

The merge of person and TAM in shiYeyi's verbal paradigm

MA Thesis

Language Diversity of Sub-Saharan Africa

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ABBREVIATIONS

∅	zero morpheme
1S	first person singular
2S	second person singular
3S	third person singular
1P	first person plural
2P	second person plural
3P	third person plural
ADV	adverbial
ANT	anterior tense
APPL	applicative extension
CAUS	causative extension
CMPL	completive aspect
CNS	consecutive tense (relative)
COND	conditional mood
CONN	connective
CONT	continuous aspect
DEM1	proximal demonstrative
DEM2	distal demonstrative
DEM3	far distal demonstrative
EMPH	emphatic pronoun
EPIST	epistemic mood
EXT	extension (verbal)
FV	final vowel
FUT	future tense
H	high tone
HOD	hodiernal past tense
HORT	hortative mood

HYP	hypothetical mood
IMMFUT	immediate future
IMP	imperative mood
IMPFV	imperfective aspect
INC	inceptive aspect
IND	indicative mood
INF	infinitive
INST	instrumental
INTERJ	interjection
ITI	itive aspect
L	low tone
LOC	locative
NARR	narrative tense (relative)
NC	noun class
NeuP	neutron-passive extension
NEG	negative marker
NP	noun phrase
OBLG	obligative mood
OC	object concord
PASS	passive extension
PERS	persistive aspect
PFV	perfective aspect
P.HOD	pre-hodiernal past tense
POSS	possessive pronoun
POT	potential mood
PROG	progressive aspect
PREP	preposition
PRES	present tense
PRN	pronoun
PropN	proper noun
PST	past tense

R	root (verb)
RECP	reciprocal extension
RECPST	recent past
REFL	reflexive extension
REL	relativizer
REMFUT	remote future tense
REMPST	remote past tense
SC	subject concord
SUBJ	subjunctive mood
TAM	tense/aspect/mood
VEN	ventive aspect
VH	vowel harmony
VP	verb phrase
VS	verb stem

Symbols

-	morpheme boundary
=	clitic boundary
[x]	phonetics
/x/	orthographics

1. INTRODUCTION

1.1. Motivation, research, and overview

The Yeyi language has been topic of discussion among scholars for a number of decades, mainly because of the region where shiYeyi is spoken. The region is a patchwork of both Bantu and non-Bantu click languages¹. Due to intensive contact with neighbouring peoples the Yeyi language shows characteristics of both Bantu and non-Bantu click languages. Nevertheless, shiYeyi is classified as a Bantu language. Eventhough, the phonology consists of more clicks than some other 'Khoisan' languages, which are a hetrogenuous group due to their click phonemes. Not only has the phonological inventory been influenced, but over the decades some lexical items have been adopted from these neighbouring languages into the shiYeyi and presumably some grammatical features as well. Furthermore, the borrowing has been integrated to a point where new innovations could occur. Recently, several scholars have expressed their concerns about the future of shiYeyi, since more dominant languages in the region seem to force shiYeyi to a state of serious language endangerment.

Explorers in the 19th century, like David Livingston (1850) and Charles J. Andersson (1855), already noted their encounters with the Yeyi culture. Mainly from the last decades of the 20th century, research on the Yeyi language accelerated into several publications. Most of the early research focused on language classification (Guthrie, 1967-71; Doke, 1967; Batibo, 1998), language contact and change (Sommer, 1995; Seidel, 2009), and dialectometrical comparison (Sommer & Vossen, 1995; Seidel, 2005). In addition, the phonology and nominal class system have been studied by scholars, such as Van der Merwe & Schapera (1942), Donnely (1990), Gowlett (1992, 1997), and Baumbach (1997).

In more recent years, Chebanne *et al.* (2007) established an orthography for shiYeyi and Lukusa (2009) published a shiYeyi-English dictionary, additionally, two grammars were published on the Yeyi language. Lukusa (2002) has written a concise grammar on Ngamiland Yeyi, in which the verb phrase is described for argument agreement markers and the verb extensions. Tense, aspect and modality (henceforth TAM) have been mostly excluded in Lukusa's grammar. Seidel (2008b) has published a more extensive grammar on Eastern Caprivi Yeyi. Sommer (2000) published an article on verbal morphology in shiYeyi, in which she motivates the first tentative conclusions on two paradigms for subject concord (henceforth SC) in combination with tense and aspect. At the same time, Sommer

¹ The term 'non-Bantu click languages' has been adopted throughout this thesis to refer to what is commonly known as the Khoisan languages. Since the latter term is a topic of discussion among scholars, Dr. M. Brenzinger (pc) introduced the term 'non-Bantu click languages'. Mainly to avoid discussions whether the term 'Khoisan' refers to a homogeneous group of languages that belong to same phylum.

(2000; 634) acknowledges the meagre availability of suitable data to reach definite statements on double SC and TAM in the shiYeyi's verbal morphology. In addition, she calls for further research into modality in shiYeyi. Sommer (2000) argues that the available data mostly reflects past tense contexts and are mostly drawn from narratives in the indicative mood. This is confirmed in Seidel's article (2008a) on the hodiernal past domain. In addition, Baumbach (1997), Sommer (1995, 2000), and Seidel (2008b) stipulate the occurrence of what appears to be a double paradigm for SC on the verbal stem. At the same time, all three scholars leave this issue for further research for this alternating occurrence.

For this reason, the main research question for this thesis will entail the subject concords in combination with temporal, aspectual and modal marking in shiYeyi's verb morphology. My aim for this research is to establish whether or not the subject concord paradigms interact with the TAM markers, and if they do, what the implications of this interaction are in terms of function and meaning. My hypothesis is that the double paradigm is a merge between subject marking and some TAM reference in shiYeyi. The focus of this research will be on the occurrence of a double SC paradigm and whether or not there is a correlation with the TAM markers. The environments in which the two SCs occur with what TAM references will be studied and analysed in two transcribed texts published by Sommer (1995). In this way, I hope to contribute to additional insights to the morphosyntaxics of the verb phrase in shiYeyi.

In chapters 2, I will provide some background on the history of the waYeyi, areal varieties and classification, and additionally, shiYeyi's phonology and nominal morphology as it is already established by other scholars. In chapter 3, I will elaborate on the tendencies of subject concord, tense, aspect and mood in Bantu languages to put shiYeyi's SC and TAM phenomena into perspective. In chapter 4, I will go into previous research on verbal morphology in shiYeyi. In chapter 5 and 6, I will describe the research design for this thesis and the data analysis from the data set. Following in chapter 7, the occurrence, use, function and meaning of the double SC paradigm and the interaction with TAM morphemes in shiYeyi will be discussed. Finally, I will draw some preliminary conclusions from both previous research and this new data analysis in chapter 8.

1.2. Theoretical framework

Various scholars have already conducted research into the classification of shiYeyi (Guthrie, 1967-71; Doke, 1967; Batibo, 1998) and diachronic change due to language contact (Sommer & Vossen, 1992, 1995; Seidel, 2009). For reasons of the scope of this thesis, I will adopt the insight already established. For the phonology, I will adopt Gowlett (1992, 1997), Sommer & Vossen (1992, 1995), Fulop *et al.* (2003) and Bostoen & Sands (2009), who have extensively analysed the phonetic inventory, including clicks. For the analysis of the noun class system, I will adopt van der Merwe & Schapera (1942), Donnelly (1990), and Baumbach (1997). In addition, both Lukusa's (2002) and Seidel's grammar (2008b) will be used as reference for this research, as is Lukusa's dictionary (2009). For TAM definitions and insights, I will follow Comrie (1976, 1985, 1989), Dahl (1985), Bybee *et al.* (1994) and Nurse (2008), for both the broader perspective across languages of the world and the Bantu perspective. Finally, I will use Seidel's grammar (2008b) and Sommer's analyses (1995, 2000) of shiYeyi as the sources for collecting data.

An additional issue that has to be addressed is one of language varieties in shiYeyi. ShiYeyi is spoken in both Namibia and Botswana, in which the language varieties have developed in separate ways (see further § 2.1.). Previous research has been conducted in both areas, causing some apparent inconsistencies in the data. Where these inconsistencies occur, I will indicate the varieties as Caprivi Yeyi (CY) for Namibia and Ngami Yeyi (NY) for Botswana.

2. BACKGROUND

2.1. The people and their language

Shiyeyi is a Bantu language spoken in the southwestern region of Eastern Caprivi in Namibia and in the Okavango region of northern Botswana (Ngamiland). The waYeyi originate from central Africa, from where they migrated down via the BaRotse Empire of Zambia along the Zambezi River into Eastern Caprivi, looking for pastures without tsetse flies (Larson, 1989). They first settled in the southwestern corner of Eastern Caprivi, which is now called DiYeyi, the land of the waYeyi. ShiYeyi speakers still at present day regard DiYeyi as their ancestral homeland (Seidel, 2009). However, an 88 years old man, called Mpho, was heard to tell the story that the waYeyi, who were living in the Chobe and Linyanti regions, migrated north to DiYeyi and from there travelled in canoes to Jao in the Okavango delta. This first settlement in Ngamiland is supposed to have been as early as 1650. In the delta, the waYeyi encountered the baTete and other San peoples, which whom they inter-married. In the mid 19th century the Tawana imposed their rule onto the waYeyi in the delta and fought the Kololo and Ndebele slave and cattle raids. The waYeyi women inter-married with the Tawana and became servants of the Tawana men. The Tawana settled in the region of Maun in 1910 and ruled most of Ngamiland. All waYeyi communities were appointed Tawana headmen, as is still the case at present day (Larson, 1989). The waYeyi traditionally are a matrilineal society, descending their lineages though the mother's side of the family. They provide in their livelihood predominantly by cattle keeping and additional fishing and hunting.

FIGURE 1. *Region of the waYeyi*

Source: Google Maps



The estimated numbers of shiYeyi speakers in Eastern Caprivi and Ngamiland are approximately 30,000 in 2000 (Sommer, 2000), even though numbers differ in the literature. Due to the migration from Eastern Caprivi to Ngamiland, two language varieties could develop with each their own linguistic history. Influence from other language communities on both sides caused language change in both language communities, in which Seidel (2009) differentiates the two varieties of shiYeyi. In the Eastern Caprivi, the waYeyi encountered Lozi dominance since the early 18th century until 1909, when the Lozi rule made way for German colonial rule, followed by the South African protectorate of Southwestern Africa. In Ngamiland, as mentioned above, the Tswana assimilation of the waYeyi has been a great influence on the language. Before Lozi and Tswana functioned as lingua francas in Namibia and Botsswana respectively, the waYeyi were in close contact with other Bantu and non-Bantu click languages in the area. The waYeyi in Eastern Caprivi were in close contact with speakers of Mbalangwe, Totela, Few, Mbukushu, Subiya, and Khoe (Khwe). The waYeyi in Ngamiland were in close contact with speakers of Mbukushu, Herero, Kgalagadi, Subiya, ||Anikhoë, and Bugakhoe (Seidel, 2009). However, the multilingual influence on shiYeyi remains a topic for research, which will be left aside for this thesis.

2.2. Classification

Guthrie's (1967-71) classification of Bantu languages places shiYeyi in the R zone (R.41), together with Herero (R.30). This group of languages is placed into the southwestern Bantu languages. This classification is confirmed by Doke (1967), which places both shiYeyi and Herero in the Western zone. However in his article, Batibo (1998; 24) proves a 64% common vocabulary between shiYeyi and Subiya (K.42), arguing a closer relation between these two languages than between shiYeyi and Herero. Batibo's (1998) claim raises the question whether shiYeyi is indeed a Western Bantu language as classified by Guthrie (1967-71) and Doke (1967) or if it is more related to the eastern Bantu stream of the South-Central Bantu languages. Both the waYeyi and the baSubiya are believed to have migrated from eastern Africa through Zambia into Eastern Caprivi. Batibo's (1998) findings seem to coincide with statements made by Sir Harry Johnston, cited in Van der Merwe & Schapera (1942: 2), that shiYeyi is classified with Luyi (Lozi) in group V, i.e. the western Zambesia languages. The lack of consensus on the classification of shiYeyi seems to confirm Andersson's (1997: 268) conclusion of shiYeyi being an isolated language within the Bantu languages, i.e. a language without any close relatives. Without getting caught up in the discussion, the issue of classification of shiYeyi will be further excluded from this paper.

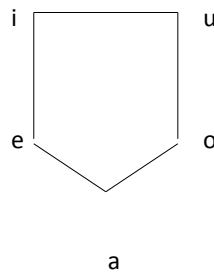
At the same time, shiYeyi shows a great influence from neighbouring non-Bantu click languages. ShiYeyi is thought to have incorporated the highest amount of clicks in their phonological inventory among the Bantu languages (see further §2.3.1.). Furthermore, some core vocabulary is borrowed from non-Bantu click languages and possibly some pronominal and verbal morphemes derive from these languages as well. The click phonemes cover 10-15% of the lexicon in shiYeyi, of which only a small portion can be traced back to a non-Bantu source (Bostoen & Sands, 2009). Nevertheless, it remains unclear which non-Bantu click languages functioned as substrate languages for borrowing, most likely the so-called Central Khoisan languages, such as the Kxoe languages, which derive from the Kxoe-Kwadi branch. Most of the languages of this branch are extinct or on the brink of extinction. However, derivations of shiYeyi from non-Bantu click languages goes beyond the scope of this paper and will be further excluded.

2.3. Phonetics and phonology

2.3.1. Phonological inventory

Lukusa (2002), and Sommer (2003) have described the phonological inventory of NY, where Donnelly (1990), Gowlett (1992), and Seidel (2008b) have described the phonological inventory of CY. ShiYeyi exhibits a five-vowel system in both varieties, as shown in FIGURE 2.

FIGURE 2. Five-vowel system in *shiYeyi*



Donnelly (1990) and Gowlett (1992) describe lengthening of all vowels [ː] for CY, with the exception of [o]. In addition, Donnelly (1990) includes nasalised vowels in his phonological inventory, where Seidel (2008b) describes nasalisation of vowels merely occurring preceding nasal or nasalised consonants. For this reason, Seidel (2008b) does not consider nasal vowels as phonemic (see further §2.3.2.).

The consonants in *shiYeyi* are mainly plosives and fricatives with the binary opposition of voiceless versus voiced, plus nasals, the alveolar flap [ɾ]², as shown in TABLE 1.

TABLE 1. *Consonants in shiYeyi*

	Bilabial		Labio-dental		Alveolar		Palato-alveolar		Palatal		Velar		Glottal
Nasal	m				n				ɲ		ŋ		
Plosive	p	b			t	d			c	ɟ	k	g	
Fricative	β		f	v	s	z	ʃ	ʒ					h
Tap, Flap					ɾ								
Lateral approximant					l ²								

The alveolar plosive and alveolar fricative occur in double articulation, [t͡s] and [d͡z], both these phonemes can be additionally aspirated. Seidel (2008b) adds the alveolar plosives and the palato-alveolar fricatives [t͡ʃ] and [d͡ʒ] to this double articulation and only describes aspiration [ʰ] to the voiceless phoneme. This latter argument coincides with the general description that aspiration occurs with both voiceless plosives and pre-nasalised voiceless plosives. All voiceless plosive and fricative

² For the NY variety both Lukusa (2002) and Sommer (2003) note a retroflex [ɻ] and the orthography they both use for this phoneme is /ld/.

phonemes, including the double articulation, occur as ejectives. In addition, all plosives and most fricatives, with the exception of [β] and [h], occur pre-nasalised. Finally, Gowlett (1992) mentions a distinction between [b] and [b:] in CY, since they occur intervocally. Donnelly (1990) confirms this geminate and even adds [d:] as an additional geminate. Sommer (2003) notes that the contrast between [b] and [b:] in NY is not found. Nor is the distinction between [l] and [r], where the former is an allophone of the latter, and is contrasted by the retroflex [ʎ] or /ld/.

As mentioned above, the inventory of click phonemes in shiYeyi is the result of contact-induced change and innovations after assimilation of the borrowed clicks into the language. Sommer & Vossen (1992) argue that the click inventory in shiYeyi is primarily borrowed from the non-Bantu click languages in the vicinity, and once they were assimilated into the language, new inventions could take place. TABLE 2 shows the click phonemes as they occur in shiYeyi and the accompaniments.

TABLE 2. *Clicks inventory in shiYeyi*³

	Voiceless	Voiced	Voiceless pre-nasalized	Voiced pre-nasalized	Aspirated	Voiceless pre-nasal aspirated	Labialised
Dental	ǀ	ǀǀ	ǀ̃	ǀ̃ǀ	ǀ ^h	ǀ̃ ^h	ǀ ^w
Alveolar	ǃ	ǃǃ	ǃ̃	ǃ̃ǃ	ǃ ^h	ǃ̃ ^h	ǃ ^w
Lateral	ǁ	ǁǁ	ǁ̃	ǁ̃ǁ	ǁ ^h		
Palatal	ǂ		ǂ̃		ǂ ^h		

The clicks in shiYeyi combine both click types, i.e. influxes, and click accompaniments, i.e. effluxes. The clicks have four distinct place of articulation, i.e. dental, alveolar, lateral, and palatal, additionally, the accompaniments are voiced, pre-nasalised, aspirated, and labialised. The click influxes will be indicated with phonetic script in the remainder of this thesis, while the effluxes will not be marked by diacritics.

2.3.2. *Vowel harmony and assimilation*

Vowel harmony occurs in what Donnelly (1990) calls prefix-to-stem harmony, i.e. where the vowel of the prefix is the front high vowel /i/ harmonises with the back vowels /u/ or /o/ or semi vowel /w/ of the following syllable. Baumbach (1997), Sommer (1995, 2000), and Seidel (2008a, 2008b) describe vowel harmony of the final vowel harmonizing with the verb in some tenses. The consonantalisation of the vowels /i/ and /u/ into the semi vowels /y/ and /w/, respectively, occur when the initial vowels are followed by the /a/ or /e/. However, Seidel (2008b) notes that this assimilation process is not always constant among speakers. Another form of assimilation is the palatalised voiceless plosives. Palatalisation [ʎ] seems to occur mainly in cases where the voiceless plosives are followed by the mid front vowel [e]. In addition, nasalisation of vowels preceding a nasal consonant occur ideophonically. Seidel (2008b) describes the restrictions of these nasalised vowels as only occurring at morpheme boundaries and in nominal prefixes preceding nominal stems.

³ The clicks presented here are topic of discussion between authors, which see. For the purpose of this thesis, the clicks encountered in the data are shown in TABLE 2.

⁴ Only reported in NY (Sommer & Vossen, 1992), absent in CY (Seidel, 2008b).

2.3.3. Tone

ShiYeyi applies a simple tone system and distinguishes between high (H) and low (L) tone, which are assigned to every syllabic nucleus, i.e. every vowel. Gowlett (1992) describes phonological reflexes of proto-Bantu (henceforth PB) in shiYeyi, in which he compares tonal patterns between PB and shiYeyi. He notes that tonal shifts from PB are more consistent in verbs than they are in nouns (1992: 143). Gowlett (1992: 143-155) describes the tendencies of the shiYeyi tone pattern, however, there are some exceptions on these common patterns. TABLE 3 shows the patterns found by Gowlett (1992) in monosyllabic, disyllabic, trisyllabic, and quadrisyllabic lexeme stems, both nominal and verbal. Patterns 1-3 indicate from the most common tone pattern (1) to the less common tone patterns (2-3).

TABLE 3. *Tone patterns in shiYeyi (Gowlett, 1992)*

Syllabic form	Tone pattern 1	Tone pattern 2	Tone pattern 3
CV	H		
(C)VCV	HL		
CVCV	LH	HL	
(C)VCVCV	HLH		
CVCVCV	HHL		
VCVCVCV	LLH	LHL	
CVCVCVCV	HHLL	HLHL	HLLH

In the monosyllabic and disyllabic nouns, the nominal stem is assigned H, while the noun prefix is L. In the disyllabic lexemes (CVCV), most verbal and nominal stems are assigned the LH tone pattern and the exceptions of HL are uniquely nominal stems. In cases where the trisyllabic lexeme is reduced to a disyllabic lexeme, the pattern becomes HL. Gowlett (1992) mentions that nominal prefixes are assigned L, however, he remains silent about verbal inflectional or derivational affixes. Sommer (2003: 571) adds that locative prefixes on the NP are usually H, however, when they occur as independent nouns on the verb the tone changes to L as SCs or OCs. Seidel (2008b: 61) describes tonal inflection, where a prosodeme of a high tone can distinguish between different grammatical markers, e.g. verbal tense.

Donnelly (1990: 1) ignores tonal patterns in shiYeyi, all together, for reasons of restriction to his paper, in which the lack of space is determining the omission of the topic. The same reasons for the absence of the topic of tonal patterns in shiYeyi, applies to VanderMerwe & Schapera (1942) and Baumbach (1997).

2.4. Nominal morphology

2.4.1. Nominal Noun class system

Like other Bantu languages, shiYeyi applies the nominal noun class system, in which all constituents of the noun phrase agree with the class assignment of the head noun. TABLE 4 shows shiYeyi's nominal noun classification, including the locative noun classes 16, 17, and 18.

TABLE 4. *Noun class prefixes in shiYeyi*

1	<i>mu-</i>	2	<i>ba-</i>
1a	∅-	2a	<i>ba-</i>
3	<i>mu-</i>	4	<i>mi-</i>
5	<i>li-</i>	6	<i>ma-</i>
7	<i>shi-</i>	8	<i>zi-</i>
9	<i>i(N)-</i>	10	<i>zi(N)-</i>
11	<i>ru-</i>		
13	<i>tu-</i>	12	<i>ka-</i>
14	<i>wu-</i>		
15	<i>ku-</i>		
16	<i>pu-</i>		
17	<i>ku-</i>		
18	<i>mu-</i>		

In VanderMerwe & Schapera (1942), Lukusa (2002) and Sommer (2003) the nominal prefix for the noun classes 2 and 2a appear to have changed into *wa-* in NY, as is the nominal prefix for noun class 5 *li-* in NY (Lukusa, 2002; Sommer, 2000). Furthermore, Sommer (2003) argues that there are some retained pre-prefixes in certain lexemes in different classes. The pre-prefix is a vowel that corresponds with the prefix vowel, i.e. *i-* in the classes 4, 5, 7, 8, 9, and 10, *a-* in the classes 2, 6, and 12, and *u-* in the remaining classes. Nominal derivations can occur by change of nominal class, where class 5/6 is augmentative, class 7/8 is pejorative, and 12/13 is diminutive. Verb-to-noun derivation can occur by *-o*, i.e. agent, or *ma-R(-ir)-o*, e.g. place of action (see § 7).

2.4.2. Pronominal system

Because of subject and object agreement, the pronoun is often omitted in shiYeyi, and is made clear from the context mostly through anaphoric reference. Substitutive pronouns function as emphatic topic markers, in contrastive focus, or referring to speech act participants (see TABLE 5).

TABLE 5. *Substitutive pronouns (monosyllabic)*

Singular									
	personal paradigm	class 3	5	7	9	11	12	14	15
1	<i>mè</i>	<i>wò</i>	<i>lyò</i>	<i>tjò/shò</i>	<i>zò</i>	<i>rò</i>	<i>kò</i>	<i>wò</i>	<i>kò</i>
2	<i>wè</i>								
3	<i>yè</i>								

Plural									
personal paradigm	class 4	6	8	10	-	13	-	-	-
1	<i>tshwè</i>	<i>yò</i>	<i>ngò</i>	<i>zò</i>	<i>yò</i>		<i>tò</i>		
2	<i>nwè</i>								
3	<i>wò</i>								

The monosyllabic pronouns can be used both independent as well as enclitics to the verb marking indirect object.

- (1) *Nd-à-ti-mù-rùsh-ir-à=lyò*
 SC-PFV-PROG-OC-weave-APPL-IND=PRNS
 'I weave **it** for him.' (Seidel, 2008b)

The disyllabic pronoun consists of the distal demonstrative + monosyllabic pronoun for the personal paradigm and reduplication of the monosyllabic pronoun for the noun classes, in which the tone pattern is assigned LH (see TABLE 6).

TABLE 6. *Substitutive pronouns (disyllabic)*

Singular									
personal paradigm	class 3	5	7	9	11	12	14	15	
1	<i>yémé</i>	<i>wòwó</i>	<i>lyòlyó</i>	<i>tjòtjò ~ shòshó</i>	<i>zòzò</i>	<i>ròrò</i>	<i>kòkó</i>	<i>wòwó</i>	<i>kòkó</i>
2	<i>yèwé</i>								
3	<i>yèyé</i>								

Plural									
personal paradigm	class 4	6	8	10	-	13	-	-	-
1	<i>yètshwé</i>	<i>yòyó</i>	<i>ngòngó</i>	<i>zòzò</i>	<i>yòyó</i>	<i>tòtó</i>			
2	<i>yènwé</i>								
3	<i>wòwó</i>								

This contrast between monosyllabic and disyllabic is not common in Bantu languages and the latter is mostly used independently as emphatic pronoun.

- (2) *Mware* *ka-ruku-tikya:* *"Ka-nd-i-siin-e,* ***yeme.*"**
 Prop.N SC3S-?-say NEG-SC1S-IMPV-*want*-SUBJ PRN1S

Mware said: "**Me**, I do want to." (Seidel, 2008b)

2.4.3. Possessive pronouns

Possessive base forms (TABLE 7a) agree with nominal possessor, whereas the complex possessive pronouns (TABLE 7b) agree with the possessed.

TABLE 7a. Possessive base forms

Singular								
personal paradigm	class 3	5	7	9	11	12	14	15
1 -nga	-wo	-lyo	-tjo	-yo	-ro	-ko	-wo	-ko
2 -we /-ye								
3 -ke								

Plural								
personal paradigm	class 4	6	8	10	-	13	-	-
1 -itu	-yo	-ngo	-zo	-zo		-to		
2 -inu								
3 -wo								

TABLE 7b. Complex possessive pronouns

Singular								
class 1	3	5	7	9	11	12	14	15
yuywa- /yuwa-	wuwa-	lilya-	shisha- / tjitja-	yiya-	rurwa-	kaka-	wuwa-	kukwa-

Plural								
class 2	4	6	8	10	-	13	-	-
baba-	yiya-	yaywa- / nganga-	ziza-	ziza-		tutwa-		

(3) *shì-pàtá* *shishá-ngá* ‘my fruit’ (Seidel, 2008b)
 NC7-fruit POSS7-POSS1S

(4) *mù-pùndì* *yúywá-ngá* ‘my child’ (Seidel, 2008b)
 NC1-child POSS1-POSS1S

2.4.4. Demonstratives

ShiYeyi employs three paradigms of demonstratives, i.e. proximal demonstrative (DEM1), distal demonstrative (DEM2), and far distal demonstrative (DEM3). All demonstratives are prefixed according to noun class, as shown in TABLE 8.

TABLE 8. Demonstrative pronouns

Singular									
	class 1	3	5	7	9	11	12	14	15
proximal (DEM1)	yíní	wúní	liní	shíní	yíní	rúní	kání	wúní	kúní
distal (DEM2)	=yò / =yè	=wò	=lyò	=shò	=yò	=rò	=kà	=wò	=kò
far distal (DEM3)	yíná	wúná	liná	shíná	yíná	rúná	káná	wúná	kúná

Plural									
	class 2	4	6	8	10	13	-	-	-
proximal (DEM1)	bàní	yíní	yàní / ngàní	zíní	zíní	túní			
distal (DEM2)	=bà / =bò	=yò	=ngà	=zò	=zò	=tò			
far distal (DEM3)	bàná	yíná	yàná / ngàná	zíná	zíná	tùna			

The demonstratives consists of a concord to the noun class prefix with the suffix /-ní/ for the proximal, /∅/ for the distal demonstrative and the suffix /-ná/ for the far distal demonstrative.

- | | | | |
|-----|--------------|-----------------|---------------------------|
| (5) | <i>Lì-ní</i> | <i>lú-kòndò</i> | <i>lyá-táà-vùndj-ìk-à</i> |
| | NC5-DEM1 | NC5-leg | NC5-CMPL-break-NeuP-IND |

‘This leg broke.’ (Seidel, 2008b)

Expressions with the demonstrative can be extended in shiYeyi. The emphatic demonstrative pronoun is built up of the demonstrative + the infix /-pá-/. The confirmative demonstrative pronoun is built up of the distal demonstrative + /-pá-/ + distal demonstrative. Both the proximal and far distal confirmative demonstrative is the same as the emphatic demonstrative + the suffix of the monosyllabic pronoun. The far distal demonstrative can be employed as ideophone, as seen in (6). By lengthening of the nasal of the /-ná/ suffix, the deitic distance of the referent is lengthened as well.

- | | | | | |
|-----|-----------------------|---------------|--------------|--------------------|
| (6) | <i>M-a-ti-mwan-a</i> | <i>i-mota</i> | <i>yi-na</i> | <i>ku-nnnnnna?</i> |
| | SC3S-PFV-PROG-see-IND | NC9-car | NC9-DEM3 | NC17-DEM3 |

‘Do you see that car waaaayyyy over there?’ (Seidel, 2008b)

3. SUBJECT CONCORD AND TAM IN BANTU

3.1. Conceptual framework and Definitions⁵

For a conceptual framework concerning tense, aspect and modality in Bantu languages, Nurse (2008) was used extensively and he has drawn from scholars like Bybee (et al.), Comrie, Güldemann, Heine, and Hewson. His work on tense and aspect in Bantu languages (2008) is a structured overview combining both linguistic theory and analysis drawn from an extensive database of Bantu languages. For that reason, I will employ Nurse’s (2008) findings as a background for the morpho-syntactic typology common in Bantu languages. The definitions included in Appendix 1 are unshamefully taken from Comrie (1976, 1985), Bybee *et al.* (1994), Nurse (2008), and Dahl (1985). Furthermore, Nurse (2008: 13) emphasises that every discrete morpheme has a unique and specific meaning, i.e. what might appear as overlap in function or meaning is never a complete overlap, because of reasons of redundancy. However, it is not always easy to pinpoint subtle semantic differences, especially in cases where a language is not fully documented.

⁵ A full list of definitions used in this thesis is included in Appendix 1.

3.2. Verb morphology

Some general typological tendencies among the Bantu languages are merely briefly discussed here, due to restrictions of this thesis. These tendencies serve as a framework against which the analysis of the verb morphology of *shiYeyi* will take place. The first tendency is that most Bantu languages show a basic SVO word order. The second tendency is that the Bantu languages employ a strict nominative-accusative case system, in which cases often are not marked. In addition, the Bantu languages are classified as agglutinative languages, in which many syntactic features are expressed with a broad variety of affixes. All lexical nominals are assigned to a noun class system, which are reflected in the nominal and verbal morphology through agreement. Due to the omission of nominal phrases, the sentence of a Bantu language could exist of merely a verb phrase, with all arguments, TAM, negation, and locatives inflected on the verb. The inflectional affixes can be represented in a template shown in FIGURE 3.

FIGURE 3. *Verbal slots in Bantu based on Meeussen, 1967 (Nurse, 2008).*

1	2	3	4	5	6.1	6.2	6.3	7	8	9
pre-initial	initial	post-initial	formative	limitative	infix	radical	suffix	pre-final	final	post-final
NEG ₁ REL	SC	NEG ₂ TA	TA	PERS, IT, INC, NARR	OC	verb root	extensions	IMPFV, REP, HAB	final vowel	PL IMPFV

3.2.1. Subject and object concord

In the Bantu languages, the subject is commonly obligatorily marked on the predicate and occupies the initial slot (FIGURE 3). The overt subjectal NP may be dropped in most Bantu languages, when the subject is known through anaphoric reference.

In contrast to SC, the object is optionally marked on the predicate in most Bantu languages with the exception of the Bantu languages in zone A, which do not allow OM at all (Riedel, 2009: 5). Languages do differ in the number of objects that may be marked on the verb (slot 6.1). In cases of multiple objects, Bresnan and Moshi (1990: 147) make the distinction between symmetrical and asymmetrical languages. In the first, more than one NP can exhibit the syntactic properties of the primary object. In the latter, only the NP that immediately follows the predicate is the 'primary object'. The primary object allows object agreement on the predicate, passivisation, reciprocalisation, and left-dislocation. One implication of the distinction between symmetrical and asymmetrical languages is that only the first will allow more than one object concordance (OC) on the verb. In multiple object constructions, Hyman and Duranti (1982: 231) argue that the higher the animacy and definiteness of the objects, the closer they are to the verb.

3.2.2. Tense, aspect and modality

Nurse states that "all Niger-Congo languages have aspect, but only some also have grammaticalised tense" (2008: 177). However, this does not imply that languages without tense distinctions do not refer to time; aspect, including *Aktionart*, expresses an internal temporal reference to a situation or state depicted by the verb phrase. Tense can be expressed lexical (temporal adverbials) or grammatical (verbal inflection). For the Bantu languages that do have inflectional tense

marking, tense tends to occur left and aspect tends to occur right, i.e. aspect tends to be marked closer to the lexical stem than tense. For this reason, tense is most commonly expressed in pre-stem slot 3 or 4, however, other positions for inflectional tense marking include the pre-initial slot 1, and rarely, the post-final slot 9.

TABLE 9 shows the timeline in which expression of tense is usually understood, where the present tense denotes the moment of speech. Notwithstanding that this tense is hardly used, since at the moment of the utterance, the tense already shifts to the past on the timeline. For example, the present tense in English is commonly expressed with the auxiliary 'be' and the progressive *-ing*. For this reason, the present tense is assumed to speak for itself.

TABLE 9. *Timeline of tense reference*

remote past > near past > immediate past > present > immediate future > near future > remote future						
past hodiernal		>	hodiernal		>	future hodiernal
pre-hesternal	>	hesternal	>	crastinal	>	post-crastinal

The past tense indicates a situation that happened before the moment of speech. Some languages indicate multiple references of the past tense, in which a distinction between recent and remote past is common. However, more distinctions are possible, i.e. immediate past (very recent), past hodiernal (today), hesternal (yesterday), and pre-hesternal (before yesterday). Most common inflectional markers for past tense are identical to the markers for the anterior aspect (see below). A second strategy for past reference is a null marker, however, this raises the question of whether the past tense is \emptyset -marked or unmarked like the present tense. A third, less common, strategy among Bantu languages is the vowel copy suffix, in which the FV copies the vowel of the stem. According to Nurse (2008: 84), this strategy is observed predominantly in the Zones K and R. For the future tense the same paradigm would apply as for the past, however, languages commonly have less expressions for future situations than for past situations. The underlying fact would be that the future is inherently less certain; this seems to be confirmed as some literature refers to crastinal (tomorrow), post-crastinal (after tomorrow) or hodiernal future (after today). Fleisch (2000) refers to the distinction between simple future (*-ka-*), definite future (*-kaku-*), and remote future (*-aku-*) for Lucazi (K.13). An additional strategy to refer to future situations is the derivatives from the verbs 'come' or 'go', although this is thought to be a more recent innovation (Nurse, 2008).

Relative tenses are distinct from the absolute tenses mentioned above, in that the relative tense does not necessarily refer to the moment of speech; rather they refer to another time already established. A classic example of a relative tense marker in Bantu languages is the narrative. In a sequence of events, only the first verb is marked for temporal setting, all subsequent events are marked with the narrative morpheme. For this reason, the narrative is often referred to as the consecutive, subsecutive, and sequential. The most common narrative marker in Bantu languages is *-ka-*, which can also occur word initial as *#ka-*. However, *-ka-* is used for a wide variety of other functions as well. Other strategies to express the narrative are \emptyset -marking or the bare infinitive, in which *ku-* becomes narrative marker instead of infinitive marker. In addition, Nurse (2008) adds that the conjunctive *na* cannot be considered a strict narrative marker, since its conjunctive function links verbs, clauses, or adds supplementary information.

The perfective and imperfective aspects are commonly used in Bantu languages, where the former represents a complete situation or state and the latter an incomplete situation or state. Traditionally, part of the situation in the imperfective is complete, whereas another part of the situation is incomplete. However, this does not imply that the perfective necessarily refers to past events, nor does the imperfective necessarily refer to present or future events. What it does imply is

that the internal structure of the verb is either a single bounded whole (perfective) or the verb denotes an unbounded event that lasts over an unspecified period of time (imperfective). The beginning or end of the imperfective is not mentioned, not relevant, and/or not known. The imperfective in Bantu can be marked as a general imperfective, usually with the suffix *-a(n)g-* / *-a(n)ga#*, on the one hand. On the other hand, the imperfective in Bantu can be marked for its subtypes, most commonly the progressive, persistive, inceptive, continuous, situative, anterior, and habitual. Some Bantu languages might employ both, e.g. Basaa (A43) (Nurse, 2008: 137). More often than not the perfective is unmarked, whereas the imperfective is marked.

The progressive aspect is marked in various ways, in which the derivation from possessives and locatives appear the most common type in Bantu. The majority of Bantu languages use the compound construction *-li+mu+ku-* ('be in/at verb-ing') for the progressive (Nurse, 2008; Bastin, 1989). In this construction, *-li* ([*-ri*]) denotes a passing phase of the event and refers to the locative verb 'be in/at', *mu-* is the locative prefix from NC18, and *ku-* denotes either the infinitive (NC15) or the locative prefix from NC17. A second compound construction for progressive aspect is *-na+ku-*, 'be with (have) + verb'. Different languages use this compound construction with a combination of various other morphemes to add tense and other aspects. In this sense, the progressive is often the basis for the persistive aspect, in which "a situation has held continuously since an implicit or explicit point in the past up to the time of speaking" (Nurse, 2008: 145), often glossed as 'still' in affirmatives or 'not yet' in negatives. The base form of the persistive prefix is mostly **ki-*, which in some cases has developed into *-shi-*. Since there are points in time involved in the persistive aspect, other tense or aspects can co-occur with the persistive aspect. A second *ki-* prefix occurs as a situative (participial) aspect. The situative is often related to *if*-clauses, and as a result, it often appears to entail hypothetical or possible situations. In this sense, the situation is unbound and could last for an unspecified amount of time, i.e. the situation could have a lengthy duration. The situative differentiates from the imperfective, since neither the beginning nor end of the situation is complete. Although there is a suspected tonal distinction between the persistive and situative **ki-*, there is no evidence as of yet to make statements about this. The habitual aspect, as the progressive, denotes a situation of unbounded duration, however, in contrast with the progressive the duration of the habitual is longer than that of the progressive. At the same time, it differs from the frequentative in the sense that the situation is repeated on different occasions. Nurse (2008: 151) notes that the iterative, continuative, and frequentative seem to be hard to distinguish in the literature. He bases his statement on Bybee *et al.* (1994) when analysing reduplication and the relation with the imperfective aspect. Often the iterative, continuative and frequentative seem to be glossed as 'repeatedly', without the discrimination whether the repetition happens on the same or different occasions.

The anterior aspect indicates that a past situation is still relevant to the moment of speech. Nurse (2008) includes the resultative aspect in the anterior, whereas Bybee *et al.* (1994) distinguish these two aspects. In the former the focus is on the relevance into the present and in the latter the focus is on the continuation of the situation into the present. The anterior is ambiguous, since it holds both tense and aspect. The reason why it is considered an aspect in this thesis is the fact that, although the anterior holds two separate time references, the anterior traditionally occupies the final slots in the verb phrase. The three most common aspect markers for the anterior are *-∅-...-ile*, *-a-...-ile*, and *-a-...-a*, which inherently shows the close relation between perfective (stem initial marking) and the anterior aspect. An explanation for this co-occurrence can be found in the intertwined relation between a past situation and the present state. However, note that tense is not involved here, since the situation is not necessarily framed on a timeline. Comrie (1985: 86) distinguishes between absolute anterior and relative anterior, in which the former has the reference point for the location of the situation as the present and the latter as some point in time (not necessarily the present moment). A further two aspects are worth mentioning, i.e. the inceptive and completive aspects. Nurse (2008: 162) notes that these two aspects are often hidden under the anterior aspect. The inceptive aspect denotes a starting point to a situation and the completive denotes a completed situation, both referring to the present time. However, more investigation would be necessary to distinguish these two aspects thoroughly from the anterior aspect. What can be expected is that the inceptive and completive aspects are derivations of the verbs 'to start/begin' and 'to finish' respectively.

Traditionally, mood denotes the speaker's attitude towards the utterance, where a small set of three moods is distinguished, i.e. indicative, subjunctive, and imperative. However when the speaker's attitude is broadened, more modalities are come into play. These modalities describe the speaker's ability, conditionality, desire, intension, obligation, possibility, permission, and subordination. The modalities are not always expressed in such an elaborate manner; rather they are mostly included in the subjunctive, expressed at tense and aspect, or by the use of auxiliaries (Nurse, 2008: 44).

3.3. Negation

In Bantu languages, six basic forms of grammatical negation are found (Nurse, 2008), which can be listed as:

1. Pre-initial inflectional morpheme (NEG₁)
2. Formative morpheme (NEG₂)
3. Final vowel [i] or vowel copy suffix
4. Post-verbal clitics or particles
5. Pre-verbal clitics or particles
6. Auxiliaries

The choice of negative seems to be related to the indicate vs subjunctive mood and main vs relative clause, in which different strategies can be used. Some languages use one negative for all clauses. Whereas other languages use two negatives contrasting main and subjunctive clauses, main and subjunctive/relative clauses, or main and relative clauses. Other languages use three negatives to contrast main, subjunctive and relative clauses. Finally, there is a group of languages that uses several odd types of negation, in which shiYeyi is included (Nurse, 2008). Nurse notes, however, that different strategies not necessarily imply different meanings of negation (2008: 187).

4. PREVIOUS RESEARCH ON VERB MORPHOLOGY IN SHIYEI

4.1. Subject and object concord

In previous research, a double paradigm for subject concord has been described for shiYeyi by Baumbach (1997), Sommer (1995, 2000), and Seidel (2008a, 2008b). That is, two sets of SC are assigned to the different tenses in shiYeyi. The first set is thought to be the basic paradigm of SC and carries the subject vowel *-i-*, this paradigm is described to be used in future tenses, the present progressive (Baumbach, 1997; Sommer, 2000) and some aspectual denotations (Sommer, 2000). The second set is thought to be a compound SC paradigm and carries the subject vowel *-a-*. This compound paradigm is thought to describe all affirmative past tenses and the present tense (Baumbach, 1997; Sommer, 2000; Lukusa, 2002; Seidel, 2008a). Sommer (2000) describes the distinction between the

two sets of SC and their distinctive vowels to be due to past and non-past tenses. The subject vowels *-u-* and *-e-* are to vowel harmony of the prefix to the verb stem (Baumbach, 1997; Sommer, 2000; Seidel, 2008a). All the scholars above noted an integrate relationship between the SC and TAM marking, however, a consensus of the precise nature of this phenomenon has not been reached. With this thesis, I hope to shed some further light on the supposed double SC and its relation to TAM in shiYeyi. In the remainder of this thesis, I will denote the two assumed paradigms as SC-*i-* and SC-*a-*, according to their final vowel. TABLE 10 shows the two SC paradigms, as they are found by Baumbach (1997) and Seidel (2008a, 2008b) in CY, and by Sommer (1995, 2000) in NY. Lukusa (2002) only describes the SC as carrying the subject vowel *-a-* and he does not include other subject vowels, therefore he is excluded from TABLE 10.

TABLE 10. Subject paradigms noted by Baumbach (1997), Sommer (2000), and Seidel (2008a+b)

	Baumbach		Sommer		Seidel	
1S	<i>ndi-</i>	<i>nda-</i>	<i>ndi-</i>	<i>nda-</i>	<i>ndi-</i>	<i>nda-</i>
2S	<i>u-</i>	<i>ma-</i>	<i>u-</i>	<i>ma-</i>	<i>u- / ko-</i>	<i>ma- / u- / ko-</i>
1P	<i>ti-</i>	<i>ta-</i>	<i>ti-</i>	<i>ta-</i>	<i>ti-</i>	<i>ta-</i>
2P	<i>ni-</i>	<i>na-</i>	<i>ni-</i>	<i>na-</i>	<i>ni-</i>	<i>na-</i>
1	<i>au-</i>	<i>ama-</i>	<i>mu- / u- / a-</i>	<i>(a)ma-</i>	<i>u- / a- / ka-</i>	<i>ma- / u- / a- / ka-</i>
2	<i>aba-</i>	<i>aba-</i>	<i>ba- / wa-</i>	<i>wa-</i>	<i>ba-</i>	<i>ba-</i>
3	<i>u-</i>	<i>wa-</i>	<i>u-</i>	<i>wa-</i>	<i>wu-</i>	<i>wa-</i>
4	<i>yi-</i>	<i>ya-</i>	<i>i-</i>	<i>ya-</i>	<i>yi-</i>	<i>ya-</i>
5	<i>lyi-</i>	<i>lya-</i>	<i>li- / ri-</i>	<i>ria-</i>	<i>li-</i>	<i>lya-</i>
6	<i>nga-</i>	<i>nga-</i>	<i>nga- / a-</i>	<i>ma-</i>	<i>ngu-</i>	<i>nga-</i>
7	<i>shi- / ci-</i>	<i>sha-</i>	<i>fi-</i>	<i>fa-</i>	<i>shi-</i>	<i>sha-</i>
8	<i>zi-</i>	<i>za-</i>	<i>zi-</i>	<i>za-</i>	<i>zi-</i>	<i>za-</i>
9	<i>yi-</i>	<i>ya-</i>	<i>i-</i>	<i>ya-</i>	<i>yi-</i>	<i>ya-</i>
10	<i>zi-</i>	<i>za-</i>	<i>zi-</i>	<i>za-</i>	<i>zi-</i>	<i>za-</i>
11	<i>ru-</i>	<i>rwa-</i>	<i>ru-</i>	<i>ru-</i>	<i>ru-</i>	<i>rwa-</i>
12	<i>ka-</i>	<i>ka-</i>	<i>ka-</i>	<i>ka-</i>	<i>ka-</i>	<i>ka-</i>
13	<i>tu-</i>	<i>twa-</i>	<i>tu-</i>	<i>tu-</i>	<i>tu-</i>	<i>twa-</i>
14	<i>wu-</i>	<i>wa-</i>	<i>wu-</i>	<i>wa-</i>	<i>wu-</i>	<i>wa-</i>

Lukusa (2002; 27) includes noun class 20 in his grammar on shiYeyi, with the prefix */ku-/* or */uku-/* and corresponding to the plural class 6. Since Lukusa (2002) does not distinguish between two SC paradigms, this noun class is not included in TABLE 9. However, one would expect */kwa-/* or */akwa-/* as a distinctive prefix for SC-*a-*, when following the above paradigms. Baumbach (1997; 442-443) describes the two paradigms as 'subject concord' (SC-*i-*) and 'compound subject concord' (SC-*a-*). This might indicate a merge between the stem of the SC and the prefix */a-*, which is confirmed by Sommer (2000; 626). Fleisch (2000) and Marten (2006) have described the prefix */a-* as a perfective marker in the grammars of Lucazi (K.13) and Herero (R.30) respectively.

Object agreement in transitive clauses is not obligatory in shiYeyi, however, when used the paradigm in TABLE 11 is used. In addition, shiYeyi appears to be an asymmetrical language (Bresnan & Moshi, 1990), since it only allows one OC on the predicate.

TABLE 11. *Object concord in CY (Seidel, 2008b)*

Singular									
personal paradigm	class 1	3	5	7	9	11	12	14	
1	-nia ⁶	-mu-	-wu-	-l(d)yi-	-shi-	-yi-	-ru-	-ka-	-wu-
2	-ku-								

Plural									
personal paradigm	class 2	4	6	8	10	-	13	-	
1	-ti-	-ba ⁷	-yi-	-nga-	-zi-	-zi-	-tu-		
2	-ni-								

4.2. Tense, aspect and modality.

The infinitive form of the verb in shiYeyi is the NC15 prefix *ku-* plus the verb stem, of which the majority of verb stems show *-a* as FV, such as *kù-tìkyá* ('to say'). Most underived verbs tend to be mono- or disyllabic. In order to express tense, aspect and modality on the verb, a number of affixes can be added. TABLE 12 shows the TAM affixes as appointed by Baumbach (1997), Sommer (2000), Lukusa (2002), and Seidel (2008a).

TABLE 12. *TAM paradigm noted by Baumbach, Sommer, Lukusa, and Seidel*

	Baumbach	Sommer	Lukusa	Seidel
Present	SCa + -ti- + stem	SCa + stem	SCa + stem	SCa + -ti- + stem
Present NEG	yemwa + SCa + INF			
Immediate Future	inkye + SCi + stem	SCi + R + VH	SCà + -ti- + stem	
Remote Future		SCi + -ku- + stem		
Future NEG		SCa + -ti- + stem	SCá + -ti- + stem	
Recent Past	kumuni + inkye + SCi + stem			
Rec. past NEG	SCa + R + VH	SCa + -ta- + stem		
Remote Past	yemwa + SCi + R + -e			
Rem. past NEG	SCa + -ta- + stem	SCa + -ra- + R + VH		
Anterior	yemwa + SCi + stem			
Hod. Anterior		SCa, i + R (+ VH)	SCa + -ta- + stem	
PreHOD. ANT		SCa + -ku- + stem		SCa + Ø + R + VH
Hod. PST Perf.				SCa + -taa- + stem
PreHOD. PST				SCa + -ku- + stem
Progr. Pres.	SCi + -shi- + stem	SCa + -ti- + stem		SCa + -riku- + stem
Progr. Pres. NEG	ka- + SCi + -shi- + stem	SCi + -i- + R + VH		
Consecutive				SCa + -kú- + stem
Narrative		ka- + stem		
Persistent		SCi + -fi- + stem		

⁶ -ndi- in NY (Sommer, 1995)

⁷ -wa- in NY (Sommer, 1995)

Habitual	SCi,u + -ku- + stem
Conclusive	SCi,u + -ku- + stem
Inceptive	SCa,u + -ka- + stem
Subjunctive	SCi + R + VH

From TABLE 12, it becomes clear that all scholars use different terminology to indicate temporal, aspectual and modal contexts. In addition, there seems to be lack of consensus on which TAM markers are assigned to the different temporal contexts. In addition, Sommer (2000; 628) describes two separate tenses for both past and future, i.e. recent past vs. remote past and immediate future vs. remote future, plus an additional anterior. All, but Sommer (2000), exclude aspectual and modal paradigms in their description of TAM markers, such as narrative, persistent, habitual, conclusive, inceptive, and subjunctive. At the same time, Baumbach (1997; 445) and Seidel (2008a; 157) include the progressive and consecutive aspect, respectively, in the temporal context. Negation is only included in Baumbach's (1997; 443-445) paradigm, but all others do take note of the negated forms of all tenses. Sommer (2000; 625) argues that the pre-initial negative prefix /ka-/ precedes the SC, replaces the pre-initial TAM slot (see below), and changes the final vowel -a/ to /-e/. In this affixal negation, Sommer (2000; 627) observes that the SC-i- paradigm is used. On the other hand, when the negation word *yòmùá* is used before the affirmative construction, the SC-a- forms appear as well. Lukusa (2002; 81-82) explains that all tenses use the negation prefix /qhu-/ preceding the full infinitive or the verb stem. In addition, he argues that an extra concord element is added between the TAM slot and the NEG slot, which agrees with the relevant subject in the way adjectives agree. In this context, the prefix /-mu-/ for singular subjects and /-wa-/ for plural subjects. Seidel (2008a) excludes negation completely from the discussion on past tense marking. Seidel (2008b) describes negation through lexical negation (*yemwa* and *kamuni*) and inflectional negation (*ka-* and *-ha-*).

Nevertheless, some preliminary hypotheses can be drawn from TABLE 12. Going back to the description of the prefix /a-/ as a perfective marker by Fleisch (2000) and Marten (2006), one can project this assumption on the TAM paradigm (TABLE 12). When following the conclusions of the above scholars, one could assume that SC-i- is the basic paradigm for subject concord. This basic SC-i- appears to appear exclusively in the future tense and in the negation of all tenses. The future tense would not have a perfective character, since this is inherently still to happen. The negated forms would neither have a perfective character, since this is not a factual description of an action/state that occurred in the past and can be seen in its entirety. That leaves us with the discussion on the present tense. One could assume that the present is a problematic tense in the first place, since at the end of the utterance the action/state is already past the moment of speech. Even in English, the simple present is hardly used, but rather the present progressive to indicate the action/state at the present moment.

Although both Sommer (2000) and Seidel (2008a; 153) mention a pre-initial slot for TAM, i.e. before the SC, neither of them include this TAM slot in their overview of verb structure. Sommer (2000; 629) describes this pre-initial TAM slot to mark either factual modality or probability modality, i.e. /*ngga-*/ and /*nca-*/ respectively. Fleisch (2000; 142-143) describes the pre-initial TAM slot /*ngá-*/ as potential or conditional for Lucazi (K.13). At the same time, Baumbach (1997) and Lukusa (2002) remain silent about a pre-initial TAM slot.

4.3. Vowel harmony.

An additional TAM marker, mentioned in the literature would be vowel harmony (henceforth VH) of the verb stem's final vowel (henceforth FV). Fleisch (2000; 319-321) notes that VH is difficult to assign to the different tenses. TABLE 13 provides an overview as used by Fleisch (2000; 320) for Lucazi (K.13) and its neighbouring languages. The tenses in which VH occurs differ across neighbouring languages and a consensus on its function and meaning can therefore not be drawn. Fleisch (2000; 321) further notes that, because of the divergent occurrence of VH across tenses, vowel harmony

cannot be assigned to the temporal contexts. Rather, he pleads that the FV in Lucazi (K.13) and other Bantu languages conveys information on mood and aspect.

TABLE 13. *Vowel harmony of verb stem's final vowel in tenses*

Lucazi	Luvale	Gciriku	Mubukushu	Kwangali	Kwanyama	Herero
ANT.	PFV.	HOD. PFV.	HOD. PST.	PRES.		EMPH. FUT.
		REC. COMPL. PROG.	REC. FIN. CONT.	PRES. HAB.	PRES. HAB.	PRES.
PRES. PFV.	PFV. NEG.	DEF. PST.	DIST. INDEF. FUT.	DETERM. PST.	REC. PST.	REC. PST. (HOD.)
PRES. NEG.		SUBSEC.	PST. (HEST.)	PST. HAB.		HAB. NEG.

Source: Fleisch, 2000: 320.

Baumbach (1997), Sommer (2000), and Seidel (2008a) describe vowel harmony to occur in shiYeyi on different occasions. Baumbach and Seidel subscribe VH to the recent past tense or the hodiernal anterior tense respectively (see TABLE 14). In both cases, this appears to be an action/state that happened in the near past. On the other hand, Sommer (TABLE 14) subscribes VH in more than one TAM context. She argues for a wide range of TAM contexts that show vowel harmony, i.e. immediate future, present progressive, remote past, subjunctive and occasionally the anterior. At the same time, Sommer (2000: 627) notes that the final verbal vowel of the infinitive changes from *-a* to *-e* (or occasionally to *-i*) in non-indicative moods and in negation. This raises the question whether the subjunctive mood indeed has vowel harmony or whether the FV changes due to change in modality. Fleisch also points out that */-e/* indicates the subjunctive mood in Lucazi (K.13), calling this phenomenon ‘the subjunctive ending *-e*’ (2000; 321). In addition, Gowlett (1992: 187) describes the verbal conjugational suffix */-e/* in the subjunctive as a reflex from proto-Bantu.

TABLE 14. *Vowel harmony of verb stem's final vowel in shiYeyi*

Baumbach		Sommer		Seidel	
		IMM.FUT.	SCi + R + VH		
		PRES. PROG.	SCi + -i- + R + VH		
REC.PST.	SCa + R + VH	REM.PST.	SCa + -ra- + R + VH	HOD. ANT.	SCa + ∅ + R + VH
		SUBJ.	SCi + R + VH		
		(ANT.)	SCa, i + R (+VH)		

Source: Baumbach (1997), Sommer (2000), and Seidel (2008a).

5. METHOD OF RESEARCH

For the analysis of the relation between the double SC paradigm and TAM marking in shiYeyi, the data set published in Sommer (1995) has been used. The data set consists of two narrative texts, in

which informants speak about every-day activities (text 1) and the origins of the waYeyi (text 3). Five informants are from Ngamiland, two females, both 47 years, one from Gaoxa and one from Shakawe, one female, 70 years, from Habu, and two males, one of 60+ years and one of 70 years, both from Ngarange. Seven informants are from Shorobe, five female, between 16-40 years, two males, 29 and 47 years. Twenty-one informants are from Seronge, eleven females, 15-60+ years, and ten males, 19-51 years. The data was collected on three separate fieldtrips between 1990 and 1992 (Sommer, 1995). Seronga is a remote and traditional settlement and Shorobe is a satellite village. In addition, some other small villages were visited in Ngamiland, namely Gaoxa, Habu, Ngarange and Shakawe. The speakers of the more isolated areas used shiYeyi on a daily bases, whereas the speakers of the more urban areas used other languages as well. The informants are pretty equally devided between male and female and from a wide range of ages. Sommer (1995) confirms the tendency that the elderly speakers use shiYeyi more in informal settings than younger speakers. Furthermore, Sommer (1995) observed that the elderly speakers used more shiYeyi morphemes in TAM distinctions than the younger speakers did. Moreover, the younger the speakers, the more their grammatical constructions follow seTswana patterns. Sommer states that 'as far as the use of various morphemes in verbal constructions is concerned, middle-aged and elderly Yeyi women from Seronga used quantitatively more different verb morphemes than other informants' (1995: 504).

Sommer's (1995) text 1 (GS_1) and text 3 (GS_3) were copied into FLEX (Fieldworks Language Explorer), which was developed by SIL International. The data from the texts was glossed and analysed in FLEX, so a word list concordance could be set up. All word forms were concorded for their occurrences throughout the texts. In this manner, the frequencies and environments of the predicates could be analysed. All predicates were compared for their morphological shape and the context in which they occurred within the text. The combinations of the different verb morphemes and their co-occurrence were noted. In addition, the combinations with noun phrases and adpositional phrases (locatives) were analysed. The examples in Seidel's grammar (2008b) were consulted for reference of the information found in the data set, occurrences in CY that were not found in the data set are not further elaborated on. After the analysis of occurrence, form and meaning were added to the different verbal morphemes in line with similar co- and context. When form and meaning of the constructs was established, the verbal morphemes were labeled according to the theoretical framework of Comrie (1976, 1985, 1989), Dahl (1985), Bybee *et al.* (1994), and Nurse (2008).

6. DATA ANALYSIS

6.1. Subject concord

To analyse the subject concord and their corresponding vowels, all subject vowels in the data were counted and analysed for form and meaning. TABLE 15 shows the separate occurrences of the subject vowels *-i-*, *-a-*, *-e-*, and *-u-*, and the number of subject concords in which the distinction between *-i-* and *-a-* could not be established (unknown) in cases such as NC2 and NC3 (*wa-*).

TABLE 15. *Subject vowels in the data*

Subject Vowel	Occurrences
<i>-i-</i>	397
<i>-a-</i>	312
<i>-e-</i>	6
<i>-u-</i>	57
unknown	82
Total	854

The total number of inflected verb stems analysed in the data is 1161, including the (negative) auxiliary verbs and the infinitives. The total number of infinitive forms with the noun class marker *ku-* is 170, in which the subject concord does not occur. In addition, the pre-initial narrative markers *#nga-* and *#ka-* omitted the subject concord on 106 occasions in total. The total number of the narrative markers *#nga-* and *#ka-* are 79 and 164 respectively.

#SC-*i-*

The subject vowel *-i-* appears almost exclusively with the pre-initial narrative markers *#nga-* and *#ka-*, with a few exceptions of SC-*u-*. In addition, SC-*i-* occurs often in combination with negative formative *-ha-* and the negative auxiliary verb *-!hu* (see § 6.3.). SC-*i-* occurs often in combination with all other formatives and limitatives, but it seems to have a preference for *-ti-*, *-ku-*, and *-ka-*. All FVs can be combined with SC-*i-*. The total number of occurrences of SC-*i-* is 397 (TABLE 15).

(7) Kàtitiwùmbá					pò	tùròngò		
<i>Ka-</i>	<i>t-</i>	<i>i-</i>	<i>ti-</i>	<i>wumb</i>	<i>-a</i>	<i>po</i>	<i>tu-</i>	<i>rongo</i>
NARR	SC1P	IMPFV	PROG	make	IND	NC16	NC13	water mug
tótù		ùwára.						
<i>totu</i>		<i>u-</i>	<i>wu-</i>	<i>ara.</i>				
CONN13		14	NC14	beer				

And then, we make a mug for beer. (GS_3)

(8) N nání		tìshìsìsé				pòpá'à		
<i>N nani</i>		<i>t-</i>	<i>i-</i>	<i>shi-</i>	<i>sis</i>	<i>-e</i>	<i>pop-</i>	<i>a'a</i>
ADV		SC1P	IMPFV	PERS	live	SUBJ	LOC16	DEM2
tìkùyìsá		zìkhánè				ngáhò.		
<i>t-</i>	<i>i-</i>	<i>ku-</i>	<i>yis</i>	<i>-a</i>	<i>zi-</i>	<i>khane</i>	<i>ngaho.</i>	
SC1P	IMPFV	VEN	take	IND	NC10	news	ADV	

While we still lived there, we only exchanged the news. (GS_1)

#SC-*a-*

The subject vowel *-a* appears before all formatives and limitatives, but seems to have a preference for the limitatives *-ta-* and *-ra-* and occasionally the formative *-ti-*. All FVs can combine with SC-*a-*. Negation never combines with SC-*a-*. The total number of occurrences of SC-*a-* is 312 (TABLE 15).

(9)	Tàzishàngàná					kó'ò, ...	
	<i>T-</i>	<i>a-</i>	<i>zi-</i>	<i>shangan</i>	<i>-a</i>	<i>k-</i>	<i>o'ò, ...</i>
	SC3P	PFV	OC10	find	IND	NC17	DEM2

We found them (the cows) there, (GS_1)

(10)	Hàngá	tátàýá				mónì	mònà	Shorobe.
	<i>Hanga</i>	<i>t-</i>	<i>a-</i>	<i>ta-</i>	<i>y</i>	<i>-a</i>	<i>moni</i>	<i>moni</i>
	ADV	SC1P	PFV	CMPL	come	IND	LOC18	LOC18

That's how we came to Shorobe. (GS_3)

#SC-e-

The subject vowel *-e* is not combined with any other formative or limitative, but rather seems like a fixed construction, i.e. SC-*e*-R-*e*. In this context, the VP expresses a potential of the action that is introduced. The total number of occurrences of SC-*e*- is 6 (TABLE 15), of which five instances are inflected on the verb *-yenda* ('to go') with first or third person plural.

(11)	"(Áù)	mùrùá,	tèèndé			
	<i>mu-</i>	<i>rua,</i>	<i>t-</i>	<i>e-</i>	<i>end</i>	<i>-e</i>
	NC1	friend	SC1P	POT	go	SUBJ

tikàringiré					imá	zìnjìrá	kùní	kù
<i>t-</i>	<i>i-</i>	<i>ka-</i>	<i>ringir</i>	<i>-e</i>	<i>ima</i>	<i>zi-</i>	<i>njira</i>	<i>kuni</i>
SC1P	IMPFV	ITI	ask	SUBJ	mother	NC10	road	LOC17

Ididzó!"

<i>ldi-</i>	<i>dzo</i>
NC5	stream

Friend, we go ask mother the way to the stream. (GS_1)

The subject vowel *-e* combines with *-ku-* or *-ka-* as motion is denoted in the fixed hortative expression 'Let us go and do X', as seen in (12)-(13). In contrast to all other pre-stem morphemes, this construction assigns high tone to the modal morpheme and low tone to the final vowel.

(12)	"(Éhè)	tééndè			tikàkyàwè			
	<i>ehe</i>	<i>t-</i>	<i>e-</i>	<i>yend</i>	<i>-e</i>	<i>t-</i>	<i>i-</i>	<i>ka-</i>
	INTERJ	SC1P	HORT	go	SUBJ	SC1P	IMPFV	ITI

zìnkùní!"

<i>zin-</i>	<i>kuni</i>
NC10-	firewood

"Let us go to get firewood!" (GS_1)

(13) “Tééndè					tikùyá					mùsàná!
<i>T-</i>	<i>e-</i>	<i>end</i>	<i>-e</i>	<i>t-</i>	<i>i-</i>	<i>ku-</i>	<i>y</i>	<i>-a</i>		<i>musana!</i>
SC1P	HORT	GO	SUBJ	SC1P	IMPFV	VEN	come	IND		ADV

“Let’s us go quickly!” (GS_1)

Sentence (14) is a negative construction with the formative *-ha-*, which might indicate that the state of the verb *-yiirziire* (to know) could potentially change if the information was brought to the speaker. In that sense, the ‘not knowing’ would be a state that is changeable. Example (14) would have a pragmatic insinuation of ‘tell me and I can change the state’ or even a hortative insinuation of a request to explain/teach.

(14) Tá	(yè)mè (áyi)	xà	kákè	ndikùkèrèká					
<i>Ta</i>	<i>yeme ayi</i>	<i>xa</i>	<i>kake</i>	<i>nd-</i>	<i>i-</i>	<i>ku-</i>	<i>kerek</i>	<i>-a</i>	
Until	PRN1S INTERJ	NEG	cannot	SC1S	IMPFV	VEN	cook	IND	

wùndèhàyiiré.

<i>wu=</i>	<i>nd-</i>	<i>e-</i>	<i>ha-</i>	<i>yiirziire.</i>
REL14	SC1S	POT	NEG	know

I cannot cook what I do not know. (GS_1)

Admittingly, the 6 occurrences in the data are meager to make any conclusions about the subject vowel *-e-*. Further research on this morpheme would be necessary to fully understand its function and meaning.

#SC-*u-*

The subject vowel *-u* occurs often in a chain of predicates with the same agent, i.e. in actions that follow each other and is often combined with the pre-stems *-ku-* or *-ka-*, and occasionally with *-ra-*. The subject vowel *-u-* never occurs in combination with the pre-initial narrative markers *#nga-* and *#ka-*. This leads to the tentative conclusion that *-u-* functions as a consecutive marker and fulfills the role as an alternative relative tense marker in narratives. The total number of occurrences of SC-*u-* is 57 (TABLE 15).

(15) Ngànditishùká.						Ndùkàtshùrárá				
<i>Nga-</i>	<i>nd-</i>	<i>i-</i>	<i>ti-</i>	<i>shuk</i>	<i>-a.</i>	<i>Nd-</i>	<i>u-</i>	<i>ka-</i>	<i>tshurar</i>	<i>-a</i>
NARR	SC1S	IMPFV	PROG	return	IND	SC1S	CNS	ITI	cut	IND

ìnyàm(á)	(y)ángá.	Ndùkùkèrèká.						
<i>i-</i>	<i>nyama</i>	<i>y-</i>	<i>anga.</i>	<i>Nd-</i>	<i>u-</i>	<i>ku-</i>	<i>kerek</i>	<i>-a.</i>
NC9	meat	NC9	POSS1S	SC1S	CNS	VEN	cook	IND

I went back. And I cut my meat. And I cooked. (GS_1)

At times, the apparent SC vowel *-u* turns out to be the vowel of the proclitic relativizer in some cases in the data.

(16)	‘É,	‘è,	wùtsàrà			ngáhò		ngàhàn’i,				
	<i>‘e</i>	<i>‘e</i>	<i>wu-</i>	<i>tsara</i>		<i>nga-</i>	<i>qhu</i>	<i>nga-</i>	<i>ha-</i>	<i>ni’l</i>		
	INTERJ	INTERJ	NC14	friendship		NC6	lack	NC6	NEG	DEM1		
	ùngùwàtiyá					wùkùtìshwísà						
	ungu=	<i>w-</i>	<i>a-</i>	<i>ti-</i>	<i>y</i>	<i>-a</i>	wu=	<i>ku-</i>	<i>ti-</i>	<i>tshw</i>	<i>-is</i>	<i>-a</i>
	REL6	SC3P	PFV	OC1P	COME	IND	REL14	NC15	PROG	to control	CAUS	IND
	wàrùá.											
	<i>wa-</i>	<i>rua.</i>										
	NC2	Tswana										

No, no, it was only friendship, they (the Ndebele) came to us to control the Tswana. (GS_3)

In (16), the REL6 refers to the negation, where *ngaho* is glossed by both Sommer (1995) and Seidel (2008b) as ‘only’. However, the adverbial *ngaho* can be analysed as done in (16), where the underlying structure surfaces. In (16), the REL14 refers back to the ‘friendship’, mentioned at the beginning of the sentence. In this sense, the relativizer shows the purpose of the ‘friendship’ in the first clause.

In the data, the subject agreement is omitted in cases where the infinitive noun class marker *#ku-* is used instead. Normally the subject agreement is set in the initial predicate and the infinitive form is used in subsequent predicates with the same agent, assuming anaphoric reference. The morpheme *ka-* in word initial position can be ambiguous, since it can carry multiple meaning, depending on the function and meaning of the morpheme *ka-* it can occur as proclitic, in pre-initial and initial position. For this reason, the two morphemes found in the data are further elaborated below.

ku-

The pre-initial morpheme *ku-* is the infinitive, which is assigned to noun class 15. The infinitive usually consists of *ku-R-a*, some exceptional verbs carry the final verb *-e* or *-i* in the verb stem. The total number of occurrences of *ku-* is 170 (see above).

(17)	Yèyè	kùtshùràrà			nì	màkhúkú.					
	<i>Yeye</i>	ku-	<i>tshurar</i>	<i>-a</i>	<i>ni</i>	<i>ma-</i>	<i>khukhu.</i>				
	PRN3S	NC15	cut	IND	with	NC6	piston				
	Kàtikérékà.										
	<i>Ka-</i>	<i>t-</i>	<i>i-</i>	<i>kerek</i>	<i>-a.</i>	Ku-	<i>tshurer</i>	<i>-a</i>	<i>ni</i>	<i>ma-</i>	<i>khukhu.</i>
	NARR	SC1P	IMPFV	COOK	IND	NC15	cut	IND with	NC6	piston	

Kùkérékà.	Kùyisá.	Kàtà.	Kùikhí.
<i>Ku- kerek -a.</i>	<i>Ku- yis -a.</i>	<i>Ka- t -a.</i>	<i>Ku- i- khi.</i>
NC15 cook IND	NC15 take IND NARR	trow away IND	NC15 ? get

He cuts with a piston. And then we cook. Cut with a piston. Cook. Take. And then, throw away. And get. (GS_3)

ka-

The morpheme *ka-* in word initial position has multiple functions, firstly, the subject agreement prefix for noun class 12 irrespective of the subject vowel, secondly, the relative tense marker for narratives, and thirdly, the verbal prefix for negation (see below for the latter two).

(18) Tàná	yíní		kàshàmú		yíní		kàyisá	
<i>Tana yi- ní'i ka- shamu yi- ní'i ka- yis -a</i>								
ADV 1 DEM1 NC12 stick 1 DEM1 SC12 take IND								

kyèémbé.

ka- yeembe.
NC12 axe.

The one took a stick, the other an axe. (GS_1)

At the same time, #ka= can be a copulative/relative that appears as a proclitic prefix on the verb referring to an object concord of noun class 12.

As seen above, the subject vowels have a unique discrete function and are used in specific environments. However, temporal reference does not seem to be the common denominator, since most sentences are in past tense. More likely, the subject vowels *-i-* and *-a-* distinguish between the imperfective and perfective aspect respectively, the subject vowel *-e-* denotes the potential mood, and the subject vowel *-u-* indicates a sequent chain of events as a consecutive relative tense marker. In cases where the SC is omitted, the pre-initial narrative markers #nga- or #ka- are used, or the infinitive marker #ku-. However, to establish the function and meaning of the subject vowels, other TAM markers were analysed as well. Below, an overview of all pre-initial (§6.2.2.1.) and pre-stem (§6.2.2.2.) markers found in the data is given, with a description of their occurrences. Finally in §6.2.2.3., the final vowels are analysed, to establish whether or not shiYeyi employs vowel harmony or whether the final vowels carry discrete function and meaning.

6.2. Tense, aspect and modality

6.2.1. Temporal adverbials

Temporal adverbials (TABLE 16) are used to indicate the time frame in which the utterance takes place. Usually the temporal adverbial is expressed sentence initial, and only used once in narration.

TABLE 16. Temporal adverbials in *shiYeyi*

<i>namushi</i>	today	<i>ati</i>	when, after
<i>iworo</i>	yesterday	<i>akyani'i</i>	now
<i>iliyo</i>	day before yesterday	<i>n/nana</i>	while
<i>uhuruhuru</i>	for a long time	<i>katanzi</i>	for a long time

After denoting the specific time at the beginning of a narration, the alternative adverbial *àti* is deployed to describe a sequence of events. In this sense, the adverbial *àti* can be understood as 'and than...'.¹

6.2.2. Grammatical TAM markers

6.2.2.1. Relative tense markers

#nga-

The pre-initial morpheme *#nga-* is used to string a sequence of events together, after the lexical tense is expressed initially. The total number of occurrences of *#nga-* is 79 (see § 6.1).

(19) Àti	ndìkùyá					kúnì	kù	Idiháyè,	
<i>Ati</i>	<i>nd-</i>	<i>i-</i>	<i>ku-</i>	<i>y</i>	<i>-a</i>	<i>kuni</i>	<i>ku</i>	<i>Idi-</i>	<i>hayè,</i>
After	SC1S	IMPFV	VEN	come	IND	LOC17	NC17	NC5	village
	ngànditishàngàná					wàwàmwé	pòpánà		
<i>#nga-</i>	<i>nd-</i>	<i>i-</i>	<i>ti-</i>	<i>shangan</i>	<i>-a</i>	<i>wawa-</i>	<i>mwe</i>	<i>popa-</i>	<i>na</i>
NARR	SC1S	IMPFV	PROG	meet	IND	2	some	LOC16	be
	pàná'à.								
<i>pa-</i>	<i>na'a.</i>								
NC16	DEM3								

After I came from the village, I met some people there. (GS_1)

#ka-

The pre-initial morpheme #ka- can be used in multiple functions, i.e. subject agreement of noun class 12 (see above), narrative marker, or negation marker (see § 6.3.). The narrative marker #ka- has the apparent same function and meaning as the narrative marker #nga- above. The total number of occurrences of #ka- is 164 (see § 6.1).

(20) Pápù	K.	àmàkáyànà						
<i>Papu</i>	<i>Karan numa</i>	<i>a-</i>	<i>m-</i>	<i>a-</i>	<i>ka-</i>	<i>yan</i>	<i>-a</i>	
LOC16	PropN.	?	SC3S	PFV	ITI	find	IND	
zìng'òmbe ...	àti	àkáyànà					zìng'òmbe	
<i>zi(n)-</i>	<i>ng'ombe</i>	<i>ati</i>	<i>a-</i>	<i>ka-</i>	<i>yan</i>	<i>-a</i>	<i>zi(n)-</i>	<i>ng'ombe</i>
NC10	cow	that	SC3S	ITI	find	IND	NC10	cow
kàtishimùrùrá				kùzibùrà				
<i>ka-</i>	<i>ti-</i>	<i>shimurur</i>	<i>-a</i>	<i>ku-</i>	<i>zi-</i>	<i>bur</i>	<i>-a</i>	
NARR-	?	start	IND	NC15	OC10	kill	IND	

There in *Karan|numa* he found cows ... after finding those cows, he/we (?) started to kill them. (GS_3)

Note that in (20), the narrative marker #ka- is followed by either SC-*i-* or the progressive marker -*ti-*, however, from the context it remains unclear which morpheme it is. Most likely, -*ti-* indicates SC1P with the imperfective marker -*i-*, since this falls within the expectations. In that case, it's not the third person singular that kills the cows, but rather the killing is a communal plural activity.

6.2.2.2. TAM markers

-ti-

The subject vowels that can combine with the formative -*ti-* are SC-*i-* and SC-*a-*. The formative -*ti-* combines with -*ku-* and -*ka-*, and does not combine with -*ta-* and -*ra-*. Only FV -*a* combines with the morpheme -*ti-*.

(21) Ngànditikàshùká.

<i>Nga-</i>	<i>nd-</i>	<i>i-</i>	ti-	<i>ka-</i>	<i>shuk</i>	<i>-a.</i>
NARR	SC1S	IMPFV	PROG	ITI	return	IND

And than I am going back (from there). (GS_1)

(22) Tà ndàtizòròká ...

<i>Ta</i>	<i>nd-</i>	<i>a-</i>	ti-	<i>zorok</i>	<i>-a</i>
ADV	SC1S	PFV	PROG	turn around	IND	

ngànditirángàrà.

<i>nga-</i>	<i>nd-</i>	<i>i-</i>	ti-	<i>rangar</i>	<i>-a</i>
NARR	SC1S	IMPFV	PROG	sleep	IND

Until I am turning around and I am sleeping. (GS_1)

-ku-

Always preceded by SC-*i-* or SC-*u-* and followed by *-ka-*, OC, or R. When *-ti-* is included in the predicate, the SC-*i-* or SC-*u-* becomes SC-*a-* and *-ti-* precedes *-ku-*, so SC-*a-ti-ku-*. In addition, the predicate always ends in FV *-a* when the morpheme *-ka-* is expressed. The construction SC-*i-ku-R-a* is always marked with a locative (LOC16/17/18) or a temporal adverbial in the clause. Finally, the prefix *-ku-* often co-occurs with the verbs *-dzwa* ('to come from') or *-ya* ('to come'), as shown in (23) and (24) respectively.

(23) Àti	ndikùdzwá					kókù	shìkhwátá,	
<i>Ati</i>	<i>nd-</i>	<i>i-</i>	ku-	<i>dzw</i>	<i>-a</i>	<i>koku</i>	<i>shi-</i>	<i>khwata,</i>
After	SC1S	IMPFV	VEN	come from	IND	LOC17	NC7	Kgotla

ngàndiyéndé					(kókù)	ìkilínìkì.	
<i>nga-</i>	<i>nd-</i>	<i>i-</i>	<i>yend</i>	<i>-e</i>	<i>(koku)</i>	<i>i-</i>	<i>kilini.</i>
NARR	SC1S	IMPFV	GO	SUBJ	LOC17	NC9	hospital

After I come here from the Kgotla, I am going to the hospital. (GS_1)

(24) Tàtikùyá						tikùsikàmà				
<i>t-</i>	<i>a-</i>	<i>ti-</i>	ku-	<i>y</i>	<i>-a</i>	<i>t-</i>	<i>i-</i>	ku-	<i>sikam</i>	<i>-a</i>
SC1P	PFV	PROG	VEN	COME	IND	SC1P	IMPFV	VEN	settle	IND

àkyò	pá'á		nì	wáwà	katanzi.
<i>akyo</i>	<i>p-</i>	<i>a'a</i>	<i>ni</i>	<i>wawa</i>	<i>katanzi.</i>
ADV	NC16	DEM2	with	PRN3P	ADV

We were coming here and we are settling here with them. (GS_3)

-ka-

The morpheme *-ka-* often occurs in combination with a locative marker (LOC16/17/18), or with verbs indicating that the event takes place away from the speaker, such as *-yenda* ('to go'), *-shuka* ('to go back'). The prefix *-ka-* can often be translated as 'there', 'over there' and expresses a distal deictic centre, as seen in (25) and (26). Furthermore, the marker *-ka-* combines with all subject vowels, all pre-stem morphemes and with all FVs.

(25) **Ngànditikàshùká.**

Nga- nd- i- ti- ka- shuk -a.
NARR SC1S IMPFV PROG ITI go back IND

And then, I am going back (home)(from there). (GS_1)

(26) **Kàtikámwàná**

rùwá

rà

màyéré.

Ka- ti- ka- mwan -a ru- wa ra ma- yere.
NARR PROG ITI see IND NC5 field CONN5 NC6 millet

And then, he (anaphoric) is seeing a millet field over there. (GS_3)

-i-

The pre-stem morpheme *-i-* seems to be ambiguous, since the actual presence is not always clear. In sentence (27), the glossed morpheme *-i-* cannot be traced back from the phonetic sentence, which raises the question whether the morpheme *-i-* occurs at all.

(27) **Ìwòró**

ndàtàyìminá

zìlòrì

kó'ò;

Iworo nd- a- ta- yimin -a zi- llori k- o'o;
Yesterday SC1S PFV Cmpl wait for IND NC10 car NC17 DEM2

tikùzikìní.

t- i- ku- zi- i- kin -i.
SC1P IMPFV VEN OC10 ?? not find EPIST

Yesterday I was waiting for a lift there; we didn't find it (the lift). (GS_1)

In sentence (28), both the morpheme *-i-* and the verb root are not glossed by Sommer (1995). However, elsewhere in the data the noun *ildina* is glossed as 'the name'. In this sense, the verb phrase *kaildi* ('to call/name'), above, might not carry a morpheme *-i-* at all.

(28) **Shikáti**

(y)étú

kàíldì

Hankuzi.

Shikati y- etu ka- i- ldi Hankuzi.
Chief 1 POSS1P NARR ?? ?? PropN

Our chief is called Hankuzi. (GS_3)

Again in (29), the morpheme *-i-* is unclear in function and meaning, additionally in this case, because the morpheme is placed between the OC and the verb root. One other occasion where the verb 'to

follow' occurs is in the imperative "Nì!ámà wàpúdì!" ('Follow the goats!'). Similarly in this case, the verb root is preceded by the imperfective *-i-*. A possible explanation for the occurrence of *-i-* in is that the verb root is *-i!ama* instead of *-!ama*, however, further data should give more insights on this tentative conclusion. A similar thing happens with the verb *-nn/amu* (to tie together) in (30).

(29) Àtikyá	àkùmwí!ámà						kùnà	kwìnjùwó,.....		
<i>Atikya</i>	<i>a-</i>	<i>ku-</i>	<i>mu-</i>	<i>i-</i>	<i>!am</i>	<i>-a</i>	<i>kuna</i>	<i>ku-</i>	<i>i-</i>	<i>njuwo,...</i>
Next	SC3S	VEN	OC3S	??	follow	IND	LOC17	NC17	NC9	house

Next, (the mother) is following him (the child) there to the house, ... (GS_1)

(30) Tìyísá	mùkáu.					Tìinn ámù.			
<i>T-</i>	<i>i-</i>	<i>yis</i>	<i>-a</i>	<i>mu-</i>	<i>kau.</i>	<i>T-</i>	<i>i-</i>	<i>i-</i>	<i>nn/amu.</i>
SC3P	IMPFV	take	IND	NC3	string.	SC3P	IMPFV	??	tie together

Kàshìminé.

<i>Ka-</i>	<i>shimin</i>	<i>-e.</i>
NARR	tie up	SUBJ

We are taking a string. We tie together. We tie up. (GS_1)

In sentence (30) above, the morpheme *-i-* could well be part of the verb root, i.e. *-inn/amu* instead of *-nn/amu*. This assumption would additionally explain the odd occurrence of the word initial double nasal sound. The final gloss of the *-i-* morpheme is shown in (31). The combination below of *ko-i-R-a* is unique in the data (Sommer, 1995) and remains impossible to analyse.

(31) ... tikùshàngàná	(hápè) zìntshará					zétù			
<i>...t-</i>	<i>i-</i>	<i>ku-</i>	<i>shangan</i>	<i>-a</i>	<i>(hape)</i>	<i>zin-</i>	<i>tshara</i>	<i>z-</i>	<i>etu</i>
...SC1P	IMPFV	VEN	meet	IND	again	NC10	friend	NC10	POSS1P
(hápè) wòwàré	kòinjèná					nà			
<i>(hape)</i>	<i>wo-</i>	<i>w-</i>	<i>a-</i>	<i>re</i>	<i>ko-</i>	<i>i-</i>	<i>njen</i>	<i>-a</i>	<i>na</i>
again	REL2	NC2	PFV	be	NC15?	??	enter	IND	CONN
(yè)tshùé	shikhwèéré....								
<i>yeshue</i>	<i>shi-</i>	<i>khweere</i>							
PRN1P	NC7	school							

...we met our friends again, who entered the school with us.... (GS_1)

At the same time, Seidel (2008b) describes the SC *ko-* for second person singular in certain cases, however, this reading does not add up in the above context.

-shi-

The prefix *-shi-* is used when a hypothesis is made of what would have happened if the existing situation stayed the same, i.e. 'if this had remained, than that...'.

(32) N nana		kùshiná		ákyó	wàyèyí				
<i>N nana</i>		<i>ku-</i>	<i>shi-</i>	<i>na</i>	<i>akyo</i>	<i>wa-</i>	<i>yeyi</i>		
If		NC15	PERS	be	ADV	NC2	yeyi		
		kàwàtízórómùshirá					wàtswánà.		
	<i>ka-</i>	<i>w-</i>	<i>a-</i>	<i>ti-</i>	<i>zoromush</i>	<i>-ir</i>	<i>-a</i>	<i>wa-</i>	<i>tswana.</i>
	NARR	SC3P	PFV	PROG	turn around	APPL	IND	NC2	tswana

If it would still be like that, the waYeyi would turn against the Tswana. (GS_3)

In the data set the two occurrence of the morpheme *-shi-* are combined as *ku-shi-R-a* and *SC-i-shi-R-a*. At the same time, it can give background information on the situation as it was at the focus point, as in (33).

(33) Pòpá'à		yèmè	ndishiré			mùpùndí.	(Yáánò)		
<i>Pop-</i>	<i>a'a</i>	<i>yeme</i>	<i>nd-</i>	<i>i-</i>	<i>shi-</i>	<i>re</i>	<i>mu-</i>	<i>pundi.</i>	<i>Yaano</i>
NC16	DEM2	PRN1S	SC1S	IMPFV	PERS	be	NC1	child.	ADV
		ndàrè		kùyivwá		ngáhò,	wàkùrù		
	<i>nd-</i>	<i>a-</i>	<i>re</i>	<i>ku-</i>	<i>yivw</i>	<i>-a</i>	<i>ngaho,</i>	<i>wa-</i>	<i>kuru</i>
	SC1S	PFV	be	NC15	hear	IND	only	NC2	big, old
		wàtitikyá				kàtànzí	yètshùé	wàdzò	
	<i>w-</i>	<i>a-</i>	<i>ti-</i>	<i>tiky</i>	<i>-a</i>	<i>katanzi</i>	<i>yetshue</i>	<i>wa-</i>	<i>dzo</i>
	SC3P	PFV	PROG	say	IND	ADV	PRN1P	NC2	Yeyi
		àkyò	páá,		yètshùé	wàdzòkàzí	kó	Kápiriví	
	<i>akyo</i>	<i>p</i>	<i>a'a,</i>	<i>yetshue</i>	<i>wa-</i>	<i>dzo</i>	<i>kazi</i>	<i>ko</i>	<i>kapirivi</i>
	that	NC16	DEM2	PRN1P	NC2	Yeyi	woman	LOC17	Caprivi
		tàràná,...							
	<i>t-</i>	<i>a-</i>	<i>ra-</i>	<i>na, ...</i>					
	SC3P	PFV	INC	be					

I was a child. When I only heard from the elders, they said that us waYeyi, that is waYeyi woman, come from the Caprivi. (GS_3)

The prefix *-shi-* in the first sentence describes the situation, as it existed when the second sentence is introduced. The fact of the speaker still being a child, when she heard where her ancestors came from, is the actual focus point.

-ta-

The limitative *-ta-* indicates that the state of the verb is not changing anymore, i.e. the event is irreversible. The action of the verb appears to have a completive character. The pre-stem prefix *-ta-* does not combine with the morphemes *-ti-* and *-ra-*, it is always preceded by *SC-a-*, which expresses the perfective state. In addition, the morpheme *-ta-* does not indicate when the event took place in the past, as shown in (34).

(34) Hàngá	tátà yá					mónì	mònà	Shorobe.
<i>Hanga</i>	<i>t-</i>	<i>a-</i>	ta-	<i>y</i>	<i>-a</i>	<i>moni</i>	<i>mona</i>	<i>Shorobe.</i>
ADV	SC1P	PFV	CMPL	come	IND	LOC18	LOC18	Shorobe

Tátàkàtíyà						wùthúkù	ìndì	ìnjàrà.	
<i>T-</i>	<i>a-</i>	ta-	<i>ka-</i>	<i>tiy</i>	<i>-a</i>	<i>wu-</i>	<i>thuku</i>	<i>indi</i>	<i>i- njara.</i>
SC1P	PFV	CMPL	ITI	flee	IND	NC14	illness	CONN	NC9 hunger

That's how we came to Shorobe. We fled from illness and hunger. (GS_3)

-ra-

The limitative morpheme *-ra-* expresses the start or the coming into being of an event at some point in the past, and the verb will change over the course of time towards the speech moment. The prefix *-ra-* does not combine with *-ti-* and *-ta-*, and is always preceded by *SC-a-*, which indicates perfective character of *-ra-*.

(35) “Tì(y)isà				mùkàù	
<i>“T-</i>	<i>i-</i>	<i>yis</i>	<i>-a</i>	<i>mu-</i>	<i>kau</i>
SC1P	IMPFV	take	IND	NC3	string

shítirán!áwà					kùìg ámù!”		
<i>shi=</i>	<i>t-</i>	<i>i-</i>	ra-	<i>n!aw</i>	<i>-a</i>	<i>ku-</i>	<i>ig amu</i>
REL7=	SC1P	IMPFV	INC	try	IND	NC15	tie together

We take a string, we try to tie it (the things) together. (GS_1)

(36) (Yáánô) námúshí	(áyì), (yáánô)	àwàtù				
<i>(Yaano) namushi</i>	<i>(ayi), (yaano)</i>	<i>a- wa- tu</i>				
ADV	today	INTERJ	ADV	2	NC2	person

wàwà xíkí	ngácò	shikùtikyá	(yáánô) wáwàràbè.						
<i>wawa-</i>	<i> xiki</i>	<i>ngaco</i>	<i>shikutikya</i>	<i>(yaano) w-</i>	<i>a-</i>	<i>wa-</i>	ra-	<i>be.</i>	
2	one	only	because	ADV	SC3P	PFV	OC3P	INC	resist

Today we are one people, only because they resisted them. (GS_3)

In contrast to what is mentioned above, the combination *-ta-ra-* occurs three times in the data set and only in combination with the verb *-isi* ('to do / to make'), as shown in (37)-(39).

(37) Ìwòró	pà!hú			shìshìndàtàràsí .					
<i>Iworo</i>	<i>p-</i>	<i>a-</i>	<i>!hu</i>	<i>shishi=</i>	<i>nd-</i>	<i>a-</i>	ta-	ra-	<i>si.</i>
Yesterday	NC16	PFV	NEG	REL7	SC1S	PFV	CMPL	INC	do

Yesterday I didn't do anything in particular. (GS_1)

(38) Zóẓìndàtàràsí						ngáhò	ìwòró.
Zozi=	nd-	a-	ta-	ra-	si	ngaho	iworo.
REL10	SC1S	PFV	CMPL	INC	do	nothing	yesterday

That's all that I did yesterday. (GS_1)

(39) (Yáánò) wàtàràsí						zìnzàrà	záwò.		
(Yaano)	w-	a-	ta-	ra-	si	zi-	nzara	z-	awo.
ADV	SC3P	PFV	CMPL	INC	make	NC10	cousin	NC10	POSS3P

You made them your cousins. (GS_3)

For reasons of too little data, the function and meaning of the above combination remains unclear, presumably it might indicate an event starting and finishing before the moment of speech.

6.2.2.3. Final vowel

-a#

The final vowel *-a* is used when the predicate holds factual information or truth, as seen in (40). This function and meaning appears to express the traditional indicative mood and often in appears in main clauses.

(40) Yèṣhùé		kàṭìdùsà				kó'ò.	
Yetshue	ka-	t-	i-	ldus	-a	k-	o'o
PRN1P	NARR	SC1P	IMPFV	put across	IND	NC17	DEM2

We put (them) across (the stream) there. (GS_3)

An additional use of the FV *-a* is the imperative mood, in which the most common form in shiYeyi is constructed as (SC-*i*)-R-*a*. This function is a direct command to the interlocutor, as shown in (41) and (42).

(41) "Nì ámà				wàpáldì!"
"N-	i-	am	-a	wa- paldi!"
SC2P	IMPFV	follow	IND	NC2 goat

"Follow the goats!" (GS_1)

(42) "Tàpìrá			wàyùéni!"
"Tapir	-a	wa-	yueni!"
dish out food	IND	NC2	guest

"Dish out the food for the guests!" (GS_1)

-e#

The final vowel *-e* is used when the predicate holds non-factual information or uncertainty, as seen in (43) and (44). This function and meaning appears to express the traditional subjunctive mood and often in appears in subclauses.

(43) **Àtàpírè** **mò,** **tikùldiá.**

<i>A-</i>	<i>tapir</i>	<i>-e</i>	<i>mo,</i>	<i>t-</i>	<i>i-</i>	<i>ku-</i>	<i>ldi</i>	<i>-a.</i>
SC3S	dish out food	SUBJ	LOC16	SC1P	IMPFV	VEN	eat	IND

She dishes out food, so we can eat. (GS_1)

(44) **Mùpúndì** **yó'ò** **àkàyisé.**

<i>Mu-</i>	<i>pundi</i>	<i>y-</i>	<i>o'ò</i>	<i>a-</i>	<i>ka-</i>	<i>yis</i>	<i>-e.</i>
NC1	child	1	DEM2	SC3S	ITI	take	SUBJ

Every child takes it (the firewood). (GS_1)

The imperative occurs in the subjunctive mood as well, as shown in (45), and appears to be more polite than the imperative in the indicative mood.

(45) **"...nìdzwé!"**

<i>"...n-</i>	<i>i-</i>	<i>dzw</i>	<i>-e!"</i>
SC2P	IPFV	come from	SUBJ

"...you should go!" (GS_1)

The compound imperative construction is build up with *-yend-e* (to go) and (SC-*e*-)R-*e*, i.e. "go and do X". The propositional character of this construction appears to trigger the subjunctive mood, as shown in (46) and (47).

(46) **"Yèndé** **òkàwáshàké!"**

<i>"yend</i>	<i>-e</i>	<i>o-</i>	<i>ka-</i>	<i>wa-</i>	<i>shak</i>	<i>-e!"</i>
go	SUBJ	SC2S	ITI	OC3P	look for	SUBJ

"Go and look for them (the goats)!" (GS_1)

(47) **"Yèndè** **ùkáyàré** **ùwùr(o)** **wàngá!"**

<i>"Yend</i>	<i>-e</i>	<i>u-</i>	<i>ka-</i>	<i>yar</i>	<i>-e</i>	<i>u-</i>	<i>wu-</i>	<i>ro</i>	<i>w-</i>	<i>anga!"</i>
go	SUBJ	SC2S	ITI	get of	SUBJ	14	NC14	bed	NC14	POSS1S

"Go and get of my bed!" (GS_3)

In addition, the compound hortative construction can be altered with subject concord and aspectual subject vowel *-e*, in which *-i* becomes the aspectual subject vowel of the second verb. SC-*e-yend-e* SC-*i-ka-R-e* is a fixed hortative construction in shiYeyi and can be translated as “Let us go and do X”, as shown in (48).

(48) “(Éhè) tééndè tikàkyàwè

<i>ehe</i>	<i>t-</i>	<i>e-</i>	<i>yend</i>	<i>-e</i>	<i>t-</i>	<i>i-</i>	<i>ka-</i>	<i>kyaw</i>	<i>-e</i>
INTERJ	SC1P	HORT	go	SUBJ	SC1P	IMPFV	ITI	get firewood	SUBJ

zìnkùni!

<i>zin-</i>	<i>kuni</i>
NC10-	firewood

“Let us go to get firewood!” (GS_1)

-i#

The final vowel *-i* is used in cases where the event is an assumption, speculation or deduction of the speaker and seems to express the epistemic mood, as seen in (49)-(51).

(49) Ngàndikàmónì ùndávù

<i>Nga-</i>	<i>nd-</i>	<i>i-</i>	<i>ka-</i>	<i>mon</i>	<i>-i</i>	<i>u-</i>	<i>ndavu</i>
NARR	SC1S	IMPFV	ITI	see	EPIST	NC1a	lion

màbúré		zìng’òmbé		zángà		zintátù.			
<i>m-</i>	<i>a-</i>	<i>bur</i>	<i>-e</i>	<i>zi-</i>	<i>ng’ombe</i>	<i>z-</i>	<i>anga</i>	<i>zin-</i>	<i>tatu</i>
SC3S	PFV	kill	SUBJ	NC10	COW	NC10	POSS1S	NC10	three

I saw that the lion killed three of my cows. (GS_1)

(50) (Yááno) ngàtitildùmáràrà àtikyá

<i>(yaano)</i>	<i>nga-</i>	<i>t-</i>	<i>i-</i>	<i>ti-</i>	<i>ldumaran</i>	<i>-a</i>	<i>atikya</i>
ADV	NARR	SC1P	IMPFV	PROG	agree	IND	that

kùtiyé		tishàngáni					
<i>ku-</i>	<i>ti-</i>	<i>y</i>	<i>-e</i>	<i>t-</i>	<i>i-</i>	<i>shangan</i>	<i>-i</i>
NC15	PROG	come	SUBJ	SC1P	IMPFV	meet	EPIST

tihwétizáni.

<i>t-</i>	<i>-i</i>	<i>hwet</i>	<i>-iz</i>	<i>-an</i>	<i>-i</i>
SC1P	IMPFV	talk	CAUS	REFL	EPIST

We agreed that we would meet and talk. (GS_1)

(51) Ndùkùtáyà					mwàná	mwán(à)	(y)àngá			
<i>Nd-</i>	<i>u-</i>	<i>ku-</i>	<i>tey</i>	<i>-a</i>	<i>mu-</i>	<i>ana</i>	<i>mu-</i>	<i>ana</i>	<i>y-</i>	<i>anga</i>
SC1S	CMPL	VEN	say	IND	NC1	child	NC1	child	1	POSS1S

àtikyá:	“Wàphéné	wàtháhà,	
<i>atikya</i>	<i>wa- phene</i>	<i>w- a- thah -a</i>	
that	NC2 goat	SC2 PFV brake out	IND

wééndì		mónì	ldívù.”
<i>w-</i>	<i>e-</i>	<i>yend -i</i>	<i>moni ldi- vu</i>
SC2	POT	GO EPIST	LOC18 NC5 place

I said to my grandchild: “The goats broke out, they must have gone to the field.” (GS_1)

-u#

The final vowel *-u* only occurs on three occasions in the data set. The three sentences in the data are glossed, by Sommer (1995), as if they have final vowel *-u*, however, a closer look shows that the final vowel is actually omitted, as shown in (52)-(54).

(52) Ìwòró	ndàdzù		pàní’i.
<i>Iworo</i>	<i>nd- a- dzu</i>	<i>-∅</i>	<i>pa- ní’i.</i>
Yesterday	SC1S PFV come from	FV	NC16 DEM1

Ndàyèndé		kò	mùzì.
<i>nd-</i>	<i>a-</i>	<i>yend -e</i>	<i>ko mu- zi.</i>
SC1S	PFV	GO SUBJ	LOC17 NC3 village

Yesterday I came from there. I went to the village. (GS_1)

(53) Ngàhó	wàfù		kù	zìshwèní	ngáhò
<i>Ngaho</i>	<i>w-</i>	<i>a-</i>	<i>fu -∅</i>	<i>ku zi- nshweni</i>	<i>nga- ho</i>
ADV	SC3P	PFV	die FV	LOC17 NC10 shame	NC6 lack

nàbí.
nabi.
bad

They only die of shame not of being bad. (GS_1)

(54) Ndùkàmwaná					wáng’kúkú	wòwù	shìkhwèéré
<i>Nd-</i>	<i>u-</i>	<i>ka-</i>	<i>mwan -a</i>	<i>wa-</i>	<i>ng’kuku wowu</i>	<i>shi- khweere</i>	
SC1S	CNS	ITI	see IND	NC2	chicken CONN2	NC7	school

shishikàndó			wáfù				(hà ldi sipe).	
<i>shi-</i>	<i>shi-</i>	<i>kando</i>	<i>w-</i>	<i>a-</i>	<i>fu</i>	<i>-∅</i>	<i>(ha ldi sipe).</i>	
NC7	NC7	big	SC3P	PFV	die	FV	ADV	

I saw the chickens of the school, they all died. (GS_1)

The sentences above show the bare verb *-dzwa* ('to come from') and *-fwa* ('to die'), in which the FV *-a* is omitted in the examples, leaving the underlying form of the assimilated vowels ending in *-u*. This vowel *-u* is, however, is part of the verb root and cannot be considered the final vowel. The FV deletion might indicate modality, however, further analysis of this phenomenon is needed to conclude the function and meaning.

-o#

The final vowel *-o* is not inflectional, but rather derivational, and is used to form a substantive from a verb as shown in TABLE 17.

TABLE 17. *Verb to noun derivation*

<i>-támbúk-à</i>	to wake up	<i>mà-támbúk-ò</i>	the awaking
<i>-bèrèk-á</i>	to work	<i>mù-bèrèk-ò</i>	the job
<i>-táp-á</i>	to dig	<i>shì-táp-ò</i>	place to dig

6.3. Negation

ShiYeyi can express negation in three different constructions on the predicate, i.e. the pre-initial morpheme *#ka-*, the post-initial morpheme *-ha-*, and the auxiliary verb *-!hu*. The auxiliary *-!hu* is constructed in a fixed manner as *SC-i-(LOC-)!hu* plus the infinitive *ku-R-a*.

#ka-

(55) Pà'á	kàndimùnù						kùlè móhà		
<i>pa-</i>	<i>a'a</i>	<i>ka-</i>	<i>nd-</i>	<i>i-</i>	<i>mu-</i>	<i>nu</i>	<i>ku-</i>	<i>lemoh</i>	<i>-a</i>
NC16	DEM2	NEG	SC1S	IMPFV	NEG	AUX	NC15	recognize	IND
nà!á	pópù	wáyèyí	wáré			kùtùrèhá.			
<i>na!a</i>	<i>popu</i>	<i>wa-</i>	<i>yeyi</i>	<i>w-</i>	<i>a-</i>	<i>re</i>	<i>ku-</i>	<i>tureh</i>	<i>-a.</i>
ADV	LOC16	NC2	yeyi	SC2	PFV	be	NC15	originate	IND

I cannot tell where the waYeyi originate. (GS_3)

-ha-

(56)	Kùyìwá		ngáhò	yémé	kókù	wàkùrù		wàngá (...)		
	<i>Ku-</i>	<i>yivw</i>	<i>-a</i>	<i>ngaho</i>	<i>yeme</i>	<i>koku</i>	<i>wa-</i>	<i>kuru</i>	<i>w-</i>	<i>anga (...)</i>
	NC15	hear	IND	only	PRN1S	LOC17	NC2	big/old	NC2	POSS1S

	Kùzùrùwá			ndàhàyììré.						
	<i>Ku-</i>	<i>zuuru</i>	<i>-w</i>	<i>-a</i>	<i>nd-</i>	<i>a-</i>	<i>ha-</i>	<i>yìziir</i>	<i>-e.</i>	
	NC15	tell	PASS	IND	SC1S	PFV	NEG	know	SUBJ	

That's all that I heard from my elders (...). I don't know, only from hearsay. (GS_3)

-!hu

(57)	Ndimù!hú			kùshàngáná			nà	(nà)	
	<i>Nd-</i>	<i>i-</i>	<i>mu-</i>	<i>!hu</i>	<i>ku-</i>	<i>shangan</i>	<i>-a</i>	<i>na</i>	<i>na</i>
	SC1S	IMPFV	LOC16	NEG	NC15	find	IND	with	with

yúúmwe.

<i>yuu-</i>	<i>mwe.</i>
1	someone

I did not find anyone there. (GS_1)

(58)	(Yáánò)	kù!hú		shóshìndàtèhwètìzánà							
	<i>(Yaano)</i>	<i>ku-</i>	<i>!hu</i>	<i>shoshi=</i>	<i>nd-</i>	<i>a-</i>	<i>ta-</i>	<i>hwet</i>	<i>-iz</i>	<i>-an</i>	<i>-a</i>
	ADV	NC15	NEG	REL7	SC1S	PFV	CMPL	speak	CAUS	REFL	IND

nàwò

<i>na-</i>	<i>awo...</i>
CONN	POSS3P

It was nothing that I spoke with them ... (GS_1)

7. SUBJECT CONCORD IN RELATION TO TENSE, ASPECT AND MOOD

This chapter presents my analysis of shiYeyi's verbal morphology after analyzing the data set, particularly the relation between subject concord and TAM. According to my data analysis above, all predicate morphemes in shiYeyi have their own discrete function and meaning, and can be divided in a template as TABLE 18. All pre-radical markers appear in low tone, except for the OC (H). The final vowel mostly carries H, whereas the verb extensions vary in tone according to the verb root.

TABLE 18. *Verbal slots in shiYeyi based on Meeussen, 1967.*

1	2a	2b	3	4	5	6.1	6.2	6.3	7
pre-initial	initial	post-initial ₁	post-initial ₂	formative	limitative	infix	radical	suffix	final
NEG ₁ , NARR,	SC, INF	subject vowel	NEG ₂ , PROG	VEN, PERS, CNT	CMPL, INC, IT	OC	verb root	extension	final vowel
<i>nga-</i>	SC	<i>-i-</i>	<i>-ha-</i>	<i>-ku-</i>	<i>-ta-</i>	OC		APPL	<i>-a</i>
<i>ka-</i>	<i>ku-</i>	<i>-a-</i>	<i>-ti-</i>	<i>-shi-</i>	<i>-ra-</i>			CAUS	<i>-e</i>
		<i>-u-</i>		<i>-riku</i> ¹	<i>-ka-</i>			PASS	<i>-i</i>
		<i>-e-</i>			<i>(-i-)</i>			NeutP	\emptyset
								REFL	

¹ Only found in CY (Seidel, 2008b)

The subject vowel is a merge of SC and TAM markers, on the one hand the subject vowel is the nucleus of the subjectal syllable, on the other hand the subject vowel expresses TAM meaning on the predicate. Because of this merge between SC and TAM of the subject vowel, they do not fit in slot 3 of the template based on Meeussen (1967). The negative marker *-ha-* occurs with SC-*i-*, the progressive marker *-ti-* occurs (at least) with SC-*i-* and SC-*a-*. For this reason, the initial slot is divided into (a) and (b), in which the SC fits in slot 2a and the subject vowel with its TAM function in slot 2b.

7.1. Subject concord paradigm

Rather than a double paradigm of SC depending on temporal expression, I would describe the vowel of the SC as aspectual/modal markers. The vowel is determined whether the predicate is imperfective aspect (SC-*i-*), perfective aspect (SC-*a-*), potential modality (SC-*e-*), or consecutive relative tense (SC-*u-*). The findings in TABLE 15 (§ 6.1) contradict the notions shown in TABLE 12 (§ 4.2.), due to the high number of occurrences of SC-*i-* within the data. Since the analysed texts are narratives of past events, one would expect to find SC-*a-* almost exclusively. As mentioned earlier, Baumbach (1997), Sommer (2000), Lukusa (2002) and Seidel (2008a) describe SC-*a-* for all affirmative past tenses and the present tense. However, the data shows that the majority of inflected verb stems carry SC-*i-*, even though, the distribution of SC-*i-* and SC-*a-* is nearly even. In my opinion, the subject vowel can therefore not be a tense marker, but shows the characteristics of an opposition between imperfective (SC-*i-*) and perfective (SC-*a-*) aspect. In the first, the action of the verb can be seen as an unbound whole where beginning and/or end are not important or not known. In the latter, the action of the verb can be viewed as a bound action with a clear beginning and/or end. Presuming the subject vowel is included in the aspectual/modal paradigm, the SC-roots in the initial slot are as shown in TABLE 19. In cases where the SC-root ends in *-u*, the imperfective is \emptyset marked and in the perfective the subject vowel *-u* becomes the glide /w/, i.e. *ru-* > *rwa* and *tu-* > *twa-*.

TABLE 19. *Subject concord paradigm*

1S	<i>nd-</i>	1P	<i>t-</i>
2S	<i>u-/ma⁻¹/ko⁻¹</i>	2P	<i>n-</i>
1	<i>u-/a-/ma⁻²</i>	2	<i>wa-</i>
3	<i>wa⁻³/ba-</i>	4	<i>y-</i>

5	<i>ld(y²)-</i>	6	<i>ng-/ m⁻³</i>
7	<i>sh-</i>	8	<i>z-</i>
9	<i>y-/i⁻³</i>	10	<i>z-</i>
11	<i>ru-</i>		
13	<i>tu-</i>	12	<i>ka-</i>
14	<i>w-</i>		

¹ Only found in CY (Seidel, 2008b)

² Forms only occur in the perfective.

³ Only found in NY (Sommer, 1995)

The contrast between imperfective and perfective aspect in shiYeyi is status of the internal structure of the event expressed by the verb and the distinction of the various phases of the event. The imperfective is a situation perceived as an unbounded event that can be divided in several phases, some of which are completed and others that are not completed. In the imperfective, nor the beginning nor end of the event is important or known. In contrast, in the perfective the event is perceived as one single bounded event, which can be viewed in its entirety and there is a specific beginning and end to the event. The imperfective and perfective occur on both stative and durative verbs, and are not related to verb categories. Notwithstanding that, the imperfective and perfective can co-occur in the same sentence, in which the first describes the background of an event and the latter describes the actual event (as seen in (59)).

(59) **Àtì Idikùwirà ndàyèshè**

<i>Ati</i>	<i>ld-</i>	<i>i-</i>	<i>ku-</i>	<i>wir</i>	<i>-a</i>	<i>nd-</i>	<i>a-</i>	<i>yesh</i>	<i>-e</i>
ADV	SC5	IMPFV	VEN	go.down	IND	SC1S	PFV	bake	SUBJ

ùròthó.

<i>u-</i>	<i>rotho.</i>
NC14	bread

After the sun went down, I baked bread. (GS_1)

Additional functions in subject vowels are potential modality (SC-*e*-) and consecutive relative tense (SC-*u*-). In the first, the action of the verb is a hypothetical proposition of an event that still has to happen. The potential SC-*e*- combines with the itive (-*ka*-) or ventive (-*ku*-) aspect marker and subjunctive mood marker -*e* in the fixed hortative construction 'let's go and do X' (see below), as an encouragement of a potential action. In contrast to other aspectual markers, the hortative mood appears to carry high tone, whereas the potential carries the common low tone. In the consecutive SC-*u*-, the verb is a following action on a previous event. The relative tense marker -*u* occurs mostly in the description of a chain of events as a sequence with the same agent. Eventhough, the relative tense marker -*u*- is only found in Ngamiland and Seronga, the high number of occurrences might indicate that this form is rather productive. The consecutive morpheme -*u*- could be a derivation of the infinitive marker *ku*-, which is a common strategy for marking a sequence of events. The infinitive marker *ku*- is used less often in Ngamiland and Seronga than in Shorobe. In addition, there seems to be a strategy of using the consecutive marker -*u*- to avoid the ambiguity with the ventive marker -*ku*- (see § 7.2.2.), which co-occur on a number of occasions in Ngamiland and Seronga. Furthermore, Seidel (2008a) notes that the consecutive construction consists of SC-*a-kú*-stem in CY, contrasting -*kú*- from the ventive marker -*ku*-, which carries low tone. This might indicate an original consecutive -*kú*-, which merged into a subject vowel -*u*- in NY.

7.2. Tense, aspect, and mood morphemes

7.2.1. Relative tense markers #nga- and #ka-

The only tense markers in shiYeyi appear to be the relative tense markers #nga- and #ka-, which are employed to indicate the narrative. The narrative always takes the imperfective aspect and can, in some cases, replace the SC, as long as the agent stays the same. In the narrative the time frame and agent are expressed in the first inflected predicate, subsequent predicates are expressed in the narrative relative tense. The lack of grammatical tense in shiYeyi is solved by the use of temporal adverbials, as seen in TABLE 20, even though lexical tense is not expressed in abundance.

TABLE 20. Temporal adverbials in shiYeyi

<i>namushi</i>	today	<i>ati</i>	when, after
<i>iworo</i>	yesterday	<i>akyani'i</i>	now
<i>iliyo</i>	day before yesterday	<i>n/nana</i>	while
<i>uhuruhuru</i>	for a long time	<i>katanzi</i>	for a long time
<i>shikutikya</i>	in the meantime		

After the time is set for the utterance, the narrative markers are employed for the continuation of the story. An alternative for the use of narrative markers is the adverbial *àtì* ('and then') to string events together on a timeline. As mentioned above, a second alternative relative tense marker *-u-* after the SC occurs to indicate a sequence of events with the same agent. Rather than tense marking, shiYeyi employs aspectual and modality markers on the predicate to indicate the process of the events, the state of completion, its relevance to the speech moment, and its spatial location from the deictic centre. However, the translation into English has the tendency to interpret the aspectual and modal morphemes as tense markers, since the aspectual and modal expressions in English are limited.

At the same time, Seidel (2008b, 352) makes note of the future indicator *inkya*, however, this lexeme does not surface in Sommer's data (1995). The reason for this might be the dialectal difference between CY and NY. In addition to the pre-initial morphemes, Seidel (2008b: 287) describes the habitual aspect for CY as #nanga-/#naka-, which appear to combine the connective /na/ and the narratives /nga/ or /ka/. Again, these morphemes are not found in NY (Sommer, 1995), and are further excluded from this analysis.

7.2.2. Aspect markers

Besides the perfective and imperfective aspectual markers on the subject vowel, shiYeyi employs other aspectual formatives and limitatives as well. The most frequent formative is the progressive formative *-ti-*. Even though shiYeyi uses a contrast between perfective and imperfective, the progressive morpheme *-ti-* is employed to mark the ongoing status of the event denoted by the verb. Where the contrast between perfective and imperfective denotes the distinction between the bounded and unbounded character of the event, the progressive indicates the continuing character of the event, in which the action of the verb remains in the same position for an indefinite amount of

time. The progressive aspect combined with the perfective indicates a situation that has started in the past and is continuing towards the present, as seen in (60).

(60) *Nd- a- ti- rut -a.*
 SC1S PFV PROG teach IND.

'I teach.' (Seidel, 2008b; 340)

Sentence (60) is a general statement of the speaker's occupation, rather than an ongoing event at the speech moment. The progressive in shiYeyi is only used in the indicative mood, indicated by the FV *-a*. This supposes that only factual and certain events can have an ongoing character. The formative prefix *-ti-* seems to be a desultory innovation, since it does not occur in neighbouring Bantu languages. One possibility would be that *-ti-* is a derivation from a non-Bantu click language. In Khwe, spoken in Caprivi and northern Botswana, the subject, emphatic, and possessive pronoun for 1 person singular is *tí* (Kilian-Hatz, 2008). The use of the pronoun for first person singular could evolve into the progressive as explained by 'my doing of X'. Following Nurse's argument that 'many markers of progressive are visible grammaticalizations of locative or possessive strategies' (2008: 167), it seems plausible that the shiYeyi progressive derives from such construction.

The opposition between ventive and itive are marked often in shiYeyi, in which the function is to indicate whether the action of the verb is moving towards or away from the deictic centre. The markers *-ku-* and *-ka-* occur on verbs of motion, verbs of bodily position, verbs of sensory perception and mental expression, and verbs of daily activities (see TABLE 21). The formative *-ku-* is often combined with the verb '*ya*' ('to come') or '*dzwa*' ('to come from'), whereas the formative *-ka-* is often combined with the verb '*yenda*' ('to go').

TABLE 21. Verbs marked with ventive and/or itive aspect in shiYeyi

Motion verbs		Verbs of bodily position and daily activities	
<i>-yenda</i>	to go	<i>-tambuka</i>	to wake up
<i>-ya</i>	to come	<i>-fuma</i>	to wake up
<i>-dzwa</i>	to come from	<i>-yima</i>	to stand up
<i>-shuka</i>	to go back/to return	<i>-sikama</i>	to sit down
<i>-siya</i>	to leave	<i>-rangara</i>	to lie down
<i>-tira</i>	to walk	<i>-khwama</i>	to sleep
<i>-tiya</i>	to walk away/ to flee	<i>-rashara</i>	to spent the day
<i>-n/’ipa</i>	to run	<i>-pinda</i>	to carry on the head
<i>-kita</i>	to go further	<i>-theohera</i>	to start work
<i>-wonduka</i>	to walk on	<i>-caisa</i>	to stop work
<i>-kherekhere</i>	to drive on	<i>-shimurura</i>	to start/ to begin
<i>-dzwelela</i>	to go on	<i>-mana</i>	to stop
<i>-kara</i>	to stay	<i>-yazura</i>	to open

<i>-tura</i>	to stay somewhere for long	<i>-thapa</i>	to wash
<i>-njena</i>	to enter	<i>-yua</i>	to wash
<i>-yeta</i>	to visit	<i>-tapa</i>	to undress
<i>-shangara</i>	to meet/ to find	<i>-ldia</i>	to eat
<i>-wa</i>	to fall	<i>-kereka</i>	to cook
<i>-lama</i>	to follow	<i>-tshurara</i>	to cut
<i>-ldieta</i>	to bring	<i>-shitira</i>	to milk
<i>-yisa</i>	to take	<i>-vueta</i>	to get water
<i>-ronga</i>	to take	<i>-kyawa</i>	to get firewood
<i>-pata</i>	to grab	<i>-ldima</i>	to plow
<i>-yana</i>	to find	<i>-tanda</i>	to hunt
<i>-hurura</i>	to let go	<i>-tunga</i>	to put nets out (fishing)
<i>-wira</i>	to go down	<i>-tiera</i>	to shake
<i>-rara</i>	to chase	<i>-susa</i>	to adjust
<i>-hindika</i>	to chase away	<i>-isi</i>	to do/ to make
<i>-thasira</i>	to attack	<i>-fua</i>	to die
<i>-tereka</i>	to fight		
<i>-khona</i>	to resist		
<i>-yara</i>	to expand		
<i>-ldusa</i>	to bring across		

Verbs of sensory perception and mental expression			
<i>-teya</i>	to say	<i>-ldumeldisa</i>	to greet
<i>-kya</i>	to say	<i>-ripota</i>	to report
<i>-ziira</i>	to tell	<i>-yivwa</i>	to hear/to understand
<i>-hweta</i>	to speak	<i>-mwana</i>	to see
<i>-year</i>	to call	<i>-shaka</i>	to want
<i>-ringara</i>	to ask/ to request	<i>-yuapa</i>	to fear
<i>-shita</i>	to refuse	<i>-tshwa</i>	to control

Verbs describing daily activities seem to indicate a distinction between the activities that take place in and around the homestead and activities away from the homestead, i.e. only marked for ventive aspect *-ku-* or only marked for itive aspect *-ka-* respectively. Therefore, the ventive aspect can be translated with 'here', whereas the itive aspect can be translated with 'there', which confirms Botne's explanation (1999) for 'distal' marker *-ka-*. Furthermore, the progressive marker often combines with ventive marker *-ku-* and itive marker *-ka-*, in which the latter two can co-occur as well. The co-

occurrence of the ventive and itive aspect remains illusive, presumably this co-occurrence indicates a movement of 'here-there-and-back'.

The aspectual morpheme *-shi-* denotes a persistent situation, in which the context is set for an ongoing situation. However, the persistive event often seems to be a hypothetical assumption. In the subclause, the *-shi-* morpheme describes a situation that has existed in the past and has changed at the moment of speech. In (33), the persistive marker denotes a background situation for the main clause. In other instances, the persistive morpheme is used in the context of "if this would still be the case, than X", as can be seen in (32), where it resembles more a situative (participial) aspect. In this sense, the pre-stem morpheme *-shi-* (**ki-*) might not necessarily split into two different functions, as Nurse (2008) describes (see §3.2.2.). In shiYeyi, the function and meaning of the persistive and situative aspect seem to co-exist in the same morpheme. Although Nurse (2008) suspects a tonal distinction between the persistive and situative **ki-*, there is no evidence in shiYeyi, since both uses are low toned. Whether the prefix *-shi-* is a formative or limitative is not entirely clear, since it only occurs with infinitive *ku-* plus SC-*i-* plus the verb stem. The fact that the persistive is always combined with the imperfective aspect shows that the persistive is hypothetical and not entirely completed.

The existence of the TAM morpheme *-i-* remains unclear, in which I would argue that this is a ambiguous morpheme that appears due to other reasons. That is due to assignment of /i/ to the verb stem ((28)-(30)), and due to an imperfective marker after an alternative SC marker, as in (31). However, more data would be needed to draw definite conclusions on this phenomenon.

ShiYeyi distinguishes between inceptive *-ra-* and completive *-ta-* aspects. The first implies that the action of the verb is at the beginning stage of happening and the latter implies that the action of the verb is entirely completed. The inceptive aspect usually combines with the imperfective marker *-i*, which is to be expected when the event is still to begin. However, occasionally, the inceptive *-ra-* occurs in combination with the perfective marker *-a*, which seems to describe a process that started at a moment in the past and has held its state up to the speech moment. The completive aspect differs from the perfective in that it does not focus on the single bound situation, but rather on completion of the event. At the same time, the construction with the completive aspect co-occurs with the perfective *-a*. The completive aspect never combines with the progressive *-ti-*, since the completed event does not necessarily carry over into the speech moment; rather it seems to be a resultative from the past. In addition, the completive *-ta-* only occurs in the indicative mood, since only factual events can be completed. In two instances in the data, the completive *-ta-* and inceptive *-ra-* co-occur on the verb. All three instances are combined with the perfective marker *-a* after the subject and the verb *-isi* ('to do/to make/to work'). In these cases, the event of the verb started in the past and has been completed entirely at the speech moment, as seen in (38)-(40). The data, however, is too limited to draw any tentative conclusions from this phenomenon.

Finally, Seidel (2008b: 292-94 and 314-17) describes the pre-stem morpheme *-rùkù-* as both a prehodiernal past and a hodiernal past imperfective marker. Notwithstanding that this double occurrence of SC-*a-riku-R-a*, of which *-rùku-* is a presumed form as a result of VH, cannot be distinguished by context (see (61) and (62)). Rather, the time setting of the occurrence of the event has to be deduced from the temporal adverbial.

(61) <i>Namushi</i>	<i>nd-a-ruku-kwan-a</i>	<i>itjira,</i>	<i>ka-nd-i-ti-mwan-a</i>
Today	SC1S-PFV-HOD-stir-IND	NC7.pap	NARR-SC1S-IMPV-PROG-see-IND

u-nywaka.
NC1a-snake.

I was stirring pap today and I saw a snake. (Seidel, 2008b: 393)

(62) *Indu pu=nd-a-riku-y-a* *ku-shi-patera, ..., tana*
 CONN Rel16=SC1S-PFV-Past-COME-IND NC17-NC7-hospital, ..., unless

ku-y-a *ku-nd-i-g|imb-a* *zi-ndwanga.*
 NC15-COME-IND NC15-SC1S-IMPFV-pierce-IND NC8-needle.

And when I got to the hospital, ..., unless coming and giving me with several injections.
 (Seidel, 2008b: 392)

Additionally in Seidel (2009: 250), the prehodiernal past in shiYeyi is compared to the historical continuous aspect *-luku-* in Lamba, in which /l/ > /r/. The label ‘historical continuous’ seems to resist the contexts better in which the morpheme *-riku-* (*-rùkù-*) occurs, as shown in (63)-(64) below. The verb marked with the prefix *-riku-* (*-rùkù-*) appears to be the preceding event before the following verb.

(63) *Shikya pw=a-ma-ti-puyumuk-a* *nanyina?* *“Ka-riku-tiy-a.”*
 “Why Rel16=?-SC3S-PROG-breath-IND very_much?” “SC3S-HOD-run-IND

“Why is she panting heavily?” “She was running.” (Seidel, 2008b: 293)

(64) *Shikya pw=a-ma-taa-puyumuk-a* *iwooro?* *“Ma-riku-tiy-a.”*
 “Why Rel16=?-SC3S-CMPL-breath-IND yesterday?” “SC3S-P.HOD-run-a.”

“Why did she pant so heavily yesterday?” “She ran/had been/was running.”
 (Seidel, 2008b: 315)

In the examples above, the subject agreement marker seems to indicate a different context of the event; rather than the TAM morpheme. The initial prefix *ka-* as *sc3s* does not occur in Sommer’s data of NY, nor does the TAM marker *-riku-* (*-rùkù-*), possibly due to dialectal variation between CY and NY. Therefore, the function and meaning of *-riku-* (*-rùkù-*) would have to be analysed further in CY.

7.2.3. Modality, final vowels and vowel harmony

In contrast of previous research (Baumbach, 1997; Sommer, 1995, 2000; Seidel, 2008a, 2008b), I would state that shiYeyi does not apply vowel harmony of the prefix vowels to the vowel of the verb root, since the subject vowels have a unique and discrete meaning. Instead in my opinion, the subject concord vowels are more likely to be TAM markers. In addition, the FVs appear to mark mood and modality, which expresses the factuality (mood) or the speaker’s attitude (modality) towards of the utterance. The distinction between mood and modality in this is made, since mood indicates the status of the verb itself and modality indicates the status according to the speaker. The function to express mood in the FV would omit vowel harmony of the FV to the verb root, since the FV holds a discrete function to express information around the utterance. The occurrence of one verb root carrying more than one FV in different contexts would confirm this discrete function of mood, for example the verb root *-yend* (‘to go’) occurs with FV *-a*, *-e*, and *-i* in the data set (Sommer, 1995).

The FV *-a* expresses the indicative mood, which is used in general statements without judgments of the speaker, factual and certain statements, sometimes called realis in the literature. In the imperative, the bare verb carries the FV *-a*. In these cases, the indicative imperative appears to be a direct command. The FV *-e* expresses the subjunctive mood in most cases, which denotes the status of the action as an assumption, non-factual, or uncertain, sometimes called irrealis in the literature. In other instances, the FV *-e* is used in the imperative mood, as (SC-*e*-)R-*e*, which appears to be a more polite command than the imperative in the indicative mood. The compound hortative construction SC-*e-yend-e* SC-*i-ka*-R-*e* (“Let us go and do X”) is between the imperative and subjunctive mood, as seen in (48). The SC carries the hortative aspect *-e*, since the proposed event has to still take place sometime in the future. The imperfective aspect of the second verb indicates that the firewood is somewhere and still needs to be collected from the place it is at. The prefix *ka-* has a distal function of the itive aspect, since the action is going to take place away from the deictic centre. Furthermore, the entire clause is in the subjunctive mood, since the utterance is still a proposition and still a non-factual situation. The FV *-i* expresses the epistemic modality, including assumptive, deductive, and speculative attitudes from the speaker, as seen in (49)-(51), in which the situation expressed by the verb is taken as an assumption by the speaker, the speaker speculates in the utterance, or the information that is given by the predicate is deducted from other information, which is not expressed. The FV *-u* occurs only three times in Sommer’s data, as seen in (52)-(54), in which the three occurrences, glossed by Sommer (1995), turn out to be part of the verb root and the FV of the bare verb *-dzwa* (‘to come from’) and *-fwa* (‘to die’) are omitted. The reason for this omission of the FV remains unclear from the data. Nevertheless, from the modality markers above, one can assume that the omission of the FV holds a modality function and meaning as well. Nevertheless, Seidel (2008b) speaks of vowel harmony in these cases, where the verb roots are monosyllabic and contain a glide. The examples given in (65), however, could be explained by FV omission, in which the glides are the result of an underlying assimilation between the vowels /u+a/ > /w/ and /i+a/ > /y/.

(65) <i>-lya = -lia > -li</i>	‘to eat’	<i>-fwa = -fua > -fu</i>	‘to die’
<i>-nwa = -nua > nu</i>	‘to drink’	<i>-pwa = -pua > -pu</i>	‘to dry’
<i>-dzwa = -dzua > -dzu</i>	‘to come from’	<i>-twa = -tua > -tu</i>	‘to pound’

(Seidel, 2008b; 297)

However, more data would have to be analysed to draw any definite conclusions about this phenomenon of FV omission and its meaning.

Finally, the FV *-o* serves as a derivational rather than inflectional process, in which the bare verb carries a noun class prefix and the FV *-o*. The derivation from verb-to-noun, however, goes beyond the scope of this thesis.

7.3. Negation

Negation on the predicate occurs in three different ways in the data, i.e. as pre-initial *#ka-*, as the formative *-ha-*, or as auxiliary verb stem *-lhu*. At the same time, it remains unclear if there is a semantic difference between these three inflections, since the data is too meagre to draw any conclusions.

In addition, two independent lexemes for negation are found by Baumbach (1997) and Seidel (2008b) for CY, i.e. *yemwa* and *kumuni* (or: *kamuni*). According to Baumbach (1997), *kumuni* is used in combination with the future lexeme *inkye* plus SC + imperfective + verb stem (see (66)), whereas *yemwa* is used in all other constructions (see (67)).

(66) Kamuni	<i>u-ndjovo</i>	<i>inkya</i>	<i>a-tshurangan-e</i>	<i>i-ndjira</i>	<i>ko=Samdono.</i>
NEG	NC1a-elephant	FUT	SC1a-CROSS-SUBJ	NC9-path	LOC17=Samdono

The elephant will not cross the road at Samdono. (Seidel, 2008b: 403)

(67) “ Yemwa	<i>nd-i-yend-e</i>	<i>ko=Gobboro</i>	<i>iwooro.</i> ”
NEG	SC1S-IMPFV-go-SUBJ	LOC17=Gaborone	yesterday

“No, I didn’t go to Gaborone yesterday.” (Seidel, 2008b: 402)

The two negative lexemes co-occur as well, as shown in (68).

(68) “ Yemwa, kamuni	<i>inkya</i>	<i>wu-yir-e.</i> ”
NEG	NEG	FUT NC3-overflow-SUBJ

“No, it (the river) will not overflow.” Seidel (2008b: 403)

In the data of Sommer (1995) of NY, the lexemes *kumuni* and *yemwa* are absent, and are therefore not analysed for this thesis.

8. CONCLUSION

From the analysis above, I would state that shiYeyi does not express tense on the verb through affixing. The affixional morphemes rather seem to express aspect and mood. For time reference, shiYeyi makes use of temporal adverbials to express specific points in time, i.e. lexical tense. However, in most cases, the specific time reference does not seem to be a focus point of the utterances. In the data, the only tense markers on the predicate are relative tense markers in form of pre-initial narrative morphemes *#nga-* and *#ka-*. A semantic or functional difference between the two narrative markers was not found. Presumably, the choice between markers is ideolectal, since different speakers appear to display a preference for either of the markers. Furthermore, some speakers in Ngamiland and Seronga employ the consecutive marker *-u-* after the SC, as well, when describing a chain of events with the same agent. In turn, this marker *-u-* might be ideolectal, since there are no instances of use found in Shorobe speakers.

At the same time, shiYeyi does not apply a double paradigm for subject agreement on the verb; instead the subject vowels appear to mark an aspectual or modal expression. Most aspectual markers do indicate events/situations/states in the past of the speech moment, which is inherently due to the type of data used. The most common subject vowels in the data are *-i-* and *-a-*, which seem to indicate the distinction between imperfective and perfective aspect. Therefore, the explanation of the perfective (SC-*a-*) as a past tense marker might be too narrow, since the imperfective (SC-*i-*) could take entirely place in past as well. Above all, the imperfective aspect cannot imply 'future tense' by definition. The main difference between perfective and imperfective aspect is that in the first the event can be seen in its entirety, whereas in the latter the beginning or end are not expressed. Furthermore, punctual verbs, like 'sneeze' are perfective at the speech moment, i.e. present time. The same reasoning applies to the anterior being too narrow to explain the perfective aspect (Sommer, 2000). The progressive aspect *-ti-* appears to indicate that both perfective and imperfective events have an ongoing character, since the progressive can be marked on both perfective and imperfective. The discrete function of the progressive is to express the relevance of an ongoing past event, but not necessarily into the present; rather than an anterior character. The subject vowels *-e* and *-u* indicate potential mood and consecutive relative tense respectively. To focus on the completion of the event, shiYeyi applies an additional completive marker *-ta-*, whereas events that are at the beginning stage of happening the aspectual marker *-ra-* is employed. The beginning stage of the event could lie entirely before the speech moment, as well, even before a subsequent event. The marker *-shi-* indicates a hypothetical persistent situation in the past and the consequences it might have if that situation would have continued in the time closer to the speech moment, i.e. where it resembles an *if-* or *when-* clause. At the same time, the pre-stem morpheme *-shi-* could be labelled as situative (participial) aspect, where the information given in the clause serves to create a background for the following utterance. As it appears from Seidel's data (2008b) on CY, the morpheme *-riku-* (*-ruku-*) is best explained as a historical continuous aspect, since it expresses a previous event before the main verb. However, this marking does not seem to occur in NY.

A second aspectual focal point in shiYeyi is the distinction on a spatial level, where the ventive marker *-ku-* and the itive marker *-ka-* express the spatial movement of the event from or towards the deictic centre. In these cases, the location where the event of the verb takes place is either 'here' or 'over there' respectively. The explanation of *-ku-* being a future marker (Seidel, 2008b; Sommer, 2000) would contradict Nurse's reasoning that tense markers occur left and aspectual markers occur right, since other aspectual markers can precede *-ku-*.

Modality is expressed in the FV of the verb and is distinguished in indicative, subjunctive and epistemic mood. The indicative and subjunctive mood have an extended function in that they express the binary opposition between factuality and non-factuality of the utterance, sometimes explained as realis and irrealis in the literature. The imperative mood is interwoven with the indicative and subjunctive mood and depends on the expectation of the speaker on whether or not the order will be carried out by the listener. The epistemic mood expresses an assumptive, deductive or speculative character of the utterance. Deletion of the FV in some cases remains illusive and the data is too meagre to draw any conclusions from this phenomenon. Nevertheless, one might assume that FV omission has a distinct function to indicate mood. The discrete functions of the final vowels imply that vowel harmony to the verb stem does not occur in shiYeyi.

Even though the data for this analysis is narrow, tonal inflection does not appear to indicate grammatical distinction in verbal morphology, since all pre-stem aspectual markers appear in low tone. In contrast of the majority of pre-stem aspectual markers carrying L, the OC carries H. The majority of FVs are expressed in H, with the exception of the predicates with OC and which are in the subjunctive mood. However, some exceptions to these tendencies are found in the data. At the same time, some tonal differences are suspected in some modal morphemes. There might be a distinction between a propositional action and the hortative construction '*Let us go and do X*', L and H respectively. Notwithstanding that some further research into tonal distinctions would be necessary to conclude tonal inflection on the verb. Tonal patterns should be analysed thoroughly on their function and meaning, since this topic has been underlined by all scholars looking at shiYeyi. The complexity of tone

patterns would be too extensive for this thesis as well and the available data is too narrow to analyse pattern change.

Admittedly, the tentative conclusions in this thesis on the aspectual and modal functions of the verbal morpheme markers need to be analysed in greater depth. The data analysed here is solely in a past narrative context, i.e. the daily activities of the informants and the historical origins of the waYeyi in Ngamiland. The aspectual and modal contexts of additional discourse would have to be analysed in future research. The same applies for temporal and spatial expression in future events, in which the tentative conclusions on aspect and mood would have to be tested. As mentioned above, an additional topic for future research is the behaviour of tonal patterns and their inflectional and derivational implications.

REFERENCES

- Andersson, Charles J. 1855. Explorations in South Africa, with Route from Walfisch Bay to Lake Ngami, and Ascent of the Tiogé River. *Journal of the Royal Geographical Society of London*, 25, 79-107.
- Andersson, Lars-Gunnar. 1997. Siyeyi revisited: prospects for the future of a threatened language. In: W.H.G. Haacke and E.D. Elderkin (eds), *Namibian Languages: Reports and Papers*, 265-274. Köln: Rüdiger Köppe Verlag.
- Batibo, H.M.. 1998. A lexicostatistic survey of the Bantu languages of Botswana. *South African Journal of African Languages*, 18(1), 22-28.
- Baumbach, Erdmann J.M.. 1997. Languages of the Eastern Caprivi. In: W.H.G. Haacke and E.D. Elderkin (eds.), *Namibian Languages: Reports and Papers*, 307-451. Köln: Rüdiger Köppe.
- Bostoen, Koen & Bonny Sands. 2009. Clicks in south-western Bantu languages: contact-induced vs. language-internal lexical change. In: Brenzinger, M. & A.M. Fehn (eds), *Proceedings, 6th World Congress of African Linguistics*, 121-132. Köln: Rüdiger Köppe Verlag.
- Botne, Robert. 1999. *Future and distal –ka-‘s: proto-Bantu or nascent form(s)?* In: Jean-Marie Hombert and Larry M. Hyman. *Bantu Historical Linguistics: Theoretical and Empirical Perspectives*. California: CSLI, Leland Stanford Junior University.
- Bresnan, Joan and Lioba Moshi. 1990. Asymmetries in Comparative Bantu Syntax. *Linguistic Inquiry*, 21 (2), 147-185.
- Bybee, J.L., R.D. Perkins & W. Pagliuca. 1994. *The Evolution of Grammar. Tense, aspect, and modality in the languages of the world*. Chicago & London; The University of Chicago Press.
- Chebanne, Andy Monthusi, Mike Rodewald and Lydia Nyati-Ramahobo. 2007. *Mutjango wu Shiyeyi: Shiyeyi writing system*. Gaborone: The Botswana Society.
- Comrie, Bernard. 1976. *Aspect*. Cambridge: University Press.
- Comrie, Bernard. 1985. *Tense*. Cambridge: University Press.
- Comrie, Bernard. 1989. *Language universals & linguistic typology*. Chicago: University Press.
- Dahl, Östen. 1985. *Tense and aspect systems*. Oxford: Blackwell.
- Doke, C.M.1967. *The southern Bantu languages; handbook of African languages*. London: Dawson's of Mall for I.A.I.
- Donnelly, Simon Scurr. 1990. *Phonology and morphology of the noun in Yeeyi*. University of Cape Town.
- Fleisch, Axel. 2000. *Lucazi grammar: a morphosemantic analysis*. Köln: Rüdiger Köppe Verlag.
- Fulop, Sean A., Peter Ladefoged, Fang Liu & Rainer Vossen. 2003. Yeyi clicks: acoustic description and analysis. *Phonetica*, 60, 231-260.
- Gowlett, Derek F. 1992. Yeyi reflexes of proto-Bantu. In Gowlett, Derek F. (ed.), *African Linguistic Contributions: Presented in honour of Ernst Westphal*, 122-188. Pretoria: Via Afrika.
- Gowlett, Derek F. 1997. Aspects of Yeyi diachronic phonology. In: W.H.G. Haacke and E.D. Elderkin (eds.), *Namibian Languages: Reports and Papers*, 235-263. Köln: Rüdiger Köppe.

- Guthrie, M. 1967-71. *Comparative Bantu, volume 1-4*. Farnborough: Gregg.
- Hyman, Larry M. and Alessandro Duranti. 1982. On the Object Relation in Bantu. *Syntax and Semantics*, 15, 217-239.
- Kilian-Hatz, Christa. 2008. *A Grammar of Modern Khwe (Central Khoisan)*. Köln: Rüdiger Köppe Verlag.
- Larson, Thomas J. 1989. The Bayeyi of Ngamiland. *Botswana Notes & Records* (21), 23-42.
- Livingston, David and Thomas Steele. 1850. Extracts of Letters from the Rev. David Livingston, Dated from the Missionary Station at Kolobeng, South Africa, 25° S. lat., 26° e. long. *Journal of the Royal Geographical Society of London*, 20, 138-142.
- Lukusa, Stephen T.M.. 2002. *Groundwork in Shiyeyi grammar with a Shiyeyi-English glossary*. Frankfurt/Main: Peter Lang, Europäischer Verlag der Wissenschaften.
- Lukusa, Stephen T.M.. 2009. *Shiyeyi-English dictionary*. Munich: Lincom Europa.
- Meeussen, A. 1967. Bantu grammatical reconstructions. *Africana Linguistica*, 61 (3), 79-121.
- Merwe, D.F. van der & I Schapera. 1942. *Notes on the noun-classes of some Bantu languages of Ngamiland*. Communications from the School of African Studies (New Series No.2). Cape Town: UP.
- Nurse, Derek. 2008. *Tense and aspect in Bantu*. Oxford: University Press.
- Riedel, Kristina. 2009. *The syntax of object marking in Sambia: a comparative Bantu perspective*. Utrecht: LOT.
- Seidel, Frank. 2005. The Bantu languages of the Eastern Caprivi: a dialectometrical analysis and its historical and sociolinguistic implications. *South African Journal of African Languages*, 25 (4), 207-242.
- Seidel, Frank. 2008a. The hodiernal past domain and the concept of recentness in Yeyi. *Africana Linguistica*, 14, 151-176.
- Seidel, Frank. 2008b. *A grammar of Yeyi: a Bantu language of Southern Africa*. Köln: Rüdiger Köppe Verlag.
- Seidel, Frank. 2009. Layered language genesis in the 'Catch Basin' of the Linyanti and Okavango swamps: the case of Yeyi. *Sprache und Geschichte in Afrika*, 20, 231-264.
- Sommer, G. and Vossen, Rainer. 1992. Schälzwörter im Yei (R41). *Afrika und Übersee*, 75, 1-42.
- Sommer, Gabi [Gabriele] and Rainer Vossen. 1995. Linguistic variation in Siyeyi. In: Traill, A., R. Vossen and M. M. A. Biesele (eds.), *The complete linguist: papers in memory of Patrick J. Dickens*, 407-479. Köln: Rüdiger Köppe Verlag.
- Sommer, Gabriele. 1995. Ethnography des Sprachwechsels: Sozialer Wandel und Sprachverhalten bei den Yeyi (Botswana). Köln: Rüdiger Köppe Verlag.
- Sommer, Gabriele. 2000. Aspects of Yeyi (R 41) verbal morphology. In: Vossen, R. and et al. (eds.), *"Mehr als nur Worte ..." Afrikanistische Beiträge zum 65 Geburtstag von Franz Rottland*, 623-638.
- Sommer, Gabriele. 2003. Western Savanna (K, R). In: Nurse, Derek and Philippon, Gérard (eds.), *The Bantu languages*, 566-580. London & New York: Routledge.
- Vossen, Rainer. 1998. Historical classification of Khoe (central khoisan) languages of Southern Africa. *African Studies*, 57(1), 93-106.

APPENDIX 1. DEFINITIONS

Main sources are: Comrie (1976,1985, 1989), Bybee *et al.* (1994), Nurse (2008), Dahl (1985).

Aktionart – the lexical meaning of the verb is inherently aspectual. See *stative* and *dynamic*.

Anterior - aspectual denotation of a past situation that has relevance to the speech moment.

Aspect – ‘the internal temporal constituency of a situation’ (Comrie, 1976: 5). Verbs may carry one or more aspects.

Completive - aspectual denotation of a situation that has been done thoroughly and has been completed.

Conjunctive – also known as *post-verbal focus*, i.e. the verb and following constituents in the same clause are in a close relationship. Contrastive with *disjunctive*, which see.

Consecutive – relative tense to string a sequence of events with the same agent, often used in a narrative environment.

Continuative - aspectual denotation of a situation where the agent keeps on doing the action on one occasion.

Crastinal – future tense of tomorrow.

Disjunctive – also known as *verb focus*, i.e. the verb is not necessarily related to any following constituents, which are often optional. Contrastive with *conjunctive*, which see.

Durative – aspectual denotation of a situation that ‘lasts for a certain period of time’ (Comrie, 1976: 41)

Dynamic – verbs denoting a process, activity, action or event. Contrastive with *stative*, which see.

Frequentative – aspectual denotation of a situation that is frequent over a period of time. To be distinguished from the habitual aspect, where the action takes place on different occasions.

Future - tense denoting that a situation

Habitual – aspectual denotation of a situation that is repeated on different occasions over a period of time. To be distinguished from the frequentative aspect, where the action takes place on one occasion.

Hesternal – past tense of yesterday.

Hodiernal – past or future tense of today

Hortative – modal denotation of a command in which the speaker is encouraging the listener to do an action, i.e. so-called ‘Let us verb’.

Imperative – modal denotation of a direct command. Bantu languages often issue a command in two ways, in the indicative (more direct) or in the subjunctive (more polite).

Imperfective – aspectual denotation of an unbounded situation that takes place over a period of time, in which part of the situation is complete and part of the situation is incomplete. Contrasts with the perfective aspect, which see.

Inceptive - aspectual denotation of the coming into being or entry into a situation, i.e. implication of a point just before or at the start of a situation.

Indicative – modal denotation of statements and questions, of which the speaker believes the utterance to be factual or true.

Iterative – aspectual denotation of a situation that is repeated on one occasion, i.e. incomplete series of complete events. Contrasts with semelfactive aspect, which see.

Itive – directional aspect in which the agent moves away from the deictic centre, i.e. movement away from here.

Mood – the speaker's attitude towards the status or factuality of the utterance. Traditionally three moods are distinguished, i.e. indicative, subjunctive, and imperative. Modality is often used for more elaborate categories, such as epistemic, deontic etc.

Narrative - relative tense to string a sequence of events in time.

Participial – see *situative*.

Past - tense denoting that a situation

Perfective – aspectual denotation of a single, bounded, and complete situation. Contrasts with the imperfective aspect, which see.

Persistent - a subtype of imperfective aspect, which denotes an open-ended situation that started in the past and continues to hold at the speech moment.

Potential – modal denotation of hypothetical ability or willingness to perform the action of the verb.

Present – tense denoting that a situation is co-extensive with the moment of speech.

Progressive – a subtype of imperfective aspect, which denotes an unbounded situation in progress at and around the speech event, where the start and finish of the situation is not known or not important.

Resultative - aspectual denotation of a past situation that continues into the present, i.e. the present state is a result of a past situation.

Semelfactive – aspectual denotation of a situation that takes place only once. Contrasts with iterative aspect, which see.

Situative – aspectual denotation often related to *if*-clauses, it often appears to entail hypothetical or possible situations. The situation is unbound and could last for an unspecified amount of time, i.e. the situation could have a lengthy duration, in which neither the beginning nor end of the situation is complete. Often called the *participial*.

Stative – verbs denoting an ongoing state of affairs, rather than an action, e.g. to be something, know, like etc. Contrastive with *dynamic*, which see.

Subject - the prototype of subject represents the intersection of agent and topic, i.e. the clearest instances of subjects, cross-linguistically, are agents which are also topics.

Subjunctive – modal denotation of speaker's believe that the action of the verb is uncertain or non-factual.

Tense – the grammaticalized expression of the location of a situation in time.

Ventive – directional aspect in which the agent moves towards the deictic centre, i.e. movement towards here.

Verb Root – bare verb, without infinitive, extensions or final vowel, also called *radical*.

Verb Stem – verb root (plus extensions) plus final vowel.