

SIL Burkina Faso

The Structure of Burkina Faso Kusaal

Draft Edition

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Preface

The dialect of Kusaal which forms the basis of the present study is that spoken in and around Youga in the southeast of Burkina Faso, very close to the boarder to Ghana. Roughly the same language dialect is also spoken across the border in Ghana at the western side of the “Nakambe” river which separates Eastern from Western Kusaal.

While there are various works on aspects of the Kusaal language, of which most have been written in Ghana, I felt the need for a sketch of the main aspects of the phonology, morphology, syntax and discourse of the Burkina Faso Kusaal in order to better understand the overall structure of Kusaal and provide a tool for those who want to further develop this beautiful language. Our insight was helpful for the development of an orthography guide and of the edition of the first Burkina Kusaal primer that is being used since 2012 in literacy.

We did a sketch on the phonology (chapter 2) followed by an outline of the Nominal morphology (chapter 3) as well as the Verbal morphology (chapter 4).

For the syntax analysis (chapter 5) we employed a structure - function approach. We tried to understand and describe the predictable grammatical patterns for Kusaal and the predictable ways in which the order of words in a sentence can (or cannot) be influenced by what goes on in the relationship between speakers and hearers, as well as the world around. This approach views the language as a series of ranks that have been set up and are described in this analysis as follows: Sentence Rank, Clause Rank, Phrase Rank, Word Rank and finally discourse Rank.

This work could not have been a reality without input from various people. So I am particularly indebted to my Kusaal friends and colleagues Pastor Elie WANGRE, Pastor Emmanuel SOUGA, and Jacques Kobéna WARE. We used sources of Burkina Kusaal texts that we collected mostly in 2012 consisting of 30 texts of different kinds (of which 18 are narratifs) and of over 200 proverbs.

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Abbreviations

Abbreviations used for interlinear translation and glosses

		Example:	Translation:
AUX	auxiliary	le	« <i>again</i> »
COMPL	completive	ēŋɪ-ya	« <i>did it</i> »
COND	conditional	ya'a	« <i>if</i> »
CONJ	conjunction	ka	« <i>and</i> »
DEF	definite article	la	« <i>the</i> »
DEM	demonstrative	-kāŋa	« <i>that</i> »
EMPH	emphatic suffix or particle	na'abo	« <i>a chief</i> »
FOC	focus marker	-ne	« <i>assertive</i> »
FUT	future tense	ne	« <i>will</i> »
IMP	imperative	Nuum !	« <i>Drink!</i> »
IRR	irrealis particle	ō da'ane	« <i>he would have bought</i> »
IMPF	imperfective aspect	nuut	« <i>drinking</i> »
INTERJ	interjection	awoo	« <i>ok</i> »
IO	indirect object	ʊ	« <i>him</i> »
LOC	locative marker	-ɪ	« <i>in/at</i> »
NEG	negation marker	bʊ	« <i>not non-future</i> »
NEG.IMP	negative imperative	da	« <i>don't</i> »
NEG.FUT	negative future	kʊn	« <i>won't</i> »
NP	noun phrase	na'ap wef	« <i>chief's horse</i> »
O	object	sɔta	« <i>the way</i> »
PAST	distant past tense	da	« <i>distant past</i> »
pl.	plural	biis	« <i>children</i> »
POSTPOS	postposition	zuk	« <i>on</i> »
PROH	prohibitive	da	« <i>don't, should not</i> »
pron.	pronoun	ba	« <i>they</i> »
PRF	perfective aspect	Ō kɔ∅ ki	« <i>He farmed millet.</i> »
Q	final question vowel	boo ?	« <i>where?</i> »
SF	syntagmatic feature	ka	« <i>connective</i> »
SUB	subordination marker	ne	« <i>when</i> »
TD	Time depth marker	da	« <i>past</i> »

Other abbreviations:

+	morpheme boundary	dt+t
σ	Syllable	CV
μ	Mora	á
[]	Phonetic pronunciation	
ATR	Advanced tongue root	
C / V / N	Consonant / vowel / nasal in chapter on syllable structure	
Cl.	Class (noun class)	
F	Foot	
L / M / H / 'H	Low / Mid / High / down stepped high tone in section on tonology	
NP	Noun phrase	
TBU	Tone bearing unit	
TC	Tonal class of nominal roots	
VP	Verbal phrase	
cf.	compare	
e.g.	for example	
etc.	et cetera, and so on	
i.e.	that is, in other words	
lit.	literally	
sb.	somebody	
sp.	species (of)	
sth.	something	
t.z.	thick millet-porridge (Hausa: 'tuan zaafi')	

1 Introduction

1.1 The people and the language

1.1.1 The Kusaasi people

A) Language Location

The Burkina Faso Kusaal region is located in the country's south-eastern corner, in the province of Boulgou. However, the great majority of the Kusaasi (the name given to the speakers of the language) are found in north-eastern

Ghana. In Burkina Faso, the neighbouring language to the west is Ninkarsé (a related dialect of Frafra); and to the north and east the Bissa. In Ghana, the Kusaal ethnic group is located in the Upper East district, and north of the Gambaga Scarp (Spratt 1968:1). The Kusaasi's neighbouring languages to the west are the Frafra, Nabdem, and Talensi; to the south is the Mamprusi; and to the east are the Bimoba and Moba.

The Kusaal language area in Burkina Faso is roughly 700 km², while in Ghana it is approximately 3,300 km².

B) Description of Location

In Burkina Faso, the Kusaasi people are found to the south and east of the central (Mossi) plateau. The area is somewhat hilly, and the general impression is that farmlands in the region are only fair. Laclavère, in his atlas of Burkina Faso, places the Kusaal in the range of the tree-vs. bush-marked areas of the country (Laclavère 1993:18), although this area may have certain patches of rather dense “dry” wooded areas. Regarding rainfall, the Kusaal area averages between 900 and 1,000 mm annually (Laclavère 1993:16).

The farmland in Ghana appears to be somewhat better, and to be sure, has a slightly higher annual rainfall. What is most striking about the Ghanaian region is that the White (Nakanbé) and Red (Nazinon) Volta Rivers pass through it, the White Volta being in general the boundary between the *tonde* and *agole* regions.

C) Population

To our knowledge, there are 15 Kusaasi villages in Burkina Faso (Bingo, Bougré, Bougré-boko,



Bourma, Dawèga, Gonsé, Koukodouré, Mong Naba, Pakoungou, Porogo, Songo, Tabiisi, Willogo, Yubougré, Youga, Youkouka, Zamé, Zerboko, Zoaga), all of which are located in Boulgou Province's Zabré and Zoaga Departments. Simply calculating the Burkina Kusaasi population according to the 1985 Burkina census (INSD 1991), and assuming a 2.68% population growth rate (Laclavère 1993:24), one arrives at a rounded figure of 17,000. It is extremely doubtful, however, that all of the Kusaasi villages are made up only of Kusaal speakers: at the villages visited, we learned of the presence of members of neighbouring people groups. Therefore, the total Kusaasi-speaking population probably does not exceed 16,000 (1985 Burkina Faso Census Report).

The great majority of the Ghanaian Kusaasi lives in the Upper East Region.

Nevertheless, we have two unresolved problems with the statistics available to us.

We are forced to assume first that the White Volta River functions as the general boundary throughout the Ghanaian Kusaal territory; and are forced to use population statistics which date from 1988. What is more reliable in these statistics is the more precise breakdown of ethnic groups for each locality. Thus, we calculate there were approximately 245,000 Kusaasi in the Bawku Administrative District (Ghana Evangelism Committee 1988:4/1–4/30). In the Upper East Region, there is an estimated 3.09% growth rate (Adams 1993:105), which would put the Kusaasi current population at least 353,000. It would seem that around 72% of the total Kusaasi population in Ghana are *agole* speakers.

Population Estimates for the Kusaasi

Population from	the mid-1980s	Projected 1997	Population % of Kusaasi
Population			
Eastern Kusaasi (<i>agole</i>) in Ghana	184,671	253,646	71.6%
Western Kusaasi (<i>tonde</i>) in Ghana	60,686	83,353	23.5%
Western Kusaasi (<i>tonde</i>) in Burkina Faso	12,463	17,118	4.8%
Total Western Kusaasi (<i>tonde</i>)	73,149	100,471	28.4%
Totals	330,969	454,588	

Projected 1997 population with a growth rate of 3.09% in Ghana and 2.68% in Burkina Faso.

D) Religious Adherence

In both Burkina Faso and Ghana, the traditional religion continues to have a very strong influence among the Kusaasi. In both Youga and Binaba, respondents to our questionnaires affirmed that followers of the traditional religion are more numerous than both Christians and Muslims. We must also presume that among Christians and Muslims, there are those who continue to practice the traditional ancestral devotion and sacrifices. More quantitative estimates are available for Ghana.

According to the Ghana Evangelism Committee's statistics for the Upper East and West Districts, 73% of the population still practices the traditional religion (Adams 1993:103).

In Burkina Faso, the Kusaasi have only begun to adopt Islam in the middle part of this century, according to the Catholic catechist in Youga. They are a quite small minority, numerically a much smaller group than both followers of traditional religions and Christians. Among the statistics for the Ghana Kusaal area, the Ghana Evangelism Committee estimates that in the Upper East and Upper West Districts, 13% of the population is Muslim, although it is unclear what proportion of these are Kusaasi (Adams 1993:90).

Terms for the language and its speakers:

- Kusaal** - the language
- Kusaa** - a person who speaks native Kusaal
- kusaas** - people who speak native Kusaal
- kusaavk** - the homeland of the Kusaas

The Kusaasi's relatives: The Dagaare, the Mossi, the Dagomba, the Frafra, the Mamprusi and many others are all directly descended from a common ancestor ethno linguistic group called the « Mabilia » (which means « *mother's child* »).

E) Economy

In economic terms, the Kusaal speaking population is heavily agrarian. Practically each family deals some sort of subsistence farming. The major crops are millet, corn, guinea corn, beans, groundnuts and Shea nuts. They also rear cattle, goats, sheep and fowls. Only in recent years Gold mine companies have come to the Kusaal area to exploit the Goldfields and thus many Kusaasi left their main occupation in their farmlands in order to concentrate on the more lucrative goldmines.

At a culinary level, the Kusaasi prefer mostly eating their traditional staple food *sa'ap* (or "T. Z.", which is an abbreviation from, '*tuozafi*', the Hausa name for the same food). Many elderly people like to drink their traditional alcoholic beverage *dãam* (or "pito", a borrowing from *fitoo*, the Hausa word for the same drink).

1.1.2 The Kusaal language and its relatives “Mabia”

The genetic + FOCiliation of Kusaal is displayed below, based on Bender-Samuel (1989) and adapted according to personal communication with G. Mieke, Kusaal is a Gur language, of the Oti-Volta branch. Within the francophone world, *Gur* languages are also known as *Voltaic* languages.

Language family tree:

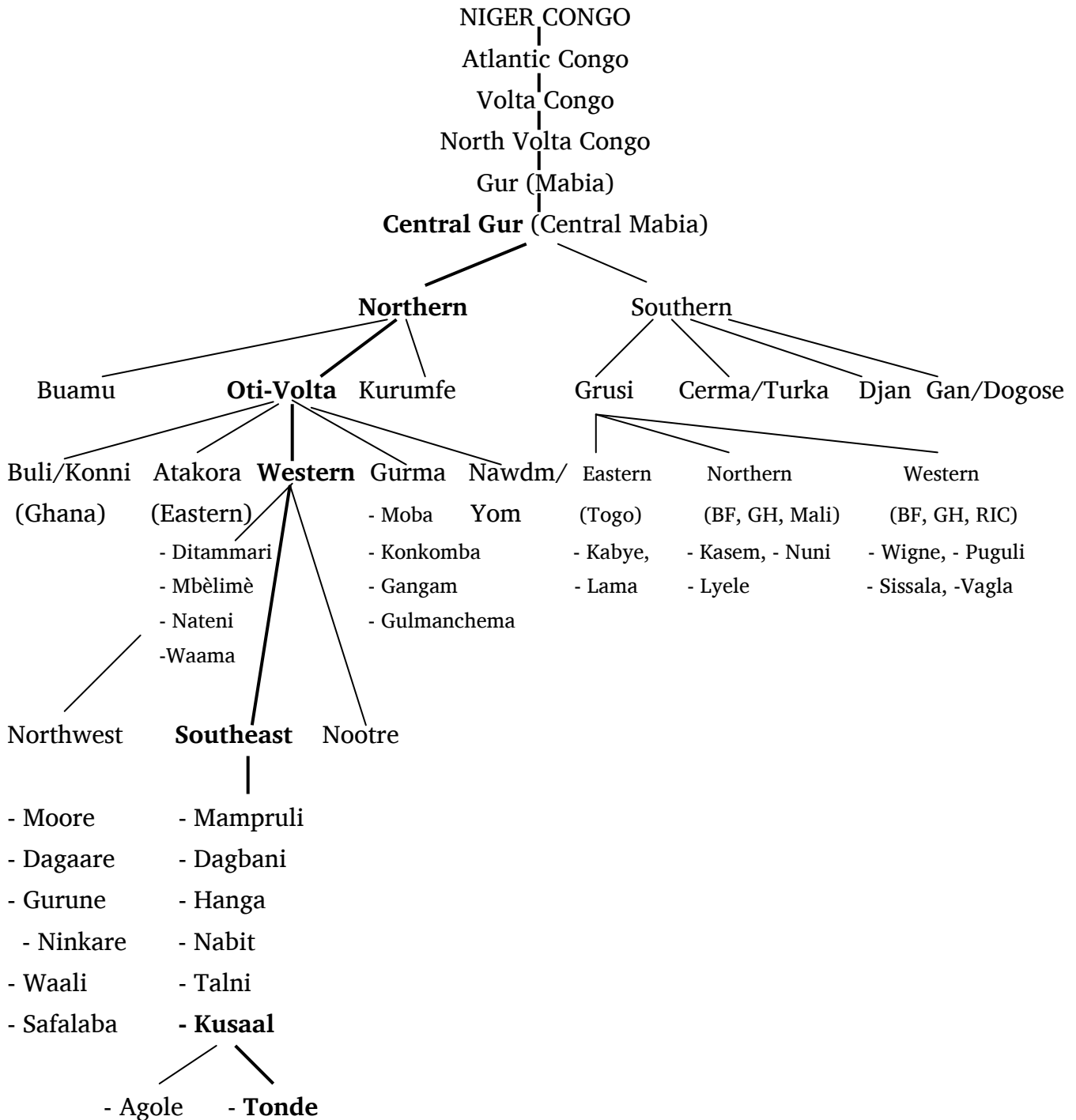


Figure 1 : Language Family Tree for Kusaal

As shown on the previous page, Kusaal falls under the following classification: “Niger-Congo, Atlantic-Congo, Volta-Congo, North, Gur, Central, Northern, Oti-Volta, Western, Southeast, Kusaal” (Grimes 1992:175). In the *Ethnologue*, a book published by the Summer Institute of Linguistics including information on all of the known languages of the world, its code is “KNU”. The language is most closely related to Dagbani and Mampruli (Naden 1989:145), but is also closely related to Frafra (also known by the names Ninkaré or Gurune/Gurenne) and Mooré. According to Prost, the similarity to Mooré is great, much more similar to Mooré than is Dagaara (Prost 1979:2).

Within the francophone world, Gur languages are also known as Voltaic languages. A. Bodomo, a Ghanaian linguist, introduced the expression Mabilia languages (“ma” « *mother* » and “bia” « *child* ») as an indigenous classificatory term. It denotes a sibling relationship between languages such as Kusaal, Dagbani, Mampruli and Dagaari. Mabilia is meant to replace such terms as Western Oti-Volta, as a subgroup of Gur (Bodomo, 1994)

Kusaal has two main dialects

- The “**Eastern Kusaal**” dialect, also called the “**Agole**” Kusaal spoken in the Eastern part of the Kusaal area.
- The “**Western Kusaal**” dialect also called the “**Tonde**” Kusaal spoken in the Western area of the Kusaal Country in Ghana and over the border in Burkina Faso.

Naden states that they are « rather distinct dialects » (1986: 258).

1.1.3 Some differences between Eastern and Western Kusaal

The Western dialect differs from the Eastern dialect in at least two different ways.

First, **lexically**, Agole uses different words for some items than Tonde:

Agole	Tonde	
nij	ẽŋ	« <i>to do</i> »
yinni	arakõ	« <i>one</i> »
pevg	ti'vk	« <i>basket</i> »
ala	wela	« <i>thus</i> »
lidig	luŋ/di'i	« <i>astonish</i> »
gullim	mã'a	« <i>only</i> »
din	lanna	« <i>this</i> »
ani	nina	« <i>there</i> »
geemne	zanne	« <i>become mad</i> »

Second, there are systematic sound differences between Agole and Tonde Kusaal

- In word final position the lightly voiced apical trill -r in Agole speech is

a voiceless -t in Tonde

Agole	Tonde	
sor	sɔt	« road »
yv'ur	yv'ut	« name »
yir	yit	« house »
nõõr	nõõt	« mouth »
daar	daat	« day »

- The **s, h** fluctuation noted in Tonde does not exist in Agole speech

Agole	Tonde	
basem !	bahum !	« leave »
tis o	tih v	« give him »

- The Agole dialect has features of labialization which are absent in Tondé.

Agole	Tonde	
tua	tɔ	« pound »
kua	kɔ	« cultivate »
nua	nɔɔ	« fowl »
buak	bɔk	« divide »
sabua	sabɔɔ	« fiancé »
zan̄kua'ar	zā̄nkɔ'ɔt	« hyena »

- The Agole dialect has features of palatalization which are absent in Tondé.

Agole	Tonde	
si'el	se'el	« something »
diem	dɛem	« parent-in-law »
dia'at	da'at	« dirt »
kia	kɛ'	« chop »
siak	sak	« agree »
tiak	tɛk	« change »

- Consonant changes.

Agole	Tonde	
kikirig	sisirik	« demon »
waat	ɔt	« cold »
soogin	sooi	« between »
pu	bv	« not »

- Consonant drop in final position.

Agole	Tonde	
biig	bii	« <i>child</i> »
kɔ'ɔg	kɔ'ɔ	« <i>break</i> »
fi'ig	fi'i	« <i>cut off</i> »
yuug	kɔ'ɔ	« <i>delay</i> »

- Vowel changes.

Agole	Tonde	
vu'ug	vo'o	« <i>resuscitate</i> »
waa	wɔɔ	« <i>skin bottle</i> »
wala/ala	wela	« <i>thus</i> »
su	si	« <i>deposit</i> »
zumaanj	zãmaan	« <i>generation</i> »
ala	alɛ	« <i>how many</i> »
wa'a	wɛ'ɛ	« <i>walking</i> »

In this work, we focus on the Tonde dialect of Kusaal, more precisely the Burkina Tonde dialect of Kusaal.

1.1.4 Other studies in Kusaal

A number of other studies of the Kusaal language have been produced, but the majority deal with the Agole dialect and not with the Tonde dialect that is described in the present study.

Most of those studies are not very detailed:

- In 1922 FUNCKE published a kusaal wordlist in German (11 pages).
- David and Nancy SPRATT who begun their work with the Kusaasi people in 1962 with SIL and later GILLBT published “The Phonology of Kusal” in 1968 (54 pages) and “Kusal Syntax” in 1972 (78 pages). Both write-ups are more a sketch than a detailed Phonology or Grammar of the language. They published book in kusaal for literacy and translated the New Testament into Kusaal.
- In 1979, André PROST published a thesis called “Le Kusaal” (168 pages) but his phonology sketch is only 12 pages long.
- Tony NADEN has collected a word list with vocabulary mostly of the Eastern Kusaal dialect.
- More recently two Ghanaian Kusaasi scholars from the Eastern kusaal area have published their Master Thesis on Eastern kusaal: in 2010 AGOSWIN Anthony Musah

wrote a thesis “Aspects of Kusaal Phonology” which he submitted to the University of Ghana, Legon.

- In 2011 HASYATU Abubakari wrote a Master Thesis called “Object-sharing as symmetric Sharing: Predicate Clefting and Serial Verb constructions in Kusaal” at the University of Tromsø in Norway.

Most of the above mentioned documents focus on the Eastern Kusaal language which is not the dialect treated in our present study. As mentioned above, SPRATT’s and PROST’s studies count only a few pages on phonology and morphology and thus go not very deep into details. In addition to these linguistic studies, a number of reports on dialect surveys have been written by John Barthelette and Mike Steinborn in SIL Burkina Faso (see bibliography).

1.1.5 The sources of the data

The data used in this project came from a multitude of Kusaal speakers and my first 1800 word collection came from Mike Steinborn who worked with SIL for several years in the Kusaal project in Burkina Faso. In addition I collected in audio format 18 folk tales told by seven different speakers, I then transcribed them with the help of Mr WARE Kobena Jacques who has a BA in Geology from the University of Ouagadougou. I had also the privilege to work with Pastor OUANGRE Elie and SOUGA Martin who both are in the process of translating the New Testament into Burkina Tonde Kusaal. A great source of encouragement and of language data was Pastor SOUGA Emmanuel in Zabré. From March 2010 onwards, after having spent 23 years in Burkina Faso working in the Kassem and Ninkare language (for our publications in those two languages, see <http://www.kassena-ninkarse.org/burkina-faso/livres-langue-kusaal.html>) it was a privilege for me to help the Kusaasi people doing some linguistics in Kusaal in order to develop an orthography, a Kusaal primer and some kusaal books for new readers (see Appendix).

1.1.6 Current study

The research on which this present study is based was carried out over a period of roughly two years between March 2010 and April 2012 while engaged at the same time in other activities. This study constitutes a description of the Tonde Kusaal spoken in Burkina Faso. The work gives an overview of various aspects of the syntax, morphology and phonology of tondé Kusaal. The systematic description of tondé Kusaal is a task which has not been undertaken so far. The model used in the study is a phonemic one, presented basically from a structural point of view. Terms such as “opposition” and “neutralization” are thus employed. However, no attempt has been made to follow a specific approach. Rather, the language itself has been allowed to

dictate the specific approach in any particular area of the study. We begin with an overall view of grammatical aspects of Kusaal and end with more detail of the phonology.

1.1.7 Inventories of Kusaal consonants, vowels, and tones

The following are the phonemic inventories of Burkina Kusaal. Each will be discussed more fully, and evidence for contrast will be given in the chapters of consonants, vowels and tone.

- Consonant phonemes:
 - Plosives/stops: p, b, t, d, g, k,
 - Fricatives: f, v, s, z
 - Nasals: m, n ,ŋ
 - Laterals: l
 - Labiovelars: kp, gb
 - Glottal: h
 - Glides: y, w

Important allophone rules: /d/: [d], [r]; /s/: [s], [h]; /f/:[f], [s]; /g/: [g], [ɣ], [y], [ʔ],[∅]

Kusaal has a nine-vowel system with the vowels dividing into sets based on the ATR feature.

- Vowel phonemes:
 - +ATR: i, e, u, o
 - -ATR: a, ɪ, ε, v, ɔ
 - 5 nasal vowels: ã, ã̃, ẽ, õ, õ̃

All of these vowels all have long counterparts (aa, ãã ...) and also glottalized counterparts (a'a, ã'ã ...).

The tonal system of Kusaal has two level tones, high (H) and mid (M), and a falling tone (L) as well as a down-stepped high tone (!H), symbolized by acute accent (á), middle accent (ā), grave accent (à), and for the down-stepped high tone an exclamation mark before acute accent (!á).

High	báɲ	H	« <i>bangle</i> »
Mid	bāɲ	M	« <i>crocodile</i> »
Low	ò bāɲ	L	« <i>he knows</i> »
High-Down-stepped High	kpá'úɲ	H-!H	« <i>guinea fowl</i> »

1.2 Sketch of morphology and syntax

In this section, an overview is given to characterize in very few words the basic characteristics of grammatical features, which will then be discussed in more detail later.

1.2.1 Morphology:

- Inflection: suffixes are predominant
- Derivation: suffixes only
- Compounding: right headed Noun-Noun
- Nouns: Inflectional classes for number marking: each noun has a pair of suffixes for singular and for plural; no semantic classes.
- Verbs:
 - Preverbal tense marking
 - Aspect marking by suffixes and tone
 - No subject-verb or other grammatical agreement.
- Reduplication: complete reduplication; many ideophones and adverbials
- Juncture feature: When two words or clitics come together within a pause group such that the first ends in a consonant and the second begins with a consonant, a transition vowel of central indeterminate quality [ə] is inserted between the two words or clitics. It takes the tone of the preceding foot and it is non-phonemic.

1.2.2 Syntax:

- Categories :
 - Nouns, verbs. Adjectives have nominal character. Most postpositions are nouns.
- Word order
 - Subject - Verb - Object (unmarked sentence order), though direct objects or location/temporal elements may be fronted for emphasis.
 - Adpositions, determiners, adjectives are all post nominal, i.e. the head noun is always phrase initial with all its modifying elements following it. The determiner *la* “the” or demonstrative *bama* “those” is final. The quantifier is the only element that occurs after the determiner or the demonstrative pronoun.
 - Negation is preverbal.
- TAM:
 - Tense: distinction between future and non-future (non-future is unmarked)

- Aspect: Perfective versus imperfective (Perfective aspect covers an action which is viewed as a whole or carries the idea of completion; imperfective aspect covers continuous and (usually) habitual actions.
- Mood: Realis versus irrealis (Realis mode is used in main clauses which are declarative in nature; irrealis mode is used for the future tense, and in imperative and optative clauses, as well as special uses in discourse.) Mood is marked by tone patterns.
- Other aspects:
 - No overt case marking.
 - Serial verb constructions are very common.
 - Movement of constituents: focus and Wh-questions are fronted
 - Passive: only impersonal passive.
 - Clauses may be joined by the coordinating conjunctions *ka* “and”, *amaa* “but” or *bee* “or”. In the course of multi-sentence discourse *ka* « and » may very often begin a sentence.

1.3 Orthography

Kusaal, as other Burkina languages, use the Latin alphabet with the addition of some phonetic symbols approved by the Burkina government:

Symbols of the Burkina National Alphabet:

Symbols used in the Kusaal orthography:

L'alphabet national du Burkina Faso							
a	b	ɓ	c	ç	d	ɗ	e
ə	ɛ	f	g	gb	h	i	ɩ
j	k	kp	l	m	n	ny	ŋ
ɲm	o	ɔ	p	r	s	sh	t
u	ũ	v	w	x	y	y	
z	zh	Il comprend 42 symboles dont 31 consonnes et 11 voyelles.					

Figure 3 : National Alphabet of Burkina Faso

L'alphabet kusaal du Burkina							
a	b				d		e
	ɛ	f	g	gb	h	i	ɩ
	k	kp	l	m	n		ŋ
	o	ɔ	p	r	s		t
u		v	v	w		y	
z		Il comprend 29 symboles dont 20 consonnes et 9 voyelles.					
cinq voyelles nasales : ã, ě, ĭ, õ, ũ							

Figure 2 : Alphabet of Burkina Kusaal

In most cases, the relation between the sounds of Kusaal and their orthographic representation is one-to-one although exceptions exist, especially for the double sounds that are represented by the digraphs *kp* and *gb* in the orthography are pronounced by many speakers [kw] and [gw]. Up to 2012 the Kusaasi people in Burkina Faso did their literacy classes in Moore a closely related language. But in 2011 several associations worked together to develop a Burkina Kusaal orthography guide (also called spelling guide). The Burkina spelling for Kusaal differs in some

ways from the Ghanaian orthography that has had more Eastern Kusaal influence and does not use the tilde to signal nasal vowels, but inserts instead an **n** after a nasal vowel.

Tone is not thought necessary to be represented in the Kusaal orthography. Tonal representations would make the orthography rather cumbersome and the tones on words change according to their context in a sentence.

The spelling guide waits for the official approval of the National Sub-Committee for Kusaal which is being created in 2012.

The following table gives a broad idea of the correspondence between written and spoken Burkina Kusaal language.

Orthography and pronunciation:

Kusaal orthography:	y	w	yã	gb	kp	g	‘
IPA:	[j]	[v]	[ɲã]	[gw]	[kw]	[ɣ]	[ʔ]

In the following, a few additional features of Kusaal orthography are listed.

- **Long vowels** are written as two signs in the orthography: **aa, ee, εε, ii, u**, etc.
- **Nasal vowels** are marked by a tilde on top of them: **ã, ë, ï, õ, ù**. In the case of long vowels, only the first one is marked by a tilde: **ãa, ëe, ïi**, etc.
- The vowels can be interrupted by a **glottal stop**. The glottal stop is marked by an apostrophe ‘: **a’a, e’e, ë’ë**, etc. All the words beginning with a vowel are preceded by a glottal stop, but this is not marked, whereas the words ending in a glottal stop are marked by an apostrophe: **da’** « to buy », **bv’** « to hit » etc.
-

1.4 Maps



Figure 4 : Location of Kusaal within Burkina Faso

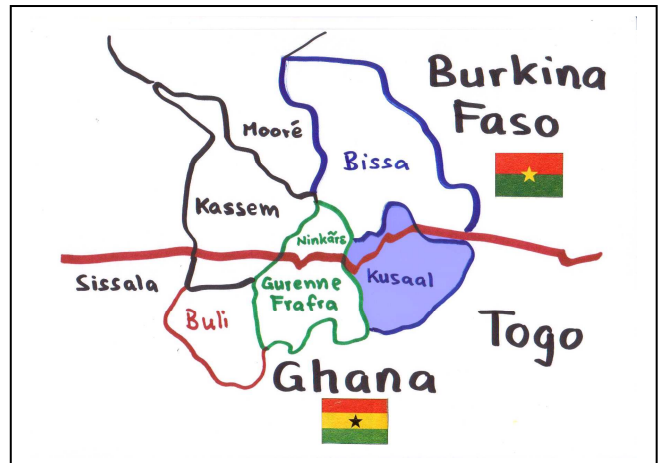


Figure 5 : Kusaal is spoken in Ghana and in Burkina Faso



Figure 6 : Kusaal villages in Burkina Faso

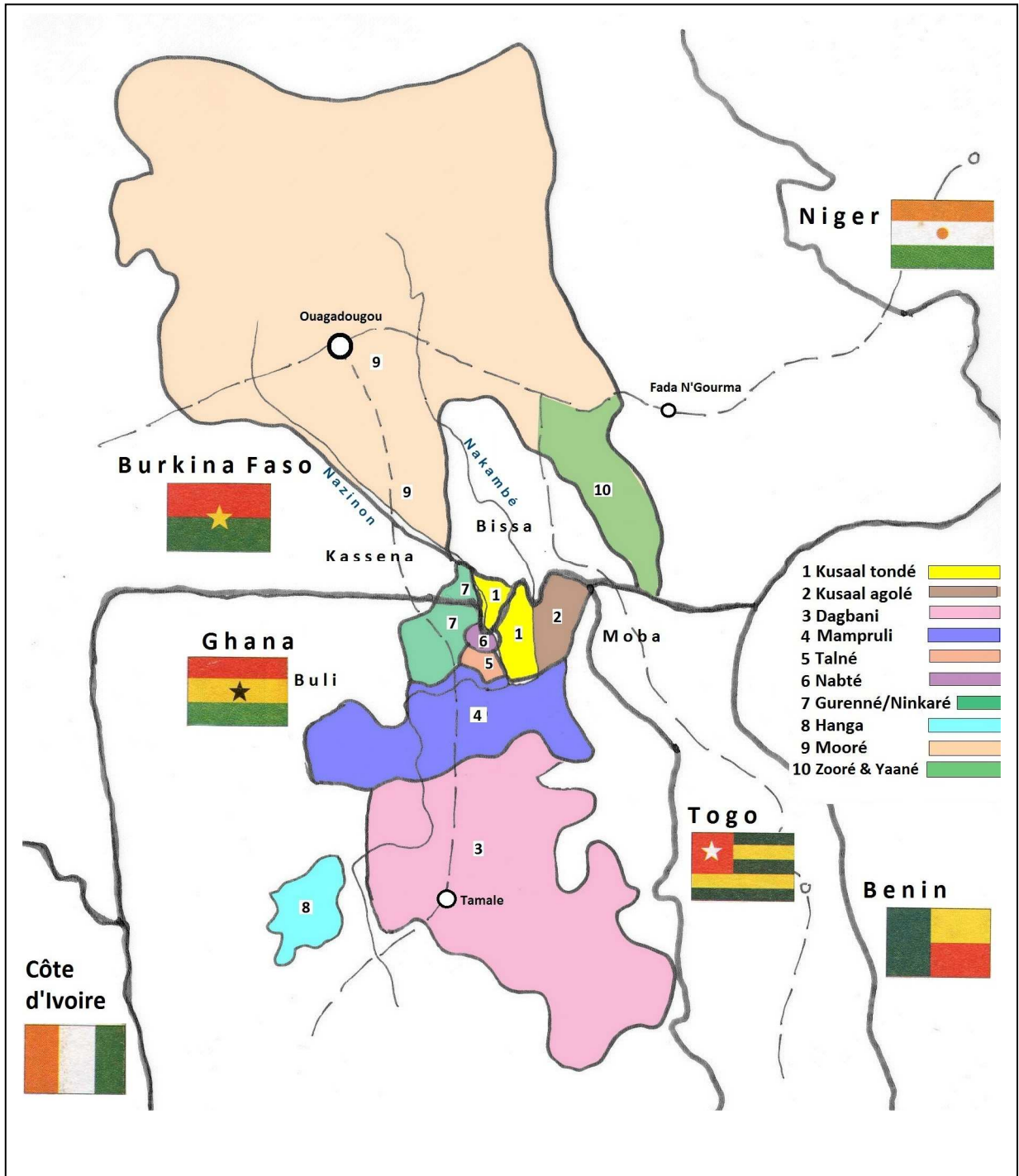


Figure 7 : Linguistically related languages of Kusaal

2 Phonology sketch

We begin with an overall view of the basic units in the Tonde Kusaal phonology. The Kusaal consonants and vowels are presented as well as some common phonological processes applying to consonants and vowels such as consonant assimilation, vowel lengthening, vowel harmony, etc.

The program ‘Praat’ was used for the acoustic phonetic aspects of the investigation.

2.1 Consonants

Burkina Kusaal has nineteen consonants and two glides (semi-consonants) in underlying representation: the plosives (or stops) /p, t, k, b, d, g, kp, gb, ʔ/, the fricatives /f, v, s, z, h/ and the sonorants /l, m, n, ŋ, w and y

From a phonetic point of view we found the following consonant sounds in Tonde Kusaal as represented in the chart 2.1

Figure 8 Table 1 : Phonetical consonant inventory

Manner of articulation ↓	← P o i n t s o f A r t i c u l a t i o n →							
	bi-labial	labio-dental	alveolar	palatal	velar	labio-velar	uvular & glottal	
Plosives	aspirated voiceless voiced flap	p^h p b		t^h t d r		k^h k k^j g g^j	kp kw gb gw	ʔ
Fricatives	voiceless voiced		f v	s z		x y		h ɣ
Laterals	voiced			l				
Glides	voiced	w ŵ			y			
Nasals	voiced	m m̂ m̄		n n̂ n̄	ɲ	ŋ ŋ̄		

In the general we used the symbols of the International Phonetic Association (I.P.A.) apart from a few exceptions which are indicated below (see point 1.5 Orthography):

y replaces the I.P.A. symbol : **j** (as in the English word « *year* »)

‘ replaces the I.P.A. symbol : ʔ (as in the London English expression [I go’ i’] « I got it. »).

The Kusaal sound system contains 20 consonantal phonemes:

Figure 9 **Table 2 : Phoneme chart of Kusaal consonants**

Manner of articu- lation ↓	← P o i n t s o f d ' a r t i c u l a t i o n →				
		labials	alveolar	post- alveolar	glottal
Plosives	voiceless	p	t	k kp	ʔ
	voiced	b	d	g gb	
Fricatives	voiceless	f	s		h
	voiced	v	z		
Lateral	voiced		l		
Glides	voiced	w	y		
Nasals	voiced	m	n	ŋ	

Notes: In writing kusaal we will use the pseudo-phoneme [r] which is an allophone of /d/ as we will show below. The glottal stop [ʔ] will be written as an apostrophe after vowels [‘].

2.1.1 Plosives / Stops

These consonant phonemes are identified by the following oppositions:

2.1.1.1 The phoneme /p/

p - b	póót	« <i>field</i> »	bóót	« <i>granary</i> »
p - t	páá	« <i>to arrive</i> »	táá	« <i>to plaster</i> »
p - f	pál	« <i>road</i> »	fál	« <i>space</i> »
p - m	pᵐᵔᵔ	« <i>paralytic</i> »	mᵐᵔᵔ	« <i>river</i> »
p - w	pᵐᵔ	« <i>to milk</i> »	wᵐᵔ	« <i>to hit</i> »

/p/ is a voiceless bilabial plosive; it has two variations, aspirated and unreleased:

[p] unreleased plosive only occurs in word final position when the previous consonant is a glottal plosive ex. [na’ap] /na’ap/ « *chief* ». In other utterance final positions there is free fluctuation between aspirated and unreleased plosives, [lep^h] or [lep] « *to return* »; [p^h] aspirated bilabial plosive occurs elsewhere, ex. [p^hoot] /poot/ « *field* »

2.1.1.2 The phoneme /b/

b

b - v	bò'òk	« valley »	vò'òk	« hat »
b - m	bèè̀t	« porridge »	mèè̀t	« construction »
b - d	bà'	« to fix »	dà'	« to buy »
b - w	bána	« chains »	wáma	« calabashes »

/b/ is a voiced bilabial plosive. In word final position the letter **b** is pronounced as a voiceless plosive **p**.

Ex. na'ap « chief » ; Õ ke'ε na'aba. « He is not a chief. »

2.1.1.3 The phoneme /t/

t

t - k	tó	« to pound »	kó	« to hoe »
t - d	tà'àṅ	« Shea tree »	dà'àṅ	« kitchen »
	tí	« to give »	dí	« to eat »
t - s	ték	« to change »	sék	« to be enough »
	tóm	« to work »	sóm	« to be good »

/t/ is a voiceless alveolar plosive, it has two variations, aspirated and unreleased:

[t] unreleased plosive only occurs in word final position, ex. [tʰɛ̃'ɛ̀t] /tɛ̃'et/ « to hope »

[tʰ] aspirated plosive occurs elsewhere, ex. [tʰɛk] /tɛk/ « frontier, limit »

In word final position the letter **t** can be the realization of **d/r**.

Examples:

[t]	[r]
tat « to have »	Tarim na ! « Bring it here! »
sit « husband »	La ke' ò sira. « It is not my husband. »
zūut « vultures »	La ke' zūure. « They are not vultures. »

2.1.1.4 The phoneme /d/

d

d - g	dúṅ	« mosquito »	gúṅ	« silk-cotton tree »
d - z	dó	« to climb »	zó	« run »
d - l	dà'	« to buy »	là'	« to laugh »
d - n	dóó	« dawadawa tree »	nóó	« chicken »

The phoneme /d/ may be defined as voiced alveolar plosive with different allophones:

Allophone /d/ [d] in word initial position

[r] voiced alveolar flap in intervocalic position

[t] in word final position (see above under /t/)

Examples: [d]	dók	« cooking pot »	[r]	bùráá	« man »
	dárók	« ladder »		lóríg	« to loosen »

However, in a number of cases, [d] is stable in intervocalic position thereby violating the allophonic rules. Thus in some loan words the sound [d] is maintained even in intervocalic position:

ko <u>du</u>	« banana »	borrowed word from Twi
ya <u>da</u>	« trust »	borrowed word from Hausa

The alternations between [d] and [r] are restricted to simplex words. When two lexical roots are combined in a compound, [d] as the onset of the second word is retained even in intervocalic position.

yi <u>d</u> ǎǎn	« house owner »	compound word from yit « house » and ǎǎn « owner »
bun <u>d</u> ɔɔ	« male donkey »	compound word from buɲ « donkey » and ɔɔ « male »
bun <u>d</u> ǎǎn	« riche »	compound word from bun « thing » and ǎǎn « owner »

2.1.1.5 The phoneme /k/

k	k - kp	ka'as	« to collect »	kpà'à	« to pour out »
	k - g	kó	« to hoe »	g'ó'	« to peck »
		kùùt	« funeral »	gúút	« cola nut »
	k - gb	kā'al	« gather »	gbā'al	« to put down »
	k - ŋ	lòk	« quiver »	lónŋ	« frog »
	k - '	dáká	« box »	dà'à	« market »
		mìk	« to be tight »	mí'	« dive »

/k/ is a voiceless velar plosive, it has two variations, aspirated and unreleased:

[k] unreleased velar only occurs in word final position, ex. [kǎ'ǎt] /kǎ'at/ « blessing »

[k^h] aspirated plosive occurs elsewhere, ex. [k^hawen] /kawen/ « sweet corn »

Palatalization: k is often pronounced slightly palatalized before the front vowels e and

Examples:

ke'	[k ^y ε']	« to cut (millet) »
kelese	[k ^y eles]	« to listen »

2.1.1.6 The phoneme /g/

g	g - gb	géén	« onions »	gbéem	« sleep »
	g - ŋ	kó'ogó	« depth »	kpá'ájó	« Guinea fowl »
	g - w	g'ó'	« to peck »	w'ó'	« to dance »

/g/ is a voiced plosive velar consonant. The phoneme /g/ has several **allophones**, thus depending on its context it can be pronounced either as:

- a) a fricative [ɣ] after high non closed vowels ɪ/ʊ
- b) a glide [y] or [w] after noun stem CVV with closed vowels ii/ɪ, uu/ʊ
- c) a glottal stop [ʔ] after ɔ, ɛ, a
- d) as a voiced velar [k] in word final position,
- e) palatalized [gʲ] word initially before the front vowels e and ɛ,
- f) or elided altogether [Ø] as a class 5 suffix in word final position.

a) The consonant **g** is pronounced weakened as a fricative [ɣ] if it is in intervocalic position between non closed high vowels

Examples: [ɣ]		[g] stays g after closed high vowels u or i	
gbɪɣɪm	« lion »	bùgúm	« fire »
lìɣìm	« tickle »	íigó	« savannah monitor »
dvɣʊt	« cooking pots »	fúúgó	« cloth »
dvɣʊ	« to cook »		

b) Weakening of **g** into a glide [y] if the word root has front vowels (i, ɪ, e, ɛ), and into [w] when the word root consists of back vowels (ʊ, u, o, ɔ).

Examples:

bii + ga	« child »	« Biiga, tum na. »	« Child, come here. »
pronounced:		[biiya]	
bʊʊ + ga	« goat »	La ke'ɛ bʊʊga.	« It is not a goat. »
pronounced:		[bʊʊwa]	

c) Following non-high vowels i/ɪ, u/ʊ, this means after **a, ɛ, ɔ**, the consonant **g** is pronounced as a glottal [ʔ] (or, depending on the speed of the speech, it is pronounced as a fricative uvular [ɣ]). Where this glottal stop is found, a strong, fairly low central transitional vowel is heard before the following consonant; this transitional vowel is almost defined as a [ɐ] which is sort of between [a] and [ɔ]. It is hard to tell the exact vowel quality and some speakers want to write /ɔ/ and the others prefer /a/.

Examples:

sag	« t.z. »	+ p « cl. 13 »	⇒ sa'ap	pronounced:	[saʔap]	or	[saɣap]
lag	« money »	+ f « cl. 11 »	⇒ la'af		[laʔaf]	or	[saɣaf]
mɔg	« lake »	+ t « cl. 9 »	⇒ mɔ't		[mɔʔt]	or	[mɔɣat]

d) In word final position, the consonant **g** is devoiced and pronounced as a voiceless plosive [k]

Examples:

wabu + **go** « *elephant* » ⇒ wabuk

wibi + **ga** « *hawk* » ⇒ wibik

e) The consonant **g** is pronounced palatalized [g^y] or [g^j] before the front vowels **e** et **ɛ**.

Examples:

gel pronounced [g^yel] « *egg* »

gefu [g^yefu] « *pocket* »

f) The velar **g** may be left unpronounced altogether [∅] in the context of a final suffix of a CVV noun or verb.

long form:

short form:

bii + **ga** bii « *child* »

tu + **ga** tu « *tree* »

buu + **ga** buu « *goat* »

bu paa + **ge** bu paae « *not arrived* »

bu yuu + **ge** bu yuue « *not lasted* »

2.1.1.7 The phoneme /kp/

kp	kp - p kpà'à « <i>to pour out</i> » pá'á « <i>to remain</i> »
	kp - gb kpé « <i>to enter</i> » gbè' « <i>to pass the night</i> »

/kp/ is a voiceless labio-velar plosive consonant. This sound is produced simultaneously with the velum and the lips as active organs of sound production. It never occurs in word final position. In Tonde Kusaal, the sounds [kp] and [kw] are free variations of the same sound. Since the letters **kw** are not in the National Alphabet of Burkina Faso, we will use the symbol **kp**.

Examples:

We write:

often pronounced:

kpaat [kwaat] « *farmer* »

kpi [kwi] « *to die* »

kpān [kwān] « *spear* »

2.1.1.8 The phoneme /gb/

gb	gb - b	gbá'á	« <i>be laying down</i> »	bá'á	« <i>ride (bike)</i> »
		gbè	« <i>pass the night</i> »	bé'	« <i>to be sick</i> »

/gb/ is a voiced labio-velar plosive consonant. It never occurs in word final position. In Tonde Kusaal, the sounds [gb] and [gw] are free variations of the same sound. Since the letters **gw** are not in the National Alphabet of Burkina Faso, we will use the symbol **gb**.

Examples:

We write:	often pronounced:	
gbɪgɪm	[gwɪgɪm]	« <i>lion</i> »
gbã'an	[gwã'an]	« <i>to be lying down</i> »
gbãvɔŋ	[gwãvɔŋ]	« <i>skin, book</i> »

2.1.1.9 The glottal stop [ʔ]

In Kusaal the glottal stop seems to have three different qualities:

a) The voiceless glottal stop /ʔ/ occurs before all words beginning with a vowel (except the 3rd singular personal pronoun), in the orthography it will not be written.

Examples:

'el	« <i>to marry</i> »
'ul	« <i>animal horn</i> »
'vvn	« <i>dry season</i> »

b) As we have seen under 2.1.1.6 c) the glottal stop can be a weakened form of the phoneme /g/.

c) A lenis voiceless glottal. In secondary (or weak) syllables this consonant is sometimes dropped altogether in very fast speech.

Examples:

kɔ'ɔm	or	kɔɔm	« <i>water</i> »
nu'uk	or	nuuk	« <i>hand</i> »
yv'vt	or	yvvv	« <i>name</i> »
da'a	or	daa	« <i>market</i> »

This seems to imply that the glottal stop has also a supra-segmental feature to reinforce vowels (see 2.2.6 Glottalized vowels).

2.1.2 Fricatives

2.1.2.1 The phoneme /f/

f	f - v	fábíl	« to worry »	vábíl	« to bow down »
	f - s	fáát	« heritage »	sáát	« plan »

/f/ is a voiceless labio-dental fricative. It has an allophone [h] occurring between two vowels in a fast pronunciation.

Allophone /f/ [h] in intervocalic position in fast speech
[f] elsewhere

Examples :

nááfó	can be pronounced	[nááhó]	« cow »
wéfó		[wéhó]	« horse »
Mam tuti fu.	can be pronounced	[mam tuti hu]	« I give you. »

2.1.2.2 The phoneme /v/

V	v - z	vóm	« life »	zóm	« flower »
	v - w	vúú	« to drag »	wúú	« all »
		vé'	« to give »	wè'	« to beat »

/v/ is a voiced labio-dental fricative. It never occurs in word final position.

2.1.2.3 The phoneme /s/

S	s - z	sǒŋ	« mat »	zǒŋ	« stable »
---	-------	-----	---------	-----	------------

/s/ is a voiceless alveolar fricative. It has an allophone [h] occurring between two vowels in a fast pronunciation.

Allophone /s/ [h] in intervocalic position in fast speech
[s] elsewhere

bàsım	can be pronounced	[bàhım]	« leave ! »
bísım		[bíhìm]	« look ! »
Ò púús ú.		[ò púúh ú]	« He greeted him. »

However the rule /s/ ⇒ [h] does not apply across morpheme boundaries of complex words. When two lexical roots are combined in a compound, [s] as the onset of the second word is retained even in intervocalic position.

Example: zum « blood » + sɔt « way » ⇒ zısɔt « blood-way, vein »

2.1.2.4 The phoneme /z/

Z

z - s zéét « *sauce* » séét « *tiredness* »
 /z/ is a voiced alveolar fricative.

2.1.2.5 The phoneme /h/

h

The phoneme /h/ is rather rare in Kusaal, it is mostly found in the word-initial position of some loan words and in interjections or as a weakened pronunciation of the phonemes /f/ and /s/ in intervocalic position of simplex words (see above). Thus there are no minimal pairs.

Examples: **hámá** « *hammer* » (from English)
hálí « *intensifier, very* »

/h/ is a voiceless glottal fricative.

2.1.3 Liquids and glides (semi-vowels)

2.1.3.1 The phoneme /l/

l

l - r	yìlìg	« <i>to be lost</i> »	yíríg	« <i>untie</i> »
	bu tólé	« <i>not cross</i> »	bu tòrà	« <i>no share</i> »
l - n	lónj	« <i>frog</i> »	nónj	« <i>poverty</i> »
	lí	« <i>to fall</i> »	ní	« <i>to rain</i> »

/l/ is a voiced lateral.

2.1.3.2 The phoneme /w/

W

w - y	wè'	« <i>to beat</i> »	yè	« <i>to see</i> »
	wé	« <i>pry</i> »	yé'	« <i>put on (cloth)</i> »
w - m	wá'á	« <i>be long</i> »	má'á	« <i>be cold</i> »
	wè'	« <i>to hit</i> »	mè'	« <i>to build</i> »

/w/ is a voiced labio-velar semi-vowel. It never appears in a word final position.

Allophone /w/ [ŵ] before nasal vowels, ex. [ŵãaŋ] or [ŋŵãaŋ] /wãaŋ/ « *monkey* »
 this [ŵ] or [ŋŵ] is the kusaal way of saying the [ŋm] of neighboring languages.

[w] elsewhere

2.1.3.3 The phoneme /y/

y	y - n	yááp	« ancestor »	nà'áp	« chief »
		yám	« gall »	nám	« you »

/y/ is a voiced palatal semi-vowel. It never appears in a word final position. The phoneme /y/ has as an allophone the palatal nasal [ɲ] before nasal vowels.

Allophone /y/ [ɲ] in word initial position before a nasal vowel
[y] elsewhere

Examples:	[ɲ]		[y]	
	ɲóót	« benefice »	yóót	« salary »
	ɲóót	« nose »	yóót	« water pot »
	ɲú'út	« naval »	yú'út	« name »
	ɲá'át	« root »	yá'at	« cheek »

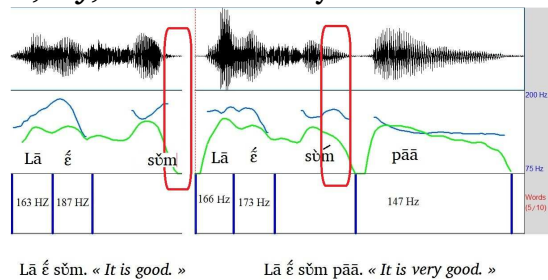
2.1.4 Nasals

2.1.4.1 The phoneme /m/

m	m - n	máán	« to sacrifice »	náán	« to honour »
		móót	« grass »	nóót	« mouth »

/m/ is a voiced bilabial nasal. The syllabic nasal **m̩** « I, my, me » is the only consonant that bears a tone.

Allophone /m/	[<u>m</u>]	mute nasal before pause
	[m̩]	syllabic nasal in isolation (as a pronoun)
	[m]	elsewhere



In this graphic done with help of the PRAAT program, one can see that the word final **m̩** is mute (blue line), while within a phrase, the **m̩** is voiced and bears a tone.

2.1.4.2 The phoneme /n/

The phoneme /n/ has been identified by the oppositions above (y/n ; m/n ; d/n).

/n/ is a voiced alveolar nasal.

Allophone /n/ [n] mute in word final position before pause

[ŋ] elsewhere

A syllabic nasal ŋ unspecified for place of articulation occurs as part of a few noun roots (e.g. *ngbām* «toad», *ngbāt* «Senegal Bush Baby», *ngɛ'a* «Bouet's agamid») which are almost certainly loan words. In all contexts ŋ assimilates in place of articulation to any following consonant ([ŋgbām]).

2.1.4.3 The phoneme /ŋ/

ŋ

ŋ - n	náŋ	« scorpion »	nàn	« now »
	bùŋ	« donkey »	bún	« thing »
	yú'úŋ	« night »	yú'ún	« then »
ŋ - g	see 2.1.1.6			

/ŋ/ is a voiced velar nasal. It occurs only on the word/syllables final position and as a velar assimilation before velar sounds (ex. n + k ⇒ ŋk).

Examples:

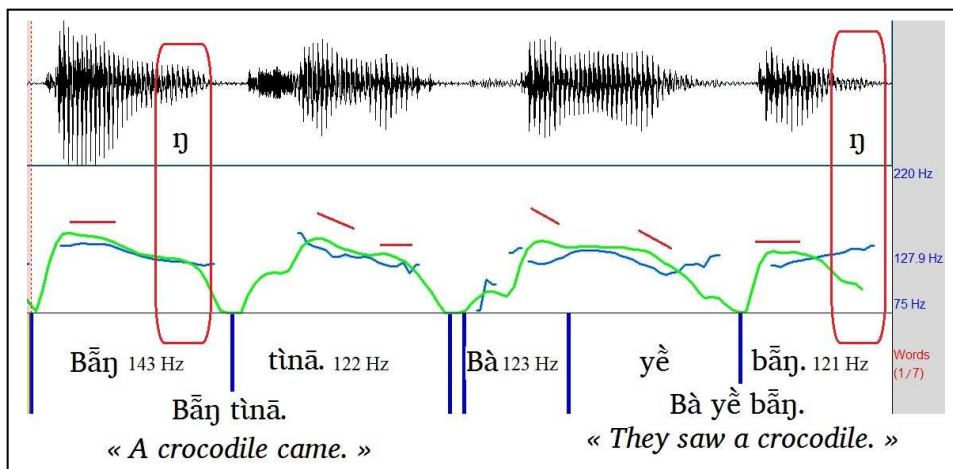
gbān + go ⇒ gbāuŋ « skin, book » plural : gbān + a ⇒ gbāna « skins/books »
 bun + ga ⇒ buŋ « donkey » plural : bun + se ⇒ bumise « donkeys »

One can observe that this assimilation occurs only at the morpheme frontier of noun classes, but it does not occur in verbs. If one would treat [ŋ] as n + g, this would add new syllable structures.

Word final before a pause the ŋ is mute (see graphic below done with PRAAT). For example the word *bāŋ* « crocodile » is pronounced mute before a pause [bāŋ#].

But the ŋ followed by another word is pronounced voiced.

Example: Bāŋ tuna. « A crocodile has come. » Ba yē bāŋ#. « They saw a crocodile. »



Allophone /ŋ/ [ŋ] mute in word final position before pause
 [ŋ] elsewhere

2.2 Vowels

This section describes the various phonemes that constitute the vocalic system of Burkina Kusaal.

Figure 10 **Table 3 : Chart of the phonetical vowel inventory**

Aperture	front		central		back	
	oral	nasal	oral	nasal	oral	nasal
high:						
close	i i' i:				u u' u:	
open	ɪ ɪ' ɪ:	ĩ ĩ' ã:			ʊ ʊ' ʊ:	ũ ũ' ã:
mid:						
half-close	e e' e:		ə		o o' o:	
half-open	ɛ ɛ' ɛ:	ẽ ẽ' ẽ:			ɔ ɔ' ɔ:	õ õ' õ:
low:						
open			a a' a:	ã ã' ã:	ɒ	

The Kusaal sound system contains 9 vowel phonemes, all vowels can be short or long, either oral or nasal, either followed by a glottal stop or pronounced without a glottal stop.

There are no mute vowels in kusaal and no allophones. In our description we will present first the short oral vowels and afterwards discuss the features of length, nasalization and glottalization. Vowel succession and diphthongs will be treated in 2.2.6

2.2.1 The oral vowels

The vowel phonemes are identified by the following oppositions:

2.2.1.1 The phoneme /i/

i - ɪ	lí	« to fall »	lí'	« to be mute »
i - e	sì	« to put inside »	sé	« transplant »
i - ɛ	sík	« to unload »	sék	« to suffice »
i - u	gít	« to shake head »	gút	« to guard »
i - ʊ	kpí	« to die »	kó	« to kill »

/i/ is a close high front unrounded advanced vowel.

2.1.2.2. The phoneme /ɪ/

ɪ - i see 2.1.2.1.

ɪ - e	zì'	« to ignore »	zè	« to carry »
ɪ - ε	sí'	« to fly »	sè	« to do intentionally »
ɪ - a	dí	« to eat »	dà'	« to buy »
ɪ - v	bì'	« to grow »	bú'	« to hit »

/ɪ/ is an open high front unrounded unadvanced vowel.

2.1.2.3. The phoneme /e/

e - i see 2.1.2.1 ; e - ɪ see 2.1.2.2.

e - ε	sé	« to transplant »	sè	« to do purposely »
e - a	bé	« to be »	bá'	« to fix into »
e - o	lèb	« to return »	lób	« to through »

/e/ is a half-closed front unrounded advanced vowel.

2.1.2.4. The phoneme /ɛ/

ε - i see 2.1.2.1 ; ε - ɪ see 2.1.2.2 ; ε - e see 2.1.2.3.

ε - a	sék	« to suffice »	sàk	« to accept »
ε - ɔ	lé	« to harness »	lò	« to bind »

/ɛ/ is a half-open front unrounded unadvanced vowel.

2.1.2.5. The phoneme /a/

a - ɪ see 2.1.2.2 ; a - e see 2.1.2.3 ; a - ε see 2.1.2.4.

a - ɔ	là'	« to laugh »	lɔ'	« to migrate »
a - o	lánɲ	« to burn »	lónɲ	« to cross over »
a - v	bá'	« to fix into »	bú'	« to hit »

/a/ is a low central vowel.

2.1.2.6. The phoneme /ɔ/

ɔ - ε see 2.1.2.4 ; ɔ - a see 2.1.2.5

ɔ - o	yó	« to pay »	yó'	« to shut »
ɔ - v	tók	« to drop »	tùk	« to carry »

/ɔ/ is a half-open back rounded unadvanced vowel.

2.1.2.7. The phoneme /o/

o - e	see 2.1.2.3 ;	o - a	see 2.1.2.5 ;	o - ɔ	see 2.1.2.6
o - ʊ	lón	« frog »		lún	« hourglass drum »
o - u	sò	« to wash »		sú	« to be drunk »

/o/ is a half-close back rounded advanced vowel.

2.1.2.8. The phoneme /ʊ/

ʊ - i	see 2.1.2.1 ;	ʊ - ɪ	see 2.1.2.2 ;	ʊ - ɔ	see 2.1.2.6 ;	ʊ - o	see 2.1.2.7
ʊ - u	bù	« to judge »		bù	« to mix »		

/ʊ/ is an open high back rounded unadvanced vowel.

2.1.2.9. The phoneme /u/

u - i see 2.1.2.1; **u - o** see 2.1.2.7 ; **u - ʊ** see 2.1.2.8

/u/ is a close high back rounded advanced vowel.

2.1.2.10. The central vowel schwa [ə]

The schwa sound [ə] has no phonemic status in Kusaal. It serves in the role of an epenthetic vowel between the consonant of for example a close syllable CVC and the onset of the suffix: CVC + CV ⇒ CVCəC. We write this sound with /ɪ/ or /ʊ/ in certain cases depending on the vowel in the word root, and in other cases depending on the vowel in the suffix.

Examples:

long form:		short form:	
wab + go pronounced	[wabəgo]	wab + ʊk	[wabʊk] /wabʊk/ « elephant »
mɔl + fo	[mɔləfo]	mɔl + ʊf	[mɔlʊf] /mɔlʊf/ « Buffon's Kob »
wɪb + ga	[wɪbəga]	wɪb + ɪk	[wɪbɪk] /wɪbɪk/ « hawk »

However the pronunciation of the Schwa [ə] is very short and often it is difficult to tell what vowel quality it takes. The Schwa [ə] has no minimal pairs opposing it with other vowels and it does not appear in the Kusaal alphabet.

These are the simple vowel phonemes of Kusaal, but each of the above shown nine short vowels have a long counterpart and all of them can be oral or nasal as well as “glottalized”.

2.2.2 The nasal vowels

In Kusaal, nasal vowels contrast with oral vowels after non-nasal consonants.

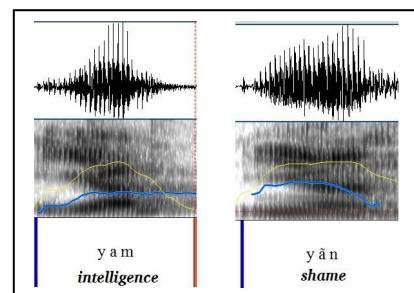
The five open vowels ɪ, ε, a, ɔ, ʊ can occur as nasal vowels ã, ẽ, ã̃, õ, ũ. They are in opposition with their oral counterparts as the following oppositions show:

ĩ - ɪ	tĩ	« to vomit »	tí	« to give »
ĩ - i	kpĩ	« to be related »	kpì	« to die »
ẽ - e	sẽ'	« to saw »	sé	« to transplant »
ẽ - ε	yẽ	« to see »	yé'	« to dress »
ã - a	bã'	« to ride »	bá'	« father »
õ - o	bõ	« to sow in line »	bò	« to loose »
õ - ɔ	yõ'	« to burn »	yò'	« to collect leaves »
ũ - u	kúkút	« handle of a hoe »	kúkút	« pig »
ũ - ʊ	gú'út	« champignon »	gú'út	« cola nut »


Nasal vowels have a slightly longer pronunciation time than their oral counterparts.

Ex.


yam	« intelligence »
yã	« shame »



Vowels are usually phonetically nasalized contiguous to a nasal consonant. The nasality of a vowel is thus caused by neighbouring nasal consonant before or after the vowel. The [+nasal] sounds spread their nasal feature to their left and to their right.

Examples: of regressive nasalization (spreading to the left) 

kul	« to go home PF »	the vowel u is not nasalized
kun	« to go home IPF »	the vowel [ũ] is nasalized
svɥa	« good »	the vowel ʊ is not nasalized
súm	« good »	the vowel [ũ] is nasalized
kpì	« die »	the vowel i is not nasalized
kpĩŋ	« extinguish »	the vowel [ĩ] is nasalized

Examples of nasalization of a vowel derived from the nasal preceding to the right: 

nāāf « cow »	mā « mother »		
nā'ap « chief »		mā'a	« only »
nāārá « early millet »		nó'ót	« leg »

Even though all vowels following a nasal consonant are nasalized, there is a distinction between strong and weak nasalization of vowels. The strong ones are nasal vowels and the weak ones are oral vowels affected by the immediate nasal consonant environment.

Examples:

weak nasalization:

ná'àp « chief »
nááf « cow »
ná'am « chiefdom »
nát « to be necessary »
nàn « to respect »

strong nasalization:

nāārá « early millet »
nó'ót « leg »
nān « now »
nāmes « to suffer »
nāām « to create »

Note on the orthography of nasal vowels:

Since the Kusaasi in Burkina Faso used to do literacy in Moore up to 2012 they are used to see the nasal tilde on the letters ã, ě, ĩ, õ, ũ. To facilitate the transfer from Moore to kusaal and because there is neutralization between ě and ě̃; ĩ and ĩ̃; õ and õ̃; ũ and ũ̃, we used the same symbols as Moore to mark a nasal vowel: ã, ě, ĩ, õ, ũ

2.2.3 The long vowels

The distinction of short and long vowels is of phonological distinction in Kusaal. We write the long vowels with two identical symbols. We interpret them as a long vowel since both bear always the same tone.

The evidence of the significance of vowel length is given by the following oppositions:

short vowel :			long vowel :	
i - ii	kpi	« to die »	kpii	« hernia »
ĩ - ũ	tí	« to vomit »	tíít	« vomiting »
ɪ - u	dí	« to eat »	díúp	« food »
e - ee	sé	« to transplant »	séé	« kind of tree »
ẽ - ěẽ	bét	« to set a trap »	béét	« porridge »
ε - εε	bén	« underwear »	béén	« boarder »
a - aa	pá'	« to remain »	páá	« to arrive »
ã - ãã	sám	« debt »	sáám	« father »

o - oo	sò	« to wash »	sóóp	« washing »
ɔ - ɔɔ	pó	« to swear »	póót	« small »
õ - õõ	dḥ	« to weed »	dḥḥ	« dawadawa fruit »
u - uu	yúm	« to sing »	yúbúm	« year »
u - uu	pùgù	« to float »	pùùg	« to cross »
ũ - ùũ	súmá	« groundnuts »	súút	« heart »

The evidence of the difference between long oral vowels and long nasal vowels is given by the following oppositions:

	long oral vowels:		long nasal vowels:	
ii - ïï	wíri	« horses »	wíit	« strings »
u - ù	púna	« genets »	púma	« arrows »
ee - ēē	sèl	« to plant »	séé	« to be tired »
εε - ēē	kéés	« to cut (hair) »	kéésá	« lamentable »
aa - āā	sáát	« plan »	sáàt	« diarrhoea »
ɔɔ - ɔ̃ɔ̃	dóó	« to get up »	dḥḥ	« dawadawa »
oo - õõ	vóók	« empty »	vḥḥk	« hat »
uu - ùũ	zúút	« tale »	zúút	« vultures »
uu - ùũ	kúú	« mouse »	kúút	« hoe »

Long vowels occur only in primary syllables carrying accent. That is, they are always the nucleus of the foot, including the complex foot. The vowel of the primary syllable of an embedded foot is always short.

Examples:

bii « child » but bilεε « baby »; buraa « man » but bura-yā'an « old man »

2.2.4 The laryngealization of vowels

2.2.4.1 Glottal stop between vowels

All words beginning with a vowel are preceded by a lenis glottal stop (which is not written in the orthography). In secondary syllables this consonant is sometimes dropped altogether, thus one can hear *kɔ'ɔm* « water » and in a very rapid pronunciation only *kɔɔm* « water ».

As we have already seen (2.1.2.9), the glottal stop is only in opposition with other consonants and with zero between two vowels or in word final position. Words that have no glottal stop in the closely related language Mooré like *koom* « water » or *yuvre* « name », have a glottal stop in

Kusaal *kɔ'om* « *water* », *yɔ'ut* « *name* ». We interpret this phenomena as laryngealization of these vowels to reinforce the vowel pronunciation and thus distinguish lexical words. This feature gives a typical “guttural colouring” to Kusaal. Therefore we speak from now on of “glottalized or laryngealized” vowels.

The following examples illustrate the difference of simple vowels and of glottalized vowels:

With glottal stop ' [VʔV] :

pa'al	« <i>to climb</i> »
kpa'a	« <i>peg</i> »
pa'a	« <i>shelter</i> »
wã'a	« <i>to break</i> »
sã'am	« <i>to spoil</i> »
zã'asvɔ	« <i>to refuse</i> »
nɔ̃'ɔt	« <i>foot</i> »
sɔ̃'ɔ	« <i>to be better</i> »
sɔ'ɔs	« <i>yesterday</i> »
kpɛ̃'ɛtɛ	« <i>enter IPF</i> »
bv'	« <i>to hit</i> »
kɔ'ɔtɛ	« <i>to break IPF</i> »
kpɛ'em	« <i>to be hard</i> »
tu'utɛ	« <i>insult IPF</i> »
wɛ'ɛ	« <i>to go IPF</i> »
wo'o	« <i>to be wet</i> »
ya'al	« <i>to hang up</i> »
yɔ'ɔt	« <i>marrow</i> »
mɔ̃'ɔt	« <i>river</i> »

Without glottal stop:

paal	« <i>new</i> »
kpãa	« <i>all</i> »
paa	« <i>to arrive</i> »
wãa	« <i>to cut</i> »
sãam	« <i>visitors</i> »
zãasvɔ	« <i>to dream</i> »
nɔ̃ɔt	« <i>mouth</i> »
sɔ̃ɔ	« <i>to smear</i> »
sɔɔs	« <i>to frighten</i> »
kpɛ̃ɛtɛ	« <i>drying up IPF</i> »
bv	« <i>not</i> »
kɔɔtɛ	« <i>to hoe IPF</i> »
kpɛ̃ɛm	« <i>adult</i> »
tɔtɛ	« <i>to thread IPF</i> »
wɛɛ	« <i>tilapia fish</i> »
woo	« <i>every</i> »
yaal	« <i>to suffer</i> »
yɔɔt	« <i>termite</i> »
mɔ̃ɔt	« <i>grass</i> »

We present some other examples drawing out the opposition between gottalized and non glottalized vowels.

ii i'i	kíɪbɔk	« <i>orphan</i> »	wíɪs	« <i>flutes</i> »
	kpí'ím	« <i>ghost</i> »	lí'ís	« <i>avoid sob.</i> »
ĩĩ ĩĩ u u'	pí'ím	« <i>arrow</i> »	bí'ísím	« <i>milk of woman</i> »
	pí'úlím	« <i>beginning</i> »	bí'írsít	« <i>breast</i> »
	tíí	« <i>tree</i> »	tíím	« <i>medicine</i> »
	wí'ís	« <i>to glean</i> »	tí'ít	« <i>basket</i> »
ee e'e	dèè	« <i>warthog</i> »	zéép	« <i>load</i> »
	tè'è	« <i>baobab tree</i> »	ké'és	« <i>say goodbye</i> »

ẽẽ	bě̀èt	« porridge »	déél	« to aim at »
ẽ'ẽ	bé'ět	« mud »	dè'è	« at the side of »
ee	béén	« boarder »	bèèl	« to accompany »
e'e	bè'è	« ladle »	bé'élá	« few, little »
aa	yáál	« to suffer »	láás	« plates »
a'a	yà'àl	« to give birth »	lá'ás	« to gather »
ãã	dáán	« owner »	sáám	« to dilute »
ã'ã	dà'àṅ	« courtyard »	sá'ám	« to destroy »
oo	vóók	« empty »	dóók	« case »
o'o	vó'óg	« to resurrect »	gó'óṅ	« sickle »
õõ	gḽḽt	« doughnut »	vḽḽt	« hole »
õ'õ	gḽ'ḽ	« thorn »	vḽ'ḽs	« hats »
ɔɔ	tóót	« mortar »	bóól	« to call »
ɔ'ɔ	gḽ'ḽ	« fish hook »	bó'ḽs	« to ask »
uu	gúút	« cola nut »	búú	« goat »
u'u	gú'ú	« to fail »	yú'úṅ	« night »
ũũ	yú'út	« yam »	sú'út	« heart »
ũ'ũ	yú'út	« navel »	sú'út	« joint »
uu	dúús	« to wipe off »	fúúk	« cloth »
u'u	dù'út	« walking stick »	gù'ùs	« to pay attention »

2.2.4.2 Glottal stop at the vowel onset and at word end

All words that start with a vowel have a glottal onset. This is a prosodic feature with no phonological opposition.

Examples :

'úún « dry season », 'è « to look for », 'igil « to kneel », 'éṅ « to do »

Often a word can end with a glottal stop. However when the same word is pronounced in a phrase the glottal stop is not heard.

Ò dà kí.

he buy millet

« He bought millet. »

Compare with:

Ò bú dá'.

he NEG buy

« He did not buy. »

Bà ké kí bá'asumè.

they cut millet finish ASS

« They finished cutting the millet. »

Bà bú ké'.

they NEG cut

« They did not cut. »

Figure 11

Table 4 : The phonetic vowel chart

opening	front		central		back	
	oral	nasal	oral	nasal	oral	nasal
high:						
close short	i i'				u u'	
close long	ii i'i				uu u'u	
open short	ɪ ɪ'	ĩ ĩ'			ʊ ʊ'	ũ ũ'
open long	ɯ ɯ'	ũũ ũ'ũ			ʊʊ ʊ'ʊ	ũũũ ũ'ũũ
mid:						
close short	e e'				o o'	
close long	ee e'e				oo o'o	
open short	ɛ ɛ'	ẽ ẽ'			ɔ ɔ'	õ õ'
open long	ɛɛ ɛ'ɛ	ẽẽ ẽ'ẽ			ɔɔ ɔ'ɔ	õõõ õ'õõ
low :						
open short			a, a'	ã ã'		
open long			aa, a'a	ãã ã'ã		

2.2.5 Vowel sequences

A number of vowel sequences occur in Kusaal both within morphemes and across morpheme boundaries.

2.2.5.1 Diphthongs

Diphthongs can be observed in:

- Some noun roots + class suffix Ex: *bã* + *ʊk* « *shoulder* »; *dàà* + *ʊk* « *wood* »
- Foreign loans like numbers *ayopɔ* « *seven* », *awai* « *nine* », further some loans like *mui* « *rice* » (which is the only word found with a **ui** sequence), *bakpai* « *week* ».

- Interjections like *ayei* « *no !* », and ideophones like *puii* « *sound when something falling to the ground* »,
- When two words are adjacent, the first ending in a vowel and the second beginning with a vowel. For example *tu* « *to give* » followed by *v* « *him/her* » ⇒ [tʉ]

We observe here that V₂ of the diphthong is always a high vowel *ɪ/i* or *ʊ/u*. Diphthongs can have a short vowel or a long vowel, an oral vowel or a nasal vowel. We found 154 words with diphthongs (out of 2700 nouns and adverbs).

Examples:

au	pauk	« <i>bark</i> »	sauk	« <i>rubbish</i> »
ãu	gbãuŋ	« <i>book</i> »	sãuŋ	« <i>destruction</i> »
aaʉ	gaauŋ	« <i>idiot</i> »	nɔraauk	« <i>rooster</i> »
ãaaʉ	gãaaʉk	« <i>raven</i> »	sãaaʉŋ	« <i>hospitality</i> »
eu	teuk	« <i>nest</i> »	leuŋ	« <i>goitre</i> »
ẽu	bẽuŋ	« <i>lake</i> »	ayẽʉ	« <i>cat</i> »
eeʉ	beeʉk	« <i>tomorrow</i> »	leeʉk	« <i>bucket</i> »
ẽeeʉ	ẽeeʉk	« <i>hump</i> »	gbẽeeʉk	« <i>mane</i> »
iu	sãmpiuk	« <i>butterfly</i> »	kikiuŋ	« <i>early</i> »
iiu	iiuk	« <i>savannah monitor</i> »	viiuŋ	« <i>owl</i> »
ʉʉ	aditʉŋ	« <i>right</i> »	yʉŋ	« <i>single, unique</i> »
ʉʉʉ	wʉʉk	« <i>red</i> »	sʉʉʉ suʉk	« <i>scabbard</i> »

A diphthong has the same length as a full vowel; therefore words like *daauk* « *wood* » are regarded as one syllable words: CVVC can be [CVʉVC].

2.2.5.2 Vowel sequences across morpheme boundaries

The diphthongs are mostly found across morpheme boundaries. A vowel sequence results from the juxtaposition of a noun root plus a noun class suffix *-ʉk* or *-ʉŋ/-uŋ*, or a verb followed by a pronoun complement suffix *-ʉ* « *him* ».

Examples:

gbãn	« <i>skin</i> »	+	ʉŋ	« <i>cl. 4</i> »	⇒	gbãuŋ	« <i>skin/paper</i> »
te	« <i>nest</i> »	+	ʉk	« <i>cl. 6</i> »	⇒	teʉk	« <i>nest</i> »
tiʉ	« <i>basket</i> »	+	ʉk	« <i>cl. 6</i> »	⇒	tiʉʉk	« <i>basket</i> »
ti	« <i>give</i> »	+	ʉ	« <i>him</i> »	⇒	tiʉ	« <i>give him, for him</i> »

This also applies to long vowels:

Examples:

daa	« stick »	+	ʊk	« cl. 6 »	⇒	daavk	« stick »
vāa	« leaf »	+	ʊk	« cl. 6 »	⇒	vāavk	« leaf »
vii	« owl »	+	uŋ	« cl. 4 »	⇒	viiuŋ	« owl »

Some **verbs** are analysed as sequences of two syllables, the first containing a long vowel, followed by a suffix **-ɪ** which constitutes the second syllable. CVV.V before pause and CVV phrase-internally.

Examples:

Citation form:	In a clause:	
wɔɔ « to praise »	Ba wɔɔ Wina'am.	« They praised God. »
dɔɔ « to get up »	Ba dɔɔ tɪŋ Zabit.	« They got up and went to Zabre. »
paa « to arrive »	Ba paa Asaa yiri.	« They arrived at Asaa's house. »
kaa « to visit »		
naa « to finish »		
tɔ « bitter, hard »		
vo « to live »		

2.3 Syllabic structure

A syllable is the basic unit of sound organisation and it comprises nuclear and marginal elements. Each syllable has a prominent sound which is its peak or its nucleus. These peaks of prominence refer normally to the vowels that occur in a word. In the “Praat” graphic the peak is shown by the yellow line showing the intensity with which the elements of the word are spoken. Each syllable then corresponds to a peak.

Examples:

One peak word:

ba' « father »

CV

Two peak word:

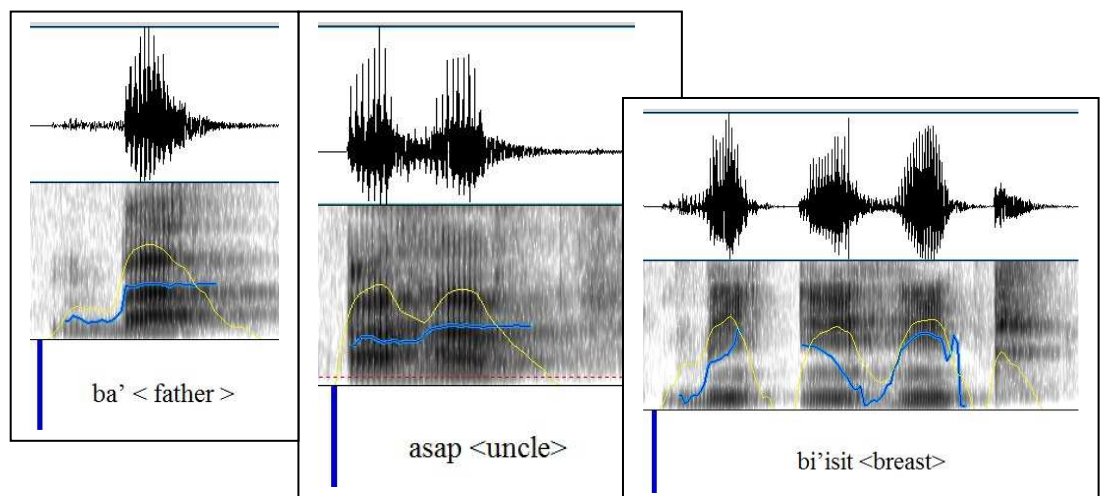
asap « uncle »

V.CVC

Three peak word:

bi'isit « breast »

CV.CV.CVC



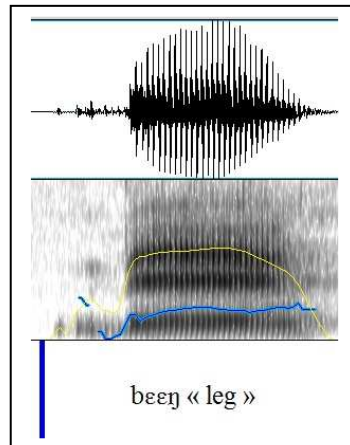
A long vowel occurrence has only one peak of prominence, also a diphthong has only one peak of prominence and displays the same length as a long vowel.

Examples:

One peak of prominence
for a long vowel

bεεŋ « leg »

CVvN

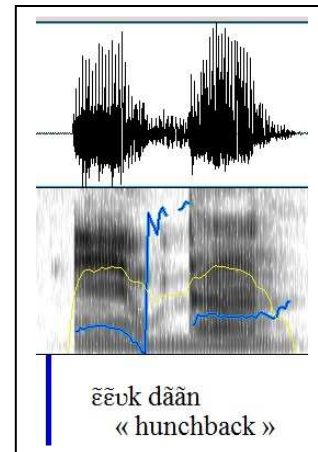


One peak of prominence
for the diphthong in the first
word, another peak for the long
vowel in the second word

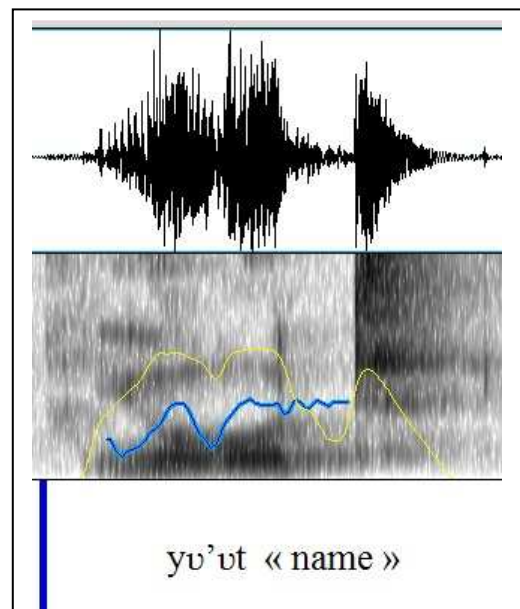
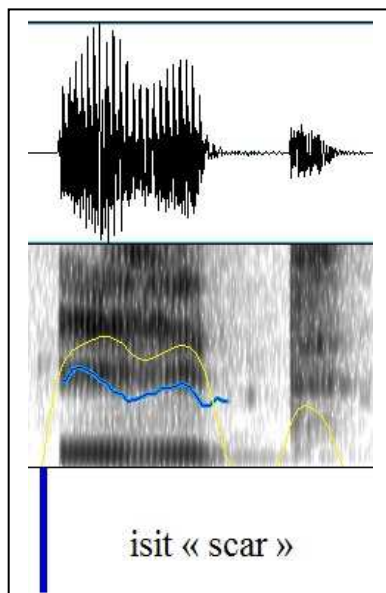
ẽẽvk dāãn « hunchback »

« lit. hump owner »

VvVC CVvN



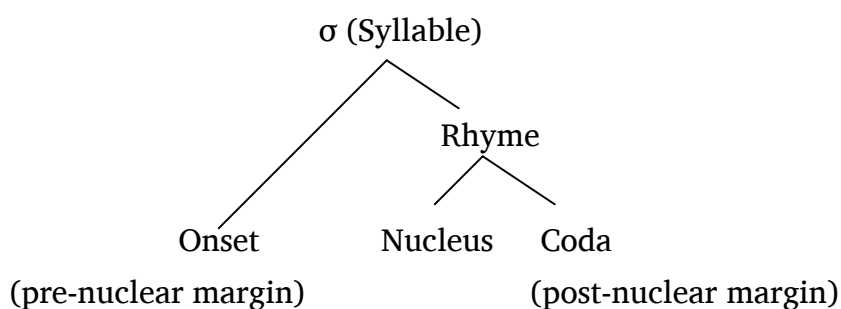
A word with a glottal stop, for example CV.CV like *yv'ut* « name », behaves like a CV.CV word like *isit* « scar » which has two peaks of prominence, and thus counts two syllables.



Primary and secondary syllables

Each Kusaal phonological word is composed of an obligatory primary syllable to which can be added one or more secondary syllables. Each of these two types has both segmental and suprasegmental functions. The primary syllable is structurally composed of an obligatory nucleus and tone while there are pre- and post- nuclear margins which are optional. The secondary syllable has an obligatory nucleus and tone and a margin which is optional.

A syllable is generally made up of an obligatory nucleus preceded by an optional consonant onset and followed by an optional consonantal coda. The sequence of nucleus and coda as a sub-constituent is called rhyme.



Vowels and syllabic nasals constitute the nucleus of a syllable. Consonants occur in the margins of the syllable.

Kusaal syllables may be divided into two classes; primary and secondary syllables.

- Primary syllables occur in roots/stems (ex. dook « room »)
- Secondary syllables occur as pre-nuclear margin (ex. a.ra.kõ « one ») or as post-nuclear margin i.e. finally of a word as noun and verb suffixes. The secondary syllable is never the nucleus of a foot and it never forms a word on its own.

This confirms that what M. E. Kropp Dakubu writes about “Gurene Word Accent” can also be applied for Kusaal:

« The first syllable of a simple lexical word - i.e. of a noun, adjective, verb or adverb, discounting any prefix, carries word accent. This means that it has CV(C) structure, carries contrastive tone, has a markedly higher intensity (measured in db) than following syllables in the word. Its vowel quality is contrastive, and establishes the ATR harmony for the rest of the word. Its vowel is also contrastively short or long. If the syllable begins with a vowel it must be preceded by a glottal stop. None of these things are true of any of the following syllables ... The segmental structure of an accented syllable is thus “stronger” than that of the other syllables of the word. » (p. 53-54)

Example:

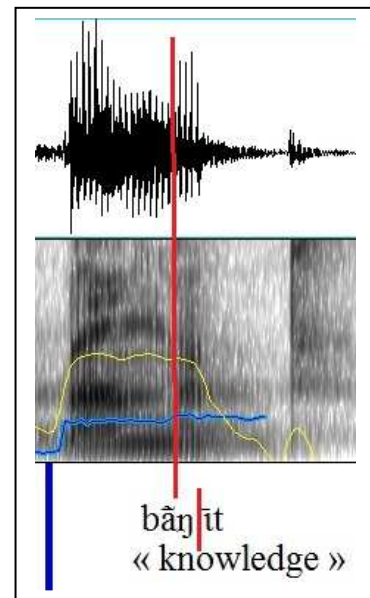
CVC.VC *bā̃ŋ.īt* « *knowledge* »,

where *bā̃ŋ* is the primary syllable

and *īt* is the secondary syllable. The primary syllable carries the peak of prominence and is the nucleus of the word. It also has a clear vowel *ā̃*.

The secondary syllable copies the tone of the primary syllable, its vowel is close to a schwa sound [ə] and is very short.

So there is also a greater contrast among the 9 vowels in primary syllables than in secondary syllables.



Syllable boundaries do not always coincide with morpheme boundaries. So words need to be re-syllabified when they get morphemes, for e.g. *gel* « *egg* » is a CVC syllable, but when the plural morpheme, i.e. the pl. suffix cl 8 -a is added *gela* « *eggs* » there will be a re-syllabified word consisting of two syllables CV.CV.

If the morpheme is a single consonant e.g. -t « imperfective », it cannot be a syllable on its own right. It is either added to a CV syllable to make a CVVC word e.g. nu « to drink » and nuut « to be drinking », or if added to a CVC syllable, it takes an epenthetic vowel to build a two syllable word CVC.VC e.g. *bas* « to let alone » and *basūt* « to be letting alone ».

2.3.1 Syllable types

There are three types of Kusaal syllable structures:

A) Nucleus only: this type of syllable occurs most often as the pre-nuclear margin of the foot and as the foot final post-nuclear margin.

Examples:

ō « *he/she, his/her* »;

a.nu « *five* »; a. naa.sɪ « *four* »;

A.saa « *Mr. Asaa* »;

cl. 10 pl suffix gel + a = *gela* « *eggs* »;

ē « *to be* »; ε « *to look for* »

The first person singular pronoun consists of a syllabic nasal N only.

Ex. m « *I, me, my* »

B) Pre-nuclear margin plus Nucleus (CV)

This type of syllable is very common. All the consonant sounds of Kusaal (except η) can occur at the pre-nuclear Margin of a syllable. Such syllables may occur at any place in the foot.

C) Pre-Nuclear Margin plus Nucleus plus Post-Nuclear Margin (CVC):

Only a limited set of consonant sounds occur at the Post-Nuclear Margin of a syllable

Among those who do not occur in this position are: d, kp, gb, v, z, h, ɲ

Among those who can occur in this position are:

- Word-internal, coda position: l, m, n, η , s, t, b,

- In word-final position: f, k, l, m, n, η , p, s, t

A Kusaal syllable may have the following five syllable structures: N, V, CV, CVC, VC

where a V may be long or short vowel, a nasal vowel or an oral vowel.

The Kusaal words are made up of one, two, three or four syllables, rarely four syllables.

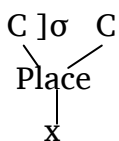
A full stop is used to mark the division between syllables.

CVv and VvC contain a long vowel, represented as Vv here. A sequence of two identical vowels is always realized as one syllable as are words with diphthongs (for example:

dààd̀k « wood » CVvVC).

Syllable codas must be homorganic with the onset of the following syllable.

These two consonants share a place of articulation node:



Kusaal syllables do not allow any consonant clusters (*CC).

2.3.2 Syllable contact law

Syllable structure changes take place when a suffix is added to a word. These changes are motivated by a Syllable Contact Law. Sonority often determines permissible syllable templates in a given language and is also a driving force behind many phonological processes and tendencies related to syllable structure. Sonority is generally defined either in an articulatory term, as the degree of openness of the vocal tract, or in acoustic terms, as related to a property such as the intensity of a given segment. Segments can be divided into a sonority hierarchy; the most commonly invoked sonority scale is the following five member scale:

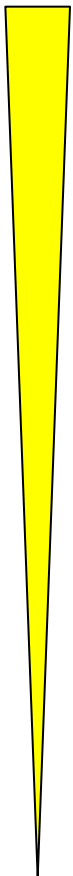
Vowels > Glides > Liquids > Nasals > Obstruents



However, some languages require the scale to be further subdivided at various points.


Universally, segments can be divided into the following 17 member scale, listed from most sonorous to least sonorous:

Natural class		Sonority index
low vowels	[a]	17
mid peripheral vowels (not [ə])	[e, ε, o, ɔ]	16
high peripheral vowels (not [i])	[i, ɪ, u, ʊ]	15
mid interior vowels ([ə])		14
high interior vowels ([i])		13
glides	[y, w]	12
approximants	([ɹ])	11
flaps	[ɾ]	10
laterals	[l]	9
trills	[r]	8
nasals	[m, n, ŋ]	7
voiced fricatives	[v, z]	6
voiced affricates		5
voiced stops	[b, d, g]	4
voiceless fricatives (including [h])	[s, f]	3
voiceless affricates		2
voiceless stops (including [ʔ])	[p, t, k]	1



The following sonority scale is relevant in Kusaal based on effects related to the Syllable Contact Law: (Mb p.47)

Sonority hierarchy for Kusaal

Natural class	Sonority
low and mid vowels	highest
high vowels	
glides	
laterals	
nasals	
obstruents	

When one vowel of a diphthong is deleted, it is the high vowel, not a low or mid vowel. This is analysed as a result of a sonority-related constraint hierarchy. Therefore, high vowels are separated from mid and low vowels in the sonority hierarchy for Kusaal.

The Syllable Contact Law is one of the cross-linguistic tendencies motivated by sonority. It has been defined in two ways.

Syllable Contact Law (Parker 2011)

- A heterosyllabic juncture of two consonants **A.B** is more harmonic (ideal) the higher the sonority of **A** and the lower the sonority of **B**. e.g. *tāmpək* ‘bag’
- In any heterosyllabic sequence of two consonants **A.B**, the sonority of **A** is preferably greater than the sonority of **B**.

This means that, all else being equal, [al.ta] is preferred to [at.la]. [al.ta] has sonority fall from coda to onset, which is preferred. [at.la] has a sonority rise from coda to onset, which is not preferred. Languages differ as to whether the SCL is applied gradiently, such that greater sonority rises are less preferred, or categorically, such that there is a specific threshold of coda-onset sonority distance that triggers a repair strategy. Languages also differ according to what repair strategy is used for SCL violations. Some attested strategies are assimilation, metathesis, glide formation, and epenthesis (See 2011: 1249).

For example, in Korean, the sequence /n-l/ violates the SCL, and this violation is resolved by complete assimilation of the nasal to the lateral: /non + li/ → nolli ‘logic’ (Seo 2011:1249).

In Kusaal, all phonemic consonants can occur word-initially. The phonemes /y, w, gb, kp, v, f/ only occur root-initially except that in nouns, /f/ also occurs at the beginning of the Noun Class 10 suffix. The remaining consonants, /b, p, t, d, k, m, n, s/, all occur freely in all consonantal positions. All vowels can be contrastively lengthened and/or nasalized. All of them may also occur in a diphthong with a high vowel preceding: ai, au, eu, ia, ua, oi, ui. These sequences are analysed as diphthongs (e.g. /ai/) rather than a glide-vowel sequence (e.g. /ay/) because these CVV syllables are considered heavy for tone-bearing purposes.

Furthermore, there are no other complex onsets in the language, so treating them as VV sequences does not require any modification of permissible syllable templates.

2.3.2.1 Monosyllabic words:

N	m	« I, my »		
V	ε	« look for »	ẽ	« to be (copula) »
CV	sĩ	« bees »	dı	« to eat »
CVv	bii	« child »	dɔɔ	« to get up »
CVC	duk	« pot »	kul	« go home »
CVvC	dook	« room »	bɔɔl	« to call »
CVN	bun	« thing »	sĩn	« shut up »
CVvN	zum	« blood »	kum	« to fry »

2.3.2.2 Disyllabic words:

CV.CV	nɔ.ya	« mouths »	bv.tẽ	« to sow + IPF »
	bv.raa	« man »	ba.yaa	« grave digger »
CV.CVC	ku.kut	« pig »	bv.puŋ	« girl »
	da.kõõt	« bachelor »	da.saat	« stick »
CV.CVN	ka.wen	« corn »	kpe.lum	« to rest »
	da.bεem	« fear »	Wl.na'am	« God »
CV.VC	lee.ɔk	« bucket »	vii.uŋ	« owl »
CV.CVC	bĩ'i.sit	« breast »	kɔɔ.sit	« to sell + ipf »
CV.CVN	lεε.ruŋ	« funnel »	kãa.lum	« to group together + imp »
CVC.CV	yel.le	« problem »	sin.ne	« to keep silent + ipf »
CVC.CVv	nin.daa	« face »	din.dii	« larva of beetle »
CVC.CVC	tãm.pɔk	« bag »	bum.bok	« hole »
CVC.CVvC	dũn.duuk	« cobra »	kun.dɔ'ɔt	« sterile »
CVVC.CVC	kpã'anŋ.kut	« turtle »	lεeb.nam	« retailer, trader »

2.3.2.3 Three-syllable words:

CV.CV.CV	si.ri.ba	« husbands »	ba.sv.go	« end »
CV.CV.CVC	mɔ.ri.gut	« effort »	gu.gu.lum	« to murmur »
	li.laa.luŋ	« swallow »	fu.yεε.ruŋ	« African robe »
CV.CVC.CVC	bu.lum.buk	« toad »	fũ.lun.fũut	« lungs »
CVV.CV.CVC	baa.kv.sol	« skink »	tii.li.tiŋ	« flute (of stick) »

CVC.CVV.CVC	du.n.du'v.rum	« urine »		
CVC.CV.CV	kon.ku.na	« humps »	ku.n.ku.ma	« outcries »

2.3.2.4 Four-syllable words (rare)

CV.CV.CV.CV	fa.bu.lu.gu	« worries »
-------------	-------------	-------------

The maximum number of syllables is four, and they seem to be very rare.

2.3.2.5 Words beginning with a vowel:

All words beginning with a vowel are preceded by a glottal stop [ʔ] which is not written in the Kusaal orthography.

V	ḥ	« he/she »		
	ẽẽ	« yes »	ãã	« to tear »
VC	ãm	« brew »	ãk	« to fly off »
	ul	« horn »	õõt	« barren woman »
V.CV	a.le	« how much »	(bv) ḥ.be	« (to not) crunch »
	a.nii	« eight »	a.nɔ'ɔ	« who »
V.VC	ii.uk	« Nil monitor »	ẽε.uk	« hump »
V.CVC	a.sap	« uncle »	ḥ.bit	« crunch + ipf »
	a.mus	« cat »	e.rum	« to belch »
	u.lum	« milk »	uu.suk	« dust »
V.CV.CV	a.ra.kḥ	« un »	a.ku.be	« oil palm »
V.CV.CV	a.go.la	« sky »	(bv) isige	« (not to) get up early »
V.CV.CVC	a.ru.zak	« wealth »	a.ru.tuŋ	« right side »

2.3.2.6 Primary and secondary syllables

Syllables may be divided into two classes: primary syllables and secondary syllables.

The primary syllable carries its own tone contrasts and is the nucleus of the word. It is made up of word roots; it carries also the accent of the word and is thus pronounced with vigour. A secondary syllable does never form a word on its own; it occurs only finally in a word and does not carry its own tone.

Example:

dàà.̀̀k « wood » is made up of one primary syllable **dàà** and a secondary syllable **-vk** « class 7 suffix » CV.VC where CV is the primary syllable and VC the secondary syllable who copied the tone from its primary syllable. Secondary syllables either copy the vowel of the primary syllable or they take an epenthetic vowel **ɪ** or **ʊ**.

The syllabic and the morphological structure of Kusaal words (see next point: Foot) do not necessarily coincide. The noun *gela* « eggs » for instance is syllabified as CV.CV *ge.la*, but morphologically it is structured into the root *gel* « egg » and *-a* « class 10 suffix ». Morphemes such as nominal roots, for instance, can have a structure which does not correspond to the actual syllabification of the word (Olawsky 1996, 172).

Ex. *kɔ'ɔ* « water » + *m* « cl. 14 suffix » = *kɔ'ɔm* « water » = CV.CVN

sak « accept » + *it* « imperfective suffix » = *sakit* « accepting + ipf » = CV.CVC or CVC.VC ?

2.3.2.7 The Phonological Foot

The phonological foot may alternatively be called the **Phonological Word**. Most often it corresponds with the grammatical or lexical word. In Kusaal, the foot is the stretch of speech that includes one primary accented syllable, and is thus the basis of the rhythm of the language. It is composed of syllables and it is also the domain of tone and vowel harmony. Usually the stress/accent occurs on the last foot which often is the penultimate syllable of the word.

In Kusaal the foot comprises four functions or roles, each of which is performed by a syllable. These functions are of two types: nucleus and margin. There is only one nucleus in any simple foot, but here may be several margins. We divide the margins into three sub-functions: the pre-nuclear margin, which comes before the nucleus, and the post-nuclear margins.

The structure of the Kusaal foot may be presented as follows:

Unit	Foot			
Functions	(Margin ₁)	Nucleus	(Margin ₂)	(Margin ₃)
Unit	Syllable	Syllable	Syllable	Syllable
Class	2ndary	Primary	2ndary	2ndary

Every foot must have a nucleus; however it is possible to have a foot with no margins at all. For this reason the word “Margin” has been put into brackets in the representation above. Syllables of the type that can occur in the nucleus are classed as primary syllables, while those that can only occur in margins are classes as secondary syllables.

Examples:

1 syllable:

m « I, my » ; *õ* « he / she » ; *ε* « to look for », *uvn* « dry season »

2 syllables, where the first syllable is the nucleus:

nɔ + ya « *mouths* » ; pɔ + 'a « *woman* » ; vii + uŋ « *owl* »

3 syllables, with the nucleus followed by two post-nuclear margins:

baa + kv + sol « *skink* » ; tii + li + tiŋ « *flute (of stalk)* » ; kon + kv + na « *humps* »

4 syllables, with the nucleus followed by three post-nuclear margins:

duŋ + du + 'v + rum « *urine* » ; fa + bu + lu + gv « *worries* »

Any of the above with a pre-nuclear margin:

a + rɪ + tuŋ « *right side* » ; A + wum + bil « *a name* » ; a + nu « *five* »

The compound foot

In a compound foot, a foot structure is embedded into the pre-nuclear margin. This embedded foot often consists only of a nucleus (underlined in the following examples), but it may also have a pre-nuclear and/or a post-nuclear margin of its own. The compound foot therefore includes two primary syllables. The nucleus of the embedded foot carries secondary accent.

Examples:

Nucleus only:

bu + raa « *man* » ; tām + pɔk « *bag* » ; bum + bok « *hole* » ; dūn + duuk « *cobra* » ;

kun + dɔ'ɔt « *sterile* »

Nucleus and one or more margins:

pɔ + 'ɔ + yã + 'aŋ « *old lady* » ; A + ma + 'an + pɔ + ka « *girl's name* » ; kpã + 'aŋ + kut « *turtle* »

In some compound feet the pre-nuclear margin is a reduplication of the nucleus.

Examples:

si + si + ruk « *bush spirit* » ; kun + kv + ma « *outcries* »

Systems of the foot

Tone phonemes are a component of every syllable, but the system is best described as a feature of the foot. There are not many minimal tonal pairs.

There are six possible tone patterns: High, Mid, Low, High-change, Mid-change, Low-change.

A High foot has High tone on the nuclear syllable and all post-nuclear margin syllables.

A Mid foot has Mid tone on the nuclear syllable and all post-nuclear margin syllables.

2.3.3 Distribution of consonants and vowels

There are some restrictions on consonants and vowels within Kusaal words. By far, the most words end in a consonant (except borrowed words, and adverbs, they end mostly in a vowel).

2.3.3.1 Consonants in syllable final and in word final position

Not all consonants can occur as C_2 in syllable coda position and in word final position. CVC_2 and $CVVC_2$ syllables are subject to constraints allowing only certain consonants to be in syllable-final position i.e. coda position:

- Word-internal, coda position (CVC_2): l, m, n, ŋ, s, t, b,
- In word-final position (CVC_2): f, k, l, m, n, ŋ, p, s, t

All Kusaal consonants (except ŋ and r) can occur in word initial position, but not all consonants can occur in word final position as the list below shows.

Figure 12 : Table 5 : Consonant position within a word

Consonant	word initial position		word internal position		word final position	
	word	sense	word	sense	word	sense
/p/	pɔ'a	« wife »	kāmpēe	« viper »	na'ap	« chief »
/b/	bɔŋ	« donkey »	kombut	« eggplant »		
/t/	teuk	« nest »	tɔtɔl	« dragonfly »	tɔt	« mortar »
/d/	ɔuk	« pot »	nindaa	« face »		
/k/	kawen	« maize »	kukut	« pig »	pe'uk	« sheep sg. »
/g/	gāavk	« knife »	mɔrgit	« effort »		
/kp/	kpa'ɔŋ	« fowl »	kɔŋkpāɔŋ	« arm »		
/gb/	gbɔgɔm	« lion »	niŋgbɔn	« body »		
/ʔ/	ʔɔɔn	« dry season »	daʔa	« market »	bɔʔ	« to hit »
/m/	ma'an	« okra »	bumɔs	« donkeys »	kɔ'ɔm	« water »
/n/	naŋ	« scorpion »	dānsik	« robe »	bɔn	« thing »
/ɲ/			peɲā'an	« ewe »		
/ŋ/			sɔŋut	« help »	sɔŋ	« mat »
/f/	fuuk	« cloth »	gefo	« pocket »	nif	« eye »
/v/	vom	« life »	vɔvɔ	« wasp »		
/s/	saa	« rain »	bɔ'ɔsɔk	« question »	baas	« dogs »
/z/	zuuk	« head »	zɔzɔŋ	« flying fox »		
/h/	haya	« so »	āhap	« uncle »		
/y/	yaap	« ancestor »	ayee	« no »		
/w/	wɔt	« rope »	dawen	« dove »		
/l/	laa	« plate »	koloŋ	« door »	yel	« problem »
/r/			nirip	« people »		

2.3.3.2 Roots versus suffixes

All consonants and vowels can occur in roots but not all can occur in affixes. Prefixes and suffixes draw from a more restricted set of phonemes than roots do. The Kusaal suffixes listed below contain only certain consonants and vowels from the language. Vowels in the suffixes with capital letters indicate that the vowel harmonizes in advanced and retracted tongue root value (\pm ATR) with the root, so /U/, for example, is realized as either [v] or [u] or [o]; and /L/ is realized either [t] or [i] or [e]

a. Nouns and adjectives

Figure 13 : Table 6: Noun class suffixes for nouns and adjectives

Gender:	noun class:	long suffixes:	short suffixes:	Examples:
I	1 (sg.)	-a	-∅	nira / nit « <i>person</i> »
	2 (pl.)	-ba	-p	niriba / nirip « <i>persons</i> »
II	3 (sg.)	-∅/-ba/-ma	-∅/-p	yaaba / yaap « <i>ancestor</i> »
	4 (pl.)	-nama	-nam	yaanama/yaanam « <i>ancestors</i> »
III	5 (sg.)	-ga/-ka/-ŋa -wa/-ya	-∅/-k/-a	baaga / baa « <i>dog</i> » buuwa « <i>goat</i> »
	6 (pl.)	-sl	-s/-ls/-mls	buusl / buus « <i>goats</i> »
IV	7 (sg.)	-gU/-kU/-ŋU/-ne	-k/-vk/-n/-a	bāku / baauk « <i>shoulder</i> »
	8 (pl.)	-rl/-tl	-t/-lt/-Ut	bā'aru / bā'at « <i>shoulders</i> »
V	9 (sg.)	-rl/-ll/-ne/-dl/-bl	-t/-lt/-∅	yu'uru / yu'ut « <i>name</i> »
	10 (pl.)	-a/-ya/-yã		yura « <i>names</i> »
VI	11 (sg.)	-fU	-f/-Uf	wefo / wef « <i>horse</i> »
	12 (pl.)	-gi/-i/-∅		wiri « <i>horses</i> »
VII	13	-bU	-p	ki'ibu / ki'ip « <i>soap</i> »
VIII	14	-m/-um/-um		kɔ'om « <i>water</i> »

b. Derivational suffixes deriving nouns/adjectives from verbs (see chapter 3)

agent: sg. -r/-t; pl. -rip/-nip/-lip

abstract noun: -lum/-lum/-sum/-sum

c. Verb suffixes (see chapter 4)

completive: -ya/-iya

progressive: -r/-t/-it/-n/-m/-l

perfective: -∅

imperative: -m/-lm/-Um, -me

affirmative/assertive/focus: -me/-ne/-kẽ/-ẽ

negative or interrogative: -e/-ra/-ta/-ma/-na

There are some gaps that stand out in the consonants and vowels not occurring in suffixes:

- not represented in the consonants: kp, gb, v, z, h,

we already noticed that all of those cannot occur in coda position C_1VC_2

- vowels not present in suffixes: ε

2.3.3.3 Vowel distribution within verbs

Any vowel may occur with monosyllabic verbs. In disyllabic verbs, any vowel may occur in the first syllable, but the second vowel is always a repetition of the first vowel or if it is different from the first it must be ι or υ . Tri-syllabic verbs usually contain all the same closed vowels or semi-closed vowels. (see chapter 4).

Examples of vowels in verbs:

	Monosyllabic		Disyllabic		Tri-syllabic	
a	bas	« to leave »	salɨg	« to slip »	---	
e	be	« to be »	lebɨg	« to return »	---	
ε	tεk	« to change »	le'elɨm	« to cook »	---	
i	bit	« to stutter »	ligi	« to patch »	digilim	« to harden »
ι	bɨs	« to look »	pɨgɨ	« to shell »	gɨgɨlɨm	« to be dumb »
o	sob	« to write »	polog	« to dazzle »	---	
ɔ	bɔ	« to look for »	dɔrvb	« to drive »	---	
u	bu	« to mix »	pugu	« to float »	gugulum	« to growl »
υ	bvt	« to sow »	pvrvg	« to divide »	bugulum	« to cast lots »

- In disyllabic verbs, all consonants in C_2 position are either: **b, g, l, m, n, ŋ, r, s, or t**. The C_3 position consonant is either: **b, g** or **m**.
- In three-syllabic verbs, all consonants in C_2 position are **b, l, r** or **g**, and in C_3 position are **l**, and all final consonants are **m**.

2.3.3.4 Vowel distribution within nouns

- **Spratt** has written in his phonology statement: « *There is a tendency towards a similarity of vowels within bars. ...Nouns have limited sequences of diverse vowels in the singular and plural forms but still within the bar. Only a few of these diverse vowel sequences occur within roots and several of*

these are known to comprise more than one bar. ... The diverse vowels which occur with the single bar nouns are not limited as to the first vowel, whilst the second is usually a high front (ɪ), or high back (ʊ) or a low vowel (a). This restriction correlates with the morphology of the noun class system.
 » (1968 : 33-34)

We agree with this statement and give some examples.

Examples:

nouns :

ligiri	« money »	gbɪgum	« lion »
bugum	« fire »	kʊkʊgʊrʊŋ	« Senegal Coucal bird »
sisiris	« demons »	sɪbɪgt	« punishment »
bugulum	« manure »	vumusuk	« threat »
suguru	« pardon »	gʊlʊsuk	« writing »
karabalak	« uvula »	kʊsʊgʊt	« cages for fowls »
fɪbɪlʊ	« whip »	pʊgʊrʊp	« aunt (father side) »
pʊsʊgʊs	« parts »	tʊgʊrʊŋ	« nest of fowl »
tolotolo	« turkey »	wʊgʊrʊp	« weaver »

When the vowel in a secondary syllable is different from the primary syllable vowel, it will be one of the epenthetic vowel *ɪ*, *ʊ* (or *e* after a nasal consonant), or a class suffix vowel:

Examples of nouns:

bumes	« donkeys »	pe'ʊk	« sheep sg. »
sɔya	« paths pl. »		
fɛ'ʊk	« wound »		
kōbʊt	« bone »		

2.3.3.5 Consonant clusters

In general, Kusaal avoids consonant clusters and inserts epenthetic vowels *ɪ*, *ʊ* (or *e* after nasals) to separate (break up) the consonant sequences. All consonant clusters occur across morpheme boundaries. Adjacent consonants must have place features of articulation (i.e. labial, alveolar or velar features). The only admissible consonant clusters are:

1. a nasal plus plosive sequence at syllable junctions or compound words
2. noun plus plural suffix *-nam*
3. two identical consonants *-ll-*, *-mm-*, *-nn-* in the long form of words i.e. word stem plus a suffix.

Examples:

1) At morpheme breaks when the first ends in a nasal:

mp	tam.pək	« bag »	ŋk	zãŋ.kɔ'ɔt	« hyena »
mb	na'am.bɔɔ	« moon »	ŋg	niŋ.gõot	« neck »
nd	nin.daa	« face »	ŋgb	gbiŋ.gbenj	« crest »
nt	nin.taa	« co wife »	ŋkp	wãaŋ.kpãrit	« baboon »

2) With plural suffix -nam:

bn	lɛɛb.nam	« retailers »
sn	tõ'os.nam	« hunters »
tn	du'ut.nam	« walking sticks »

3) Nouns in negative or interrogative forms; verbs in progressive aspect.

ll	La kɛ'ɛ gel.le.	« It is not an egg. »
mm	Ya bu wum.ma.	« You don't hear. »
nn	Õ kun.ne.	« He is going home. »

2.4 Phonological processes

2.4.1 Processes applying to consonants

2.4.1.1 Regressive assimilation of nasal consonants

The syllable-final nasal consonant assimilates to the point of articulation of the following consonant. It is an anticipated or regressive assimilation. The nasal N assimilates in the following way:

SONORITY PLATEAU

O-O: coronal fricative-stop sequence ¹²; regressive total assimilation (i.e. *st* → *tt*)
elsewhere: vowel epenthesis between the two obstruents and shortening of first syllable as needed

N-N: no clear examples, but many words have a geminate nasal

SONORITY RISE

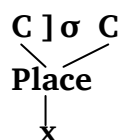
O-N: epenthesis and shortening of first syllable as needed

SONORITY FALL

N-O: nasal assimilates in place to following consonant

Melick p. 51

Syllable codas must be homorganic with the onset of the following syllable. These two consonants share a place of articulation node:



N → m / _ bilabial

N + b → [mb] bun « *thing* » + buura « *sowables* » ⇒ bumbil « *seeds* »

N + p → [mp] tãn « *adobe* » + piuk « *brick* » ⇒ tampiuk « *mud brick* »

N → n / _ alveolar

N + d → [nd] gũŋ « *cotton* » + daavk « *stalk* » ⇒ gũndaavk « *cotton stalk* »

N + t → [nt] niŋ « *body* » + teeŋ « » ⇒ ninteeŋ « *sunlight* »

N → ŋ / _ velar

N + g → [ŋg] zãn « *court* » + gɔɔm « *wall* » ⇒ zãŋgɔɔm « *house wall* »

N + k → [ŋk] bun « *thing* » + kōbuk « *hairy* » ⇒ buŋkōbuk « *wild animal* »

Furthermore, a syllable final nasal N assimilates to an adjacent following nasal

N → m / _ bilabial nasal

N + m → [mm] niŋ « *body* » + ma'asum « *cold* » ⇒ nimma'asum « *health* »

N → n / _ alveolar nasal

N + n → [nn] nim « *meat* » + nuguma « *soft* » ⇒ ninnuguma « *soft meat* »

2.4.1.2 Progressive assimilation of consonants

A noun class suffix **-re** (cl. 9) is assimilated to the manner of articulation of the stem final consonant.

Examples:

r → l / l_ (CVl + -re ⇒ CVlle)

citation form:

long form (negative or interrogative):

gel « *egg* » + re cl. 9 ⇒ gelle « *egg* »

ul « *horn* » + re cl. 9 ⇒ ulle « *horn* »

wil « *branch* » + re cl. 9 ⇒ wille « *branch* »

l → p / p + _

na'ab « chief » + la « the » na'ap pa /na'apa/ « the chief »

l → k / k + _

pook « field » + la « the » pook ka /pooka/ « the field »

l → t / t + _

yit « house » + la « the » yit ta /yita/ « the house »

Morphologically the noun and the definite article are one single morphological word. The homorganic/geminate consonants are long and they are pronounced in the double length of time compared to the short ones, but in the orthography only the nasals and laterals are written with a double consonant. The other geminate consonants are considered to be merged to one single segment linked to both a coda and onset.

2.4.1.4 Assimilation of the articulation mode

The nasal consonants spread his nasality feature to the immediate preceding and following vowels.

Regressive assimilation: ←

V → \tilde{V} / _N

sõŋ « mat » the nasal consonant ŋ spreads his nasality to the vowel õ on his left

kul « to go home » the vowel u is not nasalized

kun « going home + ipf » the vowel [ũ] is clearly nasalized

V → \tilde{V} / N _

Progressive assimilation: →

nif « eye » [nĩf]

naaf « cattle » [nããf]

2.4.1.5 Regressive assimilation on voice (or neutralization)

The opposition between voiced and voiceless stops is neutralized at the end of a word.

When the phoneme /b/ is before a pause, it losses the his voice feature and becomes [-p#]

When the phoneme /g/ is before a pause, it losses the his voice feature and becomes [-k#]

When the phoneme /d/ is before a pause, it losses the his voice feature and becomes [-t#]

voiced → voiceless / _ #

Thus voiced stops are devoiced before pause but as soon as they get a suffix, they regain their voice feature.

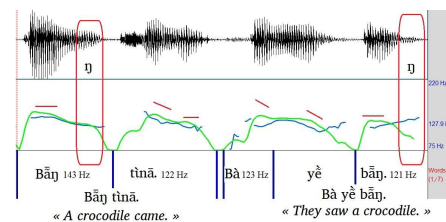
Examples:

niriba « *people* » Ba ke'ε niriba. « *They are not people.* » (Negative)
 niribɩ « *people + LOC* » Ba yē ɩ niribɩ. « *They saw him amongst people.* » (Locative)
 nirip# « *people* » Ba yē nirip. « *They saw people.* » (Affirmative)

yit# « *house* »
 yire « *house* » La ke'ε yire. « *It is not a house.* » (Negative)
 yiri « *house + loc* » Ba be yiri. « *They are at home.* » (Locative)
 yit# « *house* » Ba yē yit. « *They saw a house.* » (Affirmative)

nasal → voiceless / _ #

Bãŋ tuna. « *A crocodile came.* »
 Ba yē bãŋ. « *They saw a crocodile.* »



2.4.1.6 Consonant fusion or coalescence

When two phonemes enter into close contact, they combine/merge and give way to a fused sound.

We use N as an archiphoneme for the nasal consonants.

When /n/ and /g/ encounter each other in a word they produce a new fused velar consonant /ŋ/. The original N is preserved in the plural form.

mg → ŋ (N + g ⇒ ŋ)
 búm + g ⇒ búŋ « *donkey* » pl. búm + s ⇒ búméŋ « *donkeys* »
 níŋ + g ⇒ níŋ « *body* » pl. níŋ + s ⇒ níŋis « *bodies* »
ng → ŋ
 sǎn + g ⇒ sǎŋ « *mat* » pl. sǎn + á ⇒ sǎná « *mats* »

If two identical voiced plosives come together at morpheme borders, e.g. stem final plosive plus noun class suffix, they merge to a voiceless plosive. Thus the class suffix -g of class 5 or 7 is contracted to k; the original g is preserved in the plural form.

gg → k CVg + -g ⇒ CVk

Examples:

kug « *stool* » + g (cl. 3) ⇒ kuk « *stool* » kugus « *stools* »
 dug « *cooking pot* » + g (cl. 5) ⇒ duk « *cooking pot* » dugut « *cooking pots* »

Verbs in the imperfective CVV1, the -l before +r suffix is nasalized, even with no nasal feature in sight:

lr → n (CV1 + -r ⇒ CVn)

Examples:

kul	« to go home »	+ r « ipf »	kun	« going home »
bɔɔl	« to call »	+ r « ipf »	bɔɔn	« calling »
pa'al	« to teach »	+ r « ipf »	pa'an	« teaching »

Some nouns of class 7/8 exchange their coda consonant from -l in singular to -n in plural:

lr → n

Singular:

Plural:

kpal	« soumbala »	+ vk « cl. 7 »	kpaluk	kpal + r « cl. 8 »	kpan	« soumbala pl. »
zāl	« mad person »	+ vk	zāluk	zāl + r	zān	« mad persons »
kol	« skin bag »	+ vk	koluk	kol + r	kon	« skin bags »
sul	« hawk »	+ vk	suluk	sul + r	sun	« hawks »

The imperfective aspect suffix -r of a verb CVr contracts to -t in word final position (marked #). The original -r is however preserved in intervocalic contexts.

rr → t / r_ # (CVr + -r # ⇒ CVt)

Examples:

bur	« sow »	+ r « ipf » ⇒	but#	« to be sowing »	burum	« sow + imp »
tor	« share »	+ r « ipf » ⇒	tot#	« to be sharing »	torum	« share + imp »
gur	« wait »	+ r « agent »	gut#	« guard »	gurup	« guards »
wɔ'ɔ	« dance »	+ r « agent »	wɔ'ɔt#	« dancer »	wɔ'ɔrup	« dancers »

2.4.1.7 Elision (apocope /deletion) of consonants

Elision is a phenomenon where the phoneme or several phonemes disappear when they encounter another phoneme.

2.4.1.7.1 Elision of a nasal consonant

A nasal consonant followed by f disappears:

N → ∅ / _ f (N + f ⇒ f)

Examples:

nín + fo	⇒	níf	« eye »	pl. níní	« eyes »
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This consonant elision does not happen with other consonants:

nin + bāalík ⇒ nímbáálík « *mercy* »

nin + getɨ ⇒ níŋgétɨ « *glasses* »

zū'un + fo ⇒ zū'uf « *dawadawa seed* » pl. zū'uni « *dawadawa seeds* »

This consonant elision does not happen with other consonants:

zū'um-ma'as « *fresh seeds* »

zū'uŋ-kpe'eŋ « *dry seeds* »

The nasal consonant of the assertive particle *me* is elided after a double vowel or it is transformed into a *n* after a nasal vowel.

m → ∅ / VV_ (CVV + *me* ⇒ CV∅∅V)

Examples:

ãã « *to tear* » + *me* « *assertive particle* » ⇒ ãae « *to tear + assertive* »

m → n / Ñ_

ẽ « *to be* » + *me* « *assertive particle* » ⇒ ẽne « *to be + assertive* »

However the assertive particle *me* remains after word of the type CV et CVV :

mĩĩ + *me* ⇒ mĩ'ime « *to know + assertive* »

ke + *me* ⇒ keme « *to cause to + assertive* »

A word final position, voiceless plosive are elided before a locative particle *-ɪ* « *in, at* ».

k → ∅ / VV_ locative marker (-k + ni ⇒ ∅ -ɪ)

pook « *field* » + ni « *locative postposition* » ⇒ pook « *in a field* »

dook « *room* » + ni « *locative postposition* » ⇒ dook « *in a room* »

t → ∅ / VV_ locative marker (-t + ni ⇒ ∅ -ɪ (-e after nasal consonant))

puut « *stomach* » + ni « *locative postposition* » ⇒ puuɪ « *inside* »

sūut « *heart* » + ni « *locative postposition* » ⇒ sūuɪ « *in the heart* »

The locative postposition *ni* « *in at* » is elided to *-ɪ* or *-e* (after nasals) in certain contexts:

p → bɪ / _ locative marker

nirip « *people* » + ni « *locative postposition* » ⇒ niribɪ « *among people* »

na'ap « *chief* » + ni « *locative postposition* » ⇒ na'abɪ « *at the chief's* »

ni → e / N_

Examples:

Root :	Imperative singular :	Imperative plural :
sob « to write »	Som ! « Write ! »	Somme ! « Write (you pl.)! »
lob « to throw »	Lom ! « Throw ! »	Lomme ! « Throw (you pl.)! »
lub « knock down »	Lum ! « Knock down ! »	Lumme ! « Knock down (you pl.)! »
õb « to crunch »	Õm ! « Crunch ! »	Õmme « Crunch (you pl.)! »

2.4.1.7.3 Elision of the class 5 suffix -ga

The class 5 suffix -ga is elided after a CVv syllable word.

-ga → Ø /VV_ #

bii « child » + ga « cl. 5 » ⇒ bii « child »

buu « goat » + ga « cl. 5 » ⇒ buu « goat »

tu « tree » + ga « cl. 5 » ⇒ tu « tree »

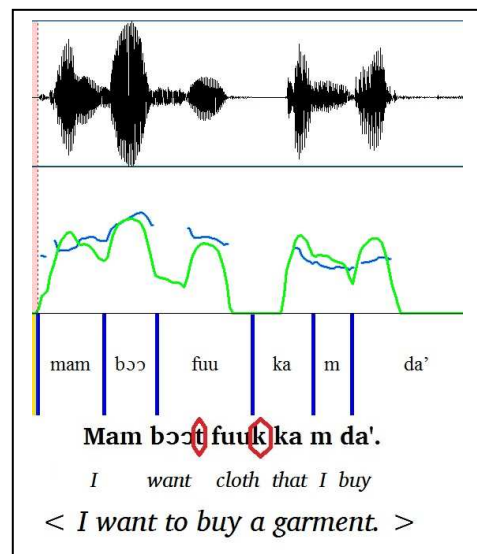
dee « warthog » + ga « cl. 5 » ⇒ dee « warthog »

2.4.1.7.4 Elision of a consonant at word frontiers

Foot final syllables may be weakened in rapid speech and thus the final consonant is very weak or drops out altogether.

In non-final position, for example at word boundaries within a phrase, a word final voiceless consonant or a glottal stop elides when the following word begins with a consonant, unless there has been inserted a epenthetic vowel (see below 2.3.2.3).

Example: *bɔɔt* « to want », *fuuk* « garment » the word final consonants *-t* and *-k* are elided because they are followed by word initial consonants as can be show in the following graphic done with help of the Praat audio Program.



« *branch* » wille wil wila

When a double consonant follows two vowels, the consonants degeminate to one single consonant.

CC → C / Vv_ #

« *frontier* » bæenne bæene bæena

« *blood + DEF* » zumma zuma

2.4.1.7.7 Downstep after glottal stop

H → 'H / ' _

A glottal stop causes a Downstep on the next vowel.

Examples:

kpá'úŋ « *guinea fowl* » [kpá'úŋ]

kó'óm « *water* » [kó'óm]

2.4.2 Processes applying to vowels

2.4.2.1 Assimilation of unlike vowels: CV₁-V₂

In certain contexts, e.g. a noun in compound words or a verb before object, V₂ is assimilated to V₁, forming a long vowel. However, phrase finally the V₂ is retained.

V₂ → V₁ / _ no pause

pɔ'a « *woman* » pɔ'ɔ̣-paal « *new bride* »

dɔ'e « *give birth* » Õ dɔ'ɔ̣ bii. « *She gives birth to a child.* »

but: Õ bu dɔ'e. « *She did not give birth.* »

In other contexts, e.g. a conjunction followed by a pronoun, V₁ is assimilated to V₂, forming a long vowel.

V₁ → V₂ / _ V₂

ka « *and* » followed by ò « *he* » ⇒ [kõõ] « *and he* »

written: k_a ò

ne « *with* » followed by v « *he* » ⇒ [nõõ] « *with him* »

written: n_e ò

ne « *with* » followed by a- « *number prefix* » ⇒ [pii naayi] « *ten with two = twelve* »

written: pii n_e ayi

2.4.2.2 Epenthetic vowels (vowel insertion)

In order to avoid not-allowed consonant clusters within words, kusaal speakers insert automatically epenthetic (or transition) vowels between the consonants. The only exception is when the first consonant is a nasal. Such situation may arise either from a juxtaposition of two roots or stems in a compound word, from suffixation or from a verb ending in a consonant followed by a pronoun beginning with a consonant (the pronoun being treated like a suffix in the language of kusaal speakers).

$\emptyset \rightarrow \mathbf{V} / \mathbf{C}_1 _ \mathbf{C}_2$

Examples of compound nouns without epenthetic vowel:

tampɔk « *bag* », kũmbuk « *nail* », tumtɔn « *worker* », nindaa « *face* », ngbãm « *toad* », nintaa « *co-wife* », zãŋgɔm « *wall* », zãŋkɔ'ɔt « *hyena* »

Examples of suffixation of plural suffix **-nam** « *plural of* »:

tõ'os « *hunter* » tõe'osnam « *hunters* », du'ut « *stick* », du'utnam « *sticks* », læɛb « *trader* », læɛbnam « *traders* », sãam « *father* », sãamnam « *fathers* »

But all the others CC sequences need a transition (epenthetic) vowel between the consonants.

$\emptyset \rightarrow \mathbf{V} / \mathbf{C}_1 _ \mathbf{C}_2$

bum « *donkey* » + -sɪ « *cl. 6 suffix* » \Rightarrow bumɪsɪ « *donkeys* »

mɔl « *antelope* » + -fɔ « *cl. 11 suffix* » \Rightarrow mɔɪfɔ « *antelope sp.* »

bĩ'is « *breast* » + -re « *cl. 9 suffix* » \Rightarrow bĩ'isire « *breast* » bĩ'isa « *breasts* »

na'ap « *chief* » bɔɔn « *calling* » na'apɪ bɔɔn « *chief is calling* » (Story 8)

As we see in the above examples the epenthetic vowel is often a -ɪ/-i- close to a [ə], but back/round vowels and labial and/or velar consonants in the environment may give backer and rounder realization like -ʊ/-u- with various intermediate position. (See also Vowel harmony 2.4.3)

Examples:

kol « *river* » + k « *cl. 5* » \Rightarrow kolɔk « *river* »

Vowel lowering

Epenthetic vowels are lowered after nasal consonants

$-\mathbf{i} \rightarrow -\mathbf{e} / \mathbf{N}_$

Examples:

Õ bɔɔn + ba. « *He called them.* » Õ bɔɔne ba.

In the same way, locative markers attached to nouns are lowered after nasal consonants.

-t/-i → -e / N_

Examples:

kɔ'ɔm « water » + -i « locative » kɔ'ɔme « in water »

2.4.2.2.1 Epenthetic vowels in verbs

When a CVC verb adds a -C suffix for aspect or mood, it has to insert an epenthetic vowel to avoid a CC sequence. There is a tendency of high vowel spread from left to the right.

kul « to go home » + -m « imperative suffix » ⇒	kul <u>u</u> m	« go home ! »
yiis « to get out » + -m « imperative suffix » ⇒	yiis <u>i</u> m	« get it out ! »
bas « to leave » + -m « imperative suffix » ⇒	bas <u>a</u> m	« leave ! »
lob « through » + -t « imperfective suffix » ⇒	lob <u>o</u> t	« throwing »
bas « to leave » + -t « imperfective suffix » ⇒	bas <u>o</u> t	« leaving »

When a verb ending in a consonant is followed by an object pronoun that begins with a consonant (ex. **tu** « we », **ba** « they », **ya** « you pl. »), a transition vowel has to be inserted. This shows that the object pronoun should be interpreted as a suffix to the verb because they are so closely tied together.

Õ bas <u>u</u> ba. « He left them. »	Ba nɔk <u>u</u> ti. « They caught us. »
<i>he leave them</i>	<i>they catch us</i>

but:

Ba bas ɔ. « They left him. »	Ba nɔk ɔ. « They caught him. »
<i>they leave him</i>	<i>they catch him</i>

Since the occurrence of this vowel is entirely predictable, it has been interpreted as non-phonemic or in other words *not significant phonemically* (Steel and Weed, 1966).

2.4.2.2.2 Epenthetic vowels in nouns

Some noun class suffixes cause an epenthetic vowel. In the negative, interrogative and vocative form most kusaal nouns have a -CV suffix. However in the citation form, which is also used most of the time (noun as subject, object, compliment etc.) the kusaal nouns transform the -CV class suffix into a simple -C suffix or they move the “lost vowel” to the left and place it before

the -C to make it a -VC suffix. This phenomenon could also be interpreted as metathesis (see 2.4.2.7).

Class:	suffix for long noun form:	suffixes for short noun form	Examples:		
				long form	short form
cl. 6	-sI	- s, <u>-is</u>	« <i>goat</i> »	bʊʊsɪ	bʊʊs
			« <i>donkey</i> »	bʊmɪsɪ	bʊmɛs
cl. 7	-gO	- k	« <i>head</i> »	zugo	zuk
	-kO	<u>-vk</u>	« <i>shoulder</i> »	bāko	bā vk
	-ŋO	<u>-vŋ</u>	« <i>skin</i> »	gbāŋʊ	gbā vŋ
cl. 8	-RI	- t	« <i>grass</i> »	mɔɔrɪ	mɔɔt
		<u>-ut</u>	« <i>elephants</i> »	waburɪ	wab ut
cl. 9	-RI	-t	« <i>nose</i> »	yōore	yōot
		<u>-ut</u>	« <i>breast</i> »	bī'isire	bī'is it
			« <i>peanut</i> »	sūmne	sūm ut
cl. 11	-fO	-if, -vf	« <i>antelope</i> »	mɔɔɪfʊ	mɔɔɪf

Epenthetic vowels are also inserted automatically in borrowed words to avoid consonant clusters. Examples:

filim « *film* »

2.4.2.3 Vowel lengthening

If a CV o C suffix is added to a noun stem ending in V the final vowel is lengthened in many cases.

stem:		suffix:		long form:	short form:	long pl.	short pl.
ba-	« <i>dog</i> »	+ -ga	« <i>cl. 5</i> »	baaga	baa	baasɪ	baas
bʊ-	« <i>goat</i> »	+ -ga	« <i>cl. 5</i> »	bʊuwa	bʊʊ	bʊʊsɪ	bʊʊs
bi-	« <i>child</i> »	+ -ga	« <i>cl. 5</i> »	biiya	bii	biise	biis
zɔ-	« <i>hill</i> »	+ -ga	« <i>cl. 5</i> »	zɔɔga	zɔɔ	zɔɔsɪ	zɔɔs

Some nouns don't lengthen the vowel for the plural form:

po-	« <i>field</i> »	+ -go	« <i>cl. 7</i> »	poogo	pook	pote	pot
do-	« <i>room</i> »	+ -go	« <i>cl. 7</i> »	doogo	dook	dote	dot
fu-	« <i>shirt</i> »	+ -go	« <i>cl. 7</i> »	fuugo	fuuk	fute	fut

But there is no lengthening at all in the case of a stem ending in a consonant:

bag-	« <i>soothsayer</i> »	+ -a	« <i>cl. 5</i> »	ba'a
pɔg-	« <i>wife</i> »	+ -a	« <i>cl. 1</i> »	pɔ'a

If a CV or C suffix is added to a CV verb stem, the final vowel is lengthened in most cases.

V → VV / CV_ suffix

Examples:

	perfective:	imperfective: + r / t	imperative: + m	action of doing: + p
« to hoe »	kɔ	kɔt	kɔm	kɔp
« to drink »	nu	nuut	nuum	nuup
« to kill »	kv	kvut	kvum	kvup
« to wash »	so	soot	soom	soop
« to buy »	da'	da'at	dam	da'ap

Some verbs lengthen their vowel for the « action of doing » but they don't lengthen the vowel in the case of imperfective and imperative:

	perfective:	imperfective: + r / t	imperative: + m	action of doing: + p
« to eat »	dɪ	dɪt	dɪm	dɪp
« to fall »	li	lit	lim	liik
« to see »	yē	yēt	yēm	yēep
« to run »	zo	zot	zom	zoop

2.4.2.4 Vowel “umlaut” for plural forms

A few nouns have a vowel “umlaut” for their plural form:

	Singular:	Plural:
« sister/ brother of the opposite sex »	tō	tāp/tōp
« cow »	naaf	nii
« snake »	waaf	wii
« money »	la'af	ligiri
« millet »	kɛɛf	ki
« horse »	wef	wiri
« guinea fowl »	kpā'ɔŋ	kpĩ'ini

2.4.2.5 Deletion or insertion of final vowel -e

Certain CV and CVV verbs have a **final -e/-ɪ in the citation form** but the final -e/-ɪ is deleted when the verb is not final in a sentence, whereas in a negative sentence it is maintained in sentence final position.

paae	« to reach, arrive »		
Õ paa yiri.	« He arrived at home. »	Õ bu paae.	« He did not arrive. »

The verbs with a glottal stop don't delete the final -ɪ/-e but copy the first vowel:

kpa'ɪ « to pour some of »

Õ kpa'a kaam. « He poured out some oil. » Õ bu kpa'ɪ. « He did not pour out. »

2.4.2.5.1 Deletion of final vowel in word final position or in isolation

Some verbs CV'V lose their final vowel before a pause. So for example in the citation form **da'** « to buy » ends in a glottal stop and loses its final vowel, but in a sentence the final vowel reappears. So the stem truncation might neutralize the contrast between [V] and [V:].

Õ **da'a** fuuk. « He bought a garment. »

Õ bɔɔt fuuk ka Õ **da'**. « He wants to buy a garment. »

Other examples:

mi'# « to know » mi'i non final

zi'# « to ignore » zi'ɪ non final

bu'# « to beat » bu,ʋ non final

2.4.2.5.2 Insertion of final vowels before pause

When the verb comes before a pause, e.g. at the end of a sentence, the **-ɪ/-e** can be added to the root. This is also the case in citation form, people can cite a verb: **bas** or **base** « to leave ». The meaning of both forms is identical; we could call them their “short” and their “long” form respectively.

Õ lob ka base.

2.4.2.6 Noun suffix vowel apocopation

Kusaal nouns have a long form with the final class suffix vowel and a short form without the final class suffix vowel. The final vowel of noun class suffixes is assumed to be basic even though they do not appear on the surface in the citation form. The final vowels appear only in clause final position of negative and interrogatives sentences and in the vocatives. Thus in Kusaal speech and texts the nouns are employed over 80 % of their appearance in their short form without the final suffix vowel. These C-final forms of nouns are an apocopation but often they are not cut off without leaving some traces of their existence. The tone of the cut suffix vowel remains on the word.

Examples:

long form:

short form:

yaa	+	ba	« ancestor »	yaap
na'a	+	ba	« chief »	na'ap
nir	+	a	« person »	nit
bii	+	ga	« child »	bii
buu	+	ga	« goat »	buu

2.4.2.7 Noun suffix 'metathesis'

When two phonemes are reversed, we use the term 'metathesis'. It is a strategy to deal with impermissible consonant clusters. In Kusaal, noun suffixation leads often to metathesis. In its short form, the noun class suffix -CV swap the sounds around and becomes -VC# to avoid CC sequences. This occurs with the classes 6, 7, 8, 9 and 11

-CV# → -VC#

As stated earlier, in word final position voiced consonants are devoiced.

Examples:

buum	« goat »	+	se « cl. 6 »	becomes	buum + es	⇒	buumes	« goats »
kol	« skin bag »	+	go « cl. 7 »		kol + vk	⇒	kolvk	« skin bag »
gbã	« paper »	+	ŋo « cl. 7 »		gbã + vŋ	⇒	gbãvŋ	« paper »
wab	« elephant »	+	te « cl. 8 »		wab + t	⇒	wabut	« elephants »

Maybe this observation is not valid and it has another, more likely explanation: Kusaal has a "front spared" and a "back round" characteristic. This means the first vowel has tendency to spread to the rest of the word (i.e. front spread). The back round phenomena is the influence of the back consonant to the preceding vowel: The back consonants k, g and ŋ provoke a round transition vowel (v) preceding them. The front consonants p, t etc., have a front-high transition vowel (ɪ/i). The nasal consonants provoke a vowel lowering and have a front-mid transition vowel (e). (See also 2.4.3.1 and 2.4.3.2)

2.4.3 Vowel harmony

Vowel harmony is a process of assimilation of a phonetic feature in one syllable of a word influencing the vowel quality in another syllable of the same word, for example the stem vowel influences the suffix vowel. Thus the choice of a suffix vowel is not free but it is determined by the quality of the stem vowel.

-Spratt has written in his phonology statement: « *There is no vowel harmony.* » (1968: 34)

On the other hand he states that: « *There is a tendency towards a similarity of vowels within bar.* »

- **Agoswin** (2010 : 89) writes speaks about an Advanced tongue Root [ATR] based vowel harmony:

« *The nine vowel system of Kusaal can also be divided into the [+ATR] and [-ATR] oppositions. Based on this distinction, the vowels which occur in a word will usually be selected almost exclusively from only one of the sets and not from the two sets at the same time. The sets are shown in (21):*

(21) [+ATR]:	i	e	o	u	
[-ATR]:	ɪ	ɛ	ɔ	ʊ	a

In the structuring of words in the language then, there is an adherence to this systematic patterning of vowels. It is thus the case that stems or words which appear on the surface, not to follow this [+/-ATR] opposition, can actually be shown to be harmonising with each other at the phonetic level. »

It seems strange to us that he says that according to individual speakers one can say the same word with [+ATR] and the other without [-ATR]. He writes on page 91:

For sequences of vowels to occur in Kusaal, it is imperative that such segments be produced with a similar movement of the tongue root. Otherwise, there is a spread of [+/-ATR] from the first syllable onto the next. This situation is observed with evidence from many dialectal variations in the language. For instance, the sets of data in (25) are possible variants of each other in the speech of an individual or even of two separate individuals:

(25)	[+ATR]	[-ATR]	Gloss
	pē'ōg	pē'ōg	'sheep'
	pōnnír	pōnnír	'toad'
	bùmbòk	bùmbòk	'hole'
	géllá	géllá	'eggs'

Our own research suggests that there are certainly some kinds of “vowel harmonies” in Kusaal but the Kusaal words cannot be divided strictly in two rigid word categories, one using exclusively vowels with advanced tongue root [+ATR] and other words using exclusively vowels with retracted tongue root [-ATR] as suggested by Agoswin.

Naden says that there is « *a tendency to harmonize on the front/spread::back/round dimension, particularly progressively - stem vowel affecting the suffix.* » (“Suffix-Vowel regression in W.O/V Nominals” p. 22)

We can find two kinds of vowel harmonizing in Burkina Kusaal:

- Front spread
- Roundness vowel harmony

It is also observed that words have often a +ATR vowel in the primary syllable (the “strong” syllable) and a -ATR vowel in the secondary syllable (the “weak” syllable):

kol.ʊk « well » = kol « well » + ʊk « cl. 7 suffix »
 pe'.ʊk « sheep » = pe' « sheep » + ʊk « cl. 7 suffix »

The above data would allow for an explanation by Cahill (2007: 191) calls « *a remarkable asymmetry in partial height assimilations: they are all one-step raisings. ... There are only two types of assimilatory processes: a vowel raises either one step higher or totally assimilates in height.* »

This last phenomenon would account for the +ART -o- in the root and the -ART -v in the class suffix which is one step higher than the root vowel. The stem vowel controls/influences the vowel of the suffix.

2.4.3.1 The front spread harmonisation

The vowel of the word stem/root, i. e. in the primary syllable determines the vowel in the following secondary syllable. This can easily be observed by the quality or transitions vowels and suffix vowels: When a stem has a closed high vowel **i** or **u**, the transition vowel will also be **-i-** or **-u-** (and not **-ɪ-** or **-ʊ-**).

Examples for transition (epenthetic) vowels:

- class suffix transition vowels for nouns:

nir + ba ⇨ nirip « people pl. »
 dul + go ⇨ duluk « Abyssinian horn bill »
 ii + go ⇨ iiuk « savannah monitor »
 mimil + go ⇨ mimiluk « flavour (salt) »



- transition vowels to incorporate verb suffixes:

suffix for incomplete action (imperfective) **-t**

mi'is + t ⇨ mi'isit « to be in the process of being drown »
 yiis + t ⇨ yiisit « to cause to get out »
 gut + ba ⇨ guru ba « to wait for them » (instead of guri ba)

- imperative suffix **-m** (-um ; -im)

kul + m ⇨ kulum « go home ! »
 fug + m ⇨ fugum « blow ! »
 kũ'un + m ⇨ kũ'unum « bend ! »
 zĩ'in + m ⇨ zĩ'inim « sit down ! »

zĩ'in + me ⇨ zĩ'inimi « (you pl.) sit down ! »
 igil + m ⇨ igilim « kneel down ! »
 gilig + m ⇨ giligim « get round ! »

Locative suffix -i / -ɪ / -e

yit « house » + i « locative » ⇨ yiri « at a house »
 til « trunk » + i « locative » ⇨ tilli « under a tree »
 nif « eye » + i « locative » ⇨ nifi « in eye »

but:

sɔt « way » + ɪ « locative » ⇨ sɔɪ « on the way »
 laa « plate » + ɪ « locative » ⇨ laaɪ « in a plate »
 nɔɔt « mouth » + ɪ « locative » ⇨ nɔɔɪ « in a mouth »

After a nasal consonant -m, -n ou -ŋ the locative vowel is influenced by the nasal and will be -e

Examples: kɔ'ɔm « water » + -e « locative » = kɔ'ɔme « in the water »

Transition vowel between verb and object pronoun -i / -ɪ / -e /-v / -u

gut « to wait » + ba « them » ⇨ guru ba « wait for them »
 dug « to cook » + m « my » ⇨ dugv m nim « to cook my meat »

The vowel spreading stops at the phonological word boundary. Thus a complex noun or a compound noun (noun-adjective) can have all kinds of different vowels.

Examples:

zu-pɛɛɪk « white head » (noun + adjective)
 zu-wāaŋ « skull » (noun + noun)
 ba-be'vɪk « bad dog » (noun + adjective)
 zū-kōōk « baldness »

This also applies to loan words like ayi « two », anu « five », aburbe « pineapple » etc.

2.4.3.2 Roundness vowel harmony

Another type of vowel harmony is based on the feature round. In Kusaal words, a rounded vowel in the root tend to appeal for a rounded vowel in the suffix or secondary syllable. In other words rounded vowels tend to occur together to the exclusion of unrounded vowels.

There is a vowel harmony imposed on the rounding of the vowels in secondary or peripheral (i.e. non-nuclear) syllables. A rounded back vowel (u, v, o, ɔ) in a word stem/root provokes that there is also a rounded back vowel in the peripheral/secondary syllable. In the same way, a front vowel in the stem (i, ɪ, e, ε) provokes a front vowel in the peripheral/secondary syllable.

Examples:

A back vowel o/ɔ/v in the root provokes a back vowel in the second syllable v and not ɪ

bɔɔt	« to want »	+ -m	« suffix cl. 14 »	⇒	bɔɔrvɪm	« will »
kug	« seat »	+ -s	« suffix cl. 6 »	⇒	kugvɪs	« seats »
so'ol	« to possess »	+ -m	« suffix cl. 14 »	⇒	so'olvɪm	« kingdom »
bũn	« to harvest »	+ -p	« suffix cl. 13 »	⇒	bũnvɪp	« harvest »
but	« to sow »	+ -m	« suffix of imperative »	⇒	burvɪm	« sow ! »
vug	« to uncover »	+ l	« reversal suffix »	⇒	vugvɪl	« to cover »
dug	« to cook »	+ ba	« they (direct objet) »	⇒	dugvɪ ba	« to cook them »
gut	« to wait »	+ m	« me (direct objet) »	⇒	gurvɪ m	« wait for me »

Note for the last two examples: A verb followed by a direct object pronoun is functioning like a single word (even though it is written separately in the orthography, see 2.4.2.2), thus we could consider the direct object pronoun like a suffix to the verb and it needs an obligatory transition vowel if the pronoun starts with a vowel. Thus the object pronoun is phonologically attached to the preceding verb, but syntactically a separate word, as are all pronouns.

In the same way a front vowel ɪ/e/ε in the root provokes a front vowel in the peripheral syllable so that it will be ɪ and not v

zi'ɪ	« to ignore »	+ m	« nominalisation suffix cl. 14 »	⇒	zi'ɪvɪm	« ignorance »
mi'i	« to know »	+ m	« nominalisation suffix cl. 14 »	⇒	mi'ɪvɪm	« knowledge »

Back-round harmony

There is also a the back-round harmony in that the back consonants g, k and ŋ influence the epenthetic vowel preceding them and make it a round vowel v / u instead of ɪ / i.

gãa	« crow »	+ k	« class suffix cl. 5 »	⇒	gãavk	« crow »
gbã	« paper »	+ ŋ	« suffix cl. 5 »	⇒	gbãvŋ	« book »
ii	« monitor »	+ k	« suffix cl. 5 »	⇒	iiuk	« Savannah monitor »

the final nasal *m*. The final nasal (-N#) is voiceless before pause and thus cannot bear a tone. Also when a syllabic nasal follows a vowel, that nasal becomes de-syllabified, and the V + N unit becomes one TBU, see example:

Nòkìm kó'õm tí m̄. « Give me the water. »

take + IMP water give me

If the TBU depended on the mora count, there should be no change in number of TBUs. An important aspect to be pointed out is that this situation is found word-finally only. In non-final position (word-medial environment), a nasal carries usually the same tone as the preceding vowel.

Thus for our analysis the TBU to which tone relates will be the syllable.

The following three syllable types V, CV, CVC, V as the syllable nucleus will always be the tone-bearing element of a syllable.

Examples:

V	ò	« he / she »	V.CV	[à.yí]	« two »
CV	mà	« mother »	CV.CV	[gé.lá]	« eggs »
CVC	kúk	« chair »	CVC.CVv	[nín.dāā]	« face »

The second type of segment which can function as TBU are nasal consonants; nasals in isolation are always syllabic.

Examples:

N	m̄	« I »	m̄ bá	« my father »
---	----	-------	-------	---------------

There is not necessarily a one-to-one mapping between syllables and Tone-bearing units (TBU). Tone on nouns ending in nasal consonant or long vowel such as CVv, CVN and CVVN syllables in word-final position can bear more than one tone though they are monosyllabic words.

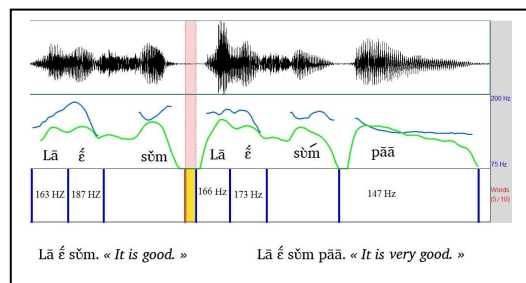
Examples:

CV	bīī	« child »
CVC	díúp	« food »
CVN#	s̄m#	« to be good »

before pause (#) the nasal consonant is voiceless and does not bear tone,

but in a non-final position the nasal consonant is voiced and does bear tone as shown in the graphic example:

Lá ẽ s̄m̄ pāā. « It is very good. »



sǔm « good, well » is in fact the short form of sùṅá « good, well ». The final vowel *a* can be dropped but its High tone is maintained on the word and transferred either to the vowel *ǔ* in final word position or to the nasal *m̃* in non-final word position.

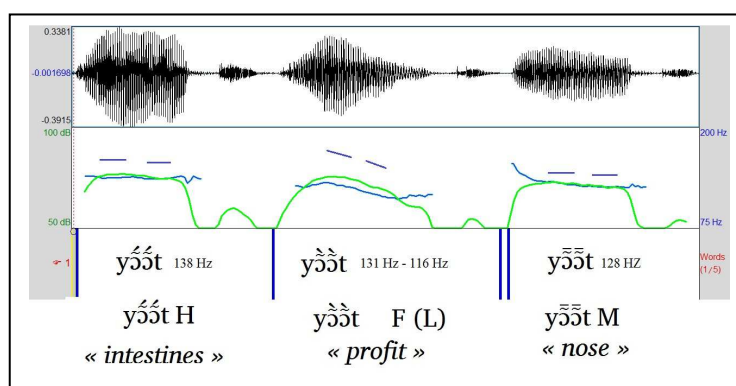
2.5.2 Tonal minimal pairs

The following examples show a few minimal pairs differing from each other only by their pitch level:

sírá	H-H	« husband »
sìrà	L-L	« truth »

bǎṅ	H	« bangle, bracelet »
bǎṅ	M	« crocodile »
Ò bǎṅ.	L	« He knows. »

yǔṛt	H	« intestines »
yṛṛt	M	« nose »
yṛṛt	L	« profit »



But there are also many examples of words which have the same tone:

yá'áṅ	« female »
yá'áṅ	« last »
yá'áṅ	« back, East »

sṛṛt	« liver »
sṛṛt	« witchcraft »

The combinations of High and Mid level tones appear as rising (MH) or falling (HM) contour tones. A floating Low tone will cause a down-step of a High tone (marked as ¹H). On the surface this floating tone does not appear on the morpheme to which it underlyingly belongs, but it does affect the tonal pattern of the following tones by lowering them.

Most suffixes seem to be High toned lexically, with the exception of *cl. 8* plurals which has a tone opposite of the previous stem tone.

2.5.3 Tonal realisations

In the speech chain the words do not always appear with their underlying tones. The surface tone is influenced by many factors surrounding it.

2.5.3.1 Tonal allophones

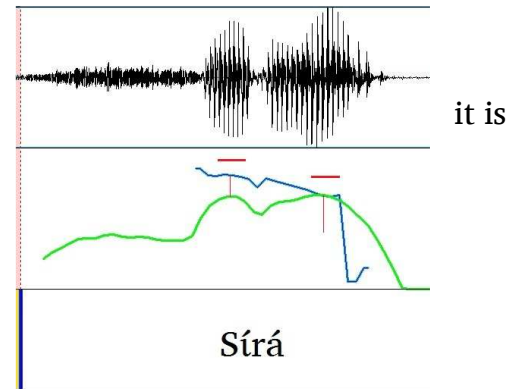
Both high and low tones have more than one allophone.

High tone: When one high tone word follows another, slightly lower in pitch than the one that precedes it.

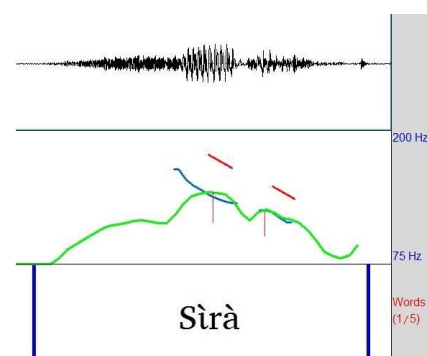
Example:

Sírá « *husband* »

The second High tone is slightly lower than the first High tone.



Sírá « *husband* »



Sìrà « *truth* »

Low tone: when a low tone follows another, it starts on a lower pitch than the preceding one and ends on a lower pitch.

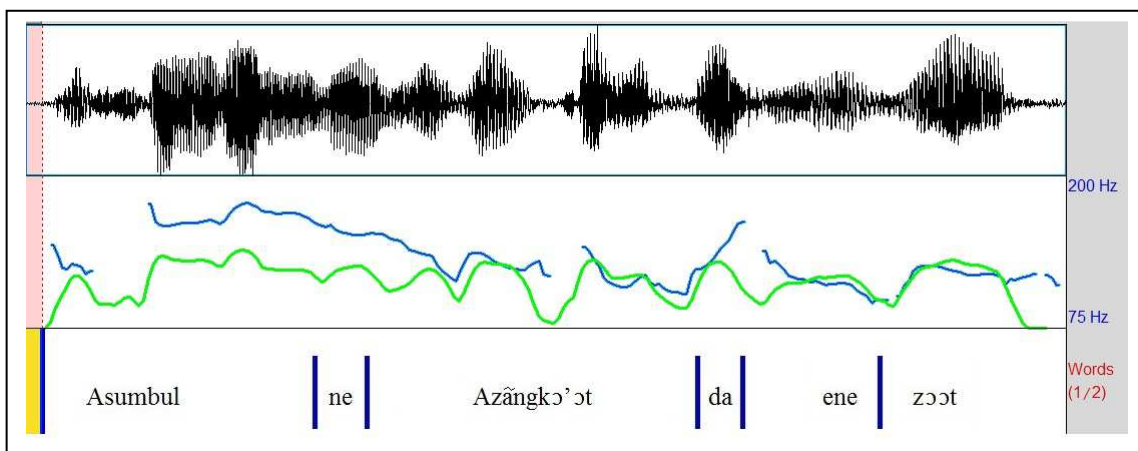
Example: sìrà « *truth* »

2.5.3.2 Downdrift

Kusaal displays the phenomenon of downdrift: after a Mid tone or after a Low tone, a High tone is realised on a slightly lower pitch level than the previous High tone. Also a Mid tone is realised on lower pitch level after a Low tone than the previous Mid tone. This phenomenon could be called “automatic pitch lowering”. Also, following a L tone, the pitch level of a following non-L tone is usually lowered, thus lowering the whole register until the end of the pause group.

The downdrift occurs within a pause group, it falls till the end of the pause group and then the high tone level/pitch is reset to its normal pitch level to start the next pause group etc.

The downdrift phenomenon is illustrated in the following sentence:



Pause

Àsúmbúl nē Àzǎ̀nkō'ōt dá ènè zóót.

Pause

Mr Rabbit and Mr Hyena PASST to be friends

B H H M B H M M H B B H

« *Mr Rabbit and Mr Hyena were friends.* »

Tone register

Tone register = pause group

Tone register

High tone is reset

Observations: In the Praat graphic above can be seen that the last high tone on *zóót* « *friends* » is almost lower than the first low tone on *À* « *Mister* ». Further can be observed in the graphic that the low tone is not stable on its original level but it too goes lower and lower. After a pause, the new sentence will start at the original pitch levels and drift down until the next pause unit.

A downdrifted H tone is only about 10 Hz lower in pitch than a previous High tone.

The loss of the class suffix **-á** is only partial, since the tone is maintained on the word level and it “jumps” to the left on the nasal consonant le **-m̃ /-ń** giving way to **sòm̃** « *good* » and **bòń** « *donkey* ». In other words, the elided vowel segment has “sent” its tone on the final nasal consonant.

Another example is **dà'à + gá** « *market* » when the class suffix **-gá** is elided, the high tone H “jumps” to the left and influences the final vowel of the root which exchanges its Low tone for the newly received High tone: **dà'á** « *market* ».

Assimilation between tones is not to be thought of in rigid terms it is rather progressive and anticipatory. thus for example a Low tone that is anticipating a High tone can slightly rise as it gets near the High tone in order to facilitate the pronunciation of the following High tone, and vice versa. That is why on a graphic where the tone pitch is shown the lines are not always straight lines but they mount or descend to anticipate the following tone. So according to its context a High tone can be

- a straight level line
- a slightly mounting line
- a slightly descending line



in anticipation of the next tone.

Normally it is the first tone that influences the following tone in a progressive way.

2.5.3.5 Tone spreading to the right

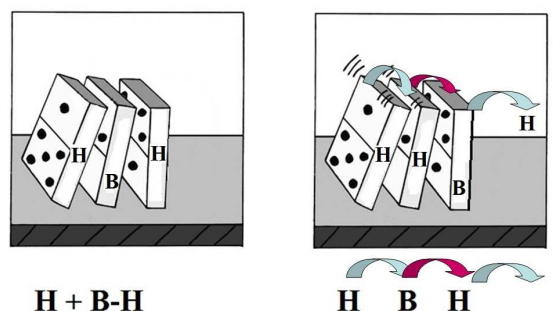
A High tone can spread to its right onto the next TBU. If its neighbour begins with a Low tone, this Low tone will give up its place and “jump” to the next TBU who in its turn loses its tone and passes it on to the next TBU. This effect is called the “domino effect.”

Examples with noun + adjective:

H- + H-H : pé'úk « *sheep* » + kúrúk « *old* » ⇒ pé-kúrúk « *old sheep* » (no tone spread)

H- + B-H : pé'úk « *sheep* » + kàrúk « *big* » ⇒ pé-kárùk « *big sheep* » (with tone spread)

" Domino effect " in Kusaal



2.5.3.6 Tone on epenthetic vowels

An epenthetic vowel has to be inserted to prevent undesirable consonant clusters CC. The tone they bear depends on the surrounding tones. In nouns, a tone on epenthetic vowels is generally Low (p. Cahill 324-5) except when the epenthetic vowel occurs between two High-toned TBUs. With verbs, the grammatical tonal melody determines the tone of the final epenthetic *ɪ* or *ʊ* (see).

Examples:

bí'ísìré « breast in its long form » composed of: bí'ís + ré but CC needs a epenthetic vowel which is Low -ì-

bí'ísít « breast in its short form » bí'ís + ít without epenthetic vowel

But in a word that has only H tones the high tone spreads also on the epenthetic vowel because there is now low tone in the whole word.

Example:

yúgúrúré « hedgehog in its long form » yúgúr + té needing a epenthetic vowel which is High -ú-

yúgúrút « hedgehog in its short form » yúgur + út without epenthetic vowel

2.5.3.7 Floating tones

Low tones can remain hidden or floating between Highs, causing Downstep. A floating L tone causes Downstep for example on an underlying H-toned suffix.

For example in a associative construction the first nouns is the possessor, and the second noun is the possessed. Both keep their morphological structure (see 3.6.1). For example we can juxtapose two h nouns *pé'úk* « sheep » and *zúk* « head »: *pé'úk z'úk* « sheep's head, or head *of* sheep »

The second word, the possessed *zúk* is downstepped. The Downstep on the second word is the result of a floating tone derived from the particular context of this construction. The associative morpheme is a floating L tone « *of* ».

2.5.3.8 Contour tones

A syllable is generally connected with one level tone, but under certain conditions, a syllable may have two TBUs and thus carry two tones. A tone different from a preceding tone may occur only at the right-hand word boundary and give way to a contour tone.

Contour tones are found only on the last syllable of a word. They are the result of a contraction, for example a lost syllable or vowel who left their tone on the noun.

Examples:

sáá + gà « rain » sáà « rain » CV:
nìm + bá « meat » nǐm « meat » CVN
tó + ò « brother/ sister » tô « brother/sister or opposite sex » CV
bì + gá « child » bìí « child » CV:
kǔŋ « cry of warning » (originally kùŋá ?)
bì + lá « small » bǐl « small » bìbís « small plural »

Long vowels bear the same tone word internally, i.e. in non-final position, whereas at the right word-boundary, they may occur.

2.5.3.9 Difficulties of interpretation

In certain compounds noun + adjective, the tone on the noun root changes. Why?

A) One explanation is that some noun roots do not have an inherent tone but they are rather toneless. Their noun root has a default Low tone but it anticipates the High tone of the High tone suffix. However in a compound word, the root keeps its Low tone because it has lost its class suffix.

Examples:

báá « dog » + bé'uk « bad » becomes: bà-bé'úk « bad dog »

B) Another explanation would be that H-H noun is realized Low when it is attached to an adjective is that the initial stress (or accent) of a word provokes a High tone in a toneless root that has a default Low tone. In Kusaal the stress is on the penultimate syllable. This stress on the first syllable of a word provokes a High tone and then the noun adds the High tone of the class suffix to make a H-H toned word.

But when a noun root adds an adjective the stress is not any more on the Low tone noun root and thus it keeps its Low tone.

Example:

'póók « field » is a stressed syllable and has a Low tone root pò
pò- root of « field » + tuta'at « big » ⇒ pò-tí'tá'át « big field » the stress is placed on 'tá

This suggests that we can classify the nouns in four tonal groups:

1. Tonal class with H tone root (ex. pé'úk « sheep », búú « goat », kóbúk « hair »)
2. Tonal class with M tone root (ex. gbīgīm « lion », yōōt « water pot »)
3. Tonal class with L tone root (ex. zàk « courtyard », zìlīm « tongue », dàà̀̀k « wood »)
4. Tonal class with default L tone root, thus H tone because of stress (ex. pook « field », bíí « child », báá « dog », p'á « woman », bá'á « diviner »)

Mid and Low tone does not seem to be spread over to the adjective, but the toneless class 4 does as shown in the following examples :

'báá « *dog* » is a tone class 4 noun with Low tone as a default tone. Thus when **bà-** it is followed by an adjective like **kórók** « *old* » it will be realised **bà-kórók** « *old dog* » without any domino effect ; The stress has now moved to penultimate syllable of the phonological word : -**kórók**
To find out whether a noun belongs to the tone class 4 one has just to combine it with an adjective and see how the tone of its root behaves.

When a noun with High tone is preceded by a personifying prefix **À-** « *Mr.* » that prefix lowers the High tone and transforms it into a downstepped !H.

Examples:

à + gél « *egg* » ⇒ Àg'él « *Mister Egg* »

B H B 'H

à + lárí bá « *Wednesday* » ⇒ Àl'árí bá « *Mister Wednesday* »

B H H H B 'H H H

2.5.3.10 Tone on verbs

Cahill writes in his description of Konni (p. 305) a related Gur language of the Oti-Volta branch « *verbs have no lexical tone* » ... « *all verbs exhibit the same tonal behaviour related to the number of syllables in the verb* » (Cahill 2007, 386).

Goswin says that « *uninflected verb stems are regularly mid-tonal or low.* » (Agoswin 2010, 137). This is also the analysis of **M. E. Kropp Dakubu** in her paper “Tone and the Gurene Verb”: « *...unlike nouns, verbs have no specified tone, even on their accented syllable.* » (Kropp Dakubu 2006, 54).

The same observation is made by Schwarz describing tones in Buli, which is a closely related language to Kusaal (2005, 19). She also says that verbs have amid tone in their neutral or citation form. This would correspond more or less with what Agoswin says about Kusaal, which is his mother tongue.

In our research we did not find minimal pairs for verbs, so it seems that tone is not lexically contrastive for verbs in the way it is for nouns. However, verbs do have a tonal melody and it is different if the same verb is for example in the imperfective aspect, the perfective aspect, and imperative or in a future tense. Thus tonal melodies for verbs depend on their context in a sentence, as well as on aspect and mood (see chapter 4).

downstepped high tones or mid tones in all case. ... Direct objects do not influence the tonal properties of verbs with third person pronominal subjects. » (p.129)

In this case, the mid tone on verbs spreads in a leftward direction to the pronominal form. In the same way the high tone of the objects spreads leftward onto the verb that becomes high toned in turn.

Example:

F̀̀ dīt dít. becomes: [F̀̀ dít d'ít.]

you eat + IPF food

« You eat food. »

2.5.3.10.2 The progressive

Agoswin says: (p. 130) « The progressive aspectual marker is a suffix -ε + affixed to present or habitual forms of verbs. The default tone on this suffix is a non-high tone - either mid for the 1st and 2nd persons or low for the 3rd pronouns respectively. The suffix however becomes high when there is a direct object in the sentence. »

M̄ nūtē. « I am drinking. »

M̄ nūté kó'ōm. « I am drinking water. »

Ò nūtè. « He is drinking. »

Ò nūté kó'ōm. « He is drinking water. »

However we prefer to interpret the -ē suffix as an allomorph of the focus marker **me** (that has other allomorphs like **ne**, for further discussion see).

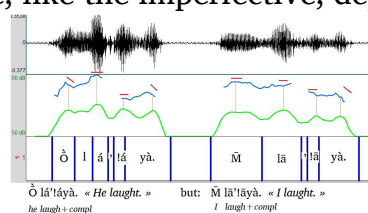
2.5.3.10.3 Perfective aspect

The perfective aspect in Kusaal denotes a completed action in the past or present. Often the tone on a perfective verb is low. But the tone of the perfective, like the imperfective, depends on the subject pronoun.

Examples:

Ò lá'áyà. « He laughed. » but: M̄ lā'áyà. « I laughed. »

he laugh + compl



Examples:

Ò dī d'ít. « He ate food. »

he eat food

Pó'á lá dī d'ít. « The wife ate the food. »

wife DEF eat food

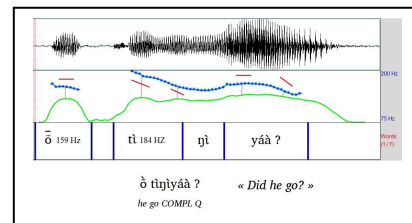
The tone of the verb in turn affects the tone of what follows; it gives a polar tone to the next syllable, or it downsteps a following high tone, thus creating a domino effect.

Example 1:

ò tìnyàà ? M LLML

he go COMPL Q

« Did he go? »



Interpretation of tones in the above sentence:

The accent of intensity provokes that the Low tone of

ò « he » is raised a little bit for stress to ò̃; it spreads its L to

the first syllable of the verb **ny** « go » that now becomes

L on its turn; the secondary syllable with the epenthetic

vowel **ɪ** copies the tone of the verb stem - epenthetic vowels are toneless - (Schwarz 2005, 24);

the **-ya** « Completed action marker » has a polar tone, since the verb root was Low, it gets a High

tone. The question mark at the end of the sentence is always a Low tone.

Example 2:

Mám bóótē pāstēēt. H HHM MMM

I + FOC want + ipf + + FOC pastor

« I want the pastor. »

Interpretation of tones in the above sentence:

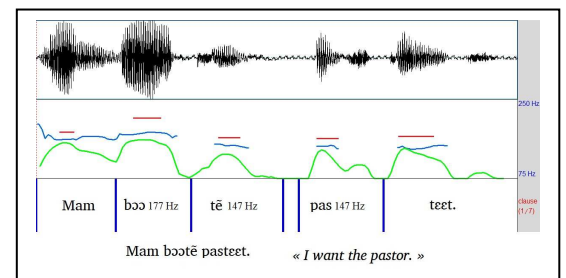
The High tone on **Mám** « I + FOC » spreads its High tone

to the verb **bóot** « to want » which gets a High tone;

its suffix for the imperfective aspect **-t-** « ing » has no tone since it has no vowel, the adjacent

affirmative suffix **-ē** gets a polar tone which is Mid; this mid tone is spread

to the object **pāstēēt** « pastor ».



2.5.3.10.4 Perfective negative

In the case of a negative particle **bú** « did not » the verb copies the high tone of **bú** but ends in a low tone on the negation marker which can be a vowel lengthening for CV verbs or a **-è** suffix for CVC verbs.

Examples:

M̄ bú kóò. « I did not farm. »

T̄ bú kóò. « We did not farm. »

Àsáá bú sóbè. « Asaa did not write. »

Whereas the future negative particle **kòn** bears a low tone and the verb copies this low tone.

Examples:

M̄ kòn kòò. « I will not farm. »

Tī kùn kòò. « We won't farm. »
 Àsáa kùn sōbē. « Asaa won't write. »

2.5.3.10.5 Future tense

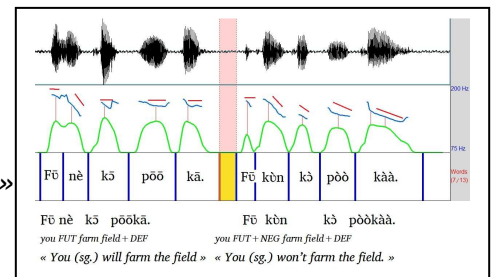
When the future particle **nè** « will » is preceding the verb, the verb will have a **Mid tone**, no matter what person is subject. The verb in turn spreads his ton on the object. According to Agoswin (p 134) **né/na** is « used pre-verbally and bears a high tone in 1st and 2nd pronominal forms. This high tone conditions adjacent low tones on 1st and 2nd pronouns to rise to mid tones. Verbs retain their default non-high tones. After 3rd person pronouns the particle will have a low tone **nè**. However, we found that **nè** in statements is mostly low tone.

e.g. m̄ **nè** zō. « I will run. » Fū **nè** zō. « You will run. »
 ò **nè** zō. « He will run. » Bà **nè** zō. « They will run. »

The future negative **kùn** « won't » provokes a falling high tone on the verb that follows it. The verb in turn spreads his ton on the object. Yet to be found out: **né** is high toned for 2nd person sg. and **nè** low toned with all the other subject pronouns.???

Examples:

Fū nè kō pōōkā. Fū kùn kò pòòkàà.
 you FUT farm field + DEF you FUT + NEG farm field + DEF
 « You (sg.) will farm the field » « You (sg.) won't farm the field. »



2.5.3.10.6 Future Interrogative

Creating the interrogative of the future forms is achieved through a significant degree of tone rising until the end of the statement where short final vowel segments in the verb stem are lengthened and takes a low tone. 1st and 2nd person become high toned in the question while low tones in the 3rd person become mid-toned. The interrogative raises the tone level in the whole sentence except at the very end where it is dropping to low.

Examples:

M̄ **né** zòò ? « Will I run? » Fú **né** zòò? « Will you run? »
 Ō **nē** zòò ? « Will he run? » Bā **nē** zòò ? « Will they run? »

2.5.3.10.7 Direct imperative

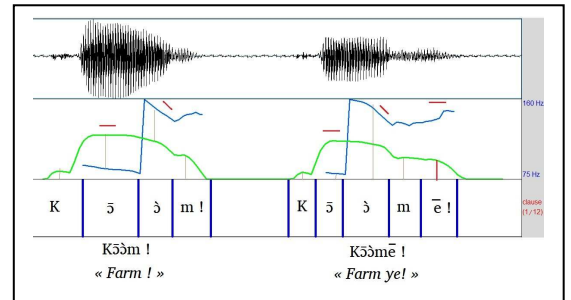
The imperative have a low tone on verb stems and the singular suffix is -m/-um.

The imperative plural suffix is -mē.

Plural imperatives have a Mid-Low-Mid melody!

Examples:

Dǔm !	« Eat ! »	Kǔm !	« Farm ! »
Dùmē !	« Eat ye! »	Kǔmē !	« Farm ye! »



2.5.3.10.8 Indirect imperative

The indirect imperative « he should do X » can also be termed hortative.

It can have the suffix -má / -mé. Indirect imperatives have (downstepped) H melody!

yé tí 'dímé. !	« We should eat / that we eat! »
yé m' 'dím. !	« I should eat / that I eat! »
yé 'fú dím !	« That you eat / you should eat! »
yé 'yá dímé !	« That you eat / you should eat! »

Preverbal particles

né	future marker
bú	negative marker
kùn	future negative
náan	would, was

pā'a	earlier today	m̄ pá'á sòyà.	« I bathed earlier today. »
sā/sō	yesterday	m̄ sā sòyà.	« I bathed yesterday. »
dā	some time ago	m̄ dā sō.	« I bathed some time ago. »

-yà	completive (provoques low tone spread to the left)
-!áà?	penultimate vowels in the interrogative forms carry a downstepped high tone

2.5.3.10.9 Tone on conditionals

Low tone subject pronouns are changed into **high tone pronouns** when it is the subject of a dependent conditional clause.

2.5.4 Function of tone

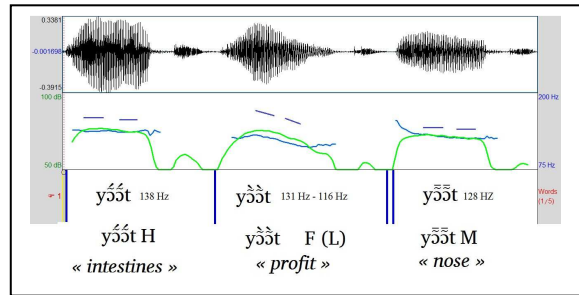
In Kusaal, tone performs both a lexical and a grammatical function;

2.5.4.1 Lexical function

Tone serves to differentiate the meaning of certain words:

Examples:

yóó̄t	H	« intestines »	138 Hz
yó̄̄t	M	« nose »	128 Hz
yó̄̄̄t	F (L)	« profit »	131-116 Hz



2.5.4.2 Grammatical function

Tone has not only a lexical function but also a grammatical function.

2.5.4.2.1 Verb aspects and modes

The main grammatical function of tone is to distinguish between different forms of the verb. The verbal system is based on a three-way contrast involving perfective an imperfective aspect combined with realis and irrealis (irrealis mode is used for the future tense and the imperative and optative clause). The distinction between these three forms is by means of both suffixes and tones. In many cases, tone alone marks the distinction, in other cases suffixes alone, and in other a combination of both tone and suffixes is used.

	Realis		Irrealis
	Perfective	imperfective	neutral
<i>to fall</i>	lì	lìtì	lī
<i>to dream</i>	záásìm	zāāsíté	zāāsìm
<i>to come</i>	tìn	tìnné	tīn
<i>to die</i>	kpì	kpíté	kpī
<i>to arrive</i>	pàà	pááté	pāā
<i>to wash</i>	pèè	péété	pēē

Examples:

Ò pèè múí lá.

he wash rice the

« He washed the rice. »

Ò pēēté mūī lá.

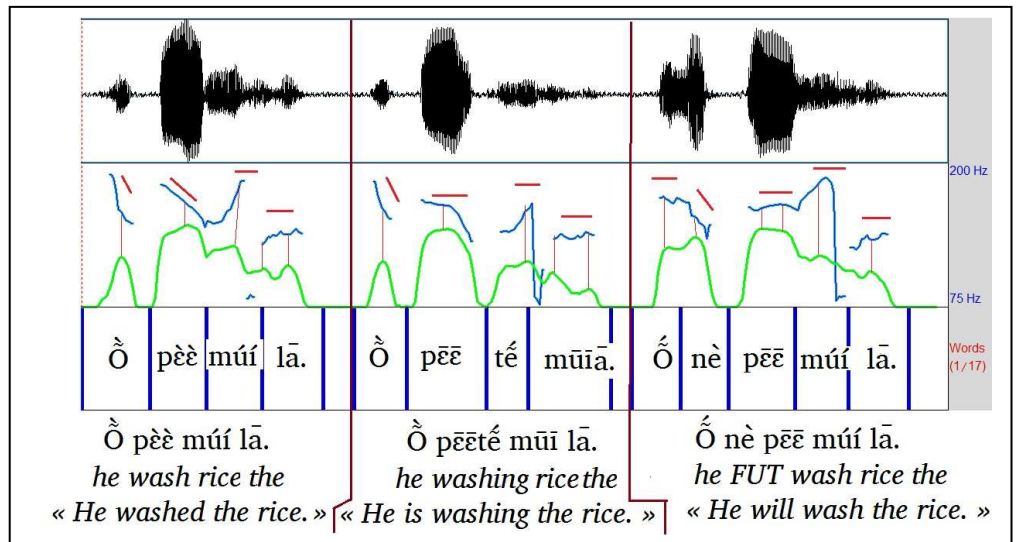
he washing rice the

« He is washing the rice. »

Ó nè pēē múí lá.

he FUT wash rice the

« He will wash the rice. »



2.5.4.2.2 Pronouns showing clause type

Another grammatical function of tone is the distinction between declarative and optative clauses marked by a change in the tone of the pronoun (as well as a possible tonal and / or segmental change in the verb). Subject pronouns have Mid or Low tone in a declarative clause, but they have High tone in an optative clause (including before subordination particle/preverb *ne* « when » :

Examples:

Declarative clause:

Fù kùnné. (Imperfective realis)

you go home

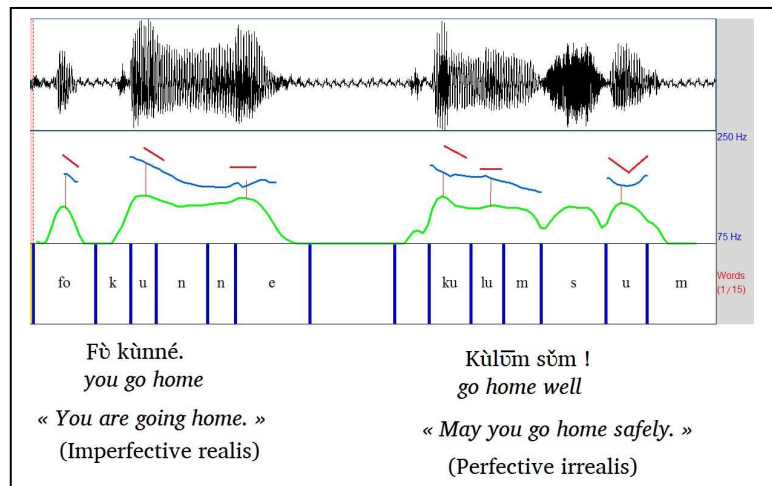
« You are going home. »

Optative clause:

Kùlòm sǔm ! (Perfective irrealis)

go home well

« May you go home safely. »



Ò sòṅìrì bà. (Imperfective realis)

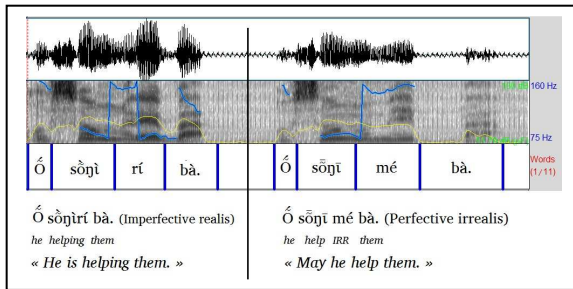
he helping them

Ó sōṅī mé bà. (Perfective irrealis)

he help them

« *He is helping them.* »

« *May he help them.* »



Fū pàà yít sǔm. (perfective realis)

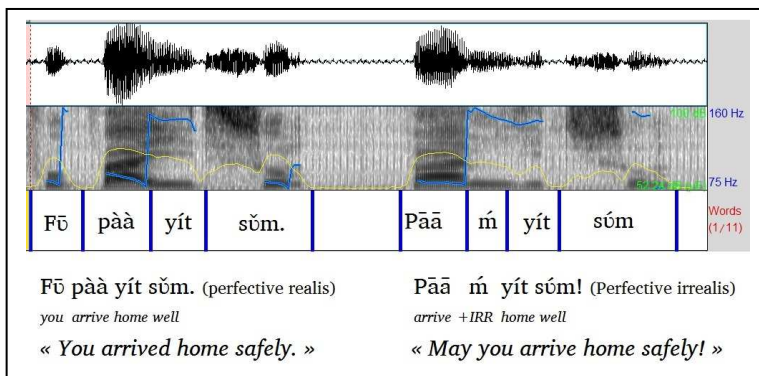
you arrive home well

« *You arrived home safely.* »

Pāā ḿ yít súm! (Perfective irrealis)

arrive IRR home well

« *May you arrive home safely!* »



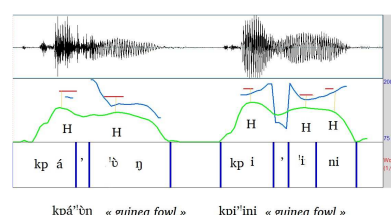
2.6 Stress

Certain syllables in a word have a prominence that is commonly called stress. Stressed syllables

- are said with greater force or intensity
- take longer to say (duration)
- are generally said in a higher pitch

These are prosodic or suprasegmental features.

Stress or accent involves categories bigger than segments and syllables. A stressed syllable is pronounced with a greater amount of energy than an unstressed syllable. Stress in Kusaal involves also a heightened pitch level as one can see on the following Praat graphic where stress is shown with the green line:



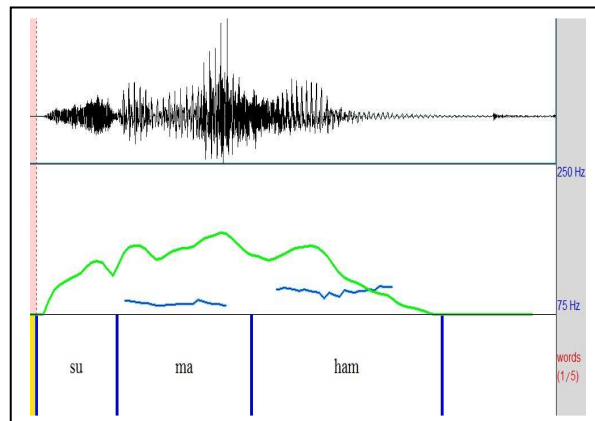
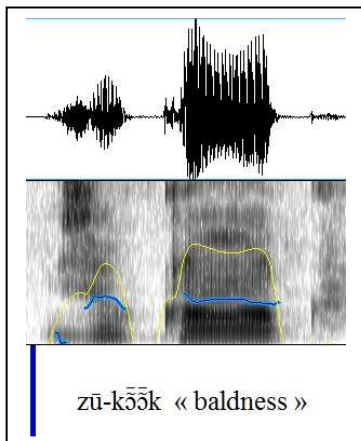
In Kusaal stress is predictable; we can observe that the stress is on the penultimate (second to last) syllable of a word. This also means that in general stress in Kusaal is often on the first syllable since most words do not have more than two syllables. (Olawsy p.175)

The first syllable of the second element in the compound has the strongest accent/stress as shown in the Praat graphic with the green line (the blue line is pitch).

Example:

Zu-'kōok « baldness »

[sũ-'maham] « joy (lit. heart-coolness) »



In Kusaal, stress is predictable and there are no minima pairs for stress, thus stress is not contrastive and does not need to be written in the orthography.

3 Nominal morphology

3.1 The noun class system

A minimal noun in Kusaal contains a noun stem and a singular/plural suffix (with exception of class 11 & 12 which has only a singular respectively a plural suffix). A definite article may occur as suffix as the last element in the word.

Noun word = stem + suffix (V, VC, C, CV)

The simplest stem is a root. CV and CVC are the most common structures for roots.

Nouns have a citation form which is the short form; and a long form, which is applied in the context of a negative or interrogative phrase. The short form has often a suffix reversal: instead of a -CV suffix it is a -VC suffix (e.g. -gv ⇒ -vk). Our database includes about 2700 nouns. The class suffixes 1 to 12 indicate singular and plural (1/2, 3/4, 5/6, 7/8, 9/10/, 11/12) whereas classes 13 and 14 belong to genders with no singular plural opposition. In the table below we give an overview of all the suffixes of the 8 Kusaal genders with the 14 class suffixes with its variants. Later on we will discuss each gender in more detail.

Vowels in the suffixes with capital letters indicate that the vowel harmonizes in advanced tongue root (\pm ATR) value with the root, so /O/, for example, is realized as either [v] or [u] or [o].

a. Nouns and adjectives

Genre:	noun class:	long suffixes:	short suffixes:	%
I	1 (sg.)	-a	-∅	
	2 (pl.)	-ba	-p	
II	3 (sg.)	-∅, -ba, -a	-∅, -p	
	4 (pl.)	-nama	-nam	
III	5 (sg.)	-ga, -ka, -ŋa -wa, -ya	-∅, -k, -ŋ, -a	
	6 (pl.)	-sE	-s, -Es, -mEs	
IV	7 (sg.)	-gO, -kO, -ŋO, -ne	-k, -vk, -n, -a	
	8 (pl.)	-rɩ, -tɩ	-t, -Et, -Ot	
V	9 (sg.)	-rE, -lE, -ne, -dE, -bE	-t, -Et, -∅	
	10 (pl.)	-a, -ya		
VI	11 (sg.)	-fO	-f, -Of	
	12 (pl.)	-gi, -i, -∅		
	13	-bO	-p	
	14	-m, -um, -um, -lum, -sum		

Nouns can have different syllabic structures (see 2.). Substantives can have a monosyllabic, dissyllabic or in rare cases even three-syllabic structure. The substantives have a short or a long form.

- The short form is the citation form, which it is given as an answer to a question like « What is this? » The class suffix is either a consonant or a consonant preceded by an epenthetic vowel in order to avoid consonant clusters *CC, or the class suffix of the short form is zero (∅).
- The long form is found in negative sentences, in interrogative sentences and in vocatives, they have the full class suffix, mostly CV.

Some nouns are derived from verbs or from adjectives. This nominalization is a process which involves the formation of nouns from verbs and adjectives. Kusaal makes often use of this phenomena as will be shown after genders I, III, IV and classes 13 & 14

3.1.1 Gender I (-a/-ba, cl. 1/2)

This gender consists primarily of different people categories, though some people are also found in other genders. The singular suffix is **-a** or **-o** /**-u** for its long form a zero ∅ for its short form. The root final **-r** becomes a voiceless **-t**. The plural suffixes are **-ba** or **-p** in the short form, see 2.1.8).

	Singular, class 1		plural, class 2		root ending in:
	long	short	long	short	
<u>Humans:</u>	-a	∅	-ba	-p/-ɪp	
« person »	nira	nit	niriba	nirip	-r
« husband »	sira	sit	siriba	sirip	-r
« rich person »	buntata	buntat	buntariba	buntatip	-r
« soothsayer »	ba'a	ba'a	ba'ariba	ba'arip	-g
« wife »	pɔ'a	pɔ'a	pɔ'aba	pɔ'ap	-g
			(g always goes to 'a after a, ɔ or ɛ)		
« bachelor »	dakōore	dakōot	dakōpa	dakōp	9/2
« younger sibling »	pitu	pitu	pitiba	pitip	
« guest, stranger »	sāana	sāan	sāama	sāam	-m
« witch »	sōya	sōya	sōoba	sōop	vowel
« sibling of opposite sexe »	tōo	tō	tāpa	tāp	-∅
« owner »	dāana	dāan	duma	dim	-m

3.1.1.1 Simple derived agent nouns

The one who executes the action of the verb is called an agentive nominal. Agent nouns are built with the derivative morpheme -r (-R which can be -r, -t, -n or -l depending on environment) followed or not by the suffix -a (sg.) or -ba (pl.) which gives

- a singular agent suffix **-ra** or in its short form **-t**
- a plural agent suffix **-rɪba** in its short form **-rɪp** (with allomorphs **-nɪp**, **-lɪp**)

Derived agentive nominals have usually high tones.

The derivative morpheme -r is added to the **imperfective verb** form.

Examples:

perfective:	imperfective:		singular	plural :	
verb	verb		noun:	noun:	
kɔ	kɔt	« hoeing »	kpaat	kpaarɪp	« farmer (s) »
			kpaara	kpaarɪba	(long form)
wɔ'	wɔ't	« dancing »	wɔ't	wɔ'ɪp	« dancer (s) »
			wɔ'ɪra	wɔ'ɪrɪba	
but	but	« sowing »	but	butɪp	« person (s) who sows »
			bura	bɪrɪba	
da'	da'at	« buying »	da'at	da'arɪp	« buyer (s) »
			da'ara	da'arɪba	
tɔ	tɔt	« pounding »	tɔt	tɔɪp	« person (s) who pounds »
			tɔɪra	tɔɪrɪba	
so'e	so'ot	« owning »	so'ot	so'orɪp	« owner(s) »
			so'ora	so'orɪba	

The **-r-** has several allomorphs

/-rɪp/	[-nep]	after nasal consonant
	[-lɪp]	after lateral consonant
	[-tɪp]	after t
	[-tɪp]	after u in verb stem
	[-tɪp]	after i in verb stem
	[-rɪp]	elsewhere

Examples:

perfective:	imperfective:		singular	plural :	
verb	verb		noun:	noun:	
pa'al	pa'an	« show »	pa'an	pa'annep	« teacher(s) »
			pa'ana	pa'anneba	

dol	dol	« follow »	dol	dollıp	« follower(s) »
			dola	dollıba	
dı	dıt	« eat »	dıt	dıtıp	« eater(s) »
			dıta	dıtıba	
gu'	gu'ut	« take care »	gu'ut	gu'urup	« guard (s) »
mi'	mi'it	« know »	mi'it	mi'irip	« knowing person (s) »
			mi'ita	mi'iriba	
fāa	fāat	« rob »	fāat	fāarıp	« robber(s) »
			fāara	fāarıba	

3.1.1.2 Complex derived agent nouns

The verb can be combined with a noun to make an agent. In this case the noun stem comes first and is followed by the verb and by the agent derivative **-r** plus the class suffix **-a** for the singular and **-ba** for the plural. Since the short form loses its final vowel, the suffix is **only -t** for the singular and **-rıp** for the plural.

Examples:

noun:	verb:	agent der.:	singular noun:	plural noun:	
dook « house »	+ mε	« build » + r	domet	domerıp	« mason (s) »
			dometa	domerıba	
sa'ap « t.z. »	+ mɔn	« stir » + r	sa'amɔn	sa'amɔnnep	« cook (s) »
			sa'amɔnna	sa'amɔnnep	
nit « person »	+ kv	« kill » + r	nikvut	nikvurıp	« murderer (s) »
kɔ'ɔm « water »	+ lugu	« swim » + r	kɔ'ɔlugut	kɔ'ɔlugurıp	« swimmer (s) »
tvm « work »	+ tum	« work » + r	tumtun	tumtunnep	« worker (s) »
gbāuŋ « book »	+ mi'	« know » + r	gbāuŋmi'it	gbāuŋmi'irip	« intellectual (s) »
zıŋ « fish »	+ gbā'a	« catch » + r	zıŋgbā'at	zıŋgbā'arıp	« fisher (s) »
dāam « beer »	+ nu	« drink » + r	dānuut	dānuurıp	« drunkard (s) »

Certain agent nouns are achieved by doubling the verb and adding the derivation suffix:

tum	« work »	⇒	tuntun	« worker »
yum	« sing »	⇒	yumyumıt	« singer »
mɔɔl	« announce »	⇒	mɔɔlmɔɔn	« advertiser »
fāa	« steal »	⇒	fāfāat	« thief »
wɔ'ɔ	« dance »	⇒	wɔ'ɔwɔ'ɔt	« dancer »
zāasum	« dream »	⇒	zāazāas	« dreamer »
zo	« run »	⇒	zotzot	« runner »

3.1.2 Gender II (-a/-nam, cl. 3/4)

This gender consists primarily of different people categories and its plural class *nam* « *plural of* » is used for most borrowed nouns. The singular suffix is zero \emptyset or **-a** /**-ba** or **-p** for its short form. The plural suffixes are **-nama** or **-nam** in the short form

	Singular, class 3		plural, class 4		root ending in:
	long	short	long	short	
<u>Kin relations:</u>					
« <i>mother</i> »	ma	ma	manama	manam	- \emptyset
« <i>father</i> »	ba'	ba'	ba'anama	ba'anam	- \emptyset
« <i>friend</i> »	zɔ	zɔ	zɔnama	zɔnam	- \emptyset
« <i>blind person</i> »	zɔ'ɔma	zɔ'ɔm	zɔ'ɔmnama	zɔ'ɔmnam	-m
« <i>father</i> »	sāama	sāam	sāamnama	sāamnam	-m
« <i>in-laws</i> »	dɛɛma	dɛɛm	dɛɛmnama	dɛɛmnam	-m
« <i>older sibling</i> »	kpēema	kpēem	kpēmnama	kpēmnam	-m
« <i>deceased</i> »	kpi'uma	kpi'um	kpi'umnama	kpi'umnam	-m
« <i>hunter</i> »	tõ'osa	tõ'os	tõ'osnama	tõ'osnam	-s
« <i>corps</i> »	kūm	kūm	kūmnama	kūmnam	-m
« <i>leper</i> »	kʊkom	kʊkom	kʊkomnama	kʊkomnam	-m
« <i>deaf</i> »	tub-kpira	tub-kpira	tub-kpirnama	tub-kpirnam	-i
<u>honorary/respect terms:</u>					
« <i>ancestor</i> »	yaaba	yaap	yaanama	yaanam	-a
« <i>chief</i> »	na'aba	na'ap	na'anama	na'anam	-a
« <i>uncle,</i> <i>mother's brother</i> »	asaba	asap	asnama	asnam	-a
« <i>elder brother/sister</i> »	kpēema	kpēem	kpēmnama	kpēmnam	-a
« <i>house owner</i> »	yidāana	yidāan	yidāannama	yidāannam	-
« <i>teacher/pastor</i> »	kārēnsāamba	kārēnsāam	kārēnsāamnam		
<u>borrowed words:</u>					
« <i>table</i> »	teebul	teebul	teebulnama	teebulnam	-l
« <i>pump</i> »	pompɪ	pomp	pompunama	pompunam	-p
« <i>cat</i> »	amuse	amus	amusnama	amusnam	-s
« <i>motorbike</i> »	mɔntɛɛt	mɔntɛɛt	mɔntɛɛtnama	mɔntɛɛtnam	-t
« <i>box</i> »	daka	daka	dakanama	dakanam	-
« <i>garden</i> »	gaarum	gaarum	gaarumnama	gaarumnam	-
« <i>photo</i> »	foto	foto	fotonama	fotonam	-

3.1.2.1 Deverbal derivations

This gender is also used to construct verbal derivations often by the use of a derivative causative morpheme -s-:

	singular:	plural:
« <i>midwife</i> »	pɔ'a dɔ'asa <i>woman birth maker</i> dɔ'a verb for « <i>to give birth</i> »	pɔ'a dɔ'asnam
« <i>ill person</i> »	bã'ata bẽ' verb for « <i>to be ill</i> »	bã'atnam
« <i>hunter</i> »	tõ'osa tõ' verb for « <i>to hunt</i> »	tõ'osnam
« <i>drive</i> »	dɔrɔba dɔrɔb verb for « <i>to drive</i> »	dɔrɔbanam

Different forms of nouns in different contexts:

According to its occurrence in the sentence, a noun can have different forms or endings. For example the noun **na'ap** «*chief*» is pronounced and written in four different ways.

- na'ap (citation form, short form) «*chief*»
- na'apa (noun + definite article) «*the chief*» almost pronounced [na'appa]
- na'apaa? (noun + definite article + question morpheme) «*the chief query?*»
- na'aba (noun in its long form, used for example in a negative sentence) «*not a chief*»

3.1.3 Gender III (-ka/-sI, cl. 5/6)

This gender consists primarily of a few people, many animals, trees and things.

The singular suffix of its long form is **-ga** or **-ŋa** after a root ending in a nasal consonant. The suffix **-ga** may be weakened into **-ya** after a **-i /-ɪ** root of a CVv noun. In the same way the **-ga** suffix may be weakened into **-wa** after a **-u/-ʊ** root of a CVv noun. In some cases the **-ga** suffix is (elided altogether leaving only its tone) shortened to **-a** attached to the noun root. The short singular form loses the vowel and the plosive undergoes a devoicing process and thus becomes **-k** or **-ŋ**.

The plural suffixes are **-sI** (**-se/-si/-sɪ**) in its long form and **-s** (often with a transition vowel **-ɪ/-e-**) in the short form. When the root ends in a nasal **m** consonant the, the short form will be **-mes**.

Examples:

	Singular, class 5		plural, class 6		root ending in:
	long	short	long	short	
<u>-ga /-se</u>					
« man »	buraaga	buraa	buraase	buraas	-a
« dog »	baaga	baa	baase	baas	-a
« rain »	saaga	saa	saase	saas	-a
« market »	da'aga	da'a	da'ase	da'as	-a
« warthog »	deega	dee	deese	dees	-e
« goat »	bɔɔwa	bɔɔ	bɔɔse	bɔɔs	-ʊ
« mountain »	zɔɔga	zɔɔ	zɔɔse	zɔɔs	-ɔ
« fowl »	nɔɔga	nɔɔ	nɔɔse	nɔɔs	-ɔ
« waist »	sɛɛga	sɛɛ	sɛɛse	sɛɛs	-ɛ
« hawk »	wɪbɪga	wɪbɪk	wɪbɪse	wɪbɪs	-b
« trousers »	kuruga	kuruk	kurise	kurɪs	-r
« buttock »	fɪsɪga	fɪsɪk	fɪsa	fɪsa	-s
<u>-ya /-se</u>					
« child »	biiya	bii	biise	biis	-i
« tree »	tɪya	tu	tɪse	tɪs	-ɪ
« baobab tree »	te'eya	te'e	te'ese	te'es	-e
<u>-ŋa /-se</u>					
« donkey »	bʊŋa	bʊŋ	bʊmɪse	bʊmɪs	-m

« <i>body</i> »	niŋa	niŋ	nimise	nimis	-m
« <i>bird</i> »	niŋa	niŋ	niise	} niis, niimis	-m
« <i>monkey</i> »	wāaŋa	wāaŋ	niimise		
« <i>Shea tree</i> »	tā'aŋa	tā'aŋ	wāamise	wāamɪs	-m
« <i>door</i> »	tā'aŋa	tā'aŋ	tā'amise	tā'amɪs	-m
« <i>door</i> »	kolɔŋa	kolɔŋ	kolise	kolɪs	-l
<u>-ka /-se</u>					
« <i>woman</i> »	bupɔka	bupɔk	bupɔ'ase	bupɔ'as	-g (ɔ + g ⇒ 'a)
« <i>chair</i> »	kɔka	kɔk	kɔguse	kɔgɔs	-g (g + g ⇒ k)
« <i>Mahogany</i> »	kɔka	kɔk	kɔguse	kɔgɔs	-g (g + g ⇒ k)
« <i>nest on grou.</i> »	vaka	vak	vagise	vagɪs	-g (g + g ⇒ k)
« <i>courtyard</i> »	zaka	zak	za'ase	za'as	-g (a + g ⇒ 'a)

Derivation

No derivatives found!

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3.1.4 Gender IV (-gO/rE, cl. 7/8)

This gender contains animals, parts of body and lots of miscellaneous nouns.

The *singular suffix* for the long form is **-gO / -ŋO** or **-kO**; shortened to **-k/-ŋ** which is often changed to **-Ok** or **-Oŋ** in the short form. The plural suffix is **-rE** or **-tE** which is **-t / -t** in its short form. A stem ending in a nasal the plural suffix may be **-a**. Nouns with a CVI stem don't have a final vowel but the **-l** changes into **-n**.

	singular, class 7		plural, class 8		stem ending in:
	long	short	long	short	
<u>-go / -re</u>					
« grass, bush »	mɔɔgo	mɔɔk	mɔɔre	mɔɔt	-ɔ
« valley »	bõ'ogo	bõ'ok	bõ'ore	bõ'ot	-õ
« cock »	nɔraago	nɔrauk	nɔraare	nɔraat	-a
« wood »	daago	dauk	daare	daat	-a
« leaf »	vāago	vāauk	vāare	vāat	-ā
« vulture »	zũugo	zũuk	zũure	zũut	-ũ
« antelope sp. »	kõogo	kõok	kõore	kõot	-õ
« elephant »	wabugo	wabuk	wabure	wabut	-b
« forehead »	gbe'ego	gbe'uk	gbe'ere	gbe'et	-e also pl. gbera
« billy goat »	buravugo	burauk	buravure	buravat	-a
« baobab bread »	te'ego	te'uk	te'ere	te'et	-e
<u>-go / -te</u> short vowel in plural:					
« field »	poogo	pook	pote	pot	-o
« room »	doogo	dook	dote	dot	-o
« dress »	fuugo	fuuk	fute	fut	-u
« head »	zugo	zuk	zute	zut	-u
<u>-ko / -te</u>					
« cooking pot »	duko	duk	dugute	dugut	-g (g + g ⇒ k)
« bag »	tāmpɔko	tāmpɔk	tāmpɔ'ate	tāmpɔ'at	-g (ɔ + g ⇒ 'a)
« termite »	mɔko	mɔk	mɔ'ɔte	mɔ'ɔt	-g (ɔ + g ⇒ 'a)
« shoulder »	bāko	bāuk	bā'are	bā'at	-g (a + g ⇒ 'a)
« antelope sp. »	gbeko	gbɛuk	gbɛ'ete	gbɛ'et	-g (ɛ + g ⇒ 'ɛ)
<u>-go / -n</u>					
« soubala »	kpavugo	kpavuk	kpane	kpan	-l
« mad person »	zālugo	zāluk	zāne	zān	-l
« skin bag »	kolugo	koluk	kone	kon	-l
« hawk »	silugo	siluk	sine	sin	-l

-ŋo / -a

« skin »	gbãŋo	gbãuŋ	gbãna	gbãna	-n
« flying fox, bat »	zĩŋzŋo	zĩŋzŋ	zĩŋzãna	zĩŋzãna	-n
« mat »	sõŋo	sõŋ	sõna	sõna	-n
« henhouse »	zõŋo	zõŋ	zõna	zõna	-n

3.1.4.1 Class 7 as single nouns

Some abstract nouns have only a singular form:

« misery, poorness »	nŋ	
« smell »	yũŋ	
« heat »	tuɩɩk	verb: tuɩ « be hot » tuɩg « become hot »

3.1.4.2 Class 8 as single nouns

« sauce »	zēet	
« honey »	sīit	cp. noun: sīf / sī « bee (s) »
« cold »	ɔɔt	
« iron »	kut	cp. kuruk « forge »
« laughing »	la'at	from verb: la' « to laugh »
« friendship »	zɔɔt	cp. noun: zɔ « friend »

3.1.4.3 Verbal derivations from class 7

Very many nouns are derived from verbs by adding the suffix of class 7 **-go/-ŋo**, which is in its short form **-k/-ŋ** and often needs a transition vowel (**-ɩk/-uŋ**) to avoid CC sequence.

Examples:

Verb:		derived noun:	
be'es	« doubt »	be'esɩk	« doubt »
dus	« feed »	duɩɩk	« nutrition »
kāal	« count »	kāalɩk	« counting »
pa'al	« teach »	pa'alɩk	« teaching »
leb	« return »	leɩɩk	« return »
gaat	« pass »	gaarɩk	« passing »
daam	« disturb »	daamɩk	« disturbing, inconvenience »
kum	« watch over »	kuɩɩk	« watching over »

võ'o	« <i>clear</i> »	võ'ok	« <i>clearance</i> »
pu'us	« <i>greet, pray</i> »	pu'usuk	« <i>greeting, prayer</i> »
kārum	« <i>read</i> »	kāruŋ	« <i>reading</i> »
belum	« <i>beseech</i> »	beluŋ	« <i>supplication</i> »
fvus	« <i>swell</i> »	fvusuŋ	« <i>swelling</i> »
yalum	« <i>be large</i> »	yaluŋ	« <i>width</i> »
bilim	« <i>roll</i> »	biluŋ	« <i>rolling</i> »
mum	« <i>bury</i> »	muŋ	« <i>burial</i> »

3.1.5 Gender V (-rE/-a, -ya, cl. 9/10)

This gender contains lots of things, body parts, certain animals, grains, plants, fruits and names for languages.

The suffix for singular is **-re** reduced to **-t** / **-t** if the final vowel drops. The suffix assimilates to a final nasal stem or lateral stem and becomes **-n** or **-l** which degeminate in its short form and thus loses representation of the suffix altogether. Or we could even say that the loss of the suffix vowel triggers strengthening of the suffix consonant **-r** or its degmination.

There are also some “ancient” forms that are found when elderly people speak: **-be** after **-m** stem and **-de** after a **-n** stem, both of which are not pronounced in the short form.

The plural does not have a short or long form, they all end in **-a**;

or often after CV or CVV noun stems the suffix is **-ya** (or **-yã** after nasal stem vowel)

Examples:

	singular, class 9		plural, class 10	
	long	short	stem ending in:	
<u>-re / -a</u>				
« <i>breast</i> »	bĩ'isire	bĩ'isit	bĩ'isa	-s
« <i>ear</i> »	tubure	tubut	tuba	-b
« <i>shelter</i> »	sugvure	sugut	suga	-g
« <i>bean</i> »	beṅure	beṅut	beṅa	-ŋ
« <i>hat</i> »	laṅure	laṅut	laṅa	-ŋ
« <i>black plum</i> »	ãarure	ãarut	ãara	-r
« <i>abscess</i> »	mɔrure	mɔrit	mɔra	-r
« <i>name</i> »	yv'ure	yv'ut	yvra	-v
« <i>groundnut</i> »	sũmere	sũmet	sũma	-m
<u>-be / -a</u>				
« <i>porcupine</i> »	sẽembe	sẽem	sẽema	-m
« <i>lion</i> »	gbɪgumbe	gbɪgum	gbɪguma	-m
<u>-ne / -a</u> CVn stems:				
« <i>tooth</i> »	yĩnne	yĩn	yĩna, yĩni	-n
« <i>lip</i> »	nɔgbãne	nɔgbã	nɔgbãna	-n
« <i>thing</i> »	bunne	bun	buna, bunnam	-n
« <i>calabash</i> »	wãne	wã	wãma	-m
<u>-de / -a</u> CVn stems				
« <i>sense</i> »	gbĩnde	gbĩn	gbĩna	-n
« <i>turtle dove</i> »	dawende	dawen	dawena	-n

-le / -a CVI stems:

« egg »	gelle	gel	gela	-l
« horn »	ulle	ul	ula	-l
« branch »	wille	wil	wila	-l
« matter »	yelle	yel	yela	-l

-re / -ya CV and CVV stems:

« tail »	zvre	zvut	zvya	-v
« path »	sre	sot	soya	-v
« thigh »	gbere	gbet	gbeya	-e
« mouth »	nvre	nvot	nvoja	-v
« rope »	wĩire	wĩit	wĩya, wĩis	-ĩ
« neck »	kpã'are	kpã'at	kpã'aya, kpãra	-ã

-re / -yã Nasal stem vowel:

« heart »	sũure	sũut	sũyã	-ã
« nose »	yõore	yõot	yõyã	-õ
« liver »	sõore	sõot	sõyã	-õ
« neck »	kpã'are	kpã'at	kpãra, kpã'aya	-ã

Vowel shortening:

« cheek »	ya'are	ya'at	ya'a	-ã
«house, compound »	yire	yit	ya, yaa	-i

3.1.5.1 Derivation from class 9

Verbs with the ending **-g/-k** or **-ŋ** usually take the **-t /-ut** (class 9) suffix to form a noun. We think that some verbs have lost their **-g** stem ending in the course of history, since for example *ma'a* « be cold » is *ma'age* in Ninkare and *maage* in Mooré, both closely related languages with Kusaal.

Examples of verbal nouns with a class 9 **-t/-ut** suffix

verb:		derived noun:	
gẽrɪg	« mix »	gẽrɪgt	« mixture »
lebɪg	« turn »	lebɪgt	« return »
lɔk	« divert »	lɔkt	« diversion »
tɛk	« change »	tɛkt	« change »
sak	« obey »	sakɪt	« obedience »
gãŋ	« choose »	gãŋɪt	« choice »

sōŋ	« <i>help</i> »	sōŋt	« <i>help</i> »
ma'a	« <i>cool</i> »	ma'at	« <i>cooling</i> »
kaa	« <i>visit</i> »	kaat	« <i>visit</i> »
dε'ε	« <i>receive</i> »	dε'et	« <i>reception</i> »
yo'o	« <i>open</i> »	yo'ot	« <i>opening</i> »
paa	« <i>arrive</i> »	paat	« <i>arrival</i> »

Language names are found in class 9 (-re /-it)

« <i>Bissa language</i> »	batit
« <i>Kasena language</i> »	gotit
« <i>Mooré language</i> »	mool
« <i>Ashanti language</i> »	santeel, kambunnet
« <i>English</i> »	gilin

3.1.6 Gender VI (-fo /-i)

This gender contains some animals, grains of cereals and some miscellaneous items.

The singular suffix **-fo** is for its long form and **-ɪf / -ɒf** for its short form.

The plural suffix is **-i** (-or **-gi** for two cases) and a few nouns are irregular and have their plural suffix from other classes. The plural suffix **-i** causes umlaut processes in the nouns whose stems have no closed vowel.

This class contains very few nouns.

Examples:

	Singular, class 11		plural, class 12		root in compound nouns:
	long	short	long	short	
« <i>cattle</i> »	naafo	naaf	niigi	nii	na'a-
« <i>snake</i> »	waafɔ	waaf	wiigi	wii	wa-
« <i>horse</i> »	wefɔ	wef	wiri		wed-
« <i>eye</i> »	nifo	nif	nini		nin-
« <i>bee</i> »	sɪfo	sɪf	sɪ		
« <i>Guinea worm</i> »	yɪɪlɔfo	yɪɪlɒf	yɪɪli		yɪɪl-
« <i>fish</i> »	zɪfo, (zɪŋa)	zɪf, (zɪŋ)	zɪmi		zɪŋ-
« <i>cyst</i> »	kpa'afo	kpa'af	kpigi		
« <i>money, cowries</i> »	la'afo	la'af	ligiri		la'a-
« <i>millet</i> »	kɛfo	kɛf	ki		
« <i>dawadawa seeds</i> »	zɪ'unɔfo	zɪ'unɒf	zɪ'uni		
« <i>Shea nuts</i> »	yɪufo	yɪuɒf	yɪuni		
« <i>rice</i> »			mui		
« <i>genet</i> »	pɪfo	pɪf	puna		-n
« <i>guinea fowl</i> »	kpã'aŋɔ	kpã'ɒŋ	kpɪ'ini		

3.1.7 Single class 13 (-bo /-p)

This gender contains only a few nouns but it has an important function in producing many verbal nouns. The suffix is for its long form is **-bo** and for its short form **-p**.

Examples:

	singular only, class 13		cp. verb:
	long form:	short form:	
« t.z., porridge »	sa'abo	sa'ap	
« soap »	ki'ibo	ki'ip	
« load on the head »	zeebo	zeep	

3.1.7.1 Derivation from class 13

There are many verbs that can add the class 11 suffix and become a noun of action (verbal nouns). Derived action nominals are usually high toned.

« action of farming »	kɔɔbo	kɔɔp	kɔ	« to hoe »
« action of sowing »	burubo	burup	bɪt	« to sow »
« action of pounding »	tɔɔbo	tɔɔp	tɔ	« to pound »
« action of dancing »	wɔ'ɔbo	wɔ'ɔp	wɔ'	« to dance »
« action of buying »	da'abo	da'ap	da'	« to buy »
« action of eating »	dubo	dup	dɪ	« to eat »
« action of entering »	kpě'ebo	kpě'ep	kpě'	« to enter »
« action of cutting »	ke'ɛbo	ke'ɛp	ke'	« to cut »
« action of beating »	bɪ'ɪbo	bɪ'ɪp	bɪ'	« to beat »
« action of climbing »	doobo	doop	do	« to climb »

Notice the difference between:

li	« to fall »	liip	« action of falling »	liik	« a fall »
zo	« to run »	zoop	« action of running »	zoot	« a race, style of running »
paa	« to arrive »	paap	« action of arriving »	paat	« arrival »
la'	« to laugh »	la'ap	« action of laughing »	laat	« laughter »

3.1.8 Single class (-m)

This class contains mass nouns, liquids and abstract nouns. The class suffix is **-m** and in addition the derived verbal nouns may have different suffixes like **-lum**, **-num**, **-sum**

Examples:

class 14	
« water »	kə'ɔm
« blood »	zum
« milk (of woman) »	bī'isim
« mil (of cow) »	ulm
« oil, butter »	kpaam
« lie »	zɪwēelɪm
	zɪwēenɪm
« flour »	zom
« fear »	dabɛɛm
« potash »	zēem
« salt »	yaarɪm
« meat »	nim
« beer »	dāam
« tears »	nintɔɔm
« bile »	yam
« wisdom, intelligence »	yam
« death »	kūm
« urine »	dundu'urɪm
« hunger »	kom
« manure, dung »	pōosɪm
« sale, goods »	kɔɔsɪm

3.1.8.1 Derivations from class 14

« shadow, coolness »	ma'asɪm	cp. ma'a « to be cool »
« action of grinding »	nɛɛm	cp. nɛɛm « to grind »
« action greeting »	pu'usɪm	cp. pu'us « to greet, pray »

Some abstract nouns are built out of stative or descriptive verbs by adding the suffixes **-m** or **-ɪm**

-lum: deverbal abstracts, or it derives from nouns, adjectives and verbs which express mental properties, feelings or states of mind.

-sum: only deverbal nouns expressing the result or causal effect of an underlying action.

(class 14).

verb:		derived nouns:	
dol	« follow »	dolum	« following »
vēl	« be beautiful »	vēlum	« beauty »
so'e	« possess »	so'olum	« kingdom »
kε'	« to not be »	kε'elum	« non-existence »
mi'i	« know »	mi'ilim	« knowledge »
zi'	« ignore »	zi'ulum	« ignorance »
be	« exist, be »	belum	« existence »
wa'a	« be long »	wa'alum	« length, distance, tallness »
ma'a	« to be cold »	ma'asum	« coldness, shadow »
malɔ	« be sweet, tasty »	malɔsum	« sweetness, tastiness »
mɔt	« have »	mɔrisum	« possessions »
tebɔ	« be heavy »	tebɔsum	« heaviness »
kɔɔs	« sell »	kɔɔsum	« sale, merchandise »
nee	« shine »	neesum	« light »
pō'e	« rot »	pō'osum	« rottenness »
tɔbɔ	« to be heavy »	tɔbɔsum	« heaviness, weight »

From adjectives:

pεɛlɔk	« white »	pεɛlum	« whiteness »
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Exceptions:

tɔn	« walk »	tɔn	« walking »
tɔm	« work »	tɔvm	« work »

3.2 Combinations of noun classes or the “mixed class nouns”

Some nouns have even more than one acceptable form and so may be classed in more than one noun class. For example,

« forehead »	sg. gbe'vɔk	can be plural:	gbe'et	(cl. 8)	or	gbera	(cl. 10)
« rope »	sg. wīit		wīya	(cl. 10)	or	wīs	(cl. 6)
« hawk »	sg. sulɔk		sulɔ	(cl. 6)	or	sun	(cl. 8)

Also, for some fruit bearing trees, one singular is used for both the tree and its fruits or product, but a different plural form may be used for the tree and for the fruit.

Example:

dōo « *dawadawa fruit or dawadawa tree* »
dōot « *dawadawa fruits* »
dōos « *dawadawa trees* »

Cross-class irregulars:

Though most nouns fit into the classes described above, some nouns have singulars from one class and plurals from another.

Examples:

singular :	sūsūf	« <i>chest</i> »	class 11
plural :	sūsūya	« <i>chests</i> »	class 10
singular:	kpā'ɔŋ	« <i>guinea fowl</i> »	class 7
plural:	kī'ini	« <i>guinea fowls</i> »	class 12
singular:	pe'uk	« <i>sheep</i> »	class 7
plural:	pe'es	« <i>sheep</i> »	class 6
singular:	mɔlof	« <i>antelope</i> »	class 11
plural:	mɔlus	« <i>antelopes</i> »	class 6
singular:	nu'uk	« <i>hand</i> »	class 7
plural:	nu'us	« <i>hands</i> »	class 6
singular	puf	« <i>genet</i> »	class 11
plural:	puna	« <i>genets</i> »	class 10

3.3 Structure of borrowed nouns

Kusaal integrates many borrowed words into the language by following as much as possible the normal kusaal structure. But there are some interesting differences: whereas it is normal for a kusaal noun in its singular form to end in a consonant, the borrowed words often end in a vowel even in their singular form, which is unusual for kusaal except for the adverbs.

Examples:

kāneya	« <i>petrol lamp</i> » (Hausa)	kodu	« <i>banana</i> » (Hausa)
googi	« <i>musician</i> » (Hausa)	mɔŋɔ	« <i>mango</i> » (English)
dūniyā	« <i>world</i> » (Hausa)	gūmbe	« <i>square drum</i> » (Dioula)
pāanɔ	« <i>bread</i> » (Hausa)	bɔ'ata	« <i>bucket</i> » (English)
dɔrɪba	« <i>driver</i> » (English)	hāma	« <i>hammer</i> » (English)
tēela	« <i>tailor</i> » (English)	lɔɔ	« <i>law</i> » (English)

3.4 Associative nominal stem

There are also a number of non-simple, “pluri-morphemic” stem-types which we outline briefly. In all cases the stem is composed of a string of roots or derivational elements with a single suffix which is that of the noun class of the last rightmost root. The associative nominal stem has two nominal stems juxtaposed with a similar range of meanings to the syntactic associative construction. The simplest form has two roots:

Examples:

bugu	« <i>fire</i> »	+ da	« <i>stick</i> »	+ vk	« <i>cl.7</i> »	⇒	buguraavk	« <i>gun</i> »
ba'a	« <i>diviner</i> »	+ kol	« <i>bag</i> »	+ vk	« <i>cl.7</i> »	⇒	ba'akolvk	« <i>diviner's bag</i> »
we	« <i>bush</i> »	+ ba	« <i>dog</i> »	+ a	« <i>cl.5</i> »	⇒	webaa	« <i>leopard</i> »
saa	« <i>rain</i> »	+ zu	« <i>head</i> »	+ k	« <i>cl.5</i> »	⇒	saazuk	« <i>sky</i> »

3.5 Reduplication

A number of nominal stems give the impression of being reduplicated without any firm evidence for the corresponding un-reduplicated forms or a strict structure for the reduplication.

kpukpã'vŋ	« <i>arm, wing</i> »
kpukpeŋ	« <i>outskirt, edge outside</i> »
zĩŋzɔŋ	« <i>fruit bat</i> »
tita'at	« <i>big</i> »
gbiŋgbeŋ	« <i>crest (of bird)</i> »

3.6 Qualification

3.6.1 Associative construction

Associative constructions (also called genitive or possessive construction) are built by postposing the qualifying and the qualified noun, both in their full but short form; that means with their short class suffixes.

Example:

« *horse of a chief* » na'ap wef (note: **not** na'aba wefo)
 chief horse

« *child of a chief* » na'ap bii
 chief child

In this case one can insert determiners, for example -kāŋa « *that* » -bāma « *those* » etc.

« *child of that chief* » na'a-kāŋa bii
 chief that child

« *child of the chief* » na'apa bii
 chief the child

Other examples:

naaf gbāvŋ	« <i>cow's skin</i> »	m sām wef	« <i>my father's horse</i> »
cow skin		my father horse	
bupɔ'ɔs na'ap	« <i>woman's president</i> »	pooka dāan	« <i>owner of the field</i> »
women chief		field owner	
pe'vk zuk	« <i>sheep's head</i> »	da'a daat	« <i>market day</i> »
sheep head		market day	

3.6.2 Compound nouns

Compound nouns show the qualifying nouns in its stem form preceding the qualified noun forming a unity and thus written as one single word.

Example:

« *chief's child* » nabii « *prince* »
 chief child

Other examples:

zēet	« <i>sauce</i> »	+	dvk	« <i>pot</i> »	⇒	zērvk	« <i>sauce pan</i> »
weevk	« <i>bush</i> »	+	baa	« <i>dog</i> »	⇒	webaa	« <i>leopard</i> »
bugum	« <i>fire</i> »	+	daavk	« <i>stick</i> »	⇒	buguraavk	« <i>gun</i> »
nif	« <i>eye</i> »	+	bō'ok	« <i>weak</i> »	⇒	nimbō'ok	« <i>compassion</i> »

3.7 Adjectives

Adjectives are integrated into the noun class system. They usually combined with a noun and thus marked by number through the class suffix. The noun is used in its stem form, and the adjective comes in last place and has its own class suffix, i.e. it takes one of the above described 14 class suffixes. The adjectives are mostly descriptive in meaning; and in most cases only occur as part of a complex nominal word. It can be added to any nominal stem wherever it is semantically appropriate.

Nominal word = substantive stem + adjective root + class suffix

Examples of adjectives according their class suffixes:

Gender III		singular: -ga / -ŋa		plural: -se	
		short form: k / -ŋ		-s	
zĩ'vk	« read »	yā'an	« old »	yēlvk	« sweet »
zĩ'is	« pl. »	yā'as	« pl. »	yēlis	« pl. »
tvulvk	« hot »	bāalvk	« thin »	sablvk	« black »
tvulis	« pl. »	bāalis	« pl. »	sablis	« pl. »
golon	« curved »	gbilik	« round »	kpɛ'ɛŋ	« dry »
golos	« pl. »	gbilis	« pl. »	kpɛ'emis	« pl. »
saalvk	« slippery »	kpiilun	« dead »	yaalvk	« useless »
saalis	« pl. »	kpiilis	« pl. »	yaalis	« pl. »
kpik	« not deep »	sebvk	« crouching »	sēk	« narrow »
kpigis	« pl. »	sebus	« pl. »	sē'es	« pl. »
silun	« quite large »	tebvsk	« heavy »	yā'an	« female »
silis	« pl. »	tebisa	« pl. »	yā'as	« pl. »

Gender IV		singular : -go / -ŋo		plural : -re / -te	
		short form : -k / -ŋ		-t	
be'vk	« bad »	zĩ'vk	« red »	wuvk	« yellow »
be'et	« pl. »	zĩ'it	« pl. »	wut	« pl. »
mavk	« square »	wok	« long »	balorvk	« ugly »
ma'at	« pl. »	wa'a	« pl. »	balot	« pl. »
yook	« useless »	ko'ok	« profound »	lɛɛvk	« unripe »
yoot	« pl. »	ko'ot	« pl. »	lɛɛt	« pl. »
vook	« empty »				
voot	« pl. »				

Gender V	singular: -re/-le/-ne short form: -t /-l/-n/-m	plural: -a /-ya
kpārit « big » kpāra « pl. »	kāsut « raw » kāsa « pl. »	bul « young (plant) » bula « pl. »
bert « big » bera « pl. »	lammet « flat » lamma « pl. »	mum « whole » muma « pl. »
bēel « naked » bēela « pl. »	pol « young » pola « pl. »	tita'at « huge » titara « pl. »
yāluj « extraordinary » yāluma « pl. »		yōosot « dark » yōosa « pl. »

- Mix of class suffixes: - The singular is of class **5** or **7 (-k/-ŋ)**
- The plural is of class **10 (-a)**

Examples:

svŋ « good » suma « pl. »	fa'asuk « light » fa'asa « pl. »	gīŋ « short » gīma « pl. »
ma'asuk « fresh » ma'asa « pl. »	milisuk « dirty » milisa « pl. »	yalvŋ « large » yaluma « pl. »
bugısvk « sweet » bugısa « pl. »	kurvk « old » kura « pl. »	bervk « thick » bera « pl. »

Only occasionally there are found traces of noun concord.

Example: pēelk/pēel (sg.), pēelis/pēela (pl.) « white »

Genre II singular <-k> Do- pēelk « white room »	plural <-s> Do- pēelis « white rooms »
Genre IV singulier <-l> Gel- pēel « white egg »	pluriel <-a> Gel- pēela « white eggs »

We found only three adjectives with two different forms:

	long form:		short form:		class
	singular	plural	singular	plural	
« <i>white</i> »	pæelga	pæelise	pæelik	pæelɪs	5 / 6
	pæele	pæela	pæel	pæela	9 / 10
« <i>new</i> »	paaliga	paalise	paalik	paalɪs	5 / 6
	paala	paalise	paal	paalɪs	1 / 6
« <i>difficult</i> »	toogo	toose	took	toos	7 / 6
	toogo	toore	took	toot	7 / 8

In this case the adjective has the same suffix as the noun would have in isolation:

pɔ'a « *wife* » + paal « *new* » ⇨ pɔ'ɔ-paal « *newly wedded wife* »
 fuuk « *dress* » + paalik « *new* » ⇨ fu-paalik « *new dress* »

3.7.1 Nouns derived from adjectives

A few nouns may be derived from adjectives

Examples:

Adjective:

tita'at « *big* »
 wa'am « *long* »
 pæelik « *white* »
 tebik « *heavy* »
 yalum « *large* »
 bē'uk « *bad* »

derived noun:

tita'alum « *greatness* »
 wa'alum « *length* »
 pæelum « *whiteness* »
 tebusuk « *weight* »
 yalun « *breadth, width* »
 bē'et « *malice, nastiness* »

3.7.2 The diminutive particle *-bil*

The diminutive particle for a singular noun is *-bila* or *-bil* in its short form, and *-bibise* or *-bibis* for its short plural form. Its meaning can be translated with « *small of, child of* ». It behaves like an adjective and is added to the root of the word it qualifies.

Examples:

	singular:		plural:
	long	short	short
« <i>sheep</i> » « <i>lamb</i> »	pebila	pe'uk pebil	pebibis
« <i>goat</i> » « <i>kid</i> »	bobila	bɔv bɔbil	bɔbibis
« <i>steer</i> » « <i>calf</i> »	na'abila	naaf na'abil	na'abibis
« <i>wife</i> » « <i>small wife</i> »	pɔ'abila	pɔ'a pɔ'abil	pɔ'abibis
« <i>granary</i> » « <i>small granary</i> »	bobila	boot bobil	bobibis
« <i>moon</i> » « <i>star</i> »	wārbila	wāɾɩk wārbil	wārbibis

3.8 Tone patterns on nouns

Kusaal simplex nouns are made up of High (H), Mid (M) and Falling (L) tones. We can divide the nouns in six tone types/classes based on the tonal pattern of the noun root (see 2.5):

1. Tonal class with H tone root (ex. búú « *goat* », kóbók « *hair* »)
2. Tonal class with H tone root but downstepped second high tone ¹H (ex. pé'¹úk « *sheep* », nú'¹úk « *hand* »)
3. Tonal class with M tone root (ex. gbīgīm « *lion* », yōōt « *water pot* »)
4. Tonal class with falling (L) tone root (ex. zàk « *courtyard* », zìlìm « *tongue* », dààk « *wood* »)
5. Tonal class with underlying toneless root and having a default falling (L) tone root, it becomes a H tone syllable because of stress (ex. póók « *field* », báá « *dog* », p'á « *woman* », bá'á « *diviner* »)

A majority of nouns end with a high tone because most class suffixes are High toned. However there are exceptions:

- Some cl. 6 -se are low tone.
- The noun class 10 plural suffix -a /-ya is consistently opposite in tone to the preceding tone, thus there is a tonal polarity in the class suffix (hypothesis is that this suffix is toneless).

3.8.1 Class 1: The H tone root

The nouns of this class have sequences of high tones. The second tone is slightly lower than the first tone (see Tonal allophones 2.5.3.1).

Examples:

sírá	« husband »	bí'ísít	« breast »	dúk	« cook pot »
kúrúk	« trousers »	nít	« person »	béét	« senior sibling »
síf	« bee »	kúgút	« tone »		

Also most derived action nominals from verbs bear high tone:

núup	« drinking »	kóóp	« farming »	káásúk	« crying »
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Also most derived agentive nominals from verbs bear high tone:

núút	« one who drinks »	kpáát	« farmer »	kúúríp	« killers »
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But tonal polar class suffix for some plurals of class 10:

yít	« house »	yà	« houses »
wíl	« branche »	wílà	« branches »
súút	« heart »	súyà	« hearts »
kísít	« face mark »	kísà	« face marks »
yóum	« year »	yómà	« years »

3.8.2 Class 2: The H tone root with downstep 'H

The tones of this class have also a sequence of high tones; however the second of two successive high tones becomes lower than the preceding tone: it is downstepped by the glottal stop (see 2.5.2.3)

Examples:

kpá'úŋ	« guinea fowl »	pó'á	« wife »
nú'úk	« hand »	t'tá'át	« big »
kó'óm	« water »		

Also downstepped 'H after a low tone personifying prefix à-

À « Mister » + báá « dog » = Àb'áá « Mr. Dog »

3.8.3 Class 3: The M tone root

The root syllable of the noun has a mid tone but it can be followed by a high tone class suffix syllable or a low tone class suffix.

Examples:

gb̄īgīm	« lion »	yō̄'ōk	« chest »	bīī	« child »
yō̄ōt	« water pot »	bānāāt	« smock »	nāāf	« cow »
wābūk	« elephant »	nōrāāūk	« rooster »		

but:

kōbūt	« bone »	kōbá	« bones »
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3.8.4 Class 4: The Falling tone root

The root syllable of the noun has a falling tone (see 2.4) but it can be followed by a high tone class suffix syllable or a falling tone class suffix. There are very few falling-toned nouns.

Examples:

sāām	« father »	kòròk	« old »
mà	« mother »	zìlìm	« tongue »
tùbìt	« ear »		

but also:

nà'áp	« chief »
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3.8.5 Class 5: The underlying toneless root

Kusaal has a group of nouns which are H, H-H in isolation but surface differently in noun-adjective compounds. Whenever such a noun is followed by an adjective, its root surfaces as a falling tone. How does a toneless root receive a H tone in certain contexts? Olawsky has a plausible explanation for this when he states that « *stress is the relevant factor for H tone assignment. This means that a noun containing a toneless root will get a H tone on the TBU which is the nucleus of a stressed syllable. Most nouns are dissyllabic, so their stress is on the penultimate or first syllable.* » (p.197) Toneless nominal roots in combination with an adjective surface as L because they do not bear stress in this context. Since stress applies to prosodic words and not to roots. So for example the surface tone for póók « field » is a H tone, but if it is reduced to its root and adds an adjective, it surfaces as L tone: pò-páálík « new field » since the stress is on the penultimate syllable 'paa.

Examples of toneless roots:

pó'á	« wife »
bíí	« child »
báá	« dog »
bá'á	« diviner »
píí	« ten »

Another phenomenon is that these toneless roots do not cause Downstep on a high tone that follows it (whereas real high tone root words do cause a Downstep on the following high tone). So for example in an associative construction H + H: bíí yít « *child's house* » both words are high toned.

Whereas in a noun + adjective construction nú'úk « *hand* » + bé'ét « *bad* »: nú-b'é'ét « *bad hand* » the second high tone is downstepped.

Compound words can have combinations of the above tonal patterns.

Examples where we indicate morpheme breaks with a +:

à + nū	« five »	nà'à + nám	« chiefs »	kùr + wók	« trousers »
à + yí	« two »	kpū + búk	« orphan »	Wí + nā'ām	« High-God »
nō + bíl	« chick »	sì + rīp	« husbands »	dà + wēn	« dove »

Contour tones in Kusaal are explicable with a contraction or elision of segmental features. Agoswin writes (p.116) that « *To a very large extent however, nouns usually carry non-low tones in the language.* » This seems to be true for Kusaal. He further writes (p. 116) that « *recurring tone patterns on the singular stems are retained and reduplicated on the corresponding plural forms.* »

3.8.6 Tone in an associative construction

There is a low tone raising (LTR) for pronouns in an associative construction; the two nouns or pronoun plus noun are placed adjacent to each other:

m̄ bá' « My father » is pronounced [m̄ bá']

So the associative construction (genitive construction / possessor possessed relationship) has a floating High tone.

3.8.7 Tone in compound nouns

N + N: The first noun retains only its root form and in a noun plus noun combination the root tone is usually retained in the compound.

e.g. nú'úk « *hand* » + bíl « *diminutive* » = núbíl « *finger* »

N + Adj.: in the case of an adjective being combined with a noun, the noun root copies the tone of the adjective:

púút « stomach/belly »	+	pēēl « white »	=	pū-pēēlīm « white belly = joy »
kúrúk « shorts »	+	wōk « long »	=	kūr-wōk « trousers »
dáám « beer »	+	pāāl « new »	=	dā-pāāl « new beer »

4 Verbal morphology

The verbal system in Kusaal is based on a four-way contrast involving perfective and imperfective aspects combined with realis and irrealis modes.

1. Perfective aspect covers an action which is viewed as a whole or carries the idea of completion.
2. Imperfective aspect covers continuous and (usually) habitual actions.
3. Realis mode is used in main clauses which are declarative in nature, except where irrealis is required.
4. Irrealis mode is used for the future tense, and in imperative and optative clauses, as well as special use in discourse.

The distinction between these four forms is by means of both suffixes and tones. In many cases tone alone marks the distinction, in other cases suffixes alone, and in others a combination of both tone and suffixes is used. Cannu (p. 250-258) describing mooré calls this relails/irrealis in French: “Mode reel” and “Mode virtuel”.

4.1 Aspect

This basic Kusaal verb form is the citation form in dictionary entries; the equivalent of infinitive verbs in other languages. It could also be called the aorist, consecutive or neutral form. Verbs are not marked for lexical tone but only for grammatical tone. The infinitive has a mid-tone, but tones are not necessary to be marked in the Kusaal orthography.

Basically, each verb has two aspectual forms: a perfective and an imperfective form, with very few exceptions. Bodomo cites Bendor-Samuel (1971) « *event and process, punctiliar and linear ...the speaker sees the action as either completed or not yet completed.* » p.88))

So for example a verb like *nū* « to drink » can have different forms according to their place in a sentence and their flectional suffix like aspect etc.

<i>nū</i>	verb root
<i>nu</i>	citation form in a dictionary
<i>nù</i>	perfective aspect, zero morpheme \emptyset , but low tone
<i>nume</i>	perfective aspect with affirmative suffix for focus
<i>nuya</i>	perfective aspect with completive aspect, intransitive use only
<i>nuut</i>	imperfective aspect
<i>nuutē</i>	imperfective aspect with +FOCirmative suffix for focus
<i>nuura</i>	imperfective aspect in final position of negative sentence

nuum	imperative singular
nuume	imperative plural

We will now look at these different forms and suffixes in more detail.

4.1.1 The perfective

The perfective form is the unmarked one from the phonological and semantic point of view. Its form is usually the shortest and simplest form of the verb, and is also use as consecutive form. It could be called aorist or simple form. The perfective describes a completed action. In absence of any reference of time (e.g. by adverbial or future particle or time depth preverbs) perfective forms are understood as referring to the past. The perfective suffix is zero \emptyset and low tone.

Examples:

M dɪ mui la. « *I ate the rice.* »

I eat rice DEF

Negative perfective suffix -e

Whereas the perfective suffix in a positive sentence is zero, in a negative sentence marked by the negative particle **bu** « *negative non-future* », the verbs with a structure CVC, CVN, CV.CVC in final position takes the negative suffix **-e**; for the CVV verbs a longer form is possible **-ge** but not obligatory.

Examples:

dɛ'ɛ	« <i>to take</i> »	Õ bu dɛ'ɛe.	« <i>He did not take.</i> »
paa	« <i>to arrive</i> »	Õ bu paage.	« <i>He did not arrive.</i> »
sak	« <i>to accept</i> »	Õ bu sake.	« <i>He did not accept.</i> »
lorɪg	« <i>to untie</i> »	Õ bu lorɪge.	« <i>He did not untie.</i> »
tɔm	« <i>to work</i> »	Õ bu tɔme.	« <i>He did not work.</i> »

The CV verb in final position just prologues their final vowel in a negative sentence.

Examples:

tɔ	« <i>to pound</i> »	Mam bu tɔɔ.	« <i>I did not pound.</i> »
da'	« <i>to buy</i> »	Õ bu da'a.	« <i>She did not buy.</i> »
dɪ	« <i>to eat</i> »	Õ bu dɪ.	« <i>He did not eat.</i> »
ni	« <i>to rain</i> »	Saa bu nii.	« <i>It did not rain.</i> »

4.1.2 The imperfective

The imperfective form refers to a habitual action or an action in progress comparable to the English continuous (“-ing”) form of verbs. In absence of any other reference of time,

imperfective forms are usually interpreted as referring to the present. On the other hand, together with an overt indication of time, imperfective forms can also refer to the past. The imperfective is formed by the suffixation of **-r** in intervocalic position or its allomorph **-t** in word final position.

Examples:

M dt mui. « *I eat rice.* » ⇒ « *I habitually eat rice* » (without other suffixes)

I eat + IMF rice

With preverbs:

M bene dt mui. « *I am eating the rice (don't you see?).* »

I be there eat + IMF rice

There are some changes some verb structures as they add the imperfective suffix:

The **V** and **CV** verbs lengthen the stem vowel before adding the **-r/-t** suffix.

Examples:

ε « *to look for* » Mam εæt ki. « *I am looking for millet.* »

tɔ « *to pound* » Mam tɔɔt ki. « *I am pounding millet.* »

da' « *to buy* » Õ da'at pe'uk. « *He is buying a sheep.* »

The **CVI** and **CVvl** verbs transform their lateral consonant into a nasal.

Examples:

kul « *to go home* » Mam kun ne m bii. « *I am going home with my child.* »

bɔɔl « *to call* » Mam bɔɔn v. « *I am calling him.* »

pa'al « *to show* » Õ pa'an biis. « *He is teaching children.* »

4.1.2.1 Habitual and progressive action

The progressive or imperfective action can take the +FOCirmative marker **-ē** (or one of its allomorphs) in order to focus on the action (see below 4.2.2).

Tɪ but ki « We sow millet (every year). » habitual action

we sow millet

Tɪ butē ki. « We are sowing millet (now). » Progressive action

we sow + +FOC millet

4.1.2.2 Negative imperfective suffix **-ra**

Negative suffix in final sentence position for an imperfective verb is **-ra** (and its allomorphs **-ta/-ma/-na** depending on the verb structure), often lengthened to **-raa**.

CV verbs take **-ra** or **-ta**

CVC, CV.CVC take the suffix **-ra**

CVN verbs assimilate the **-t** so that it becomes an nasal and thus the suffix is **-ma** or **-na**

Examples:

tɔ	« to pound »	Mam bu tɔt ki. Mam bu tɔra.	« I did not pound millet. » « I did not pound. »
dɪ	« to eat »	Õ bu dɪt sa'ap. Õ bu dɪta.	« He did not eat porridge. » « He did not eat. »
sak	« to accept »	Õ bu sakɪt lɔ la. Õ bu sakɪra.	« He did not accept the law. » « He did not accept. »
sin	« keep silent »	Õ bu sin zĩna.	« He did not keep silent today. »
sak	« accepter »	Õ bu sinna.	« He did not keep silent. »
tum	« to work »	Õ bu tum berugu. Õ bu tumma.	« He did not work a lot. » « He did not work. »

4.2 The other verb inflectional suffixes

A number of suffixes (or post-verbal particles) can be attached to either perfective or imperfective forms or to both.

1. Completive suffix **-ya/-ɪya** added to perfective verbs only.
2. + FOCirmative suffix **-me** (and its allomorphs: -ne/-me/-le/-e/-ẽ/-rɪ/-ke/-pe)
3. Imperative suffix **-m** (and its allomorphs -me, -ma) to perfective form only
4. The suffix of a past now irrelevant **-nɪ/-ni/-ɪn**
5. Venitive suffix **-a** « towards here »

4.2.1 The completive suffix **-ya**

In short sentences, when no object follows, perfective verbs require the suffix **-ya** or with an epenthetic vowel **-ɪya/ -iya** to avoid consonant clusters. The **-ya** suffix indicates that the action is complete and irreversible. This suffix never occurs in negative sentences.

Examples:

M dɪya.	Õ kpiya.	Ba kuliya.
<i>I eat + compl</i>	<i>he die + compl</i>	<i>they go-home + compl</i>
« I ate the rice. »	« He died. »	« They went home. »

4.2.2 The affirmative suffix *-me*

Apart from habitual interpretation, the imperfective form can also have a continuous meaning, namely when the particle *-ẽ* and its allomorphs *-me/-ne/-rɪ/-ke/-pe* is attached to the verb.

The perfective can also be followed by the +FOCirmative particle, even if a short object like a pronoun is inserted between the verb and the +FOCirmative suffix. This suffix puts the focus on the verb and could be called an emphatic marker.

The allomorph of the +FOCirmative suffix */-me/* takes different forms depending on the structure of the verb:

Examples:

[*-ẽ*] after an imperfective verb ending in *-t*

kɔ « *to farm* » *Õ kɔtẽ.* « *He is farming.* »

[*-ne*] after a verb ending in a vowel (V, CV)

ẽ « *to be* » *Õ ẽne mam pɔ'a.* « *She is my wife.* »

[*-ke*] after a verb ending in *-g* (the *-g* becomes a voiceless *-k*)

lorɪg « *to get lost* » *Pe'es la lorɪke.* « *The sheep are lost.* »

[*-pe/pɪ*] after a verb ending in *-b* (the *-b* becomes a voiceless *-p*)

bob « *to get ready* » *Alakum pope ka gut.* « *The hawk is ready and waits.* »

[*-re*] after a verb ending in *-r*

gaat « *to pass* » *Ba mɔr v gaart.* « *They got him and passed.* »

[*-lɪ*] after a verb ending in *-l*

tɪl « *to be hot* » *La tullɪ.* « *It is hot.* »

[*-ne*] after a verb ending in *-n* (CVN, e.g. *zal* to be mad is *zan* in the imperfective)

zan « *being mad* » *Õ zanne.* « *He is mad.* »

[*-me*] elsewhere

kpi « *to die* » *Õ kpime.* « *He died.* »

me as discontinuous form detached from the verb through insertion of a short object.

bu' « *to eat* » *Õ dɪ ba me.* « *He ate them.* »

This +FOCirmative or emphatic suffix cannot occur in negative clauses.

Example:

Baa ye, ba mɔŋɪɾɪ kōbɪt, ka ba bu mɔŋɪt sa'abo.

dog say they refuse to give bone but they NEG refuse to give porridge

« Dog says: "They refuse to give a bone, but they don't refuse to give porridge. » (Proverb)

4.2.3 Imperative suffix *-m/-me*

The perfective or aorist form of the verb can take an imperative suffix **-m** (and its allomorphs *-um/-um/-um/-ma#*) for an order to one person or **-me** (and its allomorphs *-ume/-ume*) for an order to several persons. The subject is omitted. The CV verbs lengthen their stem vowel before adding the imperative suffix except the few CV verbs that do neither lengthen their vowel in the imperfective form.

Examples:

Stem:		Imperative singular:		Imperative plural:	
tɔ	« to pound »	Tɔɔ m !	« Pound! »	Tɔɔ me !	« Pound! »
dɪ	« to eat »	Dɪ m !	« Eat! »	Dɪ me !	« Eat! »
bas	« to leave »	Bas um !	« Leave! »	Bas ume !	« Leave! »
kul	« to go home »	Kul um !	« Go home! »	Kul ume !	« Go home! »
but	« to sow »	Bur um !	« Sow! »	Bur ume !	« Sow! »

The pronoun can be used:

Tɪ tum! « Let us go! » Ya dɪm! « You (pl.) eat! »

The verbs with a CV**m**, structure keep their CVN form in the singular imperative but the plural imperative adds the suffix *-me* to the stem form.

Examples:

Stem:		Imperative singular :		Imperative plural :	
dūm	« to grind »	Dū m !	« Grind! »	Dū mme !	« Grind! »
tum	« to work »	Tu m !	« Work! »	Tu mme !	« Work! »
yum	« to sing »	Yu m !	« Sing! »	Yu mme !	« Sing! »

The verbs with a CV**b** structure delete the **-b** to form their imperative:

Examples:

Stem:		Imperative singular:		Imperative plural:	
sob	« to write »	S o m !	« Write! »	S o mme !	« Write! »

lob	« to throw »	Lom !	« Throw! »	Lomme !	« Throw! »
õb	« to chew »	Õm !	« Chew! »	Õmme	« Chew! »

Some common verbs are irregular:

ke « to cause, to leave »	imperative singular: kel	imperative plural: kelɩ
dol « to follow »	dol	dolɩ

4.2.4 The past irrealis suffix -ni

When an action is past and not relevant for the present any more, the verb can take the suffix **-ni/-ni/-ɩn**. It most often occurs in past conditional sentence with the conditional marker **ya'a** « if » with a sense like « if it had (but it hasn't) ».

Examples:

kɔ	« to farm »	Õ ya'a kɔɩni, ...	« If he had farmed, ... »
ni	« to rain »	Saa ya'a niini, ...	« If it had rained, ... »
dɛ'ɛ	« to receive »	Õ ya'a dɛ'ɛni ki, ...	« If he had received millet, ... »
pa'al	« to show »	Õ ya'a pa'alɩn v ...	« If he had shown him ... »

4.2.5 Venitive (allative) suffix -a

A verb can be suffixed by a venitive suffix **-a** « towards here, hither » indicating that the action moves towards the speaker.

Example:

Õ tunne.	Õ tuna.
<i>he come + FOC</i>	<i>he come here</i>
« He is coming. »	« He came here. »

The imperative suffix can also be followed by the venitive suffix **-a**.

Example:

bɩs « to look » + -m « imperative sg. » + -a « venitive, hither »
Bɩsɩma ! « Look towards here! »

The present tense is not lexicalized/marked in Kusaal. Future tense and past tense are marked by particles and time-depth markers. Imperfective and imperative are marked by suffixes whereas perfective is the neutral/aorist or citation form which is the shortest or simplest form of a verb.

4.3 Tense

Tense of a verb typically refers to an event or situation which has a specific position on a mental time axis. Generally time consists of three main domains: present, past, and future. In Kusaal, the distinction between past and present is not very important (thus they have for example the same negative particle *bu* « *not non-future* »). Therefore, a sentence without explicit tense marking may be past or present, depending on the context.

Example:

Õ bu tuna.

he NEG come here

« *He did not come.* » or « *He does not come.* »

There are a number of preverbal particles in kusaal. They function like the “auxiliary verbs” of languages like English lexicalizing tense and aspectual features.

Future is explicitly marked by the preverbal particle *ne* « *will* » for positive sentences and *kun* « *won't* » for negative sentences.

Example:

Ba ne tuna.

they FUT come here

« *They will come.* »

Ba kun tuna.

they FUT+NEG come here

« *They won't come.* »

In Kusaal, there are a few **time-depth** markers indicating the proximity of an event being past or future (see 5.4.1.3).

da « *more than a year* »

daa « *under a year, but more than a day* »

sɔ / sa « *one day removed in the past* »

pa'a « *earlier today* »

saa « *one day in future* »

These time-depth markers precede the verb and the negation parkers.

Examples:

Õ sa dt mui.

he yesterday eat rice

« *He ate rice yesterday.* »

Õ saa ne dt mui.

he tomorrow FUT eat rice

« *Tomorrow he will eat rice.* »

Õ da tuŋ Wa'aruk.

he PAST go Ouagadougou

« *He went to Ouaga.
(many days ago).* »

Fu bɔɔt ye fu **pēē** fuuka bee fu **pēē** kurukaa? Irrealis, optative

you want that you wash shirt + DEF or you wash trousers + DEF Q

« *Do you want to wash the shirt or the trousers?* »

Optative/subjunctive: A wish or a request is marked by the particle **ti** « *to give* ». The usual use of the optative/subjunctive is for first or third person commands - cohortative or jussive.

(Kröger p. 28).

Examples:

Ti ti tuŋ.

give we go

« *Let us go.* »

Ti ye ti tuŋ.

give that we go

« *Give that we go.* »

Ti m nu.

give I drink

« *Let me drink.* »

« *I wish to drink.* »

Ti ye ō kuli.

give that he go home

« *Let him go home.* »

« *May he go home.* »

4.5 Derivational verb suffixes

An interesting part of Kusaal verbs is that many of them can be classified into pairs or even several classes of opposition depending on derivational processes such as

1. Causative (cause somebody or something to do or to be something)
2. Applicative (activity or process done to someone else)
3. Inversive (doing the reverse action)
4. Iterativity (repeating the same action several times)
5. Ingressive (entering into a state or beginning of a process)
6. Derivation from state verb to action verb

The derivational suffixes are not always obvious and clear cut and thus they are not easily detectable. While it is easy to discern flexional suffixes, it is rather difficult with derivational morphemes. These may even involve some consonantal and vocalic changes within a verb.

4.5.1 Causative opposition verb pairs

These verbs express the idea of causing/making somebody or something do something by a third agent. The derivational morpheme is **-s/-ɪs** (with vowel lengthening in case of CV verbs); or else the derivation morpheme is else **-lig / l**.

Verb:	Derived causative verb:
kpi « to die »	kpiis « to cause to die, extinguish (fire) »
kpě' « to enter »	kpě'es « to cause to enter »
dɪ « to eat »	dus « to cause to eat, nourish somebody (humans) »
sig « to get down »	sigis « to cause to get down, to unload (e.g. goods) »
yi « to get out »	yiis « to cause to get out »
dɔ'e « to give birth »	dɔ'as « to cause to give birth »
mi' « to dive »	mi'is « to cause to dive or immerge »
dol « to follow »	dolis « to cause to follow »
wɔ' « to dance »	wɔ'ɔs « to cause to dance »
nu « to drink »	nulis « to cause to drink, to water (animals) »
nu « to drink »	nulig « to cause to drink (humans) »
vil « to bandage »	vilig « to cause to bandage »
dɪ « to eat »	dɪlɪg « to cause to eat, nourish (animals) »

4.5.2 Applicative verb pairs

These verbs imply that the action is done to someone or something else. The derivational morpheme is **-l** with or without vowel preceding lengthening.

ye « to say »	yel « to say to somebody »
zĩ'in « to sit »	zĩ'il « to place somebody into sitting position »
yɛ « to dress »	yɛɛl « to dress somebody »
gbā'a « to lay down »	gbā'al « to lay somebody down »
ze « to carry »	zeel « to load somebody/accuse somebody »
zɛ' « to stand »	zɛ'ɛl « to put somebody or something upright »
dɪgɪ « to be put down »	dɪgɪl « to put somebody or something down »

4.5.3 Inversive or reversative opposition verb pairs

This category of verbal pairs has the idea of an action versus a reversed action. The derivation morphemes of this phenomenon are **-g /-ɪg** for **CVC** verb stems and **-rɪg** or glottal stop ‘ after a **CV** verb stem with vowel lengthening. A **CVg** stem becomes **CVk** (g + g = k).

Une racine **CVg** qui se termine avec -g devient **CVk** (g + g = k).

Sample sentences:

pil	« to put a roof »	Õ pil dooka.	« He put on a roof on the room. »
pilɪg	« to unroof »	Õ pilɪg dooka.	« He unroofed the room. »
lo	« to tie »	Õ lo buv la.	« He tied the goat. »
lorɪg	« to untie »	Õ lorɪg buv la.	« He untied the goat. »
vugul	« to cover »	Õ vugul duka.	« He covered the pot. »
vuk	« to uncover »	Õ vuk duka.	« He uncovered the pot. »
yagul	« to hang up »	Õ yagul fuuka.	« He hooked up the shirt. »
yak	« to unhook »	Õ yak fuuka.	« He unhooked the shirt. »
pag	« to lock »	Õ pag koloŋa.	« He shot the door. »
pak	« to unlock »	Õ pak koloŋa.	« He opened the door. »
labil	« to stick »	Õ labil gbāvŋ.	« He stuck the paper (on a wall). »
lak	« to take off »	Õ lak gbāvŋ.	« He took off the paper (from a wall). »
yo'	« to close »	Õ yo' kolŋ.	« He closed the door. »
yo'o	« to open »	Õ yo'o kolŋ.	« He opened the door. »
ye'	« to dress »	Õ ye' fuuka.	« He put on a dress. »
yeε	« to undress »	Õ yeε fuuka.	« He took off the shirt. »

4.5.4 Iterative or repetitive opposition verb pairs

These verbs are used to show repeated action. The subject does several times the same action on the same object or on different objects. The single action verb is characterized by the suffix **-g + -g** ⇒ **-k / '** « *singulative* ».

The repeated action is characterized by the **-g + -s** ⇒ **-gɪs**, or **-s**, or **-ge**, or even a shortening of a CVv vowel

Single action verb:	Repeated action verb:
nɔk « to take »	nɔgɪs / nɔ'ɔs « to take several times »
lak « to lift the top »	lagɪs « to lift several times »
zãk « to lift up »	zãgɪs « to lift up several times »
mak « to measure »	magɪs « to measure several times »
luk « to separate(animals) »	lugɪs « to separate several times »
pik « to shell »	pige « to shell several times »
kɔ' « to break »	kɔ'ɔs « to break several times »
dɛ'ɛ « receive »	dɛ'es « to receive several times »
wa'a « cut »	wa' « to cut several times »
vuu « to drag »	vu « to drag several times »

4.5.5 Derivation from a state verb into an action verb

Some verbs expressing/describing a state can be transformed into active verbs performing a movement.

The derivation morpheme is **-n** or **-l**.

4.5.5.1.1.1.1.1 Quelques verbes d'action sont dérivés des verbes d'état grâce au suffixe

State verb:	Action verb:
zi'i « to be seated »	zi'in « to sit down »
gbã'a « to be laid down »	gbã'an « to lay down »
zɔ « to be hanging on »	zɔl « to get into a hanging position »
zɛ'ɛ « to be standing »	zɛ'ɛl « to get into a standing position »
seb « to be squatting »	sebl « to get into a squatting position »

Examples:

Ba gbā'ame.	« <i>They are lying down.</i> »	(state)
Ba gbā'aníya.	« <i>They laid down.</i> »	(action)
Õ gbā'an bii la.	« <i>She laid the child down.</i> »	(action)

4.5.6 Ingressive (Derivation from a descriptive verb into a process verb)

Some verbs describe the change of state, i.e. the subject is in a process of change. They usually add a suffix **-g** which may be translated as « become something ».

Examples:

yalım	« <i>to be wide</i> »	yalıg	« <i>to widen, to become wide</i> »
tuł	« <i>to be hot</i> »	tułıg	« <i>to become hot</i> »
so'o	« <i>to possess</i> »	so'og	« <i>to get into possession of something</i> »
sob	« <i>to be black</i> »	sobıg	« <i>to become black</i> »
nɔb	« <i>to be fat/big</i> »	nɔbug	« <i>to become fat/big</i> »

However when the verb of state has two vowels, the **-g** suffix does not appear and the verb of state has the same form as the verb of process, only the context can indicate what is meant.

Examples:

La ma'ame.	« <i>It is cold.</i> »	Stative verb
La ma'aya.	« <i>It became cold, it cooled down.</i> »	process verb

4.6 Verb structure

The vast majority of verbs (over 99%) are mono- or disyllabic, and a few only are tri-syllabic.

4.6.1 Vowel occurrence in poly-syllabic verbs

There is an interesting pattern with vowels in polysyllabic verbs: the second syllable vowel is either a copy of the vowel of the first syllable or the vowel is a high vowel **-ɪ-** or **-ʊ-**.

Examples:

CV.CV

i - i	ligi	« <i>to patch</i> »	ligi	« <i>to faint</i> »
ɪ - ɪ	gbıgɪ	« <i>to be muscular</i> »	pıgɪ	« <i>to shell</i> »
u - u	pugu	« <i>to float</i> »	nugu	« <i>to crawl</i> »

	fugu	« to blow »	lugu	« to swim »
v - v	duɣv	« to cook »	bvɣv	« to soothsay »
CV.CVC				
i - i	pirig	« to spy on »	milis	« to get used sb.»
	milig	« to dirty »	gilig	« to surround »
	kilim	« to become »	lirig	« to knock over »
	girim	« to shake »	gbilim	« to model »
	gbirig	« to pick up again »	kpilim	« to wrap »
	ligil	« to hide »	limis	« to watch out »
	pirig	« to take off »	pilig	« to take away »
ɪ - ɪ	kɪbɪɣ	« to pierce »	kɪpɪɣ	« to take by force »
	kɪɾɪ	« trembling »	kɪɾɪɣ	« to cross »
	gɪɾɪɣ	« to prevent »	fɪbɪɣ	« to flog »
	hɪɣɪm	« to tickle »	dɪɪɣ	« to put down »
o - o	polog	« to dazzle »		« »
v - v	gɪɾvɣ	« to carry on back »	fɪɾvɣ	« to sip »
	pɪɾvɣ	« to divide »	pɪɾvɣ	« to recall »
	gɪɾvɣ	« to get older »	bɪɾvɣs	« to soften »
u - u	mugus	« to aggravate »	mubul	« to close again »
	furug	« to go beyond »	fulug	« to peel »
	gurug	« to move »	gubug	« to surround »

VC.VC

i - i	isig	« to get up early »	igil	« to kneel »
	igim	« to crawl »		« »

Examples where the second vowel is an -ɪ-:

CV.CVC

a - ɪ	pasɪɣ	« to miss »	salɪɣ	« to slip »
	pabɪɣ	« to faint »	pasɪm	« to hurry up »
	narɪɣ	« to harden »	malɪs	« to be sweet/tasty »
	malɪɣ	« to arrange »	malɪm	« to get used »
	kabɪs	« knock at door »	kabɪɣ	« take out some liquid »
	kābɪl	« to hurry »	kāɾɪm	« lire »
e - ɪ	lebɪs	« to give back »	lebɪɣ	« to go back »
	kpelɪm	« to remain »	gēɾɪɣ	« to mix »
	kelɪs	« to listen »	melɪm	« to disappear »

	merig	« to squash »	pesig	« to give completely »
	pebis	« to blow on »	dēgim	« to get dirty »
	pelig	« to whiten »	kelum	« to shout »
	lerig	« to replace »	gelig	« to calculate »
	gbelig	« to lean »	delig	« to spread out »
	felig	« to move »		« »
υ - ι	gulis	« to write »		
ō - ι	dōlig	« to stretch »	borig	« to melt »

Examples where the second vowel is an -υ-:

ο - υ	lorυg	« to undo »	gōlυg	« to bend »
	kōrυg	« to scrape »	korυg	« to cut an animal's throat »
ϝ - υ	mōbυg	« to grip sb. »	mōrυg	« to endure »
	nōbυg	« to grow »		
α - υ	nabυg	« to change ones behavior »		

In trisyllabic verbs all vowels are the same or the first two are the same and the last one is an -ι-. The second consonant is always a **g** or glottal stop ‘, and the last syllable is -lim/-lum, or sometimes -rim

Examples:

CV.CV.CVN	kā'alum	«to group sth. together »	pō'olum	« to be paralyzed »
	gugulum	« to murmur »	digilim	« to harden »
	bυgυlum	« to cast lots »	gυgulum	« to be dumb »
	kpυgυrum	« to dig slightly »	sugurum	« to console »

4.6.2 Long form and short form of verbs

Most verbs have a “long form” and a “short form”.

The short form is the root of the verb, it could be called the neutral or aorist form and it is by far the most employed form in texts.

Examples of the short form:

da'	« to buy »
paa	« to arrive »
bas	« to leave »
lorig	« unwrap »

However, when the verb comes before a pause, e.g. at the end of a sentence, the long form is usually added to the root. This is also the form Kusaasi use to cite a verb in isolation. When a pronoun (except before *v* 3rd sg.) follows the verb, the verbs ending in a consonant use their long form to avoid consonant clusters.

Examples:

da'a « to buy »
 paat « to arrive »
 basɪ « to leave »
 lorɪgɪ « unwrap »

Õ da' dup.	Õ bu da'a.	Õ da'a ba.
<i>he buy food</i>	<i>he NEG buy</i>	<i>he buy them</i>
« He bought food. »	« He didn't buy. »	« He bought them. »

4.7 Stative verbs

Stative verbs express a state of somebody or of something and not an activity somebody or something are doing. They do not have a perfective or “punctiliar” aspect because they are describing a state. Thus it cannot add an imperfective aspect suffix -t, nor the completive suffix -ya. However, it can add an +FOCirmative morpheme -me/-ne/ẽ

Their structure of most Stative verbs is CV, CVN or dissyllabic CV.?V

	Simple verb form:	Verb with +FOCirmative suffix:
« to be (in a location) »	be	bene, beme
« to be (attributive) »	ẽ	ẽne
« to be absent »	kɛ'	kɛ'ene, kɛ'eme
« not to be (attributive) »	kɛ' kɛ'ene	
« to be equal »	zĩm	zĩmme
« to resemble »	wãn	wãnne
« to possess »	so'o	so'ome
« to be better »	sõ'o	sõ'ome
« to be sitting »	zĩ'i	zĩ'ime
« to be upright »	ze'ε	ze'eme
« to know »	mi'i	mi'ime
« to ignorer »	zi'ɪ	zi'ume
« to be next to »	kpe'ε	kpe'eme
« to have »	tat	tarume
« to be difficult »	tɔɪ (tɔ)	tɔme
« to be laying »	gbã'a	gbã'ame

« to be many »	zɔ'ɔ	zɔ'ɔme
« to be walking »	wɛ'ɛ	wɛ'ɛme

Some Stative verbs can add a suffix -lim / -lum / -um to make an abstract noun:

mi'i	« to know »	mi'ilim	« knowledge »
malɔs	« to be sweet »	malɔsim	« sweetness »

5 Kusaal syntax

We will look at sentence rank first, and then examine the clause rank the phrase rank, and finally the word rank.

5.1 Sentence rank

Basically there are the following three sentence types:

- Simple sentence: this has a nucleus of one clause, with or without peripheral clauses.
- Complex sentences: the nucleus consists of more than one unit, usually an introducer clause and a simple sentence. These are in a complex relationship.
- Serial sentence: this has a series of nuclei, each consisting of a simple sentence.

5.1.1 Simple sentence

The simple sentence is of two main types:

- Verbal, in which the nucleus is a verbal clause, and in which dependent clauses may occur.
- Non-verbal, in which the nucleus is a non-verbal clause, and in which there are no dependent clauses as periphery.

5.1.1.1 Verbal simple sentence

The verbal simple sentence is the basic statement sentence. It consists of a nucleus (basic clause) and of dependent clauses as an optional periphery.

Periphery (dependent clause) + Nucleus + Periphery (dependent clause)

Examples: (nucleus underlined)

Mui wol sum, boyela saa ni zɔ'e.

rice produce well because rain rained much

« The rice has produced well because it rained a lot. »

Sakum fu sãam ne fu ma nɔɔt, ka Wina'am bɔɔt lana.

obey+IMP your father and your mother mouth than God wants that

« Obey your father and your mother than God wants that. »

Õ ne tna, ti di dup, ti kom ne dũm la yela.

he SUB came we eat food we hunger SUB hurt DEF on the subject of

« *When he came we ate food because we were hungry.* »

5.1.1.2 Non-verbal simple sentence

This consists of a non-verbal clause as the nucleus. There is no periphery.

Examples:

Ne mam bii la. <i>that my child DEF</i>	« <i>That (is) my child.</i> »
Ba wusa lanna. <i>they all like that</i>	« <i>That (is) all of them.</i> »
Tuma, tuma ! <i>work work (i.e. a greeting of encouragement to somebody working)</i>	« <i>Hello!</i> »
« Ëe ! » <i>yes (answer to a question)</i>	« <i>Yes!</i> »

5.1.2 Transformation of simple sentence

The simple sentence can be transformed by different means:

5.1.2.1 Question transforms

There are three types of question sentence.

- Content question:** a) Interrogative sentence,
b) question sentence.
- Polar question:** c) alternative question sentence.

Question intonation is present on the nucleus.

5.1.2.1.1 Interrogative sentence

One of the nominal phrases has a question word i.e. an interrogative nominal as head or nucleus (= wh-questions). The information asked is in focus and the rest of the sentence is usually shared background knowledge.

It can be a verbal or a non-verbal clause. A question terminal vowel is often added.

The demarcational syntagmatic feature: The interrogative word is considered to be the syntagmatic feature of the interrogative sentence.

Examples: verbal:

Õ tɨ̃ yaa ? <i>he go where+Q</i>	« Where did he go? »
Õ ã̃ɨ̃ boo ? <i>he do what+Q</i>	« What did he do? »

Anɔ'ɔn ẽŋ lanaa ? « **Who**(sg.) *did this?* »
who do this + Q


Fv yẽ **anɔ'ɔname** ? « **Whom** (pl.) *did you see?* »
you see whom + Q

Non-verbal:

Atu læ ? « **Where** (is) *Atii?* »
Atii where

Fv yv'uree ? « (What is) *your name?* »
your name

5.1.2.1.2 Question sentence (Polar question)

The nucleus of this sentence type consists of a basic clause type, either verbal or non-verbal. The demarcational syntagmatic features: The final vowel is lengthened. If the sentence ends in a consonant, a vowel terminal is added. The question is made by an intonation which drags out the end of the sentence and lowers the pitch ().

(This is different from English, where the question intonation goes up at the end.)

Examples:

Verbal:

Tɔ, fv ye fv ẽŋ welaa ? « *What do you want to do?* » (Story 18)
so you want you do what

Fv yẽ buraa la ne zotaa ? « *Did you see the man who runs?* » (Story 18)
you see man DEF SUB running -DEF-question

Non-verbal:

Fv baa laa ? « (Is that) *your dog?* »
your dog the-question

Fvʊ ? « *You?* »
you-question

5.1.2.1.3 Alternative question sentence

A yes/no question can be made like an alternative with the second half not mentioned (like English “Do you want to eat or not?”). This gives the hearer a number of possibilities to choose from. The sentence structure is the same as for the question sentence. The demarcational syntagmatic features: The final word is **koo** or **bee** « *or not* », which in normal use is the

conjunction « *or* ». Here the meaning is less strong, because the reply is merely agreement or disagreement, rather than presenting an alternative. The intonation rises on the final word.

Examples:

Verbal:

Bii la dt mui **bee** ? « *Did the child eat the rice (or not)?* »

child DEF eat rice question + Q (or not)

Asaa kun len lepa **koo** ? « *Asaa won't return here (will he)?* »

Asaa FUT + NEG again return-here question + Q (will he?)

Non-verbal:

Bun kãna **bee** ? « *That thing?* »

thing that question

5.1.2.2 Command transforms

There are three types of imperative sentences, all of which are verbal.

5.1.2.2.1 Imperative sentence type

Transformation rules:

- Replace simple sentence nucleus by imperative clause; the subject is deleted; the verb is in the imperative mood.
- Change intonation to command (low tone).
- Add optionally the plural emphasizer **-ne**, which is usually final, but may be medial.

Examples:

Dm mui.

eat + IMP rice

« *Eat rice.* »

Dme mui.

eat + IMP.pl rice

« *Eat rice.* »

Ti dme mui.

we eat + IMP.pl rice

« *Let us eat rice.* »

Dme ne mui.

eat + IMP.pl EMPH rice

« *(You really should) eat rice.* »

Dme mui ne.

eat + IMP.pl rice EMPH

5.1.2.2.2 Future imperative sentence type

Transformation rules:

- Transform simple sentence to future tense.
- Change to command intonation.

Examples:

Fv **ne** pv'vs fv yıdım. « *Greet your family.* »
you FUT greet your house-people

Õ **ne** tıj ka ne kɔ v pooka. « *He should go and hoe his field.* »
he FUT go and with hoe his field

5.1.2.2.3 Obligatory imperative sentence type

Transformation rules:

- Add the initial syntagmatic feature **see ka** « *must, have to* » to the simple sentence.
- Change to command intonation.

Examples:

See ka m tıj Yvvi. « *I have to go to Youga.* »
must that I go Youga

5.1.3 Complex sentence

The complex sentence has a nucleus of two parts, in a complex relationship. The following types are set up:

- Speech complex
- Purpose complex
- Causative complex
- Indirect statement/command complex
- Indirect question complex

In the above types the first part is an introducer clause, except for the purpose complex, which has a simple sentence for the first part.

The second part in all the above types consists of a simple sentence in statement, command or question form. In the speech complex only, a non-verbal sentence may occur.

Except for the purpose complex, the second part of the nucleus can be said to be the expanded object of the first part. Sentence initial and final periphery may occur.

5.1.3.1 Speech complex

The introducer clause contains a verb of speech. The connective *yè* « *that* » occurs between the two parts as a demarcational syntagmatic feature.

For a fuller explanation of quoted speech, see discourse 7.8 where it is handled in greater detail. It is included here because in structure it is a complex sentence.

5.1.3.1.1 Indirect statement

The second part is a simple sentence, either verbal or non-verbal.

Examples:

Ba *yel* v *ye* ba ne tuŋ da'au.

they say him that they FUT go market+LOC

« *They told him that they go to the market.* »

5.1.3.1.2 Indirect command

The second part of the nucleus is an imperative simple sentence.

Example:

Õ tās *yè* ba tum.

« *He shouted that they should go.* »

he shout that they go+IMP

Õ bu yet yè ba tuŋ daai nee. « *He did not say that they should go to the market.* »
he not say that they go market + LOC at

5.1.3.2 Purpose complex

The first part is a simple sentence without final periphery; the second part is a simple verbal sentence. The connective **yé** « *so that, in order to, purpose* » or **tu** « *go to* » may occur between the two parts.

Examples:

Õ zĩ'in yé ò nu kɔ'om. « *He sat down in order to drink water.* » (*only intention*)
he sit down so that he drink water

Õ tuŋ tu yel ba ye ba tuna. « *He went to tell them to come here.* » (*he really did it*)
he go go.to say them that they come here

5.1.3.3 Causative complex

The introducer clause contains a causative verb. The second part is a simple verbal sentence. There is an optional connective **ka** « *that* » between the two parts always occurring after **ke** « *cause to* ».

Relational syntagmatic features:

The second part of the nucleus may not contain future, time-depth or negative verbal phrase particles and preverbs. When they occur in the first part their domain reference covers the whole sentence complex nucleus.

The subject of the second part must be different from the subject of the first part:

Examples:

Mam ke ka ò gaat. « *I made him pass.* »
I caused that he passed

Karēnsaam ke ka biis la zã'asa kule.
teacher cause that children DEF all go home

« *The teacher caused that all the children went home.* »

5.1.3.4 Indirect statement / command complex

The introducer clause contains verbs like *yě* « see », *těet* « think » *boot* « want » and is often followed by the connective *yě* « that » which occurs between the two parts.

Examples of indirect statement:

Mam **těet** **ye** karěnsāama be yiri.
I think that teacher+DEF is home+LOC
« I think that the teacher is at home. »

Mam nan **zɪ'ɪ** mam ne ěŋt sɛ'em.
I still ignore I FUT do+ipf how
« I still don't know what I will be doing. »

Mam **yě** **ye** mam zɔ la tuna.
I see that my friend DEF come here
« I saw that my friend came here. »

Examples with indirect command:

Õ yel **ye** fɔ tɪm da'au.
he say that you go+IMP market+LOC
« He said that you should go to the market. »

Mam ma **kat** mam **ye** m da tɪŋ da'au.
my mother forbid me that I PROH go market+LOC
« My mother forbids me to go to the market. »

5.1.3.5 Indirect question complex

In the indirect question complex, the second part of the nucleus may be one of the following:

- Interrogative simple sentence
- Question simple sentence
- Relative/discovery clause (dependent)

The first part of the nucleus is an introducer clause.

5.1.3.5.1 Interrogative type

The introducer clause contains one of the following verbs:

yē « see », **bɔ'ɔs** « ask »

Demarcational syntagmatic feature:

The connective **yè** may occur when preceded by the verb **bɔ'ɔs** « ask ». There is a question intonation, and sometimes an added question vowel terminal or vowel lengthening.

Examples:

Õ **bɔ'ɔs** ʋ **ye** buraa ē anɔ'ɔnee ?

she ask him that man is who+Q

« She asked him who the man is. »

Fʋ **yē** anɔ'ɔne tɪnaa ?

you see who come+Q

« Did you see who came? »

5.1.3.5.2 Question type

The introducer clause contains verbs like **bɔ'ɔs** « ask », **yel** « say »

The connector **yè** « that » usually occurs between the two parts. Question intonation and the question terminal vowel lengthening occur in the second part of the nucleus.

Examples:

Õ **bɔ'ɔs** bii la ye ã bɔɔt dupaa ?

he ask child DEF that he want food+DEF+Q

« He asked the child if he wanted the food. »

5.1.3.5.3 Relative/discovery type

The introducer clause contains verbs like **mi'** « know », **bāŋ** « know », **pa'al** « show », **yē** « see »

The second part is a relative clause, qualifying the nominal phrase (object) which precedes it, but functioning here as an indirect question.

Examples:

Mam ma, fʋ bu **bāŋ** buraa la yʋ'ʋt ne ē welaa ?

my mother you not know man DEF name SUB is how+DEF+Q

« My mother, don't you know what the name of the man is. »

Tɪ **pa'al** ʋ sɔ-kāne ka ã ne tɪŋ.

we show him road which that he FUT go

« We showed him which road he should go. »

5.1.4 Serial sentence type

The serial sentence is very common in kusaal. It consists of more than one simple verbal or complex sentence, the additional ones functioning recursively. The serial sentence has three different types, and they contrast in structure and in relationship. These are:

- serial additive sentence
- serial connective sentence
- serial bounded sentence

5.1.4.1 Serial additive sentence

This consists of the normal sentence periphery occurring optionally, with the nucleus as a recurring feature. The nucleus consists of the simple verbal or complex sentence nucleus.

Relational syntagmatic features: The nuclei stand in a coordinative relationship to each other. When the subject is the same for succeeding nuclear units, it is not repeated.

Demarcational syntagmatic features: This consists of the obligatory presence of a connective between the nuclear units, the most common being *ka* « *and* ». The more vivid, and occasionally contrastive *hali ka* « *to the extent that* » may occur.

Examples: Beginning of story 1

Buraa arakō da be, /ka/ ě zɔ'ɔm, /ka/ ò yu'ut bɔɔne Azvut. ...

man one PAST be and to.be blind and his name call Mr. Tail

« *There was a man, and (he) was blind, and his name was Mr Tail.* »

... buraa la tu'ur v me, /ka/ yaan v, /ka/ pɔ'ɔr v, /ka/ tāsır v, /ka/ yee :

man DEF insult him FOC and humiliate him and diminish him and shout at him and say that

« *... the man insulted him, humiliated him, ridiculed him, shouted at him saying ...* »

In the example below

- **serial additive sentence** units are separated by an oblique / **Ka** / « *and* » (10 times)
- serial clause sentence units are marked by *ka* « *and, that* » (see Ch. 5) 8 times

Example from text 14

Ba ēne wela daba ayopoi. / **Ka** / Azāŋkɔ'ɔt bāŋ ye Asumbul pā'asit ò me. Ba ne leb daa-se'eta, ba paam me zīŋ arakō *ka* Azāŋkɔ'ɔt de'ε. / **Ka** / Asumbul bis *ka* la bu nat ye Azāŋkɔ'ɔt kul ne zīŋaa. Ba ne paa sɔkɪtɪŋ la, *ka* so' woo nɔk ò sɔt. Asumbul ne tɪŋ be'ela *ka* zo deŋ Azāŋkɔ'ɔt tɔɔn tɪ gbā'an ēŋ wuv ò kpi me la. Azāŋkɔ'ɔt ne paa na yē la, ò bu ze'ele. Ò bāŋ ye Asumbul pā'asır v me. / **Ka** / ò bas *ka* ò tɪŋ be'ela, / **ka** / ò dɔɔ zo gāŋ ò tɪŋ tɪ kırık sɔta ne ò ēŋ wuv ò kpime la. / **Ka** / ò paa na ze'el su / **ka** / yel yee : « Ba tvum-be'eta ke *ka* Wina'am kuuri ba wāna la. » / **Ka** / dıgul zīŋa ye ò lep tɪ nɔk arakō la *ka* tna nɔk ne' la pe'es. Ò ne tɪŋ be'ela, *ka*

Asumbul dɔɔ nɔk ɔ zɪŋ gaare.

Azāŋkɔ'ɔt paa ka bu yē so'one deŋe kpi laa, ka ēŋ zoo ha. Ǿ paa na bu yē Asumbule, ka me bu yē Ǿ zɪŋa. / **Ka** / Asumbul tar Ǿ bun paa / **ka** / Ǿ pɔ'a dɔɔv / **Ka** / ba dit ka la'at Azāŋkɔ'ɔt. Fu ya'a bɔɔt galɪs, fu liti zā'asa.

5.1.4.2 Serial connective sentence

The connective sentence is composed of at least two simple verbal sentences of complex sentences, connected by a contrastive or causal connective.

Although this is a single unit semantically, it does not show the close relationship of the complex sentence. This is demonstrated by the fact that a negative in the first half causes the negative terminal to occur at the end of the first half, and not carried over to the second half terminal.

5.1.4.2.1 Contrastive

The demarcational syntagmatic feature is the connective **amaa** « but » (borrowed from Hausa). The other contrast connective is **ka** « but » especially in a negative sentence if the information in the second sentence is less of a surprise or can be expected.

Example from text 10

Bal la ēne sã'aru bɔnkɔburɪ be nina, **amaa** gãyã pɛ'el nina me.
place DEF to.be bush+LOC wild animals be there but fruit trees fill there FOC

« The place is in the bush where the wild animals live, but there are lots of fruit trees. »

other examples:

Buraa la bɔɔt ye Ǿ tuŋ da'ai, **amaa** Ǿ bē'etē.
man DEF want that he go market+LOC but he to be sick+IN

« the man wants to go to the market, but he is sick. »

Awɛnpɔka bɔɔt mɔntɛɛt, **ka** Ǿ bu tat ligrii.
Awɛnpɔka want motorbike but she NEG have money

« Awɛnpɔka wants a motorbike but she does not have money. »

5.1.4.2.2 Causal

The demarcational syntagmatic feature is the connective **boyela** « because ».

Examples:

Mui wol sɔm, **boyela** saa ni zɔ'e.
rice produce well because rain to rain a lot

« The rice has produced well because there was a lot of rain. »

Õ kvn tō'o tuna, **boyela** ã pɛɛtē fut.
she NEG.FUT able come here because she wash+IMPF+FOC cloths
 « *She will not be able to come here, because she is washing clothes.* »

Cause / Result: In Kusaal the cause is usually expressed first, followed by the result introduced by *ka* « *and, so* » or *boyela, bozugo, lanna yela* « *therefore* » i.e. it is not normal to express the result first and then say « ... because ... ». Though this can be done either with the Hausa *amaa* « *because* » or by a complicated construction with *la zugu* or *la yela* at the end, but this will normally be heard from someone who is translating or thinking English or French.

So more naturally a Kusaasi person would say the above sentences:

Saa ni zɔ'e, ka mui wol sum. « *It rained well, so the rice produced well/a lot.* »

Õ pɛɛtē fut, ka o kvn tō'o tuna. « *She is washing clothes, so she won't be able to come.* »

5.1.4.3 Serial bonded sentence

The serial bonded sentence is composed of at least two simple verbal or complex sentences, without a connective between them. The only indication that they are a single sentence unit is intonational and semantic.

As with the serial connective sentence, a negative terminal will occur sentence medial when the negative is in the first sentence of the serial.

The two parts of the sentence are in close relationship either contrastive, appositional or additive.

5.1.4.3.1 Contrastive

Contrastive predicate qualifiers often occur in the second part.

Examples:

Mam bu bɔɔt ziwēelum, mam nan bɔɔtē sira.

I NEG want lie I now want+IMPF truth

« *I do not want a lie, I want the truth.* »

Bo so'e ka ya kum ka kaasraa? Bupūŋa bu kp̄ii, ã gb̄istē. » (Mk 5:39)

what owns that you weep and cry+IMPF girls+DEF NEG die+NEG she sleep+IMPF++FOC

« *Why do you weep and cry? The girl is not dead, she is sleeping.* »

5.1.4.3.2 Appositional

The second part is in opposition to the first part, as a type of description feature.

Examples:

Ka ò len leb na yě ka ò yã'andolipa gbĩs, ka gbě'em wume ba halı.
and he again return here see that his disciples +DEF sleep and sleep afflict them intensely
« *He came again back and saw that his disciples slept, they were very tired.* »

5.1.4.3.3 Additive

Occasionally, with certain speakers, the normal connective *ka* « *and* » in the serial additive sentence is omitted in one or two in the series, thus making some nuclei « bonded » rather than connected.

5.2 Clause rank

The clause (*French: la proposition*) is the rank between the phrase (*French: le syntagme*) and the sentence (*French: la phrase*) consisting mainly of phrases, and functioning within the sentence. The clause corresponds to the phonological breath group. An average clause counts between 5 to 6 words but it is not unusual that a clause has up to a dozen words.

We will describe the clause function (5.2.1), the clause structure (5.2.2) and the clause system (5.2.3).

5.2.1 Clause function

There are three types of clauses depending on the basis of their function in the sentence:

1. Independent clause: functions as the nucleus of a simple sentence. (5.2.1.1)
2. Dependent clause: do not function as the nucleus of a simple sentence. (5.2.1.2)
3. Introducer clause: function as the first part of the nucleus of a complex sentence. (5.2.1.3)

5.2.1.1 Independent clause

5.2.1.1.1 Basic clause

The basic clause consists of a verbal or a non-verbal clause which functions as the nucleus of a simple sentence.

Example of non-verbal clause:

Ne' mam yire. « *There (is) my house.* »
there my house

The verbal clause functions as the nucleus of the simple verbal sentence. It has an obligatory subject.

Example of a verbal clause:

Azāṅkɔ'ot ne Asumbul da ēne sit taaba.

Mr. hyena and Mr. rabbit PAST to be + ASS friends together

« *Mr. Hyena and Mr. Rabbit were friends.* »

5.2.1.1.2 Interrogative clause

The interrogative clause consists of a verbal or non-verbal clause. A verbal interrogative clause has an addition of an interrogative word or a final vowel lengthening. The class suffix of the final noun is in his full, i.e. -CV lengthened form.

Examples:

Non-verbal:

Fu yu'vree ? « *What is your name?* »

your name + Q

Bo baagaa ? « *What dog?* »

what dog + Q

Verbal:

Õ tuṅ yaa nee ? « *Where did he go?* »

he go where LOC + Q

5.2.1.1.3 Imperative clause

There are two types of imperative clauses, one without subject and the other with subject.

Examples:

Without subject:

Tum! « *Go!* »

With subject:

Tɪ tum. « *Let us go.* »

Õ tum tɔ'ɔtɔ. « *He should go quickly.* »

The imperative clause can also be a prohibition to do something by adding the prohibitive marker **da** « *don't* ».

Da tum. « *Don't go.* »

Tu da tum. « *We mustn't go.* »

5.2.1.1.4 Indirect imperative clause

There is an indirect imperative clause, in this case the subject is obligatory « *X should do y!* »

Ba ye õ yim yiri! « *They said he should get out of the house.* »
they say he go out +IMP house +LOC

Ba ye õ da yim yiri! « *They said he should not get out of the house.* »
they say he PROH go out +IMP house +LOC

5.2.1.2 Dependent clause

5.2.1.2.1 Conditional clause

The conditional clause functions in the initial periphery of the sentence. They can be past conditional, non-past conditional or of temporal type.

A) Past conditional type

Demarcational features:

- **ya'a** « *if* » may recur after pre-verbs (e.g. time-depth **da** « *PAST* ») but before verbs
- both aspect of the verb can occur
- no future particles

Example:

Daarunna, fu **da ya'a** yē ligiri, fu da'ane dup.

day-that you PAST if earn money you buy+IRR food

« *On that day, if you had earned money, you would have bought food.* »

B) Conditional non-past type

Demarcational features:

- **ya'a** « *if* »
- time-depth pre-verbs do not occur
- future particles may occur e.g. **ne** « *FUT* »

Example:

Fu **ya'a** yē ligiri, fu **ne** da' wef.

you if earn money you FUT buy bike

« *If you earn money, you will buy a bike.* »

C) Temporal type

This clause does not contain time-depth preverbs or future particles; temporal preverbs may occur.

Example:

Ba ya'a tuna, ba ne dt sa'ap.

they when come + here they FUT eat T.Z.

« *When they come, they eat T.Z.* »

5.2.1.2.2 Past temporal clause

This clause functions in the initial periphery of the simple or complex verbal sentence.

Demarcational syntagmatic features:

- ne ... la, « *when* »
- future particles may not occur

Example:

Ba ne tum naa la, ba kul.

they SUB work finish DEF they go home

« *When they finished to work, they went home.* »

5.2.1.2.3 Explanatory clause

This clause functions in the initial or final periphery of a simple or complex verbal sentence.

Demarcational syntagmatic features:

- ne ... la, « *when* »
- obligatory subject
- verbal phrase
- both aspects of the verb

Examples:

Fu dt bo, dup ne sã'am laa?

you eat what food SUB destroy DEF + Q

« *What did you eat, given that (as / since) the food was spoiled?* »

Saa ne ni sɔŋaa, tu tuŋ tu but mui.

rain SUB rain well + DEF we go go.to sow rice

« *As it rained well, we went to sow rice.* »

5.2.1.2.4 Discovery clause

This clause functions as the second part of the nucleus of the indirect question complex sentence. This is the only dependent clause that functions as part of the nucleus. This clause type may also function as the complete nucleus of the sentence as a title.

Demarcational syntagmatic features:

- obligatory subject
- clause syntagmatic features *ne ... la*, « *when* »
- verbal phrase
- it includes a word like *se'em* « *how* »; *yela*; « *about* » etc.

Examples:

Tɪ pa'al ʋ ð ne pus dook se'em la.

we show him he SUB sweep room how DEF

« *We showed him how he should sweep the room.* »

Mam bu mi' ð ne ã anɔ'ɔn la.

I NEG know he SUB be who DEF

« *I don't know who he is.* »

Examples of explanatory clause functioning as title:

A Yisa ne bee a Levi yiri la yela.

Mr. Jesus SUB be Mr. Levi house + LOC DEF about

« *About Jesus being in the house of Levi.* »

A Yisa ne te'eb pō'ot la yela.

Mr. Jesus SUB heal paralytic DEF about

« *About how Jesus healed a paralytic.* »

5.2.1.2.5 Relative clause

The relative clause functions as a rank-shifted clause, within the nominal phrase, as a qualifying peripheral feature.

Demarcational syntagmatic features:

- obligatory subject
- ne « subordination marker » occurs clause initially after the subject
- optional final definite article (la / -na / -ma / -a)

The relative clause may function as subject or object of the sentence.

A) Subject: relative clause is the subject of the sentence;

Example:

Buraa la ne tuŋ Wa'arok la ẽne mam sãam.

man DEF SUB go Ouagadougou DEF be+FOC my father

« *The man who went to Ouagadougou is my father.* »

B) Object: relative clause is the object of the sentence but occurs first, front-shifted as introducer. As is usual with front-shifted phrases, it is followed by the connective **ka** « *that* ».

Example:

Fu kãal se'el-se'ene ka fu bu mi' la.

you count things which that you NEG know DEF

« *You count things which you do not know.* »

5.2.1.3 Introducer clauses

The introducer clause functions as the first part of the nucleus of the complex sentence. The second part of the complex sentence nucleus is the object of the introducer clause. The final verbal phrase of the introducer clause is an introducer type verbal phrase. When the verbal phrase is ditransitive, an indirect object may occur. We can divide the introducer clause into four classes on the basis of function in the sentence.

- Speech
- Causative
- Indirect statement/command
- Indirect question

5.2.1.3.1 Speech introducer clause

This introducer clause functions in the speech complex sentence.

Example:

Buraa la yel õ bii ye õ da tum da'ai.

man DEF say his child that he PROH go+IMP market+LOC

« *The man told his child not to go to the market.* »

5.2.1.3.2 Causative introducer clause

This introducer clause functions in the causative complex sentence. It has the introducer element **ke** « to cause / to allow » followed by the conjunction **ka** « that ».

Example:

Buraa la ke ka ò bii la tuŋ da'at.

man DEF cause that his child DEF go market+LOC

«The man caused that his child went to the market. »

5.2.1.3.3 Indirect statement / command introducer clause

This introducer clause functions in the indirect statement or command complex sentence. It has the introducer elements like **yě** « to see »; **mi'** « know »; **zi'** « not know » **pa'al** « show »; **bɔɔt** « want »; **těe** « think » etc. followed by the conjunction **ye** « that ».

Example:

Buraa la yě ye ò bii la tuŋ da'at.

man DEF see that his child DEF go market+LOC

«The man saw that his child went to the market. »

Mam **mi'i ye** karěnsāama be yiri.

I.EMPH know that teacher be house+LOC

« I know that the teacher is at home. »

5.2.1.3.4 Indirect question introducer clause

This functions in the indirect question complex sentence. It has the introducer element **ye** « say that » for indirect speech and **yee** « say that » for direct speech.

Example:

Buraa la bɔ'ɔs bii la ye ò tuŋ yaa nee ?

man DEF ask child DEF say that he go where+FOC+Q

«The man asked the child where it went. »

Ka ò **yee** : « Ēe, tuuma. » Ka ba **yee** : « Fu tuŋ yaanee ? » (from story 1)

and he said that yes greetings and they said that you go where FOC+Q

« He said (to them) 'Yes, greetings (to you)' and they said (to him): 'Where did you go?' »

5.2.2 Clause structure

The Kusaal clause consists of the following types of phrases (*French syntagmes*):

- Nominal phrase (subject)

- Verbal phrase
- Nominal phrase (indirect object)
- Nominal phrase (object)
- Complement
- Locative nominal phrase
- Prepositional nominal phrase
- Postpositional nominal phrase
- Adverbial phrase
- Ideophone phrase
- Temporal phrase

5.2.2.1 Simple clause

The simple clause has one predicate. The order of occurrence of phrases in the clause is shown in the following diagram:

Periphery	Nucleus					Periphery
Temporal phrase or Front-shifted Expansion	NP(s)	TD	Predicate			Temporal phrase
			Verbal phrase	Inner expansion	Outer expansion	
			Locative (yi ...) Transitive (nək ...) Ditransitive (IO+O) Equative (ēne ...) Stative (be ...) Impersonal (La ...)	Locative phrase prepositional NP postpositional NP adverbial phrase ideophone phrase		

The clause consists of an obligatory nucleus and an optional periphery. The predicate consists of a verbal phrase, followed by an inner expansion, followed by an outer expansion.

5.2.2.1.1 Inner expansion

The simple clause is divided into seven types on the basis of contrast in the predicate which can be intransitive, locative, transitive, ditransitive, equative, stative or impersonal.

5.2.2.1.1.1 Intransitive type

It has an intransitive verbal phrase and no inner expansion.

Example: (verbal phrase underlined)

Sɔta yalɔmme.

road + DEF be wide + FOC

«The road is wide.»

5.2.2.1.1.2 Locative type

This has a locative verbal phrase and a locative nominal phrase as the inner expansion of the predicate.

Example: (verbal phrase underlined)

	Predicate
NP	VP inner expansion

Niiŋa be tu la zuk.

bird + DEF to be tree DEF POSTPOS

« The bird is on top of the tree. »

5.2.2.1.1.3 Transitive type

This has a transitive verbal phrase, and a nominal phrase (object) as the inner expansion.

Example: (verbal phrase underlined)

	Predicate
NP	VP inner expansion

Biis la da tat daat ayi.

children DEF PAST have sticks two

« The children had two sticks. »

5.2.2.1.1.4 Ditransitive type

This has a ditransitive verbal phrase, and an inner expansion consisting of an obligatory nominal phrase (indirect object) and a second nominal phrase (object)

Example: (verbal phrase underlined)

	Predicate
NP	VP in. ex. IO O

Ba da pa'al sāamma sɔta.

they PAST show strangers + DEF road + DEF

« They showed the strangers the road. »

When the nominal phrase (indirect object) is a pronoun, the order is unchanged, but when the object is a pronoun, the order is reversed, so that the pronoun (object) precedes the noun (IO).

Example: (verbal phrase underlined)

	Predicate
NP	VP IO O

Õ tɨs m sāam ligiri.

he give my father money

« He gave money to my father. »

More often used:

Õ nək ligiri tɨs m sāam.

he take money give my father

« He took the money and gave (it) to...»

but reversed:

	Predicate
NP	VP O IO

Õ tɪstɪ la m sãam.

he give it my father

« He gave it to my father. »

5.2.2.1.1.5 Equative type

This has the equative verbal phrase \tilde{e} / \tilde{ene} « to be », or $k\epsilon'\epsilon$ « not be ».

Example: (verbal phrase underlined)

	Predicate
NP	VP inner expansion

M sãam \tilde{ene} sakut pa'an.

my father to be school teacher

« My father is a school teacher. »

5.2.2.1.1.6 Stative type

This type has the stative verbal phrase and no inner expansion. Stative verbs have no perfective form, they are per definition imperfective or progressive.

Example: (verbal phrase underlined)

	Predicate
NP	VP

Na'ap da be.

chief PAST to be

« There was a chief (Once upon a time there was a chief). »

	Predicate
NP	VP

Ligiri ke't.

money not be + LOC

« There is no money (money does not exist). »

5.2.2.1.1.7 Impersonal type

This has an impersonal verbal phrase and an optional inner expansion of a nominal phrase (indirect object, beneficiary person). The subject of the clause must be the inanimate pronoun **la** « it ». The verb is in most cases a stative verb.

Example: (verbal phrase underlined)

	Predicate			
NP	VP	NP	VP	IO

La sō'ɿ. La sō'o m ma.
it be better it be better my mother
 « *It is better.* » « *My mother is better.* »

5.2.2.1.2 Outer expansion

The outer expansion consists of the following phrases:

- locative nominal phrase (with non-locative verbal phrase)
- prepositional nominal phrase
- postpositional nominal phrase
- adverbial phrase
- ideophone phrase

The phrases occur in juxtaposition without connective.

Examples of outer expansions:

	Predicate		
NP	VP	inner expansion	outer expansion

Ba wē' ō ne balaya. (prepositional phrase, instrumental)
they hit him with sticks
 « *They beat him with sticks.* »

	Predicate	
NP	VP	outer expansion

Sota yalum paa. (Adverbial phrase)
road + DEF be wide very
 « *The road is very wide.* »

Awɿn naae ō tuuma yu.
Mr. Win finish his work first
 « *Mr. Awɿn finished his work first.* »

	Predicate		
NP	VP	inner expansion	outer expansion

Ō lob kukuta farɿ. (Ideophone phrase)
he throw stone + DEF ideophone
 « *They throw the stone far away.* »

Ō lu tuɿi bup.
he fall ground (loc. NP) ideophone phrase

	Predicate			periphery
NP	VP	inner expansion	outer expansion	

Ba ne la'as taaba Asaa yiri zīna (postpositional phrase with periphery)
they FUT gather together Mr. Saa house + LOC today
 « *They throw the stone far away.* »

5.2.2.2 Serial clause

A clause may contain more than one predicate (usually two or three), and is then called a serial clause. In a serial clause only the first predicate contains preverbs and particles. In fact, the particles and preverbs occurring in the first predicate have a domain of reference that extends over all the predicates in terms of tense, time-depth, polarity etc.

Up to three predicates may be in juxtaposition without any connective. But more often a connective *ka* « *and* », *ka ne* « *and then* » may occur once between any two predicates in a serial clause type B.

5.2.2.2.1 Types of serial clauses

There are two types of serial:

Type A

This has a series of the same predicate (repetition of the same verb)

Example: (story 2)

Ka Awedaavk tat purugut, purugut, purugut, purugut ...

and Mr. Stalling have gallop gallop gallop gallop (ideophones)

« *And Mr. Stalling run constantly (repeatedly) ...* »

Type B

This is the more common type of serial and has different predicates. The aspect too, may occasionally be different, in certain places only.

Examples:

Ka ã da le leb kpě' ãaruŋ la ka tuŋ loŋ bẽuŋ la.

and he PAST again return enter boat DEF and go cross lake DEF

« *And he returned entered again the boat went cross the lake.* »

Normally, several clause types can co-occur in serial clauses.

Examples:

Baa ne buv da zo kě' mɔɔɔ.

dog and goat PAST run enter bush+LOC

intransitive locative

« *Dog and goat run and entered the bush.* »

Õ da be ẽne bura.

he PAST be be man

stative equative

« *He lived as a man.* »

Fu yē bo kaase ?

you see what cry

transitive intransitive

« What did you see that caused you to cry? »

5.2.2.2.2 Serial clause inner expansion

When two predicates of the same type share the same expansion (inner), the following may be stated:

A) Two transitive predicates

The expansion of nominal phrase (object) occurs after the first predicate:

Example:

Ō da yē pe'vok la da'.

he PAST see sheep DEF buy

« He saw the sheep and bought it. »

B) Two locative predicates

When there are two locative predicates with the same locative expansion, the locative nominal phrase occurs after the second verbal phrase:

Example:

Ba da tɪŋ paa Wa'aruk.

they PAST go reach Ouagadougou

locative locative

« They went and reached Ouagadougou. »

C) Two ditransitive predicates

The only example where the expansion is shared is with verbs of speech, and here the nominal phrase (indirect object) occurs as the expansion of the first predicate, and does not occur after the second predicate:

Example:

Ba tɔ'os mam yee ...

they tell me say that

ditrans. ditrans.

« They told me that ... »

5.2.2.3 Complex clause

The complex clause must have two predicates, which are in complex relationship. There are three types:

5.2.2.3.1 Initial auxiliary type

In this clause type the first predicate must contain an initial auxiliary verbal phrase, in which particles and preverbs may occur. This is followed by one or more predicates, of which the verbal phrase has no particles or preverbs. The initial auxiliary predicate does not have its own expansion.

	Initial auxiliary function:	General verb function:
mi	« ever »	« know »
tō'on	« be able to »	« be able to »
kpelen	« continue »	« remain »
pī'il	« begin »	« begin »
malg	« re-do »	« repair »

Examples: (initial auxiliary predicate underlined)

Tu pī'il pa'al v tvuma.

we begin show him work

« *We began to show him the work.* »

Õ me ne tō'on tɔ'ɔt kusaal

he also FUT be able to speak Kusaal

« *He will also be able to speak Kusaal.* »

Examples with two initial auxiliary predicates:

Mam pī'il tō'on tum tvuma.

I begin be able to work works

« *I begin to be able to work.* »

Mam le pī'il karēm.

I again begin read

« *I begin again to read.* »

5.2.2.3.2 Final auxiliary type

In this clause type the final predicate consists of a final auxiliary predicate. This may follow a simple or a serial clause. The final auxiliary predicate consists of a verbal phrase without particles and preverbs. The benefactive and the comparative final auxiliary predicates include an obligatory nominal phrase (object) as expansion. Completive and negative emphatic final auxiliary predicates do not have an expansion.

	Final auxiliary function:	General verb function:
benefactive:		
tu	« for »	« give »
comparative:		
gat	« more than/ better than »	« pass »
yãŋ	« exceed »	« conquer »
wãn	« like »	« resemble »
sõ't	« better than »	« be better »
completive:		
bas	« finish »	« finish »
guu	« fail to finish »	« fail to finish »
yε'es	« again »	« add »
negative emphatic:		
kε'ε	« not »	« not be, not have »

5.2.2.3.2.1 Beneficative auxiliary

The benefactive is made with the verb **tu** « give »:

Examples:

Fu ne tum tu ma.

you FUT work give me

« *You will work for me.* »

5.2.2.3.2.2 Comparative auxiliary

The comparative is made with the verb **gãŋ** « more than »:

Fu ãne bẽrut gãŋ ma.

you be big more than me

« *You are bigger than me.* »

5.2.2.3.2.3 Completive auxiliary

The completive is made with the verb **ya'as** « again »; **pa'as** « add »; **bas** « finish » :

Ba ne tuna do tu la ya'as.

they FUT come climb tree DEF again

« *They will come and climb the tree again.* »

Õ tum tuuma bas.

he to work work finish

« He finished the work. »

Example with two final auxiliary predicates:

Õ kɔ pook bas tɪ ã kpẽem.

he hoe farm finish give his elder brother

« He finished farming for his elder brother »

Example with an initial auxiliary predicate and a final auxiliary predicates:

Õ tõ'on kɔ pook gat ã kpẽem.

he be able to hoe farm pass his elder brother

« He is able to farm more than his older brother. »

5.2.2.4 Clause periphery

The clause periphery consists of the temporal phrase. All types may occur initial or final in the clause, as the periphery. When the temporal phrase occurs initially, it is usually followed by the connective *ka* « that ».

Examples:

Nananna mam kom dũmme.

now my stomach hurt+ +FOC

« Now I am hungry. »

Lahas daat ka mam tɪŋ wɪndooɪ.

Sunday day that I go church+LOC

« On Sunday I went to church. »

5.2.2.5 Front-shifted items

The following phrases may be front-shifted for emphasis:

- nominal phrase (object)
- adverbial phrase

Only one phrase may be front-shifted, and it replaces the initial periphery.

5.2.2.5.1 Nominal phrase (object)

The nominal phrase (object) may frequently be front-shifted in an interrogative clause.

The connective *ka* « that » is then added.

Examples:

Bo **ka** fu bɔɔt kpela?

what that you want here

« *What is it that you want here.* »

5.2.2.5.2 Adverbial phrase

Adverbial phrase may be front-shifted, and it is followed by the connective **ka**.

Examples:

Wela **ka** fu ẽŋ pɪ'v ?

how that you do basket

« *How do you make a basket?* »

Bala **ka** tɪ da tɪŋ Wa'arɔk.

thus that we PAST go Ouagadougou

« *It is like that that we went to Ouagadougou.* »

5.2.2.6 Non-verbal clause

The non-verbal clause may consist of one of the following:

- Nominal phrase
- Temporal phrase
- Adverbial phrase
- Exclamation phrase
- Ideophone phrase

Examples:

5.2.2.6.1 Nominal phrase:

Fu bii laa?

your child DEF+Q

« *(Is this) your child?* »

5.2.2.6.2 Temporal phrase:

Zĩna

today

« *Today.* »

Bo daaree?

what day+Q

« *What day?* »

5.2.2.6.3 Adverbial phrase:

Lanna

like that

« *Like that.* »

Wela?

how

« *How.* »

Exclamation phrase:

Kai !

Ideophone phrase: Yırrr...

5.2.3 Clause system

There is in the clause a series of obligatory choices. The following systems apply in the clause:

- Aspect: perfective / imperfective
- Polarity: positive / negative
- Tense: future / non-future

5.2.3.1 Aspect

The clause aspect system has two categories - perfective and imperfective. All clause classes carry this distinction. The verb is always either perfective or imperfective (see 4.1).

5.2.3.2 Polarity

The polarity system of the clause has two categories: positive and negative. All clauses carry this distinction. If one of the following negative particles is present, then the clause is negative:

- **bu** « *negative non -future* »
- **kun** « *future negative* »
- **da** « *imperative negative (don't, must not)* »

The negative terminal -e/ɪ is obligatory when the clause ends in a consonant. Often the final vowel is lengthened.

All verbs except for one are positive. When they occur without a negative particle, the clause is positive. However, one verb is invariably negative: kɛ'ɛ « not to be, not to have ».

In the same way only one adverb is negative: **kotaa** « *not at all, never* »

5.2.3.3 Tense

There is a tense system in which the categories are future and non-future. This is only shown in the presence or absence of the future particle, and affects the whole clause:

- **ne** « *future* »
- **kun** « *future negative* »

Tense restrictions:

The following clauses may not be future, and in these clauses only the non-future category is possible:

Imperative (4.1.3), Indirect imperative; Past conditional (4.2.12.), Past temporal (4.2.2), Temporal (4.2.1.3)

5.3 Phrase rank

5.3.1 Verbal Phrase

The verbal phrase functions in the verbal clause as the head of the predicate. In verbal clauses the predicate always occurs. The verbal phrase may be divided into two classes on the basis of function.

- **Class 1:** This class always occurs in every verbal clause. It functions as head of the predicate in the simple clause, and the head of the first predicate in serial and complex clauses.
- **Class 2:** This occurs optionally in the clause. It functions as head of the non-initial predicate in the serial or complex clause. It consists only of a verb.

Class 1

It consists of the following:

- Verb (one, obligatory)
 - Particles (one only, optional)
 - Preverbs (up to 3, optional)
- } total of three

Order of occurrence in the verbal phrase is shown in the following diagram:

Preverbs cl.	1 Preverbs cl. 2	Preverbs cl. 3	Particle	Verb
	P e r i p h e r y			N u c l e u s
len « <i>again</i> » kpen « <i>still</i> » pun « <i>already</i> » ka « <i>but also</i> » ya'a « <i>when</i> » naan « <i>then</i> »	time-depth: da « <i>more than a year</i> » daa « <i>under a year but more than a day</i> » sɔ / sa « <i>yesterday</i> » pa' « <i>past today</i> » saa « <i>tomorrow</i> »	yiti « <i>habitual</i> » yu'us « <i>now again</i> » nan « <i>now, yet</i> » da « <i>don't</i> » puɔvɔn « <i>anticipatory desire</i> » yu'un « <i>now, at last</i> » ti « <i>go to</i> » me « <i>also</i> »	ne « <i>future</i> » kvɔn « <i>future neg.</i> » bu « <i>non-future neg.</i> »	

In multiple occurrences of preverbs, a certain variability of order is possible. The verbal phrase may be a statement or imperative in form.

Example:

Ba yu'ʊn da bu nɔk ...
they then PAST NEG take
 prev. 1 prev. 2 part. verb

« *They then did not take ...* »

Class 2

This occurs optionally in the clause. It functions as head of the non-initial predicate in the serial or complex clause. It consists only of a verb. More than one may occur in a clause.

Example:

So' ya'a yel zɔ-kãŋa ye, ɔ vuum tuŋ ti li bẽuŋe, la sit ne maale.
somebody if say hill this that he uproot+IMP go go.to fall lake+LOC it truly FUT happen

« *If somebody says to this hill that it should uproot and go fall into the lake, it will truly happen.* »

5.3.2 Nominal phrase

5.3.2.1 Nominal phrase function

The nominal phrase is divided into six classes on the basis of function in the clause

- Nominal phrase
- Complement phrase
- Locative nominal phrase
- Postpositional nominal phrase
- Prepositional nominal phrase
- Vocative phrase

Maximal noun phrase:

Possessive pronoun / noun / adjective / numeral / def. article / all /

You don't get all these at any one time.

5.3.2.1.1 Nominal phrase

This first class functions as subject, object and indirect object in the clause.

Examples:

Mam sãam ti m ma ligiri la.
my father give my mother money DEF
 subject indirect object object

« *My father gave the money to my mother.* »

5.3.2.1.2 Complement phrase

This phrase functions as the obligatory complement in the equative type clause, and may consist of the following:

- Nominal phrase
- Adverbial phrase
- Prepositional phrase
- Temporal phrase

When the nominal phrase occurs as the complement, the following restrictions apply:

- the article may not occur
- the reflexive may not occur

Examples:

Nominal phrase:

M sām ēne sakut karēnsām.

my father equative school teacher

« *My father is a school teacher* »

Adverbial phrase:

Ba ēne lanna.

they equative like that

« *They are like that.* »

Prepositional phrase:

Ba tvuma ēne wub sā'vŋ ne.

their work equative like destruction with

« *Their work is like destruction.* »

Temporal phrase:

Zīna ēne Naa-duvk wārūk daat awet daare.

today equative August month day nine day

« *Today is the ninth of August.* »

5.3.2.1.3 Locative nominal phrase

The locative nominal phrase functions obligatorily as the inner expansion of the locative clause type, and optionally as the outer expansion of all clause types. The locative nominal phrase is divided into seven types on the basis of structure:

1. General locative
2. Non-loco-motion verb
3. Locative name

4. specific locative
5. Positional locative
6. Locative pronoun
7. Interrogative locative

5.3.2.1.3.1 General locative

This consists of a locative noun as head of the nominal phrase. It is optionally followed by the locative syntagmatic features: *ni* / *-i* / *-e* « *in, at* », *zuk* « *on, above* », *tɔŋt* « *under* », etc. This general locative phrase functions in the locative type clause, after a loco-motion verb *tɔŋ* « *go* », *kpě'* « *enter* », *do* « *climb* »

Examples:

<p>Ba da zo kpě' mɔɔ.</p> <p><i>they PAST run enter bush+LOC</i></p> <p>« <i>They run and entered into the bush.</i> »</p>	<p>Niiŋa be tu la zuk.</p> <p><i>bird exist tree DEF head</i></p> <p>« <i>The bird is on the tree.</i> »</p>
--	--

5.3.2.1.3.2 Non-loco-motion verb

The head of the phrase may be a locative noun or a general noun, but the final locative syntagmatic feature *ni* / *-i* / *-e* « *in, at* » ; *zuk* « *on, above* », is obligatory. The phrase follows a non-loco-motion verb.

Examples:

<p>Õ bus teebul la zuk.</p> <p><i>he see table DEF top</i></p> <p>« <i>He looked on the table.</i> »</p>	<p>Õ nɔk ligri la daka ni.</p> <p><i>he take money DEF box in</i></p> <p>« <i>He took the money in the box.</i> »</p>
--	---

5.3.2.1.3.3 Locative name

This consists of a place name as head of the phrase and is not followed by a locative marker.

Ba tɔŋ Wa'aruk.

they go Ouagadougou

« *They went to Ouagadougou.* »

5.3.2.1.3.4 Specific locative

The first head of this complex phrase is usually animate or personal, but it may be an item. This head is a non-locative noun, and follows a loco-motion verb, in the locative clause type.

The second head of the complex phrase is the noun *zĩ'i* or *baba* « *place* ». The locative marker *ni* « *in, at* » usually occurs phrase final, but may be omitted.

Mam da tuŋ Wa'aruk m kpě'em zĩ'i. (or *baba*)

they PAST go Ouagadougou my elder brother place

« *They went to Ouagadougou to my elder brother's place.* »

5.3.2.1.3.5 Positional locative

The distinguishing feature of this type of locative phrase is the presence of a positional noun. These are usually parts of the body. The positional noun is usually followed by the locative marker *ni* / *-ɩ* / *-e* « *in, at* »

noun		positional noun	
puut	« stomach »	puuɩ	« inside »
nɔɔt	« mouth »	nɔɔɩ	« at »
tɔɔn	« front »		
poon	« behind »		
lɔgɔt	« side »		
zuk	« head »		
tɩŋɩt	« ground, bottom »		
tille	« underneath »		
suuk	« middle »		
yã'aŋ	« behind »		
gẽevk	« under »		
kpɛ'ɛ	« besides »		
babuk	« towards »		

Examples:

Õ be yita poon.

he exist house + DEF behind

« *He is behind the house.* »

Tɩ be yita puuɩ.

we exist house + DEF inside

« *We are in the house.* »

5.3.2.1.3.6 Locative pronoun

There are three locative pronouns *kpela* « *here* », *kpe* « *there indefinite* », and *nina* « *there* ».

Bii la be nina.

child DEF exist there

« *The child is over there.* »

5.3.2.1.3.7 Interrogative locative

The locative interrogative transform of all locative phrases is **yaa** « *where?* » or **yaanee?**
This functions in the interrogative clause class.

Bii la be **yaanee?**

child DEF exist where

« *Where is the child?* »

5.3.2.1.4 Postpositional nominal phrase

This functions in the outer expansion of the predicate of the clause. It could be confused with the locative phrase since it has the same syntagmatic features. It differs from it in:

- having an unrestricted nominal phrase
- co-occurring with an unrestricted range of verbs
- always being in the outer expansion of the clause
- having a different interrogative transform

It consists of an unrestricted nominal phrase, followed by the syntagmatic features **ni** « *in at* », **yela** « *about, matter* »

Examples:

Wɪn be tɪ tɔɔn **bɪn-se'ε zã'asa ni.**

God exist us front things some all in

« *God was before us in everything.* »

Mam da bu mi kɔ'ɔm lisuk **yela.**

I PAST NEG know water baptism about

« *I did not know about water baptism.* »

Interrogative transform:

The following example shows the possibility of the nominal interrogative occurring in this phrase:

Fu da pɪ'ʊs Nawɪn anɔ'ɔn yelaa?

you PAST pray God who agout/for + Q

« *Who did you pray for?* »

5.3.2.1.5 Prepositional nominal phrase

The prepositional nominal phrase functions in the clause as part of the outer expansion of the predicate. The demarcational syntagmatic feature of the phrase is **ne** « *with* », which appears phrase initial.

There are eight subclasses as follows:

5.3.2.1.5.1 Accompaniment prepositional phrase

The nominal phrase has an animate head.

Mam da tuŋ da'au **ne õ**.

I PAST go market + LOC with him

« *I went to the market with him.* »

5.3.2.1.5.2 Instrumental prepositional phrase

The nominal phrase has as head a noun that is semantically an instrument.

Ba wē' v **ne balaya**.

they beat him with sticks

« *They beat him with sticks.* »

This can be a transformation of the following serial clause:

Ba nək balaya wē' v.

they take sticks beat him

« *They beat him with sticks.* »

5.3.2.1.5.3 Adverbial prepositional phrase

The nominal phrase has a head consisting of a noun of quantity or an abstract noun.

Ba kul **ne laafe**.

they go home with health

« *They went home in good health.* »

Ba yum yuma **ne pãŋ**.

they sing songs with strength

« *They sang songs with power.* »

5.3.2.1.5.4 Referential prepositional phrase

The nominal phrase is unrestricted.

Õ sūut mas **ne õ ne tum se'emma**.

his heart be pleased with he SUB work how + DEF

« *He is pleased with (concerning) how he worked.* »

5.3.2.1.5.5 Temporal prepositional phrase

The nominal phrase is replaced by a temporal phrase.

Lanna yela wãaŋ kē'et mɔɔ **ne zīna**.

this + DEF reason monkey live + IMPF bush + LOC up-to today

« *Therefore the monkey lives in the bush until today.* »

5.3.2.1.5.6 Locative prepositional phrase

The nominal phrase has a locative noun as head.

Ba bɛɛl tɪ ne Wa'aruk.

they accompany us as-far-as Ouagadougou

« *They accompanied us Ouagadougou.* »

5.3.2.1.5.7 Measurement prepositional phrase

The nominal phrase has a head showing measurement, followed by a numeral as modifier.

Ba zã'asa tɪj ne wɔv kilomɛta anaas-naas

they all go about like kilometer four four

« *They all went about four kilometers each.* »

5.3.2.1.5.8 Simile prepositional phrase

The nominal phrase is unrestricted, except that a pronoun must be emphatic. The initial mark may be **wɔv** « *like* » and the final marker is **ne** « *with* » (or **na** in the interrogative transform) or **sɛ'emma** « *like* ».

ka kɛ'ɛ wɔv gbãmirip la ne zãmɪst sɛ'emma.

and not like scribes DEF SUB teach like DEF NEG

« *... and not like the scribes teach.* »

Tu la wãn ne kãŋkãŋ ne.

tree DEF resemble with fig tree with

« *The tree resembles a fig tree.* »

Interrogative:

Buraa la ãne ne anɔ'ɔn na?

man DEF be with whom Q

« *The man is like whom?* »

5.3.2.1.6 Vocative phrase

The vocative phrase functions as an extra-periphery of the sentence, functioning in conversation and monologue type discourse. The vocative noun has its full class suffix.

M biiya, bɪsum kpela.

my child look + IMP here

« *My child, look here.* »

5.3.2.2 Nominal phrase structure

The nominal phrase consists of

- Noun(s)
 - Pronoun(s)
 - Name
- } as nucleus
- Attributives (three types) as periphery

5.3.2.2.1 Nominal phrase periphery

The nominal phrase periphery has been divided into three types on the basis of position:

1. Type A has a fixed position
2. type B has a variable position within type A
3. type C usually occurs without any other modifier

Type A

This modifier consists of general modifiers and is sub-divided according to position:

Pre-head: positional

This subtype consists of **yu** « first » and **kpãat** « last »

yu bun « first thing »

bupɔŋ kpãat « last girl »

Post-head 1: reflexive mɛŋ « itself »

This can only occur with a personalized head. It may not occur between nuclei of a complex nominal phrase. It may co-occur with other modifiers.

bii mɛŋ « child himself »

ba mɛŋ « they themselves »

Post-head 2: numeral

This consists of a numeral, which, in its complex form has phrase structure.

Baas anu. Nirip pii ne ayi.

dogs five *people ten and two*

« Five dogs. » « Twelve people. »

Post-head 3: several

This consists of **berɔgv** « many / much », and **paa** « many, excessively »

Sikit berɔgv « much sugar »

wabit paa « many elephants »

Post-head 4: totalizer

This consists of the following: **kpãa** « all »; **wusa** « all » **zã'asa** « all »; **kãm** « every, each »; **woo** « all », **wuu** « all »

These differ from other modifiers in that more than one of the sub-type may co-occur.

So' kam zã'asa

someone every all

« Each and everyone »

Post-head 5: restrictive

This consists of **ma'a** « only » and **kõ' / kõ'o kõ'** « alone »

buguzũ'us ma'a « smoke only »

Type B

This consists of the article which may be either of the following: **la**, **-ma**, **-na**, **-a** « the »

The article has two functions in the nominal phrase: a) to give focus to the head; b) as a feature of the discourse, showing that the head has already been mentioned. The article follows the head but has a slightly variable order in the nominal phrase when other peripheral items occur:

Nii pii la

cows ten DEF

« The ten cows »

nii pii la zã'asa

cows ten DEF all

« All the ten cows »

Type C

There are two subtypes of relative, only one of which may occur in a nominal phrase.

1. Relative demonstrative

This follows the nucleus, and often occurs as the only peripheral item but it can be followed by the article. **-kãŋa** « that » **-kãnna** « that one (with article -na) », **-bama** « those »

bura-kãŋa « that man »

bura-bama « those men »

2. Relative clause

This follows the nucleus and consists of the relative clause (see 5.2.1.2.5.)

Biis ne bu mɔt ligiri la ...

children SUB NEG have money DEF

« The children who do not have money ... »

5.3.2.2.2 Simple nominal phrase

The simple nominal phrase has a nucleus consisting of one head. It may be subdivided into five types because of different heads and different peripheral restrictions:

- A) Noun
- B) Pronominal
- C) Name
- D) Restricted
- E) Interrogative

Type A Noun

This sub-type may take all peripheral items and consists of any noun as head, except those in types C, D and E below.

Examples: bii « *child* »; yit « *house* »; yem « *wisdom* »

Type B Pronominal

1. Emphatic pronoun. All peripheral items may occur except positional (*yu* « *first* » and *kpāat* « *last* »). Peripheral items are not as common as with the general nominal phrases.

tvn zã'asa « *we all* »

2. Non-emphatic pronoun. All peripheral items may occur except positional.

ba woo « *them all* »

õ kō'o kō' « *he only* »

Type C Name

1. Name of person - there may be two or three in one phrase. All names are preceded by the personating prefix –A.

2. Name of place

Peripheral items are restricted to: reflexive with persons only, restrictive, and relatives.

Asaa meŋ « *Mr. Saa himself* »

Agbigum kō'okō « *Mr. Lion only* »

Type C Restricted

The heads of this type have a limited periphery.

1. They may occur

- alone: e.g. so' « *someone* » So' tuna. « *Someone came.* »

seba « *some, some people* » Seba tuna. « *Some people came.* »

- as head of the nominal phrase:

e.g. so' woo « *each and every one* »

- often they are in fact adjectives and occur compounded with another noun.

Bi-seba bɔɔt ki. « *Some children want millet.* »

- it may be qualified by a relative complex

ni-sebune be kpelaa, .. « *Those people who are here / some who are here ...* »

Type E Interrogative

The head of this nominal phrase is the interrogative noun, or the head may be qualified by an interrogative adjective. There are no peripheral items.

anɔ'ɔ ? « *who?* »

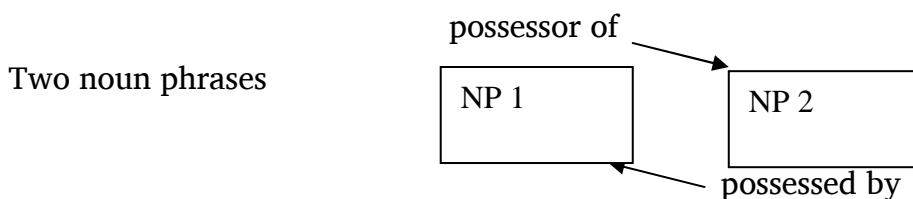
bo ? « *what?* »

ni-kāne « *which person?* »

5.3.2.2.3 Complex nominal phrase

This has more than one simple nominal phrase, occurring in juxtaposition. The simple nominal phrases are in complex relationship showing possession. The preceding nominal phrase is the possessor of the following one. Thus the middle one of three is possessed by the preceding nominal phrase head, and possesses the following one.

Diagram to illustrate this:



Example:

Na'ap wef

chief horse

« *Chief's horse / horse of the chief* »

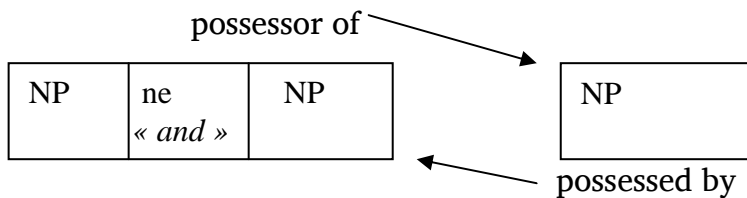
The first nominal phrase in the complex differs from the following ones:

It may consist of a serial nominal phrase functioning recursively. The second and third nominal phrase in the complex phrase may only be simple.

Asaa ne Awɪnpɔka biis

Asaa with Awɪnpɔka children

« *The children of Asaa and Awɪnpɔka.* »



On the basis of type of head, the complex nominal phrase is divided into five types:

- F) Nominal possessive
- G) Pronominal possessive
- H) Name possessive
- I) Interrogative possessive
- J) Ownership possessive

Type F Nominal possessive

In this type simple nominal phrase type A may occur in any order, in juxtaposition:

Examples: (possessor underlined)

- bunkəbūt dup « *animals' food* »
- na'ap yit « *chief's house* »
- ɔ'a la ma tuɲ « *the woman's mother's village* »

The locative nominal phrase or the postpositional nominal phrase may occur within the nominal phrase as possessor:

- nirip sūut ni tē'esuk
- people heart in thought*
- « *Thoughts of people's hearts.* »

Type G Pronominal possessive

In this type, the first nominal phrase is a pronoun nominal phrase. This pronoun is rarely qualified when functioning as possessor, but it may.

Examples: (possessor underlined)

- ba gbāna « *their books* »
- ba zā'asa gbāna « *their all's books* »
- tɪ ba' kvut « *our father's funeral* »
- bane tum la bal « *they who work's place / the place of those who work* »

Type H Name possessive

In this type the simple nominal phrase, type C, Name, is the initial possessor. It is followed by a simple nominal phrase or by the possessive phrase, or by the serial nominal phrase.

- Awɪn biis « *Awɪn's children* »

Zabut nirip

« *the people of Zabré* »

Type I Interrogative possessive

the simple interrogative nominal phrase, type E, occurs initial in the possessive phrase as possessor:

Anɔ'ɔn bun ? « Who's thing? »

Bo bun ? « what thing? »

Type J Ownership possessive

The noun *dēn* « *belongings, belonging to* » occurs finally in the phrase. This noun may only occur in possessive form.

m dēn « *mine* »

zīna dēn « *today's share* »

Asaa dēn « *belonging to Mr. Asaa* »

5.3.2.2.4 Serial nominal phrase

This may consist of any two or more simple or complex nominal phrases.

The pronominal nominal phrase (when not possessor) must be an emphatic pronominal phrase, unless the reflexive occurs. The nominal phrases are connected by **ne** « *and* » or **bee** « *or* ».

These may not be mixed in the same serial nominal phrase.

Examples:

Nit ne baa ne do^bii

person and dog and cat

« *A person and a dog and a cat.* »

Ō mɛŋ ne ō biis

he himself and his children

« *He himself and his children.* »

Mam ne fu

I.EMPH and you

« *Me and you.* »

Buraa bee bu^pɔk

man or woman

« *a man or a woman.* »

5.3.2.2.5 Numeral nominal phrase

This functions primarily as a peripheral item of the nominal phrase and temporal phrase and adverbial phrase type C. It may also function as head of the nominal phrase in a pronominal capacity, when the head that it would normally qualify is understood.

The numeral phrase may be simple, complex or serial, but unlike other forms of the nominal phrase, it has a fixed form and order, which necessitates its separate description.

Type A Simple numeral phrase

This consists of a number from any of the numeral words.

kobuk « *hundred* »; tvsit « *thousand* », baas ayi « *two dogs* »

Type B Complex numeral phrase

This consists of a numeral in plural form, followed by a numeral in singular form (not *arakõ* « *one* »). The first numeral functions as the head; the following one as the periphery.

kobus yi « *two hundred, 200* »

hundreds two

tvś atã « *three thousand, 3'000* »

thousands three

pis nu « *fifty, 50* »

tens five

Type C Serial numeral phrase

This consists of more than one numeral phrase, type A or B above, linked by the syntagmatic feature *ne* « *and* ».

The order of occurrence is invariable and is as follows:

Thousands *ne* « *and* » hundreds *ne* « *and* » tens *ne* « *and* » one to nine *ne* « *and* » halves.

So long as the correct order is maintained, any of the above numeral word class may be omitted.

Examples:

kobus yi ne pisnaas ne atã « *two hundred and forty three, 243* »

hundreds two and tens-four and three

Type D Interrogative

The numeral interrogative is *alε* « *how many?* » or *bale* « *how many?* »

Nirip alε tnaa ?

people how many come + Q

« *How many people came?* »

5.3.2.2.6 Appositional nominal phrase

The appositional nominal phrase is a second, additional nominal phrase, occurring in the same clause place as the phrase it is an apposition to. It usually occurs without a connective.

The appositional nominal phrase may be divided into the following types:

- A) Specifying
- B) Summarizing
- C) Split appositional
- D) Double appositional
- E) Listing

Type A **Specifying appositional nominal phrase**

In this type, the appositional nominal phrase immediately follows the phrase it is in apposition to. This type gives more specific information.

Õ, wabok, mət pāŋ gat bɔnkōbut wuu məw.

he elephant have strength pass animals all bush + LOC

« *He, the elephant, has more strength than all the animals in the bush.* »

Type B **Summarizing appositional nominal phrase**

In this type the appositional nominal phrase immediately follows the phrase that it is in apposition to. The apposition phrase is usually a non-emphatic pronoun or interrogative, occurring as a summary of a preceding phrase, which is usually long.

Kpaata ne Õ pɔ'a la, ba names ti me.

farmer + DEF and his wife DEF they trouble us FOC

« *The farmer and his wife, they troubled us.* »

Type C **Split appositional nominal phrase**

In this type, the phrase in apposition does not occur in juxtaposition to the phrase it is in apposition to.

1. Subject apposition. The appositional nominal phrase occurs clause final, and adds more information.

Õ tuŋ məw, Õŋa ne Õ taaba.

he go bush + LOC he and his colleagues

« *He went into the bush, he and his colleagues.* »

2. Indirect object apposition. The appositional nominal phrase occurs clause initial.

Õne ne tō'on tō gbɔgɔmma, m ne tis ɔ m pɔ'ɔyɔk.

he-who FUT able-to shoot lion + DEF, I FUT give him my daughter

« *He who will shoot the lion, I will give him my daughter.* »

3. Object apposition. The appositional nominal phrase occurs clause initial.

Sā'ata, ba bu kɔɔr vu.

bush land + DEF they NEG hoe + IPF it + NEG

« The bush land, they don't hoe/farm it. »

Type D Double appositional nominal phrase

It is possible for two appositional phrases to occur, forming a double appositional phrase.

Tu ma bii, Asaa, ã daa tina.

our mother's child Asaa he PAST come here

« Our mother's son, Asaa, he came here. »

Type E Listing appositional nominal phrase

Nominal phrases may occur in juxtaposition as a list, and together they form a whole, which may be a subject, or object etc.

Yooŋ, yi, tã, naasi, nu

one two three four five

« One, two, three, four, five. »

5.3.3 Adverbial phrase

The adverbial phrase functions in the clause in four ways:

1. In the predicate outer expansion, following the verbal phrase and inner expansion.
2. Type B below may occur front-shifted in the clause.
3. In the non-verbal clause.
4. Type B and C may occur as the complement phrase (see 5.3.2.1.2)

On the basis of the above function and of structure, the adverbial phrase may be divided into five types.

Type A

These are single adverbs, although many may be repeated for emphasis.

Examples:

hali « much », *kotaa* « not at all », *kikiuŋ* « early », *sumega* « well, carefully », *svŋa* « well », *pai* « well illuminated », *paa* « very much », *fã* « fine », *ye'es / ya'as* « again », *me* « as well ».

M pu'us fu paa.

I thank you much

« I thank you very much. »

Type B

This type may occur in the clause outer expansion, and may also occur front-shifted in the clause. It may also function as the complement phrase (see 5.3.2.1.2). It consists of adverbs like:

wāna , *lanna* « *like that* », *bo* « *why* », *wela* « *how* »

Wāna ka ti ne zāmes kusaal sumeri.

like-that that we FUT learn Kusaal well

« (It is) like that that we will learn Kusaal well. »

Bo ka ò bu tuna?

what that he NEG come here

« Why did he not come? »

Fu sāam gbā'an wela ?

your father sleep how

« How did your father sleep? »

Type C

This type may occur in the clause outer expansion, and as the complement phrase. It consists of adverbs like *yu* « *first* », *kpāat* « *last* », *lanna* « *like that* »

Õ tuna yu.

he came here first.

« *He came first.* »

Type D

This type occurs in the clause outer expansion. It consists of a nominal phrase, the head of which is *nɔ'ɔt* / *nɔba* « *foot / feet* », meaning here « *times* ». A numeral must qualify the head.

Õ da tuna nɔba atã.

he PAST came times three.

« *He came three times.* »

Type E

This type occurs in the outer expansion of the clause or as the complement phrase. It functions only in dependent clauses. It consists of the noun *sɛ'em* « *equal* ».

Õ pa'al ti Wɪn ne sɔŋ v sɛ'em la.

he show us God SUB help him equal DEF

« *He showed us how God helped him.* »

Õ pa'al ti la da ne ã sɛ'em la.

he show us it PAST SUB be how DEF

« *He showed us how it was.* »

5.3.4 Temporal phrase

5.3.4.1 Temporal phrase function

The temporal phrase may function in the following three ways:

1. In the initial or final periphery of the clause.

Dona la, ti ye ti tuŋ me ti ke' sā'ata.

this year DEF we want we go FOC go.to cut bush + DEF.

« This year, we want to go to cut the bush land. »

Ti ye ti tuŋ ti ke' sā'ata zīna.

we want we go go.to cut bush today

« We want to go to cut the bush today. »

2. The temporal phrase may function in the nonverbal clause.

Bo daaree ?

what day + Q

« What day? »

Zīna.

today

« Today. »

3. The temporal phrase may function, occasionally, as the nominal phrase (subject), or (object), or as the complement phrase.

Zīna ē Naa-duuk wārik dabis pii daat.

today be August month day ten day

« Today is the tenth of August. »

M boot m bāŋ bun zā'asa basuk sāŋa.

I>EMPH want I know things all end time

« I want to know the time of the end of all things. »

5.3.4.2 Temporal phrase structure

The temporal phrase is similar to the nominal phrase in structure. It is divided into twelve types on the basis of structure. There are simple temporal phrases and complex ones.

Type A

This consists of one temporal noun head, optionally followed by a peripheral item.

Ba da tna nək v yu'uŋ.

they PAST come catch him night

« They came and caught him at night. »

Yu'uŋ zā'asa ō be yiri.

night all he be house + LOC

« Every night he is in the house. »

Type B

1. This consists of a temporal noun like *wārik* « month », *daat* « day », *sāŋa* « time », *yuum* « year », obligatory followed by a qualifier.

Õ da tɨŋ Gaana yuum-kāna.

he PAST go Ghana year that.

« He went to Ghana that year. »

Wārik woo ò tɨŋ Wa'aruk.

month every he go Ouagadougou

« Every month he goes to Ouagadougou. »

2. The quantifier can be a numeral:

Õ tuna keef anu.

he come hour five

« He came at five o'clock. »

Wāris anaasi ka ò tɨŋ Zabú.

months four that he go Zabré

« It was for four months that he went to Zabré. »

Type C

This consists of a temporal noun head with an adjective **-sɛ'ɛ** « some, any ». Qualifiers do not occur.

Daa-sɛ'ɛ ka ò tɨŋ Yvu.

day some that he go Yougo

« Someday, he went to Youga. »

Type D

This consists of a temporal phrase, followed by **poon** « after, behind ».

Daba anii poon ka ba kul.

days eight after that they go home

« After eight days they went home. »

Complex Temporal Phrase

It has more than one head in a complex relationship.

Type E

This has as the possessed head the temporal noun **daat** « day » or **wārik** « month ». It is divided into two subtypes:

1. The temporal noun is possessed by the days of the week or month of the year.

Tɨŋ daat

Monday day

« Monday. »

Yuum-paal wārik.

year new month

« January. »

Lahat daat zā'asa.

Sunday day all

« Every Sunday. »

2. A temporal noun, usually **daat** « day » preceded as possessor by a non-temporal noun.

Qualifiers may occur phrase final.

Kvut daat.

funeral day

« Funeral day. »

Õ dɔ'ɔm daat.

his birth day

« His birthday. »

Ɔɔt wārik wusa

cold month all

« Every cold month. »

Type F

This consists of a temporal noun like *beevk* « morning », *zaa-nɔ'ɔt* « early evening », *zaam* « evening », *yu'vɲ* « night », preceded as possessor by a temporal noun like *zīna* « today », *sɔ'ɔs* « yesterday » or by a temporal phrase type E. Qualifiers may occur.

Sɔ'ɔs zaa-nɔ'ɔt.	Zīna beevk.	Arzūm daat yu'vɲ.
<i>yesterday evening</i>	<i>today morning</i>	<i>Friday day night</i>
« <i>Yesterday evening.</i> »	« <i>This morning.</i> »	« <i>Friday night.</i> »

Type G

This consists of temporal phrase type B 2, followed by the singular form of the same temporal word.

Dabs anaasɪ daat	Yuma atā yuum.
<i>days four day</i>	<i>years three year</i>
« <i>On the fourth day</i> »	« <i>In the third year.</i> »

Type E may also be followed by a numeral, and then by the singular form of its possessed head:

Lamisa daat ayi daat.

Thursday day two day

« *On the second day after Thursday* »

Serial Temporal Phrase

Type H

A temporal phrase may be a serial construction:

nintɛɲ ne yu'vɲ	Uun ne sēevk
<i>sunlight and night</i>	<i>dry season and rainy season</i>
« <i>Day and night</i> »	« <i>Dry season and wet season</i> »

5.3.5 Ideophone phrase

5.3.5.1 Ideophone phrase function

The ideophone phrase may function in two ways in the clause:

1. As the ideophone is in the outer expansion of the clause. This is a restricted type of adverbial phrase, forming a semantic expansion of the verb.

Ka Asɔ'ɔɲ dɔɔ le tat zoo bala fil fil, fil fil, fil fil.

and Mr. Hare get up again have running thus fil fil fil fil fil fil

« *And Mr. Hare rose up again and run continuously fil fil fil.* » (*running sound*)

2. As a non-verbal clause, after an introducer clause, functioning as though it were quoted speech, but having ideophonic function.

Ka ba ẽŋ fur fur fur, ba kpẽ'eya. (Story 7)

and they make fur fur fur enter

« *They entered one after the other.* »

The introducer clause may be reduced to the abbreviated speech introducer (see discourse 5.5.2.1), which consists of the pronoun subject followed by **ye** the syntagmatic feature « *that* ». In this case, however, the meaning is not « he said that », but rather « he did that », and the ideophone represents the verb as well as the sound it makes:

Õ ye bap bap bap bap

he that bap bap bap bap

« *He did bap bap bap bap ...* » (*bounding-away sound*)

5.3.5.2 Ideophone phrase structure

The ideophone phrase structure consists of an ideophone, usually depicting a sound or a movement. This may be repeated once or many times.

Au, ka ã sũuta yv'ũn tat piuu, piuu, piuu.

ah and his heart +DEF then have piu piu piu

« *Ah, his heart then made piu, piu, piu.* » (*Heart beating sound*)

5.3.6 Exclamatory phrase

The exclamatory phrase is divided into two classes on the basis of function.

Class 1

This consists of general exclamations (phrase types a) and b) and functions only in conversation and monologue type discourse.

This class occurs in two places:

a) Outside the initial periphery of the sentence. If the vocative phrase occurs sentence initial, then it precedes the vocative phrase:

Ai, ã walũm me bala.

ah he hurry up +IMP also like that

« Ah, he should hurry up. »

b) As the non-verbal clause, which functions as the non-verbal sentence. In this subclass, nominal phrases may occur as insults, either with or without exclamatory sound.

Õ ye kaai !

he say that —

« *He said 'kaai' (no way out)! »*

Class 2

This consists of the exclamation **to** « *OK* » or **haya** « *well then* » which may not be expanded, or repeated.

The exclamation occurs as feature of several ranks. It may be paragraph initial, sentence initial, or clause initial. It is a narrator-exclamation within discourse, and is adding focus to what follows.

Examples: (all the examples below are from story 1)

Paragraph initial

Haya, buraa la ne boot ye õ ku zɔ'omma, me tart õ biis.

well then man DEF SUB want that he kill blind+DEF also have his children

« Well, the man who wanted to kill the blind man, had also children. »

To, ka la ne tɔ'ɔ be'ela la, biis ayi la zã'asa kpime.

OK and it SUB pass time little DEF children two DEF all die+FOC

OK, after a little while, both children died. »

Sentence initial

... ka ne õ lebis mubul. **Haya**, zɔ'omma ne paana la, ka õ nɔk pãanɔ la tu v.

and with he return in shape well then blind+DEF SUB arrive.here DEF and he take bread DEF give him

« ... and he put it back into shape. Well, when the blind man arrived, he gave him the bread. »

5.4 Word rank

Only the function of the word is described. Within the word rank, there are two classes:

- Words. These function in the phrase rank
- Syntagmatic features. These are mainly free form particles, which function at all ranks above the word.

5.4.1 The verb and its attributives

5.4.1.1 Verbs

The verb functions as the head of the verbal phrase. All verbs have a dual classification.

- The primary classification of verbs is based on their function in different clause classes.
- The secondary classification of verbs is based on their function in different clause types.

In these classifications the verb functions in the verbal phrase in the clause.

5.4.1.1.1 Verbs - primary classification

5.4.1.1.1.1 Verb Class 1: General verbs

These verbs are unrestricted and form the largest class. They function as head of verbal phrase classes 1 and 2i. When occurring in verbal phrase class 1, which occurs first in the clause, they may be statement or imperative in form; when occurring in class 2i, which occurs second in a serial clause, they may only be statement.

Class 1 may be subdivided into three subclasses:

Subclass 1

This subclass consists of non-introducer verbs, and is by far the largest class. They function in verbal phrase class 1 and 2i. The following are examples:

sak « *accept* », tum « *work* », yě « *see* », di « *eat* »

Õ da lu tuŋt kaastě.

he PAST fall ground+LOC crying+FOC

VP 1

VP 2i

« *He fell on the ground and was crying.* »

Subclass 2

This consists of introducer verbs, which is a limited class of verbs. They consist of the following:

a) Verbs of speech:	for example:	yel	« say »
		tɔ'ɔs	« tell »
		kaas	« cry »
b) Causative verbs:		ke	« cause, allow »
c) General introducer verbs:		bɔɔt	« want »
		sum	« be good that »
		ye	« be about to » (only introd. verb)
		tu	« be about to » (movement, purpose)
		tē'es	« think »
		yē	« see »
		mi'	« know »
		bãŋ	« get to know »
		pa'al	« show, teach »
d) Question verbs:		bɔ'ɔs	« ask »

These verbs function in two ways:

A) As introducer verbs, occurring as head of verbal phrases class 1 or 2i, but never followed by another verbal phrase 2i. A verbal phrase containing an introducer verb functions in the introducer clause in the complex sentence.

Examples:

Õ bu yel ye ò ē bii.

he NEG say that he be child

« He did not say that he is a child. »

La sum ye ba kɔ ki.

it be good that they farm millet

« It is good that they farm millet. »

B) As non-introducer verbs, functioning in the same way as subclass 1 verbs.

Sɔta da bu sum.

road + DEF PAST NEG ge good

« The road was not good. »

Subclass 3

This subclass consists of 'noun-causing verbs' and consists of the following:

gu'v	« fail »	yɔɔ	« approach »	zɛ'el	« stop »
paae	« approach »	bas	« leave »	kõ'oŋ	« fail to possess »

They may not be followed by a verb in verbal form but by a noun.

Kō'ŋ ma mɔ'ɔt yaap. (proverb)

fail mother sucking grandmother

« (if you are) Failing to possess a mother (to suck), sucks grandmother ('s breast). »

Õ bas õ tvuma.

he leave his work

« He left his work. »

5.4.1.1.1.2 Verb Class 2: Initial Auxiliary Verbs

These consist of the following:

	Initial Auxiliary function:	General verb function:
mi'	« never, ever »	« know »
tõ'on	« be able to »	« be able to »
tat	« continue »	« have, possess »
pĩ'il	« begin »	« begin »
malg	« re-do, improve »	« repair, arrange »
nɔk	« use »	« take » e.g. õ nɔk su'v wã' nimma.

These may be statement or imperative in form and function in two ways:

a) As initial auxiliary verb, occurring as head of verbal phrase class 1, when followed by another verbal phrase:

Ba tās v yee: « Kel vuut. » Ka õ malg tās ne pãŋ.

they shout him say stop make noise and he re-do shout with strength

« They shouted at him saying: 'Stop the noise.' But he cried even louder. »

b) As general verb, still occurring only as head of verbal phrase class 1, when not followed by another verbal phrase:

Õ malg õ wef.

he repair his bike

« He repaired his bike. »

5.4.1.1.1.3 Verb Class 3: Final Auxiliary Verbs

These consist of the following:

	Final Auxiliary function:	General verb function:
Benefactive:		
tɪ, tɪs	« for »	« give »
Comparative:		

gat	« more than, better than »	« pass »
yāŋ	« exceed »	« conquer »
wān	« like »	« resemble »

Completive:

ba'as	« finish »	« finish »
gu'v	« fail to finish »	« fail to finish »
ya'as	« again »	« add »
bas	« to do away »	« leave » e.g. lob bas « throw away »

Negative emphatic:

ke'ε	« not »	« not be, not have »
------	---------	----------------------

Final auxiliary verbs function in two ways:

a) As final auxiliary verbs, occurring as head of verbal phrase class 2ii, following one or more verbal phrases. When functioning in this way, they may be only statement in form.

Ō kɔ̃ pook tɪ̃ ō ba'.	Nawɪn tat pāŋ gat bun woo.	Ō dɪ sa'ap ba'as.
<i>he hoe farm give his father</i>	<i>God have strength pass thing every</i>	<i>he eat TZ finish</i>
« He farmed the field for his father. »	« God is stronger than everything. »	« He finished the TZ. »

b) As general verbs in verbal phrase class 1, when not preceded by a verbal phrase. When functioning in this way they may be imperative in form as well as statement.

Statement:

Ba tɪ̃ v ligiri.
they give him money

« They gave him money. »

Imperative:

Tɪm v ligiri !
give + IMP him money

« Give him money! »

5.4.1.1.2 Verbs - secondary classification

These are classified according to function in clause types. There are seven subclasses:

Examples:

1. Intransitive	gbīs	« sleep »	zo	« run »	vo'os	« rest »
2. Locative	tɪŋ	« go »	do	« go up »	gat	« pass »
3. Transitive	mɔt	« have »	yē	« see »	dɪ	« eat »
4. Ditransitive	pa'al	« show »	tɪ	« give »	yel	« say »
5. Equative	ē	« be » (closed class)				

6. Stative	be	« exist »	gbã'a	« be lying »	berum	« be big »
7. Impersonal	tɔɪ	« be difficult »				
	mas	« be sweet »	sõ'e	« better »	(Stative verbs)	

5.4.1.2 Verbal particles

These function in the verbal phrase, immediately before the verb head. The particles consist of the following:

bu	« non-future negative » and a clitic on the final word of the clause (Spratt:31)
ne	« future, will »
kun	« future negative, will not »
da	« imperative negative, don't ...!, should not »

5.4.1.3 Preverbs

After the subject can come various preverbs relating to the time and manner of functioning of the action. Occasionally, two or three preverbs can occur together; however, the exact rules for determining the order in which they will come are not yet clear.

Preverbs occur before the verb, though there are several preverbs that may occur as adverbs following the verb (e.g. *ya'as* « again »). Preverbs function in the verbal phrase class 1, occurring before the verbal particles. The time-depth preverbs are more frequent in occurrence than other preverbs.

5.4.1.3.1 Class 1: Time-depth preverbs

This class of preverbs consists of the **time-depth** (TD) preverbs, of which only one may occur in a verbal phrase. They occur in the second place in the preverb order (see 5.3.1).

The preverbs function in verbal phrase class 1 i and ii a. they consist of the following:

da	« more than a year »
dāa	« under a year, but more than a day » with <i>dāa</i> some verbs have mid tone, some high tone (Sprat:28) e.g. <i>ò dāa kũl.</i> « He went home. »
sɔ / sa	« one day removed, yesterday » with <i>sà</i> every verb has the same tone, low (Sprat:28) <i>ò sà kùlìyā.</i> « He went home yesterday. »
pa'a	« past today, earlier today »
sáa	« tomorrow » e.g. <i>m̄ sáa nè t̄ŋ.</i> « I will go tomorrow. »

5.4.1.3.2 Class 2: Auxiliary verbs

Some of the Kusaal **auxiliary** verbs in alphabetical order:

kpelɪm	« suddenly, just »
--------	--------------------

kə'ɔn	« <i>just, still</i> »
len	« <i>again, similar action</i> » (not contrastive)
me	« <i>but also</i> »
ne	« <i>when</i> »
naan	« <i>then, conditional unfulfilled, e.g. if “a” had happened, then “b” would have happened</i> »
nan	« <i>still, not yet</i> »
pun, pʊrɪn	« <i>already</i> »
sɪt	« <i>actually</i> »
tɪ	« <i>go to</i> »
ya'an, ya'as	« <i>again, same action, once again, as usual</i> »
yāŋ	« <i>do afterwards</i> »
yiti, (yɪtɪ)	« <i>habitual, always</i> »
wʊ	« <i>come to</i> »
yu'un	« <i>next</i> » or « <i>change of state</i> »

5.4.1.4 Adverbs

Adverbs modify or qualify the meaning of verbs, adjectives, sentences and other adverbs. Adverbs function in the adverbial phrase (5.3.3), although class 1 is subdivided according to further functions in other phrases.

Class 1

This class functions in adverbial phrase type a), and are subdivided according to function in other phrases.

Subclass 1

These function only in the adverbial phrase. The following are examples of this open class:

halɪ	« <i>much</i> »	sʊŋa	« <i>well</i> »	kotaa	« <i>not at all</i> »
fāɪ	« <i>well, fine</i> »				

The following also occur as noun attributive

paa	« <i>much, plenty, a lot</i> »
berʊɡʊ	« <i>much</i> »

It is interesting to see that most adverbials end in a vowel.

Subclass 2

These function in the adverbial phrase and as temporal phrase attributives, and consist of the following:

me	« <i>as well</i> »
ya'as	« <i>again</i> »

Subclass 3

These function in the adverbial phrase, and as nominal phrase and temporal phrase attributives, and as head of the complement phrase. They consist of the following:

yu « *first* »
kpāat « *last* »

The following functions in the adverbial phrase and as head of the complement phrase:

wāna « *like that* »

Class 2

These adverbs function in adverbial phrase type B. this may occur in the outer expansion of the clause, or it may be front-shifted. They may also occur as head of the complement phrase. They consist of the following:

1. non interrogative: lanna « *like that* »
2. interrogative: bo « *why* »
 wela « *how* »

Many adverbs can be duplicated

Examples:

tɔ'ɔtɔ « *quickly* »
be'el be'el « *gradually, carefully, quietly, slowly* »
fur fur « *one after the other* »
bāalim bāalim « *softly, gently, slowly* »
yori yori « *aimlessly* »
fōl fōl « *in secret* »
be'et be'et « *badly* »

5.4.1.5 Ideophones

Ideophones function in the ideophone phrase (see 5.3.5) and are an open class.

The following are examples:

bub bub « *noise made of wind* »
fil fil « *noise made by somebody running* »
purup purup « *noise made by a horse galloping* »
bip « *noise made by something heavy falling* »

Many Kusaal ideophones consist of reduplicated syllables. There is no set number of syllables and the final syllable may be repeated as often as the speaker finds it appropriate,

e.g. yirururı « *very quietly* »

Ideophones try to describe the action mentioned before and some can be depicting a sound so we can say those are “onomatopoetic”. Nearly all ideophones have a falling (low) tone.

Ideophones can only be used at the end of a sentence.

5.4.2 The noun and its attributives

5.4.2.1 Pronouns

Pronouns are divided into emphatic and non-emphatic.

1. Emphatic pronouns

These function as head of the simple nominal phrase (5.2.2.2) type B i, of the serial nominal phrase (5.2.2.4), of the complement phrase (5.2.1.2) and of the prepositional phrase (5.2.1.5).

They consist of the following:

Figure 14 Table 7 : The emphatic pronouns of Kusaal

1 st pers. sg.	<i>mām</i>	'I, my, me'
2 nd pers. sg.	<i>fūn, fūv</i>	'you, your'
3 rd pers. sg.	<i>ōne, òò</i>	'he/she, his/her, him/her'
1 st pers. pl.	<i>tūn</i>	'we, us, our'
2 nd pers. pl.	<i>nām</i>	'you, your'
3 rd pers. pl.	<i>bànà, bàṃ</i>	'they, their, them'
3 rd pers. inanimate, sg. and pl.	<i>làn, lànà</i>	'it, its, they, their'

2. Non-emphatic pronouns

These function as head of simple nominal phrase (5.3.2.2.2) type B ii. They also function as first head of the complex nominal phrase type G (5.3.2.2.3). When followed by the reflexive they function in the serial nominal phrase (5.3.2.2.4) and in the complement phrase (5.3.2.1.2). They also function in the prepositional, postpositional and locative nominal phrase.

They consist of the following:

Figure 15 : Table 8 : The non-emphatic pronouns

	subject / possessive	object (clitic)
1 st pers. sg.	<i>m̄</i> 'I, my'	<i>m</i> 'me'
2 nd pers. sg.	<i>fū</i> 'you, your'	<i>vf, fū</i> 'you'
3 rd pers. sg.	<i>ō</i> 'he/she, his/her'	<i>v, ò</i> 'him/her'
1 st pers. pl.	<i>tī</i> 'we, our'	<i>ti</i> 'us'
2 nd pers. pl.	<i>yā</i> 'you, your'	<i>ya</i> 'you'
3 rd pers. pl.	<i>bà</i> 'they, their'	<i>ba</i> 'them'
3 rd pers. inanimate, sg. and pl.	<i>là</i> 'it, they, its, their'	<i>la</i> 'it, them'

The non-emphatic object pronoun, when immediately following a verb, is phonologically considered a clitic, forming a single phonological word with the verb to which it is attached. When the verb ends in a consonant and the pronoun begins with a consonant, a transition

vowel is inserted in order to avoid a consonant cluster. In terms of grammar and orthography however, they are considered as separate units. For example, the expression *tis + ba* ‘give them’ needs a transition vowel between the consonant sequence *sb* (*tisuba*, which is written *tisi ba* ‘give them’). Clitic pronouns are only used in object position and they inherit their tone from the verb.

5.4.2.2 Nouns

Nouns function in the nominal phrase and are divided into six classes on the basis of function. They also function in the complement phrase and the locative nominal phrase cl. 2, 4, the postpositional phrase, the vocative phrase, the prepositional nominal phrase classes 1, 2, 3, 4, 7, 8, and in the temporal phrase type D ii.

Class 1

a) This consists of all nouns not listed in other sections, and not classified under locative, temporal, etc. It is the largest class, and functions in nominal phrase type A, and complex and serial forms of the simple nominal phrase.

Examples:

ma « *mother* », *dup* « *food* », *bun* « *thing* », etc.

b) This consists on one noun, which functions as above under a), and as head of adverbial phrases type D (5.3.3): *nɔʔt* / *nɔba* « *foot / feet* »

Õ pɛʔɛ õ nɔba.

he wash his feet

« *He washed his feet.* »

Õ tɪna nɔba atã.

he come here times three

« *He came here three times.* »

Class 2

This class consists of names and functions in nominal phrases type C (Name); and in the complement phrase.

a) Person names: *Asaa*, *Pɪyɛt* (these also function in the vocative phrase)

b) Place names: *Waʔaruk*, *Yuv*, *Zabut* (these also function in the locative phrase 3 and 5 ii)

Class 3

This functions as head of nominal phrase type D and consist of the following:

soʔ / *sɛba* « *someone, some people* »

Class 4

This functions as head of nominal phrase type E, interrogative, and in nominal phrase type I:

a) Functions only in nominal phrases and prepositional phrase class 1 and 8, and in the postpositional phrase and complement phrase:

anɔ'ɔn « who »

b) functions in nominal phrase and temporal phrase type I, and temporal prepositional phrase class 6:

bo « what »

kāne « which one »

Class 5

This functions in complex nominal phrase type J, and consists of dēn « own, share, worth »

bun « thing »

Class 6

This functions in complex nominal phrase type K, and in adverbial phrase (5.3.3) type E:

sɛ'em « the same, the equal »

5.4.2.3 Locative Nouns

Locative nouns define the special coordinates of the action or situation expressed by the sentence, i.e. they help us locate where the action takes place. (In English we would call them spatial adverbials). Locative nouns function as head of the locative nominal phrase (5.3.2.1.3); they are distinguished from general nouns by their primary locative function, and not by their form. In addition, class 1 locative nouns, occur in locative phrase class 1, after a loco-motion verb, without being obligatorily followed by a locative syntagmatic feature (*ni* « in, at »).

They are divided into five classes on the basis of function.

Class 1

This class contains all general locative nouns not mentioned in other sections. They function as head of locative nominal phrases class 1, 2 (optional), 5 ii (optional).

Examples:

yit « house », tuɲ « town », pook « farm », da'a « market », mɔɔk « bush »

Class 2

This consists of one locative noun, which functions as the possessed noun in locative nominal phrases class 4: *zī'i* « place », *baba* « place »

Õ tuɲ da'a zī'i.

he go market place

« He went to the market place. »

Class 3

This class functions as the positional locative noun in locative nominal phrases 5 i and ii. Except for two they also function as general nouns in noun class 1.

The class consists of the following:

	Locative noun	general noun
pυυυ	« <i>inside</i> »	« <i>inside</i> » Õ tɨj tɨj pυυυ. « <i>inside the town</i> »
yā'aŋ	« <i>behind</i> »	« <i>back</i> »
tɔɔn	« <i>front</i> »	« <i>front</i> »
zuk	« <i>top</i> »	« <i>head</i> »
tɨjɨt	« <i>bottom</i> »	« <i>ground</i> »
nɔ'ɔt	« <i>entrance</i> »	« <i>mouth</i> »
kukpeŋ	« <i>outside</i> »	---
svuk	« <i>middle</i> »	---

Class 4

These consist of locative pronouns and function as head of locative pronoun phrase type 6 i. they consist of the following:

nina	« <i>there</i> »
kpela	« <i>here</i> »
na	« <i>here</i> »

Class 5

This class consists of interrogative locatives and functions as head of the interrogative phrase, class 8. They may also function as head of the locative prepositional phrase type 5. They consist of the following:

yaa	« <i>where?</i> »
lɛɛ	« <i>where?</i> »

5.4.2.4 Temporal Nouns

These are words or groups of words whose function in the construction is to locate the temporal coordinates of the action or situation denoted by the sentence. (In English we would call them temporal adverbials). Temporal nouns function as head of the temporal phrase (5.3.4), and as head of the temporal prepositional phrase (5.3.2.1.5), class 6.

Occurrence of syntagmatic features with temporal nouns:

The syntagmatic features *ni* « *in, at* » occur following temporal nouns thus:

1. *ni* /-ɪ /-i /-v occur obligatorily after:

Examples:

beubevi	« <i>morning</i> »
yvun-svsvvsi	« <i>at midnight</i> »
bekukēevguu	« <i>early in the morning</i> »
pī'iluŋ ni	« <i>at the beginning</i> »

When the above occur, as head of the phrase, the syntagmatic feature forms part of the temporal word and is never absent.

The temporal nouns are divided into five classes on the basis of function in the various types of temporal phrase.

Class 1

duna « *this year* », zīna « *today* », nannanna « *now* »

Class 2

sēevk « *wet season* », vvn « *dry season* », zaam « *evening* », zaa-nɔ'ɔt « *early evening* »

Class 3

wārik « *month* », daat « *day* », sāŋa « *time* », keef « *o'clock, hour* », yvum « *year* »

Class 4

da-se'ε « *some day* », saŋ-se'ε « *some time* », yvum-se'ε « *some year* »

Class 5

Tune « *Monday* », Atalaata « *Tuesday* », Alaarba « *Wednesday* »

5.4.2.5 Numerals

Class 1

pusuk, bɔ'ɔt, kēevk = « *half* »,

Class 2

ayi « *two* », atā « *three* », anaasi « *four* »

Class 3

pis tā « *thirty* », pis naasi « *forty* »

Class 4

kobuk / kobɪs « *hundred* »

Class 5

tvsit / tusa « *thousand* »

Class 6

ale / bale « *how many?* »

5.4.2.6 Noun attributives

Noun attributives function in the nominal phrase periphery. Many of them also function in the temporal phrase periphery. They are divided into classes according to function in the nominal periphery.

Class 1 Positional

yū « *first* », kpāat « *last* »

Class 2 Reflexive

mɛŋ « *reflexive, self* »

Class 3 Several

paa « *many* », berugv « *many* »

Class 4 Totalizer

zã'asa « *all* », mun « *whole* », kam « *each* », kamfãa « *each and every* », woo « *every* »

Class 5 Restrictive

kõ'kõ'o « *only* », ma'a « *only* »

Class 6 Articles

la (ma, na, -a) « *the* »

Class 7 relative

ne « *relative* »

ne la « *relative demonstrative* »

kãne « *relative* »

kãanna « *relative demonstrative* »

Class 8

bun, dēn « *own* »

5.4.3 Exclamations

Exclamations function in the exclamatory phrase (5.3.6). They are an open class, and the following are examples:

aa « *ah* », mm « *mm* », tɔ « *OK* »

5.4.4 Syntagmatic features

The syntagmatic features that are set out here are those that are not described in other ranks (unless noted as such).

5.4.4.1 Discourse syntagmatic features

1. Traditional narrative syntagmatic features.

- initial periphery: **me da be / da zĩ'i** « *once upon a time* »
- final periphery: **Lanna, ka m da be nina ka ye m yelı ya.**
« *Thus, I was there and wanted to tell you.* »

2. Discourse relationship syntagmatic features. These concern discourse flow and can be found under discourse logical relationships (see 5.5)

Discourse connectives:

- Possibility: la tō'o ē wela , pa'atı , da-se'et « *perhaps* »
- Result : lanne, lanzuk, lanna so'o ka « *therefore* »
wela yela, lanna yela « *that is why* »

5.4.4.2 Sentence syntagmatic features

Sentence syntagmatic features can occur as:

1. Sentence connective syntagmatic features
2. Sentence introducer
3. Sentence final

5.4.4.2.1 Sentence connective syntagmatic features:

a) **ka** « *and* » « connective »

This functions in the sentence in the following:

- Serial additive sentence
- optional connective in purpose, causative and indirect statement/ command complex sentences
- optional connective between past temporal periphery and sentence nucleus

Example:

Tı da paa Zabıt **ka** saa ni beruɣu.

we PAST arrived Zabre and rain rain much

« *We arrived in Zabre and it rained heavily.* »

b) **ne** « *and, with* », « connective »

This functions in the following sentence:

- optional connective between explanatory periphery and sentence nucleus.
- connective before the past temporal clause when occurring medial in a compound sentence.

Example:

Lan zug tu mɔt pɔpɛt ne tu la'as taaba kpela.

that top we have joy with we gather together here

« *Therefore we are happy because we are gathered here.* »

c) **ye** « *that* »

This functions as follows:

- Optional connective medially in the speech complex (5.1.3.1), and indirect question complex (5.1.3.5 a) and b).
- It is a discourse syntagmatic feature of reported conversation (which is the speech complex), and occurs throughout long conversation.

Example:

Õ yel ye ò ne pa'al tu bun-sɛ'ɛ.

he say that he FUT show them thing some

« *He said that he would show them something.* »

d) **yé** « *so that, in order to* » « *with the intention to, that he would* » (*but not necessarily realized*)

This functions as the connective occurring medially in the purpose complex sentence (5.1.3.2).

The pronoun is repeated after **yé**.

Example:

Tɪ da tɪj yé tɪ dɪ dup.

we PAST go so that we eat food

« *We went so that we would eat food.* »

e) **ka ne** « *and then* » « *but* », **halɪ ka** « *to the extent that* » (change of direction in the events, development maker)

These function as alternative connectives to **ka** « *and* » in the serial additive sentence.

The subject is repeated after **ka ne**

f) **amaa** « *but* » (if the second item is unexpected)

ka « *but* » (in negative clause)

These function as connectives in the serial connective sentence (contrastive).

Example:

Ba bɔɔl ʋ, amaa ã bu tna. Ba bɔɔl ʋ, ka o bu tna.
they call him but he NEG come
« They called him but he did not come. »

g) **bozugo, boyela** « because »
wela yela « that is why »

This functions in the serial connective causal sentence.

Example:

Mui wol sum, boyela saa ni zɔ'e.
rice produce well because rain rain much
« The rice did not yield well because it rained too much. »

h) **see ka** « unless, except »

This functions as the connective in the serial connective contrastive sentence.

Example:

M kʋn kɔɔ see ka saa ni suŋa.
I FUT NEG farm unless rain rain well
« I will not farm unless the rain falls well. »

5.4.4.2.2 Sentence introducer:

a) **see ka** « obligation » « have to, must »

This functions as the introducer on the obligatory command sentence.

Example:

See ka m tum.
must that I work
« I have to work. »

5.4.4.2.3 Sentence final:

a) **ko, be** « question »

This functions in the alternative question sentence. It also functions in the serial nominal phrase.

Example:

Õ tuŋ Zabɔt <u>koo</u> ? he go Zabre or not « He went to Zabre, didn't he? »	Õ tuŋ Zabɔt <u>bee</u> ? he go Zabre or « Did he go to Zabre (or somewhere else?) »
--	---

5.4.4.3 Clause syntagmatic features

We can divide the clause syntagmatic features as follows:

1. Clause class SFs
2. Clause connectives
3. Clause final SFs

1. The following are clause class syntagmatic features:

ne « *when* »

- past temporal clause (5.2.1.2.2)
- explanatory dependent clause (5.2.1.2.3)
- discovery dependent clause (5.2.1.2.4)
- relative clause (5.2.1.2.5)

All interrogative words:

yaa « *where* », *bo* « *what* » *anɔ'ɔn* « *who* », *wela* « *how* »

- interrogative clause

2. Clause connectives

ka « *connective* »

- relative object clause
- after front-shifting
- after temporal phrase clause initial
- as serial clause sentence connective

Example:

Ba mɔt se'ene *ka* tɪ bu mɔre. (relative object clause)

they have what that we NEG have

« *They have what we don't have.* »

ka is also a sentence SF.

3. Clause final syntagmatic features:

la, *-ma* / *-na* / *-a* « *the* »

This definite article occur clause final in:

- past temporal clause (5.2.1.2.2)
- explanatory clause (5.2.1.2.3)
- relative clause (5.2.1.2.5)

5.4.4.4 Phrase syntagmatic features

1. Phrase connectives:

ne « *and* »

This occurs as connective in the serial nominal phrase (5.3.2.2.4 na'ap **ne** pɔ'a « *chief and his wife* ») and in temporal phrase type K (5.3.4.2 yu'vɔŋ **ne** nintɛɛŋ « *night and day* »), and in numeral phrase type C (5.3.2.2.5 pii **ne** ayi « *twelve* »).

ko, be « *or* »

This occurs as connective in the serial nominal phrase, e.g. buɔvɔŋ **be** buribiŋ « *girl or boy* ». It also functions as a sentence SF.

2. Phrase final syntagmatic features

ni / -ɪ / -i, nee « *in, at, to* »

zuk « *above, on* »

These function finally in the locative nominal phrase (5.3.2.1.3) and in the postpositional nominal phrase (5.3.2.1.4). They may also function in the temporal phrase (5.3.4).

Õ be dooɫ.

he be room+LOC

« *He is in the room.* »

ne « *simile terminal* »

This functions in the non-interrogative simile prepositional phrase (5.3.2.1.5.8).

Example:

Õ zo wɔv webaa **ne**.

he run like leopard with

« *He runs like a leopard.* »

la / -na / -ma / -a « *simile terminal interrogative* »

This replaces ne above when the simile prepositional phrase is interrogative.

Example:

Buraa la ã wɔv anɔ'ɔ **la**?

man DEF be like whom with

« *The man is like whom?* »

3. Phrase initial syntagmatic features

ne « *with* »

This functions with all prepositional phrases.

Õ tuŋ Zabi **ne** wef.

he go Zabre with bike

« *He went to Zabre by bike.* »

5.5 Discourse rank

The discourse rank is the highest rank in Kusaal grammar and it consists of sentences and paragraphs. There are different types of discourse:

5.5.1 Narrative type discourse

Narrative discourse consists of one person speaking to an audience of one or more hearers. There is no intrusion of the listeners in the vital narrative discourse, but they do play an essential part, firstly by listening, and secondly by making continual sounds of comprehension, approbation, amazement etc.

5.5.1.1 Paragraph

The nucleus of narrative may be said to consist of paragraphs. There seem to be certain grammatical features which are used to break up the narrative, and these are considered paragraph initiating features.

The following are paragraph openers:

a) The past temporal dependent clause (5.2.1.2.2). This may repeat the previous clause (repeating information), or it may contain new information.

Repetitive example: (story 1)

ne ō len ti paa buraa la za'a-yōori. Ō ne paa buraa la za'a-yōori la, ka buraa la ε pāano ...
and he again reach man DEF courtyard entrance he when reach man DEF courtyard entrance and man DEF seek bread
« ... and he reached again the entrance of the courtyard. When he reached the entrance of the courtyard, the man got bread ... »

Non-repetitive example:

Tɔ, ka la ne tɔ'ɔ be'ela la, biis ayi la zã'asa kpime. (story 1)

OK and it when pass time little DEF children two DEF all die + AFF

« All right, when a little time passed, the two children died. »

b) A sentence with an initial temporal phrase like for e.g. « at that time », « one day later »

Example:

Daar arakõ, ka zɔ'ɔmma len yi ne ō len tuŋ ō sosvka, ...

day one, and blind + DEF again get out with he again go his begging

« One day, the blind man got out again and went after his begging, ... »

c) A sentence introduced by a discourse connective, often initiates a paragraph. This may also occur paragraph medial. *bozugo, boyela* « *therefore* », *lanna* « *thus* »

Narrative so far studied has been past tense.

Example (beginning of the last paragraph of story 3):

Lanna, ka ba yu'un tore ka Akorun paam ò bunne, ka Asò'wɔ me paam ò bun.

thus that they now share and Mr. Partridge receive his thing + FOC and Mr Hare also receive his thing

« Thus, they shared it and Mr. Partridge received his share and Mr. Hare also received his share. »

5.5.1.2 Traditional narrative

This consists of the traditional stories of the people, which are well known and are constantly being retold.

5.5.1.2.1 Relational syntagmatic features

The narrative has an initial and a final obligatory periphery, which introduce and close the narrative. The nucleus does not seem to have a set structure, but it usually consists of paragraphs.

Demarcational syntagmatic features

a) **Periphery**

There is a traditional narrative initial and final periphery.

b) **Focus**

Traditional narrative is mainly non-focal, but focal narrative may occur as well at times.

c) **Person subject**

Only third person subjects are used, and only rarely does the narrator intrude into the narration.

d) **Sentence classes**

Only statement sentences are used.

e) **Inclusion**

Quoted conversation is often included, both direct and indirect. The introductory speech clause is considered to be a syntagmatic feature of narrative discourse.

Songs, which are a form of poetic discourse, may be included.

Narrator intrusion may occur occasionally and may include rhetorical questions.

f) **Speech**

There is no direct, unquoted speech, except as an aside from the narrator, and that is pretty rare.

g) **Verb tenses**

Only the remote past is used

h) **Preverbs**

These are less used than in conversation and personal account narrative, and only some occur regularly. They rarely occur in the introduction (except the time-depth *da* « *remote past* »).

i) **Special markers**

Vocative phrase. This may not occur except in quoted speech.

Quoted speech may very lively with descriptive sounds, exclamations, vocatives, commands etc.

The remote past time-depth marker *da* occurs in the introduction (except introduction type d) and only infrequently and irregularly after that. Its presence is understood.

Connectives. The sentence connectives *bozugo*, *boyela* « *because* » does not occur in traditional narrative. They are found in personal account narratives, conversation and monologue.

5.5.1.2.2 Traditional narrative peripheries

By far the most traditional narrative stories have a

- formal introduction
- formal close

5.5.1.2.2.1 **Formal Introduction**

This may be of four types, three of which are similar. In each case the characters themselves are introduced in the introduction. Except for type d), where it appears to be optional, the remote past preverb *da* always occurs in the introduction.

a) Some narrative introductions include the word *me* before the verbal phrase. The meaning probably corresponds to « *once upon a time* ». The use of this word in the introduction is considered to be a syntagmatic feature of traditional narrative introduction.

Examples:

Nɔŋdāan me da be ka tar ɔ bii, ... (Story 8, Monique)

poor person once PAST exist and have his child

« *Once upon a time there was a poor person and he had a child ...* »

Buraa arakō me da be ka ō yu'ut bɔɔne Ayalim. (Story 13, Elie)

man one once PAST exist and his name call Ayalema

« *Once upon a time there was a man and his name was Ayalim.* »

b) Some narrative introductions omit *me*, but follow the initial nominal phrase, introducing the character with the **emphatic suffix -v / -o / -u**.

Examples:

Bupɔkɔ da be, ka mɔt ɔ bii arakō ma'a ka ɔ ẽ bupɔŋ. (Story 16, Martin)

woman + FOC PAST exist and have her child one only and she be girl

« *There was a woman and she had only one child, a girl.* »

c) Some narrative introductions omit both *me* « *once upon a time* » and the subject suffix *-v* and they exchange the verb *be* « *exist, to be* » with the verb *zĩ'i* « *to be sitting, be habiting, be living* », though this could be an influence from the Moore language which is closely related to Kusaal.

Example:

Awāaŋ ne Asũule da zĩ'i. (Story 4, Francis)

Mr. Monkey and Mr. Rabbit PAST sitting

« *Mr. Monkey and Mr. Rabbit were living (together).* »

d) Some narrative introductions omit the verb *be* and replace it with a complement phrase.

Example:

Asumbul ne Azāŋkɔ'ɔt da ẽne zɔɔt. (Story 14, Martin)

Mr. Rabbit and Mr. Hyena PAST be + FOC friendship

« *Mr. Rabbit and Mr. Hyena were friends.* »

e) Sometimes the narrator gives a pre-introduction.

Mam lomesa bɔɔt pa'ale so' ne yāk yam bɔɔrɔ ɔ sã'am yit. Buraa arakō da be. (Story 1)

my story want show somebody who choose trick want he destroy family man one PAST exist

« *My story wants to show a man who wanted to destroy a family. There was a man.* »

5.5.1.2.2 Formal close

The formal close is an essential part of the narrative. The close has two parts - both may occur, or only one, of which either may be selected.

Part 1 has three types:

a) This consists of the conclusion or summary of the story and it is told in the same person and style as the story. That is the narrator does not intrude into the close, and the person is the third person subject. However the sentence is present and the aspect may be continuous. A present-day temporal phrase may be included.

Examples:

Lanna so'o ka zĩna zĩna kpubuk ne buntat dāan dol taaba. (Story 5) see also story 9, 13

this possess that today today orphan and rich person follow together

« *This is the reason why till today an orphan and a rich person live together.* »

b) This consists of advice from the narrator, and it is therefore quite distinct from the narrative in tense and style. It is in first or second person.

Examples:

Fv ya'a bɔɔt galɩs, fv liti zã'asa. (Story 14) see also Story 16, 17

you if want overdo you fall+IPF all

« *If you want to overdo it, you lose everything.* »

c) The narrator may close by saying that he saw or heard this and that he himself was there present when that story happened. Of course everybody in the audience knows that this is not really the case, but that there is an important lesson to learn from that story. This closing sentence is meant to be some sort of assurance of authenticity.

Examples:

Lanna ka mam da be nina ka wum ka ye m tõe ya. (Story 12) also stories 1, 2, 3, 5, 6, 7, 11, 10

this and IEMPH PAST be there and hear and want I remind you

« *It is like that, I was there and heard it and I wanted to recall you that truth.* »

Lanna ka m da be nina ka ye m yeli ya. (Story 9)

this and I PAST be there and want I tell you

« *That is how it was and I was there and wanted to tell you.* »

d) The story may end in a question of conclusion to be discussed by the audience.

Example: (story 4)

Wãna ka mam da be nina ka ye m bɔ'ɔs bise,

like that and I PAST be there and want I ask see

« *Thus I was there and I want to ask you (the following question),*

bama bayi la sɔvɩ la, Asũmbule tat yam gãŋ bee, Awãaŋa tat yam gãŋ be ?

those two DEF between DEF Mr. Rabbit have intelligence pass or Mr. Monkey have intelligence pass Q

« *Between the two, is Mr. Rabbit cleverer or is Mr. Monkey cleverer?* »

Linking of initial narrative periphery and nucleus

The initial narrative periphery may be linked to the nucleus of the narrative in three ways:

a) The periphery forms the first nucleus of an additive serial sentence, and the following unit has zero subject places. This means that the periphery and the nucleus are very closely linked.

Examples: (periphery underlined)

Nɔŋdāan me da be ka Ø tar ʋ bii. (Story 8, Monique)

poor person once PAST exist and Ø have his child

« Once upon a time there was a poor person and (he) had his child. »

Bʋpɔkv da be, ka Ø mət ɔ̄ bii arakō ma'a ka ɔ̄ ē bʋpʋŋ. (Story 16, Martin)

woman PAST exist and Ø have her child one only and she be girl

« There was a woman and (she) had only one child, a girl. »

This may form the beginning of a very long non-focal serial additive sentence.

b) In some narratives, the normal serial additive sentence form is used, as above, but the introduction is considered a separate item, and the following recursive sentence contains a subject, where normally the subject would be zero.

Example:

Abaa daa be, ka ne ɔ̄ dɪ ɔ̄ pɔ'a ...

Mr. dog PAST be and with he marry his wife

« *There was Mr. Dog, and he married his wife ...*

c) In a few narratives the introduction forms a separate sentence.

Example:

Tō'osi da be. Ō ēne tō'os ne ē tō'os. (Story 12)

hunter PAST exist he be + FOC hunter who be hunter

« *There was a hunter. He was a hunter who was a (real good) hunter.* »

5.5.1.2.3 Introduction of participants

It has been noted in traditional narrative that while some of the participants are introduced in the introduction, in many texts, one or more participants is introduced later. Those introduced later may be the more important characters in the plot. When new participants are introduced in the body of the narrative in this way, there is no formal introduction.

Examples:

In Story 13, the main participant, a man called Ayalem « *Mr. Foolish* » is introduced at the beginning but the bush spirits who act only after six sentences are not introduced formally though they are also main participants of the story.

Also in story 5, the old lady is mentioned only after six sentences though she is one of the main participants of the story.

5.5.1.2.4 Included Items in Traditional Narrative

The following included items are a feature of traditional narrative, but a few may also occur in personal account narrative but maybe less dramatically expressed.

5.5.1.2.4.1 Narrator intrusion

1. Aside to listeners

a) Rhetorical question to listeners:

Example:

« ... M ēŋɪ m meŋa ! » **kε'ε lanna wãna bee ?** (story 1)

I do my self not be thus like that or

« *I did it to myself!* » *Is that not so?* »

Haya, Bĩn tō'on gut niraá ? (towards the end of story 10)

well poo be able guard person + Q

« *Well, can a poo guard a person? (logical answer would be: 'no')* »

b) Advice to listeners (in center of narrative)

Examples: (at the beginning of story 11)

Ka fɔ mi'i ye sãŋ-se'ε la, biis la sãamnamma ya'a tata, ba ne pō'ota ka ba yam kei.

and you know that time that DEF children DEF fathers + DEF if have + DEF they SUB spoil + DEF and their intelligence absent

« *You know that at those times when the fathers of the children were rich, they were spoiled and were not intelligent.* »

Mi' ka la ēne õ pita lanna. (towards the end of story 11)

know that it be + FOC her sister like that

« *Consider that it was her younger sister like that.* »

2. Aside to character within the narrative, for example warning him of impending trouble.

Example:

Example: (story 6)

Ka Agel ti bɪs ka bɪnna wau, la bu tō'o wā.

and Mr. Egg go to look but thing+DEF interjection it NEG can this

« *And Mr. Egg went to look, but watch out, that is a problem, it can not be done like this.* »

« *you better don't go there !* »

3. Narrator's exclamation to indicate character's action.

Example: (story 5)

Nɔ'ɔr anaase dāana, ka pɔ'ɔ-yā'aŋa bɪs ka aii, bii la pā'asut ō me.

times four possessor+DEF and old woman look and aii child DEF cheat her FOC

« *After four times, the old woman saw that aii (there is no way), the child has tricked her.* »

5.5.1.2.4.2 Song

Songs are included in four texts (Stories 5, 7, 10, 11) out of eighteen traditional narrative texts.

The song may be repeated several times, as a type of refrain.

The songs themselves are sung without much expression, in a set form, and often in words that are no longer in daily use, so we cannot always find a suitable translation in English for them, however the general meaning of the song is understood by the people.

Example:

Ka ō yee :

and he said

« *And he said (sung):*

« M zɔ kōoknama, part ba yigira, part ba yigira.

my friend antelopes ??? they ??? ??? they ???

« *My friends, antelopes ... (the words are not understood by our language helper)*

M zɔ niinama, part ba yigira, part ba yigira.

my friend cows ??? they ??? ??? they ???

« *My friends the cows ... ???* »

M suŋ wām pɛere laaree, wām pɛeri laaree.

I start calabash washing laughing calabash washing laughing

« *I start washing the calabash and laughter, calabash and laughter*

M zɔ-suma baara yee yee yee, m zɔ-suma baara woo. »

my good friends ??? ??? ??? ??? me good friends ??? all

« *My good friends... , my good friends ... ???* »

Ka ba wɔ' ka ba wɔ', ka ba wɔ' ka ba wɔ'.

and they dance and they dance and they dance and they dance

« *And they danced and danced and danced continually.* »

Songs form part of the poetic type of discourse.

5.5.1.2.4.3 Reported conversation

There is much reported conversation in traditional narrative, and this is often extremely realistically reported. However the narrator does not use a different voice or style speech styles to put into the mouth of the different participants. The narrator uses more or less the same uniform voice to report conversation from different characters, so they bear the same style. It does not seem to be possible to distinguish characters in a story by the intonation of their speech, only by their introduction, and by what they actually say.

Avoidance of pronoun confusion in indirect quotation:

An interesting feature of the change of pronoun is that when there would be confusion of third persons between characters in indirect quotation, the pronoun is changed to the noun in indirect speech, but never in direct speech.

Examples:

Ka ō yel yee: « Fv mi lot tukit suŋa. » (Direct quotation)

and he say that you know car driving well

« *And he said: 'You know well how to drive a car'.* »

Ka ō yel ye Awāaŋ mi lot tukit suŋa. » (indirect quotation)

and he say that Mr. Monkey know car driving well

« *And he said that Mr. Monkey know well how to drive a car.* »

5.5.1.3 Personal Account Narrative

This consists of a narrative of any length, describing a personal experience or desire. Its style and subject matter contrasts with traditional narrative, although it is still basically the same type of discourse.

5.5.1.3.1 Relational syntagmatic features

The narrative has no periphery or order of presentation. It consists merely of an account, which may be termed the nucleus.

Demarcational syntagmatic features

a) Periphery

There is no set periphery.

Though there may be an opening introduction or / and a closing comment.

Example from story 20:

Opening:

Bun se'ε be ka yiti pa'alı tı wakat se'ε ka tı bāŋıt ye
thing which be and often show us time certain that we knowing that

Wına'am stı sōŋırtı tı beruɣu. Tın daa bene la'asugı Wa'aruk ka buraa...
God truly help us much we PAST be meeting Ouagadougou and man

« *There are certain things that show us that at certain times so that we recognize that God helps us much. We were in a workshop in Ouagadougou when a man ...* »

Closing:

Kiba-kāŋa ēne wela, ka tı ye tı tɔ'ɔstı ya.
This story be +AFF like that and we want we tell you.

« *The story went like that, and we wanted to tell you that.* »

b) Focus

The narrative is often focal, but may include short or long stretches of non-focal narrative.

c) Person subject

First and third person subjects are used.

d) Sentence classes

Only statement sentences are used.

e) Inclusion

Quoted conversation is occasionally found, but this is not such an extensive or graphic feature of personal account narrative as of traditional narrative. Songs do not occur.

f) Speech

This only occurs as an included item.

g) **Verb tenses**

All verb tenses are used, but future is less common. The depth of time may be any, i.e. present, past that day, one day removed, within a year, remote past.

h) **Preverbs**

These are more varied and freely used than in traditional narrative.

i) **Special markers**

Vocative phrase: There is no example in our text material, but it is not considered to be impossible.

Quoted speech: There are some descriptive sounds, exclamations, etc. but they are usually not as common as in traditional narrative.

5.5.2 **Reported conversation**

Reported conversation occurs in traditional and personal account narrative, in conversation and in monologue types of discourse.

Reported conversation has a structure of a complex sentence. It may be long or very short.

Demarcational syntagmatic features

Reported conversation consists of three parts:

a) Introducer clause, b) the connective **ye / yee**, c) quoted speech. There is no syntagmatic feature marking the end of reported conversation, except changed intonation. Often though, the close is also indicated by change of actor and often by topic change.

5.5.2.1 **Introducer clauses**

The speech introducer clause is described under 5.2.1.3.1. It normally consists of a nominal phrase subject, a final verb of speech, and an optional indirect object. This introducer clause need not initiate a sentence, but it may be a part of a long serial sentence.

Example (Story 1)

Ka aza'al dɔɔ yee : « Mam p̃o dũm. »

and so and so rise say that my stomach hurt

« *And one of them rose and said: 'My stomach hurts.'* »

The introducer clause may be abbreviated in three ways.

a) To the nominal phrase subject (as speaker), with or without the connective **ye / yee**.

This introducer usually starts a new sentence.

b) To the pronoun subject, followed obligatory by the connective **ye**. This abbreviated form is used for short conversation of one or two clauses. It may also be used when there are many rapid changes of speaker.

c) The introducer clause may be omitted entirely when the conversation is already in progress or the speakers are known. The only syntagmatic feature which then marks the conversation is the quoted speech intonation relevant to the type of speech reported.

Example (from story 13)

... ka ba bɔ'ɔsɪ **yee**: «Aa, anɔ'ɔnam me tuna sēebitaa?» Ka ba **yee**: «Tun.» \emptyset «Ya ye ya butēe?»
and they ask say.that ah who also come sowing+DEF+Q and they say.that we you want you sow+FOC+Q
 « ...they asked: 'Who has come to sow?' they said: (It is) us.' \emptyset 'You want to sow?' »

When the introducer clause is omitted, however, the connective **ye** may still occur.

5.5.2.2 Connective **ye** / **yee** « say that »

Direct speech is introduced by the connective **yee** (long vowel), and indirect speech is introduced by the connective **ye** (short vowel).

Example for indirect speech (story 14):

Ka Azāṅkɔ'ɔt **ye** awoo.

and Mr. Hyena say that OK

« And Mr. Hyena said OK. »

When the reported conversation is longer than one clause, the connective **ye** may occur throughout the conversation, occurring clause initial, and sometimes clause medial as well. It may be used anywhere in the serial additive sentence.

So we might find long reported conversations like:

He asked him **ye**: «, **ye**, **ye**
say.that say.that say.that

5.5.2.3 Quoted speech

The speech may be statement, question of command. Usually there is some response stated, except for statement and for rhetorical questions. The speech itself may be short or long, and may consist of verbal or non-verbal sentences, of exclamation, according to the situation.

5.5.2.4 Direct and indirect quotation

Both direct and indirect quotations are equally used in narrative, at any stage, although speakers vary over their general preference.

In direct quotations the original utterance is reported word-for-word, including any vocatives, or exclamations. In particular, the personal pronouns used represent the viewpoint of the person reported as speaking.

In indirect quotation, on the other hand, all vocatives, and nearly all exclamations are omitted, and the personal pronouns used represent the viewpoint of the narrator.

An interesting feature of the change of pronoun is that when there would be confusion of third persons between characters in direct quotation, the pronoun is changed to the noun in indirect speech, but never in direct speech.

5.5.3 Discourse Referentials

5.5.3.1 Nominal referentials

In any discourse when a participant or a noun has been mentioned and is referred to again, whether animate or inanimate, it must always be followed by the article (*la* /-*ma* /-*na* /-*a* « the »), which means in this usage « already referred to ».

Examples:

Nɔŋdāan me da be ka tar ʋ bii. Ka pur ʋ bii la ye, ... (story 8)

poor person once PAST exist and have his child and give.name his child DEF that

« *Once upon a time there was a poor person and he had a child. He named his child (already referred to) that ...* »

Traditional narrative name referentials

In traditional narrative what would normally be a general noun may become a name. This always occurs with animals that speak and are participants in traditional narrative, and it may occasionally occur with other participants. In the story 6, an egg speaks. The personification prefix *A-* « *Mr.* » precedes the noun (*gbɪgum* « *lion* », but *Agbɪgum* « *Mr. Lion* »). It thus becomes a participant and functions as a “name” type noun. The important feature about this use of “name” is that the name type noun is not followed by the referential article *la* « *the* ».

Examples: (story 6)

Anɔbil ne Agel da be. (introduction)

chick and egg PAST exist

« *There was Mr. Chick and Mr. Egg.* »

Ka Anɔbil ye, Agel dom. Agel ye, Anɔbil dom.

and Mr. chick say that Mr. Egg climb + IMP Mr. Egg say that Mr. Egg climb + IMP

« *And Mr. Chick told Mr. Egg to climb. Mr. Egg told Mr. Chick to climb.* »

References to the chick and the egg continue throughout the text without the referential article.

5.5.3.2 Pronominal referentials

In Kusaal discourse there is no need to use a noun occasionally, instead of a pronoun, for style. Clarity of meaning is the only reason for re-use of noun, and the noun is only repeated when the use of the pronoun would have confused the characters.

Serial additive sentence pronouns

With the serial additive sentence, the rule applies that the same subject in succeeding clauses is never repeated, there is zero subject (\emptyset). Therefore when there is a pronoun subject in succeeding clauses in this sentence type, a change of subject is heralded; there is no ambiguity in the pronoun.

In the following example (from story 14), there are two characters Mr. Rabbit and Mr. Hyena who was nominally mentioned in the previous sentence.

\tilde{O} bāŋ ye Asumbul pā'asir v me. Ka \tilde{O} bas ka \tilde{O} tuŋ be'ela, ka \tilde{O} dɔɔ zo gāŋ v tuŋ tu kirig
he know that Mr. Rabbit cheat her AFF and *he* leave that *she* go a bit and *he* raise run pass her go go.to cross
 (Hyena) (Rabbit) (Hyena) (Rabbit)

« *She* (Hyena) knew that Mr. Rabbit cheats her. And *he* (Rabbit) waited that *she* (Hyena) went a little bit further, and *he* (Rabbit) got up and run overtook her and went crossing

sɔta ne \tilde{O} ēŋ wuv ō kpi me la. Ka \tilde{O} paa na ze'el su ka \emptyset yel yee : ...
 road+DEF with *he* make like *he* die FOC DEF and *she* arrive here stand silently and — say that
 (Rabbit) (Hyena) (Hyena)

« the road and *he* (Rabbit) made like he would be dead. And *she* (Hyena) arrived and stood still and \emptyset said: ... »

5.5.3.3 Object and locative referentials

It is stated in clause structure that the nominal phrase object is essential in the transitive clause, unless deleted at discourse rank, and that the locative phrase is essential in the locative clause, unless deleted at discourse rank.

In isolated utterances the nominal phrase (object) and locative phrase are essential in those two clause types, but in a longer discourse both may be omitted after the first reference, so long as the meaning is not obscured by their absence.

Examples:

Nominal phrase (object):

Example taken from story 1

... ka \tilde{O} nɔk pāano la tu v. Ka zɔ'omma de'e \emptyset , ka pu'us v baruka, ka nɔk \emptyset si \tilde{O} tāmpɔkt ...
 and he take bread DEF give him and blind+DEF receive \emptyset and thank him thanks and take \emptyset put.in his bag+LOC

« ... and he gave him the bread. And the blind man took (it), and thanked him, and took (it) and put it inside his bag ... »

Locative phrase: (Story 20)

Ka dɔrɪba la yāŋ paa Ø, ka tɪ zɔ
and driver DEF can do arrive — and our friend

« *And our driver was able to arrive (at Garango, Name is implicit) and our friend ...* »

« *and went to Ouaga. When we arrived__* » (implicit: Ouaga)

The nominal phrase (object) and locative nominal phrase may occasionally also be omitted in the discourse, even in a single utterance, when the meaning is fully contained in that particular utterance without the object or locative. The full meaning content is usually transferred to the verb - only a few verbs are able to function in this way.

Examples:

Õ dɪya. « *He has eaten.* »

Õ dɪ dupa. « *He has eaten the food.* »

Õ da leb ka kul. « *He returned and went-home.* »

Õ da leb ka kul yiri la. « *He returned and went-home to the house.* »

5.5.4 Focal and non-focal discourse

Kusaal discourse may be either focal or non-focal. This is shown by choice of sentence type, and explains in the discourse why a certain sentence type is selected, and why a narrator will link his sentences the way he does. It is one of the stylistic devices for presenting the plot. In conversation, the norm is focal discourse, but non-focal is included at times, and especially in included narrative.

In narrative, the norm is non-focal, especially in traditional narrative, with focal included at times. The amount of focal narrative included depends partly on the type and aim of the narrative, and partly on the style of the speaker.

In monologue the norm is mainly focal discourse.

The first clause of a new sentence is always in focus: succeeding clauses are out of focus if the serial additive construction is used. Any other construction is in focus. Serial additive clauses may be put into focus by the use of emphatic markers.

Example or **non-focal narrative**:

(Towards the beginning of story 5)

... Bam bayopoi la yi tuŋ ye ba tɪ wā' daat. Ka ba ne tuŋ daata wāabi la, ba tɪ wā' daata ba'as yu'vn tɛ'eb ye ba kul. Ka saa ku bēelum bēelum, ka ba zi'ɪ ba yit sɔraavka meŋ ne be wɛvɛŋ se'ɛ

ne naane kule. Ka ba zot eet yit ye ba so'oe. Ka ba zot tat tat tat tat ti paa pɔ'ɔ-yã'aŋ se'ε ne ōb nirip ti gãŋ, ka ba kar v ka ō tuŋ ti me' dook arakō ma'a be sã'arɪ nina. ...

... All of the seven went out (into the bush land) to cut wood. And when they went to the cutting of the wood, they finished to cut the wood and afterwards prepared to go home. And the rain threatened and there were very heavy clouds (covering the sky), and they didn't even know how where the road to their house is in order to go home. And they were running and looking for a house so that they could hide (find shelter). And they were running for a long time and arrived to a certain old woman who eats people, and the people chased her away (from home) and she went into the wilderness and build a one room house there. ...

Events are linked: ... and, ... and ... and ... (no focus markers)

Example of **focal narrative**: (Towards the end of story 5)

(In the following examples the new sentence shows focus (underlined)).

... Nɔ'ɔr anaase dāana, ka pɔ'ɔ-yã'aŋa bɪs ka aii, bii la pã'astɪ ō me. Ka pɔ'ɔ-yã'aŋ yu'vɪn dɔɔ tulug zot kunna. Ō zo paana yē ka dook ē fōo, se'el se'el ke'esige. Ka pɔ'ɔ-yã'aŋa yu'vɪn zε'ε wē'et nu'us yee : « Wau, bi-kāna paam mam, bii kāna paam mam. »

Lanna so'o ka zīna zīna kpubuk ne buntat dāan dol taaba. Ka la ya'a ke'ε welaa, sãŋ se'ε la, buntat dāan bu sakit ye kpubuk dol vɪ, bala kpubuk bu tat se'el se'ela.

Lanna ka m da be nina ka yē ka ye m tɔ'ɔsɪ ya.

... The fourth time the old woman realized that there is a problem, the child has cheated her. And then the old woman turned round and run home. She arrived running and saw that the room was empty, nothing was there. And then the old woman stood there clapping hands (to show regret) saying: « Oh no, this child got me, this child got me. »

This is why nowadays an orphan and a rich person live together. And if it is not for that, in former times, a rich person would not accept to live together (in harmony) with an orphan, because an orphan does not have anything.

That is how it is and I was there and saw this and wanted to tell you.

5.5.5 Speed (or information load)

5.5.5.1 Speed of event flow

A relevant feature of discourse description is the speed of event narration. This is the speed with which new information is imparted in the narrative, and the amount of redundancy allowed or demanded in normal speech.

The normal minimum rate of communication is one or two new events or new items of information per clause, but there can be no hard and fast rule.

A common feature is the use of verbs of low communication value. When this occurs, two or three verbs are often used together to specify one event. Verbs of low communication value include:

tat / *nɔk* « take », *dɔɔ* « arise », *tɪj* « go », *tuna* « come », *gat* « pass », *yě* « see, find » etc.

Verbs of low communication are used to specify an event in detail without giving too much new information. They help to reduce the rate of communication, so that the communication load is not too great.

In the following example: verbs are in italics and new items of information are underlined:

(story 20)

Õ ne *dɔɔ* Wa'arɔka *wɛ'ɛ* Garɔŋa ye ã *tɪ* *bɪs* ɔ bii laa, ã
he when arise Ouagadougou going Garango for he go to see his child DEF, he

ne *kpě'* lota, ã *zĩ'ine* dě'e dɔrɪba la. Õ ne zĩ'in *dě'en* *dɔrɪba*
when enter he he sit+FOC next to driver the he when sit next to driver

« *When he arose from Ouagadougou going to Garango to see his child, and he entered the car, he sat next to the driver. When he sat next to the driver ... »*

In the above sentences, there are any low communication verbs. It is fairly typical of speed when movement and motion is involved. It seems that the rate of communication is often slower when movement is the main topic.

The following example is from later event in the same story and the information load is of a more general topic is rather faster:

sɔrɪ la, ka na'ayĩnam, fāarɪpa, yɔ'ɔn gɪɪ ba.
way +LOC time FOC, that bandits, robbers, henceforth surround them.
their way, bandits, robbers came to surround them.

Ba ne *gɪɪ* ba la, ne ba wě' malɪ la.
they SUB surround them BKRF, subsequent they shoot gun DEF.
While they were surrounding them, they shot with their guns.

Ba ne *wě'* malɪ la, ba wě'ene dɔrɪba la.
they SUB shoot gun DEF, they shoot +OFOC driver DEF.
While they were shooting they shot at the driver.

In the above example, the events are dramatic, so there is only one verb per clause, but the same verb is repeated in the next clause, which prevents overloading (too much information load or ‘speed’) in this case.

5.5.5.2 Redundancy and repetition

It is noted, in traditional narrative particularly, that as the plot is unfolded the narrator uses both redundancy and repetition. These slow down the rate with which the information is imparted, and serve either to bind the narrative together (redundancy) or for emphasis (repetition).

5.5.5.2.1 Redundancy

This may be caused by the following:

1. Use of past temporal dependent clauses as an entirely anaphoric feature:

ne õ len ti paa buraa la za‘a-yõori. Õ ne paa buraa la za‘a-yõori la, ka buraa la ... (story 1)

with he again go reach man DEF house entrance he when reach man DEF house entrance DEF that man DEF

« *and he reached the entrance of the man’s house. When he reached the entrance of the man’s house, the man ... »*

2. Statement of an event after statement of purpose towards that event:

Example: (story 5)

Bam bayopoi la yi tuŋ ye ba ti wã’ daat. Ka ba ne tuŋ daata wãabi la,
them + FOC seven DEF get out go so that they go to cut wood and they when go wood + DEF cutting + LOC DEF
« *The seven of them got out to cut firewood. And when they went at the wood cutting place,*

ba ti wã’ daata ba’as yu’vn tɛ’eb ye ba kul.

they go to cut wood + DEF finish then prepare so that they go home

« *they cut the wood and then prepared to go home. »*

5.5.5.2.2 Repetition

5.5.5.2.2.1 Repetition to show repeated action:

Example: (story 7)

Ka ne õ gĩ’i wãaŋnam nina kɔ’ɔn ku ba ku ku, ...

and with he snatch monkeys there simply kill them kill kill

« *And he seized the monkeys there and simply killed them killed killed (one after the other), ... »*

5.5.5.2.2.2 Repetition for emphasis and effect:

Examples:

Repetition of a single noun phrase: (story 3)

... yel ñ niripa : « Tarı **nimma** lebe na, ka **nimma** ke'ε sum. **Nimma** kuuru nirip.
arrive say his people + DEF take meat + DEF return here because meat + DEF not be good meat + DEF kill + IPF people
« ... told his people: « Bring the meat back, because the meat is not good. The meat kills people. »

Repetition of a command: (story 3)

Nee Akoroŋ ne ñpa, Akoroŋ kpiya. **Tare nimma lebi na ! Tare nimma lebi na !** »
look Mr. Partridge when chew Mr. Partridge die + compl take meat + DEF return here take meat + DEF return here
« Look, when Mr. Partridge ate, Mr. Partridge died. Bring the meat back! Bring the meat back! »

Repetition of an action: (story 10)

Ka ba wɔ' ka ba wɔ', ka ba wɔ' ka ba wɔ'.
and they dance and they dance and they dance and they dance
« And they danced and danced and danced and dance. »

5.5.5.2.2.3 Repetition of narration of main event before climax, for emphasis.

Example: In story 5 the girl uses tricks to avoid the old lady's murdering the children. Her tricky way of acting is repeated four times in the story.

Ka ñ yee: « Yiri la, zaam ya'a yiti ma'a wãna m ma yiti dugune sũm-meja ...
and she say home DEF evening if habitual get cold like that my mother habitual cook + AFF peanuts
« And she said: « At home, when the evening arrives my mother cooks peanuts ... »

Ka ñ yee: Ba yiti nɔki tı'ok ne ba tuŋ kolıgı tı wik kɔ'om tara tı mam ... »
and she say they habitual take basket and they go river + LOC go to fetch water bring give me
« And she said: They take a basket and go to the river to fetch water for me ... »

... ka mam ẽŋ v yam ne yam yel yee, ba yiti dugune tia ne sũm-meja tı mam ...
and I make her intelligence with intelligence say that they habitual cook + AFF beans and peanuts give me
« ... and I used trick after trick telling her that they usually cook beans and peanuts for me ...

Ka mam yee, ba yiti nɔki tı'ok tuŋ kolıgı tı wik kɔ'oma tıs mam ...
and I say that they habitual take basket go river + LOC go to fetch water give me
« And I said that they usually take a basket and go to the river to fetch water for me ... »

5.5.5.2.2.4 Deliberate slowing of narrative just before climax to add to suspense.

To add suspense before the climax, the storyteller can slow down the narrative by repeating things. For example in story 8, the python wants to kill the evil chief, but it will take time and does not want to kill him immediately. The python tells the chief at five occasions to hurry up and bring more food. The chef brings more and more food: first a hundred cows, than 100 animals, then 100 chicken, then 100 children, then finally 100 women, at the climax python swallows the chief himself.

5.5.5.2.2.5 Flashback

There are very few examples in Kusaal texts of flashback, when the narrator by recalling a previous event, interrupts the event flow.

5.5.5.2.2.6 Saying the same on several occasions

In some narratives, the participants are quoted in detail, saying exactly the same on many occasions, and outside the main part of the plot. This slows the speed of communication and causes impatience on the part of the listeners.

Example: In story 12 it is said six times that if someone says aloud the name of the meat, he will die. This builds up impatience on the side of the listeners till at last the name of the meat is pronounced and the troubles start, i. e. people who pronounce it really die.

5.5.5.3 Increase of speed

There is a noticeable increase in the rate of communication at the climax of the narrative, to such a degree that the narrative becomes rather terse. At this point of the narrative there is no expansion or repetition or detail:

Example of story 12 where everything goes rather slowly but then speeds up at the climax full of action and speed: (verbs underlined)

ka õ ye niripa, ba basum ka zo kul yiri tu nɔk õ zɔvta
and he say people, they leave IMP and run go home house LOC go to take his tail +DEF

« ... and he told the people to leave and (he) run home to his house to get his tail (and bring it)

na wē' õ pɔ'a la nɔ'ɔr anaasi, ka wē' buraa la nɔ'ɔr atã, ka ba dɔɔ. Ka õ
here hit his wife DEF times four and hit man DEF times three and they arise. and he
here hit his wife four times and hit the man three times and they rose. And he

nək yella bilig pa'al zāma la, ka yv'un kul tu vaa ã
take matter +DEF explain show deceit DEF, and after go home go to collect her
explained them the matter and afterwards he went home to collect his

pɔ'a la la'at ye ã kulum, ã bu len bɔɔr v beevk ne
wife's DEF belongings so that she go home IMP, he NEG again want her tomorrow and
wife's belongings so that she goes home; he does not want her anymore tomorrow and

daart. Õ zām v me.
after tomorrow she cheat him AFF.
after tomorrow (in the future). She deceived him. »

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List of Kusaal text materials

Figure 16 : Table 7 : List of 30 Kusaal text

Type and title:	Author:	Age:	Date:	Audio	Tran.	Inter.	Length
		aprox.			Fr.	Engl.	
Narrative traditional							
1. Nisaal tɔm-be'et yɔɔt	NANGA S.	60	Jan 12	x	x	x	668 words
2. Yam gat pāŋ	NANGA S.	60	Jan 12	x	x	x	414 words
3. Asɔ'ɔŋ ne Akoroŋ	NANGA S.	60	Jan 12	x	x	x	839 words
4. Awāaŋ ne Asūul	N'DEOGO F.	40	Jan 12	x	x	x	763 words
5. Kpɔbɔk ne buntat dāan yela	N'DEOGO F.	40	Jan 12	x	x	x	843 words
6. Anɔbil ne Agel	N'DEOGO F.	40	Jan 12	x	x	x	271 words
7. Abaa ne Asūmbul	OUARE Mon.	45	Jan 12	x	x	x	729 words
8. Nɔŋdāan bii ne na'ap yela	OUARE Mon.	45	Jan 12	x	x	x	1 458 words
9. Se'ε ne so'o ka baa bu tɔ'on	ZOBRA R.	55	Jan 12	x	x	x	860 words
10. Se'ene so'o ka ba basut ka	ZOBRA R..	55	Jan 12	x	x	x	771 words
11. Da gāasit niriba	ZOBRA R.	55	Jan 12	x	x	x	1 180 words
12. Tɔ'os	OUARE Mon.	45	Jan 12	x	x	x	1 340 words
13. Ayalum po-paaluka yela	WANGRE E.	55	Mar 11	x	x	x	799 words
14. Asumbul ne Azāŋkɔ'ɔt	SOUGA Mar.	40	Oct 11		x	x	334 words
15. Azāŋkɔ'ɔt ne Asugul ne	SOUGA Em.	50	Apr 10	x	x		1 295 words
16. Bii ka ba lob bas	SOUGA Mar.	40	Mai 12		x		480 words
17. Zɔwēel daavk	SOUGA Mar.	40	Mai 12		x		512 words
18. Bɔraa ne bu de'et pā'asugo	WANGRE E.	55	Mai 12	x	x	x	1 026 words
Narrative personal account							
19. Abambil Komaasi tun yela	OUARE Kob.	25	Mai 12	x	x	x	381 words
20. Wɔnaam guurum	SOUGA Mar.	40	Mai 12	x	x	x	419 words
21. Bileε	WANGRE E.	55	Mai 12	x	x	x	
Behavioral							
22. Mba sakut tun yela	OUARE Kob.	25	Mai 12	x	x	x	413 words
23. Exhortation to pupils	WANGRE E.	55	Mai 12	x	x	x	
Dialogue							
24. Monique and Kobena	OUARE Kob.	25	Mai 12	x	x	x	633 words
25. Monique and Silviane	OUARE Kob.	25	Mai 12	x	x	x	444 words
26. Elie and Martin about Gold	WANGRE E.	55	Mai 12	x	x	x	
Expository							
27. Kɔɔ-sum	OUARE Kob.	25	Mai 12	x	x	x	432 words
Procedure							
28. Kpaam maaluk yela	OUARE Kob.	25	Mai 12	x	x	x	227 words
29. House construction	SOUGA Mar.	40	Mai 12	x	x	x	574 words
30. Mariage	WANGRE E.	55	Mai 12	x	x	x	

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