat your child,'

Modal verbs constitute the third class that can serve as auxiliaries. (614) through (616) provide examples of various modal verbs. In (614), the modal verb *wúmbɛ* 'want' appears as auxiliary, preceding the main verb *lɛ́ɛ̀* 'talk', which is an instance of code-switching to Kwasio.

(614) mɛ́ **wúmbɛ́** **lɛ́ɛ̀** nà bɔ̂.
mɛ-H wúmbɛ-H lɛ́ɛ̀ nà bɔ̂
1S-PRES want-R talk[Kwasio] COM 3P
'I want to talk with them.'

As mentioned above, most auxiliary verbs are also found as independent verbs in other contexts besides auxiliary constructions. Thus, *wúmbɛ* 'want' can also be used as a transitive verb requiring an object or it appears in main clauses to a complement clause. Similarly, *yánɛ* 'must' in (615) is another modal auxiliary that is commonly found in the corpus.

(615) donc wɛ̀ bùdɛ́ ná bàfû, wɛ́ **yànɛ́** **gyàgà**
donc wɛ bùdɛ-H ná ba-fû wɛ-H yànɛ-H gyàga
so[French] 2S be-R again ba2-fish 2S-PRES must-R buy
bɔ̂.
bɔ̂
2.OBJ
'So, you have fish again, you have to buy them.'

For the negated form, Gyeli has a suppletive lexical form, namely *dúù* 'must not', as shown in (616).

(616) kálɛ̀ mɛ̀ báà kì nâ bá **dúù** **bɛ̀** bédéwɔ̀.
kálɛ̀ mɛ̀ báà kì nâ ba-H dúù bɛ̀ H-be-déwɔ̀
NEG 1S 2.FUT say COMP 2-PRES must.not.SBJV grow be8-food
'It's not me, they [= who] will say that they must not grow food.'

While the previous examples all contained one auxiliary plus a main verb, complex predicates can also be composed of three verbs. The first two verbs are auxiliary verbs, belonging to one of the three mentioned verb classes, while the third verb is again the main verb. Also in tripartite verb constructions, only the first auxiliary is tonally inflected for tense and mood while the second appears as an infinitive, just like the main verb.

Since three-verb predicate constructions are significantly less frequent in the corpus, their exact combination patterns are more difficult to explore. In general, however, it seems that auxiliaries from any two verb classes can combine and precede the main verb. The first auxiliary then has scope over the following two verbs while the second auxiliary only has scope over the main verb, as indicated by the square brackets.

Aspectual auxiliaries which are more grammaticalized so that they do not occur as verbs in their own right have a tendency to appear in first auxiliary position, as the Basaa loan word *lɔ́* 'come' expressing RETROSPECTIVE aspect in (617).

(617) áh gyí wɛ́ **[lɔ́** **[njì** **gyésɔ̀**]]?
áh gyí wɛ-H lɔ́ njì gyésɔ
EXCL what 2S-PRES RETRO come look.for
'Ah, what have you just come to look for?'

A similar construction is found with the PRIORATIVE marker *pâ* in (618). As shown in (623) below, however, this tendency is not absolute and also more grammaticalized aspectual verbs can occur in the second auxiliary position.

(618) á **[páàŋgɔ́** **[tálè** **sílè**,]] mɛ̀ nzíí ná kɛ̀.
a-H páàŋgɔ-H tálɛ sílɛ mɛ nzíí ná kɛ̀
1-PRES PRIOR[Kwasio]-R begin finish 1S PROG.PRES again go
'He starts first to finish [speaking], I'm continuing again [= will then speak].'

Other auxiliaries are generally more free to appear either as first or second auxiliary. Thus, *sílɛ* 'finish', for instance, occurs as first auxiliary in (619), but as second in (620) and (621). In (619), *sílɛ* 'finish' has scope over both the second auxiliary and the main verb.

(619) ɛ́ vâ mɛ̀ dyùwɔ́ nâ ɛ́ vâ yîì **[sílè** **[njì**
ɛ́ vâ mɛ dyùwɔ-H nâ ɛ́ vâ yîì sílɛ njì
LOC here 1S.PST1 hear-R COMP LOC here 7.FUT finish come
búlè.]]
búlɛ
destroy
'Here I heard that here it will all come to be destroyed.'

In contrast, in (620) and (621), *sílɛ* only has scope over the main verb. In (620), it is preceded by another aspectual auxiliary verb.

(620) mɛ̀ nzíí kɛ̀ nà vúlɛ̀ lévúdû̀ nà
mɛ nzíí kɛ̀ nà vúlɛ H-le-vúdû̀ nà
1S PROG.PRES go COM take.away OBJ.LINK-le5-one COM
lèvúdû̀, mɛ́ **[táálɛ́** **[sílè** **nyùlè**.]]
le-vúdû̀ mɛ-H táálɛ-H sílɛ nyùlɛ
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].'

In comparison, in (621), *sílɛ* is preceded by the deictic motion verb *kɛ̀* 'go'.

(621) bwánɔ̀ bá kálɛ́ bɑ̃̂ bɔ́ bá [**kɛ́**
b-wánɔ̀ bá kálɛ́ b-ɑ̃̂ bɔ́ ba-H kɛ̀-H
ba2-child 2:ATT ∅1.older.sister 2-POSS.1S 2.EMPH 2-PRES go-R
[**sílɛ̀ pándɛ̀**.]]
sílɛ pándɛ
finish arrive
'The children of my older sister, they all arrive.'

Separated verbs The hypothesis that the second auxiliary and the main verb function as one unit over which the first, inflected auxiliary has scope, is further supported by the position of sentential modifiers (listed in Table 6.5). Thus, complex predicates cannot only appear directly juxtaposed with one another, but they can also be separated by sentential modifiers and object pronouns. Sentential modifiers have been observed to occur after the inflected auxiliary, as in the two-verb predicate in (622).

(622) wɛ́ **yànɛ́** ná **gyàgà** ndísì,
wɛ-H yànɛ-H ná gyàga ndísì
2S-PRES must-H again buy ∅3.rice
'You must again buy rice,'

If a sentential modifier is used in a three-verb predicate, as in the combination of modal and aspectual auxiliaries in (623), the modifier will still appear after the first, inflected auxiliary. It has not been observed to appear after the second auxiliary though.

(623) bí bɔ́gà yá **wúmbɛ́** ndáà **pɑ́ɑ̀** **nyɛ̂** sâ
bí bɔ́-gà ya-H wúmbɛ-H ndáà pɑ́ɑ̀ nyɛ̂ sâ
1P.EMPH 2-other 1P-PRES want-R also PRIOR see ∅7.thing
bá gyíbɔ́ ngyùlɛ̀ wá kùrɑ̃̂.
ba-H gyíbɔ-H ngyùlɛ̀ wá kùrɑ̃̂
2-PRES call-R ∅3.light 3:ATT ∅7.electricity
'We others, we also want to first see the thing they call the light of electricity.'

The same is true when an object pronoun is fronted and appears within a complex predicate: the object pronoun will always appear after the first auxiliary, as in (624) for a two-verb construction and in (625) for three-verb constructions.[13] (In my notation in the following examples, I distinguish lexical and pronominal objects, representing full NP objects with a capital 'O' while pronominal objects are indicated by a small 'o'.)

(624) S AUX o V

mɛ́	**lígɛ́**	nyɛ̂	**dè**,
mɛ-H	lígɛ-H	nyɛ̂	dè
1S-PRES	stay-R	1.OBJ	eat

'I stay to eat it,'

(625) S AUX o_1 V_1 V_2 O_2

báà	**sílɛ̀**	bî	**kúmbà**	**lwɔ̂̃**	mándáwɔ̀.
báà	sílɛ	bî	kúmba	lwɔ̂̃	H-ma-ndáwɔ̀
2.FUT	finish	1P.OBJ	arrange	build	OBJ.LINK-ma6-house

'They will arrange for us building houses.'

What these examples also show is that complex predicates can either involve one object, as in (624), or two different objects, as in (625). For such single object constructions, the preverbal object pronoun always appears between the auxiliary and the main verb, following the pattern S AUX O V. This order also holds when the clause is expanded by an oblique noun phrase, as in (626).[14]

(626) S AUX o V X

bùdì	bà	**sílɛ́ɛ̀̃**	mɛ̂	**wɛ̀**	ndáwɔ̀	tù	vâ.
b-ùdì	ba	sílɛ́ɛ̀̃	mɛ̂	wɛ̀	ndáwɔ̀	tù	vâ
ba2-person	2.PST1	finish.COMPL	1S.OBJ	die	∅9.house	inside	here

'The people have all died here inside the house.'

Further, this order holds in special constructions such as object left dislocation, as discussed in section 6.3.1.1. In (627), the object noun phrase is topicalized while the pronominal object fronting results in predicate focus.

[13] Preverbal object pronouns are an information structure phenomenon, achieving predicate focus. This is further discussed in section 6.3.2.2.

[14] The object pronoun *mɛ̂* is an instance of possessor raising as discussed in section 6.4.2.

(627) O_1, S AUX o_1 V

kɛ́ɛ̀	bwánɔ̀	bǎ̰,	mɛ̀	**sílɛ́ɛ̀**	bɔ̂	**dyùù**.
kɛ́ɛ̀	b-wánɔ̀	b-ǎ̰	mɛ	sílɛ̃ɛ̃̀	bɔ̂	dyùù
EXCL	ba2-child	2-POSS.1S	1S	finish.COMPL	2.OBJ	kill

'He [says]: Ha, my children, I have already killed them.'

Constructions with two objects, one of which occurring preverbally, have the general structure S AUX O_1 V O_2. Thus, in a double object construction with a typical ditransitive verb such as *vɛ̀* 'give' in (628), one of the pronominal objects can be fronted before the main verb while the second verb stays in the canonical object position. Both are clearly objects, the first one marked by a pronoun and the second, lexical object by the object linking H tone.

(628) S AUX o_1 V O_2

ká	bá	**ké**	[wɛ̂]$_{O1}$	**vɛ̀**	[bébwúyà		bébáà	nà
ká	ba-H	kɛ̀-H	wɛ̂	vɛ̀	H-be-bwúyà		bé-báà	nà
if	2-PRES	go-R	2S.OBJ	give	OBJ.LINK-be8-hundred		8-two	COM
màwú	mátánɛ̀,]$_{O2}$							
ma-wú	má-tánɛ̀							
ma6-ten	6-five							

'If they go give you 250 (Francs),'

More research is required to determine whether any of the two objects can be fronted as a pronoun. Intuitively, it seems that this would be possible and just depend on which object is more salient and thus stays in a phrase-final focus position.

6.2.4 Sentential Modification

Gyeli has a range of sentential modifiers, listed in Table 6.5. They are all monosyllabic and clearly not nouns. These modifiers are special instances of adverbs which, in contrast to adverbs discussed in chapter 4.2, 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.

ndáà	'also'	21	(37.5%)
ná	'again, still'	13	(23.2%)
vɛ̀ɛ̀	'only, still'	8	(14.3%)
kɔ́ɔ̀	'only, still'	7	(12.5%)
sâ	'only, just'	5	(8.9%)
lìí	'not yet'	2	(3.6%)
Total		56	

Table 6.5: Sentential modifiers

Some sentential modifiers play a role in information structure. For instance, *ndáà* 'also' is used for expanding a topic or focus, while its counterparts *vɛ̀ɛ̀*, *kɔ́ɔ̀*, and *sâ* restrict topics and foci. Also *ná* 'again, still' can be used for both verbs and other grammatical relations. Further, *vɛ̀ɛ̀* and *kɔ́ɔ̀* can introduce subordinate clauses, similar to the negation particle *tí*, acting as a sequential marker. These constructions are discussed in chapter 7.2.3.3. 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 6.5 lists modifiers in decreasing frequency. Thus, the second most frequent modifier is *ná* 'again, still' which is translated as *encore* into French. The modifiers *vɛ̀ɛ̀*, *kɔ́ɔ̀*, and *sâ* are about equally frequent. In terms of their semantics, they are difficult to distinguish though. 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 (629), *ndáà* follows the lexical subject noun phrase, expanding the subject topic.

(629) The woman ate mangoes.

nà	[mwánɔ̀	mùdɑ̂]$_S$	**ndáà**	à nzí	dè
nà	m-wánɔ̀	m-ùdɑ̂	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 (630). 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.

(630) bvúlɛ̀ bá ntégɛ́lɛ́ **ndáà** bíyɛ̀.
bvúlɛ̀ ba-H ntégɛlɛ-H ndáà bíyɛ̀
ba2.Bulu 2-PRES bother-R also 1P.OBJ
'The Bulu bother us, too.'

Further, *ndáà* is used under negation, as in (631).

(631) ká wɛ̀ɛ́ wúmbɛ́lɛ́ **ndáà**, mɛ́ nɔ̀ɔ́ nkwɛ̂
ká wɛ̀ɛ́ wúmbɛ-lɛ́ ndáà mɛ-H nɔ̀ɔ̀-H nkwɛ̂
if 2S.PRES.NEG want-NEG also 1S-PRES take-R ∅3.basket
wá mábɔ́'ɔ̀.
wá H-ma-bɔ́'ɔ̀
3:ATT 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 (632). Here, it modifys the copula complement *kùrɑ̂̃* 'electricity', which is one of the things, among others, that the Bagyeli wish to obtain.

(632) yá wúmbɛ́ **ndáà** náà bí bɔ́gà yá
ya-H wúmbɛ-H ndáà nâ bí b-ɔ́gà ya-H
1P-PRES want-R also COMP 1P.EMPH 2-other 1P-PRES
páŋgɔ́ bɛ̀ nà kùrɑ̂̃ **ndáà**.
páŋgɔ-H bɛ̀ nà kùrɑ̂̃ ndáà
PRIOR[Kwasio]-R be COM ∅7.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 (633) with a modal auxiliary and (634) with an aspectual auxiliary.

(633) wɛ́ yànɛ́ **ná** gyàgà ndísì,
wɛ-H yànɛ-H ná gyàga ndísì
2S-PRES must-H again buy ∅3.rice
'You must again buy rice,'

(634) mɛ́ pɑ́ **ná** kɛ̀ dígɛ̀ mùdì wà nû
mɛ-H pɑ̂-H ná kɛ̀ dígɛ m-ùdì wà nû
1S-PRES PRIOR-H again go see N1-person 1:ATT 1.DEM.PROX
ɛ́ pɛ́ɛ́.
ɛ́ pɛ́-ɛ́
LOC over.there.DIST
'I try again and go see this person over there.'

When *ná* follows negation, as in (635), its meaning is 'anymore'. Thus, comparable to *ndáà* under negation, no negative polarity item is required.

(635) mɛ̀ɛ̀ kálɛ̀ **ná** bɛ̀ nà djí ɛ́ vâ.
mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ
1S.FUT NEG.FUT anymore be COM ∅7.place LOC here
'I won't have a place here anymore.'

In non-verbal predicates, *ná* follows the SCOP copula, as in (636).

(636) bɔ́nɛ́gá báà **ná** djìí dé tù.
b-ɔ́nɛ́gá báà ná djìí dé tù
2-other 2.COP still ∅7.forest LOC inside
'The others are still in the forest.'

ná further occurs frequently at the end of a phrase. For example, in (637), *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 *bényámɛ̀* more salient. This, however, requires further investigation.

(637) ónóò bí bɔ́gà yá pɑ́ djî bényámɛ̀
ónóò bí b-ɔ́gà ya-H pɑ̂-H djî H-be-nyámɛ̀
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-oocur with other sentential modifiers, such as *ndáà* 'also'. In this case, *ná* follows *ndáà,* as shown in (638).

(638) bwánɔ bá bùdɑ̂ bábáà èè nà mwánɔ wà
b-wánɔ bá b-ùdɑ̂ bá-báà èè nà m-wánɔ wà
ba2-child 2:ATT ba2-woman 2-two EXCL COM N1-child 1:ATT
mùdɑ̂ nlɑ́álɛ̀ ndáà **ná**.
m-ùdɑ̂ nlɑ́álɛ̀ 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 (639), the modifiers occurs after the auxiliary as well as phrase-finally.

(639) áà mɛ̀ nzíí **ná** làwɔ̀ **ná**.
áà mɛ nzíí ná làwɔ ná
yes 1S PROG.PRES still talk still
'Yes, I am still talking.'

Finally, *ná* can also occur preverbally, as in (640). Here, it follows the subject *wɛ́* 'you' (while the other instances of *ná* in the clause follow the verb.)

(640) wɛ́ **ná** báàlá nà nyɛ́ fí nà wɛ́
wɛ-H ná báàla-H nà nyɛ̂-H fí nà wɛ-H
2S-PRES again repeat-R COM see-R different COM 2S-PRES
ndyándyá **ná** sálɛ́ ɛ́ pɛ̀ nà wɛ́ kòlá
ndyándya-H ná sálɛ́ ɛ́ pɛ̀ nà wɛ-H kòla-H
work-R again ∅7.work LOC over.there COM 2S-PRES add-R
ná mɔ̀nɛ́ nû.
ná mɔ̀nɛ́ nû
again ∅1.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 SCOP seem to be rather rare, however, at least rarer than *ndáà* 'also' modifying noun phrases.

vèè 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 (641) and (642), *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'.

(641) mɛ̀ nyɛ́ kwádɔ́ yî, Kúndúkùndù. **vèè**
mɛ nyɛ̂-H kwádɔ́ yî Kúndúkùndù vèè
1S.PST1 see-R ∅7.village 7.DEM.PROX PN only
màndáwɔ̀ má zì mɔ́ nà mɔ́.
ma-ndáwɔ̀ má zì mɔ́ nà mɔ́
ma6-house 6:ATT ∅7.tin 6.OBJ COM 6.OBJ
'I saw this village, Kundukundu. Only tin (roofed) houses, each and each.'

In (641), the *vèè* modifies *màndáwɔ̀ má zì* 'tin houses' (in contrast to houses with raffia roofs). In (642), it refers to *nàmɛ́nɔ́* 'tomorrow'.

(642) **vèè** nàmɛ́nɔ́ nàmɛ́nɔ́ nà pámò dɛ̃̀.
vèè nàmɛ́nɔ́ nàmɛ́nɔ́ nà pámo dɛ̃̀
only tomorrow tomorrow COM arrive today
'Only tomorrow, tomorrow, until today. [= only heard promises till today]'

In (643), 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'.[15]

[15]In Cameroonian French, *vèè* is still translated as *seulement* 'only', but the meaning of *seulement* in this case is far from being clear.

(643) nâ bá dyúù nyê. **vèè** mùdì nyɛ̀ djáà̰sà.
nâ ba-H dyúù nyê vèè m-ùdì nyɛ djáà̰sà
COMP 2-PRES kill.SBJV 1.OBJ only N1-person 1 disappear
'That they kill him. Suddenly the person disappears.'

Another instance of a sequential function is given in (644). 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 (644) 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.

(644) **vèè** bɛ́dɛ̀.
vèè bɛ́dɛ
only light
'just light [the house].'

vèè can also precede adverbs which it modifies in a restrictive sense. This is the case for both (645) and (646).

(645) ɛ́ vâ màkwèlɔ̀ má fúgɛ̀, **vèè** vâ.
ɛ́ vâ ma-kwèlɔ̀ ma-H fúgɛ vèè vâ
LOC here ma6-felling 6-PRES end only here
'Here, the felling ends, only here.'

(646) yɔ́ɔ̀ pɔ̀nɛ̀ **vèè** mpù.
yɔ́ɔ̀ pɔ̀nɛ̀ vèè mpù
7.COP ∅7.truth still like.this
'It is still true like this.'

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 (647) 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.

(647) màlɛ́ndí máà **vèè** kwè mímpìndí.
ma-lɛ́ndí 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].'

kɔ́ɔ̀ **'still, just'** The sentential modifier *kɔ́ɔ̀* has some functional and semantic overlap with both *vɛ̀ɛ̀* and *sâ*. Therefore, it is hard to distinguish the functional and semantic range of these three modifiers. *kɔ́ɔ̀* has in common with *vɛ̀ɛ̀* 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 (648) where *kɔ́ɔ̀* links an event within a chain of events. Nzambi locks his friend's family into a house, pours fuel over the house and the takes a lighter—the following event is introduced with *vɛ̀ɛ̀* as explained in (644).

(648) **kɔ́ɔ̀** nɔ̀ɔ̀ brìkɛ̂ wɛ̂,
kɔ́ɔ̀ nɔ̀ɔ̀ brìkɛ̂ w-ɛ̂
just take ∅1.lighter[French] 1-POSS.3S
'just takes his lighter,'

In (649), the speaker wraps up a conversation by stating that they were three people who spoke and then finish. As such, *kɔ́ɔ̀* again more serves as a sequential marker rather than a restrictive modifier.

(649) **kɔ́ɔ̀** sílɛ̀.
kɔ́ɔ̀ sílɛ
just finish
'Just finish.'

As a second function, *kɔ́ɔ̀* is also used for restricting information. Thus, the statement in (650), '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 (650a) and (650b) illustrate, the modifier always precedes the object noun phrase, no matter whether it occurs as first or second object.

(650) The woman bought oranges and beans for the children.

a. tɔ̀sâ, à nzí gyàgà **sâ/kɔ́ɔ̀** béfùmbí
tɔ̀sâ a nzí gyàga **sâ/kɔ́ɔ̀** H-be-fùmbí
no 1 PROG.PST buy only OBJ.LINK-be8-orange
bwánɔ̀.
b-wánɔ̀
ba2-child
'No, she bought only oranges for the children.'

b. tɔ̀sâ, à nzí gyàgà b-wánɔ̀ **sâ/kɔ́ɔ̀** bè-fùmbí.
tɔ̀sâ a nzí gyàga b-wánɔ̀ **sâ/kɔ́ɔ̀** 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 *kɔ́ɔ̀* and *sâ* can be used interchangeably in this context, namely whenever *kɔ́ɔ̀* expresses restriction. Also (651) represents such a case. When Nzambi realizes that his family has been killed, he just cries (and does not do anything else).

(651) nzàmbí wà nû **kɔ́ɔ̀** kìyà léwê.
nzàmbí wà nû kɔ́ɔ̀ kìya H-le-wê
PN 1:ATT 1.DEM.PROX only give OBJ.LINK-le5-cry
'This Nzambi only gives a cry.'

In other contexts, *kɔ́ɔ̀* seems to be less restrictive in its function, but expresses something like 'just' or 'simply' in English. This is the case in (652), which is certainly not restrictive since the Bagyeli state that they also wish for other improvements, for instance tin roofs.

(652) nà bí bésè **kɔ́ɔ̀** kùrə̂ bè dé tù.
nà bí b-ésè kɔ́ɔ̀ kùrə̂ bè dé tù
COM 1P.EMPH 2-all just ∅7.electricity be LOC inside
'with all of us just electricity be inside.'

Another way of translating *kɔ́ɔ̀* into Cameroonian French is *toujours* 'still', which applies in examples such as (653) and (654). In both cases, the function of *kɔ́ɔ̀* is to take up a previous discourse topic and re-introduce it.[16]

(653) yá mbàà, yá mbàà yíì nâ **kɔ́ɔ̀** mpù é nzìwù
yá mbàà yá mbàà yíì nâ kɔ́ɔ̀ mpù é nzìwù
7:ATT second 7:ATT second 7.COP COMP still like.this LOC PN
lɔ́ táálɛ̀ làwɔ̀ nâ bon,
lɔ́ táálɛ làwɔ nâ bon
RETRO begin talk COMP good[French]
'The second, the second is that still as Nze just began to say that, good,'

(654) yíì pɔ́né **kɔ́ɔ̀** lèváá lɛ̀vúdə̂ nâ bí
yíì pɔ́né kɔ́ɔ̀ le-váá lɛ̀-vúdə̂ nâ b-í
7.COP ∅7.truth still le5-thing 5-one COMP ba2-non.Bagyeli
bá ntégélé bágyɛ̀lì.
ba-H ntégɛlɛ-H H-ba-gyɛ̀lì
2-PRES bother-R OBJ.LINK-ba2-Gyeli

[16] 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.

'It is true, still the same thing that the non-Bagyeli bother the Bagyeli.'

Finally, *kɔ́ɔ̀* seems to express some kind of irrealis modality, as in (655)

(655) **kɔ́ɔ̀** nyɛ́gà á làwɔ́ ndáà.
kɔ́ɔ̀ nyɛ́-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 (650). *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 (656), for instance, *sâ* precedes the oblique noun phrase *nà màlɛ́ndí* '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.

(656) nyɛ̀gà váà nyɛ̀gá tsíyɛ́ **sâ** nà màlɛ́ndí,
nyɛ-gà váà nyɛ-gá tsíyɛ́ sâ nà ma-lɛ́ndí,
3S-CONTR here 3S-CONTR live-R only COM 6-palm.tree
màlɛ́ndí máà mɔ́gà.
ma-lɛ́ndí máà mɔ́-gà.
6-palm.tree 6:DEM 6-CONTR
'Him here, he lives only from palm trees, these palm trees.'

In (657), the *sâ* restricts the object interpretation and thus precedes the object noun phrase *mwánɔ̀ wɔ́ɔ̀* '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.

(657) vɛ̂ mɛ̀ **sâ** mwánɔ̀ wɔ́ɔ̀ wà wɛ̀ bùdɛ́
vɛ̂ mɛ̀ sâ m-wánɔ̀ w-ɔ́ɔ̀ wà wɛ bùdɛ-H
give.IMP 1S.OBJ 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 (658). 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.

(658) ká wɛ́ nyɛ́ mɛ̂ djíì **sâ** vâ nâ bá
ká wɛ-H nyɛ̂-H mɛ̂ djíì sâ vâ nâ ba-H
if 2S-PRES see-R 1S.OBJ stay only here COMP 2-PRES
nzíyɛ̀, bá nzíyɛ̀ djìyɔ̀.
nzíyɛ̀ ba-H nzíyɛ̀ djìyɔ
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 (659), there is no restriction on the following locative noun phrase, nor on any other constituent of the phrase.

(659) à tɛ́lɛ́ **sâ** dɛ́ndì témɔ́.
a tɛ́lɛ-H sâ d-ɛ́ndì témɔ́
1.PST1 stand-R just le5-courtyard middle
'He just stood in the middle of the courtyard.'

lìí **'not yet'** The least frequently found sentential modifier in the corpus is *lìí* which is a negative polarity item only occuring with past negation words (see chapter 5.4 for more information on negation). 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 (660), the modifier occurs between the negation and the main verb.

(660) mɛ̀ pálɛ́ **lìí** bâ.
mɛ pálɛ́ lìí bâ
1S.PST1 NEG.PST yet marry
'I am not yet married.'

The same is true for (661) which also includes an object, but this does not affect the position of the modifier.

(661) mɛ̀ pálɛ́ **lìí** dè mántúà.
mɛ pálɛ́ 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 *pálɛ́*. It is not clear whether it can occur also with the variant *sàlɛ́*.

6.3 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."

As such, information structure, i.e. the packaging of, for instance, *given* and *new* information, has an impact on general clause structure. African languages are known to be rich in information structure phenomena and recent years have seen a wealth of publications in this research area.[17]

Gyeli uses a range of strategies to package information in clauses and discourse. The most important information structure strategies are listed in Table 6.6. This list is not exhaustive. For instance, prosodic means seem to be relevant as well, but this requires further research. There are four strategies to express focus, namely left dislocation, topicalization, emphatic pronouns, and the contrastive marker *-ga*. These strategies either apply to subjects, objects, or both. Focus is expressed in-situ, by pronominal object fronting, and by cleft constructions.

In the following subsections, I will discuss both topic and focus phenomena in turn. 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.[18]

[17] A literature overview on information structure in African languages is given in Güldemann et al. (2015).

[18] 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.

Function	Strategy	Grammatical relation
Topic	Left dislocation	S and O
	Emphatic pronouns	S and O
	Contrastive *-ga*	S
	Topicalization	O
Focus	In-situ	S, O, X, PCF
	Object pronoun fronting	PCF
	Cleft constructions	S

Table 6.6: Topic and focus strategies

6.3.1 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"

Therefore, topic phenomena concern subjects and objects, but not, in contrast to focus phenomena, predicates and adjuncts. 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 been 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.

6.3.1.1 Left Dislocation

One means to express topicality is left dislocation. This phenomenon applies mainly to objects, but can be argued to occur also with subjects in combination with other information structure phenomena. In 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 (662). 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.

(662) áá bîì, **màndáwɔ̀ má zì**, yáà **mɔ́** fúàlà
áá bîì ma-ndáwɔ̀ má zì yáà mɔ́ fúala
EXCL 1P.OBJ ma6-house 6:ATT ∅7.tin[Bulu] 1P.FUT 6.OBJ end
bwɛ̂ lèwùlà lé vɛ́?
bwɛ̂ le-wùlà lé vɛ́
receive le5-hour 5:ATT which
'Ah, us, as for the tin houses, when will we receive them?'

The same pattern applies in (663) 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.

(663) The Bulu person says that he will quarrel with you [= the Gyeli child].

pílì **mwánɔ̀ bàgyɛ̀lì**, àà **nyɛ̂** kɛ̀ bíyɔ̀,
pílì m-wánɔ̀ ba-gyɛ̀lì àà nyɛ̂ kɛ̀ bíyɔ
when N1-child ba2-Gyeli 1.FUT 1.OBJ 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 (664). The discourse context is the same as for (662) 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 (664), *ŋgùndyá* 'raffia' is left dislocated before the subject and the occurs again in its lexical form in-situ.

(664) I think, the machete missed me here [= pointing to his forehead].

ŋgùndyá, mɛ́ kɛ́ sɔ́lɛ̀gà **ŋgùndyá** dyúwɔ̀.
ŋgùndyá mɛ-H kɛ̀-H sɔ́lɛga ŋgùndyá dyúwɔ̀
∅9.raffia 1S-PRES go-R chop ∅9.raffia on.top
'The raffia, I go to chop the raffia on top.'

Left dislocation is also used to expand the topic, as in (665). Expansion is achieved with the sentential modifier *ndáà* 'also' which follows the constituent it modifies.[19] Thus, in (665), the lexical object noun phrase is left dislocated, followed by *ndáà* and taken up in-situ by an object pronoun.

[19]See section 6.2.4 for more information on sentential modifiers.

(665) The woman ate the oranges.

nà	**màntúà**	**ndáà**	à nzí	dè	**mɔ̂**.
nà	mà-ntúà	ndáà	a nzí	dè	mɔ̂
COM	ma6-mango	also	1 PROG.PST eat		6.OBJ

'And she also ate mangoes.'

While left dislocation of objects is obvious and quite salient—objects usually appear after the verb—left dislocation of subjects is less obvious since they appear at the left edge of the clause anyway. One could argue, however, that left dislocation of subjects takes place with other topic phenomena such as emphatic pronouns and the contrastive *-ga* which appear before the SCOP. It seems that in these instances, there is also a short prosodic break, in contrast to non-dislocated lexical subject noun phrases. Thus, subject topicality achieved by emphatic pronouns and the contrastive marker *-ga* also involves left dislocation.

6.3.1.2 Emphatic Pronouns

Emphatic pronouns also serve as a means to express topic. Mostly, emphatic pronouns occur with subjects, as in (666). 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.

(666) You come to find us here.

donc	**bí**,	yá	táálɛ́	bê	yàlànɛ̀,	àà.
donc	bí	ya-H	táálɛ-H	bê	yàlanɛ	àà
so[French]	1P.EMPH	1P-PRES	begin-R	2P	respond[Bulu]	EXCL

'So we, we start to respond to you, mhm.'

Often, an emphatic pronoun is combined with the marker *-ga*, indicating a contrastive topic, as in (667). 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 from other African communities.

(667) White people working for NGOs receive money in Europe.

bí **bɔ́gà**, yá wúmbɛ́ ndáà pa̋a̋ nyê sâ
bí bɔ́-gà ya-H wúmbɛ-H ndáà pa̋a̋ nyê sâ
1P.EMPH 2-other 1P-PRES want-R also start see ∅7.thing
bá gyíbɔ́ ngyùlɛ̀ wá kùra̋.
ba-H gyíbɔ-H ngyùlɛ̀ wá kùra̋
2-PRES call-R ∅3.light 3:ATT ∅7.electricity
'We others, we also want to first see the thing they call the light of electricity.'

Also, an emphatic pronoun can be used in expanded topics, as in (668). 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).

(668) ɛ̀sɛ́ **béé** **ndáà**, bèyá làwɔ́ fàlà.
ɛ̀sɛ́ béé ndáà bèya-H làwɔ-H fàlà
is.it[French] 2P.EMPH also 2P[Kwasio]-PRES speak-R ∅1.French
'Isn't it, you, you also speak French.'

Emphatic pronouns are further used with objects in left dislocation, as in (669). Nzambi's wife explains to her husbands 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.

(669) The field is running out of food.

bèdéwò béndɛ̀ **byɔ̀**, mɛ́ lɔ́ njì lɛ́bɛ̀lɛ̀ bédéwò
be-déwò bé-ndɛ̀ byɔ̀ mɛ-H lɔ́ njì lɛ́bɛlɛ H-be-déwò
be8-food 8-ANA 8.EMPH 1-PRES RETRO come follow be8-food
bà wɛ̀.
bà wɛ̀
AP 2S.OBJ
'This food, I have come to look for the food at your place.'

6.3.1.3 Contrastive *-ga*

The marker *-ga* is used in order to contrast a new subject topic from an old one. For instance, in (670), 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.

(670) wɛ́ kɛ́ nà nyê nkɔ̰̀wáká. **nyègà**, à
wɛ-H kɛ̀-H nà nyê nkɔ̰̀wáká nyè-gà a
2S-PRES go COM 1 equal.sharing 1.EMPH-CONTR 1
nzíí wê vɑ̋ɑ̀̃kɛ́ sâ mpù.
nzíí wê vɑ̋ɑ̀̃kɛ́ sâ mpù
PROG.PRES 2S.OBJ go[Bulu] do like.this
'You go with him [= the Bulu] equally sharing. As of him, he is going to do you like this [= tries to trick you].'

This contrast of subject topics is also well illustrated in (671). 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.

(671) You take the bread fruit.

wègà, wɛ́ kɛ́ nà mɔ̂. **mègà**, mɛ́ lígɛ́
wɛ-gà wɛ-H kɛ̀-H nà mɔ̂ mɛ-gà mɛ-H lígɛ-H
2S-CONTR 2S-PRES go-R COM 6.OBJ 1-CONTR 1S-PRES stay-R
dè mwánɔ̀ wɔ́ɔ̀.
dè m-wánɔ̀ w-ɔ́ɔ̀
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 *-ga* is provided in (672). 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 of the friend ('you'), he does not react in the expected way, but causes trouble.

(672) I send you the message and ask you to help me.

ɛ́ tè **wègà** wɛ́ njí sâ mbvúndá ɛ́ ndzǐ
ɛ́ tè wɛ̀-gà wɛ-H njì-H sâ mbvúndá ɛ́ ndzǐ
LOC there 2S-CONTR 2S-PRES come-R do ∅9.trouble LOC ∅9.path
vâ.
vâ.
here
'There you, you come to make trouble on the way here.'

6.3.1.4 Topicalization

Topicalization can be viewed as a special case of left dislocation which only applies to objects. In contrast to left dislocation as discussed in section 6.3.1.1, in topicalization, the object occurs in front of the subject, but is not cross-referenced in-situ. Thus, in (673), the emphatic 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.

(673) I will build houses in Ngolo, each with a tin roof.

yɔ́ɔ̀	mɛ́	wúmbɛ́	wû.
yɔ́ɔ̀	mɛ-H	wúmbɛ-H	wû
7.EMPH	1S-PRES	want-R	there

'This I want there.'

In (674), 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.'

(674)

yɔ́ɔ̀	**yɔ́ɔ̀**	mɛ̀	djìlɛ́	mà.
yɔ́ɔ̀	yɔ́ɔ̀	mɛ	djìlɛ-H	mà
7.OBJ	7.OBJ	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 (673) and (674), there are also examples where a lexical object noun phrase is left dislocated, but not cross-referenced in-situ. This is the case in (675).

(675) The woman cooked rice for her child.

nà	**nákúndɛ̀kúndɛ̀ ndáà**,		à	bíyɛ́lɛ́.
nà	nákúndɛ̀kúndɛ̀	ndáà	a	bíyɛlɛ-H
COM	∅1.bean	also	1.PST1	cook-PST

'And she also cooked beans.'

Topicalization is less frequent than general left dislocation in the corpus. It seems, from the few examples, that topicalization is rather used to wrap up a topic and/or summarize the topic of the previously said, while left dislocation introduces a new topic.

6.3.2 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 in-situ which applies to all grammatical relations, by fronting an object pronoun to achieve predicate focus (PCF), and by cleft constructions in order to express subject focus.

6.3.2.1 *In-Situ* Focus

In-situ focus seems to be the most common focus strategy in Gyeli, applying to subject, object, predicate, and adjunct focus. This is illustrated by examples for each grammatical relation. In (676), the statement of the first clause in (676a) is corrected in (676b). There, the new and thus most salient information is the subject noun phrase *mùdɑ̂* 'woman' which appears in-situ, namely as first argument in the general S V O word order.

(676) a. mùdṵ̂ à dé mántúà.
m-ùdṵ̂ a dè-H H-ma-ntúà
N1-man 1.PST1 eat-R OBJ.LINK-ma6-mango
'The man ate the mangoes.'

b. tɔ̀sâ, **mùdɑ̂** à nzí dè mántúà.
tɔ̀sâ m-ùdɑ̂ a nzí dè H-ma-ntúà
no N1-woman 1 PROG.PST eat OBJ.LINK-ma6-mango
'No, THE WOMAN was eating the mangoes.'

The same strategy applies to object focus. Again, (677b) is a correction of the clause in (677a). This time, the correction of information concerns the object, which appears in-situ, namely after the verb.

(677) a. mùdə̂ à dé mántúà.
m-ùdə̂ a dè-H H-ma-ntúà
N1-woman 1.PST1 eat-R OBJ.LINK-ma6-mango
'The woman ate the MANGOES.'

b. tɔ̀sâ, à nzí dè **ndísì**.
tɔ̀sâ a nzí dè ndísì
no 1 PROG.PST eat ∅3.rice
'No, she was eating RICE.'

(678) represents an example of in-situ adjunct focus. Here, the oblique noun phrase *lèwùlà lé vɛ́* 'when' occurs in-situ. As explained in section 6.4.1, such question noun phrases can also appear phrase-initially, but the general focus position is at the end of a phrase in Gyeli.

(678) áá bîì, màndáwɔ̀ má zì, yáà mɔ́ fúàlà
áá bîì ma-ndáwɔ̀ má zì yáà mɔ́ fúala
EXCL 1P.OBJ ma6-house 6:ATT ∅7.tin[Bulu] 1P.FUT 6.OBJ end
bwɛ̂ **lèwùlà lé vɛ́**?
bwɛ̂ le-wùlà lé vɛ́
receive le5-hour 5:ATT which
'Ah, us, as for the tin houses, WHEN will we receive them?'

Finally, also predicate focus can be achieved in-situ, as shown in (679). In the answer to the question 'What did the woman do with the mangoes?', the predicate *dè* 'eat' appears in-situ, i.e. as expected between S and O.

(679) a. gyí mùdə̂ à sá nà màntúà?
gyí m-ùdə̂ a sâ-H nà ma-ntúà
what N1-woman 1.PST1 do-R COM ma6-mango
'What did the woman do with the mangoes?'

b. à **dé** mɔ̂.
a dè-H mɔ̂
1.PST1 eat-R 6.OBJ
'She ATE them.'

6.3.2.2 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 (680). While in a pragmatically more neutral clause the object pronoun *yɔ̂* '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.

(680) This tender child is good when you wrap it in a leaf package.

mèɛ̀	**yɔ̂**	**dè**.
mèɛ̀	yɔ̂	dè
1S.FUT	7.OBJ	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 (681). The context is the same as in (680). 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 *nyɛ̂* 'him' is defocussed.

(681)

mɛ́	lígɛ́	**nyɛ̂**	**dè**.
mɛ-H	lígɛ-H	nyɛ̂	dè
1S-PRES	stay-R	1.OBJ	eat

'I stay to EAT him [= the child].'

A similar example is presented in (682). 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.

(682)

nyɛ̀	náà	à múà	**wɛ̀**	**bíyɔ̀**.
nyɛ	nâ	a múà	wɛ̀	bíyɔ
1	COMP	1 PROSP	2S.OBJ	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 *wɛ̀* 'you' in preverbal position, the verb *bíyɔ* 'hit' is in focus position.

6.3.2.3 Cleft Constructions

In addition to in-situ focus, subjects can also be focussed by means of cleft constructions. There are two types of clefts used for subject foucs, one with the SCOP copula and one with the identificational marker *wɛ́*. Just as the SCOP copula is more frequent than the identificational marker, as discussed in section 6.1, cleft constructions with the SCOP copula also seem to be the default cleft construction. An example of this is given in (683). The subject appears in focus, as an answer to the question 'Who ate the mangoes?'. The default SCOP copula of agreement class 7 is generally used to express 'it is X'.[20]

(683) Who ate the mangoes?

yíì	**bwánɔ̀**	[bá	dé	mántúà.]$_{\text{REL}}$
yíì	b-wánɔ̀	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.'

Under negation, the SCOP copula is replaced by the verbal copula *bɛ̀* 'be', as expected and discussed in section 6.1.4. Thus, in (684), the negated correction of the statement 'That woman ate the mangoes' is expressed by the negated verbal copula *bɛ́lɛ́* for 'it is not X', while for the affirmative cleft, the SCOP copula is used again.

(684) That woman ate the mangoes.

[20]Optionally, an attributive marker could be inserted after *bwánɔ̀*, but since the attributive marker is identical in its form with the following SCOP *bá*, it is highly preferred to omit the attributive marker. This is in line with general relative clause marking as discussed in chapter 7.2.2. Relative clauses can in any case be marked by an attributive marker, but in many cases, the attributive marker can be omitted.

tɔ̀sâ, **yí** **bɛ́lɛ́** **mùdə̂** **núndɛ̀**, **yîì** **mɛ̂** [mɛ̀ nzí
tɔ̀sâ, yí bɛ̀-lɛ m-ùdə̂ nú-ndɛ̀, yîì mɛ̂ mɛ nzí
no 7.PRES be-NEG N1-2 woman 1-ANA 7.COP 1S.OBJ 1S
dè mántúà.]$_{REL}$
dè H-ma-ntúà.
PROG.PST eat

'No, it is not that woman, it is me who ate the mangoes.'

If the subject in focus consists of a complex lexical noun phrase, as in (685), a cleft construction with the identificational marker *wɛ́* is preferred. As in the previous examples, the relative clause following the cleft appears without explicit attributive marker.

(685) ntɛ́mbɔ̀ wà mùdə̂ wə̂ nyɛ̀ **wɛ́** [bùdɛ́
ntɛ́mbɔ̀ wà m-ùdə̂ w-ə̂ nyɛ wɛ́ bùdɛ-H
∅1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1 ID have-R
mwánɔ̀ wà mùdə̂ mvúdə̰̂.]$_{REL}$
m-wánɔ̀ wà m-ùdə̂ m-vúdə̰̂
N1-child 1:ATT N1-woman 1-one

'My wife's younger sister, it is her who has one girl.'

Finally, the SCOP copula and identificational marker *wɛ́* can also appear in combination as a double cleft construction, as shown in (686). In these double clefts, first the SCOP copula cleft type is used and then the identificational one with the marker *wɛ́*. These constructions seem to be more marked than simple clefts and thus seem to emphasize the subject focus even more.

(686) The woman ate the mangoes, didn't she?

a. tɔ̀sâ, [**yîì** ntɛ̀mbɔ́ wɛ̂] [nyɛ̂ **wɛ́**] [nzí dè
tɔ̀sâ yîì ntɛ̀mbɔ́ w-ɛ̂ nyɛ̂ wɛ́ nzí dè
no 7.COP ∅1.sibling 1-POSS.3S 1.EMPH ID PROG.PST eat
mántúà.]$_{REL}$
H-ma-ntúà
ma6-mango

'No, it is her sister who ate the mangoes.'

b. tɔ̀sâ, [**yîì** síŋgì] [yɔ̂ **wɛ́**] [nzí dè.]$_{REL}$
tɔ̀sâ yîì síŋgì yɔ̂ wɛ́ nzí dè.
no 7.COP ∅7.monkey 7.EMPH ID PROG.PST eat

'No, it is the monkey who ate [= them].'

In this section, I presented the most frequent and salient phenomena of Gyeli information structure. For future work, it would be desirable to expand research on this topic, especially concerning prosodic cues.

6.4 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.

6.4.1 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 developped 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 (687), which also has a longer emphatic form *nànâ*, as in (688). Both only occur at the beginning of a phrase.

(687) **nà** wɛ̀ nyɛ́ nyɛ̂?
nà wɛ nyɛ̂-H nyɛ̂
Q 2S.PST1 see-R 1.OBJ
'Did you see him?'

The emphatic question marker *nànâ* in polar questions pragmatically expresses insistence or even disbelief. Thus, in (688), 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.

(688) **nànâ** wɛ̀ nyɛ́ nyɛ̂?
nànâ wɛ nyɛ̂-H nyɛ̂
Q 2S.PST1 see-R 1.OBJ
'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 (689). In this example, it has to be clear from the context, however, that the sentence is a question. Otherwise, *nà* as in (687) has to be used.

(689) wɛ̀ nyɛ́ nyɛ̂?
wɛ nyɛ̂-H nyɛ̂
2S.PST1 see-R 1.OBJ
'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, (687) could also be translated as 'Did you really see him?', just as in (688). Using the longer form *nànâ*, as in (688), is even more emphatic and indicates the speakers disbelief: speakers would also translate the question in (688) as 'Are you sure that you saw him?'

nà can also co-occur with interrogatives, as shown in (690). *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 though that *nà* here has an emphasizing function.

(690) **nà púù yá gyí** wɛ̀ pálɛ́ gyàgà
nà púù yá gyí wɛ̀ pálɛ́ gyàga
Q ∅7.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 *ŋgáà* The question marker *ŋgáà* 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. *ŋgáà* 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 *ŋgáà* as 'Q(tag)'. Just like the question marker *nànâ, ŋgáà* 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)*, *ŋgáà* can occur both at the beginning and the end of a question, as shown in (691). The expected answer to the questions in (691) would be 'yes'.

(691) a. wɛ̀ nyɛ́ nyɛ̂, **ŋgáà**?
2S.PST1 see 3S Q(tag)
'You saw him, didn't you/right?'

b. **ŋgáà**, wɛ̀ nyɛ́ nyɛ̂?
Q(tag) 2S.PST1 see 3S
'Right, you saw him?'

ŋgáà is used in the same form for negated questions, as shown in (692). Here, the expected answer would be 'no'.

(692) a. wɛ̀ nyɛ́lɛ́ nyɛ̂, **ŋgáà**?
wɛ nyɛ̂-lɛ nyɛ̂ ŋgáà
2S.PST1 see-NEG 1.OBJ Q(tag)
'You didn't him, did you?'

b. **ŋgáà**, wɛ̀ nyɛ́lɛ́ nyɛ̂?
ŋgáà wɛ nyɛ̂-lɛ nyɛ̂
Q(tag) 2S.PST1 see-NEG 3S
'Right, you didn't see him?'

In contrast to constituent questions, *ŋgáà* 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 *ɛ́ vɛ́* 'where' and oblique

noun phrases, such as *dúbɔ̀ lé vɛ́* 'when [= which day]', *wùlà yá vɛ́* '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 (693).

(693) **nzá** nzí nyɛ̂ Màmbì? S V O
nzá nzí nyɛ̂ Màmbì
who PROG.PST see PN
'Who saw Mambi?'

(694) provides an example for a question asking for an inanimate subject, thus using *gyí* 'what'.

(694) **gyí** nzí bvúɔ̀ kàsà? S V O
gyí nzɨ́ bvúɔ̀ kàsà
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 *nzí* in past questions, even though the meaning is not necessarily progressive. Questions can also be formed without the PROGRESSIVE marker, as in (695), but speakers would spontaneously form questions with this aspect marker while stating that questions without it are also grammatical and apparently mean the same. *nzí* therefore most likely also serves another function than PROGRESSIVE, but this needs further investigation.

(695) gyí bvúɔ́ kàsà? S V O
gyí bvúɔ̀-H kàsà?
what break-R ∅7.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 (696), the object interrogative pronoun *nzá* 'who' is left dislocated to the beginning of the phrase. As (696b) shows, this also holds for negated questions. Both questions occur in O S V (X) word order.

(696) a. **nzá** wɛ̀ nzí nyɛ̂ mɛ́nɔ́ yî mákítì?
nzá wɛ̀ nzí nyɛ̂ mɛ́nɔ́ yî mákítì
who 2S PROG.PST see ∅7.morning 7.DEM ma6.market
'Who did you see this morning at the market?'

b. **nzá** wɛ̀ɛ́ kwálɛ̀lɛ̀?
nzá wɛ̀ɛ́ kwàlɛ-lɛ
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 (697). Again, this also holds for negated questions, as in (697b).

(697) a. **gyí** bwáà nzí nyɛ̂ tísɔ̀nì? O S V X
gyí bwáà nzí nyɛ̂ tísɔ̀nì
what 2P PROG see ∅7.town
'What did you (Pl.) see in town?'

b. **gyí** wɛ̀ɛ́ kwálɛ́lɛ́ tísɔ̀nì dé tù? O S V X
gyí wɛ̀ɛ́ kwàlɛ-lɛ tísɔ̀nì dé
what 2S like-NEG ∅7.town LOC inside
'What don't you like in town?'

c. **gyí** Àdà lɑ́ɑ́ pá'á wà sɑ̂? O S V X
gyí Àdà lɑ́ɑ̀-H pá'á wà sɑ̂
what PN read-R ∅1.side 1:ATT ∅1.father
'What does Ada read for father?'

The object interrogative pronoun can also occur in-situ, as shown in (698) for both *nzá* 'who' and *gyí* 'what'. In terms of its pragmatics, the in-situ position differs from left dislocatation in terms of information structure. The object position in-situ is the focus position, and thus the object interrogative appears in focus in (698).

(698) a. wɛ̀ɛ́ kwálɛ́lɛ́ **nzá**? S V O
wɛ̀ɛ́ kwálɛ́-lɛ́ nzá
2S.PRES.NEG like-NEG who
'WHO don't you like?'

b. Àdà lɑ́ɑ́ **gyí** pá'á wà sɑ̂? S V O X
Àdà lɑ́ɑ̀-H gyí pá'á wà sɑ̂
PN read-R what ∅1.side 1:ATT ∅1.father
'WHAT does Ada read for father?'

In questions with double objects, the object interrogative can occur in three positions. In (699), the question asks for the recipient object (which is often referred to as the direct object, but, as explained in section 6.2.1.2, 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 (699a), ii) in the first object slot, as in (699b), and iii) in the second object slot, as in (699c).

(699) a. **nzá** á vɛ́ béfùmbí? O_1 S V O_2
nzá a-H vɛ̂-H H-be-fùmbí
who 3S-PRES give-R OBJ.LINK-be8-orange
'Whom does s/he give the oranges?'

b. á vɛ́ **nzá** bèfùmbí? S V O_1 O_2
a-H vɛ̂-H nzá be-fùmbí
3S-PRES give-R who be8-orange
'Whom does s/he give the oranges?'

c. á vɛ́ béfùmbí **nzá**? S V O_1 O_2
a-H vɛ̂-H H-be-fùmbí 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 (700).

(700) a. **gyí** wɛ́ gyíkɛ́sɛ́ bwánɔ̀? O_1 S V O_2
gyí wɛ-H gyíkɛsɛ-H b-wánɔ̀
what 2S-PRES teach-R ba2-child
'What do you teach the children?'

b. wɛ́ gyíkɛ́sɛ́ **gyí** bwánɔ̀? S V O_1 O_2
wɛ-H gyíkɛsɛ-H gyí b-wánɔ̀
2S-PRES teach-R what ba2-child
'What do you teach the children?'

c. wɛ́ gyíkɛ́sɛ́ bwánɔ̀ **gyí**? S V O_1 O_2
wɛ-H gyíkɛsɛ-H b-wánɔ̀ 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 (701), 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.

(701) a. **nà nzá** wèè kɛ̀ pɛ̂? X S V
nà nzá wèè kɛ̀ pɛ̂
COM who 2S.FUT go over.there
'With whom will you go there?'

b. wèè kɛ̀ pɛ̂ **nà nzá**? S V X
wèè kɛ̀ pɛ̂ 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 (702).

(702) a. **bà nà nzá** báà kɛ̀ pɛ̂? X S V
bà nà nzá báà kɛ̀ pɛ̂?
AP COM who 2.FUT go over.there
'They and who will go there?'

b. báà kɛ̀ pɛ̂ **bà nà nzá**? S V X
báà kɛ̀ pɛ̂ bà nà nzɑ̂́
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 (703).

(703) a. **nzá** yáà lɑ́ **nà nyɛ̂**?
nzá yáà lɑ̂-H nà nyɛ̂
who 1P.PST2 talk-R COM 3S.OBJ
'Who did we talk to?'

b. **nzá** wɛ̀ nzí làdtɔ̀ **nà nyɛ̂** tísɔ̀nì?
nzá wɛ nzî-H làdtɔ̀ nà nyɛ̂ tísɔ̀nì
who 2S PROG-PST meet COM 3S.OBJ ∅7.town
'Who did you meet in town?'

Other examples of adjunct questions concern locative questions. Again, as shown in (704), the locative oblique phrase can occur phrase-initially or in-situ, even though the left dislocated variant seem to be much more frequent, given their relatively unmarked status.

(704) a. **ɛ́ vɛ́** wɛ́ɛ̀ lúmɛ̀lɛ̀ bwánɔ̀ sùkúlì? X1 S V O X2
ɛ́ vɛ́ wɛ́ɛ̀ lúmɛlɛ b-wánɔ̀ sùkúlì
LOC where 2S.FUT send ba2-child ∅7.school
'Where will you send the children to school?'

b. wɛ́ɛ̀ lúmɛ̀lɛ̀ bwánɔ̀ sùkúlì **ɛ́ vɛ́**? X1 S V O X2
wɛ́ɛ̀ lúmɛlɛ b-wánɔ̀ sùkúlì ɛ́ vɛ́
2S.FUT send ba2-child ∅7.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 *dúbɔ̀ lé vɛ́* 'what day', as in (705a), or *wùlà yá vɛ́* 'what time', as in (705b). Again, both examples can occur phrase-initially and in-situ with the in-situ position being the more marked one.

(705) a. **dúbɔ̀ lé vɛ́** à nzí pámò? X S V
d-úbɔ̀ lé vɛ́ a nzî-H pámò
le5-day 5:ATT which 3S PROG-R arrive
'When did she arrive [= what day]?'

b. à nzí pámò **wùlà yá vɛ́**? S V X
a nzî-H pámò wùlà yá vɛ́
3S PROG-R arrive ∅7.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 (706) shows.

(706) a. **púù yá gyí** bá gyíbɔ́ nyɛ̂? X S V
púù yá gyí ba-H gyíbɔ-H nyɛ̂
∅7.reason 7:ATT what 2-PRES call-R 1.OBJ
'Why do they call him?'

b. bá gyíbɔ́ nyɛ̂ **púù yá gyí**? S V X
ba-H gyíbɔ-H nyɛ̂ púù yá gyí
2-PRES call-R 1.OBJ ∅7.reason 7:ATT what
'WHY do they call him?'

6.4.2 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 (707), the possessor is expressed in the subject.

(707) **mɛ́** dvúɔ́ nkû.
mɛ-H dvúɔ̀-H nkû
1S-PRES hurt-R ∅3.foot
'My foot hurts.'

In most cases, however, the possessor has object status. In (708), for instance, the possessor *mɛ̂* takes the object position while *mbɔ̀* 'arm' occurs as a bare locative oblique noun phrase.

(708) ká yí nyí **mɛ̂** mbɔ̀... mpáŋgì yí kùgá
ká yi-H nyî-H mɛ̂ m-bɔ̀ mpáŋgì yi-H kùga-H
when 7-PRES enter-R 1S.OBJ N3-arm ∅7.bamboo 7-PRES can-R
nâ nyîì **wɛ̀** mbɔ̀.
nâ nyîì wɛ m-bɔ̀
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 (709). Here, the possessor appears in the copula complement.

(709) nzà nyíì **mɛ̀** mɔ̂.
nzà nyíì mɛ̀ mɔ̂
∅9.hunger 9.COP 1S.OBJ ∅3.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 (710), for example, the structure could be modified to 'build houses for me' with a purpose or benefactive oblique phrase introduced by *púù yá* (see section 6.2.1.3).

(710) mɛ̀ bùdɛ́ nâ á lwɔ́ŋgɔ́ **mɛ̂** màndáwɔ̀,
mɛ bùdɛ-H nâ a-H lwɔ́ŋgɔ-H mɛ̂ ma-ndáwɔ̀
1S have-R COMP 1-PRES build[Kwasio]-R 1S.OBJ ma6-house

'I say that she [Nadine] builds me houses,'

The same benefactive reading holds for copula constructions, as in (711).

(711) nlə̂̀ wá zì, ndáwɔ̀ nyà zì nyíì **mɛ̀** **vé**?
nlə̂̀ wá zì ndáwɔ̀ nyà zì nyíì mɛ̀ vé
∅3.story 3:ATT ∅7.tin ∅9.house 9:ATT tin 9.COP 1S.OBJ 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 adversary functions, as in (712) 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 6.3.2.2). This shows that possessor objects indeed behave identical to other objects.

(712) bùdì bà síl̋ɛ̋ɛ̋ **mɛ̂** wɛ̀ ndáwɔ̀ tù vâ.
b-ùdì ba síl̋ɛ̋ɛ̋ mɛ̂ wɛ̀ ndáwɔ̀ tù vâ
ba2-person 2.PST1 finish.COMPL 1S.OBJ die ∅9.house inside here
'The people have all died here inside the house.'

6.4.3 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 *bálɛ* 'surpass'. This holds for the comparison of the quality of two entities, as in (713). In this example, the compared quality is *mpà* 'good', a nominal qualifier, followed by the infinitival form of *bálɛ* 'surpass'.

(713) kàbà yíì mpà bálɛ̀ sɔ́tì.
kàbà yíì mpà bálɛ sɔ́tì
∅7.dress 7.COP good surpass ∅1.trousers
'The dress is better than the trousers.'

The pattern is the same for adverbial comparison. In (714), *mpà* serves as an adverb to *kɛ̀* 'go, run'. Just as in the previous example, it is followed by the comparison verb.

(714) Màmbì á kɛ́ mpà bálɛ̀ Àdà.
Màmbì a-H kɛ̀-H mpà bálɛ̀ Àdà
PN 1-PRES go-R good surpass PN

‘Mambi runs better than Ada.’

bálɛ is further used in comparison of quantities. Here, *bálɛ* follows the object noun phrase that the quantity refers to and directly precedes the entity that is subject to comparison, namely the person Màmbì.

(715) Adà à tsìlɔ́ békáládɛ̀ bálɛ̀ Màmbì.
Adà a tsìlɔ-H H-be-káládɛ̀ bálɛ̀ Màmbì
PN 1.PST1 write-R OBJ.LINK-be8-letter surpass PN
‘Ada wrote more letters than Mambi.’

bálɛ can also function as the only verb in a clause that is tonally inflected for tense and mood, as in (716). Here, the comparison is between the second constituents of a noun + noun genitive construction while the first constituent of the second construction is elided.

(716) lèdyűǜ lé dɛ̂ bálɛ́ nàkùgúù.
le-dyűǜ lé dɛ̂ bálɛ-H nàkùgúù
le5-heat 5:ATT today surpass-R yesterday
‘Today it’s warmer than yesterday.’

In (717), a comparison construction is used to express semantically a superlative by comparing one person’s driving style to that of everyone else.

(717) Adà á dvùdɔ́ màtúà bálɛ̀ bɔ́gà.
Adà a-H dvùdɔ-H màtúà bálɛ bɔ́-gà
PN 1-PRES drive-R ∅1.car surpass 2-other
‘Ada drives the car faster than all [= the fastest].’

In contrast, in (718), a superlative is expressed without comparing two entities. Instead, *bálɛ* follows an object noun phrase which is subject to the superlative interpretation while *kɛ̀ mpfúndɔ́* encodes in which way Ada’s car is the best, namely in going fast.

(718) Adà á dvùdɔ́ màtúà bálɛ̀ kɛ̀ mpfúndɔ́.
Adà a-H dvùdɔ-H màtúà bálɛ kɛ̀ mpfúndɔ́
PN 1-PRES drive-R ∅1.car surpass go ∅3.speed
‘Ada drives the fastest car.’

Finally, some comparison construction types take additionally to *bálɛ* the adverb *mpù* ‘like’. This is the case in equatives, as shown in (719).

(719) mɛ̀ɛ́ **bálɛ́lɛ́** bɛ̀ nà mɔ̀nɛ́ ɛ́ **mpù** nàkùgúù.
mɛ̀ɛ́ bálɛ-lɛ bɛ̀ nà mɔ̀nɛ́ ɛ́ mpù nàkùgúù
1S.PRES.NEG surpass-NEG be COM ∅1.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 (720).

(720) Àdà à dé mántúà **bálɛ̀** **mpù** Màmbì
Àdà a dè-H H-ma-ntúà bálɛ mpù Màmbì
PN 1.PST1 eat-R OBJ.LINK-ma6-mango surpass like PN
à dé mándjù.
a dè-H H-ma-ndjù
1.PST1 eat-R OBJ.LINK-ma6-banana
'Ada ate more mangoes than Mambi bananas.'

Having described major types and phenomena of simple clauses, I now turn to complex clauses in the next chapter.

Chapter 7

Complex Clauses

Complex clauses are those which are comprised of one or more clauses, 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.

7.1 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)
   - comitative marker *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 with 21 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.

7.1.1 Conjunction with *nà* 'and'

Conjoining two clauses with the comitative marker *nà* is the most frequent coordination stratgey in the Gyeli corpus. *nà* usually appears between to clauses, but can also occur at the beginning of a new clause, linking the clause to the previous text, as in (721). *nà* is never found sentence-finally.

(721) He is going into the forest on the long path.

nà	pándɛ̀ vâ,	bùdì	báà	bɛ̀.
nà	pándɛ̀ vâ	b-ùdì	báà	bɛ
COM	arrive here	ba2-person	2.DEM.PROX	be.there

'And having arrived here, these people are there.'

There are structural differences among conjoined clauses. I thus distinguish conjoined clauses which both express overtly a subject from those where the subject is elided in the second coordinand. 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.

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 (722), for example, a lexical noun phrase serves as subject, while the second clause only marks subject agreement on the SCOP 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.

(722) bon, mpɔ̀ŋgɔ̀ sílɛ́ɛ̀̂ **nà** béè
bon, mpɔ̀ŋgɔ̀ sílɛ́ɛ̀̂ nà béè
OK[French] ∅7.generation finish.COMPL COM 2P.COP
bànáyɛ̂yɛ̂.
ba-náyɛ̂yɛ̂
2-bleached.out
'OK, the generation has been wiped out and you are bleached out [= white].'

(723) 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.

(723) yá lɔ́ fúàlà **nà** mɛ̀ lɔ́ làwɔ̀.
ya-H lɔ́ fúala nà mɛ lɔ́ làwɔ
1P-PRES RETRO end COM 1S RETRO talk
'We just finished and I just spoke.'

If two conjoined clauses have the same subject, the subject in the second clause can often be elided. There are, however, 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 (724).

(724) mɛ́ lámbó nzàmbí wà nû **nà** mɛ́
mɛ-H lámbo-H nzàmbí wà nû nà mɛ-H
1S-PRES trap-R PN 1:ATT 1.DEM.PROX COM 1S-PRES
wúmbɛ́ lèmbò ɛ́ mpù à bùdɛ́ mɛ̂.
wúmbɛ-H lèmbo ɛ́ mpù a bùdɛ-H mɛ̂
want-R know LOC like.this 1 have-R 1S.OBJ
'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 (725).

(725) donc bèyá lɔ́ kɛ̀ **nà** bèyà nzíí pándɛ̀.
donc bèya-H lɔ́ kɛ̀ nà bèya nzíí pándɛ
so[French] 2P-PRES RETRO go COM 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 (726), the first coordinand has a left dislocated object while the second appears in basic word order.

(726) bèkúmbɛ́ báà njì nà byɔ̂ **nà** báà njì lwɔ̰̂
be-kúmbɛ́ báà njì nà byɔ̂ nà báà njì lwɔ̰̂
be8-roof 2.FUT come COM 8 COM 2.FUT come build
mándáwɔ̀.
H-ma-ndáwɔ̀
OBJ.LINK-ma6-house
'Roofs they will bring and they will come and build houses.'

Subject elision in second coordinand In many cases where the two subjects are identical, the one in the second coordinand is 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 (727).

(727) vɛ̀ɛ̀ mùdì nyɛ̀ djɑ́ɑ̰̀sà **nà** kɛ́ djìí dé tù
vɛ̀ɛ̀ m-ùdì nyɛ djɑ́ɑ̰̀sà nà kɛ̀-H djìí dé tù
only N1-person 1 disappear COM go-R ∅7.forest LOC inside
nà ndzɨ̌ pámò dɛ̃̂.
nà ndzɨ̌ pámò dɛ̃̀
COM ∅9.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 (728a) 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 (728a) from the one in (728b) where no coordinator is present.

(728) a. áà síl**ɛ́** kɛ̀ **nà** dvù**wɔ́** dyúwɔ̀,
áà síl**ɛ**-H kɛ̀ nà dvùwɔ-H dyúwɔ
1.PST2 finish-R go COM stuff-R ∅7.top
'He has gone and stuffed the top [= with straw],'

b. áà síl**ɛ́** kɛ̀ dvù**wɔ̀** dyúwɔ̀,
áà síl**ɛ**-H kɛ̀ dvùwɔ dyúwɔ
1.PST2 finish-R go stuff ∅7.top
'He has gone to stuff the top [= with straw],'

(728b) represents an instance of a complex auxiliary construction. As such, the verb *dvùwɔ* occurs in its infinitival form, i.e. with a final L tone. In contrast, under coordination as in (728a), the verb is tonally inflected for tense and mood and thus occurs with a H tone.

Finally, conjunction constructions can have multiple coordinands, as (729) shows. This complex example contains both coordinands with elided subjects and overt subject expression.

(729) wɛ́ ná báàlá **nà** nyɛ́ fí **nà** wɛ́
wɛ-H ná báàla-H nà nyɛ̂-H fí nà wɛ-H
2S-PRES again repeat-R COM see-R different COM 2S-PRES
ndyándyá ná sálɛ́ ɛ́ pɛ̀ **nà** wɛ́ kòlá
ndyándya-H ná sálɛ́ ɛ́ pɛ̀ nà wɛ-H kòla-H
work-R again ∅7.work LOC over.there COM 2S-PRES add-R
ná mɔ̀nɛ́ nû.
ná mɔ̀nɛ́ nû
again ∅1.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].'

***nà* in non-clausal coordination** It should also be mentioned that *nà* is not only used in clausal coordination, but also in coordination of, for instance, noun phrases, as shown in (730).

(730) **nà** mìmbàŋgá **nà** màsá **nà** bègyí **nà**
nà mi-mbàŋgá nà ma-sá nà be-gyí nà
COM mi4-coconut.tree COM ma6-prune COM be8-what COM
bègyí, by**ɛ́**sɛ̀ béè sílɛ̀ ntàmànɛ̀.
be-gyí by-**ɛ́**sɛ̀ béè sílɛ ntàmanɛ
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 (731).[1]

(731) S V X_1 ‘and’ X_2

àá	bámálá	tɔ́bá	mpfùmɔ̀	**nà**	pámò	mɛ́nɔ́.
àá	bámala-H	tɔ́bá	mpfùmɔ̀	nà	pámo	mɛ́nɔ́
1.INCH	scold-R	since	∅3.midnight	COM	arrive	∅7.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.

7.1.2 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 also its object, both of which are elided in the second clause, as shown in (732) and (733).[2]

(732) S V_1 O_1 [‘and’] V_2 O_2

[yɔ́ɔ̀	mùdâ̰	tɔ́kɛ́	mwánɔ̀]	[kàlànɛ̀	nyɛ̂.]
yɔ́ɔ̀	m-ùdâ̰	tɔ́kɛ-H	m-wánɔ̀	kàlanɛ	nyɛ̂
so	N1-woman	collect-R	N1-child	hand.over	1.OBJ

‘So the woman picks up the child [and] hands [it] over to him.’

(733) S V_1 O_1 [‘and’] V_2 O_2

[yɔ́ɔ̀	mɛ́	tɔ́kɛ́	mɔ̀nɛ́	wɛ̀]	[vɛ̀	nyɛ̂.]
yɔ́ɔ̀	mɛ-H	tɔ́kɛ-H	mɔ̀nɛ́	w-ɛ̀	vɛ̀	nyɛ̂
so	1S-PRES	collect-R	∅1.money	1-POSS.3S	give	1.OBJ

[1]Note that *pámò* ‘arrive’ is consistently used in a preposition-like function of ‘till’.

[2]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.

‘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 6.2.3, auxiliaries generally belong to three verb classes, namely apsectual verbs, deictic motions verbs, and modal verbs. *tɔ́kɛ* ‘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 (732), the woman first picks up her childs and then hands it over to Nzambi.

7.1.3 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 (734). Here, 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.

(734) You were telling me to do so.

kánâ	mɛ̀	kɔ̀bɛ́	ndáà tsì,	mɛ̀ɛ́
kánâ	mɛ	kɔ̀bɛ-H	ndáà tsì	mɛ̀ɛ́
or	1S.PST1	break-R	also ∅7.interdiction	1S.PRES.NEG

lémbólɛ́.
lémbo-lɛ
know-NEG
‘Or I also broke the interdiction, I don’t know.’

(735) 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, *wɛ́* ‘you’ is resumed also in the second clause.

(735) wɛ́ njí nà bî **nânà/kânà** wɛ́ lígɛ̀?
wɛ-H njî-H nà bî nânà/kânà wɛ-H lígɛ
2S-PRES come-R COM 1P.OBJ 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 (736). In this construction, the coordinator in the second clause can be abbreviated to *kâ*.

(736) **kânà** àà njì nà byɔ̂ **kâ(nà)** àà lúmɛ̀lɛ̀.
kânà àà njì nà byɔ̂ kâ(nà) àà lúmɛlɛ
or 3S.FUT come COM 8.OBJ or 3S.FUT send
'Either he will bring them [= books] or he will send [them].'

(736) 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 discussed above.

Finally, (737) represents a case where the first and the second coordinand are asymmetrical in that the second coordinand consists only of a negated substitute *m̀m̂* 'no' of the first clause. The speaker makes a suggestion in the first coordinand, but then changes his mind and suggests the opposite.

(737) mùdə̂ kɛ́ nà nyɛ̀ mánkə̂ **kánâ** m̀m̂.
m-ùdə̂ kɛ̀-H nà nyɛ̀ H-ma-nkə̂ kánâ m̀m̂
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.'

7.1.4 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) 'oppositive', as in (738), ii) 'corrective', as in (739), or iii) 'counterexpectative', as in (740).[3] Gyeli does not make any lexical distinction between these subtypes, but expresses all of them with the same adversative coordinator *ndí* 'but'.

(738) Oppositive

[3]Examples of these different adversative subtypes stem from Mauri (2008).

mɛ̀ gyàgá békùndá **ndí** Àdà à gyàgá
mɛ gyàga-H H-be-kùndá ndí Àdà a gyàga-H
1S.PST1 buy-PST1 OBJ.LINK-be8-shoe but PN 3S.PST1 buy-PST1
tsílɛ̀ yá sɔ́tì.
tsílɛ̀ yá sɔ́tì
∅7.smallness 7:ATT ∅1.trousers
'I bought shoes whereas Ada bought shorts.'

(739) Corrective

á sàlɛ́ bédtɔ̀ nkòlɛ́ mpfùndɔ̀ **ndí** à nzí kɛ̀
a-H sàlɛ́ bédtɔ̀ nkòlɛ́ mpfùndɔ̀ ndí a nzî-H kɛ̀
3S-NEG PST.NEG ascend ∅3.hill fast but 3S.PST1 PROG-R go
nà kɛ̀ tsídɛ́ɛ̀.
nà kɛ̀ tsídɛ́ɛ̀
COM ∅7.walk slow
'He didn't run up the hill, but went slowly.'

(740) Counterexpectative

Àdà á dyà ntɛ́ bvùbvù **ndí** àá
Àdà a-H dyà ntɛ́ bvùbvù ndí àá
PN 3S-PRES ∅7.tallness ∅3.size much but 3S.PRES.NEG
lálɛ́ basket.
lá-lɛ́ basket
play-NEG basketball
'Ada is very tall, but he doesn't play basketball.'

Just like other coordinators, *ndí* 'but' precedes a clause, as shown by the double occurrence of *ndí* in (741).

(741) **ndí** mɛ̀ɛ́ sálɛ́ wɛ̂ bvùbvù **ndí** vɛ̀dáà mɛ́
ndí mɛ̀ɛ́ sâ-lɛ́ wɛ̂ bvùbvù ndí vɛ̀dáà mɛ-H
but 1S.PRES.NEG do-NEG 2S.OBJ much but but[Bulu] 1S-PRES
dyúwɔ́ nâ wɛ́ɛ̀ dé mwánɔ̀, nɔ́ɔ̀?
dyúwɔ-H nâ wɛ́ɛ̀ dè-H m-wánɔ̀, nɔ́ɔ̀
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 (742), the Bulu coordinator *vɛ̀dáà* 'but' is used instead of *ndí*. In other cases, *ndí* and *vɛ̀dáà* are both used, the Gyeli variant preceding the Bulu one, as shown in (741).

(742) yí ntégèlè, **vèdáà** mɛ́ sùmbɛ́lɛ́ bê.
yi-H ntégɛlɛ vèdáà mɛ-H sùmbɛlɛ-H bê
7-PRES disturb but[Bulu] 1S-PRES greet[Kwasio]-R 2P.OBJ
'That disturbs, but I greet you.'

Also, *ndí* is often substituted by the French form *mais* 'but', as in (743).

(743) ká wɛ́ sílɛ́ kɛ̀ sâ sálɛ́ **mais** pílì wɛ́
ká wɛ-H sílɛ-H kɛ̀ sâ sálɛ́ mais pílì wɛ-H
if 2S-PRES finish-R go do work.7 but[French] when 2S-PRES
kɛ́ nâ wɛ́ kɛ́ djíì mònɛ́ wɔ̂, á
kɛ̀-H nâ wɛ-H kɛ̀-R djíì mònɛ́ w-ɔ̂ a-H
go-R COMP 2S-PRES go-R ask ∅1.money 1-POSS.2S 1-PRES
làwɔ́ wɛ̂ nyùmbò.
làwɔ-H wɛ̂ nyùmbò
tell-R 2S ∅3.mouth
'If you go do all the work, but when you go to go ask for your money, he frowns at you.'

7.2 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, but have a dependency relation. A such, a dependent clause, i.e. a clause that is incomplete and cannot occur on its own, is embedded into a main or matrix clause. The embedded dependent clause, also called 'subordinate clause', takes over some syntactic function of the main clause, either by modifying a constituent as in attributive subordinate clauses, or by replacing a constituent, as in complement clauses.

Attributive dependent clauses can be further subdivided. I distinguish syndetic from asyndetic subordinate clauses. Syndetic clauses are those that are overtly marked as such by a grammatical morpheme, for instance the attributive marker in relative clauses. In contrast, asyndetic clauses are those which lack overt lexical marking as a subordinate clause.

I will first discuss two kinds of asyndetic attributive clauses in section 7.2.1. These include infinitival subordinate clauses and framing construc-

tions. Then, I turn to syndetic attributive dependent clauses, namely relative clauses in section 7.2.2, adverbial clauses in section 7.2.3, of which conditional clauses are a sub-type, and finally attributive clauses with the complementizer *nâ* in section 7.2.4. In section 7.2.5, I describe complement clauses.

7.2.1 Asyndetic Subordinate Clauses

Attributive dependent clauses in Gyeli include two types which are asyndetic, i.e. which do not mark the subordinate clause as such by means of, for example, an attributive marker in relative clauses or an adverb in adverbial clauses. Asyndetic can thus be considered as 'linkless' to some extent. They do, however, display the defining features of subordinate clauses: they depend on a main clause in that they cannot occur independently and they are marked prosodically as a clausal unit by a pause between the dependent and the main clause.

Gyeli has two types of asyndetic attributive clauses. I refer to one type as infinitival clauses and to the other as framing constructions. I discuss both in turn.

7.2.1.1 Infinitival Clauses

One kind of asyndetic attributive subordinate clauses in Gyeli are infinitival clauses. I call them infinitival clauses since the verb in this type of subordinate clause occurs in its infinitival form and is thus uninflected for tense-mood marking. Another characteristic of infinitival clauses is that the subordinate clause lacks any subject marking. It either receives its subject interpretation from the main clause, the subject of the main clause and the subject of the infinitival clause being co-referential, or the infinitival clause remains unspecified for a subject. Infinitival clauses can both be preposed and postposed to the main clause, as I show in the following.

Preposed infinitival clauses In (744) through (749), the infinitival clause is precedes the main clause it modifies.

Preposed infinitival clauses often express temporal sequences, the event of the infinitival clause being posterior to the event of the main clause. Thus,

in (744), the event of arriving in town is completed at the time of greeting people.[4]

(744) [pámɔ̀ tísɔ̀nì,]$_{INF}$ á súmɛ́lɛ́ bùdì.
pámɔ tísɔ̀nì a-H súmɛlɛ-H b-ùdì
arrive ∅7.town 1-PRES greet-R ba2-people
'Having arrived in town, he greets the people.'

(744) and (745) are both instances where the implied subject of the infinitival clause is co-referential with the subject of the main clause. In (744), it is the same person who arrives in town and then greets the people. In (745), 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 (744) is interpreted as non-co-referential to the one in the main clause, for instance when the speaker talks about his own arrival in town, but about a different person greeting the people (a similar case is presented below in (747) where the implied agent of the subordinate clause and the subject of the main clause are not co-referential). In (745), the co-referential reading is reinforced due to the causality chain: because the person ate the mangoes, he is not hungry anymore.

(745) [sílɛ dè mántúà,]$_{INF}$ à tí ná dyúwɔ̀ nzà.
sílɛ dè H-ma-ntúà a tí ná dyúwɔ nzà
finish eat OBJ.LINK-ma6-mango 1 NEG anymore feel ∅9.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 (746), for instance, the narrator talks about a healer who has turned into an antilope 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 (746) allows both interpretations of either the healer having arrived 'here', i.e. in the forest, or the people of his village.

[4]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 (744) as *Arrivé en ville, il salue les gens*.

(746) [nà pándɛ̀ vâ,]$_{INF}$ bùdì báà bɛ̀.
nà pándɛ̀ vâ b-ùdì báà bɛ
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. (747) 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'.

(747) [kɛ̀ dígɛ̀ mpù,]$_{INF}$ mùdì nú bɛ́lɛ́.
kɛ̀ dígɛ mpù m-ùdì nú bɛ́-lɛ́
go look like.this N1-person 1.DEM.DIST be-NEG
'Going looking like this, nobody is there.'

The main clause can have most of the tense-mood category that are allowed in a main clause. Thus, the SUBJUNCTIVE is excluded on the grounds that it is restricted to subordinate clauses. Also, IMPERATIVES are not found in main clauses which embed infinitival clauses. Past categories and the FUTURE, however as well as the PRESENT, as illustrated in the previous examples, are allowed in main clauses to infinitival clauses. The same is true for the INCHOATIVE, as shown in (748).

(748) [ndɛ̀náà pámò lébṵ̂,]$_{INF}$ àá gyì.
ndɛ̀náà pámo H-le-bṵ̂ 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 (749).

(749) [donc pè tsíyɛ̀ pɔ́nɛ́ lèkɛ́lɛ̀,]$_{INF}$ bvúlɛ̀ bá
donc pè tsíyɛ pɔ́nɛ́ le-kɛ́lɛ̀ bvúlɛ̀ ba-H
so[French] there cut ∅7.truth le5-word ba2.Bulu 2-PRES
ntégɛ́lɛ́ bîì ɛ́ vâ.
ntégɛlɛ-H bîì ɛ́ vâ
bother-R 1P.OBJ 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 (750) through (754). Postposed infinitival clauses seem to express purpose or manner rather than temporal sequences as with preposed clauses. In (750) and (751), 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.

(750) wɛ̀ nà ngvùlɛ̀ [kɛ̀ sɔ́lɛ̀gà wû]$_{INF}$ nà njí kù
wɛ nà ngvùlɛ̀ kɛ̀ sɔ́lɛga wû nà njì-H kù
2S COM ∅9.strength go fall there COM come-R fall[Kwasio]
ɛ́ sì.
ɛ́ sì
LOC ∅9.ground
'You are strong to go fall there and come fall to the ground.'

(751) 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 (751), an object pronoun is fronted, as discussed in chapter 6.3.2.2 on information structure.[5]

(751) bá nà ngvùlɛ̀ [bíyɛ̀ sílɛ̀ lwɔ̂ mándáwɔ̀.]$_{INF}$
bá nà ngvùlɛ̀ bíyɛ̀ sílɛ lwɔ̂ H-ma-ndáwɔ̀
2 COM ∅9.strength 1P.OBJ finish build OBJ.LINK-ma6-house
'They have the strength to build us all houses.'

While preposed infinitival clauses directly precede the main clause, postposed infinitival clauses can constitute one of several subordinate clauses following the main clause. In these multiple subordinate constructions, there are differences as to whether an infinitival clause modifies the main clause or another subordinate clause. This can be established in most cases based on which clause's subject is co-referential with the infinitival clause's implied subject.

For instance, (752) consists of a main clause, followed by an adverbial subordinate clause and an infinitival clause. The two subordinate clauses

[5]This example is also noteworthy because the fronted object pronoun usually occurs between the auxiliary verb *sílɛ* 'finish' and the main verb *lwɔ̂* 'build'. In this example, however, it occurs before the auxiliary.

are juxtaposed and the infinitival clause still depends on the main clause since the same subject of the main clause is implied for the infinitival clause.

(752) S V O [ADV] [INF]

báà	bù	mpàgó	[pílì	pɔ́dɛ̀	àà	vâ,]$_{ADV}$	[njì	tsíyɛ̀	
báà	bù	mpàgó	pílì	pɔ́dɛ̀	àà	vâ	njì	tsíyɛ̀	
2.FUT	break	∅3.road	when	∅1.port	1.COP	here	come	cut	

vâ.]$_{INF}$
vâ
here

'They will build a road when the port is here, coming cross-cutting here.'

(753) 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 is dependent on the complement rather than the main clause. The subject of the complement clause is also implied as subject for the infinitival clause.

(753) S V [[COMP] [INF]]

bɔ́nɛ́gá	bá	lɔ́	sílɛ̀	làwɔ̀	[nâ	bvúlɛ̀	bá	
bɔ́-nɛ́gá	ba-H	lɔ́	sílɛ	làwɔ	nâ	bvúlɛ̀	ba-H	
2-other	2-PRES	RETRO	finish	speak	COMP	ba2.Bulu	2-PRES	

ntɛ́gɛ́lɛ́	bágyɛ̀lì,]$_{COMP}$	[kɛ̀	nà	kwàlɛ̀	bùdâ̰	kɛ̀	nà
ntɛ́gɛlɛ-H	H-ba-gyɛ̀lì	kɛ̀	nà	kwàlɛ	b-ùdâ̰	kɛ̀	nà
bother-R	OBJ.LINK-ba2-Gyeli	go	COM	love	2n-woman	go	COM

kwàlɛ̀	bùdâ̰	bá	bá-gyɛ̀lì.]$_{INF}$
kwàlɛ	b-ùdâ̰	bá	ba-gyɛ̀lì
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 subordinate clause, as shown in (754). In this example, the main clause is followed by an infinitival clause, a relative clause and then another infinitival clause. The implied subject 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.

(754) S V X [[INF1] [REL] [INF2]]

yá sàgà mɛ́nɔ́ wɛ̂ [nyɛ̂ mápà
ya-H sàga mɛ́nɔ́ wɛ̂ nyɛ̂ H-ma-pà
1P-PRES be.surprised ∅7.morning in see OBJ.LINK-ma6-paw
má ndjìbù]$_{INF}$ [má bwámɔ́ ndáwɔ̀ dé tù,]$_{REL}$ [kɛ̀
má ndjìbù ma-H bwámɔ-H ndáwɔ̀ dé tù kɛ̀
6:ATT ∅1.antilope 6-PRES come.out-R ∅9.house LOC inside go
dɛ́ndì.]$_{INF}$
d-ɛ́ndì
le5-courtyard
'We are surprised in the morning to see paws of an antilope which come out of the house, going into the courtyard.'

Given the limited amount of infinitival clauses in the corpus, future research will have to determine other differences in the structure and the semantic range of infinitival clauses.

7.2.1.2 Framing Constructions

The second type of asyndetic subordinate clauses concerns framing constructions. Framing constructions are characterized by a S V main clause, comprised of a simple verbal predicate that is followed by the dependent 'framed' clause. The dependent clause has to take the same SCOP as the main clause, but usually differs in TM and/or aspect marking.

Framing constructions are mentioned in chapter 5.5 as an embedding strategy to combine certain TM categories which cannot be combined directly in a simple clause. They are, however, not restricted to aspectual verbs, but can also occur with non-aspectual verbs, as shown in (755). This example further illustrates why the 'framed' clause really qualifies as a dependent clause. First, the main clause is treated as an intonation phrase. If the embedded clause was part of the main clause, the verb *gyímbɔ* 'dance' would surface with a metatonic H tone. Since it does not, it is clear that the embedded clause is treated as its own intonation unit. Second, the embedded clause contains a PROGRESSIVE marker in the variant that only occurs in subordinate clauses, but never in main clauses.

(755) á gyímbɔ̀ [à nzéɛ́ sâ mákwásì.]
a-H gyímbɔ a nzéɛ́ sâ H-ma-kwásì
1-PRES dance 1 PROG.SUB do OBJ.LINK-ma6-clapping
'He dances while clapping.'

In terms of its function, the main clause anchors the time frame of the 'framed' clause. Thus, in (755), the main clause could also take a past or future TM category and the embedded clause would be temporally anchored at that time.

In terms of frequency, framing constructions occur significantly more often with aspectual than with non-aspectual verbs in the main clause. An example is given in (756). Here, the 'framed' clause is temporally anchored at the REMOTE PAST of the main clause, while the 'framed' clause has the RECENT PAST as its TM category.[6]

(756) áà bɛ́ [à bó nà màbádò nyúlɛ̀.]
áà bɛ̀-H a bô-H nà ma-bádò nyúlɛ̀
1.PST2 be-PST 1.PST1 lie-R COM ma6-open.wound ∅9.body
'He was being lying with open wounds on the body.'

While the dependent clause in (756) does not include any aspect marking, in the vast majority of cases, aspect marking is essential in the 'framed' clause. Two examples of this are given in (757) and (758).

(757) mɛ̀ɛ̀ bɛ̀ [mɛ̀ nzéɛ́ kɛ̀.]
mɛ̀ɛ̀ bɛ̀ mɛ nzéɛ́ kɛ̀
1S.FUT be 1S PROG.SUB.R go
'I will be going.'

In (757), the main clause anchors the embedded clause in the FUTURE while the dependent clause is marked for PROGRESSIVE aspect.

(758) áà kɛ́ [à nzéɛ́ kɛ̀ nà gyìyɔ̀.]
áà kɛ̀-H à nzéɛ́ kɛ̀ nà gyìyɔ
1.PST2 go-PST 1 PROG.SUB go COM cry
'She left crying.'

The same aspect marking occurs in the dependent clause in (758). This sentence is anchored in the REMOTE PAST though.

[6]The French translation given by speakers is *Il était étant couché*....

7.2.2 Relative Clauses

Relative clauses are attributive subordinate clauses which modify a noun phrase constituent in a main 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 are externally headed by the head of the noun phrase which precedes the relative clause. They have a minimal syntactic form of:

$$[(\text{ATT})\ \text{S}\ \text{V}]_{\text{REL}}$$

As we shall see below, relative clauses may be introduced by an attributive marker which, in many cases, is optional though. Generally, relative clauses internally follow a basic word order of S V. The position of the object depends, however, on the funtion of the relative clause' head. If the head functions as the object of the relative clause, it occurs externally and is generally not cross-referenced in-situ. If the head of the relative clause does not function as its object, an object usually appears in its basic position, namely after the verb. I will get back to this in more detail below.

I explore relative clauses in Gyeli in various directions. First, I investigate what kind of noun phrases in the main clause can be modified. I then describe how relative clauses are formally marked. Third, I show the different syntactic roles that a head noun of a relative clause can take within the relative clause. Finally, I provide examples of different types of relative clauses such as restrictive, non-restrictive, and free relative clauses. Data on relative clauses stem both from the Gyeli corpus and the Relative Clause Questionnaire by Downing et al. (2010).

Noun phrases that can be modified by a relative clause Noun phrases that can be modified by a relative clause in Gyeli include all available noun phrases in a clause, namely subject, object, and oblique noun phrases, as illustrated in (759) through (764).

In (759), the relative clause modifies the subject noun phrase of the verbal main clause.[7]

[7]This noun phrase is comprised of a noun + noun construction which lacks an attributive marker. Interestingly, the head of the relative clause is the second nominal constituent of the noun + noun construction, even though the head of the noun + noun construction is the first constituent, as discussed in chapter 3.4.6.

(759) bwánɔ̀ békúmbé [**bé** bà njí nà byɔ̂]$_{REL}$ bé
b-wánɔ̀ be-kúmbé bé ba njì-H nà byɔ̂ be-H
ba2-child be8-tin 8:ATT 2.PST1 come-R COM 8.OBJ 8-PRES
tɛ́lɛ́ màbé.
tɛ́lɛ-H mà-bé
stand-R here-8
'The few tin roofs that they brought stand here.'

Also, relative clauses can modify subject noun phrases of non-verbal predicate constructions, as in (760). Here, the subject is followed by a SCOP copula.

(760) bɛ̀ [**yá** bwánɔ̀ bá lɔ́ làwɔ̀]$_{REL}$ yîì tè.
bɛ̀ yá b-wánɔ̀ ba-H lɔ́ làwɔ yîì 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]'

Likewise, the relative clause can appear as the copula comlpement in a non-verbal predicate construction, as shown in (761). In this case, the relative clause follows the SCOP copula. The head of the relative clause is encoded in the SCOP copula and cross-referenced by a resumptive pronoun at the end of the relative clause.

(761) lèbvúú lé tè lɔ́ɔ̀ [yá bùdɛ́ lɛ̂.]$_{REL}$
le-bvúú lé tè lɔ́ɔ̀ ya-H bùdɛ-H lɛ̂
le5-anger 5:ATT there 5.COP 1P-PRES have-R 5.OBJ
'The anger there it is that which we have.'

Relative clauses can also modify object noun phrases. In (762), the second object of a double object construction is followed by a relative clause.

(762) vɛ̂ mɛ̀ sâ mwánɔ̀ wɔ́ɔ̀ [**wà** wɛ̀ bùdɛ́
vɛ̂ mɛ̀ sâ m-wánɔ̀ w-ɔ́ɔ̀ wà wɛ bùdɛ-H
give.IMP 1S.OBJ only N1-child 1-POSS.2S 1:ATT 2S have-R
nû.]$_{REL}$
nû
1:DEM.PROX
'Give me only your child that you have here.'

Also left dislocated object noun phrases can be modified by a relative clause, as shown in (763).

(763) nyɛ̀ nâ yáà mɛ́ láà, nâ sá [wɛ́ sá nɔ́gá
nyɛ nâ yáà mɛ-H láà nâ sá wɛ-H sâ-H nɔ́-gá
1 COMP yes 1S-PRES say COMP ∅7.thing 2S-PRES do-R 1-other
mùdì,]$_{REL}$ àà yɔ̂ wɛ̂ nyê.
m-ùdì àà yɔ̂ wɛ̂ nyê
N1-person 1.FUT 7.OBJ 2S return
'He: Yes, I say, the thing that you do to another person, he will return to you.'

Finally, relative clauses may modify oblique noun phrases, as illustrated with the locative oblique in (764).

(764) à làdó nà sɔ́ ɛ́ ndáwɔ̀ dé tù [nyà
a làdo-H nà sɔ́ ɛ́ ndáwɔ̀ dé tù nyà
1.PST1 meet-R COM ∅1.friend LOC ∅9.house LOC inside 9:ATT
sɑ́ wɛ̂ à lwɔ̂.]$_{REL}$
sɑ́ w-ɛ̂ a lwɔ̂
∅1.father 1-POSS.3S 1.PST1 build
'He met with a friend in the house that his father built.'

Marking of relative clauses As these examples show, Gyeli does not have a distinct grammatical class of relative pronouns. Instead, an attributive marker (ATT) can be used to indicate the attributive relation between subordinate clause and modified noun phrase.[8] This attributive marker, which agrees in gender with the head noun, is also used in noun + noun constructions, as discussed in chapter 3.4.6. 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

[8]As such, I consider relative clauses as syndetic dependent clauses, even though the attributive marker can be omitted optionally.

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 we will see below. The only criterion that seems to favor attributive marker deletion is when the attributive marker and the following SCOP are identical in shape, as for instance in (765).

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 metatonic H tone in the realis moods as they would within an intonation phrase. Also, a pause indicates the end of a relative clause.

The syntactic role of the head of 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 (765), the head noun of the relative clause functions as the subject of it. In these constructions, the relative clause has the same word order as basic clauses, namely S V. In fact, since the relative clause in this example is not marked by an attributive marker, only prosody indicates the relative clause which otherwise would not be distinguishable from a basic clause followed by another basic clause.

(765) bwánɔ̀ bùdə̂ [bá lìmbɔ́ dyúà,]$_{\text{REL}}$ bá sá
b-wánɔ̀ b-ùdə̂ ba-H lìmbɔ-H dyúà ba-H sâ-H
ba2-child ba2-woman 2-PRES know-R swim 3S-PRES do-R
másâ ɛ́ nsá'à wá jíwɔ́.
H-ma-sâ ɛ́ nsá'à wá jíwɔ́
OBJ.LINK-ma6-game LOC ∅3.shore 3:ATT ∅7.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. This is the case, for example, in (766) and (767). In both examples, the head noun serves as the object for the main clause as well as for the relative clause. Also, for both examples, the object of the main clause appears in-situ. In (766), the relative clause is marked with an attributive marker. In terms of word order, the object that serves as the head of the relative clause is preposed to the clause, which then has the structure O S V in (766) and O S V X in (767).

(766) bîì, bá dyúwɔ́ lɛ́kɛ́lɛ̀ [**lé**
bîì ba-H dyúwɔ-H H-lɛ-kɛ́lɛ̀ lé
1P.EMPH 2-PRES understand OBJ.LINK-le5-language 5:ATT
wɛ́ làwɔ̀.]$_{REL}$
wɛ-H làwɔ
2S-PRES speak
'We, they understand the language that you speak.'

In comparison, (767) appears without the attributive marker, even though the structure is identical to the one found in (766).

(767) bí bɔ́gà yá wúmbɛ́ ndáà pa̋a̋ nyɛ̂ sâ
bí bɔ́-gà ya-H wúmbɛ-H ndáà pa̋a̋ nyɛ̂ sâ
1P.EMPH 2-other 1P-PRES want-R also start see ∅7.thing
[bá gyíbɔ́ ngyùlɛ̀ wá kùra̋.]$_{REL}$
ba-H gyíbɔ-H ngyùlɛ̀ wá kùra̋
2-PRES call-R ∅3.light 3:ATT ∅7.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. Both, the patient (P) and the recipient (R) object of the relative clause can serve as its head, as shown in (768) and (769). As with single object constructions, the object that serves as head in double object relative clauses precedes the relative and is thus moved out of its basic position.

(768) O_P [S V O_R]...

kálàdɛ̀ [yá Àdà nzí vɛ̀ mɛ̂]$_{REL}$ yîì mpâ.
kálàdɛ̀ yá Àdà nzí vɛ̀ mɛ̂ yîì mpâ
∅7.book 7:ATT PN PROG.PST give 1S.OBJ 7.COP good

'The book that Ada gave me is nice.'

(769) O_R [S V O_P]...

mwánɔ̀ mùdã [mɛ̀ nzí vɛ̀ kálàdɛ̀]$_{REL}$ áà mpâ.
m-wánɔ̀ m-ùdã mɛ nzí vɛ̀ kálàdɛ̀ áà mpâ
N1-child N1-woman 1S PROG-PST1 give ∅7.book 1.COP good
'The girl to whom I gave the book is nice.'

If the head of a relative clause serves as an oblique of the relative clause, this is marked by a resumptive pronoun following the comitative marker *nà* in the relative clause. This is illustrated in (770).

(770) X_i [S V O X_i]...

ntfúmɔ́ [yá tsíyɛ́ pɛ́mbɔ́ **nà** **wɔ̂**]$_{REL}$ wú vúlɔ́lɛ́
ntfúmɔ́ ya-H tsíyɛ-H pɛ́mbɔ́ nà wɔ̂ wu-H vúlɔ-lɛ
∅3.knife 1P-PRES cut-R ∅7.bread COM 3.OBJ 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 reciprocal verb, such as *ládo nà* 'meet with' in (771).

(771) X_i [S V X_i X_{ii}]...

sɔ́ [mɛ̀ ládó **nà** **nyɛ̂** mbvû lɛ̀̃]$_{REL}$ àà pándɛ̀
sɔ́ mɛ ládo-H nà nyɛ̂ mbvû lɛ̀̃ àà pándɛ
∅1.friend 1S.PST1 meet-R COM 1.OBJ ∅3.year pass 1.FUT arrive
njì dígɛ̀ bî nàmɛ́nɔ́.
njì dígɛ bî nàmɛ́nɔ́
come watch 1P.OBJ tomorrow

'The friend I met last year will come to see us tomorrow.'

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 show 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 (772), where the head of the non-restrictive relative clause serves as its subject. This structure is the same as its restrictive counterpart in (765).

(772) Àdà [á lìmbɔ́ mbásâ,]$_{REL}$ àà sɔ́ wɑ́ɑ̀̃.
Àdà a-H lìmbɔ-H mbásâ àà sɔ́ w-ɑ́ɑ̀̃
PN 1-PRES know-R ∅7.hunt 1.COP ∅1.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 (773).

(773) míyù wáà̰ [wɛ̀ nzí nyɛ̂ ndáwɔ̀,]$_{REL}$ àà
míyù w-áà̰ wɛ nzí nyɛ̂ ndtáwɔ̀ àà
∅1.sibling 1-POSS.1S 2S.PST1 PROG-PST1 see ∅9.house 1.COP
ŋgyɛ́'èlɛ̀.
ŋgyɛ́'èlɛ̀
N1-teacher
'My brother, who you saw at the house, is a teacher.'

Another type of relative clause concerns cleft constructions which are discussed in detail in chapter 6.3.2.3 on information structure. These constructions involve the default SCOP copula of agreement class 7 which is followed by the relative clause. Also in cleft constructions, the use of the attributive marker is optional, as indicated by the parantheses in (774). Since the attributive marker and the following SCOP are identical in their shape, the omission of the attributive marker is preferred.

(774) S_i [S_i V O X]

yíì bwánɔ̀ bùdâ̰ [(**bá**) bá sá
yí b-wánɔ̀ b-ùdâ̰ (bá) ba-H sâ-H
7.COP ba2-child ba2-woman (2:ATT) 2-PRES do-R
másâ ɛ́ jíwɔ́.]$_{REL}$
H-ma-sâ ɛ́ jíwɔ́
OBJ.LINK-ma6-game LOC ∅7.river
'It's the girls who are playing by the river.'

While the head of the cleft relative clause in (774) serves as its subject, it serves as its object in (775).

(775) O [S V]

yíì bwánɔ̀ bùdâ̰ [wɛ̀ nzí nyɛ̂.]$_{REL}$
yíì b-wánɔ̀ b-ùdâ̰ wɛ̀ nzí nyɛ̂
7.COP ba2-child ba2-woman 2S PROG.PST see
'It's the girls that you saw.'

Again, the same is true for double object constructions in the relative clause, where one of the objects is the head noun of the clause, as in (776). This example further shows that the (recipient) head noun is moved out of the first object position since the second (patient) object in the relative clause occurs without the object linking H tone, even though it follows the verb directly on the surface.

(776) O_R [S V O_P]

yíì	bwánɔ̀	bùdə̂̀	[**bá**	àà	lúmɛ̀lɛ̀	bèkúlà.]$_{REL}$
yíì	b-wánɔ̀	b-ùdə̂̀	bá	àà	lúmɛlɛ	be-kúlà
7.COP	ba2-child	ba2-woman	2:ATT	1.FUT	send	be8-present

'It's the girls that she will send presents to.'

The fourth 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 (777). In this example, the free relative serves as the subject of the relative clause.

(777)

mɛ́	nyɛ́	**mùdì/nzá**	[nzí	njì	pá'à
mɛ-H	nyɛ̂-H	m-ùdì/nzá	nzî-H	njì	pá'à
1S-PRES	see-R	N1-person/who	PROG-PST1	come	∅3.side

wə́ə̀ə̀.]$_{REL}$
w-ə́ə̀
3-POSS.1S

'I see the person/who passed by me.'

(778) 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.

(778)

mɛ̀	lə́	bɔ̀	mùdì	[**wà**	Àdà	kwàlɛ̀.]$_{REL}$
mɛ	lə̂-H	bɔ̂	m-ùdì	wà	Àdà	kwàlɛ̀
1S.PST1	tell	2.OBJ	N1-person	1:ATT	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 (779) 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.

(779) mɛ́ nyɛ́ **sâ/gyí** [bá njí nà yɔ̂.]$_{REL}$
mɛ-H nyɛ̂-H sâ/gyí ba-H njì-H COM yɔ̂
1S-PRES see-R ∅7.thing/what 2-PRES come-R COM 7.OBJ
'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 (780) where *nzá* 'who' serves as recipient object of the clause.

(780) mɛ́ lìmbɔ́ nzá [àà líbɛ̀lɛ̀ béyìgà.]$_{REL}$
mɛ-H lìmbɔ-H nzá àà líbɛlɛ H-be-yìgà
1S-PRES know-R who 3S.FUT show OBJ.LINK-be8-picture
'I know who she will show the pictures to.'

Temporal relative clauses One special function that relative clauses take in Gyeli is that to express temporality. While other languages achieve this with adverbs, as in English *when*, Gyeli uses oblique nouns that are modified by the relative clause as in (781).

(781) yî mpà [**yɔ̂ɔ̀** wɛ́ kấ yɔ̀ dúmbɔ́.]$_{REL}$
yî mpà yɔ̂ɔ̀ wɛ-H kâ-H yɔ̀ dúmbɔ́
7.COP good ∅7.time 2S-PRES wrap-R 7.OBJ ∅7.package
'It is good when you wrap it in a (leaf) package.'

Complex relative clause constructions I now discuss some examples of complex relative clauses. Relative clauses can be complex in various respects. For instance, there can be double relative clause constructions, as in (782). Here, a relative clause is followed by another relative clause without any coordinating device. The head of both relative clauses is, however, the same, namely *lé* 'tree'. For both relative clauses, the head serves as an object.

(782) lé [**yá** wɛ́ nyɛ̂]$_{REL}$ [bá gyíbɔ́ ngàlɛ́]$_{REL}$ yî.
lé yá wɛ-H nyɛ̂ ba-H gyíbɔ-H ngàlɛ́ yî
∅7.tree 7:ATT 2S-PRES see 2-PRES call-R PN 7.COP
'The tree that you see that they call 'ngàlɛ́' is that.'

Relative clauses can also be coordinated, as shown in (783). Thus, the comitative marker *nà* conjoins the two relative clauses.

(783) bwánɔ̀ [bà síl ɛ́ɛ̀ lâ békálàdɛ̀ **nà**
b-wánɔ̀ ba síl ɛ́ɛ̀ lâ H-be-kálàdɛ̀ nà
ba2-child 2.PST1 finish.COMPL read OBJ.LINK-be8-book COM
bà síl ɛ́ɛ̀ dyíkɛ̀sɛ̀,]$_{\text{REL}}$ bá kùgá nà kɛ̀
ba síl ɛ́ɛ̀ dyíkɛsɛ ba-H kùga-H nà kɛ̀
2.PST1 finish.COMPL study 2-PRES can-R COM go
ndáwɔ̀.
ndáwɔ̀
∅9.house
'The children who have finished reading their books and who have finished studying can go home.'

Also, there are examples of relative clauses which contain a complement clause, as in (784).

(784) mùdì [mɛ́ bvúálá [**nâ** à nzí làwɔ̀]$_{\text{COMP}}$]$_{\text{REL}}$ à
m-ùdì mɛ-H bvúala-H nâ à nzí làwɔ à
N1-person 1S-PRES think-R COMP 1 PROG.PST talk 1
nzí láà dó.
nzí láà dó
PROG.PST tell ∅7.lie
'The person that I think she spoke with was lying.'

While this section has provided a comprehensive description of relative clauses in Gyeli, future research is still required, for instance to determine which factors favor or prevent the omission of the attributive marker.

7.2.3 Adverbial Clauses

Another type of syndectic subordinate clauses are adverbial clauses. Basically all adverbial clauses are introduced by an adverbial with the exception of causal clauses which are introduced by a noun plus attributive marker. For convenience, I also discuss this clause type in this section as well.

Generally, I distinguish two kinds of adverbial clauses, as shown in Table 7.1. Certain adverbials entail a full dependent clause which includes minimally a subject and a verb, the verb being inflected for tense and mood. I call them 'full adverbial clauses'.

There are other adverbials which trigger an infinitival structure. Adverbial infinitival clauses lack a subject in the dependent clause and do not mark tense-mood on the verb. This is comparable to asyndetic infinitival

Clause type	Adverbial	Gloss	Function
Full adverbial clause	*líní*	when	temporal
	pílì/pílɔ̀	'when'	temporal
	tɔ̀	'even, although'	concessive
	púù yá	'because'	causal
	ká	'if'	conditional
Adverbial infinitival clause	*tí*	'without'	negation
	vɛ̀ɛ̀	'only'	sequential
	kɔ́ɔ̀	'only'	sequential

Table 7.1: Adverbials introducing adverbial clauses

clauses discussed in section 7.2.1.1, but differs from those in that adverbial infinitival clauses require the adverbial. I will provide examples for each of adverbial clause type and the different adverbials in the following.

7.2.3.1 Full Adverbial Clauses

Gyeli uses a range of adverbials to introduce full subordinate clauses, including temporal, concessive, clausal, and conditional clauses. The adverbials differ in their degree of grammaticalization, some being highly grammaticalized as adverbs while others share features of nouns. The language has three variants for temporal clauses, namely *líní* and *pílì* or *pílɔ̀*. *pílì* occurs most frequently in the corpus while *pílɔ̀* and *líní* may be loan words from neighboring languages since they are also used in, for istance, 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. (785) gives an example of a preposed adverbial clause with *líní*.

(785) [**líní** á sílɛ́ dè mántúà,]$_{\text{ADV}}$ à tí ná
líní a-H sílɛ-H dè H-ma-ntúà, a tí ná
when 1-PRES finish-R eat OBJ.LINK-ma6-mango 1 NEG anymore
dyúwɔ̀ nzà.
dyúwɔ nzà
feel ∅9.hunger
'When he has eaten mangoes, he does not feel hunger anymore.'

(786) provides an example of a postposed adverbial clause with *líní*. Both sentences express temporal sequences, the event of the adverbial clause hap-

pening before the event of the main clause.

(786) á súmɛ́lɛ́ bùdì, [**líní** á pámɔ́ tísɔ̀nì.]$_{ADV}$
a-H súmɛlɛ-H b-ùdì líní a-H pámɔ-H tísɔ̀nì
1-PRES greet-R ba2-person when 1-PRES arrive-R ∅7.town
'He greets the people, when he arrives in town.'

líní also has a variant *lí nâ*, including a complementizer. This construction is described in section 7.2.4.

Temporal *pílì/pílɔ̀* 'when' The temporal adverb *pílì* is the most frequently used temporal adverb in the corpus, introducing a dependent clause. (In elicitation, also *pílɔ̀* was sometimes used.) Adverbial phrases with *pílì* can both precede and follow the main clause. In (787), it precedes the main clause. The dependent clause here shows basic S V word order.

(787) [**pílì** mɛ́ làwɔ́ mpù,]$_{ADV}$ mɛ̀ɛ́ válɛ́
pílì mɛ-H làwɔ-H mpù mɛ̀ɛ́ vá-lɛ́
when 1S-PRES speak-R like.this 1S.PRES.NEG tolerate-NEG
làwɔ̀.
làwɔ
speak
'When I speak like this, I don't tolerate to talk [= I'm not lieing].'

Also in (788), the adverbial clause is preposed to the main clause. In this example, the dependent clause includes a verbal copula *múà* with a nominal locative predicate.

(788) [**pílì** yí múà ndáwɔ̀ nyà mànyɔ̀ ndɛ̀náà,]$_{ADV}$ á
pílì yí múà ndáwɔ̀ nyà ma-nyɔ̀ ndɛ̀náà a-H
when 7 be ∅9.house 9:ATT ma6-drink like.this 1-PRES
kí náà à múà njì bvúdà nà wɛ̂.
kì-H nâ a múà njì bvúda nà wɛ̂
say-R COMP 1 PROSP come quarrel COM 2S.OBJ
'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 (789).

(789) báà bù mpàgó [**pílì** pɔ̀dɛ̀ àà lɛ̃̀.]$_{ADV}$
báà bù mpàgó pílì pɔ̀dɛ̀ àà lɛ̃̀
3.FUT break ∅3.road when ∅1.port 1.FUT pass

'They will build a road when the port passes.'

(790) 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.

(790) wɛ́ yànɛ́ ná gyàgà ndísì, [**pílì** wɛ́ lèmbó
wɛ-H yànɛ-H ná gyàga ndísì pílì wɛ-H lèmbo-H
2S-PRES must-H again buy ∅3.rice when 2S-PRES know-R
[nâ bùdì bá ndáwɔ̀ bvùbvù.]$_{COMP}$]$_{ADV}$
nâ b-ùdì bá ndáwɔ̀ bvùbvù
COMP ba2-person 2:ATT ∅9.house many
'You must again buy rice, when you know that there are many people at home.'

Concessive *tɔ̀* 'even, although' Another adverbial used to introduce dependent clauses is the concessive *tɔ̀* 'even, although' which also appears in nominal modification, expressing 'any', as described in chapter 3.5.3.1. Again, adverbial clauses introduced by *tɔ̀* can both precede and follow the main clause, as shown in (791) and (792), respectively.

(791) [**tɔ̀** wɛ̀ɛ́ kwálɛ́lɛ́ nyɛ̂,]$_{ADV}$ wɛ́ yànɛ́ nyɛ̂
tɔ̀ wɛ̀ɛ́ kwálɛ-lɛ nyɛ̂ wɛ-H yànɛ-H nyɛ̂
even 2.PRES.NEG like-NEG 1.OBJ 2S-PRES must-R see
bégyɛ́mɔ̀.
H-be-gyɛ́mɔ̀
OBJ.LINK-be8-good.manner
'Even if you don't like him, you must still be polite [= lit. see good manners].'

(792) à bwámɔ́ djî [**tɔ̀** mpù á
a bwámɔ-H djî tɔ̀ mpù á
3S.PST receive-PST1 ∅7.position even like.this 3S.PST.NEG
sàlɛ́ sílɛ́ sùkúlì.]$_{ADV}$
sàlɛ́ sílɛ-H sùkúlì
NEG.PST finish-R ∅7.school
'He got the job although he didn't finish school.'

Causal *púù yá* 'because' *púù yá* marks the causal relation relation between the main clause and the dependent clause it introduces. Strictly speaking it is not an adverbial though, but a noun and an attributive marker, literally

meaning 'reason of'. The dependent clause that follows *oúù 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 (793).

(793) yà nzí gyâ djìí [**púù** **yá** lévídó
ya nzî-H gyâ djìí púù yá le-vídó
1P.PST PROG-R sleep ∅7.forest ∅7.reason 7:ATT le5-darkness
lè múà djî.]
le múà djî
5.PST PROSP ∅7.forest
'We slept in the forest because it was about to get dark in the forest.'

Comparable to *líní* 'when, *púù* can also be used with a complementizer, as shown in section 7.2.4.

In the corpus, *púù yá* is not used to introduce subordinate clauses, but only in oblique phrases, as discussed in chapter 6.2.1.3. 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 (794).

(794) tè mɛ̀ɛ̀ djíbì kɛ̀ lwɔ̂ tè, [**àmú** vâ mɛ̀ɛ́
tè mɛ̀ɛ̀ djíbì kɛ̀ lwɔ̂ tè àmú vâ mɛ̀ɛ́
there 1S.FUT first go build there because[Bulu] here 1S.NEG
bɛ́lɛ́ nà sí ɛ́ va]
bɛ́-lɛ́ nà sí ɛ́ vâ
be-NEG COM ∅ 9.ground LOC here
'There, I will first go construct there because here I don't have any land.'

7.2.3.2 Conditional Clauses with *ká* 'if'

The adverbial *ká* 'if' introduces conditional clauses, comparable to *if*-clauses in English.[9] *ká* has been observed to also function as a temporal rather than a conditional marker, as shown in (795).

[9]These conditional clauses have the same structure as other full adverbial clauses. I treat them in their own section only for the convenience of the reader in order to find them more easily in the grammar.

(795) [**ká** á dígɛ́ nâ [gesture],] á nyɛ́
ká a-H dígɛ-H nâ [gesture] a-H nyɛ̂-H
when 1-PRES look-R COMP [gesture] 1-PRES see-R
mbúmbù wɛ́ɛ̀ á pámò.
mbúmbù w-ɛ́ɛ̀ a-H pámo
∅1.namesake 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 (796) through (798). The sentences in (796) and (797) show that the basic word order in the dependent clause is maintained.

(796) [**ká** wɛ́ wúmbɛ́ djímbɛ̀lɛ̀ lébímbú]$_{\text{COND}}$ déè
ká wɛ-H wúmbɛ-H djímbɛlɛ H-le-bímbú déè
if 2S-PRES want-R lose OBJ.LINK-le5-weight eat.SBJV
pɛ́mbɔ́ mwánɔ̀ sâ.
pɛ́mbɔ́ m-wánɔ̀ sâ
∅7.bread N1-child ∅7.thing
'If you want to lose weight, eat less bread.'

The same is true for negated conditional clauses, as in (797).

(797) [**ká** wɛ̀ɛ́ wúmbɛ́lɛ́ ndáà,]$_{\text{COND}}$ mɛ́ nɔ̀ɔ́ nkwɛ̂
ká wɛ̀ɛ́ wúmbɛ-lɛ́ ndáà mɛ-H nɔ̀ɔ̀-H nkwɛ̂
if 2S.PRES.NEG want-NEG also 1S-PRES take-R ∅3.basket
wá mábɔ́'ɔ̀.
wá H-ma-bɔ́'ɔ̀
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 (798). 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.

(798) [**ká** kɛ́ɛ́sɔ́ yí wúmbɛ́ wɛ̂ dyɔ̀dɛ̀,]$_{\text{COND}}$ wɛ́
ká kɛ́ɛ́sɔ́ yi-H wúmbɛ-H wɛ̂ dyɔ̀dɛ wɛ-H
if ∅7.égal 7-PRES want-R 2S.OBJ deceive 2S-PRES
kílɔ̀wɔ̀.
kílɔwɔ.
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 (799).

(799) mɛ̀ɛ̀ njì nàmɛ́nɔ́ [**ká** Àdà á wúmbɛ́ nâ mɛ́
mɛ̀ɛ̀ njì nàmɛ́nɔ́ ká Àdà a-H wúmbɛ-H nâ mɛ-H
1S.FUT come tomorrow if PN 1-PRES want-R COMP 1-PRES
pándɛ́ɛ̀.]$_{\text{COND}}$
pándɛ́ɛ̀
arrive.SBJV
'I will come tomorrow if Ada wants me to come.'

Irrealis marking of conditonal 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 (800) through (803). Generally, the same TM category is used in the conditional clause that is also used in the main clause. Thus, in (800), the main clause appears in the PRESENT and so does the conditional clause. When the PRESENT TM 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 *pílì* 'when'.

(800) [**ká** mɛ́ bwé nkwànò,]$_{\text{COND}}$ mɛ́ dè.
ká mɛ-H bwè-H nkwànò mɛ-H dè
if 1S-PRES obtain-R ∅3.honey 1S-PRES eat
'If I get honey, I eat [it].'

In order to mark irrealis conditions, other TM categories are used. The most salient strategy to mark a conditional clause as irrealis, however, is the use of the irrealis marker *kɔ̀*. In (801), for instance, the main and conditional clause appear in the FUTURE. The speaker can then choose to use the irrealis

marker *kɔ̀* in order to express that it is rather unlikely that he will find honey. If *kɔ̀* is not used, the speaker indicates that it is more likely to find honey in the future.

(801) [**ká** mɛ̀ɛ̀ bwé nkwànò,]$_{\text{COND}}$ (kɔ̀) mɛ̀ɛ̀ dè.
ká mɛ̀ɛ̀ bwè-H nkwànò kɔ̀ mɛ̀ɛ̀ dè
if 1S.FUT obtain-R ∅3.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 (802) shows. Parantheses around *kɔ̀* indicate its optionality. Again, when the irrealis marker is used, is emphasizes the likelihood that the event of the main clause will not happen. In contrast to the PRESENT use in (800), the RECENT PAST seems to indicate a lower likelihood of finding honey.

(802) [**ká** mɛ̀ bwé nkwànò,]$_{\text{COND}}$ (kɔ̀) mɛ̀ dé.
ká mɛ bwè-H nkwànò kɔ̀ mɛ dè-H
if 1S.PST1 obtain-R ∅3.honey IRR 1S.PST1 eat-PST
'If I obtained honey, I would eat [it].'

The only circumstances where *kɔ̀* is systematically used is the clear irrealis context which is further expressed by the REMOTE PAST. This is shown in (803). Here, the speaker talks about an event that clearly did not happen.

(803) [**ká** mɛ́ɛ̀ bwé nkwànò,]$_{\text{COND}}$ kɔ̀ mɛ́ɛ̀ dé.
ká mɛ́ɛ̀ bwè-H nkwànò kɔ̀ mɛ́ɛ̀ dè-H
if 1S.PST2 obtain-R ∅3.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 TM categories in conditonal clauses stem from elicitation. Therefore, an investigation of the frequency of other TM categories in conditional clauses requires a significantly larger corpus in future research.

7.2.3.3 Infinitival Adverbial Clauses

The second type of adverbial clauses is not expressed by a full dependent clause, but by an infinitival clause which lacks both explicit subject and tense-mood marking. While all infinitival adverbial clauses lack tense-mood marking, the absence of a subject is the usual case, but not absolute. There

are examples where a subject occurs, but the verb still appears in its infinitival form.

Infinitival adverbial clauses are comparable to asyndetic infinitival subordinate clauses, as discussed in section 7.2.1.1 with the difference that the adverbial is required in these circumstances. Omitting the adverbial either changes the meaning or makes the sentence ungrammatical altogether. Therefore, the dependent clause cannot be considered asyndetic, but the adverbial is the device that grammatically marks the clause as a dependent clause. There are three adverbials that entail an infinitival dependent clause: *tí* expressing negation and *vɛ̀ɛ̀* and *kɔ́ɔ̀* serving as sequential markers.

Negation with *tí* In contrast to asyndetic infinitival subordinate clauses, which can be both preposed and postposed, infinitival clauses that are introduced by an adverbial follow the main clause. As explained in section 7.2.1.1, preposed asyndetic infinitival clauses usually express temporal sequences while postposed clauses often encode purpose. None of these functions hold for adverbial infinitival clauses, which is probably the reason why these sentences are considered as ungrammatical without the adverbials. The adverbial *tí* rather expresses simultaneity, as shown in (804) and (805).

(804) à múà nà bábɛ̀ [**tí** wúmbɛ̀ wɛ̀.]
a múà nà bábɛ̀ tí wúmbɛ wɛ̀
1S be COM ∅7.illness NEG want-R die
'He was sick, without wanting to die.'

The main clause in (804) is comprised of a verbal copula construction and modified by the adverbial infinitival clause. Semantically, the event of the main and the subordinate clause happen simultaneously: the person is sick and, at the same time, does not want to die.

As with asyndetic infinitival clauses, the subject of the dependent clause is not explicit, but a matter of interpretation whether the subject of the dependent clause is co-referential with the subject of the main clause or not. While, in (804), the implied subject of the dependent clause is co-referential with the one of the main clause, this is not the case in (805). Here, the subject of the main clause is the healer who roams the forest in the shape of an antilope while the implied subject of the dependent clause

is the people of the village, while the healer is the object referent of the dependent clause (‘without seeing him [= the healer])’.

(805) nà kɛ́ djìí dé tù nà ndzǐ pámò dɛ̃̂, [**tí**
nà kɛ-H djìí dé tù nà ndzǐ pámò dɛ̃ tí
COM kè-R ∅7.forest LOC inside COM ∅9.path arrive today NEG
nyɛ̂ nyɛ̀.]
nyɛ̂ nyɛ̀
see 1.OBJ
‘And (he) goes in the forest on the path till today, without seeing him.’

Sequential marker *vɛ̀ɛ̀* *vɛ̀ɛ̀* and *kɔ́ɔ̀* are both used as sentential modifiers, as described in chapter 6.2.4. They can also introduce an adverbial infinitival clause when they directly precede the verb. Only in this position do they alter the clause type to an infinitival dependent clause. In (806), the verb *bɛ́dɛ* ‘light’ surfaces without a realis marking metatonic H tone and has thus to be considered as an infinitive.

(806) à nɔ̀ɔ́ brìkɛ̂, [**vɛ̀ɛ̀** bɛ́dɛ̀ ndáwɔ̀.]
a nɔ̀ɔ̀-H brìkɛ̂ vɛ̀ɛ̀ bɛ́dɛ ndáwɔ̀
1.PST1 take-R ∅1.lighter[French] SEQU light ∅9.house
‘He took the lighter, just lighting the house.’

The adverbial in (806) can be omitted without making the sentence ungrammatical. It changes, however, the sentence’s meaning. Without the adverbial, the asyndetic dependent clause would express purpose ‘He took the lighter in order to light the house.’ The intended meaning with the adverbial is sequential: the person first takes the lighter and then lights the house on fire.

A special case is presented in (807) where the infinitival clause has an overt subject. The verb *kwè* ‘fall’ appears still in its infinitival form, lacking the metatonic 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.

(807) má dvúmɔ́lɛ́ mbvú mbì mbvû, [màlɛ́ndí
ma-H dvúmɔ́-lɛ́ mbvú mbì mbvû ma-lɛ́ndí
6-PRES produce-NEG ∅3.year like[Kwasio] ∅3.year ma6-palm.tree
máà **vɛ̀ɛ̀** kwè mípìndí.]
máà vɛ̀ɛ̀ kwè H-mi-pìndí
6.DEM.PROX only fall OBJ.LINK-mi4-non.ripe
'They don't produce [fruit] every year, these palm trees only falling non-ripe [fruit].'

Sequential marker *kɔ́ɔ̀* The sequential marker *kɔ́ɔ̀* seems to have exactly the same fucntion as *vɛ̀ɛ̀* when introducing a dependent clause. While both sentential modifiers are compared in chapter 6.2.4, their potential distributional and semantic differences is even less clear as clause introducing devices. It rather seems that they are freely interchangeable in this function. An example of *kɔ́ɔ̀* introducing an adverbial infinitival clause is given in (808).

(808) à djí mbɛ̂, [**kɔ́ɔ̀** gyíbɔ̀ bwánɔ̀.]
a djì-H mbɛ̂ kɔ́ɔ̀ gyíbɔ bwánɔ̀
1.PST1 open-R ∅3.door SEQU call ba2-child
'She opened the door, just calling the children.'

As with *vɛ̀ɛ̀*, omitting the adverbial in (808) gives a purpose reading of 'She opens the door in order to call the children.' In contrast, *kɔ́ɔ̀* gives a sequential interpretation.

7.2.4 Attributive Clauses with *nâ*

The fourth type of attributive subordinate clauses, along with asyndetic, relative, and adverbial clauses, are those that use *nâ*. I generally classify *nâ* as a complementizer and gloss this grammatical morpheme as such, since this seems to be its primary function. Also, attributive complementizer clauses share some prosodic features with true complement clauses, as discussed in section 7.2.5, in that the main and the dependent clause are treated as one intonation unit, as we shall see below. In terms of its function, however, *nâ* also introduces subordinate clauses which modify the main clause rather than replacing an argument.

In attributive clauses with *nâ*, the complementizer can either occur on its own, or it can co-occur with an adverbial. In both cases, the dependent

clause serves as an attributive addition to the main clause, containing information that is not grammatically required, unlike true complement clauses. As such, these clauses are comparable to oblique phrases with the difference that they are clausal rather than phrasal.

7.2.4.1 Bare Complementizer Constructions

Bare attributive clauses with *nâ* belong to one intonation unit with the main clause they modify. This is seen in (809) where the verb of the main clause takes a metatonic H tone which it would not if it was at the end of an intonation phrase. As such, attributive complementizer clauses differ from other types of attributive clauses such as relative or adverbial clauses. The *nâ* clause is, however, clearly a dependent clause. A diagnostic for this status is the use of the subordinate PROGRESSIVE form in (809). Attributive complementizer clauses are generally postposed to the main clause, as this example also shows. This is another difference to other attributive subordinate clauses.

(809) mɛ́ sìsɔ́ [**nâ** mɛ́ **nzɛ́ɛ́** nyɛ̂
mɛ-H sìsɔ-H nâ mɛ-H nzɛ́ɛ́ nyɛ̂
1S-PRES be.happy-R COMP 1S-PRES PROG.SUB see
mándáwɔ̀.]$_{\text{COMP}}$
H-ma-ndáwɔ̀
OBJ.LINK-ma6-houses
'I'm happy that I'm seeing the houses.'

Bare complementizer clauses can also follow main clauses that are comprised of cleft constructions, as in (810). In this example, the main clause expresses a prohibition while the dependent clause specifies what the prohibition is about. (810) also provides further evidence that the *nâ* clause is a dependent clause since it includes the SUBJUNCTIVE form of the verb. As explained in chapter 5.2.4.7, SUBJUNCTIVES usually appear in subordinate clauses.

(810) yîì mpíndá [**nâ** mɛ́ déè.]$_{\text{COMP}}$
yîì mpíndá nâ mɛ-H déè
7.COP ∅9.prohibition COMP 1S-PRES eat.SBJV
'It is forbidden that I eat.'

A common function of attributive bare complementizer clauses is to express purpose and/or intention. This is demonstrated in (811) and (812).

(811) ɔ̀ múà gyésɔ̀ [**nâ** wɛ́ kɛ̀.]$_{COMP}$
ɔ múà gyésɔ nâ wɛ-H kɛ̀
2S[Kwasio] RETRO search COMP 2S-PRES go
'you are about to want to leave.'

While (811) takes a PRESENT TM marking in the *nâ* clause, the SUBJUNCTIVE is used in (812). Both TM categories seem to equally possible in this context.

(812) á lúndɛ́lɛ́ bɔ̂ lèkàá lé ndáwɔ̀ nyî
a-H lúndɛlɛ-H bɔ̂ le-kàá lé ndáwɔ̀ nyî
1-PRES fill-R 2.OBJ le5-kind 5:ATT ∅9.house 9.DEM.PROX
[**nâ** bɛ́ɛ̀ vyâ.]$_{COMP}$
nâ bɛ́ɛ̀ vyâ
COMP be.SBJV full
'He fills them in this kind of house that it [house] be full.'

Bare complementizer clauses with *nâ* not only modify main clauses, but also other dependent clauses, as for instance adverbial subordinate clauses in (813). In this example, the adverbial clause precedes the main clause and so does the complementizer clause which modifies the adverbial clause.

(813) [pílì wɛ́ kɛ́ [**nâ** wɛ́ kɛ́ djíì mònɛ́
pílì wɛ-H kɛ̀-H nâ wɛ-H kɛ̀-R djíì mònɛ́
when 2S-PRES go-R COMP 2S-PRES go-R ask ∅1.money
wɔ̂,]$_{COMP}$]$_{ADV}$ á làwɔ́ wɛ̂ nyùmbò.
w-ɔ̂ a-H làwɔ-H wɛ̂ nyùmbò
1-POSS.2S 1-PRES tell-R 2S ∅3.mouth
'When you go to go ask for your money, he frowns at you.'

7.2.4.2 Adverbials + Complementizer Constructions

In contrast to bare complementizer attributive clauses, 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.

Temporal adverbials There are two temporal adverbials in Gyeli which combine with the complementizer *nâ*, namely *lí* 'when' and *sɔ́ɔ̀* 'before'. This is most likely not an exhaustive list and other adverbials might be possible in this construction type as well.

(814) 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.

(814) mɛ̀ nzí nɔ̂ fɔ́tɔ̀ [**lí** **nâ** Àdà à
mɛ nzî-H nɔ̂ fɔ́tɔ̀ lí nâ Àdà a
1S.PST PROG.PST1 take ∅1.photo when COMP PN 3S.PST
nzí bɛ̀ à nzɛ́ɛ́ dè mántúà.]
nzî-H bɛ̀ a nzɛ́ɛ́ 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 (815) precedes the main clause it modifies. In this example, the adverbial *sɔ́ɔ̀* 'before' is used, expressing anteriority. Thus, the event of the main clause happens before the event of the subordinate clause.

(815) [**sɔ́ɔ̀** **nâ** á pámó tísɔ̀nì,] á súmɛ́lɛ́
sɔ́ɔ̀ nâ a-H pámo-H tísɔ̀nì a-H súmɛlɛ-H
before COMP 1-PRES arrive-R ∅7.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 to the noun plus attributive construction *púù yá* which is discussed in section 7.2.3.1. An example is provided in (816).

(816) yá pándɛ́ nà síŋgìlìtì [**púù** **nâ** wɛ́
ya-H pándɛ-H nà síŋgìlìtì púù nâ wɛ-H
1P-PRES arrive-R COM ∅1.shirt ∅7.reason COMP 2S-PRES
bwádɔ́ɔ̀ nyɛ̀ púù màbwálɛ́.]
bwádɔ́ɔ̀ nyɛ̀ púù ma-bwálɛ́.
wear.SBJV 1.OBJ ∅7.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'.

7.2.5 Complement Clauses

Sentential complementation is restricted to verbs of perception ('hear', 'see'), consciousness ('know', 'remember', 'think'), and intention ('want', 'like') in Gyeli. While, structurally, complement clauses seem to be identical with bare complementizer clauses, they differ from those in that they are not attributive, but serve as a complement to the main clause. Noonan (2007: 52) 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."

Thus, while the main clause in (809), repeated here in (817), can appear on its own, the *nâ* clause being attributive and optional, the main clause in (818) is incomplete without the complementizer clause.[10]

(817) mɛ́ sìsɔ́ [**nâ** mɛ́ **nzɛ́ɛ́** nyɛ̂
mɛ-H sìsɔ-H nâ mɛ-H nzɛ́ɛ́ nyɛ̂
1S-PRES be.happy-R COMP 1S-PRES PROG.SUB see
mándáwɔ̀.]
H-ma-ndáwɔ̀
OBJ.LINK-ma6-houses
'I'm happy that I'm seeing the houses.'

Both, the attributive and the complement *nâ* clause have in common that they form one intonation unit with the main clause, as indicated by the metatonic H tone on the verb *sìsɔ* 'be happy' in (817) and *wúmbɛ* 'want' in (818). Further, in both cases, the *nâ* clause is a dependent clause, as suggested by the occurrence of the SUBJUNCTIVE in (818) which is generally restricted to subordinate clauses.

[10] I do acknowledge, however, that the presented predicates of the main clauses in complementation may not inherently be transitive and thus, by means of their valency, require an object. There are certainly contexts in which these predicates can be intransitive. Also, objects can be elided under certain circumstances. In the presented examples, however, the *nâ* clauses are syntactically required and not optional.

(818) mɛ́ wúmbɛ́ [**nâ** á gyámbɔ́ɔ̀ bèdéwɔ̀.]$_{COMP}$
mɛ-H wúmbɛ-H nâ a-H gyaḿbɔ́ɔ̀ be-déwɔ̀
1S-PRES want-R COMP 3S-PRES cook.SBJV be8-food
'I want her/him to cook food.'

Apart from verbs expressing intention, such as *wúmbɛ* 'want', also verbs of consciousness serve as predicates to complement clauses. This is the case, for instance, with *lèmbo* 'know', as shown in (819) and (820).

(819) á lèmbó [**nâ** bùdì báà bá múà
a-H lèmbo-H nâ b-ùdì báà ba-H múà
1S-PRES know-R COMP ba2-person 2.DEM.PROX 2-PRES PROSP
búɛ̀lɛ̀ **nâ** bá dyúù nyɛ̀.]$_{COMP}$
búɛlɛ̀ nâ ba-H dyúù nyɛ
fish COMP 2-PRES kill.SBJV 1.OBJ
'He knows that these people are about to fish (look for him) in order to kill him.'

(820) ndí wɛ́ lèmbó [**nâ** mbvúndá nyîì bvúdà nà
ndí wɛ-H lèmbo-H nâ mbvúndá nyîì bvúda nà
but 2S-PRES know-R COMP ∅9.trouble 9.FUT fight COM
mbvúndá.]$_{COMP}$
mbvúndá
∅9.trouble
'But you know that trouble would fight with trouble.'

The same is true for *bvû* 'think', as in (821).

(821) mɛ́ bvú [**nâ** nkwálá wúù tfùndɛ́ mɛ̀
mɛ-H bvû-H nâ nkwálá wúù tfùndɛ-H mɛ̀
1S-PRES think-R COMP ∅3.machete 3.PST2 miss-R 1S.OBJ
vâ.]$_{COMP}$
vâ
here
'I think that the machete had missed [= injured] me here.'

Finally, also verbs of perception can function as predicates of complement clauses. An example is given in (822).

(822) mɛ́ dyúwɔ́ [**nâ** mpàgó wá pɔ́dɛ̀ lā́ vâ.]$_{COMP}$
mɛ-H dyúwɔ-H nâ mpàgó wá pɔ́dɛ̀ lā̀-H vâ
1S-PRES hear-R COMP ∅3.street 3:ATT ∅1.port pass-R here
'I hear that the road to the port passes [= will pass] here. '

Traditionally, also quotes in reported discourse are viewed as a subtype of sentential complementation. As I will show in the following section, however, reported discourse constructions are formally not the same.

7.3 Reported Discourse

Reported discourse (RD) represents a special instance in which the complementizer *nâ* is systematically used. As we shall see below, *nâ* clauses in reported discourse are different from both attributive and complement uses. Before arguing for this hypothesis, I first define the terminology related to reported discourse, following 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 (823), the unit marked as 'QI' introduces the reported text which, in turn, is marked by 'RD'.

(823) [yɔ́ɔ̀ bá kí **nâ**]$_{QI}$ [ɛ́ɛ́kɛ̀ mwánɔ̀ wɛ́ɛ̀ mùdə̂̀
yɔ́ɔ̀ ba-H kì-H nâ ɛ́ɛ́kɛ̀ m-wánɔ̀ w-ɛ́ɛ̀ m-ùdə̂̀
so 2-PRES say-R COMP EXCL N1-child 1-POSS.3S N1-woman
wà nù à bwə́ə̂̀.]$_{RD}$
wà nù a bwə́ə̂̀
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".'

Prosodically, the complementizer *nâ* belongs to the QI and not to the quote, which is indicated by a pause after the complementizer.[11] In some cases, the complementizer also undergoes salient lengthening, in addition

[11]This phenomenon has also been noted, for instance, in Hausa, as Güldemann (2008: 236) points out.

to the following pause, as shown in (824).[12] This does not happen in attributive or complement clauses where *nâ* rather belongs to the dependent clause.

(824) Speak Gyeli!

[mɛ́	làwɔ́	**náà**]$_{QI}$	[màndáwɔ̀	má	zì	má
mɛ-H	làwɔ-H	nâ	ma-ndáwɔ̀	má	zì	ma-H
1S-PRES	talk-R	COMP	ma6-house	6:ATT	∅7.tin	6-PRES
kùgáà		mɛ̀	vâ.]$_{RD}$			
kùgáà		mɛ	vâ			
be.enough.SBJV		1S.OBJ	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 (823) with the say-verb *kì* 'say', which is the most common and frequent predicate in a QI, and in (824) with *làwɔ* 'talk'. Another element that can appear in the QI is the verbal copula *bùdɛ́* 'have', as shown in (825).

(825)

[mais	mɛ̀	bùdɛ́	nâ]$_{QI}$	[ɛ́	pɛ̀,	ɛ́	wû
mais	mɛ	bùdɛ-H	nâ	ɛ́	pɛ̀	ɛ́	wû
but[French]	1S	have-R	COMP	LOC	over.there	LOC	there
bèyá		lwɔ̃́	kwádɔ́	yɑ̃̂	ɛ́	wû.]$_{RD}$	
bèya-H		lwɔ̃̂-H	kwádɔ́	y-ɑ̃̂	ɛ́	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 *bùdɛ́* is used in a QI, it generally seems to imply a wish, request, order, or some sort of intention expression, as also shown in (826).

(826)

[bvúlɛ̀	bà	bùdɛ́	nâ]$_{QI}$	[ká	wɛ̀	ŋgyɛ̀lì	wɛ̀ bùdɛ́ tʃídí
bvúlɛ̀	ba	bùdɛ-H	nâ	ká	wɛ	ŋ-gyɛ̀lì	wɛ bùdɛ-H tsídí
ba2.Bulu	2	have-R	COMP	if	2S	N1-Gyeli	2S have-R ∅1.animal
wɔ̂]$_{RD}$	bá	sɛ̀ŋgɛ́	nyɛ̂	sí.			
w-ɔ̂	ba-H	sɛ̀ŋgɛ-H	nyɛ̂	sí			
1-POSS.2S	2-PRES	lower-R	1.OBJ	down			

'The Bulu say that if you, Gyeli, you have your animal, they lower it [= its price].'

[12] 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.

QIs in Gyeli can also occur without any predicate at all. Minimally, they contain speaker reference and the complementizer. This is demonstrated in (827) where the QI is only comprised of the speaker reference *nyɛ̀* and the complementizer *nâ*.

(827) [nyɛ̀ nâ]$_{QI}$ [ooh mùdə̂̀, bàmbɛ́, kɛ̀ djíì mbɔ́mbɔ̀
nyɛ̀ nâ ooh m-ùdə̂̀ bàmbɛ́, kɛ̀ djíì mbɔ́mbɔ̀
3S COMP EXCL N1-woman sorry go ask.IMP ∅1.namesake
mwánɔ̀ sá yí dè.]$_{RD}$
m-wánɔ̀ sá yí dè
N1-child ∅7.thing 7.DEM eat
'He: 'Oh, wife, excuse me, go and ask the namesake [the other Nzambi] for a little to eat."

In addition to its special prosodic feature which suggest that *nâ* belongs to the QI and not the quote, non-clausal QIs as in (827) provide another argument against analyzing reported discourse as sentential complementation. These non-clausal QIs, which occur pervasively in the corpus, do not possess any predicate that could require a complement clause.[13] 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 these 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 to direct reported discourse. In the corpus, most instances of reported discourse are direct. There are, however, also examples of indirect speech, as in (828).

[13]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.

(828) [mùdì wà sɔ̀ndyɛ́ à nzí kí nâ]$_{QI}$ [ká mɛ̀
m-ùdì wà sɔ̀ndyɛ́ a nzî-H kì-H nâ ká mɛ
N1-person 1:ATT ∅1.police 3S.PST PROG-R say COMP if 1S.PST
nyɛ́ àksìdɛ̂̃.]$_{RD}$
nyɛ̂-H àksìdɛ̂̃
see-R ∅1.accident[French]
'The police officer asked whether I saw that accident.'

This concludes a brief discussion of complex clauses in Gyeli. This discussion is clearly not exhaustive and I fully expect that larger corpora and further investigation would lead to uncovering further intricacies in the Gyeli system.

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.

I use the notational convention that when morpheme breaks are opaque, no morpheme break is indicated at all. 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.

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
bâ	marry	bán-ala	-	bál-ɛsɛ	-	-	-
bà	smoke sth.	báy-ala	-	-	-	bày-aga	-
báàla (nà)	repeat	-	-	-	-	-	-
báàlɛ	protect, guard	báà-la	báàl-a	-	-	-	-
bága (nà)	stop sth.	bá-ala	-	-	-	-	-
bàkɛ	glue, post	-	bàg-a	-	-	-	-
bálɛ	surpass	-	bál-a	-	-	-	-
bál**ɔwɔ**	bend down	-	bálawa	-	-	-	-
bámɔ	scold	bám-ala	bám-a	-	bám-ɛlɛ	-	-
bàwɛ	carry	bàw-ala	bàw-a	bàw-ɛsɛ	-	-	-
báwɛ	injure (oneself)	báw-ala	-	báw-ɛsɛ	-	-	-
bɛ̀	sow, plant	bèy-ala	bɛ̀y-a	-	-	-	-
bɛ́dɛ	light	bɛ́d-ala	-	-	-	bɛ́d-ɛga	-
bédɔ	go up, mount	béd-ala	béd-a	béd-ɛsɛ	béd-ɛlɛ	béd-ɛga	-
bédo	ferment	-	béd-a	-	-	-	-
bɛ̀làn**ɛ**	use	-	bèlàn-a	-	-	-	-
bén**ɛlɛ**	raise, lift	bén-ala	bénala	-	-	bén-ɛga	-
bènɔ	refuse	bèn-ala	bèn-a	-	-	-	-
béyɔ	ripen	-	-	bél-ɛsɛ	-	béy-aga	-
bígɛ	develop, emerge	-	-	bíg-ɛsɛ	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
bísi (nà)	pay attention	-	-	-	-	-	-
bíyɔ	hit	bín-ala	bíl-a	bíl-ɛsɛ	bìy-ɛlɛ	-	-
bɔ̀	rot	-	-	bɔ̀y-ɛsɛ	-	-	-
bɔ̀gɛ	enlarge	bɔ̀g-ala	bɔ̀g-a	bɔ̀g-ɛsɛ	-	-	-
bɔ́m**ɛlɛ**	wrinkle	bɔ́m-ala	-	-	-	-	-
bû	destroy	búy-ala	búy-a	-	-	-	-
bô	lie down (intr.)	-	búg-a	-	-	-	-
búlɛ	burst	-	búl-a	-	-	-	-
búlɔ	fish	búl-ala	búl-a	-	-	-	-
búmɛ	bark	búm-ala	-	-	-	-	-
bùmɛ	announce sth.	bùm-ala	bùm-a	-	-	-	-
bùm**ɛlɛ**	hit (nail)	bùm-ala	bùmal-a	-	-	-	-
búndɔ	pay brideprice	búnd-ala	búnd-a	búnd-ɛsɛ	-	-	-
búw**ɛlɛ**	tâter (fruit)	-	búwal-a	-	-	-	-
bvû	think, believe	bvú-ala	-	-	-	-	-
bvúda (nà)	quarrel	bvúd-ala	-	-	-	-	-
bvùma	thunder	-	-	-	-	bvùm-aga	-
bvùmba	surprise, scare	bvùmb-ala	-	-	-	-	-
bvúɔ̀	break (tr.)	bvúg-ala	bvúg-a	-	-	-	-
bwə̂sa	think, remember	-	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
bwɛ́ɛ̃**lɛ**	wait	bwɛ́-ãla	-	-	-	-	-
bwà	give birth	-	-	bwàl-ɛsɛ	-	-	-
bwà	become big	bɔ̀g-ala	-	-	-	-	-
bwádɔ	dress, wear	bɔ́d-ala	-	bɔ́d-ɛsɛ	-	-	-
bwámɔ	receive	bwám-ala	bwám-a	-	-	-	-
bwàndɔ	peel (mango)	bwànd-ala	bwànd-a	-	-	-	-
bwàndya	despise	bwàndy-ala	-	-	-	-	-
bwè	catch, arrest	bèy-ala	bùl-ɛ	-	-	-	-
bwɛ̀d**ɔwɔ**	be tasty	-	-	bɔ̀d-ɛsɛ	-	-	-
byáàda	answer	-	-	-	-	-	-
dɛ̀	draw water	dɛ̀ŋg-ala	dɛ̀ɛ̀l-a	-	dɛ̀-ãlɛ	-	-
dè	eat	díy-ala	díb-a	díl-ɛsɛ	-	-	-
dɛ́ndɛ	set trap	dɛ́nd-ala	dɛ́nd-a	-	-	-	-
dìlɛ	bury	dìl-ala	dìl-a	-	-	-	-
djímbɛ	get lost	djímb-ala	-	djímb-ɛsɛ	djímb-ɛlɛ	-	-
djɛ́ɛ̀sa	disappear	djɛ́-ɛ̀la	-	-	-	-	-
djàŋg**ala**	have sex	-	-	-	-	-	-
djì	open	djìy-ala	djìy-a	-	-	-	-
djì(yɔ)	sit, habiter	djìl-ala	djìl-a	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
djìbɔ̀	close	djìb-ala	djìb-a	-	-	-	-
djílɔ	be satisfied	-	-	djíl-ɛsɛ	-	-	-
djìlɔ	be heavy	-	djìl-a	djìl-ɛsɛ	-	-	-
djím**ɛsɛ**	extinguish	-	djím-a	-	-	-	-
djímɔ	be deep	-	-	-	-	-	-
djìna	dive	-	-	djìn-ɛsɛ	-	djìn-ɛga	-
djíwɔ	steal	djíb-ala	djíb-a	-	-	-	-
djíyɛ	burn (intr.)	djíg-ala	-	djíg-ɛsɛ	-	-	-
dɔ̀	negotiate	-	-	-	-	-	-
dùlɛ	be bitter	dyùl-ala	dyùl-a	dyùl-ɛsɛ	-	-	-
dùmɔ	heal, get well	-	dyùm-a	-	-	-	-
dúna	quarrel	-	-	-	-	-	-
dvùbɔ	soak, dip	dvùb-ala	-	dvùb-ɛsɛ	(dvùb-ɛlɛ)	-	-
dvùdɔ	drive	dvùd-ala	dvùd-a	-	-	-	-
dvúm**ɛlɛ**	praise sb.	dvúm-ala	-	-	-	-	-
dvùmɔ	fall down	dvùm-ala	dvùm-a	dvùm-ɛsɛ	-	-	-
dvùɔ̀	hurt	dvùg-ala	dvùg-a	dvùg-ɛsɛ	-	-	-
dwàmbo	ask for sth.	dwàmb-ala	-	-	-	dwàmb-aga	-
dyǎ̰ǎ̰	chase	dyáŋg-ala	dyáŋg-a	-	-	-	-
dyṵ̌	be hot	dyúŋg-ala	-	-	dyúŋg-ɛlɛ	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
dyà	sing	dyà-ala	dyày-a	-	-	-	-
dyâ	lie down	dyá-ala	-	-	-	-	-
dyɛ́gɛ	lean sth.	dyɛ́k-ala	-	-	-	-	dyɛ́g-ɔwɔ
dyɔ̀	laugh	dyɔ̀-ala	dyɔ̀las-a	dyɔ̀l-ɛsɛ	-	-	-
dyɔ̀dɛ	deceive	dyɔ̀d-ala	dyɔ̀d-a	-	-	-	-
dyû	kill	dyúw-ala	dyúw-a	-	-	-	-
dyúà	swim	-	-	-	-	-	-
dyúwɔ	hear	dyúw-ala	-	dyúg-ɛsɛ	dyúw-ɛlɛ	-	-
dyúàda	perceive	-	-	-	-	-	-
dzámɛ	excuse	-	-	-	-	-	-
fù**ɛsɛ**	shake	-	-	-	-	-	-
fúgɛ	end	fú-ala	-	-	-	-	-
fùlɛ	miss	fù-ala	-	fùl-ɛsɛ	-	-	-
fùlɔ	descend	-	fùl-a	fùl-ɛsɛ	-	-	-
gìyɔ (gyì)	cry	gyìl-ala	-	gìl-ɛsɛ	-	-	-
gyə̂̀	paint	-	gyàŋg-a	-	-	-	-
gyə̂̀lɛ	roast	-	-	-	-	-	-
gyàga	buy	gyàg-ala	-	-	-	-	-
gyámbɔ	cook	gyámb-ala	gyámb-a(a)	-	gyámb-ɛlɛ	gyámb-aga	-
gyáŋgya	work	gyáŋga-ala	-	gyáŋg-ɛsɛ	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
gyɛ́'è	block	gyɛ́g-ala	gyɛ́g-a	-	-	-	-
gyè'**ɛlɛ**	pray, beg	-	-	-	-	-	-
gyɛ́lɛ	jump, fly	gyɛ́l-ala	gyɛ́l-a	gyɛ́l-ɛsɛ	-	-	-
gyɛ̀ndɔ	slip	-	gyɛ̀nd-a	-	-	-	-
gyɛ́sɔ	search	gyɛ́s-ala	gyɛ́s-a	-	-	-	-
gyíbɔ	call	gyíb-ala	gyíb-a	-	-	-	-
gyìbɔ	sharpen	gyìb-ala	gyìb-a	-	-	-	-
gyìdɛ	forgive	-	gyìd-a(a)	-	-	-	-
gyíka (nà)	resemble	-	-	-	-	-	-
gyíkɛ	learn	-	-	gyík-ɛsɛ	-	-	-
gyímbɔ	dance	gyímb-ala	gyímb-a(a)	gyímb-ɛsɛ	-	-	-
gyímɛ	wake sb	-	gyím-a(a)	gyím-ɛsɛ	-	gyím-aga	-
kɑ̃̂	wrap	kɑ́-ãla	-	-	-	-	-
kà	catch	-	-	-	kàs-ɛlɛ	-	-
ká'à	role up	kág-ala	-	-	-	-	-
kàdɛ	detach	kàd-ala	-	kàd-ɛsɛ	-	kàd-ɛga	-
kádɔ	be too much	kád-ala	-	-	-	-	-
kàgɔ	promise	kàg-ala	-	-	-	-	-
káka	shiver	-	-	-	-	-	-
kàlanɛ	transmit	-	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
kàl**ɛga**	stop over	-	-	-	-	-	-
kámbɔ	chew	kámb-ala	kámb-aa	-	-	-	-
kàmbɔ (nà)	defend	kàmb-ala	kàmb-a	-	-	-	-
kánda	crack	-	-	kánd-ɛsɛ	-	-	-
kàs**ɛlɛ**	light	kàs-ala	-	-	-	-	-
kásɔ	become thin	kás-ala	-	-	kás-ɛlɛ	kás-ɛga	-
kàbɔ	share	kàb-ala	kàb-a(a)	-	-	-	-
kɛ̀	go	-	-	-	-	-	-
kɛ̃̀	shave	kèŋg-ala	-	-	-	-	-
kɛ́’è	hatch	-	kɛ́g-a(a)	-	-	-	-
kèd**ɛlɛ**	gnaw	kɛ̀d-ala	-	-	-	-	-
kɛ̀lɛ	hang	kɛ̀l-ala	kɛ̀l-a	-	-	-	-
kfúdɛ	cover	kfúd-ala	kfúd-a(a)	-	-	kfúd-ɛga	-
kfùlɔ	scrape	kfùl-ala	kfùl-a	-	-	kfùl-ɛga	-
kfùm**ala**	find	-	kfùm-a(a)	-	-	-	-
kfùbɛ	provoke	kfùb-ala	-	-	kfùβ-ɛlɛ	-	-
kíl**ɔwɔ**	be vigilant	-	-	kíl-ɛsɛ	-	-	-
kíŋg**ɛlɛ**	become stiff	-	-	-	-	-	-
kìya	give	kìy-ala	-	kìy-ɛsɛ	-	-	-
kìyɛ	try, tempt	kìy-ala	-	-	kìy-ɛlɛ	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
kɔ̂	gather, pluck	kɔ́y-ala	kɔ́y-a	-	-	kɔ̀y-aga	-
kɔ́bɛ	violate	kɔ́b-ala	-	-	-	-	-
kɔ́dɛ	turn sth	kɔ́d-ala	kɔ́d-a	kɔ́d-ɛsɛ	-	kɔ́d-ɛga	-
kɔ́gɛ	straighten	kɔ́g-ala	kɔ́g-a	kɔ́g-ɛsɛ	-	-	-
kòla	add	kòl-ala	-	-	-	-	-
kòlɛ	help	kòl-ala	-	-	-	-	-
kɔ̂̀lɛ	snore	-	-	-	-	-	-
kɔ́sɛ	cough	kɔ́s-ala	-	-	kɔ́s-ɛlɛ	-	-
kúɛlɛ	mock	kú-ala	-	-	-	-	-
kùga	spread, fit	-	-	-	-	-	-
kùlɛ	borrow	kùl-ala	-	kùl-ɛsɛ	-	-	-
kùmasa	prepare	-	-	-	-	-	-
kùmbɔ	repair	kùmb-ala	-	-	-	-	-
kwə̂̀	cut raffia	kwàŋg-ala	kwáŋg-a	-	-	-	-
kwə̂̀	betray	kwáŋg-ala	kwáŋg-a	kwáŋg-ɛsɛ	-	-	-
kwə́ə̀̀lɛ	spy	kwə́́l-ala	-	-	-	-	-
kwà	grind	kwàg-ala	kwàg-a	-	-	-	-
kwádɔ	twist sth	-	kwád-a	-	-	kwád-ɛga	kwàd-ɔwɔ
kwàlɛ	love	kwàl-ala	kwàl-a	-	-	-	-
kwànɛ	sell	-	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
kwê	fall, fail	kwéy-ala	-	kù-ɛsɛ	-	-	-
kwêlɛ	bite	kwá-ala	kwáál-a(a)	-	-	-	-
kwɛ̀lɔ	cut down	kwɛ̀l-ala	kwɛ̀l-a(a)	-	-	kwɛ̀l-ɛga	-
kyàlɛ	start engine	-	-	-	-	-	-
kyɛ̀l**ɛga**	fall from tree	kyɛ̀l-ala	-	-	-	-	-
lə̂	read, count	láŋg-ala	láŋg-a	-	-	-	-
lə̀	pass	làŋg-ala	-	-	làŋg-ɛlɛ	-	-
lɛ̀	pour in	lɛ̀ŋg-ala	lɛ̀ŋg-a(a)	-	-	-	-
lə̂	insult	lúŋg-ala	-	-	-	-	-
lə́ə̀	whistle	lóŋg-ala	lóŋg-a	-	-	-	-
lə́ɔ̀	build	lúŋg-ala	-	lúŋg-ɛsɛ	-	-	-
lâ	harvest	léy-ala	léy-a	-	-	léy-ɛga	-
láà	tell	lá-ala	-	-	-	-	-
làdo (nà)	meet	làd-ala	-	làd-ɛsɛ	-	-	-
lága	contaminate intr	lég-ala	-	lég-ɛsɛ	-	-	-
lámbɔ	trap	lámb-ala	lámb-a(a)	-	-	-	-
lána	distribute	lán-ala	-	-	-	-	-
lɛ̂	offer	léy-ala	léy-a	-	-	-	-
lɛ̀b**ɛlɛ**	follow	lɛ̀b-ala	-	-	-	-	-
lɛ̀ɛ̀	uproot	lɛ̀y-ala	lɛ̀y-a	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
légɛ	singe	lég-ala	-	lég-ɛsɛ	-	lég-ɛga	-
lèmbo	know, flee	lèmb-ala	-	lèmb-ɛsɛ	-	-	-
lènd**ɔ**	flow	-	-	lènd-ɛsɛ	-	lènd-ɛga	-
líbɛla	appear	-	-	-	-	-	-
líb**ɛlɛ**	show	líb-ala	-	-	-	-	-
límbɛ	pull	límb-ala	-	-	-	límb-ɛga	-
líyɛ	leave	líg-ala	-	-	-	-	-
líy**ɛlɛ**	accompany	líy-ala	-	-	-	-	-
líyɔ	clear land	líy-ala	líy-a	-	-	líy-aga	-
lɔ̀	sew, weave	lɔ̀y-ala	lɔ̀y-a	lɔ̀y-ɛsɛ	-	-	-
lùà	curse	lɔ̀g-ala	lɔ̀g-a	lɔ̀g-ɛsɛ	-	-	-
lúmɛ	send	lúm-ala	lúm-a	-	lúm-ɛlɛ	-	-
lúnd**ɔ**	fill oneself	lúnd-ala	lúnd-a	lúnd-ɛsɛ	lúnd-ɛlɛ	-	-
lùŋga	grow	-	-	lùŋg-ɛsɛ	-	-	-
lùŋg**ɛlɛ**	aim at	lùŋg-ala	-	-	-	-	-
lúwɔ	bite	lúw-ala	lúw-a	lúw-ɛsɛ	-	-	-
lvúmɔ	sting	lvúm-ala	lvúm-a	lvúm-ɛsɛ	-	-	-
má’à	accuse	mág-ala	mág-a	-	-	-	-
mánd**ɔ**	stuff mouth	mánd-ala	mánd-a	-	mád-ɛlɛ	-	-
méɛ̀lɛ	accept	mɛ́-ala	méɛ́l-a	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
mɛ̀mɔ	admit	mɛ̀m-ala	-	-	-	-	-
mɛ̀sɔ	wave	mɛ̀s-ala	-	-	-	-	-
mgbám**ala**	be sour	-	-	-	-	-	-
mímba	brag	mímb-ala	-	-	-	-	-
mìno	swallow	mìn-ala	-	mìn-ɛsɛ	-	-	-
mú**ɛlɛ**	nibble	mú-ala	-	mú-ɛsɛ	-	-	-
mwàsɔ	throw	mwàs-ala	mwàs-a	-	-	-	-
myàkɛ	sprinkle	myàk-ala	-	myàk-ɛsɛ	-	-	-
myámata	be narrow	-	-	-	-	-	-
myámɔ	knead, press	myám-ala	-	-	-	-	-
náàta (nà)	stick	-	-	-	-	-	-
ndà	cross	ndàŋg-ala	ndàŋg-a	-	-	-	-
ndtámanɛ	ruin, destroy	-	-	-	-	-	-
ŋgwáwɔ	bend, bow	-	-	ŋgwáŋg-ɛsɛ	-	-	ŋgwáŋg-ɔwɔ
níndya	urinate	níndy-ala	-	níndy-ɛsɛ	-	-	-
nìyɛ	be beautiful	níndy-ala	-	níŋg-ɛsɛ	-	-	-
ŋjì	come	-	-	-	-	-	-
nɔ̀ɔ̀	take	nɔ̀ŋg-ala	nɔ̀ŋg-a	-	-	-	-
ntɑ̋ɑ̀	climb over	ntàŋg-ala	-	ntàŋg-ɛsɛ	-	-	-
ntɛ́g**ɛlɛ**	disturb	ntɛ́g-ala	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
nyâ	lick	nyáŋg-ala	-	nyáŋg-ɛsɛ	-	-	-
nyàà	defecate	nyàg-ala	-	nyàg-ɛsɛ	-	-	-
nyàlɛ	scratch	nyàl-ala	-	-	-	-	-
nyàmɔ	deteriorate	nyàm-ala	-	nyàm-ɛsɛ	-	-	-
nyàno	hurt	-	-	-	-	-	-
nyɛ̂	see	nyɛ́n-ala	-	-	-	-	-
nyɛ̀s**ɛlɛ**	deepen, press on	-	-	-	-	-	-
nyì	return	nyìg-ala	-	-	-	-	-
nyî	enter	nyíŋg-ala	-	-	nyíŋg-ɛlɛ	-	-
nyímɛ	refuse	nyím-ala	-	nyím-ɛsɛ	-	-	-
nyímɛ̀l**ɛlɛ**	tighten	nyím-ala	-	-	-	-	-
nyɔ̀mb-ɛlɛ	tickle	nyɔ̀mb-ala	-	-	-	-	-
nyùlɛ	drink	nyùl-ala	-	nyùl-ɛsɛ	-	-	-
nyùmbɔ	smell (intr)	nyùmb-ala	-	nyùmb-ɛsɛ	nyùmb-ɛlɛ	-	-
pa̋	reign	páŋg-ala	-	-	-	-	-
pá’à	dig	pág-ala	-	-	-	-	-
pà’à	grow intr	pàg-ala	-	-	-	-	-
pádɔ	pluck	pád-ala	-	-	-	-	-
pálaba	blink (eye)	-	-	-	-	-	-
pálɔ̀	sort	pál-ala	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
pámo	appear	pám-ala	-	-	-	-	-
pándɛ	arrive	pánd-ala	-	-	-	-	-
pánɛ	hang up	pán-ala	-	pán-ɛsɛ	-	-	-
pàno	shine	-	-	-	-	-	-
pɛ̂	choose	pɛ́y-ala	-	-	-	-	-
pɛ̀nd**ɛlɛ**	lick out	pɛ̀nd-ala	-	-	-	-	-
péndɔ	braid	pénd-ala	pénd-a	-	-	-	-
péya	booze	péy-ala	-	péy-ɛsɛ	-	-	-
pfú**ɛlɛ**	crunch	pfú-ala	-	-	-	-	-
pfùmbɛ	pull out	pfùmb-ala	-	-	-	-	-
pfúndɔ	be frightened	pfúnd-ala	-	pfúnd-ɛsɛ	-	-	-
pfùβ**ɛlɛ**	blow	pfùβ-ala	-	-	-	-	-
pfùwɔ	dust	pfùw-ala	-	-	-	-	-
pímbɛ	wipe	pímb-ala	-	-	-	-	-
pín**asa**	be squeezed	pín-ala	-	pín-ɛsɛ	-	-	-
pɔ́nd**ɛsɛ**	punish	-	-	-	-	-	-
pṹ̃	pay	púŋg-ala	-	-	-	-	-
púndi	polish	púnd-ala	-	-	-	-	-
pùsɛ	push	pùs-ala	-	-	-	-	-
pwàsɔ	stretch	pwàs-ala	-	-	-	-	pwàs-ɔwɔ

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
sə̂̂	vomit	sáŋg-ala	-	sáŋg-ɛsɛ	-	-	-
sə́ə̂̀sa	mix	-	-	-	-	-	-
sə̂̂ (bà)	approach sth	síŋg-ala	-	-	sís-ɛlɛ	-	-
sâ	do	sá-ala	-	-	-	-	-
sá'àwa	move repeatedly	-	-	-	-	-	-
sàga	shock, scare	sàg-ala	-	-	-	-	-
sàlɔ	cut lengthwise	sàl-ala	sàl-ɛ	-	-	-	-
sálɔ	become plenty	-	-	-	-	-	-
sánɛ	decide	sán-ala	-	-	-	-	-
sɛ̀g**ɛsɛ**	sieve	-	-	-	-	-	-
sɛ́lɔ	peel	sɛ́l-ala	sɛ́l-a	-	-	-	-
sɛ̀ndɛ	slip	sɛ̀nd-ala	-	sɛ̀nd-ɛsɛ	-	-	-
sɛ̀ŋgɛ	lower	sɛ̀ŋg-ala	-	-	-	-	-
síawa	have hiccup	-	-	-	-	-	-
sílɛ	finish	síl-ala	-	síl-ɛsɛ	-	-	-
sìl**ɛga**	fade	sìl-ala	-	sìl-ɛsɛ	-	-	-
sílɔ	rub, smear	síl-ala	-	-	-	-	-
símasa	regret	-	-	-	-	-	-
sìmbɔ	drag	sìmb-ala	-	-	-	-	-
símɛ	respect	sím-ala	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
síndya	exchange	síndy-ala	-	-	-	-	-
sísɛlɛ	scare sb	sís-ala	-	-	-	sís-ɛga	-
sísɔ (bà)	approach	sís-ala	-	-	-	-	-
sìsɔ	be happy	sìs-ala	-	-	-	-	-
sìya	wash, bathe	sìy-ala	-	-	-	-	-
síyɛ	saw	síy-ala	-	-	-	-	-
síyɛsɛ	swing, shake	-	-	-	-	-	-
sɔ́ɔ̀	continue	-	-	-	sɔ́s-ɛlɛ	-	-
sòbala	accumulate	-	-	-	-	-	-
sɔ́lɛ	undress	sɔ́l-ala	-	sɔ́l-ɛsɛ	-	-	-
sɔ̀lɛ̀	hide sth.	sɔ̀l-ala	-	-	-	-	-
sɔ́lɛga	fall	-	-	-	-	-	-
sɔ́ndya	sharpen (point)	sɔ́ndy-ala	-	-	-	-	-
sɔ́sɛlɛ	smoke meat	-	-	-	-	-	-
sùmbɔ	die mysteriously	sùmb-ala	-	-	-	-	-
súmɛlɛ	greet	súm-ala	-	-	-	-	-
sùbɛ	pour out	sùb-ala	-	sùb-ɛsɛ	sùb-ɛlɛ	-	-
swásɔ	dry	swás-ala	-	-	swás-ɛlɛ	-	-
swàwɔ	hide intr	-	-	-	-	-	-
tɑ́ɑ̀la	judge	-	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
tɛ̂̂	limp	téŋg-ala	-	-	-	-	-
tɛ̀̀ɛ̀̀	abandon	tèŋg-ala	-	-	-	-	-
tɔ́̀̀lɛ	guide	-	-	-	-	-	-
tá'àlɛ	start	-	-	-	-	-	-
tàtɔ	squeak	tàt-ala	-	tàd-ɛsɛ	-	-	-
tátɔ	take care of	tát-ala	-	-	-	-	-
tê	invent, create	téy-ala	-	-	-	-	-
té'è	be soft	-	-	-	-	-	-
tébɔ	rise	tél-ala	-	-	-	-	-
tégɛ	tire, fatigue	tég-ala	-	tég-ɛsɛ	-	-	-
tèmb**ɔwɔ**	set (sun)	-	-	tèmb-ɛsɛ	-	-	-
tɛ̀ndɔ	tear	tɛ̀nd-ala	-	tɛ̀nd-ɛsɛ	-	-	-
tfúada	be late	-	-	-	-	-	-
tfùbɔ	pierce, rape	tfúb-ala	-	-	-	-	-
tfùdɔ	pinch	tfùd-ala	-	-	-	-	-
tfúga	suffer	tfúg-ala	-	tfúg-ɛsɛ	-	-	-
tfúmbɔ	fold, wrinkle	tfúmb-ala	-	tfúmb-ɛsɛ	-	tfúmb-aga	-
tîî	get going	tíy-ala	-	-	-	-	-
tìnɔ	harvest tubers	tìn-ala	tìl-ɛ	-	-	-	-
tɔ̀à	boil intr.	tɔ̀g-ala	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
tɔ́kɛ	pick up	tɔ́k-ala	tɔ́k-a	tɔ́k-ɛsɛ	-	-	-
tɔ́wa	drip, leak	-	-	-	-	-	-
tsî̂	untie	tsíŋg-ala	-	-	-	-	-
tsî́ɛlɛ	bind, tie	tsî́-ala	-	-	-	-	-
tsàmɛ	spit	tsàm-ala	-	-	-	-	-
tsíbɔ	grind, trample	tsíb-ala	-	-	-	-	-
tsìɛ̀	live, be well	-	-	-	-	-	-
tsíɛ̀	cut	tsíy-ala	-	-	-	-	-
tsìlɔ	write	tsìl-ala	tsìl-a	tsìl-ɛsɛ	-	-	-
tsímɛlɛ	sneeze	tsím-ala	-	tsím-ɛsɛ	-	-	-
tsíndɔ	shove, push	tsínd-ala	-	-	-	-	-
túà	move places	tɔ́g-ala	-	tɔ́g-ɛsɛ	-	-	-
tùndɛ	miss	tùnd-ala	-	-	-	-	-
túnɔwɔ	float	-	-	-	-	-	-
túwanɛ (nà)	meet	túw-ala	-	-	-	-	-
twálɔ	peck	twál-ala	-	-	-	-	-
vàà	praise	vàg-ala	-	-	-	-	-
vàmòkwè	knock over	-	-	-	-	-	-
vásɛ	rise (dough)	-	-	-	vás-ɛlɛ	-	-
vê	give	vɛ́y-ala	-	-	-	-	-

Verb	Gloss	Reciprocal *-ala*	Passive *-a*	Causative *-ɛsɛ*	Applicative *-ɛlɛ*	Autocausative *-ɛga/-aga*	Positional *-ɔwɔ*
vè'è	try on clothes	vèg-ala	-	-	vè'-ɛlɛ	-	-
vɛ́mbɔ	blow nose	vɛ́mb-ala	-	-	-	-	-
vɛ́sɔ	have desire	vɛ́s-ala	-	-	-	-	-
vɛ̀wɔ	breathe	-	-	-	-	-	-
vèyɛ	mesure	vèy-ala	-	-	-	-	-
vìdɛ	(re-)turn	vìd-ala	vìd-a	-	vìd-ɛlɛ	vìd-ɛga	-
vím**ala**	groan	-	-	-	-	-	-
víndo	hate	vínd-ala	-	-	-	-	-
vísɔ	cover	vís-ala	-	-	vís-ɛlɛ	-	-
víwɔ	suck	víw-ala	-	-	-	-	-
víyãsa	be light	-	-	-	-	-	-
víy**ala**	touch	-	-	-	-	-	-
vɔ̂	be calm/cold	vɔ́l-ala	-	vɔ́l-ɛsɛ	-	-	-
vòda	rest	vòd-ala	-	-	-	-	-
vɔ́lɛ	help	vɔ́l-ala	-	-	-	-	-
vòwa	wake up	vòw-ala	-	vòl-ɛsɛ	-	vòl-ɛga	-
vû	leave	vúy-ala	vúm-a	-	-	-	-
vú**ɛlɛ**	blow	-	-	-	-	-	-
vúlɔ	be sharp	-	-	-	-	-	-
vúba (nà)	hug	-	-	-	-	-	-

Verb	Gloss	Reciprocal	Passive	Causative	Applicative	Autocausative	Positional
		-dla	*-a*	*-ɛsɛ*	*-ɛlɛ*	*-ɛga/-aga*	*-ɔwɔ*
vyámb**ɛlɛ**	surround	-	-	-	-	-	-
vyɛ̀	draw	vyèg-ala	-	-	-	-	-
wɛ̋ɛ̃	skin animals	wɛ́ŋg-ala	-	-	-	-	-
wámɛ	hurry	-	-	-	-	-	-
wàwɛ	spread out	wàw-ala	wàw-a(a)	-	-	wàw-ɛga	-
wáwɔ	crawl	-	-	-	-	-	-
wɛ̀	die	-	-	-	-	-	-
wómb**ɛlɛ**	sweep	wómb-ala	-	-	-	-	-
wúmbɛ	want	wúmb-ala	-	-	-	-	-
wùmɛ	pluck	wùm-ala	-	-	-	-	-
wúŋg**ala**	wander, dangle	-	-	-	-	-	-
wùsa	forget	wùs-ala	wùs-a(a)	-	-	-	-
yàlanɛ	respond	-	-	-	-	-	-
yémɛdɛ	tighten	yém-ala	-	-	-	-	-
yíɛ̀	avoid, dodge	yé-ala	-	-	-	-	-
yímbɔ	visit	yímb-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 Antilope*, 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. Therefore, I indicate at the end of each intonation phrase whether a sentence is ended, using a fullstop. In cases where the grammatical sentence continues in the next line, I indicate that by a comma at the end of an intonation phrase. In a few rare cases, grammatical sentences end within an intonation phrase. Since the speaker did not pause and the language consultant did not identify a natural break, I mark the end of the grammatical sentence with a fullstop within the intonation phrase. Grammatical sentences that the speaker does not finish are marked by three dots.

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. 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 Antilope

The story about the healer who turned into an antilope 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 antilope and fled into the forest. The villagers were worried about this and tried to kill the antilope, but they could never find it.

(A1) yɔ́ɔ̀ yá táàlɛ̀.
yɔ́ɔ̀ ya-H táàlɛ̀
so 1P-PRES begin
'So, we begin.'

(A2) yɔ́ɔ̀ ŋgə̀̃ nû à bɛ́ ŋgə̀̃,
yɔ́ɔ̀ ŋgə̀̃ nû a bɛ̀-H ŋgə̀̃
so ∅1.healer 1.DEM.PROX 1.PST1 be-R ∅1.healer
'So, this healer was a healer.'

(A3) ŋgə̀̃.
ŋgə̀̃
∅1.healer
'a healer.'

(A4) à djìlɛ́ mâ.
a djìlɛ-H mâ
1S.PST1 stay-R PRF
'He was there.'

(A5) à njâ dyùmɔ́ bùdàà dyùmɔ́ bùdàà dyùmɔ́
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 dyùmɔ́ 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 méḍé nyá mùdì.
a múà méḍé nyá m-ùdì
1S be self real N1-person
‘He was himself a real (old) man.’

(A7) à dyùmɔ́ bùdì, à dyùmɔ́ bùdì,
a dyùmɔ-H b-ùdì a dyùmɔ-H b-ùdì
1S.PST1 heal-R ba2-person 1S.PST1 heal-R ba2-person
à múà médé nyá mùdì pɔ́né ntúlé.
a múà médé nyá m-ùdì pɔ́né ntúlé
1S.PST1 be self real N1-person ∅7.truth ∅3.old
‘He was healing people, he was healing people, he was himself a real old man.’

(A8) nyɛ̀ táàlé bábɛ̀.
nyɛ táàlɛ-H bábɛ̀
1S.PST1 begin-R ∅7.illness
‘He started to be sick.’

(A9) gbḭ́ gbḭ̀ gbḭ́ gbḭ̀ gbḭ́ à múà nà bábɛ̀ tí
gbḭ́ gbḭ̀ gbḭ́ gbḭ̀ gbḭ́ a múà nà bábɛ̀ tí
IDEO IDEO IDEO IDEO IDEO 1 PROSP COM ∅7.illness NEG
wúmbɛ̀ wɛ̀.
wúmbɛ wɛ̀
want-R die
‘[imitation of the disease roaming in his body] He was about to be sick, without wanting to die.’

(A10) bá sàgà é kfùmàlà mɛ̀ múà ndáà mùdì.
ba-H sàga é kfùmala mɛ múà ndáà m-ùdì
2-PRES be.surprised LOC find 1S be 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) mɛ̀ múà pɔ́né wá yìmbá ntɛ́ wû.
mɛ múà pɔ́né wá yìmbá ntɛ́ wû
1S be ∅7.truth 3:ATT ∅7.age ∅3.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 ndáwɔ̀ dé tù nyɛ̀ mɛ́dɛ́ támé.
ya-H sàga àà ndáwɔ̀ dé tù nyɛ mɛ́dɛ́ támé
1P-PRES be.surprised 1.COP ∅9.house LOC inside 1 self alone
'We are surprised. He is in his house all by himself.'

(A14) m̀h m̀h m̀ m̀ m̀h.
IDEO IDEO IDEO IDEO IDEO
'[imitation of healer's self talk and noises he makes in the house].'

(A15) yá sàgà mɛ́nɔ́ wɛ̂ nyɛ́ɛ̀ mápà
ya-H sàga mɛ́nɔ́ wɛ̂ nyɛ́ɛ̀ H-ma-pà
1P-PRES be.surprised 7∅.morning in see.? OBJ.LINK-ma6-paw
má ndjìbù má bwámɔ́ ndáwɔ̀ dé tù,
má ndjìbù ma-H bwámɔ-H ndáwɔ̀ dé tù
6:ATT ∅1.antilope 6-PRES come.out-R ∅9.house LOC inside
'We are surprised in the morning to see paws of an antilope which come out of the house,'

(A16) kɛ̀ dɛ́ndì.
kɛ̀ d-ɛ́ndì
go le5-courtyard
'going into the courtyard.'

(A17) kɛ̀ dígɛ̀ mpù,
kɛ̀ dígɛ mpù
go look like.this
'Going looking like this,'

(A18) mùdì nú bɛ́lɛ́.
m-ùdì nú bɛ́-lɛ́
N1-person 1.DEM.DIST be-NEG
'nobody is there.'

(A19) ndùù à vìdégáà ndjìbù.
ndùù a vìdeg-áà ndjìbù
so 1S.PST1 turn-PRF ∅1.antilope
'[French: So], he has already turned into an antilope.'

(A20) à múà á kɛ́ djìí dé tù,
a múà a-H kɛ̀-H djìí dé tù
1.PST1 be 1-PRES go-R ∅7.forest LOC inside
'He was about to go into the forest.'

(A21) nà ndzǐ gyâ.
nà ndzǐ gyâ.
COM ∅9.path ∅7.length
'on the long path.'

(A22) kɛ́ djìí dé tù,
kɛ̀-H djìí dé tù
go-R ∅7.forest LOC inside
'(He) goes into the forest'

(A23) nà ndzǐ gyâ.
nà ndzǐ gyâ.
COM ∅9.path ∅7.length
'on the long path.'

(A24) kɛ́ djìí dé tù,
kɛ̀-H djìí dé tù
go-R ∅7.forest LOC inside
'(He) goes into the forest'

(A25) nà ndzǐ gyâ.
nà ndzǐ gyâ
COM ∅9.path ∅7.length
'on the long path.'

(A26) nà pándɛ̀ vâ bùdì báà bɛ̀.
nà pándɛ̀ vâ b-ùdì báà bɛ
COM arrive here ba2-person 2.DEM.PROX be.there
'And having arrived here, these people are there.'

(A27) á lèmbó nâ bùdì báà bá múà
a-H lèmbo-H nâ b-ùdì báà ba-H múà
1S-PRES know-R COMP ba2-person 2.DEM.PROX 2-PRES PROSP
búɛ̀lɛ̀ nâ bá dyúù nyɛ̀.
búɛlɛ̀ nâ ba-H dyúù nyɛ
fish COMP 2-PRES kill.SBJV 1.OBJ
'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 djɑ̋ɑ̀sà,
nâ ba-H dyúù nyê vèè m-ùdì nyɛ djɑ̋ɑ̀sà
COMP 2-PRES kill.SBJV 1.OBJ only N1-person 1 disappear
'That they kill him. Suddenly the person disappears,'

(A29) nà ké djìí dé tù nà ndzǐ pámò dê̋,
nà kè-H djìí dé tù nà ndzǐ pámò dẽ̋
COM go-R ∅7.forest LOC inside COM ∅9.path arrive today
'And (he) goes in the forest on the path till today,'

(A30) tí nyê nyè.
tí nyê nyɛ
NEG see 1.OBJ
'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 moneky 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) djíyɔ̀.
djíyɔ
sit.down
'Sit down [Introductory words to a story]'

(N3) yɔ́ɔ̀ nzàmbí núù djì.
yɔ́ɔ̀ nzàmbí núù djì.
so PN 1.DEM.PROX sit
'So, there is this [person called] Nzambi.'

(N4) nzàmbí djìlɛ́ mà.
nzàmbí djìlɛ-H mà
PN sit-R COMPL[Kwasio]

‘Nzambi is already there.’

Aminu to cameraman:

(N5) wɛ̀ nzíí bàlɛ̀ bébɑ́ɑ̀.
wɛ nzíi-H bàlɛ H-be-bɑ́ɑ̀
2S PROG-PRES keep OBJ.LINK-be8-word
‘You are keeping the words.’

Tata:

(N6) wɛ̀ nzíí bàlɛ̀ mpà.
wɛ nzíi-H bàlɛ mpà
2S PROG-PRES keep good
‘You are keeping [the words] well.’

(N7) yɔ́ɔ̀ nzàmbí núù djì.
yɔ́ɔ̀ nzàmbí núù djì
so PN 1.DEM.PROX sit
‘So there is this [person called] Nzambi.’

Aminu:

(N8) bwáá lɑ́ bɔ̂!
bwáa-H lã-H bɔ̂
2P-PRES tell-R 2.OBJ
‘You tell them!’

Tata:

(N9) nzàmbí djɪ̃̂ à lwɔ́ mɔ̀ kwádó,
nzàmbí djɪ̃̂ a lwɔ̂-H mɔ̀ kwádó
PN sit.COMPL 1S.PST build-R COMPL ∅7.village
‘Nzambi is there, he has already built a village,’

(N10) bá nà mùdɑ̂̃ wɛ̂.
bá nà m-ùdɑ̂̃ w-ɛ̂
2 COM 1-woman 1-3S.POSS
‘they [= him] and his wife.’

(N11) bànzàmbí bábɑ́ɑ̀,
ba-nzàmbí bá-bɑ́ɑ̀,
ba2-PN 2-two
‘Two Nzambis,’

(N12) nɔ́gá gyɑ́ɑ̀ nkɛ̀ nɔ́gá gyɑ́ɑ̀ mbyɛ̂.
nɔ́-gá gyɑ́ɑ̀ nkɛ̀ nɔ́-gá gyɑ́ɑ̀ mbyɛ̂
1-other ∅1.side ∅3.low 1-other ∅1.side ∅3.high
'one down-stream, the other up-stream.'

(N13) ɛ́ mpù bá kí nâ djíwɔ́ mbyɛ̂ nà djíwɔ́
ɛ́ mpù ba-H ki-H nâ djíwɔ́ mbyɛ̂ nà djíwɔ́
LOC like.this 2-PRES say-R COMP ∅7.river ∅3.high COM ∅7.river
nkɛ̀.
nkɛ̀.
∅3.low
'Like this they say that up the river and down the river.'

(N14) yɔ́ɔ̀ bànzàmbí bá tè bá djì.
yɔ́ɔ̀ ba-nzàmbí bá tè ba-H djì
so ba2-PN 2:ATT there 2-PRES sit
'So the Nzambis there sit [are settled].'

(N15) yɔ́ɔ̀ nzàmbí nɔ́gá núù bɛ́ nzàmbí wà gyí?
yɔ́ɔ̀ nzàmbí nɔ́-gá núù bɛ̀-H nzàmbí wà gyí?
so PN 1-other 1.PST2 be-R PN 1:ATT what
'So this other Nzambi was which Nzambi?'

(N16) mɛ́ líβɛ̀lɛ̀, nzàmbí wà lèlɛ́ndí.
mɛ-H líβɛlɛ nzàmbí wà le-lɛ́ndí.
1S-PRES show PN 1:ATT le5-palm.tree
'I show [gesture], the Nzambi of the palm tree.'

(N17) nɔ́nɛ́gá nyɛ̀gà,
nɔ́-nɛ́gá nyɛ̀-gà
1-other 1-CONTR
'The other one,'

(N18) wà lè-bɔ́ɔ̀.
wà le-bɔ́ɔ̀.
1:ATT le5-breadfruit.tree
'the one of the breadfruit tree.'

(N19) yɔ́ɔ̀ bànzàmbí bá tè bà bwàá sɔ́,
yɔ́ɔ̀ ba-nzàmbí bá tè ba bwàa-H sɔ́,
so 2-PN 2:ATT there 2.PST1 become-R ∅1.friend
'So, the Nzambis there became friends,'

(N20) nâ bá djíî,
nâ ba-H djíî
COMP 2-PRES sit.SBJV
'so that they stay,'

(N21) ɛ́ nû pɛ̀ ɛ́ nû pɛ̀.
ɛ́ nû pɛ̀ ɛ́ nû pɛ̀
LOC 1.DEM.PROX there LOC 1.DEM.PROX there
'one there and one there.'

(N22) bànzàmbí bá tè bá djìlɛ́ mà.
ba-nzàmbí bá tè ba-H djìlɛ-H mà
2-PN 2:ATT there 2-PRES sit-R COMPL[Kwasio]
'The Nzambis there live there already.'

(N23) yɔ́ɔ̀ bá kí nâ ɛ́ɛ́kɛ̀!
yɔ́ɔ̀ ba-H ki-H nâ ɛ́ɛ́kɛ̀!
so 2-PRES say-R COMP EXCL
'So they say that [EXCL of surprise]!'

(N24) mwánɔ̀ wɛ̂ mùdə̂ wà nû.
m-wánɔ̀ w-ɛ̂ m-ùdə̂ 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 bwə̀ə̀.
a bwə̀ə̀.
1.PST1 give.birth
'She has given birth.'

(N26) nyɛ̀gà váà nyɛ̀gá tsíyɛ́ sâ nà màlɛ́ndí,
nyɛ-gà váà nyɛ-gá tsíyɛ́ sâ nà ma-lɛ́ndí,
3S-CONTR here 3S-CONTR live-R only COM 6-palm.tree
màlɛ́ndí máà mɔ́gà.
ma-lɛ́ndí máà mɔ́-gà.
6-palm.tree 6:DEM 6-CONTR
'Him here, he lives only from palm trees, these palm trees.'

(N27) má dvúmɔ́lɛ́ mbvú mbì mbvû,
ma-H dvúmɔ́-lɛ́ mbvú mbì mbvû
6-PRES produce-NEG ∅3.year like[Kwasio] ∅3.year
'They don't produce [fruit] every year,'

(N28) màlɛ́ndí máà vèè kwè mímpìndí.
ma-lɛ́ndí 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 bwɛ̀ɛ́ mwánɔ̀.
nzàmbí a bwɛ̀ɛ̃-H m-wánɔ̀
PN 1.PST1 give.birth-R N1-child
'Nzambi has given birth to a child.'

(N30) yɔ́ɔ̀ nzàmbí nyɛ̀gà à kɛ́ɛ̃̀ dígɛ̀ mísì.
yɔ́ɔ̀ nzàmbí nyɛ-gà a kɛ́ɛ̃̀ dígɛ m-ísì
so PN 1-too 1.PST1 go.COMPL watch ma6-eye
'So this Nzambi has gone and watched with his eyes [= was thinking].'

(N31) nyɛ̀ nâ ooh mùdɛ̂,
nyɛ nâ ooh m-ùdɛ̂
1 COMP EXCL N1-woman
'He: 'Oh, wife,"

(N32) bàmbɛ́, kɛ̂ djíì mbúmbù mwánɔ̀ sá yí dè,
bàmbɛ́ kɛ̂ djíì mbúmbù m-wánɔ̀ sá yí dè
sorry go.IMP ask ∅1.namesake N1-child ∅7.thing 7:ATT eat
'excuse me, go and ask the homonym [the other Nzambi] for a little to eat,'

(N33) ɛ́ pɛ̀ nâ á njíyɛ̀ mɛ̀ nà yɔ̂.
ɛ́ pɛ̀ nâ a-H njíyɛ mɛ̀ nà yɔ̂
LOC there COMP 1-PRES come.SBJV 1S.OBJ COM 7.OBJ
'so that she bring me that [food].'

(N34) mɛ̀ múà wɛ̀ nà nzà.
mɛ múà wɛ̀ nà nzà
1S PROSP die COM ∅9.hunger
'I'm about to die from hunger.'

(N35) yɔ́ɔ̀ mùdɛ̂ nùù tè,
yɔ́ɔ̀ m-ùdɛ̂ nùù tè,
so N1-woman 1.COP there
'So the woman is there [= leaves],'

(N36) kíyà mwánɔ̀ ndzɛ̀ŋgɔ̀,
kíya m-wánɔ̀ ndzɛ̀ŋgɔ̀
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) wɔ́ɔ́ɔ́ɔ́ɔ́ gbə̀̀m
wɔ́ɔ́ɔ́ɔ́ɔ́ gbə̀̀m
IDEO IDEO
'[depiction of moving by foot or motorbike and imitating sound of putting basket down]'

(N39) áh gyí wɛ́ lɔ́ njì gyɛ́sɔ̀?
áh gyí wɛ-H lɔ́ njì gyɛ́sɔ
EXCL what 2S-PRES RETRO come look.for
'[Breadfruit Nzambi talking] Ah, what have you just come to look for?'

(N40) nyɛ́ náà mùdì wɑ́ɑ̀̃ɑ̀̃, mɛ̀ wɛ́̃ɛ̀̃ nà nzà.
nyɛ náà m-ùdì w-ɑ́ɑ̀̃ mɛ wɛ́̃ɛ̀̃ nà nzà.
1 COMP N1-person 1-POSS.1S 1S die.COMPL COM ∅9.hunger
'She: 'My person, I'm dead from hunger."

(N41) nkɛ̀ nyì nzí síléɛ̀̃ bédéwò.
nkɛ̀ nyi nzí síléɛ̀̃ H-be-déwò.
∅9.field 9 PROG.PST finish.COMPL OBJ.LINK-be8-food
'This field was already running out of food.'

(N42) bèdéwò béndɛ̀ byɔ̀ mɛ́ lɔ́ njì lɛ́bɛ̀lɛ̀ bédéwò
be-déwò bé-ndɛ̀ byɔ̀ mɛ-H lɔ́ njì lɛ́bɛlɛ H-be-déwò
be8-food 8-ANA 8.EMPH 1-PRES RETRO come follow be8-food
bà wɛ̀.
bà wɛ̀
AP 2S.OBJ
'This food, I have come to look for the food at your place.'

(N43) náà ká wɛ̀ múà wáà vɔ́lɛ̀ mɛ̀...
náà ká wɛ múà wáà vɔ́lɛ mɛ̀
COMP if 2S PROSP 2S.FUT[Kwasio] help 1S.OBJ
'If you can help me...'

(N44) nzà nyíì mɛ̀ mɔ̂.
nzà nyíì mɛ̀ mɔ̂
∅9.hunger 9.COP 1S.OBJ ∅3.stomach
‘Hunger is me in the stomach.’

(N45) nágyàlɛ́ wà mùdɑ̂̀.
nágyàlɛ́ wà m-ùdɑ̂̀
∅1.breastfeeding 1:ATT N1-woman
‘[I am a] breastfeeding woman.’

(N46) yɔ́ɔ̀ mɛ́ lɔ́ njì gyɛ́sɔ̀ sá yí dè.
yɔ́ɔ̀ mɛ-H lɔ́ njì gyɛ́sɔ sá yí dè
so 1S-PRES RETRO come search ∅7.thing 7:ATT eat
‘So I just came to look for something to eat.’

(N47) yɔ́ɔ̀ nzàmbí á kí náà ɛ́ɛ̀,
yɔ́ɔ̀ nzàmbí a-H kì-H náà ɛ́ɛ̀
so PN 1-PRES say-R COMP yes
‘So Nzambi says yes,’

(N48) bɑ́̂ yɔ́ɔ̀ yíì tè.
bɑ́̂ y-ɔ́ɔ̀ yíì tè
∅7.word 7-POSS.2S 7.COP there
‘Your speech is there [= I understand you].’

(N49) ndí vɛ̀dáà,
ndí vɛ̀dáà
but but[Bulu]
‘But still,’

(N50) yíì mùdà nlɑ̂̀.
yíì mùdà nlɑ̂̀
7.COP big ∅3.story
‘this is a big story.’

(N51) yɔ́ɔ̀ nzàmbí kí nâ bɔ̀̂
yɔ́ɔ̀ nzàmbí kì-H nâ bɔ̀̂
so PN say-R COMP good[French]
‘So Nzambi says ‘Good.”

(N52) mùdɑ̂̀ kɛ́ nà nyɛ̀ mánkɛ̂̀,
m-ùdɑ̂̀ kɛ̀-H nà nyɛ̀ H-ma-nkɛ̂̀
n1-woman go-R COM 1 OBJ.LINK-ma6-field
‘The woman [his wife] shall go with him to the field,’

(N53) kánâ m̀m̂.
kánâ m̀m̂
or no
'or no.'

(N54) wɛ̀ mɛ́dɛ́ pấ lígɛ̀. yá nà nyɛ̀ yá kɛ́
wɛ mɛ́dɛ́ pấ-H lígɛ ya-H nà nyɛ ya-H kɛ̀-H
2S.EMPH self start-R stay 1P-PRES COM 1 1P-PRES go-R
mánkɛ̂́.
H-ma-nkɛ̂́
OBJ.LINK-6-field
'You [= his wife] stay first, we and her, we go to the field.'

(N55) yɔ́ɔ̀ bá téé kɛ̀ndɛ̀,
yɔ́ɔ̀ ba-H téè-H kɛ̀ndɛ̀
so 2-PRES start.walking-R ∅7.walk
'So they go on the walk,'

(N56) bà mùdấ wà nû.
bà m-ùdấ wà nû
AP N1-woman 1:ATT 1.DEM.PROX
'they with this woman.'

(N57) wúɔ́ɔ́ɔ́ɔ́ pámò mánkɛ̂́,
wúɔ́ɔ́ɔ́ɔ́ pámo H-ma-nkɛ̂́
IDEO arrive OBJ.LINK-ma6-field
'[depiction of moving] Having arrived in the fields,'

(N58) nzàmbí, màbɔ́ɔ̀ nkwɛ́ɛ̀ dé nâ vɔ́sì.
nzàmbí ma-bɔ́ɔ̀ nkwɛ́ɛ̀ dé nâ vɔ́sì
PN ma6-bread.fruit ∅3.basket LOC COMP IDEO
'Nzambi, the bread fruits in the basket [depiction of pouring].'

(N59) yɔ́ɔ̀ nzàmbí á nɔ̀ɔ́ mábɔ́ɔ̀ má ndɛ̀.
yɔ́ɔ̀ nzàmbí a-H nɔ̀ɔ̀-H H-ma-bɔ́ɔ̀ má ndɛ̀
so PN 1-PRES take-R OBJ.LINK-ma6-bread.fruit 5:ATT ANA
'So Nzambi takes those bread fruit.'

(N60) nyɛ̀ nâ bȍ,
nyɛ nâ bȍ
1 COMP good[French]
'He says 'Good,''

(N61) ɔ̀ múà gyésɔ̀ nâ wɛ́ kɛ̀.
ɔ múà gyésɔ nâ wɛ-H kɛ̀
2S[Kwasio] RETRO search COMP 2S-PRES go
'you are about to want to leave.'

(N62) sílɛ̂ nà mɛ̀ kèndɛ̀ vúdû.
sílɛ̂ nà mɛ̀ kèndɛ̀ vúdû
finish.IMP COM 1S ∅7.time one
'Finish with me one time [= in one go, immediately].'

(N63) mɛ̀ɛ́ djílɛ́ wɛ̀ bvúbvû.
mɛ̀ɛ́ djí-lɛ́ wɛ̀ bvúbvû
1S.PRES.NEG ask-NEG 2S.OBJ much
'I don't ask you for much.'

(N64) vɛ̂ mɛ̀ sâ mwánɔ̀ wɔ́ɔ̀ wà wɛ̀ bùdɛ́
vɛ̂ mɛ̀ sâ m-wánɔ̀ w-ɔ́ɔ̀ wà wɛ bùdɛ-H
give.IMP 1S.OBJ 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) mɛ́ lígɛ́ nyɛ̂ dè,
mɛ-H lígɛ-H nyɛ̂ dè
1S-PRES stay-R 1.OBJ eat
'I stay to eat it,'

(N66) nà màbɔ́'ɔ̀ máà.
nà ma-bɔ́'ɔ̀ máà
COM ma6-bread.fruit 6:DEM.PROX
'with these bread fruit.'

(N67) wɛ́ nɔ̀ɔ́ mábɔ́'ɔ̀ máà.
wɛ-H nɔ̀ɔ̀-H H-ma-bɔ́'ɔ̀ máà
2S-PRES take-R OBJ.LINK-ma6-bread.fruit 6:DEM.PROX
'You take these bread fruit.'

(N68) wɛ̀gà, wɛ́ kɛ́ nà mɔ̂.
wɛ-gà wɛ-H kɛ̀-H nà mɔ̂
2S-CONTR 2S-PRES go-R COM 6.OBJ
'As of you, you take them [= the bread fruit] away.'

(N69) mɛ̀gà, mɛ́ lígɛ́ dè mwánɔ̀ wɔ́ɔ̀,
mɛ-gà mɛ-H lígɛ-H dè m-wánɔ̀ w-ɔ́ɔ̀
1-CONTR 1S-PRES stay-R eat ma1-child 1-POSS.2S
'As of me, I stay and eat your child,'

(N70) nà màbɔ́'ɔ̀.
nà ma-bɔ́'ɔ̀
COM ma6-bread.fruit
'with bread fruit.'

(N71) sílɛ̀!
sílɛ
finish
'That's it!'

(N72) ɛ́ɛ́kɛ̀ mùdâ̂ à gyɛ̂́ɛ̂̀ à gyɛ̂́ɛ̂̀ ah
ɛ́ɛ́kɛ̀ m-ùdâ̂ a gyɛ̂́ɛ̂̀ a gyɛ̂́ɛ̂̀ ah
EXCL N1-woman 1.PST1 cry.COMPL 1.PST1 cry.COMPL EXCL
mùdì wấầ wɛ́ sá mɛ̂ ná?
m-ùdì w-ấầ wɛ-H sâ-H mɛ̂ ná
N1-person 1-POSS.1S 2S-PRES do-R 1S.OBJ how
'Oh, the woman cries and cries; ah, my person, what do you do to me?'

(N73) yɔ́ɔ̀ nzàmbí kí náà mɛ̀ bwàá wɛ̀ tʃíyɛ̀ lèkɛ́lɛ̀
yɔ́ɔ̀ nzàmbí kì-H náà mɛ bwàà-H wɛ̀ tʃíyɛ le-kɛ́lɛ̀
so PN say-R COMP 1S.PST1 PRF-R 2S.OBJ cut le5-speech
dɛ̂́ nâ mɛ́ lígɛ́ dè mwánɔ̀ wɔ́ɔ̀,
dɛ̂́ nâ mɛ-H lígɛ-H dè m-wánɔ̀ w-ɔ́ɔ̀
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 màbɔ́'ɔ̀,
nà ma-bɔ́'ɔ̀
COM ma6-bread.fruit
'with bread fruit.'

(N75) lèkáà lé tè'ètè yá mwánɔ̀ yî̀,
le-káà lé tè'ètè yá m-wánɔ̀ yî̀
le5-kind 5:ATT ∅7.tenderness 7:ATT N1-child 7.DEM.PROX
'The kind of this tenderness of the child,'

(N76) yíì mpà yɔ́ɔ̀ wɛ́ kɑ́ yɔ̀ dúmbɔ́.
yíì mpà yɔ́ɔ̀ wɛ-H kɑ̂-H yɔ̀ dúmbɔ́
7.COP good ∅7.time 2S-PRES wrap-R 7.OBJ ∅7.package
'is good when you wrap it in a (leaf) package.'

(N77) mɛ̀ɛ̀ yɔ̂ dè.
mɛ̀ɛ̀ yɔ̂ dè
1S.FUT 7.OBJ eat
'I will eat it.'

(N78) yɔ́ɔ̀ nzàmbí kí náà bɔ̃̀,
yɔ́ɔ̀ nzàmbí kì-H náà bɔ̃̀
so PN say COMP good[French]
'So Nzambi says 'Good','

(N79) ká wɛ̀ɛ́ wúmbɛ́lɛ́ ndáà,
ká wɛ̀ɛ́ wúmbɛ-lɛ́ ndáà
if 2S.PRES.NEG want-NEG also
'if you don't want [this] either,'

(N80) mɛ́ nɔ̀ɔ́ nkwɛ̂ wá mábɔ́'ɔ̀.
mɛ-H nɔ̀ɔ̀-H nkwɛ̂ wá H-ma-bɔ́'ɔ̀
1S-PRES take-R ∅3.basket 3:ATT OBJ.LINK-ma6-bread.fruit
'I take the basket with the bread fruit.'

(N81) wɛ́ kɛ́ wɛ̀ nà nzà nyɔ́ɔ̀ ɛ́ pɛ̀, wɛ́
wɛ-H kɛ̀-H wɛ̀ nà nzà ny-ɔ́ɔ̀ ɛ́ pɛ̀, wɛ-H
2S-PRES go-R die COM ∅9.hunger 9-POSS.2S LOC there 2S-PRES
kɛ́ wɛ̀ nà nyɔ́ɔ̀.
kɛ̀-H wɛ̀ nà ny-ɔ́ɔ̀
go-R die COM 9-OBJ
'Your are going to die of your hunger there, you are going to die of it.'

(N82) yɔ́ɔ̀ mùdɑ̂ dígɛ́ mísì ndɛ́ɛ́ɛ́.
yɔ́ɔ̀ m-ùdɑ̂ dígɛ-H m-ísì ndɛ́ɛ́ɛ́
so N1-woman watch-R ma6-eye IDEO
'So the woman looks with her eyes [ideophone for staring].'

(N83) nyɛ̀ nâ tɔ̀sâ!
nyɛ nâ tɔ̀sâ
1 COMP nothing
'She [says]: no!'

(N84) yɔ̀ mùdə̂ tɔ́kɛ́ mwánɔ̀ kàlànɛ̀ nyɛ̂.
yɔ̀ m-ùdə̂ tɔ́kɛ-H m-wánɔ̀ kàlanɛ nyɛ̂
so N1-woman collect-R N1-child hand.over 1.OBJ
'So the woman picks up the child, hands it over to him.'

(N85) nzàmbí nyɛ̀ nâ ŋkɛ̀.
nzàmbí nyɛ nâ ŋkɛ̀
PN 1 COMP go.HORT
'Nzambi [says]: Let's go.'

(N86) wɔ́ɔ́ɔ́ bɔ́ pámò.
wɔ́ɔ́ɔ́ bɔ-H pámo
IDEO 2-PRES[Kwasio] arrive
'[depiction of motor sound] They arrive.'

(N87) nzàmbí nyɛ̀ nâ ɛ́ mùdə̂ wə̂,
nzàmbí nyɛ nâ ɛ́ m-ùdə̂ w-ə̂
PN 1 COMP LOC N1-woman 1-POSS.1S
'Nzambi [says]: My woman,'

(N88) mwánɔ̀ wɛ́ɛ̀ nyɛ̀ nû.
m-wánɔ̀ w-ɛ́ɛ̀ nyɛ nû
N1-child 1-POSS.3S 1 1.DEM.PROX
'her child is this.'

(N89) mɛ́ lɔ́ nɔ́ɔ̀ mwánɔ̀ púù yá mábɔ́'ɔ̀
mɛ-H lɔ́ nɔ́ɔ̀ m-wánɔ̀ púù yá ma-bɔ́'ɔ̀
1S-PRES RETRO take N1-child ∅7.reason 7:ATT ma6-bread.fruit
mâ.
mâ
6.DEM.PROX
'I have just taken the child for these bread fruit.'

(N90) kálɛ̀ mɛ̀ báà kì nâ bá dúù bɛ̀ bédéwɔ̀.
kálɛ̀ mɛ̀ báà kì nâ ba-H dúù bɛ̀ H-be-déwɔ̀
NEG 1S 2.FUT say COMP 2-PRES must.not.SBJV grow be8-food
'It's not me, they [= who] will say that they must not grow food.'

(N91) yɔ̀ mùdə̂ nú kɛ̀.
yɔ̀ m-ùdə̂ nû-H kɛ̀
so N1-woman 1-PRES go
'So the woman goes.'

(N92) ndɛ̀náà pámò lébů̂, àá gyì.
ndɛ̀náà pámo H-le-bů̂ 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 njì nyɛ̂ nɔ̀ɔ̀.
àá gyì, àá gyì, dyúmò njì nyɛ̂ nɔ̀ɔ̀
1.INCH cry 1.INCH cry ∅1.spouse come 1.OBJ take
'She's at the beginning of crying, she's at the beginning of crying, the husband comes to fetch her.'

(N94) ɛ́ nà! mwánɔ̀ nùù vɛ́?
ɛ́ nà m-wánɔ̀ nùù vɛ́
LOC how N1-child 1.COP where
'What! Where is the child?'

(N95) nyɛ̀ nâ sɔ́ wɔ́ɔ̀ nɔ̀ɔ́ mɔ̀ mwánɔ̀.
nyɛ nâ sɔ́ w-ɔ́ɔ̀ nɔ̀ɔ̀-H mɔ̀ m-wánɔ̀
1 COMP ∅1.friend 1-POSS.2S take-R COMPL 1-child
'She [says] 'Your friend has taken the child."

(N96) à kɛ́ɛ̀̀ nyɛ̂ dè.
a kɛ́ɛ̀̀ nyɛ̂ dè
1.PST1 go.COMPL 1.OBJ eat
'He has left to eat it.'

(N97) yɔ́ɔ̀ á lɔ́ kì náà:
yɔ́ɔ̀ a-H lɔ́ kì náà
so 1-PRES RETRO say COMP
'So he just said that:'

(N98) ɛ́ mpù wèɛ́ gyáŋgyálɛ́ bédéwɔ̀.
ɛ́ mpù wèɛ́ gyáŋgya-lɛ́ H-be-déwɔ̀
LOC like.this 2S.PRES.NEG work-NEG OBJ.LINK-be8-food
'Like this, you don't work for your food.'

(N99) yɔ́ɔ̀ nyɛ̀gá nɔ̀ɔ̀ mwánɔ̀,
yɔ́ɔ̀ nyɛ-gá nɔ̀ɔ̀ m-wánɔ̀
so 1-other take N1-child
'So the other taking the child,'

(N100) á lígɛ́ nyê dè,
a-H lígɛ-H nyê dè
1-PRES stay-R 1.OBJ eat
'he stays to eat it,'

(N101) nà màbɔ́'ɔ̀ méɛ̀.
nà ma-bɔ́'ɔ̀ m-ɛ́ɛ̀
COM ma6-bread.fruit 6-POSS.3S
'with his bread fruit.'

(N102) yɔ́ɔ̀ nzàmbí wà nû kɛ́ dígɛ̀ mpù nâ kɛ́!
yɔ́ɔ̀ nzàmbí wà nû kɛ̀-H dígɛ mpù nâ kɛ́
so PN 1:ATT 1.DEM.PROX go-R look like.this COMP EXCL
'So this Nzambi goes and looks like this: 'Ey!"

(N103) mbúmbù wâ̰ wɛ́ kúmbɔ́ mê sá
mbúmbù w-â̰ wɛ-H kúmbɔ-H mê sá
∅1.namesake 1-POSS.1S 2S-PRES arrange-R 1S.OBJ ∅7.thing
mpù.
mpù
like.this
'My namesake, you really do this to me.'

(N104) ɛ́ mwánɔ̀ wâ̰ dyúwɔ̀.
ɛ́ m-wánɔ̀ w-â̰ dyúwɔ̀
EXCL N1-child 1-POSS.1S on
'Hey, about my child!'

(N105) [clicking] yɔ́ɔ̀ wà núndɛ̀ dígɛ́ mísì,
[clicking] yɔ́ɔ̀ wà nú-ndɛ̀ dígɛ-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) ndɛ́ɛ́ɛ́ɛ́ nyɛ̀ nâ tɔ̀sâ!
ndɛ́ɛ́ɛ́ɛ́ nyɛ nâ tɔ̀sâ
IDEO 1 COMP nothing
'[depiction of staring] He [says]: No!'

(N107) yíì pɛ̀'ɛ̀ nyà mwánɔ̀ mùdṵ̂, mɛ́ pá̰á̰
yíì pɛ̀'ɛ̀ nyà m-wánɔ̀ m-ùdṵ̂ mɛ-H pá̰à̰-H
7.COP ∅9.memory 9:ATT N1-child N1-male 1S-PRES start-H
ná nyɔ̂ vɛ̀.
ná nyɔ̂ vɛ̀
again 9.OBJ give

'This is the memory of a boy [= talks about himself], I first give it [to him]. [= pay the other Nzambi back]'

(N108) yɔ́ɔ̀ nzàmbí wà núú nyî.
yɔ́ɔ̀ nzàmbí wà núú nyî
so PN 1:ATT 1.DEM.DIST enter

'So that Nzambi comes in.'

(N109) bóŋ
bóŋ
good[French]

'Good.'

(N110) mɛ́ lámbó nzàmbí wà nû,
mɛ-H lámbo-H nzàmbí wà nû
1S-PRES trap-R PN 1:ATT 1.DEM.PROX

'I trap this Nzambi,'

(N111) nà mɛ́ wúmbɛ́ lèmbò ɛ́ mpù à bùdɛ́ mɛ̂.
nà mɛ-H wúmbɛ-H lèmbo ɛ́ mpù a bùdɛ-H mɛ̂
COM 1S-PRES want-R know LOC like.this 1 have-R 1S.OBJ

'and I want to know like this how he takes me (what he thinks of this story).'

(N112) yɔ́ɔ̀ nzàmbí wà nû kɛ̂ɛ̀ bwɔ̂sà, nyɛ̀ nâ:
yɔ́ɔ̀ nzàmbí wà nû kɛ̂ɛ̀ bwɔ̂sa nyɛ nâ
so PN 1:ATT 1.DEM.PROX go.COMPL think 1 COMP

'So this Nzambi has gone to think, he [says]:'

(N113) sá mɛ́dɛ́ mɛ̀ nzí sâ yî.
sá mɛ́dɛ́ mɛ nzí sâ yî
∅7.thing self 1S PROG.PST do 7.OBJ

'The thing itself, I was doing it [= by sending his wife].'

(N114) mɛ́ pɑ̂ ná kɛ̀ dígɛ̀ mùdì wà nû
mɛ-H pɑ̂-H ná kɛ̀ dígɛ m-ùdì wà nû
1S-PRES start-H again go see N1-person 1:ATT 1.DEM.PROX
ɛ́ pɛ́ɛ́.
ɛ́ pɛ́-ɛ́
LOC over.there.DIST

'I try again and go see this person over there.'

(N115) yɔ́ɔ̀ nzàmbí njí mpù bə̂ə̂ə̂ə̂, njì dígɛ̀ mpù.
yɔ́ɔ̀ nzàmbí njî-H mpù bə̂ə̂ə̂ə̂ njì dígɛ mpù
so PN come-R like.this IDEO come look like.this
'So Nzambi comes like this [depiction of walking a long distance], comes looking like this.'

(N116) nyɛ̀ nâ kéééé!
nyɛ nâ kéééé
1 COMP EXCL
'He [says]: What!'

(N117) mbúmbù!
mbúmbù
∅1.namesake
'Namesake!'

(N118) mɛ́ lɔ́ njì bàgyə̂̀ bà wê.
mɛ-H lɔ́ njì ba-gyə̂̀ bà wê
1S-PRES RETRO come ba2-stranger AP 2S
'I just came as a guest to you.'

(N119) ndíííí,
ndí
but
'But...'

(N120) ndjìmɔ̀ wá sá ndjìnîì.
ndjìmɔ̀ wá sá ndjìnîì
∅3.entire 3:ATT ∅7.thing different
'the whole thing is different.'

(N121) mɛ́ lɔ́ njì gyɛ́sɔ̀ bà wê.
mɛ-H lɔ́ njì gyɛ́sɔ bà wê
1S-PRES RETRO come search AP 2S
'I just came to search at your's.'

(N122) ɛ́ɛ́ɛ́ nzàmbí kí nâ ɛ́ɛ́,
ɛ́ɛ́ɛ́ nzàmbí kì-H nâ ɛ́ɛ́
EXCL PN say-R COMP yes
'Hey, Nzambi says: 'Yes,"

(N123) bèsá bíndɛ̀ byɛ́sɛ̀ béè ndáà.
be-sá bí-ndɛ̀ by-ɛ́sɛ̀ béè ndáà
be8-thing 8-ANA 8-all 8.COP also
'All these things are there also. [= way of introducing a problem]'

(N124) bèsá bíndɛ̀ byɛ́sɛ̀ béè ndáà.
be-sá bí-ndɛ̀ by-ɛ́sɛ̀ béè ndáà
be8-thing 8-ANA 8-all 8.COP also
'All these things are also there [= way of introducing a problem]'

(N125) ndí mɛ̀ɛ́ sálɛ́ wɛ̂ bvùbvù ndí vèdáà
ndí mɛ̀ɛ́ sâ-lɛ́ wɛ̂ bvùbvù ndí vèdáà
but 1S.PRES.NEG do-NEG 2S.OBJ much but but[Bulu]
mɛ́ dyúwɔ́ nâ,
mɛ-H dyúwɔ-H nâ
1S-PRES understand-R COMP
'But I don't do you a lot, but I understand that,'

(N126) wɛ́ɛ̀ dé mwánɔ̀, nɔ́ɔ̀?
wɛ́ɛ̀ dè-H m-wánɔ̀, nɔ́ɔ̀
2.PST2 eat-R N1-child no
'you have eaten the child, didn't you?'

(N127) nyɛ̀ nâ mɛ́ɛ̀ dé pɔ́nɛ́ nà màbɔ́'ɔ̀.
nyɛ nâ mɛ́ɛ̀ dè-H pɔ́nɛ́ nà ma-bɔ́'ɔ̀
1 COMP 1S.PST2 eat-R ∅7.truth COM ma6-bread.fruit
'He [says]: I really ate [it] with bread fruit.'

(N128) mègà mɛ́ɛ̀ dyúwɔ́ nzɑ̋ɑ̀ dúwɔ̀ lé tè.
mɛ-gà mɛ́ɛ̀ dyúwɔ-H nzɑ̋ɑ̀ d-úwɔ̀ lé tè
1S-CONTR 1S.PST2 feel-R ∅7.appetite le5-day 5:ATT there
'As of me, I felt appetite that day.'

(N129) mɛ̀ kí bɛ̀ nà tsídí.
mɛ kí bɛ̀ nà tsídí
1S.PST1 NEG[Kwasio] be COM ∅1.meat
'I didn't have any meat.'

(N130) á kfùmálá mpù, nzàmbí lúndɛ́lɛ́ɛ̀̋ ɛ́ mpù.
a-H kfùmala-H mpù nzàmbí lúndɛ́lɛ́ɛ̀̋ ɛ́ mpù
1-PRES find-R like.this PN fill.COMPL LOC like.this
'He finds [it = inside the house] like this, Nzambi has filled [it = the house] like this.'

(N131) kɛ́ mbúmbù, bwánɔ̀ bà sílɛ́ɛ̀̋ kɛ̀ vɛ́?
kɛ́ mbúmbù b-wánɔ̀ ba sílɛ́ɛ̀̋ kɛ̀ vɛ́
EXCL ∅1.namesake ba2-child 2.PST1 finish.COMPL go where
'Ey namesake, where have all the children gone to?'

(N132) nyɛ̀ nâ kɛ́ɛ̀ bwánɔ̀ bǎ̰, mɛ̀ sílɛ́ɛ̃̀ bɔ̂
nyɛ nâ kɛ́ɛ̀ b-wánɔ̀ b-ǎ̰ mɛ sílɛ̃ɛ̃̀ bɔ̂
1 COMP EXCL ba2-child 2-POSS.1S 1S finish.COMPL 2.OBJ
dyùù.
dyùù
kill
'He [says]: Ha, my children, I have already killed them all.'

(N133) ŋgáà, wɛ́ nyɛ́ mpù?
ŋgáà, wɛ-H nyɛ̂-H mpù
Q(tag) 2S-PRES see-R like.this
'Right, you see that?'

(N134) bèkɔ́kɔ́ bé nlô bé tè,
be-kɔ́kɔ́ bé nlô bé tè
be8-hollowness 8:ATT ∅3.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, nyɛ̀ nzí lèmbò dyùù bɔ̂ fàmíì
kó mbúmbù nyɛ nzí lèmbo dyùù bɔ̂ fàmíì
EXCL ∅1.namesake 1.PST1 PROG know kill 2.OBJ ∅1.family
bá bùdì ná?
bá b-ùdì ná
2:ATT ba2-person how
'Oh namesake, how could he kill them, the family of people?'

(N138) nyɛ̀ nâ ó,
nyɛ nâ ó
1 COMP EXCL
'He [says]: 'Oh,"

(N139) mbúmbù!
mbúmbù
∅1.namesake
'Namesake!'

(N140) ɛ́ yɔ́ɔ̀ wà mwánɔ̀ mùdṵ̂ sá màmbò má
ɛ́ yɔ́ɔ̀ wà m-wánɔ̀ m-ùdṵ̂ sâ-H m-àmbò má
LOC so 2S[Bulu] N1-child N1-man do-R ma6-thing 6:ATT
mwánɔ̀ mùdṵ̂.
m-wánɔ̀ m-ùdṵ̂
N1-child N1-man
'So you boy do boy things.'

(N141) mɛ̀ nzí wúmbɛ̀ nâ bwánɔ̀ bâ̂ bá
mɛ nzí wúmbɛ nâ b-wánɔ̀ b-â̂ ba-H
1S.PST1 PROG want COMP ba2-child 2-POSS.1S 2-PRES
bwámóò ɛ́ mpù mìntáŋgánɛ́ békúdɛ́
bwámóò ɛ́ mpù mi-ntáŋgánɛ́ H-be-kúdɛ́
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
PN say-R COMP good[French]
'Nzambi says: 'Good,"

(N143) mɛ̀ dyúwɔ́ mɔ̀.
mɛ dyúwɔ-H mɔ̀
1S.PST1 understand-R COMPL
'I have understood.'

(N144) yɔ́ɔ̀ nzàmbí kí nâ bon mɛ̀ nìyɛ́ mɔ̀.
yɔ́ɔ̀ nzàmbí kì-H nâ bon mɛ nìyɛ-H mɔ̀
so PN say-R COMP good[French] 1S.PST1 return-H COMPL
'So Nzambi says: Good, I am returning home.'

(N145) nyɛ̀ nâ mbúmbù, nlâ wùú gyálɛ́.
nyɛ nâ mbúmbù nlâ wùú gyà-lɛ́
1 COMP N1-namesake ∅3.story 3.PRES.NEG be.long-NEG
'He [says]: 'Namesake, the story isn't long. [= it is easy]"

(N146) sílɛ̂ dyùù fàmí wɔ́ɔ̀ wà bùdì, wɛ̀ɛ̀
sílɛ̂ dyùù fàmí w-ɔ́ɔ̀ wà b-ùdì wɛ̀ɛ̀
finish.IMP kill ∅1.family 1-POSS.2S 1:ATT ba2-person 2S.FUT
nyɛ̂.
nyɛ̂
see
'Kill your whole family of people, you will see.'

(N147) bwánɔ̀ bɔ́ɔ̀ báà bwámò míntáŋgánɛ́.
b-wánɔ̀ b-ɔ́ɔ̀ báà bwámo H-mi-ntáŋgánɛ́
ba2-child 2-POSS.2S 2.FUT become OBJ.LINK-mi4-white.person
'Your children will become white people.'

(N148) gyí mɛ́dɛ́ wɛ́ kɛ́ nà vǔǔ̀ wɛ̂?
gyí mɛ́dɛ́ wɛ-H kɛ̀-H nà vǔǔ̀ wɛ̂
what self 2S-PRES go-R COM worry there
'What do you go and worry about there?'

(N149) yɔ́ɔ̀ nzàmbí wà núú nìyɛ̀.
yɔ́ɔ̀ nzàmbí wà núú nìyɛ
so PN 1:ATT 1.DEM.DIST return
'So that Nzambi returns [home].'

(N150) ɛ́kɛ̀! nzàmbí wà nú áà sàlɛ́ bɛ̀ nà
ɛ́kɛ̀! nzàmbí wà nú áà sàlɛ́ bɛ̀ nà
EXCL PN 1:ATT 1.DEM.DIST 1.PST2 NEG.PST be COM
bɛ̂ líná-á pámò.
bɛ̂ líná a-H pámo
∅7.word when 1-PRES arrive
'Oh! That Nzambi had no words as soon as he arrives.'

(N151) nyɛ̀ nâ álè.
nyɛ nâ álè
1 COMP allez[French]
'He [says]: *Allez!* [= Ok].'

(N152) nyáà ŋgà, sílɛ́ nyî ndáwɔ̀ dé tù.
nyáà ŋgà sílɛ́-H nyî ndáwɔ̀ dé tù
shit.IMP PL finish-R enter ∅9.house LOC inside
'*Faites chier*, go all into the house.'

(N153) sílɛ̂ ŋgà nyî vâ.
sílɛ̂ ŋgà nyî vâ
finish.IMP PL enter here
'Enter all here.'

(N154) á lúndɛ́lɛ́ bɔ̂ lèkàá lé ndáwɔ̀ nyî
a-H lúndɛlɛ-H bɔ̂ le-kàá lé ndáwɔ̀ nyî
1-PRES fill-R 2.OBJ le5-kind 5:ATT ∅9.house 9.DEM.PROX
nâ bɛ́ɛ̀ vyâ.
nâ bɛ́ɛ̀ vyâ
COMP be.SBJV full
'He fills them in this kind of house that it [house] be full.'

(N155) áà sílɛ́ kɛ̀ nà dvùwɔ́ dyúwɔ̀,
áà sílɛ-H kɛ̀ nà dvùwɔ-H dyúwɔ
1.PST2 finish-R go COM stuff-R ∅7.top
'He has gone and stuffed the top [= with straw],'

(N156) nâ tə̂̀.
nâ tə̂̀
COMP tight
'tight.'

(N157) yɔ́ɔ̀ nzàmbí dígɛ́ mísì ɛ́ mpù.
yɔ́ɔ̀ nzàmbí dígɛ-H m-ísì ɛ́ mpù
so PN look-R ma6-eye LOC like.this
'So Nzambi looks with the eyes like this.'

(N158) nzá nzíí mɛ̂ nyɛ̂?
nzá nzíí mɛ̂ nyɛ̂
who PROG.PRES 1S.OBJ see
'Who is seeing me?'

(N159) ah mbúmbù, wɛ̀ wɛ́ tɛ́lɛ́ núndɛ̀?
ah mbúmbù wɛ wɛ-H tɛ́lɛ-H nú-ndɛ̀
EXCL ∅1.namesake 2S 2S-PRES stand-R 1-ANA
'Ah namesake, is it you who is standing there?'

(N160) nyàá djìwɔ̀ djìwɔ̀ djìwɔ̀ wɛ̀!
nyàà-H djìwɔ djìwɔ djìwɔ wɛ
shit-R close close close 2S
'Shit, close, close, close you!'

(N161) nà mùdə̂̀ wɔ́ɔ̀, wɛ́ɛ̀ bɛ́sɛ̀ báà tù wû.
nà m-ùdə̂̀ w-ɔ́ɔ̀ wɛ́ɛ̀ b-ɛ́sɛ̀ báà tù wû
COM N1-woman 1-POSS.2S EXCL 2-all 2.COP inside there
'And your wife, so all are inside there.'

(N162) lígɛ̀ sâ nzàmbí nyɛ̀ mɛ́dɛ́.
lígɛ sâ nzàmbí nyɛ mɛ́dɛ́
stay only PN 1 self
'Only Nzambi himself stays [outside].'

(N163) yɔ́ɔ̀ nzàmbí sá mpù.
yɔ́ɔ̀ nzàmbí sâ-H mpù
so PN do-R like.this
'So Nzambi does like this.'

(N164) à kɛ́ɛ̀̀ nyî pɛ̀ dyúwɔ̀ à dígɛ́ɛ̀̀
a kɛ́ɛ̀̀ nyî pɛ̀ dyúwɔ̀ a dígɛ́ɛ̀̀
1.PST1 go.COMPL enter there on.top 1.PST1 watch.COMPL
à díg-â dígɛ́ɛ̀̀.
a dígɛ́ɛ̀̀ a dígɛ́ɛ̀̀
1.PST1 watch.COMPL 1.PST1 watch.COMPL
'He went inside there on top and watched and watched and watched.'

(N165) kì nâ nzá nyɛ́ mê?
kì nâ nzá nyê-H mê
say COMP who see-R 1S.OBJ
'[He] says: 'Who sees me?"

(N166) yá nyɛ́-lɛ́, yá nyɛ́-lɛ́ wɔ́ɔ̀.
ya-H nyɛ́-lɛ́, ya-H nyɛ́-lɛ́ wɔ́ɔ̀
1P-PRES see-NEG 1P-PRES see-NEG 2S.OBJ[Kwasio]
'We don't see, we don't see you.'

(N167) nyɛ̀ nâ àwâ.
nyɛ nâ àwâ
1 COMP thanks
'He: 'Thanks."

(N168) nyàá sùbɔ̀ èsə̂s ɛ́ dyúwɔ̀.
nyàá sùbɔ èsə̂s ɛ́ dyúwɔ̀
1.INCH pour ∅1.fuel LOC ∅7.top
'He starts pouring fuel on top.'

(N169) wùùùù wùùùù.
wùùùù wùùùù
IDEO IDEO
'[depiction of pouring].'

(N170) àlé,
àlé
allez[French]
'*Allez* [= Ok],'

(N171) kɔ́ɔ̀ nɔ̀ɔ̀ brìkɛ̂ wɛ̂,
kɔ́ɔ̀ nɔ̀ɔ̀ brìkɛ̂ w-ɛ̂
SEQU take ∅1.lighter[French] 1-POSS.3S
'then takes his lighter,'

(N172) vɛ̀ɛ̀ bɛ́dɛ̀.
vɛ̀ɛ̀ bɛ́dɛ
only light
'just light [the house].'

(N173) tèèè uf.
tèèè uf
IDEO IDEO
'[depiction of waiting and then the flame].'

(N174) mùdì kí tàtɔ̀ wúó!
m-ùdì kí tàtɔ wú-o-H
N1-person NEG 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 wɔ̀m, mùdì núú djí nâ wɔ̀m.
nâ wɔ̀m m-ùdì núú djì-H nâ wɔ̀m
COMP IDEO N1-person 1.DEM.DIST stay-R COMP IDEO
'Be there silence, that person stay silent.'

(N177) màà mâ...
m-àà mâ
ma6-thing 6.DEM.PROX
'These things...'

(N178) ɛ́ mùdì nɔ́gá núù lígɛ́ vâ?
ɛ́ m-ùdì nɔ́-gá núù lígɛ-H vâ
LOC N1-person 1-other 1.DEM.PROX stay-R here
'Is there any person left here?'

(N179) lèkfúdɛ̀!
le-kfúdɛ̀
le5-idiot
'Idiot!'

(N180) à bwàá yɛ́ɛ́ kɛ́ djì mpù.
a bwàà-H yɛ́ɛ́ kɛ̀-H djì mpù
1 PRF-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) nyɛ̀ nâ mɛ̀ɛ́ bɛ́lɛ́ wû.
nyɛ nâ mɛ̀ɛ́ bɛ̀-lɛ wû
1 COMP 1S.PRES.NEG be-NEG there
'He: 'I'm not there."

Nze:

(N182) yà!
yà
yes
'Yes!'

Tata:

(N183) mìntáŋgánɛ́ mí múà vìdɛ̀gà dé.
mi-ntáŋgánɛ́ mi-H múà vìdɛga dé
mi4-white.person 4-PRES PROSP turn LOC
'They are about to turn into white people.'

(N184) bon, mpɔ̀ŋgɔ̀ sílɛ́ɛ̃̀ɛ̃̀,
bon, mpɔ̀ŋgɔ̀ sílɛ́ɛ̃̀ɛ̃̀
OK[French] ∅7.generation finish.COMPL
'OK, the generation has been wiped out,'

(N185) nà béè bànáyɛ̂yɛ̂.
nà béè ba-náyɛ̂yɛ̂
COM 2P.COP 2-bleached.out
'and you are bleached out [= white].'

(N186) ɛ́ mpù mbúmbù núú láá mɛ̂ nâ,
ɛ́ mpù mbúmbù núú láà-H mɛ̂ nâ
LOC like.this ∅1.namesake 1.DEM.DIST tell-R 1S.OBJ COMP
'Like this, that namesake tells me that,'

(N187) báà sâ nâ lèfû lèvúdṹ,
báà sâ nâ le-fû lè-vúdṹ
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) wɛ́ dyúwɔ́ mpù bàmìntùlɛ̀ bɔ́gá bá tsígɛ̀
wɛ-H dyúwɔ-H mpù ba-mìntùlɛ̀ bɔ́-gá ba-H tsígɛ
2S-PRES hear-R like.this ba2-mouse 2-other 2-PRES take.off
tsùk tsùk tsùk.
tsùk tsùk tsùk
IDEO IDEO IDEO
'You hear like this the other mice take off [depiction of noise of mice].'

(N190) àà nàmɛ́nɔ́ bwáà dè, nàmɛ́nɔ́.
àà nàmɛ́nɔ́ bwáà dè nàmɛ́nɔ́
EXCL tomorrow 2P.FUT eat tomorrow
'Ah, tomorrow you will eat, tomorrow.'

(N191) bwáà pə̃́ə̀ ŋgâ dyà nà pówàlà wû.
bwáà pə̃́ə̀ ŋgâ dyà nà pówàlà wû
2P.FUT start PL sleep COM ∅7.calm there
'You (pl.) will first sleep quietly there.'

(N192) bé dúú vṵ̃ṵ̃.
be-H dúù-H vṵ̃ṵ̃
2P-PRES must.not-R worry
'Don't worry.'

(N193) bèdéwɔ̀ bíné, mɛ̀ nzíí byɔ̂ gyámbɔ̀.
be-déwɔ̀ b-íné mɛ nzíí byɔ̂ gyámbɔ̀
be8-food 8-POSS.2P 1S PROG.PRES 8.OBJ prepare
'Your food, I am preparing it.'

Nze:

(N194) yéééé!
yéééé
EXCL
'[sound of disappreciation]!'

Tata:

(N195) wùf wùf.
wùf wùf
IDEO IDEO
'[depiction of sound when mice are walking].'

(N196) bàmìntùlɛ̀ bá lèmbó nâ màmbò má bvùlɛ́.
ba-mìntùlɛ̀ ba-H lèmbo-H nâ m-àmbò má bvùlɛ́
ba2-mouse 2-PRES know-R COMP ma6-thing 6:ATT ∅8.night
'The mice know that these are things of the night.'

(N197) bá múà gyɛ́sɔ̀ bédéwɔ̀ byáwɔ́.
ba-H múà gyɛ́sɔ H-be-déwɔ̀ by-áwɔ́
2-PRES PROSP search OBJ.LINK-be8-food 8-POSS.3P
'They are about to look for their food.'

(N198) ùβù ùβù bàmìntùlɛ̀ báà wû.
ùβù ùβù ba-mìntùlɛ̀ báà wû
IDEO IDEO ba2-mouse 2.COP there
'[depiction of sound of mice] The mice are there.'

(N199) nzàmbí nzí kàmbɔ̀.
nzàmbí nzí kàmbɔ
PN PROG.PST1 defend
'Nzambi was defending [the house, in vain].'

(N200) àá bámálá tɔ́bá mpfùmɔ̀ nà pámò mɛ́nɔ́.
àá bámala-H tɔ́bá mpfùmɔ̀ nà pámo mɛ́nɔ́
1.INCH scold-R since ∅3.midnight COM arrive ∅7.morning
'He is at the beginning of scolding from midnight until the morning.'

(N201) à tɛ́lɛ́ sâ dɛ́ndì témɔ́.
a tɛ́lɛ-H sâ d-ɛ́ndì témɔ́
1.PST1 stand-R only le5-courtyard middle
'He just stood in the middle of the courtyard.'

(N202) mɛ́nɔ́ wɛ̀è nyɛ̂ nâ mbúmbù nzíí kì
mɛ́nɔ́ wɛ̀è nyɛ̂ nâ mbúmbù nzíí kì
∅7.morning 2S.FUT see COMP ∅1.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 lɔ́ sɛ́mbɔ̀
bímbú le-kàá lé wùlà yá Nadine lɔ́ sɛ́mbɔ
∅7.amount le5-kind 5:ATT ∅7.time 7:ATT PN RETRO arrive
vâ,
vâ
here
'The amount of time that Nadine just arrived here, [= when Nadine just arrived here]'

(N204) nzàmbí vèɛ̀kɛ́ yɔ́ɔ̀ mbɛ̀.
nzàmbí vèɛ̀kɛ́ yɔ́ɔ̀ mbɛ̀
PN go[Bulu] open[Bulu] ∅3.door
'Nzambi just goes open the door.'

Mambi:

(N205) vèɛ̀ vèɛ̀ vèɛ̀ vèɛ̀ kíŋgɛ̀lɛ̀ kíŋgɛ̀lɛ̀ kíŋgɛ̀lɛ̀.
vè vè vè vè kíŋgɛlɛ kíŋgɛlɛ kíŋgɛlɛ
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 núù vɛ̀ vâ.
nzàmbí nké'é yá nzàmbí núù vɛ̀ vâ
PN ∅7.scream 7:ATT 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 ∅7.scream
'He is screaming.'

(N209) ká á dígɛ́ nâ [gesture] á nyɛ́
ká a-H dígɛ-H nâ [gesture] a-H nyɛ̂-H
when 1-PRES look-R COMP [gesture] 1-PRES see-R
mbúmbù wɛ́ɛ̀ á pámò.
mbúmbù w-ɛ́ɛ̀ a-H pámo
∅1.namesake 1-POSS.3S 1-PRES arrive
'When he looks like [gesture], he sees his namesake who arrives.'

Aminu:

(N210) mbúmbù wà lèbɔ́’ɔ̀.
mbúmbù wà le-bɔ́’ɔ̀
∅1.namesake 1:ATT le5-bread.fruit
‘The namesake of the bread fruit.’

Tata:

(N211) àá, à pámɔ̋̀ɔ̀,
àá, a pámɔ̋̀ɔ̀
EXCL 1.PST1 arrive.COMPL
‘Yes, he has arrived,’

(N212) wà màlɛ́ndí.
wà ma-lɛ́ndí
1:ATT ma6-palm.tree
‘of the palm trees.’

(N213) yɔ́ɔ̀ á sɛ́mbɔ̀.
yɔ́ɔ̀ a-H sɛ́mbɔ
so 1-PRES arrive
‘So he arrives.’

(N214) mbúmbù ɛ́ ná?
mbúmbù ɛ́ 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 is anger in the heart (he is angry).’

(N216) mɛ̀ɛ́ lémbòlɛ̀ bàsɔ̋́ bɔ́ɔ̀ ɛ́ mpù
mɛ̀ɛ́ lémbo-lɛ̀ bà-sɔ̋́ b-ɔ́ɔ̀ ɛ́ 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) mɛ̀ɛ́ lémbòlɛ̀ ɛ́ mpù báà ndáwɔ̀ dé
mɛ̀ɛ́ lémbo-lɛ̀ ɛ́ mpù báà ndáwɔ̀ 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 wɛ̀ sílɛ́ɛ̀̀ nyàà dyùù mpɔ̀ŋgɔ̀ yá
nâ wɛ sílɛ́ɛ̀̀ nyàà dyùù mpɔ̀ŋgɔ̀ 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 lɔ́ sâ ná?
ba-H lɔ́ sâ ná
2-PRES RETRO do how
'How did they do [that]?'

(N220) bùdì bà sílɛ́ɛ̀̀ mɛ̂ wɛ̀ ndáwɔ̀ tù
b-ùdì ba sílɛ́ɛ̀̀ mɛ̂ wɛ̀ ndáwɔ̀ tù
ba2-person 2.PST1 finish.COMPL 1S.OBJ die ∅9.house inside
vâ.
vâ
here
'The people have all died here inside the house.'

(N221) ɛ́ mpù wɛ̀ nzí mɛ̂ láà.
ɛ́ mpù wɛ nzí mɛ̂ láà
LOC like.this 2S PROG.PST1 1S.OBJ tell
'You were telling me like this.'

(N222) kánâ mɛ̀ kɔ̀bɛ́ ndáà tsì,
kánâ mɛ kɔ̀bɛ-H ndáà tsì
or 1S.PST1 break-R also ∅7.interdiction
'Or I also broke the interdiction,'

(N223) mɛ̀ɛ́ lémbólɛ́.
mɛ̀ɛ́ lémbo-lɛ
1S.PRES.NEG know-NEG
'I don't know.'

(N224) yɔ́ɔ̀ nzàmbí kí nâ mbúmbù,
yɔ́ɔ̀ nzàmbí kì-H nâ mbúmbù
so PN say-R COMP ∅1.namesake
'So Nzambi says: 'Namesake','

(N225) djíî sí vâ.
djíî sí vâ
sit.IMP down here
'sit down here.'

(N226) nóò!
nóò
EXCL
'No!'

(N227) béè bùdì bá vúdṵ̂ ndí bwáá gyɛ́sɔ́
béè b-ùdì bá vúdṵ̂ ndí bwáa-H gyɛ́sɔ-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) ɛ̀hɛ̂!
ɛ̀hɛ̂
EXCL
'Exactly!'

Tata:

(N229) wɛ̀ lèmbṍṑ sâ bányá màmbò
wɛ lèmbṍṑ sâ H-ba-nyá m-àmbò
2S.PST1 know.COMPL do OBJ.LINK-ba2-important ma6-thing
nâ ká mɛ́ lúmɔ́ wɛ̂ nlάà nâ,
nâ ká mɛ-H lúmɔ-H wɛ̂ nlάà nâ
COMP if 1S-PRES send-R 2S.OBJ ∅3.message COMP
'You know to do the important things that if I send you the message that,'

(N230) mbúmbù, kòlɛ̂ mɛ̀,
mbúmbù kòlɛ̂ mɛ̀
∅1.namesake, help.IMP 1S.OBJ
'namesake, help me,'

(N231) ɛ́ tè wɛ̀gà wɛ́ njí sâ,
ɛ́ tè wɛ̀-gà wɛ-H njì-H sâ
LOC there 2S-CONTR 2S-PRES come-R do
'and there you, you come to make,'

(N232) mbvúndá ɛ́ ndzǐ vâ.
mbvúndá ɛ́ ndzǐ vâ
∅9.trouble LOC ∅9.path here
'trouble on the way here.'

(N233) ndí wɛ́ lèmbó nâ mbvúndá nyîì bvúdà nà
ndí wɛ-H lèmbo-H nâ mbvúndá nyîì bvúda nà
but 2S-PRES know-R COMP ∅9.trouble 9.FUT fight COM
mbvúndá.
mbvúndá
∅9.trouble
'But you know that trouble would fight with trouble.'

(N234) nzàmbí wà nû kɔ́ɔ̀ kìyà léwê.
nzàmbí wà nû kɔ́ɔ̀ kìya H-le-wê
PN 1:ATT 1.DEM.PROX only give OBJ.LINK-le5-cry
'This Nzambi only gives a cry.'

(N235) bààm.
bààm
IDEO
'[finish].'

(N236) nzàmbí gyîî.
nzàmbí gyîî
PN cry.COMPL
'Nzambi has cried.'

(N237) à gyîî.
a gyîî
1.PST1 cry.COMPL
'He has cried.'

(N238) lèkfúdɛ̀ à nzí bíyɔ̀ nlô pɛ́ɛ́.
le-kfúdɛ̀ a nzí bíyɔ nlô pɛ́-ɛ́
le5-idiot 1 PROG.PST hit ∅3.head there-DIST
'The idiot was hitting the head there.'

(N239) áà bɛ́ à bó nà màbádò nyúlɛ̀.
áà bɛ̀-H a bô-H nà ma-bádò nyúlɛ̀
1.PST2 be-R 1.PST1 lie-R COM ma6-open.wound ∅9.body
'He was being lying with open wounds on the body. [*Il était étant couché avec...*]'

(N240) nyɛ̀ nâ yáà mɛ́ láà,
nyɛ nâ yáà mɛ-H láà
1 COMP yes 1S-PRES say
'He: 'Yes, I say,"

(N241) nâ sá wɛ́ sá nɔ́gá mùdì,
nâ sá wɛ-H sâ-H nɔ́-gá m-ùdì
COMP ∅7.thing 2S-PRES do-R 1-other N1-person
'the thing that you do to another person,'

(N242) àà yô wɛ̂ nyè.
àà yô wɛ̂ nyè
1.FUT 7.OBJ 2S return
'he will return to you.'

(N243) yɔ́ɔ̀ nzàmbí wà nû,
yɔ́ɔ̀ nzàmbí wà nû
so PN 1:ATT 1.DEM.PROX
'So this Nzambi,'

(N244) sá á sá nɔ́nɛ́gá,
sá a-H sâ-H n-ɔ́nɛ́gá
∅7.thing 1-PRES do-R 1-other
'the thing that he does to the other,'

(N245) yɔ́ɔ̀ nyɛ̀gà á nyé nyɛ̂,
yɔ́ɔ̀ nyɛ̀-gà a-H nyè-H nyɛ̂
so 1-other 1-PRES return-R 1.OBJ
'so the other returns to him,'

(N246) ŋgvùndɔ̀ nyà tè.
ŋgvùndɔ̀ nyà tè
∅9.vengence 9:ATT there
'the vengence of there.'

(N247) ɛ́ vâ màlíyɔ̀ má fúgɛ̀.
ɛ́ vâ ma-líyɔ̀ ma-H fúgɛ
LOC here ma6-clearing 6-PRES end
'Here, the clearing ends.'

(N248) ɛ́ vâ màkwɛ̀lɔ̀ má fúgɛ̀,
ɛ́ vâ ma-kwɛ̀lɔ̀ ma-H fúgɛ
LOC here ma6-felling 6-PRES end
'Here, the felling ends,'

(N249) vɛ̀ɛ̀ vâ.
vɛ̀ɛ̀ vâ
only here
'only here.'

(N250) kàndá wɛ́ ndɛ̀.
kàndá wɛ́ ndɛ̀
∅7.proverb ID ANA
'The story is this.'

(N251) bàmpámbó bá líyɛ̀ líyɛ̀,
ba-mpámbó ba-H líyɛ líyɛ
ba2-ancestor 2-PRES leave leave
'The ancestors leave [the proverbs to us],'

(N252) nâ yá tɑ́ɑ̀tà békàndá bé
nâ ya-H tɑ́ɑ̀-tà 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) byɔ̂ wɛ́ bèndɛ̀.
byɔ́ wɛ́ bè-ndɛ̀
8.EMPH ID 8-ANA
'Those are these.'

(N254) byɔ̂ bé vɛ́ bíì màpè'è.
byɔ̂ be-H vɛ̀-H bíì ma-pè'è
8.EMPH 8-PRES give-R 1P.OBJ ma6-wisdom
'They give us wisdom.'

Aminu:

(N255) ká kɛ́ɛ́sɔ́ yí wúmbɛ́ wɛ̂ dyɔ̀dɛ̀,
ká kɛ́ɛ́sɔ́ yi-H wúmbɛ-H wɛ̂ dyɔ̀dɛ
if ∅7.égal 7-PRES want-R 2S.OBJ deceive
'If somebody wants to deceive you,'

(N256) wɛ́ kílɔ̀wɔ̀.
wɛ-H kílɔwɔ
2S-PRES be.vigilant
'you are vigilant.'

(N257) wɛ́ kí nâ ɛ́y!
wɛ-H kì-H nâ ɛ́y
2S-PRES say-R COMP EXCL
'You say: 'Hey!"

Djiedjhie:

(N258) yí bálɛ́ gyà.
yi-H bálɛ-H gyà
7-PRES surpass-R ∅7.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) mɛ́ wúmbɛ́ lɛ́ɛ̀ nà bɔ̂.
mɛ-H wúmbɛ-H lɛ́ɛ̀ nà bɔ̂
1S-PRES want-R talk[Kwasio] COM 3P
'I want to talk with them.'

(C2) yí ntégɛ̀lɛ̀, ɔ̀ dyúwɔ́ mɔ̀?
yi-H ntégɛlɛ ɔ dyúwɔ-H mɔ̀
7-PRES disturb 2S[Kwasio] hear-R COMPL
'It disturbs, have you understood?'

(C3) yí ntégèlè, vèdáà mé sùmbélé bê.
yi-H ntégɛlɛ vèdáà mɛ-H sùmbɛlɛ-H bê
7-PRES disturb but[Bulu] 1S-PRES greet[Kwasio]-R 2P.OBJ
'That disturbs, but I greet you.'

(C4) mé sùmélé bê ndènáà.
mɛ-H sùmɛlɛ-H bê ndènáà
1S-PRES greet-R 2P.OBJ like.that
'I greet you like this.'

(C5) djínɔ lé kwàdɔ yâ̂ yîì Ngòló.
dj-ínɔ lé kwàdɔ y-â̂ yîì ngòló
le5-name 5:ATT ∅7.village 7-POSS.1S 7.COP PN
'The name of my village is Ngolo.'

(C6) pándè té nà té, mè djínɔ ná Nzè.
pándɛ té nà té mɛ dj-ínɔ ná Nzè
arrive ∅7.position COM ∅7.position 1S le5-name SIM PN
'Having arrived immediately, my name is Nze.'

(C7) kfúmà wà Nkóòlóŋ.
kfúmà wà nkóòlóŋ
∅1.chief 1:ATT PN[Bulu]
'The chief of Ngolo [= uses exonym].'

(C8) kfúmà wà Nkóòlóŋ, Nzè.
kfúmà wà nkóòlóŋ, Nzè
∅1.chief 1:ATT PN[Bulu] PN
'The chief of Ngolo, Nze.'

Mambi:

(C9) nyè wé nû.
nyɛ wé nû
1 ID 1.DEM.PROX
'This is him [= Nze].'

(C10) á páàŋgɔ́ tálè sílè, mè nzíí ná kè.
a-H páàŋgɔ-H tálɛ sílɛ mɛ nzíí ná kè
1-PRES PRIOR[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 mɛ̀ nzíí ná làwɔ̀ ná.
áà mɛ nzíí ná làwɔ 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.EMPH 1P-PRES suffer 1P-PRES suffer-R COM what
'What do we suffer, we suffer from what?.'

(C13) yá tfúgá nà ngùndyá, mpáŋgì.
ya-H tfúga-H nà ngùndyá mpáŋgì
1P-PRES suffer-R COM ∅9.raffia ∅7.bamboo
'We suffer from the straw, the bamboo.'

(C14) ká yí nyí mɛ̂ mbɔ̀... mpáŋgì yí kùgá
ká yi-H nyî-H mɛ̂ m-bɔ̀ mpáŋgì yi-H kùga-H
when 7-PRES enter-R 1S N3-arm ∅7.bamboo 7-PRES can-R
nâ nyíì wɛ̀ mbɔ̀.
nâ nyíì wɛ m-bɔ̀
COMP enter.SBJV 2S N3-arm
'When it goes into my arm... the bamboo can sting your arm.'

(C15) yáà fúàlà bígɛ̀ yɔ̃̂ yá vɛ́?
yáà fúala bígɛ yɔ̃̂ yá vɛ́
1P.FUT end develop ∅7.time[Bulu] 7:ATT which
'When will we end up developping?'

(C16) yá vyǎǎ kɛ̀ nà kwɑ̃̂ mángùndyá, wɛ̀ nà
ya-H vyǎǎ-H kɛ̀ nà kwɑ̃̂ H-ma-ngùndyá wɛ nà
1P-PRES do.but-H go COM cut OBJ.LINK-ma6-raffia 2S COM
ngvùlɛ̀ kɛ̀ sɔ́lɛ̀gà wû nà njí kù ɛ́
ngvùlɛ̀ kɛ̀ sɔ́lɛga wû nà njì-H kù ɛ́
∅9.strength go fall there COM come-R fall[Kwasio] LOC
sì.
sì
∅9.ground
'We do nothing but go and cut the raffia, you are strong to go fall there and come fall to the ground.'

(C17) mɛ́ bvú nâ nkwálá wúù tfùndɛ́ mɛ̀ vâ.
mɛ-H bvû-H nâ nkwálá wúù tfùndɛ-H mɛ̀ vâ
1S-PRES think-R COMP ∅3.machete 3.PST2 miss-R 1S.OBJ here
'I think that the machete had missed [= injured] me here.'

(C18) ngùndyá, mɛ́ kɛ́ sɔ́lɛ̀gà ngùndyá dyúwɔ̀.
ngùndyá mɛ-H kɛ̀-H sɔ́lɛga ngùndyá dyúwɔ̀
∅9.raffia 1S-PRES go-R chop ∅9.raffia on.top
'The raffia, I go to chop the raffia on top.'

(C19) áá bîì, màndáwɔ̀ má zì, yáà mɔ́ fúàlà
áá bîì ma-ndáwɔ̀ má zì yáà mɔ́ fúala
EXCL 1P.OBJ ma6-house 6:ATT ∅7.tin[Bulu] 1P.FUT 6.OBJ end
bwɛ̂ lèwùlà lé vɛ́?
bwɛ̂ le-wùlà lé vɛ́
receive le5-hour 5:ATT which
'Ah, us, tin houses, when will we receive them?'

(C20) mà bɛ́ vɛ́?
ma bɛ̀-H vɛ́
6.PST1 be-R where
'Where were they?'

(C21) mɛ́ bvú nâ bàmó tè yɔ́ɔ̀ wɛ́ yî.
mɛ-H bvû-H nâ bàmó tè yɔ́ɔ̀ wɛ́ yî
1S-PRES think-R COMP ∅7.scar there 7.EMPH ID 7.DEM.PROX
'I think, the scar there is this.'

(C22) bwà nzíí kàlànɛ̀?
bwa nzíí kàlanɛ
2P PROG.PRES transmit
'Are you translating?'

(C23) yá lɔ́ fúàlà nà mɛ̀ lɔ́ làwɔ̀.
ya-H lɔ́ fúala nà mɛ lɔ́ làwɔ
1P-PRES RETRO end COM 1S RETRO talk
'We just finished and I just spoke.'

(C24) nlɑ̂ wá zì, ndáwɔ̀ nyà zì nyíî mɛ̀ vé?
nlɑ̂ wá zì ndáwɔ̀ nyà zì nyíî mɛ̀ vé
∅3.story 3:ATT ∅7.tin ∅9.house 9:ATT tin 9.COP 1S.OBJ where
'The problem with the tin, where is the tin (roofed) house for me?'

(C25) fàmí wɑ̂ nyɛ̀ngwɛ́sɛ̀ nâ á bígɛ́ɛ̀.
fàmí w-ɑ̂ nyɛ̀-ngwɛ́sɛ̀ nâ a-H bígɛ́ɛ̀
∅1.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
∅3.PN[Bulu] COMP 3-PRES develop.SBJV
'Nko'olong [name of the village], may it develop.'

(C28) ɔ̀bâj ɔ̀bâj ɔ̀bâj.
[straw straw straw]Bulu
'Straw, straw, straw.'

(C29) mɛ́ ŋgà kɛ́ sɔ́tàn èlɛ̀ yɔ́ßɛ̀tɛ̀.
[1S build go jump tree top]Bulu
'I build and jump up on the tree.'

(C30) fá à ŋgà bálɛ̀ màvá.
[machete 3S 1S hurt here]Bulu
'The machete injured me here.'

(C31) yɔ́ɔ̀ mɛ́ wúmbɛ́ mándáwɔ̀ má zì má
yɔ́ɔ̀ mɛ-H wúmbɛ-H H-ma-ndáwɔ̀ má zì ma-H
so 1S-PRES want-R OBJ.LINK-ma6-house 6:ATT ∅7.tin 6-PRES
tɛ́wɔ́'ɔ̀ mɛ̀ vâ, ndá zì.
tɛ́wɔ̀ɔ̀ mɛ vâ ndá zì
put.SBJV 1S.OBJ here ATT[Bulu] ∅7.tin[Bulu]
'So I want tin (roofed) houses that they be put here for me, of tin.'

(C32) má kì má yánɛ́ bî ndà zì djálɛ́ 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) làwɔ̂ bágyɛ̀lì!
làwɔ̂ H-ba-gyɛ̀lì
speak.IMP OBJ.LINK-2-Gyeli
'Speak Gyeli!'

Nze:

(C34) mɛ́ làwɔ́ náà màndáwɔ̀ má zì má
mɛ-H làwɔ-H nâ ma-ndáwɔ̀ má zì ma-H
1S-PRES say-R COMP ma6-house 6:ATT ∅7.tin 6-PRES
kùgáà mɛ̀ vâ.
kùgáà mɛ vâ
be.enough.SBJV 1S.OBJ here
'I say that there should be enough tin (roofed) houses here for me.'

(C35) bàgyɛ̀lì bá sɔ́ bà sílɛ́ɛ̀ bígɛ̀.
ba-gyɛ̀lì bá sɔ́ ba sílɛ́ɛ̀ bígɛ
2-Gyeli 2:ATT ∅1.friend 2.PST1 finish.COMPL develop
'The fellow Bagyeli have already all developped.'

(C36) bí bɔ́ɔ̀ yá bígɛ́ mpá'à wá vɛ́?
bí b-ɔ́ɔ̀ ya-H bígɛ-H mpá'à wá vɛ́
1P.EMPH 2-other 1P-PRES develop-R ∅3.side 3:ATT which
'How will we others develop?'

(C37) mɛ́ kɛ́ dvùmɔ nkùndyá dyúwɔ̀,
mɛ-H kɛ̀-H dvùmɔ nkùndyá dyúwɔ̀
1S-PRES go-R fall ∅9.raffia on.top
'I go fall from the raffia up there,'

(C38) kɛ̀ kwɑ̂ ngùndyá mbvúɔ̀ nzíí nɔ̀.
kɛ̀ kwɑ̂ ngùndyá mbvúɔ̀ nzíí nɔ̀
go cut ∅9.raffia ∅1.rain PROG.PRES rain
'going cutting the raffia when it's raining.'

(C39) ŋgà wɛ́ nyɛ́ nyɛ̂?
ŋgà wɛ-H nyɛ̂-H nyɛ̂
Q(tag) 2S-PRES see-R see
'Right, you see [that] often.'

(C40) ngùndyá tè nyɔ́ bɛ́ nyî.
ngùndyá tè nyɔ́ bɛ̀-H nyî
∅9.raffia there 9.EMPH be-R 9.DEM.PROX
'The raffia there, it is that.'

(C41) ndí mɛ̀, mɛ̀, yà, bà fàmí wɑ̂ yáà bígɛ̀
ndí mɛ mɛ ya bà fàmí w-ɑ̂ yáà bígɛ
but 1S 1S 1P AP ∅1.family 1-POSS.1S 1P.FUT develop
yɔ́ɔ̃̀ yá vɛ́, ɛ́ yɑ̂ kwádɔ́ nâ
yɔ́ɔ̃̀ yá vɛ́ ɛ́ y-ɑ̂ kwádɔ́ nâ
∅7.time[Bulu] 7:ATT which LOC 7-POSS.1S ∅7.village COMP

yíì vàágɔ̀?
yíì vàágɔ̀
7.COP animated
'But I, I, we, my family, what time will we develop, so my part of the village be lively?'

(C42) mɛ̀ bɛ́ ngyɛ̂̀ Ngvùmbɔ̀.
mɛ bɛ̀-H n-gyɛ̂̀ Ngvùmbɔ̀
1S.PST1 be-R N1-guest PN
'I was a guest of the Ngumba.'

(C43) mɛ̀ nyɛ́ kwádɔ́ yî, Kúndúkùndù.
mɛ nyɛ̂-H kwádɔ́ yî Kúndúkùndù
1S.PST1 see-R ∅7.village 7.DEM.PROX PN
'I saw this village, Kundukundu.'

(C44) vɛ̀ɛ̀ màndáwɔ̀ má zì mɔ́ nà mɔ́.
vɛ̀ɛ̀ ma-ndáwɔ̀ má zì mɔ́ nà mɔ́
only ma6-house 6:ATT ∅7.tin 6.OBJ COM 6.OBJ
'Only tin (roofed) houses, each and each.'

(C45) mɛ́gà ɛ́ɛ̀ yɛ̂̀ kwádɔ́ yɔ́gà!
mɛ́-gà ɛ́ɛ̀ y-ɛ̂̀ kwádɔ́ yɔ́-gà
1S-CONTR EXCL 7-POSS.1S ∅7.village 7-CONTR
'As of me, right, my [part of the] village too!'

(C46) wɛ́gà wɛ̀ njí dyɔ̀dɛ̀ bùdì.
wɛ́-gà wɛ njì-H dyɔ̀dɛ b-ùdì
2S-CONTR 2S.PST1 come-R deceive ba2-person
'As of you, you came to deceive people.'

(C47) mínɔ̀ má bùdì mà kɛ́ɛ̀̀, máà vé?
m-ínɔ̀ má b-ùdì ma kɛ́ɛ̀̀ 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 lɔ́ɔ̀ yá bùdɛ́ lɛ̂.
le-bvúú lé tè lɔ́ɔ̀ ya-H bùdɛ-H lɛ̂
le5-anger 5:ATT there 5.COP 1P-PRES have-R 5.OBJ
'The anger there it is that which we have.'

(C49) vɛ̀ɛ̀ nàmɛ́nɔ́ nàmɛ́nɔ́ nà pámò dɛ̀̃.
vɛ̀ɛ̀ nàmɛ́nɔ́ nàmɛ́nɔ́ nà pámo dɛ̀̃
only tomorrow tomorrow COM arrive today
'Only tomorrow, tomorrow, until today. [= only heard promises till today]'

Severin in Ngumba:

(C50) bùrè bvúbvù bɔ́ ʃí nzì wâ?
people many 2 PROG come here
'Are many people coming here?'

Nze:

(C51) éè bvúbvù. pílì mɛ́ làwɔ́ mpù, mɛ̀ɛ́
éè bvúbvù pílì mɛ-H làwɔ-H mpù mɛ̀ɛ́
yes many when 1S-PRES speak-R like.this 1S.PRES.NEG
válɛ́ làwɔ̀.
vá-lɛ́ làwɔ
tolerate-NEG speak
'Yes, many. When I speak like this, I don't tolerate to talk [= I'm not lieing].'

(C52) yîì nâ báà bvúbvù.
yîì nâ báà bvúbvù
7.COP COMP 2.COP many
'It is that they are many.'

(C53) bwánɔ̀ békúmbé bé bà njí nà byɔ̂ bé
b-wánɔ̀ be-kúmbé bé ba njì-H nà byɔ̂ be-H
ba2-child be8-tin 8:ATT 2.PST1 come-R COM 8.OBJ 8-PRES
tɛ́lɛ́ màbé.
tɛ́lɛ-H mà-bé
stand-R here-8
'The few tin roofs that they brought stand here.'

(C54) màndáwɔ̀ má tɛ́lɛ́ màmá.
ma-ndáwɔ̀ ma-H tɛ́lɛ-H mà-má
ma6-house 6-PRES stand-R here-6
'Houses stand here.'

(C55) bèsàndyá lèwúmɔ̀ nà bétánɛ̀,
be-sàndyá lè-wúmɔ̀ nà bé-tánɛ̀
be8-raffia.mat le5-ten COM 8-five
'Fifteen raffia mats,'

(C56) byɔ́ bé tɛ́lɛ́ bé.
byɔ́ be-H tɛ́lɛ-H (mà-)bé.
8.EMPH 8-PRES stand-R 8
'They stand here.'

(C57) bèkúmbɛ́ báà njì nà byɔ̂ nà báà njì lwə̂
be-kúmbɛ́ báà njì nà byɔ̂ nà báà njì lwə̂
be8-roof 2.FUT come COM 8 COM 2.FUT come build
mándáwɔ́.
H-ma-ndáwɔ́
OBJ.LINK-ma6-house
'Roofs they will bring and they will come and build houses.'

(C58) bímbú lɛ́ fàmí wə̂ wà mɛ̀ bùdɛ́
bímbú lɛ́ fàmí w-ə̂ wà mɛ bùdɛ-H
∅5.amount 5:ATT ∅1.family 1-POSS.1S 1:ATT 1S.PST1 have
mà…
mà
COMPL[Kwasio]
'The size of my family that I have gotten…'

(C59) ndáwɔ́ tè ká mɛ́ lə̌́ tè…
ndáwɔ́ tè ká mɛ-H lə̀̌-H tè
∅9.house there when 1S-PRES pass-R there
'The house there, when I pass there…'

(C60) ɛ́ pɛ́ɛ́ mɛ̀ɛ̀ lwə̂ nyà ndáwɔ́.
ɛ́ pɛ́-ɛ́ mɛ̀ɛ̀ lwə̂ nyà ndáwɔ́
LOC there-DIST 1S.FUT build real ∅9.house
'I will build a real house over there.'

(C61) ɛ́ pɛ́ɛ́ mɛ̀ɛ̀ djìyɔ́.
ɛ́ pɛ́-ɛ́ mɛ̀ɛ̀ djìyɔ
LOC there-DIST 1S.FUT stay
'I will live over there, here I heard that here it [they] will come and destroy all.'

(C62) ɛ́ vâ mɛ̀ dyùwɔ́ nâ ɛ́ vâ yíì sílɛ̀ njì
ɛ́ vâ mɛ dyùwɔ-H nâ ɛ́ vâ yíì sílɛ njì
LOC here 1S.PST1 hear-R COMP LOC here 7.FUT finish come
búlɛ̀.
búlɛ
destroy
'Here I heard that here it will all come to be destroyed.'

(C63) bímbú lɛ́ mámbɔ̀ŋgɔ̀ máà mɛ̀ vâ.
bímbú lɛ́ ma-mbɔ̀ŋgɔ̀ máà mɛ̀ vâ
∅5.amount 5:ATT ma6-plant 6.COP 1S.OBJ here
'I have many plants here.'

(C64) mɛ́ kɛ́ djìyɔ̀ vé, yá bà fàmí wɑ̂?
mɛ-H kɛ̀-H djìyɔ vé ya-H bà fàmí w-ɑ̂
1S-PRES go-R stay where 1P-PRES AP ∅1.family 1-POSS.1S
'Where will I live, we with my family?'

Severin in Ngumba:

(C65) bɑ̂ njè bû wáá?
2.FUT arrive break here
'Will they come to destroy the place here?'

Nze:

(C66) mɛ́ dyúwɔ́ nâ mpàgó wá pɔ́dɛ̀ lɑ́ vâ.
mɛ-H dyúwɔ-H nâ mpàgó wá pɔ́dɛ̀ lɑ̀̃-H vâ
1S-PRES hear-R COMP ∅3.street 3:ATT ∅1.port pass-R here
'I hear that the road to the port passes [= will pass] here. '

(C67) mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ.
mɛ̀ɛ̀ kálɛ̀ ná bɛ̀ nà djí ɛ́ vâ
1S.FUT NEG.FUT anymore be COM ∅7.place LOC here
'I won't have a place here anymore.'

(C68) mɛ̀ɛ̀ djíbì nyɛ̀, mɛ́ kɛ́ ɛ́ pɛ̀ búùlɛ̀.
mɛ̀ɛ̀ djíbì nyɛ̀ mɛ-H kɛ̀-H ɛ́ pɛ̀ búùlɛ̀
1S.FUT first return 1S-PRES go-R LOC there ∅7.old.settlement
'I will first return, I go over there to the old settlement.'

(C69) ɛ́ pɛ̀ mɛ́ɛ̀ tɛ́.
ɛ́ pɛ̀ mɛ́ɛ̀ tɛ̂-H
LOC there 1S.PST2 found-PST
'Over there I had originally settled.'

(C70) áà kɛ́ndɛ́ gyà.
áà kɛ́ndɛ́ (yá) gyà
EXCL ∅7.walk (7:ATT) ∅7.distance
'Oh, it's a long walk.'

(C71) báà tfùbɔ̀ ndáà,
báà tfùbɔ ndáà
2.FUT pierce also
'They will cut [= a road there] too,'

(C72) báà tfùbɔ̀, báà tfùbɔ̀.
báà tfùbɔ̀ báà tfùbɔ̀
2.FUT pierce 3P.FUT pierce
'they will cut, they will cut.'

(C73) mpàgó wá nùmbà wúù.
mpàgó wá nùmbà wúù
∅3.road 3:ATT ∅1.logger there
'The road of the loggers there.'

(C74) tè mɛ̀ɛ̀ djíbì kɛ̀ lwɔ̰̀ tè.
tè mɛ̀ɛ̀ djíbì kɛ̀ lwɔ̰̀ tè
there 1S.FUT first go build there
'There, I will first go construct there.'

(C75) àmú vâ mɛ̀ɛ́ bɛ́lɛ́ nà sí ɛ́ vâ.
àmú vâ mɛ̀ɛ́ bɛ́-lɛ́ nà sí ɛ́ vâ
because[Bulu] here 1S.NEG be-NEG COM ∅9.ground LOC here
'Because here I don't have any land.'

(C76) ɛ́ vâ mɛ̀ɛ́ bɛ́lɛ́ nà sí vâ.
ɛ́ vâ mɛ̀ɛ́ bɛ́-lɛ́ nà sí vâ
LOC here 1S.NEG be-NEG COM ∅9.ground LOC here
'Here I don't have any property.'

(C77) wɛ́ dyúwɔ́ nâ mɛ̀ nzíí kɛ̀ nà kwɛ̀lɔ̀
wɛ-H dyúwɔ-H nâ mɛ nzíí kɛ̀ nà kwɛ̀lɔ
2S-PRES hear-R COMP 1S PROG.PRES go COM fell
málɛ́ndí tè ɛ́ vâ?
H-ma-lɛ́ndí tè ɛ́ vâ
OBJ.LINK-6-palm.tree there LOC here
'Do you hear that I'm going to fell these palm trees here?'

(C78) mɛ̀ nzíí kɛ̀ nà vúlɛ́ lévúdɔ̰̂ nà
mɛ nzíí kɛ̀ nà vúlɛ-H H-le-vúdɔ̰̂ nà
1S PROG.PRES go COM take.away-R OBJ.LINK-le5-one COM
lèvúdɔ̰̂, mɛ́ táálɛ́ sílɛ̀ nyùlɛ̀.
le-vúdɔ̰̂ mɛ-H táálɛ-H sílɛ nyùlɛ
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) m̀m̀ ndɛ̀náà. lèkɛ́lɛ̀ lɛ́ndɛ̀ lɛ́ɛ̀ nâ...
m̀m̀ ndɛ̀náà. le-kɛ́lɛ̀ lɛ́-ndɛ̀ lɛ́ɛ̀ nâ
EXCL like.this le5-word 5-ANA 5.COP COMP
'Yes, like this. The word is that...'

other speaker:

(C80) nà mìmbàŋgá nà màsá nà bègyí nà
nà mi-mbàŋgá nà ma-sá nà be-gyí nà
COM mi4-coconut.tree COM ma6-prune COM be8-what COM
bègyí,
be-gyí
be8-what
'And the coconut trees and the pruniers and so on and so forth,'

(C81) byɛ́sɛ̀ béɛ̀ sílɛ̀ ntàmànɛ̀.
by-ɛ́sɛ̀ béɛ̀ sílɛ ntàmanɛ
8-all 8.FUT finish ruin
'they all will be ruined.'

Nze:

(C82) màsá mâ vâ kɛ́ nà ntàmànɛ̀, nà
ma-sá mâ vâ kɛ̀-H nà ntàmanɛ nà
ma6-prunier 6.DEM.PROX here go-R COM ruin COM
màbɔ́'ɔ̀ tu tu tu ngùɔ́
ma-bɔ́'ɔ̀ , tu tu tu ngùɔ́
ma6-bread.fruit all[French] all[French] all[French] ∅7.sugar.cane
'These pruniers will be ruined and the bread fruit trees, everything, the sugar cane,'

(C83) mɛ̀ bìyɛ́ làwɔ̀ nâ àà bwánɔ̀ bâ̂...
mɛ bìyɛ-H làwɔ nâ àà b-wánɔ̀ b-â̂
1S in.vain? speak COMP EXCL ba2-child 2-POSS.1S
'I say in vain: 'ah, my children...''

(C84) yɔ́ɔ̀ mɛ̀ djìlɛ́ kwádɔ́ yî.
yɔ́ɔ̀ mɛ djìlɛ-H kwádɔ́ yî
so 1S.PST1 stay-R ∅7.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) ntɛ́mbɔ́ wə̂ wɛ́ nû.
ntɛ́mbɔ́ w-ə̂ wɛ́ nû
∅1.younger.sibling 1-POSS.1S ID 1.DEM.PROX
'This is my little brother.'

Mama:

(C87) ntùmbà wə̂ wɛ́ nû.
ntùmbà w-ə̂ wɛ́ nû
∅1.older.brother 1-POSS.1S ID 1.DEM.PROX
'This is my big brother.'

Nze:

(C88) mwánɔ̀ wə̂ ndáà wɛ́ nù.
m-wánɔ̀ w-ə̂ ndáà wɛ́ nù
N1-child 1-POSS.1S also ID 1.DEM.PROX
'This is also my child.'

Djiedjhie:

(C89) pə̂ bígɛ̀.
pə̂ bígɛ̀.
start.IMP develop
'Speak first.'

Mambi:

(C90) bõ mwa mɛ́ɛ́ béè
bõ mwa mɛ́ɛ́ béè
good[French] 1S.EMPH[French] 1S.COP 2P.COP
alónzì vâ tè nà bèyá njí nyɛ̂
alónzì vâ tè nà bèya-H njì-H nyɛ̂
come.on[French] here there COM 2P-PRES come-R see
bágyèlì.
H-ba-gyèlì
OBJ.LINK-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) mɛ̀ djínɔ̀ ná màmbì, mɛ̀ɛ́ bɛ́lɛ́ nà mùdə̂.
mɛ dj-ínɔ̀ ná màmbì mɛ̀ɛ́ bɛ́-lɛ́ nà m-ùdə̂
1S le5-name SIM PN 1S.PRES.NEG be.NEG COM N1-woman
'My name is Mambi, I don't have a wife.'

(C93) mɛ̀ pálɛ́ lìí bâ.
mɛ pálɛ́ lìí bâ
1S.PST1 NEG.PST yet marry
'I am not yet married.'

Nze:

(C94) à pálɛ́ lìí bâ.
a pálɛ́ lìí bâ
1.PST1 NEG.PST yet married
'He is not yet married.'

Mambi:

(C95) mɛ̀ djínɔ̀ ná màmbì, màmbì.
mɛ dj-ínɔ̀ ná màmbì màmbì
1S le5-name SIM PN PN
'My name is Mambi, Mambi.'

Nze:

(C96) mɛ̀ bùdɛ́ bwánɔ̀ bábáà.
mɛ bùdɛ-H b-wánɔ̀ bá-báà
1S have-R ba2-child 2-two
'I have two children.'

Mambi:

(C97) pílì bèyá lɔ́ njì ɛ́ vâ tɛ́ɛ̀ dɛ́́,
pílì bèya-H lɔ́ njì ɛ́ vâ tɛ́ɛ̀ dɛ́́
when 2P-PRES RETRO come LOC here now today
'When you just arrived here now today,'

(C98) nâ bèyá njí nyɛ̂ bá-gyèlì, voilà.
nâ bèya-H njì-H nyɛ̂ 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 bɔ́gà yá wúmbɛ́ ndáà mínsáyá
bí b-ɔ́gà ya-H wúmbɛ-H ndáà H-mi-nsáyá
1P.EMPH 2-other 1P-PRES want-R also OBJ.LINK-mi4-deed
mí màmbò bèyá sá bî myɔ̂ kí bɛ̀
mí m-àmbò bèya-H sâ-H bî myɔ̂ kí bɛ̀
4:ATT ma6-thing 2P-PRES do-R 1P.OBJ 4.OBJ NEG[Kwasio] be
mímpà.
mí-mpà
4-good
'Us, the others, we want also the deeds of things that you do us, they are not good.'

(C100) ká bèyá bùdɛ́ másà wùnɛ́,
ká bèya-H bùdɛ-H másà w-ùnɛ́
if 2P-PRES have-R ∅1.boss 1-POSS.2P
'If you have your boss,'

(C101) ká másà wùnɛ́ njì, yá láá másà wùnɛ́
ká másà w-ùnɛ́ njì ya-H láà-H másà w-ùnɛ́
if ∅1.boss 1-POSS.2P come 1P-PRES tell-R ∅1.boss 1-POSS.2P
nâ mìnsáyá mí bèyá sâ mí bɛ́lɛ́ mpà, vúdṵ̂ wɛ́
nâ mi-nsáyá mí bèya-H sâ mi-H bɛ́-lɛ́ mpà, vúdṵ̂ wɛ́
COMP mi4-deed 4:ATT 2P-PRES do 4-PRES be-NEG good one ID
yí-ndɛ̀.
yí-ndɛ̀
7-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 yíî nâ kɔ́ɔ̀ mpù ɛ́
yá mbàà yá mbàà yíî nâ kɔ́ɔ̀ mpù ɛ́
7:ATT second 7:ATT second 7.COP COMP still like.this LOC
nzìwù lɔ́ táálɛ̀ làwɔ̀ nâ bon,
nzìwù lɔ́ táálɛ làwɔ nâ bon
PN RETRO begin talk COMP good[French]
'The seecond, the second is that still as Nze just began to say that, good,'

(C103) kwádɔ́ yá Ngòló, yá dzìlɛ́ màyì.
kwádɔ́ yá Ngòló ya-H djìlɛ-H mà-yì
∅7.village 7:ATT PN 1P-PRES seat-R here-7
'The village Ngolo, we [have] place[d] it here.'

(C104) yáà ndáà vâ dísù bvúlɛ̀ bá vèlásá
yáà ndáà vâ dísù bvúlɛ̀ ba-H vèlasa-H
1P.COP also here first.off[Bulu] ba2.Bulu 2-PRES contest-R
bîì nà kwádɔ́ yî.
bîì nà kwádɔ́ yî
1P.OBJ COM ∅7.village 7.DEM.PROX
'We are also here, first off, the Bulu contest our [ownership of] this village.'

(C105) bvúlɛ̀ bá ntɛ́gɛ́lɛ́ ndáà bíyɛ̀.
bvúlɛ̀ ba-H ntɛ́gɛlɛ-H ndáà bíyɛ̀
ba2.Bulu 2-PRES bother-R also 1P.OBJ
'The Bulu bother us, too.'

(C106) bvúlɛ̀ bà bùdɛ́ nâ ká wɛ̀ ŋgyɛ̀lì wɛ̀ bùdɛ́ tʃídí
bvúlɛ̀ ba bùdɛ-H nâ ká wɛ ŋ-gyɛ̀lì wɛ bùdɛ-H tsídí
ba2.Bulu 2 have-R COMP if 2S N1-Gyeli 2S have-R ∅1.animal
wɔ̂ bá sɛ̀ŋgɛ́ nyɛ̂ sí.
w-ɔ̂ ba-H sɛ̀ŋgɛ-H nyɛ̂ sí
1-POSS.2S 2-PRES lower-R 1.OBJ down
'The Bulu say that if you, Gyeli, you have your animal, they lower it [= its price].'

(C107) bɛ́ɛ́ wɛ̀ nzíí dyúwɔ̀ mɛ̂? voilà, bon...
bɛ́ɛ́ wɛ nzíí dyúwɔ mɛ̂? voilà, bon
right 2S PROG.PRES hear 1S.OBJ ok[French] good[French]
'Right, you hear me? Ok, good...'

(C108) yá nà yí báàlá nâ bèdɔ̀wɔ̀ nà bvúlɛ̀,
yá nà yi-H báàla-H nâ bèdɔwɔ nà bvúlɛ̀
7:ATT fourth 7-PRES repeat-R COMP hang.on? COM ba2.Bulu
báà nâ wɛ̀, sílɛ̂ kɛ̀ sâ sálɛ́.
báà nâ wɛ sílɛ̂ kɛ̀ sâ sálɛ́
2.COP COMP 2S finish.IMP go do ∅7.work
'The forth it repeats that about the Bulu, they say that 'you, finish go do the work'.'

(C109) ká wɛ́ sílɛ́ kɛ̀ sâ sálɛ́ mais pílì wɛ́
ká wɛ-H sílɛ-H kɛ̀ sâ sálɛ́ mais pílì wɛ-H
if 2S-PRES finish-R go do work.7 but[French] when 2S-PRES
kɛ́ nâ wɛ́ kɛ́ djíì mònɛ́ wɔ̂, á
kɛ̀-H nâ wɛ-H kɛ̀-R djíì mònɛ́ w-ɔ̂ a-H
go-R COMP 2S-PRES go-R ask ∅1.money 1-POSS.2S 1-PRES
làwɔ́ wɛ̂ nyùmbò.
làwɔ-H wɛ̂ nyùmbò
tell-R 2S ∅3.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) nyɛ̀ náà à múà wɛ̀ bíyɔ̀.
nyɛ nâ a múà wɛ̀ bíyɔ
1 COMP 1 PROSP 2S.OBJ hit
'He [says] that he is about to beat you.'

(C111) nyɛ̀ náà à múà wɛ̀ bíyɔ̀ dɛ́̃,
nyɛ nâ a múà wɛ̀ bíyɔ dɛ́̃
1 COMP 1 PROSP 2S.OBJ hit today
'He [says] that he is about to beat you today,'

(C112) nkàmɔ̀ nà mònɛ́ wɔ̂ dyúwɔ̀.
nkàmɔ̀ nà mònɛ́ w-ɔ̂ dyúwɔ̀
∅9.reason COM ∅1.money 1-POSS.2S on.top
'for the reason about your money.'

(C113) pílì wɛ́ kɛ́ nâ wɛ́ kɛ́ tɔ́kɛ̀ mwánɔ̀
pílì wɛ-H kɛ̀-H nâ wɛ-H kɛ̀-H tɔ́kɛ m-wánɔ̀
when 2S-PRES go-R COMP 2S-PRES go-R collect N1-child
sáyà, bvúlɛ̀ à bùdɛ́ lébvúú nà mɛ̂.
sáyà bvúlɛ̀ a bùdɛ-H H-le-bvúú nà mɛ̂
∅7.thing ba2.Bulu 1 have-H OBJ.LINK-le5-anger COM 1S.OBJ
'When you go to go gather a small thing, the Bulu is angry with me.'

(C114) mɛ̀ nzí dyâ vâ kùgúù dɛ̀̃ màfú mábáà.
mɛ nzí dyâ vâ kùgúù dɛ̀̃ ma-fú má-báà
1S PROG.PST1 lie.down here ∅7.evening today ma6-day 6-two
'I was here the evening two days ago [= from today].'

(C115) mɛ̀ bɛ́ nà mùdɛ̃̂ wà mí
mɛ bɛ̀-H nà m-ùdɛ̃̂ 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 ndáwɔ̀ vâ mùdə̂ wà mí àà
é vâ ndáwɔ̀ vâ m-ùdə̂ wà m-í àà
LOC here ∅9.house here N1-woman 1:ATT N1-non-Pygmy 1.FUT
njì dúwɔ̀ lévúdə̂,
njì d-úwɔ̀ lé-vúdə̂
come le5-day 5-one
'This house over here, the Bantu farmer woman will come the same day,'

(C117) é pɛ̀ njì djíî mònɛ́ wɛ́ɛ̀, é pɛ̀
é pɛ̀ njì djíî mònɛ́ w-ɛ́ɛ̀ é pɛ̀
LOC over.there come ask ∅1.money 1-POSS.3S LOC over.there
njì djíî.
njì djíî
come ask
'there in order to come ask for her money, there to come ask.'

(C118) yɔ́ɔ̀ mɛ́ tɔ́kɛ́ mɔ̀nɛ́ wɛ̀ vɛ̀ nyɛ̂,
yɔ́ɔ̀ mɛ-H tɔ́kɛ-H mɔ̀nɛ́ w-ɛ̀ vɛ̀ nyɛ̂
so 1S-PRES collect-R ∅1.money 1-POSS.3S give 1.OBJ
'So I collect her money [and] give [it to] her,'

(C119) nâ ndɛ̀náà yíî mpà.
nâ ndɛ̀náà yíî mpà
COMP like.this 7.COP good
'that like this it be good.'

(C120) bon pílì yí báàlá nà bɛ̀ ndɛ̀náà ndɛ̀náà
bon pílì yi-H báàla-H nà bɛ̀ ndɛ̀náà ndɛ̀náà
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.'

(C121) bvúlɛ̀ bà bùdɛ́ mà sá yíî ná
bvúlɛ̀ ba bùdɛ-H mà sá yíî ná
ba2.Bulu 2 have COMPL[Kwasio] ∅7.thing 7.COP again

vúdû̌.
vúdû̌
one
'There is one more thing about the Bulu.'

(C122) wɛ́ kɛ́ nà nyê nkɔ̃̀wáká, nyɛ̀gà à
wɛ-H kɛ̀-H nà nyê nkɔ̃̀wáká nyɛ̀-gà a
2S-PRES go COM 1 equal.sharing 1.EMPH-CONTR 1
nzíí wê vɑ́ɑ̀kɛ́ sâ mpù.
nzíí wê vɑ́ɑ̀kɛ́ sâ mpù
PROG.PRES 2S.OBJ 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 ndáwɔ̀ nya mànyɔ̀ ndɛ̀náà,
pílì yí múà ndáwɔ̀ nya ma-nyɔ̀ ndɛ̀náà
when 7 be ∅9.house 9:ATT ma6-drink like.this
'When it is in a bar like this,'

(C124) á kí náà à múà njì bvúdà nà wê.
a-H kì-H nâ a múà njì bvúda nà wê
1-PRES say-R COMP 1 PROSP come quarrel COM 2S.OBJ
'he says that he is about to come quarrel with you.'

(C125) pílì mwánɔ̀ bàgyɛ̀lì, àà nyê kɛ̀ bíyɔ̀,
pílì m-wánɔ̀ ba-gyɛ̀lì àà nyê kɛ̀ bíyɔ
when N1-child ba2-Gyeli 1.FUT 1.OBJ go hit
'At times the Gyeli child, he will go hit it,'

(C126) kɛ̀ nyê bíyɔ̀ mpù.
kɛ̀ nyê bíyɔ mpù
go 1.OBJ hit like.this
'hit it like this.'

(C127) báà nâ bìsɔ́mɔ̀nɛ̀ bìsɔ́mɔ̀nɛ̀ bé nyì.
báà nâ bi-sɔ́mɔ̀nɛ̀ bi-sɔ́mɔ̀nɛ̀ be-H nyì
2.COP COMP be8-complaint be8-complaint 8-PRES enter
'it is them that complaints over complaints start.'

(C128) donc pɛ̀ tsíyɛ̀ pɔ́né lékɛ́lɛ̀, bvúlɛ̀ bá
donc pɛ̀ tsíyɛ pɔ́né le-kɛ́lɛ̀ bvúlɛ̀ ba-H
so[French] there cut ∅7.truth le5-word ba2.Bulu 2-PRES
ntɛ́gɛ́lɛ́ bîî ɛ́ vâ.
ntɛ́gɛlɛ-H bîî ɛ́ vâ
bother-R 1P.OBJ LOC here

‘So, to say the truth, the Bulu bother us here.’

(C129) kwádɔ́ yá wɛ́ nyê yá djìlɛ́ mà
kwádɔ́ yá wɛ-H nyê ya-H djìlɛ-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) bvúlɛ̀ bá ntɛ́gɛ́lɛ́ bîì. kwádɔ́ yá wɛ́ nyê
bvúlɛ̀ ba-H ntɛ́gɛlɛ-H bîì kwádɔ́ yá wɛ-H nyê
ba2.Bulu 2-PRES bother-R 1P.OBJ ∅7.village 7:ATT 2S-PRES see
yá djìlɛ́ mà wá yî.
ya-H djìlɛ-H mà wá yî
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 bɔ́nègà bɔ́ pê mbíɛ̀ bɔ́ lɛ́ɛ̀ náà
ba2-person 2-other 2 there ∅3.high 2.PRES say COMP
mí bɔ́ kwàlɛ́ b-ùdə̂ b-ɔ̀ɔ̀.
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 wɛ̀ɛ̀ njĭ nà njĭ, wɛ̀ɛ̀ njĭ nà
voilà wɛ̀ɛ̀ njĭ nà njĭ wɛ̀ɛ̀ njĭ nà
ok[French] 2S.COP ∅9.path COM ∅9.path 2S.COP ∅9.path COM
njĭ.
njĭ.
∅9.path
‘Exactly, you are on the right track.’

(C133) donc bɛ̀yá lɔ́ kɛ̀ nà bɛ̀yà nzíí pándɛ̀,
donc bɛ̀ya-H lɔ́ kɛ̀ nà bɛ̀ya nzíí pándɛ
so[French] 2P-PRES RETRO go COM 2P PROG.PRES arrive
‘So, you just came and you are arriving,’

(C134) bɛ̀yá nzíyɛ̀ bíyɛ̀ kfùmàlà.
bɛ̀ya-H nzíyɛ̀ bíyɛ̀ kfùmala
2P-PRES come.SBJV 1P.OBJ find

‘you (pl) may come to meet us.’

(C135) bùdì bésè bà nzíí kè nà ké dé̋ bèdjìí
b-ùdì b-ésè ba nzíí kè nà kè-H dé̋ be-djìí
ba2-person 2-all 2 PROG.PRES go COM go-R today be8-forest
dé tù.
dé tù
LOC inside
‘All the people are going into the forest today.’

(C136) dɔ̃̂ bèyá nzíyè bíyè kfùmàlà.
dɔ̃̂ bèya-H nzíyè bíyè kfùmala
so[French] 2P-PRES come.SBJV 1P.OBJ find
‘So, you (pl) may come to meet us.’

(C137) bɔ́négá báà ná djìí dé tù.
b-ɔ́négá báà ná djìí dé tù
2-other 2.COP still ∅7.forest LOC inside
‘The others are still in the forest.’

(C138) bèyá nzíyè bíyè kfùmàlà vâ.
bèya-H nzíyè bíyè kfùmala vâ
2P-PRES come.SBJV 1P.OBJ find here
‘You may come to meet us here.’

(C139) donc bí yá táálé bê yàlànè, àà.
donc bí ya-H táálɛ-H bê yàlanɛ àà
so[French] 1P.EMPH 1P-PRES begin-R 2P respond[Bulu] EXCL
‘So we start to respond to you, mhm.’

Severin in Ngumba:

(C140) wɛ̀ sí léè náà ɔ̀ bírì bùrɑ̃̂ bɔ̀ nìà?
2S PROG.PST say COMP 2S have ba2-woman 2:ATT how.many
‘You said you have how many wives?’

Nze:

(C141) nà mɛ̂?
nà mɛ̂?
Q 1S
‘Me?’

Mambi:

(C142) à bùdɛ́ mà mùdə̂.
a bùdɛ-H mà m-ùdə̂.
1 have-R COMPL[Kwasio] N1-woman
'He already has a wife.'

Nze:

(C143) mɛ̀ bùdɛ́ mà mùdə̂ mvúdə̌,
mɛ bùdɛ-H mà m-ùdə̂ m-vúdə̌
1S have-R COMPL[Kwasio] N1-woman 1-one
'I have already one wife.'

(C144) bwánɔ̀ mpù [gesture showing 2].
b-wánɔ̀ mpù
ba2-child like.this
'that many children [gesture showing 2].'

(C145) bwánɔ̀ bá bùdə̂ bábáà èè nà mwánɔ̀ wà
b-wánɔ̀ bá b-ùdə̂ bá-báà èè nà m-wánɔ̀ wà
ba2-child 2:ATT ba2-woman 2-two EXCL COM N1-child 1:ATT
mùdə̂ nlɑ́álɛ̀ ndáà ná.
m-ùdə̂ nlɑ́álɛ̀ ndáà ná
N1-woman three also again
'Two girls, yes, and also again a third girl.'

(C146) mm ndí nyɛ̀gà à ndáà lèbá ɛ́ pɛ̀.
mm ndí nyɛ̀-gà a ndáà le-bá ɛ́ pɛ̀
EXCL but 1-other 1 also le5-marriage LOC there
'Mhm, but the other one has gotten also married over there.'

(C147) à kɛ́ bwálɛ̀ nà eeehhh...
a kɛ́ bwálɛ nà eeehhh
1.PST1 go be.born COM EXCL
'She was born elsewhere and eehmmm...'

(C148) ntɛ́mbɔ̀ wà mùdə̂ wə̂ nyɛ̀ wɛ́ bùdɛ́
ntɛ́mbɔ̀ wà m-ùdə̂ w-ə̂ nyɛ wɛ́ bùdɛ-H
∅1.younger.sibling 1:ATT N1-woman 1-POSS.1S 1 ID have-R
mwánɔ̀ wà mùdə̂ mvúdə̌.
m-wánɔ̀ wà m-ùdə̂ m-vúdə̌
N1-child 1:ATT N1-woman 1-one
'It's my wife's younger sister who has one girl.'

(C149) kwádɔ́ yáwɔ̀ yɔ̂ wɛ́ yî.
kwádɔ́ y-áwɔ̀ yɔ̂ wɛ́ yî
∅7.village 7-POSS.3P 7 ID 7.DEM.PROX
'Their village is this one.'

(C150) ká wɛ́ nyɛ́ mɛ̂ djíì sâ vâ nâ bá
ká wɛ-H nyɛ̂-H mɛ̂ djíì sâ vâ nâ ba-H
if 2S-PRES see-R 1S.OBJ stay only here COMP 2-PRES
nzíyɛ̀, bá nzíyɛ̀ djìyɔ̀.
nzíyɛ̀ ba-H nzíyɛ̀ djìyɔ
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 wúmbɛ́ ndáà náà bí bɔ́gà yá
ya-H wúmbɛ-H ndáà nâ bí b-ɔ́gà ya-H
1P-PRES want-R also COMP 1P.EMPH 2-other 1P-PRES
páŋgɔ́ bɛ̀,
páŋgɔ-H bɛ̀
start[Kwasio]-R be
'We also want that we others first have..'

(C152) nà kùrɛ̂ ndáà.
nà kùrɛ̂ ndáà
COM ∅7.electricity also
'also electricity.'

(C153) ónóò bí bɔ́gà yá pɛ́ djî bényámɛ̀
ónóò bí b-ɔ́gà ya-H pɛ̂-H djî H-be-nyámɛ̀
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.'

(C154) yá bɛ́lɛ́ nà kùrɛ̂.
ya-H bɛ́-lɛ́ nà kùrɛ̂
7-PRES be-NEG COM ∅7.electricity
'There is no electricity.'

(C155) mɛ́ dyúwɔ́ nâ mìntáŋgánɛ́ mí nzíí njì
mɛ-H dyúwɔ-H nâ mi-ntáŋgánɛ́ mí nzíí njì
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 the white people are coming and coming.'

(C156) mìntáŋgánɛ́ métì mí sá náà,
mi-ntáŋgánɛ́ mé-tì mi-H sâ-H nâ
mi4-white.person 4-DEM[Bulu] 4-PRES do-R COMP
'The white people make that,'

(C157) bàmɔ̀nɛ́ bá vɛ́ bɔ̂ ɛ́ pɛ̀ sɔ́'ɔ̀ wû...
ba-mɔ̀nɛ́ ba-H vɛ̀-H bɔ̂ ɛ́ pɛ̀ sɔ́'ɔ̀ wû
ba2-money 2-PRES give-R 2.OBJ LOC there before there
'the money they give them there [in Europe] before...'

(C158) bí bɔ́gà yá wúmbɛ́ ndáà pɑ́ɑ̀ nyɛ̂ sâ
bí bɔ́-gà ya-H wúmbɛ-H ndáà pɑ́ɑ̀ nyɛ̂ sâ
1P.EMPH 2-other 1P-PRES want-R also start see ∅7.thing
bá gyíbɔ́ ngyùlɛ̀ wá kùrɑ̂ɑ̂.
ba-H gyíbɔ-H ngyùlɛ̀ wá kùrɑ̂ɑ̂
2-PRES call-R ∅3.light 3:ATT ∅7.electricity[French]
'We others, we also want to first see the thing they call the light of electricity.'

(C159) wú bɛ́ mà bî ndáwɔ̀ dé tù!
wú bɛ̀-H mà bî ndáwɔ̀ dé tù
3 be-R COMPL[Kwasio] 1P.OBJ ∅9.house LOC inside
'That it was already in our houses!'

(C160) màndáwɔ̀ má báà lwɔ̂,
ma-ndáwɔ̀ má báà lwɔ̂
ma6-houses 6:ATT 2.FUT build
'The houses that they will build,'

(C161) má bá lwɔ́ bî.
má ba-H lwɔ̂-H bî
6:ATT 2-PRES build-R 1P
'that they build for us.'

(C162) mɛ̀ɛ́ bɛ́lɛ́ mùdì wà lɛ̀kɛ́lɛ̀.
mɛ̀ɛ́ bɛ́-lɛ́ m-ùdì wà le-kɛ́lɛ̀
1S.PRES.NEG be-NEG N1-person 1:ATT le5-word
'I'm not a person of many words.'

Severin in Ngumba:

(C163) wɛ̀ wɛ́ yîì nzɛ́? gyí ywɛ̀ límbó màmbì mɔ́-míyà
2S.EMPH 2S 7.COP who what 2S know ma6.thing 6-all
bɔ́ ʃíí sâ?
2.PRES PROG do
'Who are you? What do you know about all the things they do?'

Nze to Mama:

(C164) wɛ́ làwɔ́ téɛ̀.
wɛ-H làwɔ-H téɛ̀
2S-PRES talk-R now
'You speak now.'

Mama:

(C165) èè mɛ̀ djínɔ̀ ná Màmà.
èè mɛ̀ dj-ínɔ̀ ná Màmà
yes 1S le5-name SIM PN
'My name is Mama.'

(C166) yîì pɔ́nɛ́ kɔ́ɔ̀ lèváá lɛ̀vúdṵ̂ nâ bí
yîì pɔ́nɛ́ kɔ́ɔ̀ le-váá lɛ̀-vúdṵ̂ nâ b-í
7.COP ∅7.truth still le5-thing 5-one COMP ba2-non.Bagyeli
bá ntɛ́gɛ́lɛ́ bágyɛ̀lì.
ba-H ntɛ́gɛlɛ-H H-ba-gyɛ̀lì
2-PRES bother-R OBJ.LINK-ba2-Gyeli
'It is true, still the same thing that the non-Bagyeli bother the Bagyeli.'

(C167) mɛ̀ɛ̀ vâ, sɑ̂̀ wɑ́̀ à wɛ́, mɛ̀ɛ̀ mwánɔ̀
mɛ̀ɛ̀ vâ sɑ̂̀ w-ɑ́̀ a wɛ̀-H mɛ̀ɛ̀ m-wánɔ̀
1S.COP here ∅1.father 1-POSS.1S 1.PST1 die-R 1S.COP N1-child
nyùlɛ̀.
nyùlɛ̀
orphan
'I'm here, my father has died, I'm an orphan.'

Nze :

(C168) èé, lûŋgà yá sā́ wɛ́ɛ̀ yɔ́ɔ̀ yíí.
èé lûŋgà yá sā́ w-ɛ́ɛ̀ yɔ́ɔ̀ yíí
EXCL ∅7.grave 7:ATT ∅1.father 1-POSS.3S 7.COP 7.DEM.DIST
'Right, his father's grave is over there.'

Mama:

(C169) lûŋgà yá sā́ wâ̂ yɔ́ bɛ́ yíí.
lûŋgà yá sā́ w-â̂ yɔ́ bɛ̀-H yíí.
∅7.grave 7:ATT ∅1.father 1-POSS.1S 7.EMPH be-R 7.DEM.DIST
'My father's grave is over there.'

(C170) bwánɔ̀ bá kálɛ́ bâ̂ bɔ́ bá kɛ́
b-wánɔ̀ bá kálɛ́ b-â̂ bɔ́ ba-H kɛ̀-H
ba2-child 2:ATT ∅1.older.sister 2-POSS.1S 2.EMPH 2-PRES go-R
sílɛ̀ pándɛ̀.
sílɛ pándɛ
finish arrive
'The children of my older sister, they all arrive.'

Nze:

(C171) yáà, nyɛ̀ wɛ́ nû.
yáà nyɛ wɛ́ nû
EXCL 1 ID 1.DEM.PROX
'Yes, this is him.'

Mama:

(C172) nyā́ā̀ wâ̂ núú Ntàbɛ̀tɛ́ndá pɛ̀.
nyā́ā̀ w-â̂ núú Ntàbɛ̀tɛ́ndá pɛ̀
∅1.mother 1-POSS.1S 1.DEM.DIST PN there
'My mother is over there in Ntabɛtɛnda [= name of village].'

(C173) à nzí kɛ̀ létʃíndɔ́ lé
a nzí kɛ̀ H-le-tsíndɔ́ lé
1 PROG.PST1 go OBJ.LINK-le5-funeral.ceremony 5:ATT
ntùmbà wâ̂.
n-tùmbà w-â̂
N1-older.brother 1-POSS.1S
'She was going to my older brother's funeral ceremony.'

Nze:

(C174) nɔ́gá à nzí wɛ̀ wû.
nɔ́-gá a nzí wɛ̀ wû
1-CONTR 1 PROG.PST1 die there
'That one died over there.'

Mama:

(C175) nɔ́négá à nzí wɛ̀ wû.
nɔ́-négá a nzí wɛ̀ wû
1-other 1 PROG.PST1 die there
'That one died over there.'

(C176) yɔ́ɔ̀ pɔ̀nɛ̀ vɛ̀ɛ̀ mpù.
yɔ́ɔ̀ pɔ̀nɛ̀ vɛ̀ɛ̀ mpù
7.COP ∅7.thruth still like.this
'It is still true like this.'

(C177) bɔ́négá bá lɔ́ sílɛ̀ làwɔ̀ nâ bvúlɛ̀ bá
bɔ́-négá ba-H lɔ́ sílɛ làwɔ nâ bvúlɛ̀ ba-H
2-other 2-PRES RETRO finish speak COMP ba2.Bulu 2-PRES
ntégɛ́lɛ́ bágyɛ̀lì,
ntégɛlɛ-H H-ba-gyɛ̀lì
bother-R OBJ.LINK-ba2-Gyeli
'The others have just said that the Bulu bother the Bagyeli,'

(C178) kɛ̀ nà kwàlɛ̀ bùdə̂ kɛ̀ nà kwàlɛ̀ bùdə̂ bá
kɛ̀ nà kwàlɛ b-ùdə̂ kɛ̀ nà kwàlɛ b-ùdə̂ bá
go COM love 2n-woman go COM love ba2-woman 2:ATT
bá-gyɛ̀lì.
ba-gyɛ̀lì
ba2-Gyeli
'coming and loving the women, coming and loving the women of the Bagyeli.'

Severin in Ngumba:

(C179) djínásá náà wà pɛ́lí lí bɛ̀ nà m-ùrə̂?
mean COMP 2S NEG.PST yet be COM 1-woman
'That means that you haven't been yet with a woman?'

Nze:

(C180) àà mwə̂ ntùà, àà mwə̂ ntúà.
àà m-wə̂ ntùà àà m-wə̂ ntúà.
1.COP N1-child small 1.COP N1-child small
'He is a small child, he is a small child.'

Mama:

(C181) mɛ̀ɛ̀ nyá mùdì nà nyɛ̂.
mɛ̀ɛ̀ nyá m-ùdì nà nyɛ̂
1S.COP real N1-person COM 1.OBJ
'I'm an adult and him [= Mambi].'

(C182) yà pálɛ́ bɛ̀ nà bùdə̂.
ya pálɛ́ bɛ̀ nà b-ùdə̂
1P NEG.PST be COM ba2-woman
'We did not have any women.'

Severin in Ngumba:

(C183) ɔ́ kɛ́ nà lywɛ́lɛ́ b-ùdə̂ bì-djìnáà.
2S.PRES go COM show ba2-woman be8-finger
'You go and hit on women [lit. show women with fingers]?'

Mama:

(C184) mɛ̀ fúgɛ́ɛ̀̂.
mɛ fúgɛ́ɛ̀̂
1S.PST1 finish.COMPL
'I have finished.'

Nze:

(C185) á kí náà à sílɛ́ mà.
a-H kì-H nâ a sílɛ-H mà
3S-PRES say-R COMP 1.PST1 finish COMPL[Kwasio]
'He says that he has finished.'

Mambi:

(C186) donc bə̂ yîì nâ bí yá wúmbɛ́
donc bə̂ yîì nâ bí ya-H wúmbɛ-H
so[French] ∅7.word 7.COP COMP 1P.EMPH 1P-PRES want-R
nâ nyá màmbɔ̀ máà mpâ,
nâ nyá m-àmbɔ̀ máà mpâ
COMP real ma6-thing 6.COP good
'So, the word is that we want that the important things be good,'

(C187) màndáwɔ̀ má zì,
ma-ndáwɔ̀ má zì
ma6-house 6:ATT ∅7.tin[Bulu]
'tin-roofed houses,'

(C188) nà nà kùrɑ̂ màndáwɔ̀.
nà nà kùrɑ̂ ma-ndáwɔ̀
COM COM ∅7.electricity ma6-house
'and, and electricity in the houses.'

(C189) kí dyúwɔ̀ nâ bà lwɔ́ ndáwɔ̀ vúdṵ̂ ndí
kí dyúwɔ nâ ba lwɔ̂-H ndáwɔ̀ vúdṵ̂ ndí
NEG understand COMP 2.PST1 build-R ∅9.house one but
màndáwɔ̀,
ma-ndáwɔ̀
ma6-houses
'Without understanding that they [white people] built one house, but houses,'

(C190) mùdì nyɛ̀ ngwɛ̂ màndáwɔ̀.
m-ùdì nyɛ ngwɛ̂ ma-ndáwɔ̀
N1-person 1 all[Kwasio] ma6-house
'every person [their] houses.'

(C191) nà bí bésɛ̀ kɔ́ɔ̀ kùrɑ̂ bɛ̀ dé tù.
nà bí b-ésɛ̀ kɔ́ɔ̀ kùrɑ̂ bɛ̀ dé tù
COM 1P.EMPH 2-all still ∅7.electricity be LOC inside
'with all of us just electricity be inside.'

(C192) bɑ̂ yɑ̂ màfwálá wɛ́ yíndɛ̀.
bɑ̂ y-ɑ̂ ma-fwálá wɛ́ yí-ndɛ̀
∅7.word 7-POSS.1S ma6-end ID 7-ANA
'This is my last word.'

Severin in Ngumba:

(C193) bíyɔ̀ bí lɛ́ɛ̀ náà sí nyà bɛ́-lɛ́, dí bíyà lwɔ̀
2P.EMPH 2P.PRES say COMP ∅9.land 9 be-NEG but 2P build
yɛ́?
where
'You say that you don't have any land, but where do you build?'

Mambi:

(C194) báà bù mpàgó pílì pɔ̀dɛ̀ àà lɑ̃̀.
báà bù mpàgó pílì pɔ̀dɛ̀ àà lɑ̃̀
3.FUT break ∅3.road when ∅1.port 1.FUT pass
'They will build a road when the port passes.'

(C195) à múà njì lɑ̃̀, báà bù mpàgó.
a múà njì lɑ̃̀ báà bù mpàgó
1 PROSP come pass 2.FUT break ∅3.road
'It [the port] is about to come pass [= by here], they will build the road.'

(C196) báà bù mpàgó pílì pɔ́dɛ̀ àà vâ, njì tsíyɛ̀ vâ.
báà bù mpàgó pílì pɔ́dɛ̀ àà vâ njì tsíyɛ̀ vâ
2.FUT break ∅3.road when ∅1.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.EMPH 2.FUT break ∅3.road
'They will build a road.'

Nze:

(C198) mɛ̀ɛ̀ kɛ̀ búùlɛ̀ yɑ̃̂̀.
mɛ̀ɛ̀ kɛ̀ búùlɛ̀ y-ɑ̃̂̀
1S.FUT go ∅7.old.camp 7-POSS.1S
'I will go to my old settlement.'

Mambi:

(C199) èhè báà bù mpàgó nà pámò pɛ̀ Kyíɛ̀ŋgɛ̀.
èhè báà bù mpàgó nà pámo pɛ̀ Kyíɛ̀ŋgɛ̀
EXCL 2.FUT break ∅3.road COM arrive over.there PN
'Yes, they will build a road up to Kienge [= river and name for Kribi].'

(C200) bá nà ngvùlɛ̀ bíyɛ̀ sílɛ̀ lwɔ̃̂ mándáwɔ̀.
bá nà ngvùlɛ̀ bíyɛ̀ sílɛ lwɔ̃̂ H-ma-ndáwɔ̀
2 COM ∅9.strength 1P.OBJ finish build OBJ.LINK-ma6-house
'They have the strength to build us all houses.'

(C201) wɛ̀ dyúwɔ́ mɔ̀?
wɛ dyúwɔ-H mɔ̀
2S.PST1 hear-R COMPL
'Have you understood?'

(C202) báà sílɛ̀ bî kúmbà lwə̂ mándáwɔ̀.
báà sílɛ bî kúmba lwə̂ H-ma-ndáwɔ̀
2.FUT finish 1P.OBJ arrange build OBJ.LINK-ma6-house
'They will arrange for us building houses.'

Mambi:

(C203) bá kɛ́ ndáà nà tɛ́lɛ́ mákùndù má
ba-H kɛ̀-H ndáà nà tɛ́lɛ-H H-ma-kùndù má
2-PRES go-R also COM put-R OBJ.LINK-ma6-clay.house 6:ATT
kùrə̂ kɛ́ kɛ́ kɛ́ kɛ́ kɛ́.
kùrə̂ kɛ́ kɛ́ kɛ́ kɛ́ kɛ́
∅7.electricity IDEO IDEO IDEO IDEO IDEO
'They also go and put clay houses with electricity, [depiction of putting the electricity poles along the road].'

(C204) wɛ̀ dyúwɔ́ mɔ̀?
wɛ dyúwɔ-H mɔ̀
2S.PST1 hear-R COMPL
'Have you understood?'

Nze:

(C205) ɛ́ pɛ̀ bà sílɛ́ bî lwə̂ mándáwɔ̀
ɛ́ pɛ̀ ba sílɛ-H bî lwə̂ H-ma-ndáwɔ̀
LOC there 2.PST1 finish-R 1P.OBJ build OBJ.LINK-ma6-house
ɛ́ pɛ̀.
ɛ́ pɛ̀
LOC there
'There, they have finished to build us houses there.'

(C206) ɔ̀ dyúwɔ́ mɔ̀?
ɔ dyúwɔ-H mɔ̀
2S.PST1[Kwasio] understand-R COMPL
'Have you understood?'

(C207) mm, nâ yí kádɔ́ nâ mùdì bɛ̀ tí
mm nâ yi-H kádɔ-H nâ m-ùdì bɛ̀ tí
EXCL COMP 7-PRES be.plenty-R COMP N1-person be go[?]
njì nà yímbɔ̀. mhm.
njì nà yímbɔ̀. mhm
come COM 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) pə̂ mɛ̂ láà tè!
pə̂ mɛ̂ láà tè
start.IMP 1S.OBJ tell there
'Tell me first there! [= Tell me how they would come.]'

(C209) bímbú lɛ́ mámbòŋgò mâ, wɛ̀ mɛ́dɛ́ dígɛ̂
bímbú lɛ́ ma-mbòŋgò mâ wɛ mɛ́dɛ́ dígɛ̂
∅5.amount 5:ATT ma6-plant 6.DEM.PROX 2S self look.IMP
mɛ́dɛ́,
mɛ́dɛ́
self
'The amount of these plants, yourself, look yourself,'

(C210) nâ á dyúwɔ́ bágyɛ̀lì.
nâ a-H dyúwɔ-H H-ba-gyɛ̀lì
COMP 1-PRES understand-R OBJ.LINK-ba2-Gyeli
'so that she [Nadine] understands the Bagyeli.'

Mambi:

(C211) bə̀ wɛ́ làwɔ̀ bá dyúwɔ́ sâ yɛ́sɛ̀
bə̀ wɛ-H làwɔ ba-H dyúwɔ-H sâ y-ésɛ̀
∅7.word 2S-PRES speak 2-PRES understand-R ∅7.thing 7-every
'The word that you speak, they understand everything. [= not the language, but what is promised]'

(C212) bîì, bá dyúwɔ́ lɛ́kɛ́lɛ̀ lé
bîì ba-H dyúwɔ-H H-lɛ-kɛ́lɛ̀ lé
1P.EMPH 2-PRES understand OBJ.LINK-le5-language 5:ATT
wɛ́ làwɔ̀.
wɛ-H làwɔ
2S-PRES speak
'We, they understand the language that you speak.'

Mama:

(C213) wɛ́ nyɛ́ mbɛ́ yá bá njí líbɛ̀lɛ̀ yíndɛ̀.
wɛ-H nyɛ̂-H mbɛ́ yá ba-H njì-H líbɛlɛ yí-ndɛ̀
2S-PRES see-R ∅7.thing 7:ATT 2-PRES come-R show 7-ANA
'You see the thing [camera] that they came to show there.'

(C214) wɛ́ tɛ́bɔ́ númbá vúdṵ̂!
wɛ-H tɛ́bɔ-H númbá vúdṵ̂!
2S-PRES put-R ∅7.place one
'Stay in the same place! [= don't move because of the camera]'

Nze:

(C215) mais mɛ̀ bùdɛ́ nâ ɛ́ pɛ̀,
mais mɛ bùdɛ-H nâ ɛ́ pɛ̀
but[French] 1S have-R COMP LOC over.there
'But I say that over there,'

(C216) ɛ́ wû bèyá lwɔ́ kwádɔ́ yâ ɛ́
ɛ́ wû bèya-H lwɔ̂-H kwádɔ́ y-â ɛ́
LOC there 2P[Kwasio]-PRES build-R ∅7.village 7-POSS.1S LOC
wû.
wû
there
'there you (pl) build my village over there.'

(C217) kwádɔ́ yâ̰, màndáwɔ̀ má zì.
kwádɔ́ y-â̰ ma-ndáwɔ̀ má zì
∅7.village 7-POSS.1S ma6-house 6:ATT ∅7.tin[Bulu]
'My village, tin houses.'

Délégué:

(C218) voilà bùgù yɛ́sɛ̀.
voilà bùgù y-ɛ́sɛ̀
voilà[French] ∅7.place 7-all
'Voilà, all the place.'

Nze:

(C219) mɛ̀ bùdɛ́ nâ á lwɔ́ŋgɔ́ mɛ̂ màndáwɔ̀,
mɛ bùdɛ-H nâ a-H lwɔ́ŋgɔ-H mɛ̂ ma-ndáwɔ̀
1S have-R COMP 1-PRES build[Kwasio]-R 1S.OBJ ma6-house
'I say that she [Nadine] builds me houses,'

(C220) búùlɛ̀ yá Ngɔ̀lɔ́ Ngɔ̀lɔ́ Ngɔ̀lɔ́.
búùlɛ̀ yá Ngɔ̀lɔ́ Ngɔ̀lɔ́ Ngɔ̀lɔ́.
∅7.old.camp 7:ATT PN PN PN
'at the old settlement of Ngolo, Ngolo, Ngolo.'

(C221) mɛ̀ɛ̀ lwɔ́ngɔ̀ mándáwɔ̀ Ngɔ̀lɔ́ zì
mɛ̀ɛ̀ lwɔ́ngɔ mándáwɔ̀ Ngɔ̀lɔ́ zì
1S.FUT build[Kwasio] OBJ.LINK-ma6-house PN ∅7.tin[Bulu]
nà zì.
nà zì
COM ∅7.tin[Bulu]
'I will build houses in Ngolo, each with tin (roofs).'

(C222) yɔ́ɔ̀ mɛ́ wúmbɛ́ wû.
yɔ́ɔ̀ mɛ-H wúmbɛ-H wû
7.EMPH 1S-PRES want-R there
'That is what I want there.'

(C223) àmú mɛ̀ɛ́ bɛ́lɛ́ nà sí vâ.
àmú mɛ̀ɛ́ bɛ́-lɛ́ nà sí vâ
because[Bulu] 1S.PRES.NEG be-NEG COM ∅9.ground here
'Because I don't have any land here.'

(C224) bǎ̀ yá bwánɔ̀ bá lɔ́ làwɔ̀ yíì tè.
bǎ̀ yá b-wánɔ̀ ba-H lɔ́ làwɔ yíì 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) mɛ̀ɛ́ bɛ́lɛ́ nà sí vâ.
mɛ̀ɛ́ bɛ́-lɛ́ nà sí vâ
1S.PRES.NEG be-NEG COM ∅9.ground here
'I don't have any land here.'

(C226) mɛ̀ɛ̀ vâ mpínásâ.
mɛ̀ɛ̀ vâ mpínásâ
1S.COP here squeezed
'I'm squeezed here.'

(C227) donc sí nyâ̰ nyíì búùlɛ̀ yá
donc sí ny-â̰ nyíì búùlɛ̀ yá
so[French] ∅9.ground 9-POSS.1S 9:COP ∅7.old.camp 7:ATT
Ngɔ̀lɔ́.
Ngɔ̀lɔ́
PN
'So, my land is the old settlement of Ngolo.'

Mambi:

(C228) lé yá wɛ́ nyê bá gyíbɔ́ ngàlɛ́ yîì.
lé yá wɛ-H nyê ba-H gyíbɔ-H ngàlɛ́ yîì
∅7.tree 7:ATT 2S-PRES see 2-PRES call-R PN 7.COP
'The tree that you see that they call 'ngàlɛ́' is that.'

(C229) bá lā́ pámò vâ tɛ́ɛ̀ bà kwɛ̀lɔ́ɔ̃̀ yɔ̀
ba-H lā̃-H pámo vâ tɛ́ɛ̀ ba kwɛ̀lɔ́ɔ̃̀ yɔ̀
2S-PRES pass-R arrive here now 2S.PST1 cut.COMPL 7.OBJ
kílɛ̀ dyúwɔ̀ tsíyà.
kílɛ̀ dyúwɔ̀ tsíyà
NEG[Kwasio] hear ∅1.question
'They pass and arrive here now, they cut it already without hearing a question [= without asking].'

(C230) yɔ́ɔ̀ yɔ́ɔ̀ mɛ̀ djìlɛ́ mà.
yɔ́ɔ̀ yɔ́ɔ̀ mɛ djìlɛ-H mà
7.OBJ 7.OBJ 1S.PST1 place-R COMPL[Kwasio]
'This, this I have placed [there].'

Djiedjhie in Mabi:

(C231) pfúmá m-í lɛ́ɛ́ mê náà bîì tí wúmbɛ̀ sá
chief N1-non.Pygmy say 1S COMP 2P.EMPH? NEG want do
bì-sálɛ̀ bɔ̀ pwā̂ bì-dólò, bí bíná dólò ywê, bí
be8-work 2 pay be8-money 2P refuse ∅7.money 7.POSS.3S, 2P
wúmbɛ́ sá náà líní bí sá bì-sálɛ̀ bɔ́ kíyá bî
want ∅7.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 ndɛ̀ wà Nlúnzɔ̀!
àà kfúmá ndɛ̀ wà Nlúnzɔ̀
ECXL ∅1.chief ANA 1:ATT PN
'Ah, that chief from Nlunzo!'

Nze:

(C233) àà á sɔ́’ɔ̀!
àà a-H sɔ́’ɔ̀
EXCL 1-PRES quit
‘Ah, may he quit!’

Mambi:

(C234) yɛ̀ŋgɛ̀-yɛ̀ŋgɛ̀ nâ bùdì bá ndyándyá wû
yɛ̀ŋgɛ̀-yɛ̀ŋgɛ̀ nâ b-ùdì ba-H ndyándya-H wû
especially COMP ba2-person 2-PRES work-R there
kàlɛ̀gà bíyɛ̀ pándɛ̀ dígɛ̀ bíyɛ̀ vâ, yà bùdɛ́ vâ nâ
kàlɛga bíyɛ̀ pándɛ dígɛ bíyɛ̀ vâ ya bùdɛ-H vâ nâ
stop.over 1P.OBJ arrive watch 1P.OBJ here 1P have-R here COMP
pílì wɛ́ kɛ́ bésàlɛ́ bèdjɔ́wɔ̀ bé
pílì wɛ-H kɛ̀-H H-be-sàlɛ́ be-djɔ́wɔ̀ bé
when 2S-PRES go-R OBJ.LINK-be8-work be8-day.labor 8:ATT
kùgúù nà bé lévídósí,
kùgúù nà bé le-vídósí
∅7.evening COM 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 wɛ̀ bùdɛ́ ná bàfû, wɛ́ yànɛ́ gyàgà
donc wɛ bùdɛ-H ná ba-fû wɛ-H yànɛ-H gyàga
so[French] 2S be-R again ba2-fish 2S-PRES must-R buy
bɔ̂.
bɔ̂
2.OBJ
‘so, you have fish again, you have to buy them.’

(C236) wɛ́ símásá ndáà sìgá.
wɛ-H símasa-H ndáà sìgá
2S-PRES regret-R also ∅1.cigarette
‘You also regret a cigarette [= because you cannot buy it].’

(C237) wɛ́ símásá ndáà ŋwándɔ́.
wɛ-H símasa-H ndáà ŋwándɔ́
2S-PRES regret-R also ∅3.manioc.stick
‘You also regret the manioc stick.’

(C238) wɛ́ yànɛ́ ná gyàgà ndísì,
wɛ-H yànɛ-H ná gyàga ndísì
2S-PRES must-H again buy ∅3.rice

‘You must again buy rice,’

(C239) pílì wɛ́ lèmbó nâ bùdì bá ndáwɔ̀
pílì wɛ-H lèmbo-H nâ b-ùdì bá ndáwɔ̀
when 2S-PRES know-R COMP ba2-person 2:ATT ∅9.house
bvùbvù.
bvùbvù
many
‘when you know that there are many people at home.’

Nze:

(C240) èsɛ́ béé ndáà bèyá làwɔ́
èsɛ́ béé ndáà bèya-H làwɔ-H
is.it[French] 2P.EMPH also 2P[Kwasio]-PRES speak-R
fàlà.
fàlà
∅1.French
‘Isn’t it, you, you also speak French.’

(C241) mèɛ́ láwɔ̀lɛ̀ fàlà.
mèɛ́ láwɔ-lɛ̀ fàlà
1S.PRES.NEG speak-NEG ∅1.French
‘I don’t speak French.’

(C242) nzá núù dè nzá núù nyímɛ̀.
nzá núù dè nzá núù nyímɛ
who 1.FUT eat who 1.FUT refuse
‘Who will eat, who will refuse.’

Mambi:

(C243) pílì wɛ́ kɛ́ gyàgà báfû bábáà...
pílì wɛ-H kɛ̀-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 kɛ́ wɛ̂ vɛ̀ bébwúyà bébáà nà
ká ba-H kɛ̀-H wɛ̂ vɛ̀ H-be-bwúyà bé-báà nà
if 2-PRES go-R 2S.OBJ give OBJ.LINK-be8-hundred 8-two COM
màwú mátánɛ̀,
ma-wú má-tánɛ̀
ma6-ten 6-five
‘If they go give you 250 (Francs),’

Nze:

(C245) wɛ́ sá tè ná?
wɛ-H sâ-H tè ná
2S-PRES do-R there how
'how do you manage there? [because it's very little money]'

(C246) mhm, mɛ̀ Nzìwù wɛ̂.
mhm mɛ Nzìwù wɛ́
EXCL 1S PN ID
'Mhm, I'm Nziwu.'

Mambi:

(C247) wɛ́ ná báàlá nà nyɛ́ fí nà wɛ́
wɛ-H ná báàla-H nà nyɛ̂-H fí nà wɛ-H
2S-PRES again repeat-R COM see-R different COM 2S-PRES
ndyándyá ná sálɛ́ ɛ́ pɛ̀ nà wɛ́ kòlá
ndyándya-H ná sálɛ́ ɛ́ pɛ̀ nà wɛ-H kòla-H
work-R again ∅7.work LOC over.there COM 2S-PRES add-R
ná mɔ̀nɛ́ nû.
ná mɔ̀nɛ́ nû
again ∅1.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) yɔ́ɔ̀ nû àá láwɔ̀lɛ̀.
yɔ́ɔ̀ nû àá láwɔ-lɛ̀
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) kɔ́ɔ̀ nyɛ́gà á làwɔ́ ndáà.
kɔ́ɔ̀ nyɛ́-gà a-H làwɔ-H ndáà
only 1-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, dzámɛ́ ŋgá nyɛ̂.
mhm dzámɛ́ ŋgá nyɛ̂
EXCL excuse PL 1.OBJ

‘Mhm, excuse (pl) him. [= teasing: excuse him for accepting the poorly paid work]’

(C251)
bí	bɛ̂	yá	lɔ́	làwɔ̀.
bí	b-ɛ̂	ya-H	lɔ́	làwɔ
1P.EMPH	2-all[Kwasio]	1P-PRES	RETRO	speak

‘We all just spoke.’

(C252)
yà	bɛ́	bùdì	bálɑ́álɛ̀.
ya	bɛ̀-H	b-ùdì	bá-lɑ́álɛ̀
1P.PST1	be-R	ba2-person	2-three

‘We were three people.’

Mambi:

(C253)
kɔ́ɔ̀	sílɛ̀.	
kɔ́ɔ̀	sílɛ	
just	finish	

‘Just finish.’

Appendix III: Lexicon

The Gyeli — English lexicon represented here contains almost 1500 entries. It is an extended version of the verb and noun databases. It includes verbs and nouns that are not in the databases as well as 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
-ákɛ̀ d- *n.* 5/6 nest *pl.* m-ákɛ̀
-ákɔ́ n- *n.* 3/6 earwax *pl.* m-àkɔ́
-álɛ̀ bw- *n.* 8/6 canoe *pl.* m-álɛ̀
-àmbɔ̀ m- *n.* 6 thing
-ámɔ́ d- *n.* 5/6 hornbill *pl.* m-ámɔ́
ányɔ̀nè *n.* 1/2 onion *pl.* ba-nányɔ̀nè
-áwɛ̀ j- *n.* 5/6 goliath frog (*Conraua goliath*) *pl.* m-áwɛ̀

B

-bɛ̂ le- *n.* 5/6 spotted-necked otter (*Lutra maculicollis*) *pl.* ma-bɛ̂
bɛ̂ *n.* 3/4 pit, stone *pl.* mi-bɛ̂
bɛ̌ *n.* 7/8 word *pl.* be-bɛ̌
bɛ́ɛ́ɛ́ɛ́ *ideo.* depiction of walking a long distance fast
-bɛ́ɛ̋ be- *n.* 8 beauty
-bɔ́ le- *n.* 5/6 knee *pl.* ma-bɔ́
bà *v.* smoke (tr.) (e.g. cigarette) *stat.* mbàyá *recip.* bàyala *autoc.* bàyaga
bâ *v.* marry *stat.* mbánâ *caus.* bálɛsɛ *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 *stat.* mbàálâ
báàlɛ *v.* protect, guard, keep *stat.* mbàálá *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 *stat.* mbágâ *recip.* bágala
bàgò *n.* 7/8 hoe *pl.* be-bàgò
bàkɛ *v.* stick, attach sth. *stat.* mbàgá
bàlándè *n.* 1/2 larva, caterpillar *pl.* ba-bàlándè
bálɛ *v.* surpass, overtake, conquer *stat.* mbálâ
bálɔwɔ *v.* bend down, se courber *stat.* mbálɔ́wɔ̂
bàmbèyè *n.* 7/8 prostitution *pl.* be-bàmbèyè
bámíwálɛ́ *n.* 7/8 scorpion *pl.* be-bámíwálɛ́
bámɔ *v.* scold *stat.* mbámâ *appl.* bámɛlɛ *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

-bándɔ́wɔ́ lé mpɔ̀mbɔ́ lè- *n.* 5/6 forehead *pl.* ma-bándɔ́wɔ́ má mampɔ̀mbɔ́
bándyɛ̀ (wà le-kɔ́ɔ̀) *n.* 1/2 cave (of stone) *pl.* ba-bándyɛ̀
-bándyì lè- *n.* 5/6 slap in the face *pl.* ma-bándyì
básí *n.* 7/8 shoulder blade *pl.* be-básí
bábɛ̀ *n.* 7/6 disease *pl.* ma-bábɛ̀
báwɛ *v.* injure (oneself) *stat.* mbáwâ *caus.* báwɛsɛ *recip.* báwala
bàwɛ *v.* carry *stat.* mbàwá *caus.* bàwɛsɛ *recip.* bàwala
bé *n.* 7/8 well, pit, hole *pl.* be-bé
bɛ̀ *v.* be
bɛ̀ *v.* sow, plant, cultivate *stat.* mbÈɛ̀yá *recip.* bèyala
bɛ̀'ɛ̀ *n.* 7/6 shoulder *pl.* ma-bɛ̀'ɛ̀
bɛ́dɛ *v.* light *stat.* mbɛ́dâ *recip.* bɛ́dala *autoc.* bɛ́dɛga
bédɔ *v.* go up, mount *stat.* mbédâ *appl.* bédɛlɛ *caus.* bédɛsɛ *recip.* bédala *autoc.* bédɛga ascend
bédo *v.* ferment *stat.* mbédálâ
bɛ̀lanɛ *v.* use *stat.* mbèlánɛ̂
bɛ́lɛ́ *n.* 7/8 handicap *pl.* be-bɛ́lɛ́
-bɛ́lɛ̀ le- *n.* 5/6 breast *pl.* ma-bɛ́lɛ̀
-bèlé le- *n.* 5/6 kola nut *pl.* ma-bèlé
bénɛlɛ *v.* lift, raise *recip.* bènala *autoc.* bénɛga
bèngvùdɛ̀ - *n.* 1/2 golden angwantibo (*Arctocebus aureus*) *pl.* ba-bèngvùdɛ̀
bénó *n.* 7/8 buttock *pl.* be-bénó
bènɔ *v.* refuse *stat.* mbèná *recip.* bènala
béyɔ *v.* ripen *stat.* mbéyâ *caus.* bélɛsɛ *autoc.* béyaga
-bí le- *n.* 5/6 excrements *pl.* ma-bí
-bí'ì le- *n.* 5/6 leech *pl.* ma-bí'ì
bíá *n.* 1/2 beer *pl.* ba-bíá
bígɛ *v.* become rich, develop, emerge *stat.* mbígâ *caus.* bígɛsɛ
bímbú *n.* 7/6 quantity *pl.* ma-bímbú
-bìndì le- *n.* 5/6 testicle *pl.* ma-bìndì
bìnɔ́ *n.* 7/8 louse *pl.* be-bìnɔ́
bísì nà *v.* pay attention, consider
bíbɔ̀ *n.* 7/8 thickness *pl.* be-bíbɔ̀
bíwɔ̀ *n.* 3 bad luck, malheur
bíwɔ̀ *qual.* bad
bíyálá *n.* 7/8 awful, hysterical, terrible (positive or negative) *pl.* be-bíyálá
bíyɔ *v.* hit, beat *stat.* mbílâ *appl.* bìyɛlɛ do sth. bad, activate sth. *caus.* bílɛsɛ *recip.* bínala
-bɔ́ le- *n.* 5/6 sole, footprint, hoof *pl.* ma-bɔ́
bɔ̀ *v.* rot *stat.* mbɔ̀yá *caus.* bɔ̀yɛsɛ
-bɔ̂ m- *n.* 3/6 arm *pl.* ma-bɔ̂
bô *v.* lie down (intr) *stat.* mbúgâ *tr.* búgɛ
-bɔ́'ɔ̀ le- *n.* 5/6 bread fruit, bread fruit tree (*Treculia africana*) *pl.* ma-bɔ́'ɔ̀
bódé *n.* 1/2 boot *pl.* ba-bódé
bɔ̀gɛ *v.* enlarge *stat.* mbɔ̀gá *caus.* bɔ̀gɛsɛ *recip.* bɔ̀gala

bɔ̀lɛ́ *n.* 7/8 mold on food *pl.* be-bɔ̀lɛ́
bɔ́mɛlɛ *v.* wrinkle *stat.* mbɔ́málâ *recip.* bɔ́mala
bɔ̀ndì *n.* 7/8 colobus monkey *pl.* be-bɔ̀ndì
-bóndó le- *n.* 5/6 toad *pl.* ma-bóndó
-bòtù ma- *n.* 6 scalp ringworm infection (*Tinea capitis*)
bû *v.* destroy *stat.* mbúyâ *recip.* búyala
bùábùá *n.* 7/8 state of animal or fish when flesh is not yet dry during smoking process *pl.* be-bùábùá
bùdɛ́ *n.* 7/8 shell (sea, turtle, nut), skin of fruit *pl.* be-bùdɛ́
bùgù *n.* 7/8 place *pl.* be-bùgù
búkɛ́ *n.* 7/8 1) crazy person 2) tsetse fly *pl.* be-búkɛ́
búlɛ *v.* burst *stat.* mbúlâ
búlɔ *v.* fish *stat.* mbúlâ *recip.* búlala
-búlɔ̀ mɑ̂ m- *n.* 1/2 fisherman *pl.* ba-búlɔ̀ mɑ̂
búmɛ *v.* bark *recip.* búmala
bùmɛ *v.* announce sth. *stat.* mbùmá *recip.* bùmala
-bùmɛ̀ màpɔ̂ m- *n.* 1/2 announcer, messenger *pl.* ba-bùmɛ̀ bá ma-pɔ̂
bùmɛlɛ *v.* hit (nail) *stat.* mbùmálâ *recip.* bùmala
búndɔ̀ *n.* 7/8 bride price *pl.* be-búndɔ̀
búndɔ *v.* pay brideprice *stat.* mbúndâ *caus.* búndɛsɛ *recip.* búndala
búɔ̀ *n.* 1/2 mute person *pl.* ba-búɔ̀
búɔ̀ *n.* 7/8 mortar *pl.* be-búɔ̀
-bùɔ́ le- *n.* 5/6 cripple *pl.* ma-bùɔ́
búùlɛ̀ *n.* 7/8 old settlement *pl.* be-búùlɛ̀
-búwà le- *n.* 5/6 lung *pl.* ma-búwà
búwɛlɛ *v.* squeeze, feel (e.g. fruit) *stat.* mbúwálâ
bvû *v.* think, believe
bvúala *v.* believe *stat.* mbvúálâ
bvúbvù *n.* 9 multitude
bvùbvù *inv.* (too) many, (too) much
bvúdà nà *v.* quarrel *stat.* mbvúdâ *recip.* bvúdala
bvùdɛ̀ *n.* 7/6 clearing (in forest) *pl.* ma-bvùdɛ̀
-bvúlɛ̀ m- *n.* 1/2 Bulu person
bvùlɛ́ *n.* 8/8 night *pl.* be-bvùlɛ́
bvùmá *n.* 7/8 1) fruit 2) ball *pl.* be-bvùmá
bvùma *v.* thunder *autoc.* bvùmaga flock of birds flys away suddenly
bvùmá yá lé-bɛ́lɛ̀ *n.* 7/8 female breast *pl.* be-bvùmá bé má-bɛ́lɛ̀
bvùmá yá ngɔ̀ndɛ̀ *n.* 7/8 full moon (ball of moon) *pl.* be-bvùmá bé ngɔ̀ndɛ̀
bvùmba *v.* surprise sb, chase sb. *stat.* mbvùmbá *recip.* bvùmbala
bvúɔ́ *n.* 8/8 elephant trunk *pl.* be-bvúɔ́
bvúɔ̀ *v.* break (tr.), harvest mais *stat.* mbvúgâ *recip.* bvúgala *intr.* bvúkɛ break
-bvúú lè- *n.* 5/6 anger, being

annoyed, unhappiness
bwɑ̂ *n.* 8/6 medicine *pl.* ma-bwɑ̂
-bwɑ́sà ma- *n.* 6 thoughts
bwɑ̂sa *v.* think, remember
bwɛ́ɛ̃lɛ *v.* wait *recip.* bwɑ́ɑ̃la
-bwɔ̃̌ le- *n.* 5/6 beehive *pl.* ma-bwɔ̃̌
bwà *v.* give birth *stat.* mbwàlá *appl.* bwàlɛ be born *caus.* bwàlɛsɛ
bwà *v.* become big *stat.* mbògá *recip.* bɔ̀gala *tr.* bɔ̀gɛ fatten, make fat
bwá má-kí *v.* lay eggs
bwàà *v.* become, have, be
bwádɔ *v.* dress, wear *stat.* mbwádâ *caus.* bɔ́dɛsɛ *recip.* bɔ́dala
-bwálɛ́ m- *n.* 1/2 parent *pl.* ba-bwálɛ́
-bwálɛ́ ma- *n.* 6 birth
-bwálɛ̀sɛ̀ bùdɑ̂ m- *n.* 1/2 midwife *pl.* ba-bwálɛ̀sɛ̀ bá bùdɑ̂
bwámɔ *v.* 1) leave, go out 2) receive, obtain 3) become *stat.* mbwámâ *recip.* bwámala
bwàndɔ *v.* peel (e.g. mais, mango) *stat.* mbwàndá *recip.* bwàndala
bwàndyá *n.* 7/8 disdain, adultery *pl.* be-bwàndyá
bwàndya *v.* despise *stat.* mbwàndyá *recip.* bwàndyala
bwè *v.* catch, arrest *stat.* mbùlá *recip.* bèyàlà
bwɛ̀dɔ̀wɔ̀ *n.* 7/6 taste *pl.* ma-bwɛ̀dɔ̀wɔ̀
bwɛ̀dɔwɔ *v.* be sweet, be tasty *caus.* bòdɛsɛ make sweet
-bwɨ̌ le- *n.* 5/6 hyena *pl.* ma-bwɨ̌
bwímɔ̀ *n.* 7/8 net hunting *pl.* be-bwímɔ̀
bwɔ̂(bwɔ̀) *n.* 7/8 brain *pl.* be-bwɔ̂
bwúyà *n.* 7/8 hundred *pl.* be-bwúyà
byáàdà *v.* answer, respond *stat.* mbyáàdá

D

dɑ̃̀ *v.* draw water *stat.* ndɑ̃̀ɑ́lá *appl.* dɑ̃̀ɑ̃̀lɛ *recip.* dɑ̃̀ngala
-dɑ̃̂ lé bá-fû le- *n.* 5/6 fish pont, source *pl.* ma-dɑ̃̂ má bá-fû
dɛ̃̂ *adv.* today
dè *v.* eat *stat.* ndíyâ *caus.* dílɛsɛ *recip.* díyala
-dèlémɔ́ɔ̀ le- *n.* 5/6 mud wasp *pl.* ma-dèlémɔ́ɔ̀
déndɛ *v.* set (trap) *stat.* ndéndâ *recip.* déndala
-déwɔ̀ be- *n.* 8 food
-dígà ma- *n.* 6 vision, apparition
-dìlá ma- *n.* 6 funeral
dìlɛ *v.* bury *stat.* ndìlá *recip.* dìlala
dísì *n.* 7/8 bowl *pl.* be-dísì
díyɛ̀ *qual.* expensive
dó *n.* 7/8 lie *pl.* be-dó
-dɔ̀ ma- *n.* 6 negotiation for price
dɔ̀ *v.* negotiate (for price), discuss
dómɛ̀ *n.* 7/8 laziness *pl.* be-dómɛ̀
dɔ̀ɔ̀ *n.* 7/8 puddle *pl.* be-dɔ̀ɔ̀
-dówó be- *n.* 8 sweat
dù *n.* 7/6 thigh *pl.* ma-dù
dùlɛ̀ *n.* 7/6 bitterness *pl.* ma-dùlɛ̀

dùlɛ̀ mákímbɔ́ *n.* 7/6 saltiness (bitterness of salt) *pl.* ma-dùlɛ̀ má mákímbɔ́

dúmbɔ́ *n.* 7/8 package, packet *pl.* be-dúmbɔ́

dúngìlà *n.* 7/8 hedgehog *pl.* be-dúngìlà

dúɔ̀dù - *n.* 7/8 termite queen, carterpillar *pl.* be-dúɔ̀dù

dúù *v.* must not

dvǔ *n.* 7/8 noise *pl.* be-dvǔ

dvűɔ̃̀ *n.* 7/8 great hornbill *pl.* be-dvűɔ̃̀

dvùbɔ *v.* soak, dip *stat.* ndvùbá *appl.* dvùbɛlɛ bé-kà weed grass with rake *caus.* dvùbɛsɛ *recip.* dvùbala

dvùdɔ *v.* drive *stat.* ndvùdá *recip.* dvùdala

dvúmá *n.* 7/8 honour *pl.* be-dvúmá

dvúmɛlɛ *v.* praise sb. *stat.* ndvùmálá *recip.* dvùmala

dvúmɔ̀ *n.* 7/8 baobab tree *pl.* be-dvúmɔ̀

dvùmɔ *v.* fall down (tree) *stat.* ndvùmá *caus.* dvùmɛsɛ *recip.* dvùmala

dvùɔ̀ *v.* hurt (oneself) *stat.* ndvùgá *caus.* dvùgɛsɛ *recip.* dvùgala *tr.* dvùgɛ

dvùwɔ *v.* stuff sth.

dwàmbo *v.* ask for sth *stat.* ndwàmbá *recip.* dwàmbala

dyǎ̃ã̀ *v.* chase, drive away *stat.* ndyángâ *recip.* dyángala

dyà *v.* sing *stat.* ndyàyâ *recip.* dyàala

dyà *n.* 7/8 distance, length *pl.* be-dyà

dyâ (sí) *v.* lie (down), live *stat.* ndyáyâ *recip.* dyáàlà have sex

dyáàla *v.* have sex

dyágɔ́ *n.* 7/8 sleeping place *pl.* be-dyágɔ́

dyàmbo *v.* copulate

-dyɛ̂ le- *n.* 5/6 pincers (insect) *pl.* ma-dyɛ̂

dyɛ́kɛ *v.* lean sth, incline sth *stat.* ndyɛ́kâ *recip.* dyɛ́kala lean against one another

dyɔ̀ *n.* 7/8 smile, laughter *pl.* be-dyɔ̀

dyɔ̀ *v.* laugh, smile *stat.* ndyòlasa *caus.* dyɔ̀lɛsɛ *recip.* dyɔ̀ala

dyɔ̂ *n.* 7/8 sleep *pl.* be-dyɔ̂

dyɔ̃̀ɔ̃́ *n.* 7/8 bed *pl.* be-dyɔ̃̀ɔ̃́

-dyɔ̀dálà ma- *n.* 6 deception, cheating

dyɔ̀dɛ *v.* deceive, cheat *stat.* ndyɔ̀dá *recip.* dyɔ̀dala

dyǔ *v.* be hot *stat.* ndyúngâ, ndúngálâ *appl.* dyúngɛlɛ heat, boil sth. *recip.* dyúngala (warm body around fire)

-dyǔ le- *n.* 5/6 heat (from sun), fever *pl.* ma-dyǔ

dyúà *v.* swim

dyúàdà *v.* feel, hear, perceive sensually

dyùlɛ *v.* be bitter or salty *stat.* ndyùlá *caus.* dyùlɛsɛ *recip.* dyùlala

dyúmɔ̀ *n.* 1/2 spouse *pl.* ba-dyúmɔ̀

dyùmɔ *v.* heal, get well

stat. ndyùmá
-dyúmù ma- *n.* 6 sperm
dyúná *n.* 7/8 quarrel, dispute *pl.* be-dyúná
dyúna *v.* quarrel *stat.* ndúnâ
dyúngúlɛ̀ *n.* 7/8 chameleon *pl.* be-dyúngúlɛ̀
dyùù *v.* kill *stat.* ndyúwâ *recip.* dyúwala
dyùwá *n.* 7/6, 8 thorn *pl.* be-dyùwá, ma-dyùwá
dyúwɔ̀ *n.* 5 sky
dyúwɔ̀ *post.* on top, above
dyúwɔ *v.* hear *stat.* ndyùgá *appl.* dyúwɛlɛ listen *caus.* dyúgɛsɛ make feel *recip.* dyúwalɛ
dzámɛ *v.* excuse, forgive

DJ

djáǎ(-sa) *v.* disappear suddenly (slowly) *stat.* ndjáǎsá *recip.* djáàla
djàngala *v.* have sex
djí *n.* 7/8 place (where someone stays) *pl.* be-djí
djí yá má-sɔ̰̀ - *n.* 7/8 cemetery (place of graves) *pl.* be-djí bé má-sɔ̰̀
djì *v.* open *stat.* ndjìyá *recip.* djìyala
djǐ *n.* 7/8 bench *pl.* be-jǐ
djì(yɔ) (sí) *v.* sit (down), habiter, stay *stat.* ndjìlá *appl.* djìlɛ seat sb., stay *recip.* djìlala
-djíbí n- *n.* 1/2 thief *pl.* ba-djíbí
djìbɔ *v.* close *stat.* ndjìbá *recip.* djìbala
djíga *v.* be angry
-djíì be- *n.* 8 anger
djíì *v.* ask (a question)
djìí *n.* 7/8 forest, brousse *pl.* be-djìí
djíkɛsɛ *v.* make sb. angry
djílɔ *v.* be satisfied (not hungry) *stat.* ndjílâ *caus.* djílɛsɛ
-djìlɔ̀ le- *n.* 5/6 1) weight 2) dignity *pl.* ma-djìlɔ̀
djìlɔ *v.* be heavy *stat.* ndjìlá *caus.* djìlɛsɛ
djímbɛ *v.* get lost *stat.* ndjímbâ *appl.* djímbɛlɛ lose sth. *caus.* djímbɛsɛ make forget *recip.* djímbala forget each other
djímɛsɛ *v.* extinguish *stat.* ndjímâ
djímɔ *v.* be deep
djìna *v.* dive, disappear in water *stat.* ndjìnâ *caus.* djìnɛsɛ *autoc.* djìnɛga sink (intr.), melt
djísɔ̀wɔ̀ *n.* 7/8 patience *pl.* be-djísɔ̀wɔ̀
djíwɔ́ *n.* 7/8 river *pl.* be-djíwɔ́
-djíwɔ́ ma- *n.* 6 water
djíwɔ *v.* steal, plunder *stat.* ndjíwâ *recip.* djíwala
djíyɛ *v.* burn (intr.) *stat.* ndjígâ *caus.* djígɛsɛ make angry *recip.* djígala burn *tr.* djígɛ burn sth.
djìyɔ́ *n.* 7/8 chair *pl.* be-djìyɔ́
djɔ́wɔ̀ *n.* 7/8 day work *pl.* be-djɔ́wɔ̀

E

ɛ́ *prep.* at, on, by
ɛ́ ná *interr.* how
ɛ́ vɛ́ *interr.* where
-ɛ́ndì d- *n.* 5/6 courtyard *pl.* m-ɛ́ndì
èsə̂s *n.* 7/8 gaz, fuel *pl.* b-esə̂s
-ɛ́sɛ̀ *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) *pl.* ba-fù'ú
fùœsɛ *v.* shake *stat.* mfùásâ
fúgɛ *v.* end *stat.* mfúgâ *recip.* fúala
fúkɛ̀ *n.* 1/2 driver ants (Hymenoptera) *pl.* ba-fúkɛ̀
fùláwà *n.* 7/8 flower, hedge, bush *pl.* be-fùláwà
fùlɛ *v.* miss, escape *stat.* mfùlâ *caus.* fùlɛsɛ *recip.* fùlala
fùlɔ *v.* descend, go down *stat.* mfùlâ *caus.* fùlɛsɛ
fúmbélé *n.* 3/4 shin *pl.* mi-fùmbélé
fùmbí *n.* 7/8 orange *pl.* be-fùmbí
-fùɔ̀ le- *n.* 5/6 stem, plant *pl.* ma-fùɔ̀
-fúsì *qual.* different
-fwálá le- *n.* 5/6 end *pl.* ma-fwálá
-fwálá lé túmbɔ́ le- *n.* 5/6 border (between countries) *pl.* ma-fwálá má bé-túmbɔ́
-fwálá má nkùlɛ́ ma- *n.* 6 summit

G

gə̂ *n.* 1/2 gown *pl.* ba-gə̂
gbɨ́ gbɨ́ gbɨ́ gbɨ́ gbɨ́ *ideo.* dpeiction of small objects moving in space, e.g. bacteria roaming in body
gbìm *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.* gìlɛsɛ *recip.* gìlala
gɔ́lɛ̀ *n.* 7/8 gold *pl.* be-gɔ́lɛ̀
gwámbɔ *v.* ask for sth., beg
gwàwɔ́ *n.* 7/8 civet *pl.* be-gwàwɔ́
gwɛ́mbɛ̀ *n.* 7/8 cloth *pl.* be-gbɛ́mbɛ̀
gyə̀ *v.* paint, draw *stat.* ngyàngâ
gyə́ə̀ *n.* 1/2 side *pl.* ba-gyə́ə̀
gyə̂lɛ *v.* roast *stat.* ngyə́ə̀lâ
gyà *n.* 7/8 music, song *pl.* be-gyà
gyà *v.* be long
-gyâ le- *n.* 5/6 charcoal *pl.* ma-gyâ
gyá yá nyúmbù *n.* 7/8 lip *pl.* be-gyá bé nyúmbù
gyàga *v.* buy *stat.* ngyàgá *recip.* gyàgala
-gyàgɛ̀sì bé-sâ n- *n.* 1/2 merchant, vendor *pl.* ba-gyàgɛ̀sì bá bé-sâ
gyàlɛ́ *n.* 7/8 puerperium (period after giving birth (about a month)) *pl.* be-gyàlɛ́
gyámbɔ *v.* prepare, cook *stat.* ngyámbâ *appl.* gyámbɛlɛ

prepare for *recip.* gyámbala
gyángya *v.* work *stat.* ngyángyâ *caus.* gyángyɛsɛ *recip.* gyángyala
-gyɛ́ le- *n.* 5/6 tooth *pl.* ma-gyɛ́
gyê *n.* 7/8 Cameroon clawless otter (*Aonyx capensis congicus*) *pl.* be-gyê
-gyɛ̃̂ n- *n.* 1/2 stranger, guest *pl.* ba-gyɛ̃̂
gyɛ́'è *v.* block *stat.* ngyɛ́gâ *recip.* gyɛ́gala
-gyè'èlè ma- *n.* 6 prayer
gyè'ɛlɛ *v.* pray, beg, demand *stat.* ngyàálâ
gyɛ́lɛ *v.* jump, fly *stat.* ngyɛ́lâ *caus.* gyɛ́lɛsɛ *recip.* gyɛ́lala
-gyèlì n- *n.* 1/2 Gyeli person *pl.* ba-gyɛ̀lì
gyɛ́mɔ̀ *n.* 7/8 habit, manner *pl.* be-gyɛ́mɔ̀
gyèndɔ̀ *v.* slip *stat.* ngyèndá
gyɛ́sɔ *v.* look for, search, lack *stat.* ngyɛ́sâ *recip.* gyɛ́sala
gyí *pro.* what
gyíbɔ *v.* call *stat.* ngyíbâ *recip.* gyíbala
gyìbɔ *v.* sharpen *stat.* ngyìbá *recip.* gyìbala
gyìdɛ *v.* forgive *stat.* ngyìdá
gyíka (nà) *v.* resemble
gyíkɛ *v.* learn *stat.* ngyíkâ be intelligent *caus.* gyíkɛsɛ teach
gyímbɔ *v.* dance *stat.* ngyímbáà *caus.* gyímbɛsɛ *recip.* gyímbala
-gyìmbɔ̀ n- *n.* 1/2 sorcerer *pl.* ba-gyìmbɔ̀
-gyìmbɔ̀ le- *n.* 5/6 magic (innate to a person) *pl.* ma-gyìmbɔ̀
gyímɛ *v.* wake sb. up *stat.* ngyímâ *caus.* gyímɛsɛ *autoc.* gyímaga wake up
gyímù *n.* 7/8 tongue *pl.* be-gyímù
-gyɔ́lɛ́ le- *n.* 5/6 bushbaby (*Galago alleni*) *pl.* ma-gyɔ́lɛ́

H

hámà *n.* 1/2 hammer *pl.* ba-hámà

I

-í m- *n.* 1/2 non-Pygmy people *pl.* b-í
-ímbɔ́ dj- *n.* 5/6 raffia palm *pl.* m-ímbɔ́
-ínɔ̀ dj- *n.* 5/6 name *pl.* m-ínɔ̀
-ísì d- *n.* 5/6 1) eye 2) kernel, seed *pl.* m-ísì
-ísì lé bénó d- *n.* 5/6 anus (lit. eye of the buttock) *pl.* m-ísì mí bénó
ìtálíyèn *n.* 7 Italy

K

kɛ̃̂ *n.* 7/8 bunch of palm nuts *pl.* be-kɛ̃̂
kɛ̃̂ *v.* wrap *stat.* nkɛ̃̂lá *recip.* kɛ́ɛ̃̀la
-ká le- *n.* 5/6 leaf *pl.* ma-ká
ká *n.* 7/8 grass *pl.* be-ká
kà *v.* catch (object in air) *stat.* nkàsá

appl. kàsɛlɛ light sth.
ká'à *v.* role up (e.g. mattress, paper), envelop, bandage *stat.* nkágâ *recip.* kágala
-kà'á le- *n.* 5/6 clan, tribe, kind *pl.* ma-kà'á
kàbà *n.* 7/8 long dress *pl.* be-kàbà
kábálá *n.* 7/8 horse *pl.* be-kábálá
kàbɔ *v.* share, divide, serve *stat.* nkàbá *recip.* kàbala
kàdɛ *v.* detach, unwrap (e.g. manioc stick) *stat.* nkàdá *caus.* kàdɛsɛ *recip.* kàdala *autoc.* kàdɛga detach by itself
kádɔ *v.* exceed, be too much *stat.* nkádâ *recip.* kádala
kàdó *n.* 1/2 gift, present *pl.* ba-kàdó
kàdɔ̂ *n.* 1/2 ladder *pl.* ba-kàdɔ̂
kàgá *n.* 7/8 defect giving birth *pl.* be-kàgá
-kàgà le- *n.* 5/6 bewitched woman *pl.* ma-kàgà
-kágɛ́ le- *n.* 5/6 promise *pl.* ma-kágɛ́
kàgɔ *v.* promise *recip.* kàgala
káka *v.* shiver
kàká *n.* 7/8 cocoa (*Theobroma cacao*) *pl.* be-kàká
kálá *n.* 7/8 chili paste seasoning *pl.* be-kálá
-kàlà le- *n.* 5/6 doughnuts *pl.* ma-kàlà
kàlà *n.* 7/8 strawmat *pl.* be-kàlà
kálàdɛ̀ *n.* 7/8 book *pl.* be-kálàdɛ̀
kàlanɛ *v.* transmit, translate *stat.* nkálánɛ̂
kálé *n.* 1/2 sister (older and younger) *pl.* ba-kálé
kàlɛga *v.* stop over, go over with stops
kámbɛ̀ *n.* 1/2 weaver ants (*Oecophylla*) *pl.* ba-kámbɛ̀
kámbɔ *v.* chew *stat.* nkámbâ *recip.* kámbala
kàmbɔ nà *v.* defend *stat.* nkàmbá *recip.* kàmbala
kàmɛ̀rún *n.* 1 Cameroon
kánda *v.* crack (e.g. bottle, cup, glass) *stat.* nkándâ *caus.* kándɛsɛ
kàndá *n.* 7/8 proverb *pl.* be-kàndá
kàsà *n.* 7/8 bridge *pl.* be-kàsà
kàsɛlɛ *v.* light *stat.* nkàsálâ *recip.* kàsala
kásɔ *v.* become thin *stat.* nkásâ *appl.* kásɛlɛ *recip.* kásala *autoc.* kásɛga get suddenly angry
kɛ̃̀ *v.* shave *stat.* nkèngá *recip.* kèngala
-kɛ̃̀ nlô n- *n.* 1/2 gecko *pl.* ba-kɛ̃̀ mí-nlô
-kénó le- *n.* 5/6 blue duiker (*Cephalophus monticola*) *pl.* ma-kénó
kɛ́ *n.* 7/8 fish scale *pl.* be-kɛ́
kɛ̀ *v.* go, walk
kɛ̀ mpfúndɔ́ *v.* run, go fast
kɛ́ kɛ́ kɛ́ kɛ́ kɛ́ *ideo.* depiction of placing objects in a row
-kɛ̀'ɛ̀ le- *n.* 5/6 molar tooth *pl.* ma-kɛ̀'ɛ̀
kɛ́'ɛ̀ (má-kí) *v.* hatch *stat.* nkɛ́gâ
kɛ̀dɛlɛ *v.* gnaw, knabbern

stat. nkɛ̀dálâ *recip.* kɛ́dala
-kɛ́lɛ̀ le- *n.* 5/6 language *pl.* ma-kɛ́lɛ̀
kɛ̀lɛ *v.* hang *stat.* nkɛ̀lá *recip.* kɛ̀lala
kɛ̀mbɛ̀ *n.* 7/8 phlegm *pl.* be-kɛ̀mbɛ̀
kɛ̀ndɛ̀ *n.* 7/8 1) journey, traveling 2) time *pl.* be-kɛ̀ndɛ̀
kɛ̀ndɛ̀ vúdṵ̂ *n.* 7/8 1) once, one time 2) in one go, immediately *pl.* be-kɛ̀ndɛ̀ bé-báà
kɛ́ɛ́sɔ́ *n.* 7/8 person of equal rank, peer, neighbor *pl.* be-kɛ́ɛ́sɔ́
-kfṵ̂ le- *n.* 5/6 owl *pl.* ma-kfṵ̂
kfùbala *v.* move
kfùbɛ *v.* provoke *stat.* nkfùbálâ *appl.* kfùbɛlɛ provoke *recip.* kfùbala move
kfúbɔ́ *n.* 7/8 epilepsy *pl.* be-kfúbɔ́
kfúbɔ̀ *n.* 1/2 chicken *pl.* ba-kfúbɔ̀
-kfúdɛ̀ le- *n.* 5/6 mad person, idiot *pl.* ma-kfúdɛ̀
kfúdɛ *v.* cover, put a lid *stat.* nkfúdâ *recip.* kfúdala *autoc.* kfúdɛga close oneself
kfúdɔ má-bɔ̰̂ *v.* kneel
kfùdɔ́ yá ntɛ́lɛ́ *n.* 7/8 old tissue, rag
kfúdɔ̀wɔ̀ *n.* 7/8 chest *pl.* be-kúdɔ̀wɔ̀
kfúlɛ́ɛ́ *n.* 7/8 raffia *pl.* be-kfúlɛ́ɛ́
kfúlà *n.* 7/8 two sticks in monkey trap that hold the trigger *pl.* be-kfúlà
-kfúlé le- *n.* 5/6 paw, sole *pl.* ma-kfúlé
kfúlɛ̀ wà djìí *n.* 1/2 (forest) tortoise *pl.* ba-kfúlɛ̀ (bá djìí)
kfúlè bìpɛ̀bɛ̀ - *n.* 1/2 sea turtle *pl.* ba-kfúlɛ bá bìpɛ̀bɛ̀
-kfúlɛ̀ le- *n.* 5/6 hump *pl.* ma-kfúlɛ̀
kfùlɔ *v.* scrape skin of porcupine (soak in hot water, then remove spikes) *stat.* nkfùlá *recip.* kfùlala *autoc.* kfùlɛga
kfúmá *n.* 1/2 chief, rich person *pl.* ba-kfúmá
kfùmala *v.* find *stat.* nkfùmá
kfúmbɔ́ *n.* 7/8 bragging, showing-off *pl.* be-kfúmbɔ́
-kfùmɔ́ le- *n.* 5/6 heap *pl.* ma-kfùmɔ́
kfùmɔ́ *n.* 7/8 stump *pl.* be-kfùmɔ́
-kfùndɛ̀ le- *n.* 5/6 garbage *pl.* ma-kfùndɛ̀
kfúnɔ́ *n.* 7/8 hornbill *pl.* be-kfúnɔ́
kfùɔ̀ - *n.* 7/8 alstonia tree (*Alstonia congensis*) *pl.* be-kfùɔ̀
kfúzá *n.* 7/8 fist *pl.* be-kfúzá
-kí le- *n.* 5/6 egg *pl.* ma-kí
kì *v.* say
-kìkùù ma- *n.* 6 exam
-kílì be- *n.* 8 slyness, cunning
kílɔwɔ *v.* be vigilant *stat.* nkílásâ be warned *caus.* kílɛsɛ make vigilant
-kímbɔ́ ma- *n.* 6 salt
kímì *n.* 1/2 monkey (generic) *pl.* ba-kímì
kìndá *n.* 7/8 sugar ant *pl.* be-kìndá
kíngɛlɛ *v.* become stiff *stat.* nkíngálâ
kísínì *n.* 1/2 kitchen *pl.* ba-kísínì
kìya *v.* give *stat.* nkìyá *caus.* kìyɛsɛ chase sb. *recip.* kìyala

kíyɛ́ *n.* 7/8 iron *pl.* be-kíyɛ́
kìyɛ *v.* 1) try 2) tempt *appl.* kìyɛlɛ taste sth. *recip.* kìyala taste each other
kó *n.* 1/2 uncle (mother's brother) *pl.* ba-kó
-kókò m- *n.* 1/2 Bakoko *pl.* ba-kókò
kòkù *n.* 7/8 albino *pl.* be-kòkù
kòla *v.* add, lengthen *stat.* nkòlá *recip.* kòlala
kòlɛ *v.* help *stat.* nkòlá *recip.* kòlala
kòyà *n.* 7/8 rope Strick *pl.* be-kòyà
-kɔ́ le- *n.* 5/6 stone *pl.* ma-kɔ́
kɔ́ɔ̀ *adv.* always
kɔ̂ *v.* gather, pluck, pick *stat.* nkɔ́yâ *recip.* kɔ́yala *autoc.* kɔ́yaga
-kɔ́ lé tʃ́ǐ le- *n.* 5/6 nape of neck *pl.* ma-kɔ́ má tʃ́ǐ
kɔ̀'ɔ̀ *n.* 7/8 African Jointfir (*Gnetum africanum*) *pl.* be-kɔ̀'ɔ̀
kɔ́bɛ̀ *n.* 1/2 cup *pl.* ba-kɔ́bɛ̀
kɔ́bɛ *v.* violate, break (rule) *stat.* nkɔ́bâ *recip.* kɔ́bala
-kɔ́dɛ́ le- *n.* 5/6 bend, curve *pl.* ma-kɔ́dɛ́
kɔ́dɛ *v.* turn sth. (with vehicle) *stat.* nkɔ́dâ *caus.* kɔ́dɛsɛ *recip.* kɔ́dala *autoc.* kɔ́dɛga turn oneself
kɔ́dɔ̀ *n.* 7/8 yam *pl.* be-kɔ́dɔ̀
kɔ̀fí *n.* 7/8 coffee *pl.* be-kɔ̀fí
kɔ́gɛ *v.* straighten *stat.* nkɔ́gâ *caus.* kɔ́gɛsɛ *recip.* kɔ́gala
kɔ́kɔ́ *n.* 7/8 1) shell 2) emptiness *pl.* be-kɔ́kɔ́
kɔ́kɔ́ yá nlô - *n.* 7/8 skull *pl.* be-kɔ́kɔ́ bé mí-nlô
kɔ́kɔ́ yá ngwálà *n.* 7/8 snail house *pl.* be-kɔ́kɔ́ bé bá-ngwálà
kɔ̃̂lɛ *v.* snore
kɔ̀lɛ (mábɔ́ɔ̀) *v.* stumble *recip.* kɔ̀lala
-kɔ́ndà le- *n.* 5/6 sap *pl.* ma-kɔ́ndà
-kɔ́ndyì le- *n.* 5/6 palm (of hand) *pl.* ma-kɔ́ndyì
kɔ́sɛ *v.* cough *appl.* kɔ́sɛlɛ make cough *recip.* kɔ́sala
kpàdà kpàdà *ideo.* depiction of drumming on bamboo
kpɛ̀mɛ̀ *n.* 7/8 manioc leaves *pl.* be-kpɛ̀mɛ̀
kpúdùm kpúdùm *ideo.* depiction of drumming
kù *n.* 1/2 rat *pl.* ba-kù
kʉ̂ *n.* 1/2 leopard *pl.* ba-kʉ̂
kúdɛ́ *n.* 7/8 skin *pl.* be-kúdɛ́
kúɛlɛ *v.* mock, make fun of *recip.* kúala
kùga *v.* spread, fit, be.enough *stat.* nkùgá
kùgúù *n.* 7/8 evening *pl.* be-kùgúù
kùgúù bvúɔ̀ *n.* 7 day before yesterday
kùgúù mgbágà - *n.* 7 day before yesterday
kúkú *n.* 7/8 mushroom *pl.* be-kúkú
kùlɛ *v.* borrow *stat.* nkùlá *caus.* kùlɛsɛ lend *recip.* kùlala
kúlí *n.* 9/6 funeral ceremony from death to burying (French *deuil*) *pl.* ma-kúlí
kùlì *n.* 7/8 pimpel *pl.* be-kùlì
kùmasa *v.* prepare *stat.* nkùmásâ

kúmbɛ́ - *n.* 7/8 tin *pl.* be-kúmbɛ́
kùmbɔ́ *n.* 7/8 womb *pl.* be-kùmbɔ́
kùmbɔ *v.* repair, reconciliate, arrange, fix *stat.* nkùmbá *recip.* kùmbala
kùnàà *inv.* good
kùndá *n.* 7/8 shoe *pl.* be-kùndá
-kúndí le- *n.* 5/6 mat *pl.* ma-kúndí
-kúɔ́ le- *n.* 5/6 Azobé tree, Ironwood tree (*lophira alata*) *pl.* ma-kúɔ́
kùrɑ̂ *n.* 7 electricity
kùsì *n.* 1/2 parrot *pl.* ba-kùsì
kùbɛ̂ *n.* 7/6 heritage *pl.* ma-kùbɛ̂
-kúwɔ́ le- *n.* 5/6 flea *pl.* ma-kúwɔ́
-kwɑ̌ le- *n.* 5/6 spear, arrow *pl.* ma-kwɑ̌
kwɑ̂ *v.* cut raffia leaves in tree *stat.* nkwángâ *recip.* kwángala
kwɑ̂ *v.* betray *stat.* kwángâ *caus.* kwángɛsɛ *recip.* kwángala
kwɑ́ɑ̀lɛ *v.* spy *stat.* nkwɑ́ɑ́lâ *recip.* kwɑ́lala
kwî *n.* 7/8 Peter's duiker (*Cephalophus callipygus*) *pl.* be-kwî
kwà *v.* grind (with stone), hollow out canoe *stat.* nkwàgá *recip.* kwàgala
kwádɔ́ *n.* 7/6 village *pl.* ma-kwádɔ́
kwádɔ́ písɛ̀ *n.* 7/6 countryside, rural area *pl.* ma-kwádɔ́ písɛ̀
kwádɔ *v.* twist, bend *stat.* nkwádâ *autoc.* kwádɛga
kwàlɛ̀ *n.* 7/8 1) love, desire 2) partridge *pl.* be-kwàlɛ̀
kwàlɛ *v.* love, like *stat.* nkwàlá *recip.* kwàlala
-kwálówó le- *n.* 5/6 knuckle (hand, foot) *pl.* ma-kwálówó
kwámɔ́ *n.* 9/6 bag *pl.* ma-kwámɔ́
kwàndɔ̀ *n.* 7/8 plantain *pl.* be-kwàndɔ̀
kwánɛ́ *n.* 7/8 meeting, party *pl.* be-kwánɛ́
kwànɛ *v.* sell *stat.* nkwàná
-kwásì ma- *n.* 6 clapping (with hands)
kwàsyó *n.* 2 Kwasio people
kwɛ̂ *n.* 7/8 cough *pl.* be-kwɛ̂
kwê *v.* fall, fail (trans.) *stat.* nkwéyâ *caus.* kùsɛsɛ make fall *recip.* kwéyala
kwɛ̂lɛ *v.* bite *stat.* nkwáálâ *recip.* kwáala
kwɛ̀lɔ *v.* 1) cut down 2) injure someone *stat.* nkwɛ̀lá *recip.* kwɛ̀lala *autoc.* kwɛ̀lɛga
kyàlɛ *v.* start an engine *stat.* nkyàlá
kyɛ́gɛ̀ *n.* 7/8 Basaa *pl.* be-kyɛ́gɛ̀
kyɛ̀lɛga *v.* fall from tree when branch breaks *stat.* nkyɛ̀lɛ́gâ *recip.* kyɛ̀lala
kyɛ̀lí *n.* 7/8 bird trap *pl.* be-kyɛ̀lí

L

lɑ̀ *v.* pass, overtake, pass by *stat.* nlàngá *appl.* làngɛlɛ let pass, time *recip.* làngala
lɑ̂ *v.* read, count *stat.* nlángâ *recip.* lángala
lɑ́ (yá nyúà) *n.* 7/8 green mamba

pl. be-lɑ́̂ (bé nyúà)
lɑ̂ mímbvû *n.* 1/2 larvaes on a tree *pl.* ba-lɑ̂ mímbvû
-lá le- *n.* 5/6 fish trap *pl.* ma-lá
-là ma- *n.* 6 1) meaning 2) support (material, financial) 3) importance
-lâ le- *n.* 5/6 antenna *pl.* ma-lâ
lâ *v.* harvest, collect honey *stat.* nláyâ *recip.* léyala *autoc.* léyɛga
láà *v.* tell *stat.* nláwâ *recip.* láàla
láálɛ̀ *num.* three
làdo nà *v.* meet *stat.* nlàdá *caus.* làdɛsɛ *recip.* làdala
lága *v.* contaminate sth. (e.g. disease) *stat.* nlágâ *caus.* légɛsɛ *recip.* légala
-lámbɔ̀ le- *n.* 5/6 trap *pl.* ma-lámbɔ̀
lámbɔ̀ *n.* 7/6 lamp *pl.* ma-lámbɔ̀
lámbɔ *v.* trap *stat.* nlámbâ *recip.* lámbala
lána *v.* distribute, unlimited offer *stat.* nlánâ *recip.* lánala
lándè *n.* 7/6 Sea almond tree (*Terminalia catappa*) *pl.* ma-lándè
lábɛ̀ *n.* 1/2 big rainy season *pl.* ba-lábɛ̀
lé *n.* 7/8 tree, bush *pl.* be-lé
lɛ́ *n.* 7/8 glass *pl.* be-lɛ́
lɛ̂ *v.* offer *stat.* nléyâ *recip.* léyala
lɛ̃̀ *v.* pour into *stat.* nlèngá *recip.* lèngala
lèbɛlɛ *v.* follow, chase *stat.* nlèbálâ *recip.* lèbala
lèbvùá *inv.* nine
lèɛ̀ . uproot, disroot *stat.* nlèyá *recip.* lèyala
légɛ *v.* singe *stat.* nlégâ *caus.* légɛsɛ *recip.* légala *autoc.* légɛga
lèmbo *v.* 1) know 2) flee, escape *stat.* nlèmbá *caus.* lèmbɛsɛ *recip.* lèmbala
-lɛ́ndɛ́ le- *n.* 5/6 palm tree *pl.* ma-lɛ́ndɛ́
lèndɔ *v.* flow *stat.* nlèndá *caus.* lèndɛsɛ *autoc.* lèndɛga
lɛ́nɛ̀ *n.* 7/8 offer *pl.* be-lɛ́nɛ̀
lɛ́ngɔ̀ *n.* 7/8 fun, amusement, joke *pl.* be-lɛ́ngɔ̀
líbɛla *v.* show up, appear (e.g. moon) *stat.* nlíbálâ
líbɛlɛ *v.* show *stat.* nlíbálâ *recip.* líbala
líɛ̀ *v.* leave (to sb), cede, let *stat.* nlígâ *recip.* lígala
límà *n.* 7/8 stupidity *pl.* be-límà
límbɛ *v.* pull *stat.* nlímbâ *recip.* límbala *autoc.* límbɛga
línâ *inv.* since
líndɛ̀ *inv.* when
-líbɛ́lá (má ngɔ́ndɛ́) ma- *n.* 6 rising, apparition (of moon)
lìvrɛ́ *n.* 1/2 book *pl.* ba-lìvrɛ́
líyɛlɛ *v.* accompany *stat.* nlíyálâ *recip.* líyala
líyɔ *v.* clear land *stat.* nléyâ *recip.* líyàlà *autoc.* líyaga
lɔ̀ *v.* sew, weave, weave nest *stat.* nlɔ̀yá *caus.* lɔ̀yɛsɛ *recip.* lɔ̀yala
-lɔ̂ le- *n.* 5/6 ear *pl.* ma-lɔ̂
lòá *n.* 7/8 slave, servant *pl.* be-lòá
lɔ̀gɔ̀ *n.* 7/8 curse *pl.* be-lɔ̀gɔ̀

-lɔ́lɛ̀ mí-nkɔ̀lɛ̀ n- *n.* 1/2 weaver, taylor *pl.* ba-lɔ́lɛ̀ bá mí-nkɔ̀lɛ̀
lɔ̀lɔ̀ *n.* 7/8 duck *pl.* be-lɔ̀lɔ̀
lɔ̀mbì *inv.* eight
lɔ̀ndɔ́ *n.* 7/8 ring *pl.* be-lɔ̀ndɔ́
lɔ́ngá *n.* 7/8 group, swarm, flock *pl.* be-lɔ́ngá
-lɔ̀ɔ́ le- *n.* 5/6 dew *pl.* ma-lɔ̀ɔ́
-lṹ ma- *n.* 6 sexual intercourse
-lṹ le- *n.* 5/6 insult *pl.* ma-lṹ
lṹ *v.* insult *stat.* nlúngâ *recip.* lúngala and lúwala
lùà *v.* curse *stat.* nlɔ̀gá *caus.* lɔ̀gɛsɛ *recip.* lɔ̀gala
lṹã̀ *v.* whistle *stat.* nlɔ́ngâ *recip.* lɔ́ngala scream *tr.* lɔ́ngɛ yɛ́lɛ̀ whistle with whistle
lúmɛ *v.* send *stat.* nlúmâ, nlúmálâ *appl.* lúmɛlɛ *recip.* lúmala
lùmɔ́ *n.* 7/8 yellow fever mosquito (*Aedes aegypti*) *pl.* be-lùmɔ́
lùndá *n.* 7/8 small forest, grove between villages and houses (French *bosquet*) *pl.* be-lùndá
lúndɛ́ *n.* 7/8 apa tree (*Afzelia bipidensis*) *pl.* be-lúndɛ́
lúndɔ *v.* fill oneself (with food) *stat.* nlúndá *appl.* lúndɛlɛ fill sth. *caus.* lúndɛsɛ *recip.* lúndala
lùnga *v.* grow *stat.* nlùngá *caus.* lùngɛsɛ
lùngɛlɛ *v.* aim (at) *stat.* nlùngálâ *recip.* lùngala
lúwɔ *v* . bite *stat.* nlùwá *caus.* lúwɛsɛ *recip.* lúwala
lṹ̀ *v.* build, construct *stat.* nlúngâ *caus.* lúngɛsɛ *recip.* lúngala
-lvùgà mà- *n.* 0/6 animation, liveliness
lvúmɔ́ *n.* 7/8 maggot *pl.* be-lvúmɔ́
lvúmɔ *v.* sting *stat.* nlvúmâ *caus.* lvúmɛsɛ *recip.* lvúmala fight in war
lvùúgɔ *v.* animate, excite

M

mm̀ - *n.* 6 sea
má'à *v.* accuse *stat.* mágâ *appl.* mándɛlɛ *recip.* mágala
-máá le- *n.* 5/6 cheek *pl.* ma-máá
màbè *n.* 6 Mabi people
màbùnzò *n.* 1/2 lion (Kwasio word) *pl.* ba-mábùnzò
màkítì *n.* 6 market
mámé *n.* 1/2 aunt (father's sister) *pl.* ba-mámé
mándɛlɛ *v.* accuse (interchangeable with má'à) *recip.* mándala accuse
màndjìmɔ̀ *inv.* whole, entire
mándɔ *v.* stuff mouth *stat.* mándâ *appl.*
-màNgɔ́lɔ́ le- *n.* 5/6 ankle *pl.* ma-màngɔ́lɔ́
mânù *n.* 6 junction, crossroad
másà *n.* 1/2 boss *pl.* bmásà
másɛ́gá *adv.* suddenly, unexpectedly
màtèlà *n.* 1/2 mattress *pl.* ba-màtèlà
mátʃà màtʃà *ideo.* depiction of

eating in little bits
màtúà *n.* 1/2 car *pl.* ba-màtúà
méɛ̀lɛ *v.* accept, respond, reply *stat.* méɛ́lâ *recip.* méala
méméɛ́ wà be-sâ *n.* 1/2 owner *pl.* béɓéɛ́ bá bé-sâ
mèmɔ *v.* admit *stat.* mèmá *recip.* mèmala
méɲɔ́ *n.* 7/8 morning *pl.* be-méɲɔ́
mèsɔ̀ *v.* wave (greeting) *stat.* mèsá *recip.* mèsala
mèvâ - *n.* 7 pride
mfû *n.* 3/4 poison *pl.* mi-mfû
mfùlɛ̀ *n.* 3/4 fart *pl.* mi-mfùlɛ̀
mgbǎ̃ *n.* 7/8 crow *pl.* be-mgbǎ̃
-mgbámàlà ma- *n.* 6 acidity
mgbámala *v.* be sour
mgbásá *n.* 7/8 hunting with spear and dogs *pl.* be-mgbásá
mgbèmgbèmɛ̀ - *n.* 7/8 lion *pl.* be-mgbèmgbèmɛ̀
mgbísì *n.* 3/4 freshness, rawness, living *pl.* mi-mgbísì
mímbà *v.* brag *recip.* mímbala
mìnkɨ́ *n.* 1/2 pot, casserole *pl.* ba-mìnkɨ́
mìnò *v.* swallow *stat.* mìná *caus.* mìnɛsɛ *recip.* mìnala
mìntùlí *n.* 1/2 mouse *pl.* ba-mìntùlí
-mìnú le- *n.* 5/6 gill *pl.* ma-mìnú
míyù *n.* 1/2 brother, cousin, close friend (younger or same age) *pl.* ba-míyù
mkpámá *n.* 3/4 novelty *pl.* mi-mkpámá
mɔ̀ *n.* 3/4 stomach *pl.* mi-mɔ̀
mɔ̀nɛ́ *n.* 1/2 money *pl.* ba-mɔ̀nɛ́
-mɔ́ngɔ̀ le- *n.* 5/6 male driver ant (*Dorylinae*) *pl.* ma-mɔ́ngɔ̀
mpá *n.* 3/4 island *pl.* mi-mpá
mpà *n.* 1/2 1) Thomas' bushbaby (*Galago thomasi*) 2) virgin *pl.* ba-mpà
mpà'à *n.* 9 vapor, fog
mpá'à wá nyúlɛ̀ *n.* 3/4 side of the body *pl.* mi-mpá 'à mí nyúlɛ̀
mpà(mpà) *qual.* good
mpàálé *n.* 9/6 news *pl.* ma-mpàálé
mpàgó *n.* 3/4 road *pl.* mi-mpàgó
mpàmbìlì *n.* 3/4 plunge, fall *pl.* mi-mpàmbìlì
mpàndà *n.* 1/2 bug (all larger, rounder insects) *pl.* ba-mpàndà
mpàndyè *n.* 7/8 bamboo *pl.* be-mpàndyè
mpàndyì *n.* 7/6 rib *pl.* ma-mpàndyí
mpèlɛ̀ *n.* 1/2 eagle *pl.* ba-mpèlɛ̀
mpèndɛ̀ *n.* 3/4 root *pl.* mi-mpèndɛ̀
mpèwɔ́ *n.* 3/4 wind *pl.* mi-mpèwɔ́
mpfùmbɔ̀ *n.* 3/4 dead tree (without leaves) *pl.* mi-mpfùmbɔ̀
mpfùmɔ̀ *n.* 3/4 midnight *pl.* mi-mpfùmɔ̀
mpfúndɔ́ *n.* 3/4 running, race *pl.* mi-mpfúndɔ́
mpfùngyá'à *n.* 3/4 dust *pl.* mi-mpfùngyá'à
mpfùɔ̀ *n.* 3/4 last meal with medicine in a healing session *pl.* mi-mpfùɔ̀

mpí'ìdì *n.* 9/6 heat (from fire, pot, people) *pl.* ma-mpí'ìdì
mpíì *n.* 3/4 kidney *pl.* mi-mpíì
mpìmbá *n.* 7/8 pancreas *pl.* be-mpìmbá
mpìnàgà *n.* 3/4 obligation, duty *pl.* mi-mpìnàgà
mpíndá *n.* 9/6 law, prohibition *pl.* ma-mpíndá
mpìndí *n.* 3/4 non-ripeness *pl.* mi-mpìndí
mpìndì *n.* 9/6 dirt *pl.* ma-mpìndì
mpìndyɔ́ *n.* 3/4 trigger in trap *pl.* mi-mpìndyɔ́
mpìngá *n.* 3/4 sweet cassava *pl.* mi-mpìngá
mpǒ *n.* 1/2 sun squirrel (*Heliosciurus gambianus*) *pl.* ba-mpǒ
mpɔ̀'ɔ̀ - *n.* 3/4 tooth gap *pl.* mi-mpɔ̀'ɔ̀
mpɔ́ndɔ́ *n.* 3/4 shirt *pl.* mi-mpɔ́ndɔ́
mpɔ̀ngɔ́ *n.* 9/6 seedling *pl.* ma-mpɔ̀ngɔ́
mpòngóló *n.* 7/8 ginger plant (*Aframomum*) *pl.* be-mpòngóló
mpù *?.* like (this)
mpů *n.* 3/4 payment *pl.* mi-mpů
mpúbɛ́lɛ̀ *n.* 1/2 current, rip tide *pl.* ba-mpúbɛ́lɛ̀
mpúdɛ́ *n.* 3/4 mais *pl.* mi-mpúdɛ́
mpúɛ̀rɛ̀ *inv.* seven
mpùlɛ́ *n.* 3/4 1) African whitewood (*Enantia chlorantha*) 2) yellow color *pl.* mìmpùlÉ
mpúmbú *n.* 3/4 calf *pl.* mi-mpúmbú
mpwá *n.* 3/4 bouillon, stock (made from water, salt, and chili) *pl.* mi-mpwá
mtʃà mtʃà mtʃà *ideo.* depiction of picky eating (only taking certain items off the plate)
múɛlɛ *v.* nibble *stat.* múálâ *caus.* múɛsɛ *recip.* múala
-múngɛ̀ le- *n.* 5/6 beetle (*Buprestidae*) *pl.* ma-múngɛ̀
músɔ́ *n.* 7/8 midday, noon *pl.* be-músɔ́
mvɛ́bɛ́ *n.* 7/8 hedgehog *pl.* be-mvɛ́bɛ́
mvíndɔ́ *n.* 3/4 sweet water turtle *pl.* mi-mvíndɔ́
mwádèkǎ *n.* 7/8 other side *pl.* be-mwádèkǎ
mwálɛ́ *n.* 3/4 female *pl.* mi-mwálɛ́
-mwàngɔ́lɔ́ le- *n.* 5/6 joint *pl.* ma-mwàngɔ́lɔ́
mwàsɔ̀ *n.* 3/4 long bendable stick in trap that holds animal *pl.* mi-mwàsɔ̀
mwàsɔ *v.* throw *stat.* mwàsá *recip.* mwàsala
mwɛ́ *n.* 3/4 dam, barrage *pl.* mi-mwɛ́
myàkɛ *v.* sprinkle *stat.* myàká *caus.* myàkɛsɛ *recip.* myàkala
myámata *v.* be narrow, narrow sth. *stat.* myámátâ
myámɔ *v.* knead, press (dough or fruit), press between fingers *recip.* myámala
myángálɛ̀ *n.* 3/4 rust *pl.* mi-

myángálɛ̀
myɛ́ *n.* 4 fur

MB

mbáálɔ́ *n.* 3/4 jaw *pl.* mi-mbáálɔ́
mbàdɔ́ *n.* 3/4 lake *pl.* mi-mbàdɔ́
mbàfùmbɔ̀ *n.* 3/4 shrew *pl.* mi-mbàfùmbɔ̀
mbágò *n.* 3/4 package, envelop *pl.* mi-mbágò
mbàmbà *n.* 3/4 co-wife *pl.* mi-mbàmbà
mbámbɛ́ *n.* 1/2 grand-parent, ancestor *pl.* ba-mbámbɛ́
mbàmbìlì *n.* 1/2 father-in-law *pl.* ba-mbàmbìlì
mbàngá *n.* 3/4 nut, pit, stone *pl.* mi-mbàngá
mbàngá lé-léndɛ́ - *n.* 3/4 coconut *pl.* mi-mbàngá mí má-léndɛ́
mbɛ̂ *n.* 1/2 flood *pl.* ba-mbɛ̂
mbènɛ̀ *n.* 9/6 bad sign, omen *pl.* ma-mbènɛ̀
mbéwɔ̀ *n.* 3/4 selfishness, sin *pl.* mi-mbéwɔ̀
mbɛ̀ *n.* 3/4 drum *pl.* mi-mbɛ̀
mbɛ̂ *n.* 3/4 door *pl.* mi-mbɛ̂
mbɛ́ɛ́ *n.* 3/4 metal oven *pl.* mi-mbɛ́ɛ́
mbèlè *n.* 3/4 African Padauk, African Coralwood (*Pterocarpus soyauxii*) *pl.* mi-mbèlè
-mbǐ le- *n.* 5/6 pillar *pl.* ma-mbǐ
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
mbɔ̀lɛ̀ *n.* 3/4 okra *pl.* mi-mbɔ̀lɛ̀
mbɔ̀lɛ́ kfúnó *n.* 7/8 slime *pl.* be-mbɔ̀lɛ́ kfúnó
mbɔ̀mbɔ́ *n.* 9/6 face *pl.* ma-mbɔ̀mbɔ́
mbɔ̀mbɔ́ *n.* 3/4 daughter-in-law *pl.* mi-mbɔ̀mbɔ́
mbɔ̀ngɔ̀ *n.* 7/6 plant *pl.* be-mbɔ̀ngɔ̀
mbɔ̀ɔ̀ *n.* 3/4 fatness *pl.* mi-mbɔ̀ɔ̀
mbɔ̀sàwà *n.* 3/4 wetness *pl.* mi-mbɔ̀sàwà
mbǔ *n.* 7/8 bullfrog *pl.* be-mbǔ
mbúlá *n.* 7/6 debt *pl.* ma-mbúlá
mbúlɛ̀ wá sí *n.* 3/4 blister *pl.* mi-mbúlɛ̀ mí sí
mbúlɔ̀ *n.* 3/4 migratory locust (*Locusta migratoria*) *pl.* mi-mbúlɔ̀
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
mbvùlɛ̀ *n.* 7/8 bushbuck (*Tragelaphus scriptus*) *pl.* be-mbvùlɛ̀
mbvúlɛ̀ síyɛ̀ *n.* 7/8 soot *pl.* be-mbvúlɛ̀ bé síyɛ̀
mbvúndá *n.* 9/6 trouble, error,

mistake *pl.* ma-mbvúndá
-mbvúndyɛ̀ le- *n.* 5/6 leafy debris to hide traps) *pl.* ma-mbvúndyɛ̀
mbvúɔ̀ *n.* 1/2 rain *pl.* ba-mbvúɔ̀
mbvúɔ̀ wà mbvú *n.* 1/2 drizzle (lit. rain of white hair) *pl.* ba-mbvúɔ̀ bá mbvú
mbvúɔ̀ wà nɛ́nɛ̀ *n.* 1/2 strong rain *pl.* ba-mbvúɔ̀ bá nɛ́nɛ̀
mbwâ *n.* 3/4 tuber, bulb *pl.* mi-mbwâ
mbwàmbɔ̀ *n.* 3/4 bundle, package *pl.* mi-mbwàmbɔ̀
mbwàmɔ̀ *n.* 3/4 staying with woman in other compound, adultery *pl.* mi-mbwàmɔ̀
mbwàmɔ̀ *n.* 1/2 python *pl.* ba-mbwàmɔ̀
mbwɛ̌ *n.* 1/2 dog *pl.* ba-mbwɛ̌
mbyɛ̂ *n.* 3/4 high, up-stream *pl.* mi-mbyɛ̂

N

nɑ̂̀ *num.* four
ná *adv.* still, again
nà *com.* and, with
nâ *comp.* that
nàkùgúù *adv.* yesterday
nàménɔ́ *adv.* tomorrow
náàtà nà *v.* stick (sth.), be sticky *stat.* nátâ
nábànkúdí *n.* 1/2 female lizard *pl.* ba-nábànkúdí
nábè(bè) *qual.* red
nábúndjɑ̂̀ *n.* 1/2 bed bug *pl.* ba-nàbúndjɑ̂̀
nágyàlɛ́ *n.* 1/2 breastfeeding woman *pl.* ba-nágyàlɛ́
nákúlúú *n.* 1/2 forest tortoise (*Kinixys homeana*) *pl.* ba-nákúlúú
námángɔ̀(mángɔ̀) *n.* 1/2 male lizard *pl.* ba-námángɔ̀(mángɔ̀)
námínsɔ̀gɛ̀ *n.* 1/2 palm rat *pl.* ba-námínsɔ̀gɛ̀
námbàmbàlà(mbàmbàlà) *qual.* white
nánkyàálɛ́ *n.* 1/2 termite mound *pl.* ba-nánkyàálɛ́
nápfû(pfû) *qual.* darkened color
návyû(vyû) *qual.* black
náyê(yê) *qual.* brightened color
náyûyû *n.* 1/2 vertigo *pl.* ba-náyûyû
nátɑ̂̀ *qual* . straight
-nángá le- *n.* 5/6 star *pl.* ma-nángá
nɛ́nɛ̀ *qual.* big
níɛ̀ *v.* be beautiful *caus.* níngɛsɛ
níí *n.* 7/8 vagina *pl.* be-níí
níndyà *v.* urinate *caus.* níndyɛsɛ *recip.* níndyala
níyɛ̀ *inv.* how many
njɑ̂̀ *n.* 7/8 gall bladder, gall *pl.* be-njɑ̂̀
njì *v.* come *stat.* njìyá
njí nà *v.* bring (come with)
njímí *n.* 1/2 blind person *pl.* ba-njímí
njɔ́'ɔ̀ *n.* 1/2 elephant *pl.* ba-ndjɔ́'ɔ̀
njú *n.* 7/8 gap between incisor teeth *pl.* be-njú

nkɑ̃̂ *n.* 3/4 guinea fowl *pl.* mi-nɑ̃̂
nkɔ̃̂ *n.* 3/4 back *pl.* mi-nkɔ̃̂
nkʉ̃̂ɔ̃̂ *n.* 3/4 betrayal *pl.* mi-nkʉ̃̂ɔ̃̂
nkʉ̃̂ɔ̃̂ b-ùdì - *n.* 1/2 traitor *pl.* ba-kʉ̃̂ɔ̃̂ bá b-ùdì
nká *n.* 3/4 line, row *pl.* mi-nká
nká'à *n.* 3/4 western red colobus (*Procolobus badius*) *pl.* mi-nkâ
nkáálè *n.* 3/4 vertebrate *pl.* mi-nkáálè
nkáálɔ́ *n.* 3/4 fence *pl.* mi-nkáálɔ́
nkáálɔ́ *n.* 3/4 African/Guinea pepper tree (*Xylopia aethiopica*) *pl.* mi-nkáálɔ́
nkábɛ́ *n.* 9/6 paddle *pl.* ma-nkábɛ́
nkàdɛ̀ *n.* 3/4 provocation *pl.* mi-nkàdɛ̀
nkágá *n.* 3/4 side of an animal *pl.* mi-nkágɑ̀
nkámbílí *n.* 3/4 chewed up (fish) bones that are spat out when eating *pl.* mi-nkámbílí
nkàmɛ̀ *n.* 3/4 sticky sap (from vein, used for birdlime) *pl.* mi-nkàmɛ̀
nkàmɔ̀ *n.* 9 reason
nkándâ *n.* 3/4 crack *pl.* mi-nkándâ
nkàndɛ́ *n.* 1/2 African dwarf crocodile (*Osteolaemus tetraspis*) *pl.* ba-nkàndɛ́
nkándɔ̀ *n.* 3/4 beer *pl.* mi-nkándɔ̀
nkângà *n.* 1/2 weaver bird *pl.* ba-nkângà
nkázá *n.* 3/4 whip *pl.* mi-nkázá
nké'é *n.* 7/8 scream *pl.* be-nké'é
nkè *n.* 3/4 low, down-stream *pl.* mi-nkè
nkɛ́'ɛ́ *n.* 3/4 jaw *pl.* mi-nkɛ́'ɛ́
nkè'ɛ̀ *n.* 3/4 chin *pl.* mi-nkè'ɛ̀
-nkɛ́dɛ́ le- *n.* 5/6 hip, waist *pl.* ma-nkɛ́dɛ́
nkɛ́dɛ́ *n.* 9/6 courage *pl.* ma-nkɛ́dɛ́
nkɛ̀lɛ̀ yá d-ísì *n.* 7/8 eyebrow *pl.* be-nkɛ̀lɛ̀ bé m-ísì
nkfù lé lɔ̃̂ *n.* 3/4 whole in ear *pl.* mi-nkù mí ma-lɔ̃̂
nkfúdɛ́ *n.* 7/8 cloud, fog *pl.* be-nkfúdɛ́
nkfùndɛ́ *n.* 3/4 barren woman *pl.* mi-nkfùndɛ́
nkfùbɔ́ *n.* 3/4 trunk (body) *pl.* mi-nkfùbɔ́
nkfúù *n.* 3/4 ghost *pl.* mi-nkfúù
nkfùwɔ́ *n.* 3/4 torso *pl.* mi-nkvùwɔ́
nkìngù *n.* 3/4 1) edge 2) edge *pl.* mi-nkìngù
nkìyɔ́ *n.* 3/4 wave *pl.* mi-nkìyɔ́
nkɔ̀lɛ́ *n.* 3/4 vein, rope, line *pl.* mi-nkɔ̀lɛ́
nkɔ́lɔ̀ *n.* 3/4 watch, clock *pl.* mi-nkɔ́lɔ̀
nkɔ́ngɔ́ *n.* 3/4 frog (general term) *pl.* mi-nkɔ́ngɔ́
nkɔ́sâ *n.* 3/4 manner of coughing *pl.* mi-nkɔ́sâ
nkɔ́zì *n.* 7/8 part of throat of animal that gets removed after killing *pl.* be-nkɔ́zì
nkù *n.* 3/4 hole, animal den *pl.* mi-nkù
nkû *n.* 1/2 Gambian pouched rat (*Cricetomys gambianus*) *pl.* ba-nkû
nkû *n.* 3/4 leg, foot *pl.* mi-nkû

nkùá *n.* 3/4 tree trunk *pl.* mi-nkùá
nkùlɛ́ *n.* 3/4 hill, mountain *pl.* mi-nkùlɛ́
nkúlɔ́ *n.* 3/4 “dead” (raimy) season (May-Aug) *pl.* mi-nkúlɔ́
nkùmàsà *n.* 3/4 preparation *pl.* mi-nkùmàsà
nkùmbɔ́ *n.* 1/2 African brush-tailed porcupine (*Atherurus africanus*) *pl.* ba-nkùmbɔ́
nkùmbò *n.* 3/4 Nile crocodile (*Crocodylus niloticus*) *pl.* mi-nkùmbò
nkùmbɔ́ wá d-úú *n.* 3/4 nasal wing *pl.* mi-nkùmbɔ́ mí m-úú
nkúmbɔ̀lɔ́ *n.* 3/4 diarrhea *pl.* mi-nkúmbɔ̀lɔ́
nkùmù *n.* 3/4 prison *pl.* mi-nkùmù
nkùndé *n.* 3/4 tail *pl.* mi-nkùndé
nkúnkúmbɛ́ *n.* 3/4 bow *pl.* mi-nkúnkúmbɛ́
nkùù *n.* 3/4 evil spirit *pl.* mi-nkùù
-nkùzÓ - *n.* 3/4 widow/er *pl.* mìnkùzÓ
nkwǎ̋ǎ̀lɛ̀ b-ùdì *n.* 1/2 spy *pl.* ba-kwǎ̋ǎ̀lɛ̀ bá b-ùdì
nkwálá *n.* 3/4 machete *pl.* mi-nkwálá
nkwànò *n.* 3/4 honey *pl.* mi-nkwànò
nkwásá *n.* 3/4 fishing pole *pl.* mi-nkwásá
nkwɛ̌ *n.* 3/4 basket *pl.* mi-nkwɛ̌
nkyǎ̋ *n.* 3/4 shrimp *pl.* mi-nkyǎ̋
nkyǎ̰ *n.* 3/4 scabies *pl.* mi-nkyǎ̰
nlǎ̋ *n.* 3/4 anus *pl.* mi-nlǎ̋
nlǎ̰ *n.* 3/4 story, tale, problem *pl.* mi-nlǎ̰
nlàà *n.* 3/4 antenna, horn *pl.* mi-nlàà
nlàwɔ́ *n.* 3/84 branch *pl.* mi-nlàwɔ́
nlémò *n.* 3/4 heart *pl.* mi-nlémò
nlô *n.* 3/4 head *pl.* mi-nlô
nlùdɛ̀ *n.* 3/4 scale (for weighing) *pl.* mi-nlùdɛ̀
nlùngá *n.* 3/4 bucket *pl.* mi-nlùngá
nlvúmá *n.* 3/4 fork *pl.* mi-nlvúmá
nɔ̀ɔ̀nɛ́ *n.* 7/8 bird (generic term) *pl.* be-nɔ̀ɔ̀nɛ́
nɔ́ɔ́ *n.* 1/2 deaf person *pl.* ba-nɔ́ɔ́
nɔ̀ɔ̀ *v.* take *stat.* nɔ̀ngá *recip.* nɔ̀n-gala
nsḭ̌ *n.* 3/4 African linsang (*Poiana richardsonii*) *pl.* mi-nsḭ̌
nsɔ̰̌ *n.* 3/4 (intestinal) worm *pl.* mi-nsɔ̰̌
nsɔ̰̂ *n.* 3/4 beak *pl.* mi-nsɔ̰̂
nsá *n.* 3/4 shore *pl.* mi-nsá
nsá wá mǎ̰ *n.* 3/4 beach, shore (bord de la mer) *pl.* mi-nsá mí mǎ̰
nsá’à *n.* 3/4 shrub, bush (e.g. banana tree) *pl.* mi-nsá’à
nsà’á *n.* 3/4 mantled guereza (*Colobus guereza*) *pl.* mi-nsà’á
nsá’àwà *n.* 3/4 flouncing, repeated movement (e.g. leaves) *pl.* mi-nsá’àwà
nsàlá *n.* 3/4 crevice, fissure *pl.* mi-nsàlá
-sálɛ̀ mànkɛ̰̂ n- *n.* 1/2 farmer *pl.* ba-sálɛ̀ bá má-nkɛ̰̂
nsámbò *n.* 3/4 penis *pl.* mi-nsámbò

nsɛ́ *n.* 3/4 sand *pl.* mi-nsɛ́
nsɛ́lɔ́ *n.* 3/4 plant with thorns *pl.* mi-nsɛ́lɔ́
nsíngɔ́ *n.* 3/4 fastness, speed *pl.* mi-nsíngɔ́
nsínó *n.* 3/4 color, paint *pl.* mi-nsínó
nsìsɔ́ *n.* 3/4 vein *pl.* mi-nsìsɔ́
nsìyɛ̀ *n.* 3/4 string *pl.* mi-nsìyɛ̀
nsɔ̂ wá d-ísì *n.* 3/4 pupil *pl.* mi-nsɔ̂ mí m-ísì
nsɔ́nsɔ́ *n.* 3/4 bone marrow *pl.* mi-nsɔ́nsɔ́
nsùlɛ̀ *n.* 3/4 ripeness *pl.* mi-nsùlɛ̀
nsùmbɔ́ *n.* 3/4 hunt (with dogs and spears) *pl.* mi-nsùmbɔ́
ntɑ́ɑ̀ *v.* climb over, overcome, suceed *stat.* ntàngá *caus.* ntàngɛsɛ *recip.* ntàngala
ntá *n.* 3/4 niece, nephew (children of the sister, i.e. children who do not belong to the house, but have their father elsewhere) *pl.* mi-ntá
ntà *n.* 1/2 grand-child *pl.* ba-ntà
ntámanɛ *v.* ruin, destroy, be ruined
ntàmbɛ̀ *n.* 1/2 rubber *pl.* ba-ntàmbɛ̀
ntàmbɛ̂ *n.* 1/2 stick *pl.* ba-ntàmbɛ̂
ntàngànɛ̀ *n.* 3/4 white person *pl.* mi-ntàngànɛ̀
ntányá *n.* 3/4 cleanliness *pl.* mi-ntányá
ntɛ́ *n.* 3/4 tallness, size *pl.* mi-ntɛ́
ntɛ̀gá *n.* 3/4 weakness, softness *pl.* mi-ntɛ̀gá
ntɛ́gɛlɛ̀ *v.* threaten, annoy, disturb *stat.* ntɛ́gálâ *recip.* ntɛ́gala
ntɛ́lɛ́ *n.* 7/8 clothing, fabric *pl.* be-ntɛ́lɛ́
ntɛ̀mbɔ́ *n.* 1/2 younger siblings and cousins *pl.* ba-ntɛ̀mbɔ́
-ntɛ̀mbwà le- *n.* 5/6 wrinkle (in skin) *pl.* ma-ntɛ̀mbwá
ntɛ̀ndá *n.* 3/4 tear, rip *pl.* mi-ntɛ̀ndá
-ntɛ̀ndì le- *n.* 5/6 saliva, drool *pl.* ma-ntɛ̀ndì
ntfùgà *n.* 7/8 lid (of bottle) *pl.* be-ntfùgà
ntfúmò *n.* 3/4 knife *pl.* mi-ntfúmò
ntɔ̀gɔ̀ *n.* 7/8 sweet potato *pl.* be-ntɔ̀gɔ̀
ntɔ̀ndɔ̀gɛ̀ *n.* 7/8 needle *pl.* be-ntɔ̀ndɔ̀gɛ̀
ntɔ̀ndɔ̀m *ideo.* depiction of monkeys jumping in trees
ntɔ̀ngɛ̀ *n.* 1/2 hornet, wasp, mantispid *pl.* ba-ntɔ̀ngɛ̀
ntsɑ́ntsùgɛ̀ *n.* 3/4 dragon fly (*Odonata*) *pl.* mi-ntsɑ́ntsùgɛ̀
ntúà *n.* 7/6 mango (fruit), mango tree, wild mango (*Irvingia gabonensis*) *pl.* ma-ntúà
-ntúdégá le- *n.* 5/6 bruise *pl.* ma-ntúdégá
ntúlé *n.* 3/4 old person *pl.* mi-ntúlé
ntúmɛ́ *n.* 3/4 walking stick *pl.* mi-ntúmɛ́
ntúmɔ̀ *n.* 2 Mvai people (Campo, Guinea, Mbam)
ntùngù *n.* 3/4 manner, behavior *pl.* mi-ntùngù

ntùɔ́ *inv.* six
ntúbí *n.* 3/4 savannah *pl.* mi-ntúbí
númbá *n.* 7/8 place *pl.* be-númbá
nùmbà *n.* 1/2 logger *pl.* ba-nùmbà
nvèwɔ̀ *n.* 3/4 breath *pl.* mi-nvèwɔ̀
ŋwándɔ́ *n.* 3/4 bitter manioc *pl.* mi-ŋwándɔ́
ŋwándɔ́ *n.* 9/6 manioc stick *pl.* ma-ŋwándɔ́
nyə̂̀ *n.* 1/2 mother *pl.* ba-nyə̂̀
nyá *inv.* really
nyâ *n.* 7/8 nail (finger, toe), claw *pl.* be-nyâ
-nyâ ma- *n.* 6 milk
nyâ *v.* lick, suckle (babies) *stat.* nyángâ *caus.* nyángɛsɛ *recip.* nyángala
nyàà *v.* defecate *stat.* nyàgâ *caus.* nyàgɛsɛ *recip.* nyàgala
nyáàlɛ̀ *n.* 1/2 beggar *pl.* ba-nyáàlɛ̀
nyádɛ̀ *n.* 1/2 buffalo *pl.* ba-nyádɛ̀
nyàgà *n.* 7/8 cow *pl.* be-nyágà
nyàlɛ́ *n.* 1/2 son/brother -in-law *pl.* ba-nyàlɛ́
nyàlɛ *v.* scratch *stat.* nyàlá *recip.* nyàlala
nyàmá *n.* 3/4 broken thing *pl.* mi-nyàmá
nyámbá *n.* 9/6 armpit *pl.* ma-nyámbá
nyàmɛ̀ *n.* 7/8 poverty *pl.* be-nyàmɛ̀
nyàmɔ *v.* get ruined, spoil (e.g. house, fruit) *stat.* nyàmá *caus.* nyàmɛsɛ *recip.* nyàmala
nyánɛ̀ *n.* 7/8 war *pl.* be-nyánɛ̀
-nyánɔ̀ ma- *n.* 6 pain
nyàno *v.* hurt
nyè *v.* return *stat.* nyìgá *recip.* nyìgala
nyê *v.* see, look *recip.* nyénala
nyèmbɛ́ *n.* 7/8 gun *pl.* be-nyèmbɛ́
nyèsɛlɛ *v.* press down on sth., deepen *stat.* nyèsá lowered
nyî *v.* enter *stat.* nyíngâ *appl.* nyíngɛlɛ *recip.* nyíngala
nyígɛ *v.* beg
nyìkà (yá m-bɔ̂) - *n.* 7/8 crook of the arm *pl.* be-nyìkà bé má-bɔ̂
nyímɛ *v.* refuse *stat.* nyímâ *caus.* nyímɛsɛ *recip.* nyímala
nyímɛlɛ *v.* tighten *stat.* nyímálâ *recip.* nyímala
nyɔ̀mbɛlɛ *v.* tickle *recip.* nyɔ̀mbala
nyɔ́nyɔ̃̂ *n.* 7/8 yawn *pl.* be-nyɔ́nyɔ̃̂
-nyɔ́ɔ̀ ma- *n.* 6 wine, general term for alcohol
-nyɔ́ɔ̀ má léndé ma- *n.* 6 palm wine
nyú (wá nkwànò) *n.* 1/2 bee *pl.* ba-nyú (bá nkwànò)
nyúúlé *n.* 7/8 insect *pl.* be-nyúúlé
nyűä̂ *n.* 1/2 snake *pl.* ba-nyűä̂
nyúlɛ́ *n.* 3/4 orphan *pl.* mi-nyúlɛ́
nyúlɛ̀ *n.* 9/6 body *pl.* ma-nyúlɛ̀
nyùlɛ̀ *n.* 3/4 flame *pl.* mi-nyùlɛ̀
nyùlɛ *v.* drink *stat.* nyùlá *caus.* nyùlɛsɛ *recip.* nyùlala
nyùmbò *n.* 3/4 mouth *pl.* mi-nyùmbò
nyùmbɔ *v.* smell intr. (good or bad) *stat.* nyùmbá *appl.* nyùmbɛlɛ smell sth. *caus.* nyùmbɛsɛ *recip.* nyùmbala

nyùngù *n.* 1/2 rainbow *pl.* ba-nyùngù
nyùùlɛ̀ *n.* 1/2 mosquito *pl.* ba-nyùùlɛ̀
nywɑ́ɑ̀ *adv.* early (in the day, before sunset)
nzɑ́ɑ̀ *n.* 7 appetite for meat or fish
nzá *pro.* who
-nzá le- *n.* 5/6 dead leaves in water *pl.* ma-nzá
-nzálɛ̀ ma- *n.* 6 urine
nzàmbí *n.* 1/2 god, good spirit *pl.* ba-nzàmbí
nzàmbɔ̀ *n.* 7/8 marsh *pl.* be-nzàmbɔ̀
nzámù *n.* 1/2 appetite *pl.* ba-nzámù
nzɛ̀lɛ̀ *n.* 7/8 beard *pl.* be-nzɛ̀lɛ̀
nzí nzálɛ̀ *n.* 7/8 bladder (place of urine) *pl.* be-nzí nzálɛ̀
nzìlɑ̀ *n.* 7/8 swallow *pl.* be-nzìlɑ̀
-nzímɔ̀ le- *n.* 5/6 termite (*Isoptera*) *pl.* ma-nzímɔ̀
nzɔ̀mɛ́ *n.* 7/8 splinter *pl.* be-nzɔ̀mɛ́

ND

ndɛ́ɛ́ɛ́ɛ́ *ideo.* depiction of staring
ndà *v.* cross *stat.* ndàngá *recip.* ndàngala
ndáà *adv.* also, too
ndàlò *n.* 1/2 tobacco *pl.* ba-ndàlò
ndáwɔ̀ *n.* 9/6 house *pl.* ma-ndáwɔ̀
ndɛ̀ - *n.* 3/4 bait *pl.* mi-ndɛ̀
ndɛ̀mó *n.* 9/6 dream *pl.* ma-ntɛ̀mó
ndɛ́ndíbù *n.* 1/2 spider, spider web *pl.* ba-ndɛ́ndíbù
ndísì *n.* 3/4 rice *pl.* mi-ndísì
ndjímbà *n.* 3/4 ignorance *pl.* mi-ndjìmbá
ndjìmɔ̀ *n.* 3/4 some, someone, any *pl.* mi-ndjìmɔ̀ (mí b-ùdì)
-ndjù le- *n.* 5/6 sweet banana *pl.* ma-ndjù
-ndjwɑ̂ le- *n.* 5/6 eggplant *pl.* ma-ndjwɑ̂
ndúá *n.* 7/8 clitoris *pl.* be-ndúá
ndùwɔ́ *n.* 3/4 roof *pl.* mi-ndùwɔ́
ndvùɔ́ *n.* 7/8 suffering, difficulty *pl.* be-ndvùɔ́
ndvùù *n.* 3/4 bad luck, bad event *pl.* mi-ndvùù
ndwàmbɛ̀lɛ̀ *n.* 3/4 exaggerated request *pl.* mi-ndwàmbɛ̀lɛ̀
ndyándyà (wá m-údí) - *n.* 3/4 giant, tall person *pl.* mi-ndyándyà (mí b-údí)
ndyàwɔ̀ *n.* 7/6 chisel *pl.* ma-ndyàwɔ̀
ndyúà *n.* 3/4 swimming *pl.* mi-ndyúà
ndzɑ̂ɑ̀ *n.* 9/6 dance *pl.* ma-ndzɑ̂ɑ̀
ndzɑ́ɑ́ *n.* 9/6 jealousy, envy *pl.* ma-ndzɑ́ɑ́
ndzɛ̀ɛ̀ *n.* 1/2 fly *pl.* ba-ndzɛ̀ɛ̀
ndzà *n.* 9/6 hunger *pl.* ma-ndzà
ndzààlɛ́ *n.* 1/2 tree pangolin (*Manis tricuspis*) *pl.* ba-ndzààlɛ́
ndzámbɔ̀ *n.* 7/6 upper arm *pl.* ma-ndzámbɔ̀
ndzàmbɔ̀ *n.* 7/8 mud *pl.* be-

ndzàmbɔ̀
ndzě *n.* 1/2 panther, leopard *pl.* ba-ndzě
ndzélì (yá m-ísì) *n.* 7/8 hair in face (beard, around eyes) *pl.* be-ndzélì (bé m-ísì)
ndzǐ *n.* 9/6 path *pl.* ma-ndzǐ
ndzìè *n.* 1/2 gorilla *pl.* ba-ndzìè
ndzìlì *n.* 1/2 guard *pl.* ba-ndzìlì
ndzílí yá m-bɔ̂ *n.* 7/8 elbow *pl.* be-ndzílí ma-bɔ̂
ndzìmózó *n.* 1/2 guard *pl.* ba-ndìmózó
ndzìwɔ̀ *n.* 1/2 yellow-backed duiker (*Cephalophus silvicultor*) *pl.* ba-ndzìwɔ̀
-ndzólɛ̀ le- *n.* 5/6 tear *pl.* ma-ndzólɛ̀

NG

ngɛ̀ã(ngɛ́ã) *n.* 1/2 healer *pl.* ba-ngɛ̀ã(ngɛ́ã)
ngɛ̂̃ *n.* 9/6 field, garden *pl.* ma-ngɛ̂̃
ngɔ̀̃língɔ́̃lì *n.* 7/8 throat, larynx *pl.* be-ngɔ̀̃língɔ́̃lì
ngǔ̃ɔ̃ *n.* 7/8 tomato *pl.* be-ngǔ̃ɔ̃
ngálɛ̀ *n.* 1/2 thunder, lightning, melmel *pl.* ba-ngálɛ̀
ngàmbàlà *n.* 7/6 rarity, difficulty *pl.* ma-ngàmbàlà
ngámbɛ́ *n.* 7/6 vision, oracle *pl.* ma-ngámbɛ̀
ngàtà *n.* 9/6 bandage, wrapping *pl.* ma-ngàtà
ngɛ̀'ɛ̀ *n.* 7/8 eyebrow *pl.* ba-nkɛ̀'ɛ̀
ngɛ̀lɛ́nɛ̀ *n.* 1/2 English person *pl.* ba-ngɛ̀lɛ́nɛ̀
ngɔ̀ *n.* 9/6 grinding stone plate *pl.* ma-ngɔ̀
ngǒ *n.* 1/2 pig *pl.* ba-ngǒ
ngǒ wà djí *n.* 1/2 bush pig (*Potamochoerus porcus*) *pl.* ba-ngǒ bá djí
ngɔ́kɔ̀bɛ́ *n.* 7/8 bracelet *pl.* be-ngɔ́kɔ̀bɛ́
ngòmbáà *n.* 1/2 lemon *pl.* ba-ngòmbáà
ngɔ̀mbɔ̀ *n.* 1/2 monitor lizard *pl.* ba-ngɔ̀mbɔ̀
ngɔ̀mɔ̀ *n.* 9/6 tam tam (small drum) *pl.* ma-ngɔ̀mɔ̀
ngɔ̀ndɛ̀ *n.* 1/2 moon, month *pl.* ba-ngɔ̀ndɛ̀
ngɔ̀ngɔ̀lɛ̀ *n.* 7 sadness (about lack), compassion
ngóvìnà *n.* 1/2 government *pl.* ba-ngóvìnà
ngùlá *n.* 3/4 headscarf *pl.* mi-ngùlá
ngùndyá *n.* 9/6 raffia leaf when used for weaving *pl.* ma-ngùndyá
ngùɔ́ *n.* 7/8 sugar (cane) *pl.* be-ngùɔ́
ngvű̃ɔ̃ *n.* 1/2 storm, tornado *pl.* ba-ngvű̃ɔ̃
ngvù *n.* 1/2 flying squirrel (*Idiurus zenkeri*) *pl.* ba-ngvù
ngvùbɔ́ *n.* 1/2 hippopotamus *pl.* ba-ngvùbɔ́
ngvúlɛ̀ *n.* 9/6 strength, force *pl.* ma-ngvúlɛ̀
ngvúmà *n.* 1/2 some, someone (unspecified, unknown) *pl.* ba-ngvúmà

-ngvúmbɔ̀ ma- *n.* 6 flirt, attention seeking
ngvùmbɔ̀ *n.* 2 Ngumba people
ngvùndɛ̀ *n.* 7/8 mask *pl.* be-ngvùndɛ̀
ngvùndɔ̀ *n.* 9/6 vengence *pl.* ma-ngvùndɔ̀
ngvúngvúlɔ́ *n.* 3/4 bush cricket (*Tettigoniidae*), grasshopper (*Zonocerus*) *pl.* mi-ngvúngvúlɔ́
ngvúú *n.* 7/8 shyness *pl.* be-ngvúú
ngwɛ̌ *n.* 1/2 millipede *pl.* ba-ngwɛ̌
ngwálà *n.* 1/2 snail *pl.* ba-ngwálà
ngwálɔ̀ *n.* 7/6 side, next, corner *pl.* ma-ngwálɔ̀
ngwámé *n.* 7 danger
ngwàndɔ́ *n.* 3/4 melon seed (*pistache*) *pl.* mi-ngwàndɔ́
ngwáwà *n.* 7/8 guava *pl.* be-ngwáwà
ngwáwɔ *v.* bend (only animate), bow *stat.* ngwáwâ *caus.* ngwàngɛsɛ
ngwɛ́lɛ̀ *n.* 9/6 witchcraft *pl.* ma-ngwɛ́lɛ̀
ngyɛ̂ *n.* 3/4 visit *pl.* mi-ngyɛ̂
ngyà *n.* 3/4 intestines *pl.* mi-ngyà
ngyà wá lètɔ́lɛ̀ *n.* 3/4 hernia *pl.* mi-ngyà mí mátɔ́lɛ̀
ngyámànɛ̀ *n.* 7 Germany
ngyàngɔ́ *n.* 7/8 hunt (with gun) *pl.* be-ngyàngɔ́
-ngyɛ̌ mi- *n.* 4 hunting rats (in holes)
ngyɛ́mɔ̀ *n.* 3/4 fruit bat *pl.* mi-ngyɛ́mɔ̀
ngyɛ́sá *n.* 7/8 cake *pl.* be-ngyɛ́sá
ngyɔ́wɔ̀ *n.* 3/4 hook *pl.* mi-ngyɔ́wɔ̀
ngyùlè *n.* 3/4 light *pl.* mi-ngyùlè
ngyùlè wá vísɔ́ *n.* 3/4 sunlight *pl.* mi-ngùlè mí vísɔ́

O

ɔ́(nɛ́)gá *mod.* (an)other

P

pɑ̂ *v.* do first (only as auxiliary)
pɑ̂ *v.* reign, govern, command *stat.* mpángâ *recip.* pángala
pɛ́ *n.* 9/6 injury *pl.* ma-pɛ́
pɔ̂ *n.* 2 Fang
-pà le- *n.* 5/6 paw *pl.* ma-pà
pá'á *n.* 7/8 1) bark (tree) 2) coin *pl.* ba-pá'á
pá'à *v.* dig, hollow out (e.g. drum) *stat.* mpágâ *recip.* págala
pà'à *v.* grow (plants) *stat.* mpàgá *recip.* pàgala
páàlà *n.* 9/6 valley *pl.* ma-páàlà
pádɔ *v.* 1) pluck (e.g. prunes, chili), 2) wring out *stat.* mpádâ *recip.* pádala
pálaba *v.* blink (eye)
pálɔ *v.* sort *stat.* mpálâ *recip.* pálala
-pámó ma- *n.* 6 rise, arrival
pámo *v.* appear *stat.* mpámâ *recip.* pámala
pàmpɛ́lɛ̀ *n.* 7/8 grapefruit *pl.* be-pàmpɛ́lɛ̀
pándɛ *v.* arrive *stat.* mpándâ

recip. pándala

pándyì *n.* 1/2 plate *pl.* ba-pándyì

pándyì wà dô - *n.* 1/2 deep plate

pánɛ *v.* hang up *stat.* mpánâ *caus.* pánɛsɛ *recip.* pánala

pàno *v.* shine (e.g. sun, fireflies, stars, moon, light, lamp) *stat.* mpàná

pê *v.* choose *stat.* mpéyâ *recip.* péyala

pè'è *n.* 9/6 wisdom *pl.* ma-pè'è

-pébà le- *n.* 5/6 fin (fish) *pl.* ma-pébà

péè *n.* 7/8 avocado (tree and fruit) *pl.* be-péè

pèè *n.* 9/6 conscience *pl.* ma-pèè

péépéè *n.* 1/2 cockroach *pl.* ba-péépéè

pélè *n.* 7/8 side *pl.* be-pélè

-pélè bé bénó be- *n.* 8 buttocks

pémbɔ́ *n.* 7/8 clay, bread *pl.* be-pémbɔ́

pèndɛlɛ *v.* lick out with finger *stat.* mpèndálâ *recip.* pèndala

péndɔ *v.* braid *stat.* mpéndâ *recip.* péndala

pépé *n.* 1/2 leaf-hopper bug (*Cicadellidae*) *pl.* ba-pépé

-pébá le- *n.* 5/6 wing *pl.* ma-pébá

péwɔ́ *n.* 7/8 scar *pl.* be-péwɔ́

péyà *v.* booze, get drunk *caus.* péyɛsɛ *recip.* péyala

-pf'ǒ ba- *n.* 2 Bapoko (Kwasio loan word)

pfû *n.* 7/8 colobus monkey *pl.* be-pfû

pfáááá *ideo.* depiction of flinging a long object or slinging

pfùdé *n.* 9/6 mold *pl.* ma-pfùdé

pfùdɔ́ *n.* 7/8 abandonment *pl.* be-kfùdɔ́

pfúɛlɛ *v.* crunch *stat.* mpfúálâ *recip.* pfúala

pfùmbɛ *v.* pull out (groundnuts) *stat.* mpfùmbá *recip.* pfùmbala

pfúndɔ *v.* be frightened *caus.* pfúndɛsɛ *recip.* pfúndala

pfùngà *n.* 7/8 lid (pot, eye) *pl.* be-pfùngà

pfúbáné *n.* 3/4 cleanliness *pl.* mi-pfúbáné

pfùbɛlɛ *v.* blow (tr), blow down *stat.* mpfúbálâ *recip.* pfùbala

pfùtùm *ideo.* depiction of sound when jumping into water

pfùwɔ *v.* dust *stat.* mpfùwâ *recip.* pfùwala

-pfùyá be- *n.* 8 ashes, powder

píìpíì *n.* 1/2 butterfly, moth *pl.* ba-píìpíì

-pílá ngàndé be- *n.* 8 overbite (teeth) (ngàndé as in crocodile)

pílì *n.* 7/6 moment, season *pl.* ma-pílì

pílɔ̀ *adv.* when

pìmáá *n.* 7/8 wall *pl.* be-pìmáá

pímbɛ *v.* wipe *stat.* mpímbâ *recip.* pímbala

pímù *n.* 9/6 force, power *pl.* ma-pímù

píndyɔ́ *n.* 7/8 piece, part that is

broken off *pl.* be-píndyɔ́
pínɛsɛ *v.* squeeze *stat.* mpínâ *recip.* pínala
písɛ̀ *adv, post.* last, late
písɛ̀ *n.* 7/8 back (spatial) *pl.* be-písɛ̀
píyɔ̀ *qual.* small, thin
pìyù-pìyù *n.* 1/2 small rain, small rainy season (Mar - May) *pl.* ba-pìyù-pìyù
pɔ́ *n.* 9/6 news, prophecy *pl.* ma-pɔ́
pɔ́dɛ̀ *n.* 1/2 port, harbour *pl.* ba-pɔ́dɛ̀
pɔ́m *n.* 1/2 potato *pl.* ba-pɔ́m
pɔ́ndɛsɛ *v.* punish *stat.* mpɔ́ndâsâ
pɔ́nɛ́ *n.* 7 truth
pɔ̀pɔ́ *n.* 7/8 papaya *pl.* be-pɔ̀pɔ́
pɔ̀tɔ̀ *n.* 7/8 clay (for building houses) *pl.* be-pɔ̀tɔ̀
pówàlà *qual.* tranquille, calm
púɔ̃̀ *v.* pay *stat.* mpúngâ *recip.* púngala
pùdùm *ideo.* depiction of falling into mud or throwing stone into water
púndí *n.* 1/2 guenon (*Cercopithecus preussi*) *pl.* ba-púndí
púndi *v.* polish *stat.* mpúndâ *recip.* púndala
pùsɛ *v.* push *stat.* mpùsá *recip.* pùsala
púsí *n.* 7/8 bottle *pl.* be-púsí
púù *n.* 7 1) reason 2) púù + ATT/GEN for, because
pùúlì *n.* 7/8 hat *pl.* be-pùúlì
pwápwâ *n.* 1/2 truth, honesty *pl.* ba-pwàpwâ
pwàsɔwɔ *v.* stretch (animal with sticks for smoke), stretch oneself *stat.* mpwàsá *recip.* pwàsala
pwɛ̀dà *n.* 1/2 grass *pl.* ba-pwɛ̀dà
pyàgá *n.* 7/6 paper *pl.* ma-pyàgá
sɔ́ *n.* 1/2 father, male *pl.* ba-sɔ́

S

-sâ ma- *n.* 6 game (playing)
sɔ̃̂ *v.* vomit *stat.* nsángâ *caus.* sángɛsɛ *recip.* sángala
sɔ́ wà kfúbɔ̀ *n.* 1/2 rooster (male of chicken) *pl.* ba-sɔ́ bá kfúbɔ̀
sɔ́ɔ̃̀sa *v.* mix *stat.* nsɔ́ɔ̃́sâ
sɔ̃̂ĩ̂ *v.* approach (tr.) *stat.* nsíngâ *appl.* sísɛlɛ *recip.* síngala
sá *n.* 1/2 earth worm *pl.* ba-sá
-sá le- *n.* 5/6 *prune* (fruit of *Canarium schweinfurthii* tree) *pl.* ma-sá
sà *n.* 7/8 hut *pl.* be-sà
sâ *n.* 7/8 thing *pl.* be-sâ
-sâ le- *n.* 5/6 feather *pl.* ma-sâ
sâ *v.* do *stat.* nsáyâ *recip.* sáala
sá'àwà *v.* move repeatedly
sáálɛ́ *n.* 7/8 work *pl.* be-sáálɛ́
sàga *v.* shock, scare, be surprised *stat.* nsàgá *recip.* sàgala
ságɔ́ságɔ́ *n.* 1/2 comb *pl.* ba-ságɔ́ságɔ́
-sálá (má kúlí) ma- *n.* 6 ceremony months after a funeral ending the *deuil*
sàlàgà *n.* 7/8 ditch *pl.* be-sàlàgà
sàlɛ *v.* crack intr. (e.g. wood, wall)

-sálɛ̀ bàmbèyè n- *n.* 1/2 prostitute *pl.* ba-sálɛ̀ bá be-bàmbèyè
-sálɛ̀ màngámbɛ́ n- *n.* 1/2 diviner, fortune-teller *pl.* ba-sálè bá mángámbɛ́
-sálɛ̀ ngyàngɔ́ n- *n.* 1/2 hunter *pl.* ba-sálɛ̀ bá bé-ngyàngɔ́
sálɔ *v.* become lots *stat.* nsálâ
sàlɔ *v.* cut lengthways *stat.* nsàlá *recip.* sàlala
sàmbèsè *n.* 7 rape
sàndyá *n.* 7/8 raffia mat for house building *pl.* be-sàndyá
sàndyà *n.* 1/2 fabric (*pagne*) *pl.* ba-sàndyà
sánɛ *v.* decide *stat.* nsánâ *recip.* sánala
sàsàmbɛ́ (yá mwánɔ̀) *n.* 7/8 miscarriage *pl.* be-sàsàmbɛ́

-sɛ̃̀ le- *n.* 5/6 small canoe, dugout *pl.* ma-sɛ̃̀
-sɛ̃̂ le- *n.* 5/6 umbrella tree (*Musanga cecropioides*) *pl.* ma-sɛ̃̂
sɛ́'è *n.* 7/8 liver *pl.* be-sɛ́'è
sɛ́'è *n.* 7/8 mandrill (*Mandrillus sphinx*) *pl.* be-sɛ́'è
sègèsè *n.* 7/8 sieve *pl.* be-sègèsè
sègɛsɛ *v.* sieve *stat.* nsègásâ
sɛ́kɛ̀ *n.* 1/2 termite *pl.* ba-sɛ́kɛ̀
sɛ́lɔ *v.* shell, skin, husk *stat.* nsɛ́lâ *recip.* sɛ́lala
sɛ́mbɔ *v.* arrive, land
sèndɛ *v.* slip *stat.* msèndá *caus.* sèndɛsɛ *recip.* sèndala
sèngɛ *v.* lower *stat.* nsèngá *recip.* sèngala
sí *n.* 9/6 ground, soil, world *pl.* ma-sí
sí *post.* under
síawa *v.* have a hiccup
sìgá *n.* 1/2 cigarette *pl.* ba-sìgá
-sìlá le- *n.* 5/6 mole-cricket (*Gryllotalpa africana*), tiger beetle (*Megacephala*) *pl.* ma-sìlá
sílɛ *v.* finish, end, use up, kill *stat.* nsílâ *caus.* sílɛsɛ *recip.* sílala
sìlɛga *v.* descend, fade *stat.* nsìlá *caus.* sìlɛsɛ *recip.* sìlala
sìlí *n.* 7/8 1) hair 2) spark (bé béyí) *pl.* be-sìlí
sílífàzì *n.* 1/2 sandal *pl.* ba-sílífàzì
sílɔ *v.* rub, smear, paint *stat.* nsílâ *recip.* sílala
símasa *v.* regret *stat.* nsímásâ
sìmbɔ *v.* drag *stat.* nsìmbá *recip.* sìmbala
símɛ *v.* respect *stat.* nsímâ *recip.* símala
sìmú *n.* 7/8 liquid sauce *pl.* be-sìmú
síndya *v.* change, exchange *stat.* nsíndyâ *recip.* síndyala
síngí *n.* 7/8 squirrel (generic term) *pl.* be-síngí
síngì *n.* 7/8 cat *pl.* be-síngì
sìngì *n.* 7/8 soul, spirit *pl.* be-sìngì
sísà *n.* 3/4 Aidan fruit and tree (*Tetrapleura tetraptera*) *pl.* mi-nsísà
sísɛlɛ *v.* scare sb. *stat.* nsísâ *recip.* sísala *autoc.* sísɛga
sìsímù *n.* 7/8 shadow (of person)

pl. be-sìsímù

sísɔ *v.* approach (intr.) *stat.* nsísâ *recip.* sísala

sìsɔ *v.* be happy *recip.* sìsala

sìsùù *n.* 7/8 apparition *pl.* be-sìsùù

-síyá be- *n.* 8 imitation

sìya *v.* wash, bathe *stat.* nsìyá *recip.* sìyala

síyɛ̀ *n.* 7/8 fire (Kwasio loan word) *pl.* be-síyɛ̀

síyɛ *v.* saw *stat.* nsíyâ *recip.* síyala

síyɛsɛ *v.* swing, shake *stat.* nsíyàsâ

síyɔ̀ *n.* 7/8 dry season (Nov-Mar) *pl.* be-síyɔ̀

-síyɔ̀ le- *n.* 5/6 elephant tusk *pl.* ma-síyɔ̀

sɔ́ *n.* 1/2 friend *pl.* ba-sɔ́

sɔ̀ *n.* 7/8 saw *pl.* be-sɔ̀

sɔ̰̀ *n.* 9/6 grave, tomb *pl.* ma-sɔ̰̀

sɔ́'ɔ̀ *v.* continue *stat.* nsɔ́sala *appl.* sɔ́sɛlɛ

sɔ̀'ɔ́ *n.* 7/8 cynocephalus monkey *pl.* be-sɔ̀'ɔ́

sòbala *v.* accumulate, coagulate *stat.* nsòbálá

sɔ̀gá *n.* 7/8 secret *pl.* be-sɔ̀gá

sɔ́lɛ *v.* undress, take off (clothes) *stat.* nsɔ́lâ *caus.* sɔ́lɛsɛ *recip.* sɔ́lala

sɔ̀lɛ *v.* hide sth. *stat.* nsɔ̀lá *recip.* sɔ̀lala

sɔ́lɛ́ yá gɔ́lɛ̀ *n.* 7/8 Northern double-collared sunbird (*Cinnyris reichenowi*) *pl.* be-sɔ́lɛ́ bé gɔ́lɛ̀

sɔ́lɛga *v.* fall, take a tumble *stat.* nsɔ́lɛ́gâ

sɔ̀mɔ̀nɛ̀ *n.* 7 complaint

sɔ́ndɔ̀ *n.* 1/2 week *pl.* ba-sɔ́ndɔ̀

sɔ́ndya *v.* bring to point, sharpen *stat.* nsɔ́ndyà *recip.* sɔ́ndyala

sɔ́nì *n.* 7 shame

sɔ́ɔ̀ *post.* before, in front

sɔ́ɔ̀ *n.* 7 front (spatial)

sɔ́sɛlɛ *v.* smoke (fish or animal) *stat.* nsɔ́sálâ

-sɔ̀sí ma- *n.* 6 joy

sɔ́bá *n.* 7/8 mud *pl.* be-sɔ́bá

sɔ́bì *n.* 7/8 soap *pl.* be-sɔ́bì

sɔ̰̀kìndá *n.* 1/2 biting ants *pl.* ba-sɔ̰̀kìndá

sɔ́tì *n.* 1/2 trousers *pl.* be-sɔ́tì

-sù le- *n.* 5/6 jigger *pl.* ma-sù

sù'ù *n.* 7/8 putty-nosed monkey (*Cercopithecus nictitans*) *pl.* be-sù'ù

-sù'ù le- *n.* 5/6 waterfall *pl.* ma-sù'ù

sùbɛ *v.* pour out, turn over *stat.* nsùbá *appl.* sùbɛlɛ ejaculate *caus.* sùbɛsɛ turn sth over *recip.* sùbala

súbì *n.* 7/8 sauce, soup *pl.* be-súbì

sùmbɔ *v.* die in a mystical way *stat.* nsùmbá *recip.* sùmbala

súmɛlɛ *v.* greet *stat.* nsúmálâ *recip.* súmala

-sùnɛ́ n- *n.* 3/4 flesh *pl.* mi-sùnɛ́

súngú *n.* 7/8 drinking cup made of leaves (for water or medicine) *pl.* be-súngú

sùngù *n.* 7/8 war *pl.* be-sùngù

-súnɔ́ le- *n.* 5/6 doubt *pl.* ma-súnɔ́

súwálá *n.* 7/8 meeting, conference *pl.* be-súwálá

sùwɔ *v.* spill *appl.* sùwɛlɛ pour sth.
swáálɛ̀ *n.* 1/2 bone marrow *pl.* ba-swáálɛ̀
-swàmbò le- *n.* 5/6 going out (for hunting) *pl.* ma-swàmbò
swásɔ *v.* dry (intr.) *stat.* nswásâ *appl.* swásɛlɛ *recip.* swásala
swàwɔ *v.* hide (intr.) *stat.* nswàwá
-swî le- *n.* 5/6 death *pl.* ma-swî
ʃyɛ̂ ʃyɛ̂ *ideo.* depiction of sneaking

T

tə̂ *n.* 9/6 number, price *pl.* ma-tə̂
tə̂ - *n.* 7/8 rack for smoking meat *pl.* be-tə̂
tə́ə̀ *v.* tell (only used for stories, anecdotes, fairy tales)
tə́alà nà *v.* judge
-tá le- *n.* 5/6 stain *pl.* ma-tá
tá *n.* 1/2 father *pl.* ba-tá
tá'àlɛ *v.* start, begin *stat.* ntáálâ
tàbá *n.* 7/8 necklace *pl.* be-tàbá
-tálá ma- *n.* 6 beginning, start
-támbí le- *n.* 5/6 oyster *pl.* ma-támbí
-tàmbó le- *n.* 5/6 bee wax *pl.* ma-tàmbó
-tánà le- *n.* 5/6 hail *pl.* ma-tánà
tándɔ́ yá m-wánɔ̀ *n.* 7/8 womb (cage, net of child) *pl.* be-tándɔ́ bé b-wánɔ̀
tánɛ̀ *mod.* five
-tángà ba- *n.* 2 Batanga (Banua and Bapoko)
-tàngò ma- *n.* 6 palm wine (areal term)
tàtànɔ́s *n.* 1/2 mantis *pl.* ba-tàtànɔ́s
tátɔ *v.* take care of, guard *stat.* ntátâ *recip.* tátala
tàtɔ *v.* squeak, scream *stat.* ntàdá *caus.* tàdɛsɛ *recip.* tàtala
tàwɔ̀ *n.* 7/8 goat, sheep *pl.* be-tàwɔ̀
té *n.* 7/8 posture, position *pl.* be-té
tèèèè *ideo.* depiction of waiting
tè'ètè *n.* 7/8 tenderness *pl.* be-tè'ètè
tɛ̂ *adv.* now
tê *v.* create, invent, found *stat.* ntéyâ *recip.* téyala
tə̂ *v.* limp *recip.* téngala
tə̀ə̀ *v.* abandon *stat.* ntèngá *recip.* tèngala
-té'é le- *n.* 5/6 fatigue *pl.* ma-té'é
té'è *v.* be soft, be weak *stat.* ntégâ *tr.* tégɛ soften, make soft
tèbɛ́ *n.* 7/8 beach, shore *pl.* be-tèbɛ́
tébɔ *v.* get up, rise, stop, stand *stat.* ntélâ *appl.* télɛ place sth. upright *recip.* ntélala place each other
tégɛ *v.* make tired *stat.* ntɛgâ *caus.* tégɛsɛ *recip.* tégala
-télɛ̀ ma- *n.* 6 saliva (spit)
tèmbɔwɔ *v.* set, go down (only for sun) *stat.* ntèmbá *caus.* ntèmbɛsɛ
tèmbɔ́wɔ́ má vísɔ́ ma- *n.* 6 sunset
-tèndáà le- *n.* 5/6 ground cricket *pl.* ma-tèndáà
tèndɔ *v.* tear *stat.* ntèndá *caus.* tèndɛsɛ *recip.* tèndala

tètèkɜ̀ *n.* 7/8 frogs that fall from sky with rain *pl.* be-tètèkè
tfúada *v.* be late, tarder
tfùbó *n.* 7/8 black mamba *pl.* be-tfùbó
tfùbo *v.* 1) pierce 2) rape *stat.* ntfúbâ *recip.* tfúbala
tfùdáà *n.* 7/8 pinch *pl.* be-tfùdáà
tfúdɛ́ *n.* 7/8 bump *pl.* be-kfúdɛ́
tfùdɔ *v.* pinch *stat.* ntfùdá *recip.* tfùdala
tfúgà *n.* 7/8 suffering *pl.* be-tfúgà
tfúga *v.* suffer *stat.* ntfúgâ *caus.* tfúgɛsɛ *recip.* tfúgala
-tfùlɛ̀ ma- *n.* 6 smell
tfúmbɔ *v.* fold, wrinkle *stat.* ntfúmbâ *caus.* tfúmbɛsɛ *recip.* tfúmbala *autoc.* tfúmbaga
tfùnɛ̀ *n.* 7/8 strap (made of bark or veins), scarf for carrying babies *pl.* be-tfùnɛ̀
-tɪ̃ɛ̃́ le- *n.* 5/6 knod *pl.* ma-tɪ̃ɛ̃́
tíì *v.* start walking, displace oneself *stat.* ntíyâ *recip.* tíyala
tìnɔ *v.* tear out, harvest (tubers) *stat.* ntìná *appl.* tílɛ *recip.* tìnala
tísònì *n.* 7/8 town *pl.* be-tísònì
títímɔ́ *n.* 7/8 middle *pl.* be-títímɔ́
-tɔ́ le- *n.* 5/6 drop *pl.* ma-tɔ́
tɔ̀ *inv.* any
tɔ̀à *v.* boil (intr.) *stat.* ntɔ̀gá *recip.* tɔ̀gala *tr.* tɔ̀gɛ boil sth.
tɔ̀dɛ̀ *n.* 7/8 roundness *pl.* be-tɔ̀dɛ̀
tɔ́dyínì *n.* 1/2 thousand *pl.* ba-tɔ́dyínì
tɔ́kɛ *v.* take, pick up *stat.* ntɔ́kâ *caus.* tɔ́kɛsɛ *recip.* tɔ́kala
-tɔ́lɛ̀ le- *n.* 5/6 navel *pl.* ma-tɔ́lɛ̀
tɔ̂mbɔ́ *n.* 7/8 problem *pl.* be-tɔ̂mbɔ́
-tóndí le- *n.* 5/6 friend/lover *pl.* ma-tóndí
tɔ̀ndɔ̀ *n.* 1/2 nail *pl.* ba-tɔ̀ndɔ̀
tɔ̀ntsá *n.* 7/8 mistletoe plant (*Agelanthus djurensis*) *pl.* be-tɔ̀ntsá
tɔ̋ɔlɛ *v.* guide, direct
tɔ̀sâ *adv.* no, never, nothing
tɔ́wá *inv.* all (used with time only, whole time/night/day/hour)
tɔ́wa *v.* drip, leak *stat.* ntɔ́wâ
trésì *n.* 1/2 thread *pl.* ba-trésì
tù *post.* inside
tű̀ù *n.* 7/8 axe *pl.* be-tű̀ù
túà *v.* move places/houses *stat.* ntɔ́gâ *caus.* tɔ́gɛsɛ *recip.* tɔ́gala
túdɛ̀ *n.* 7/8 tumor *pl.* be-túdɛ̀
-túmbà n- *n.* 1/2 older brother, cousin, close friend *pl.* ba-túmbà
túmbɔ́ *n.* 7/8 country *pl.* be-túmbɔ́
tùndɛ *v.* miss *stat.* ntùndá *recip.* tùndala
túnɔwɔ *v.* float
túù *n.* 7/8 spoon *pl.* be-túù
túwanɛ nà *v.* meet (on appointment) *stat.* ntúwánɛ̂ *recip.* túwala
twálɔ *v.* peck *stat.* ntwálâ *recip.* twálala

TS

tsàmɛ *v.* spit *stat.* ntsàmá *recip.* tsàmala

tsǐ *n.* 9/6 1) neck 2) voice *pl.* ma-tsǐ

tsɨ̂ *v.* untie, unwrap, loosen *stat.* ntsíngâ *recip.* tsíngala

-tsì n- *n.* 1/2 in-law *pl.* ba-tsì

tsì *n.* 7/8 interdiction *pl.* be-tsì

-tsí wà m-ùdɨ̂ n- *n.* 1/2 mother/sister-in-law *pl.* ba-tsí bá b-ùdɨ̂

tsíbɔ *v.* grind, trample (in mortar) *stat.* ntsíbâ *recip.* tsíbala

tsìdɛ̀dɛ̀ *n.* 1/2 honesty *pl.* ba-tsìdɛ̀dɛ̀

tsídí *n.* 1/2 animal, meat *pl.* ba-tsídí

tsíɛ̀ *n.* 9/6 blood *pl.* ma-tsíɛ̀

tsíɛ̀ *v.* cut *stat.* ntsíyâ *recip.* tsíyala

tsìɛ̀ *v.* live, be well *stat.* ntsìgá

-tsíɛ̀ be-nyàgà n- *n.* 1/2 butcher (cow slaughterer) *pl.* ba-tsíɛ̀ bá bé-nyàgà

tsǐɛlɛ *v.* make a knod, bind, tie *stat.* ntsǐyálâ *recip.* tsǐyala

tsíɛ̀sámɛ̀ *n.* 1/2 circumcision *pl.* ba-tsíɛ̀sámɛ̀

tsígɛ *v.* take off, start going (only with plural subject)

tsíì *n.* 7/8 life *pl.* be-tsî

tsílì *n.* 7/8 smallness, part, shortness, half *pl.* be-tsílì

tsílí yá kàbà *n.* 7/8 short skirt *pl.* be-tsílí bé kàbà

tsílì yá m-ùdì *n.* 7/8 dwarf (small person) *pl.* be-tsílì bé b-údì

tsílì yá ndáwɔ̀ *n.* 7/8 room *pl.* be-tsílì má-ndáwɔ̀

tsílí yá sɔ́tì *n.* 7/8 pants *pl.* be-tsílí bé sɔ́tì

tsìlɔ *v.* write *stat.* ntsìlá *caus.* tsìlɛsɛ *recip.* tsìlala

tsímbɛ́ *n.* 7/8 plank *pl.* be-tsímbɛ́

tsímɛlɛ *v.* sneeze *caus.* tsímɛsɛ *recip.* tsímala

tsíndí *n.* 9/6 riverside, shore *pl.* ma-tsíndí

-tsíndí (lé nkú) le- *n.* 5/6 heel (of the foot) *pl.* ma-tsíndí má nkú

-tsíndɔ́ le- *n.* 5/6 1) party, festival 2) *neuvène* ceremony nine days after funeral *pl.* ma-tsíndɔ́

tsíndɔ *v.* push lightly, shove *stat.* ntsíndâ *recip.* tsíndala

tsíyà *n.* 1/2 question *pl.* ba-tsíyà

-tsɨ̀yɛ́ le- *n.* 5/6 knot *pl.* ma-tsɨ̀yɛ́

tsùk tsùk tsùk tsùk *ideo.* depiction of noise that mice make

tʃɔ̀p tʃɔ̀p tʃɔ̀p *ideo.* depiction of dripping sound or sound walking in mud

U

-ù d- *n.* 5/6 oven, hearth *pl.* m-ù

-ùdɨ̂ m- *n.* 1/2 woman, wife *pl.* b-ùdɨ̂

-ùdɨ̂ m- *n.* 1/2 man, husband *pl.* b-ùdɨ̂

-ùdì m- *n.* 1/2 person *pl.* b-ùdì

-ùdì wà wɔ́ngɔ́ m- *n.* 1/2 soldier *pl.* b-ùdì bá bé-wɔ́ngɔ́

ùf *ideo.* depiction of sound when

something catches fire
-úgó dv- *n.* 5/6 toilet *pl.* m-úgó
-úmbɔ́ d- *n.* 5/6 wrap *pl.* m-úmbɔ́
-úmbɔ́ lé ká d- *n.* 5/6 fish or meat wrapped and prepared in leaf *pl.* m-úmbó má ká
-úmbɔ́ lé nkɛ̃̂ d- *n.* 5/6 fish or meat prepared in pot, dish with fish in lemon sauce *pl.* m-úmbɔ́ má nkɛ̃̂
-úndɔ̀ d- *n.* 5/6 galago *pl.* m-úndɔ̀
-úú d- *n.* 5/6 nose *pl.* m-úú
-ùwɔ̀ d- *n.* 5/6 daytime *pl.* m-ùwÒ

V

-váá le- *n.* 5 thing
vàà *v.* praise, be proud *stat.* mvàgá *recip.* vàgala
vɑ́ɛ̃̀vɑ̀ɛ̃̀ *n.* 7/8 generosity *pl.* be-vɑ́ɛ̃̀vɑ́ɛ̃̀
válɔ́ *n.* 7/8 polygamy *pl.* be-válɔ́
vàmo kwɛ̀ *v.* knock over
vásɛ *v.* rise (dough) *stat.* mvásâ *appl.* vásɛlɛ (caus. meaning)
vɛ́ *inv.* which
vɛ̂ *v.* give *stat.* mvɛ́yâ *recip.* vɛ́yala
vè'è *v.* try on (clothes) *stat.* mvègá *appl.* vè'ɛlɛ (caus. meaning) *recip.* vègala
vɛ́ɛ̀lá *n.* 7/8 decoration *pl.* be-vɛ́ɛ̀lá
vèkò *n.* 7/8 drawing, painting *pl.* be-vèkò
-vɛ́mbɔ́ le- *n.* 5/6 guenon (*Cercopithecus*) *pl.* ma-vɛ́mbɔ́
vɛ́mbɔ (kèmbè) *v.* blow nose (phlegm) *stat.* mvɛ́mbâ *recip.* vɛ́mbala
vɛ́sɔ *v.* have desire *stat.* mvɛ́sâ *recip.* vɛ́sala
-vɛ́wɔ̀ le- *n.* 5/6 cold, malaria *pl.* ma-vɛ́wɔ̀
vèwɔ *v.* breathe
vèyɛ *v.* mesure *stat.* mvèyá *recip.* vèyala
ví *n.* 7/8 wooden part in trap hiding the hole in the ground *pl.* be-ví
vìdɛ *v.* turn, return, roll sth. *stat.* mvìdá and mvìdálâ *appl.* vìdɛlɛ turn sth. *recip.* vìdala *autoc.* vìdɛga
vídɛ́lɛ̀ *n.* 7/8 smoke *pl.* be-vídɛ́lɛ̀
-vídósí le- *n.* 5/6 dawn, early morning *pl.* ma-vídósí
-vídú le- *n.* 5/6 darkness *pl.* ma-vídú
-vìlɛ̀ le- *n.* 5/6 ginger species (*Aframomum*) *pl.* ma-vìlɛ̀
vímala *v.* groan *stat.* mvímálâ
vímù *n.* 7/8 giant pangolin (*Manis gigantea*) *pl.* be-vímù
víndo *v.* hate *stat.* mvíndâ *recip.* víndala
-vínó ma- *n.* 6 pus
vìnɔ́ *n.* 7/8 finger *pl.* be-vìnɔ́
vìnɔ́ yá sɑ́ɑ̃̂ *n.* 7/8 thumb (main finger) *pl.* be-vìnɔ bé sɑ́ɑ̃̂
vísɔ́ *n.* 8 sun
vísɔ *v.* cover *stat.* mvísâ and mvísálâ *appl.* vísɛlɛ *recip.* vísala
vìsɔ́ *n.* 7/8 bone, skeleton, fish bone *pl.* be-vìsɔ́
vìsɔ́ yá nkáàlɛ̀ *n.* 7/8 backbone

pl. be-vìsɔ́ bé mí-nkáàlɛ̀
víwɔ *v.* suck *stat.* mvíwâ *recip.* víwala
víyə̀̂sa *v.* be light *stat.* mvíyə́̂sâ
víyala *v.* touch *stat.* mvíyálâ
vìyɔ́ *n.* 8 fire
vɔ̂ *v.* 1) be calm 2) be cold *stat.* mvóyâ *caus.* vɔ́lɛsɛ calm sb. down *recip.* vólala
-vɔ̀dá le- *n.* 5/6 rest, vacation *pl.* ma-vɔ̀dá
vòda *v.* rest, relax *stat.* mvòdá *recip.* vòdala
-vɔ́lɛ̀ be- *n.* 8 grief (after sb.'s departure/death)
vɔ́lɛ *v.* help *stat.* mvɔ́lâ *recip.* vɔ́lala
vóvɔ́lɛ̀ *n.* 7 freshness, peace, tranquillity
vòwa *v.* wake (up) *stat.* mvòwâ *caus.* vòlɛsɛ *recip.* vòwala *autoc.* vòlɛga wake up
vû *v.* leave *stat.* mvúyâ *appl.* vúlɛ get rid of, take away *recip.* vúyala
vṳ̂ṳ̂ *v.* worry, be excited
vúba nà *v.* hug sb.
vúdṳ̂ *num.* one
vúɛlɛ *v.* blow (with mouth, e.g. into fire) *stat.* mvúálâ
-vúlɔ̀ ma- *n.* 6 cutting edge (of e.g. knife or machete)
vúlɔ *v.* be sharp *stat.* mvúlâ
-vúlù le- *n.* 5/6 foam *pl.* ma-vúlù
vùlùngù *n.* 7/8 noose in trap *pl.* be-vùlùngù
-vúsí le- *n.* 5/6 hole *pl.* ma-vúsí
-vútɔ̀ ma- *n.* 6 oil (for body)
vùvùlɛ̀ *n.* 7/8 baked bread or baguette *pl.* be-vùvùlɛ̀
vùzí *n.* 7/8 abdomen *pl.* be-vúzì
vyámbɛlɛ *v.* surround *stat.* mvyámbálâ
vyɛ̀ *v.* draw *stat.* mvyɛ̀gá *recip.* vyɛ̀gala

W

-wă le- *n.* 5/6 twin *pl.* ma-wă
-wə̂̌ ma- *n.* 6 fat
-wâ ntúà m- *n.* 1/2 young woman *pl.* b-wâ bá túà
wàà *n.* 1/2 chimpanzee, bonobo *pl.* ba-wáa
wáádɔ́ *n.* 7/6 net *pl.* ma-wáádɔ́
wàlɛ̀ *n.* 7/8 bitter kola (fruit and tree) (*Garcinia kola*) *pl.* be-wàlɛ̀
wámɛ *v.* hurry
wámíyɛ́ *adv.* fast
-wánɔ̀ m- *n.* 1/2 1) child, baby 2) small, few *pl.* b-wánɔ̀
-wánɔ̀ (wà) m-údə̂̌ m- *n.* 1/2 girl (female child), daughter *pl.* b-wánɔ̀ b-údə̂̌
-wánɔ̀ (wà) múdṳ̂ m- *n.* 1/2 boy (male child), son *pl.* b-wánɔ̀ b-údṳ̂
-wánɔ̀ nláwɔ́ m- *n.* 3/4 twig (child of branch) *pl.* b-wánɔ̀ mí-nláwɔ́
-wányɛ̀ le- *n.* 5/6 young man *pl.* ma-wányɛ̀
wàwɛ *v.* spread (out) *stat.* mwàwá *recip.* wàwala *autoc.* wàwɛga
wáwɔ *v.* crawl

wáyà *n.* 7/8 wire *pl.* be-wáyà
-wê le- *n.* 5/6 cry *pl.* ma-wê
wɛ̀ *v.* die *stat.* mwɛ̀yá
wɛ́ɛ̃̀ *v.* skin (animals with fur; burn the fur, then scratch fur off) *stat.* ngwɛ́ngâ *recip.* wɛ́ngala
wómbɛlɛ *v.* sweep *stat.* mwómbálâ *recip.* wómbala
-wɔ̀ le- *n.* 5/6 taro, cocoyam *pl.* ma-wɔ
wɔ́'ɔ̀ *n.* 7/8 broom *pl.* be-wɔ́'ɔ̀
wɔ́lɛ̀ *n.* 7/8 hawk *pl.* be-wɔ́lɛ̀
wɔ̀m *ideo.* depiction of (sudden) silence
wɔ́ngɔ́ *n.* 7/8 helmet *pl.* be-wɔ́ngɔ́
wɔ́ɔ́ɔ́ *ide.* depiction of moving by foot or motorbike
-wùdɛ̀ le- *n.* 5/6 cooking stone *pl.* ma-wùdɛ̀
-wùlà le- *n.* 5/6 time, hour *pl.* ma-wùlà
-wúmbɛ́ le- *n.* 5/6 wish, desire, want *pl.* ma-wúmbɛ́
wúmbɛ *v.* want, wish, need *stat.* mwúmbâ *recip.* wúmbala want each other's things, desire each other
-wùmbó le- *n.* 5/6 cotton *pl.* ma-wùmbó
wùmɛ̀ (kfúbɔ̀) *v.* pluck (chicken) *stat.* mwùmá *recip.* wùmala
-wúmɔ̀ le- *n.* 5/6 ten *pl.* ma-wúmɔ̀
wúndɛ̀ *n.* 1/2 window *pl.* ba-wúndɛ̀
wùndɛ̀ *n.* 7/8 groundnut *pl.* be-wùndɛ̀
wúngala *v.* wander, dangle
wúnjɔ̀ɔ̀ *n.* 2 Ewondo people
wùsà *n.* 7/8 dry banana leaf *pl.* be-wùsà
wùsa *v.* forget *stat.* mwùsá *recip.* wùsala
wúsɛ̀ *n.* 7/8 drought *pl.* be-wúsɛ̀
wùù wúú wùù wúú *ideo.* depiction of sound of bees
wùùùù *ideo.* depiction of pouring liquids or granulars
wùwù *n.* 7/8 small bat *pl.* be-wùwù

Y

yákú *n.* 7/8 fire fly *pl.* be-yákú
yàlanɛ *v.* respond
yándɔ́ *n.* 7/8 trace *pl.* be-yándɔ́
yànɛ *v.* must
yə̂yə̂ - *n.* 1/2 pan *pl.* ba-yə̂yə̂
yɛ́ *n.* 7/8 mushroom *pl.* be-yɛ́
yɛ́'ɛ́ *n.* 7/8 thirst, desire, envie *pl.* be-yɛ́'ɛ́
yɛ́dɛ́lɛ̀ *n.* 7/8 star (also used in Kwasio) *pl.* be-yɛ́dɛ́lɛ̀
yɛ́lɛ̀ *n.* 7/8 whistle (both with mouth and whistle) *pl.* be-yɛ́lɛ̀
yɛ́mɛdɛ *v.* tighten *stat.* myɛ́mâ *recip.* yɛ́màlà
yɛ́ngɛ̀ *n.* 7/8 yodel at wedding *pl.* be-yɛ́ngɛ̀
yɛ̃̀yɛ̃̀ yá m-ùdì - *n.* 7/8 retarded person *pl.* be-yɛ̃̀yɛ̃̀ bé b-ùdì
yí *n.* 7/8 wood, firewood, fire *pl.* be-yí

yíɛ̀ *v.* avoid, dodge *stat.* nyéyâ *recip.* yéala
yílɛ̀ *n.* 7/6 viper *pl.* ma-yílɛ̀
yìmbá *n.* 7/8 age *pl.* be-yìmbá
-yímbálî le- *n.* 5/6 entrance *pl.* ma-yímbálî
yímbɔ *v.* go for a walk, visit *stat.* yímbâ *recip.* yímbala
yúlɛ̀ *n.* 1/2 decedent, deceaed person *pl.* ba-yúlɛ̀
yúngú *n.* 7/8 sea eagle *pl.* be-yúngú

Z

(m-ùdì wà) zìmbà *n.* 1/2 soldier *pl.* (b-ùdì bá) ba-zìmbà
zíngɔ́ *n.* 7/8 short dress *pl.* be-zíngɔ́
zìbí *n.* 7/8 tsetse fly (*Glossina*) *pl.* be-zìbí

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